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A SURVEY OF THE VASCULAR FLORA OF BEAUFORT COUNTY, SOUTH CAROLINA: RELICTS AND REMNANTS

A Thesis Presented to the Graduate School of Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
Plant and Environmental Sciences

by Daniel C. Payne August 2010

Accepted by:
Robert E. Ballard, Committee Chair
Patrick D. McMillan
David W. Bradshaw
Richard D. Porcher

ABSTRACT

Beaufort County has historically been one of the most poorly botanized counties in the state. Geographically, it lies farther from the major research institutions than most other counties and has therefore received little attention from modern botanists. Major waterways, numerous private communities and an oppressive summer climate further complicate botanical research. Beaufort has one of the fastest growing human populations in the state. Natural areas are rapidly being converted into residential and commercial developments. An understanding of the county's flora is necessary to focus conservation efforts to preserve critical habitat and develop management plans for maintaining biodiversity. This project was conducted to help provide that data.

Between 2003 and 2010, over 3000 voucher collections were made from various plant communities throughout the county. Previous collections housed at the Clemson and Citadel herbaria were also examined. Special emphasis was placed on documenting populations of rare plants, invasive plants and new state occurrences. In total 1597 native and naturalized taxa were documented. Prior to this study, 938 taxa were reported for the county. This study has added an additional 659. More than 200 of these were not previously reported for South Carolina in the most recent atlas. Some represent range extensions of native species which should be considered for inclusion to South Carolina Rare List. Information is provided about the new state records and the more significant county records. Many of the new records consist of species which are exotic and may warrant special attention due to the threat they may pose to natural ecosystems and agriculture.

DEDICATION

I dedicate this thesis to my lord and savior, Jesus Christ who redeemed me from my sins and gave me the hope of eternal life. During a time of great personal difficulty, he inspired me with the dream to go back to school. He provided me with mentors at Clemson who had the knowledge and patience to guide me through this educational journey. He provided me the means to achieve this dream without incurring debt. He gave me the patience to collect and process the data and the endurance to complete this project. Dearest to me, he brought my daughter, Haley Elise Payne, back into my life.

ACKNOWLEDGMENTS

I am deeply grateful to everyone who has contributed to this project. This space only allows me to mention a few. First, among these are my graduate advisor and committee members; Dr. Robert Ballard, Dr. Patrick McMillan and Dr. David Bradshaw and Dr. Richard Porcher. Dr. McMillan deserves special notice for his outsized role. Dixie Damrel, the current museum curator reexamined numerous specimens. The Biological Science Department staff was extremely helpful, particularly Barbara Piekutowski, Sally Brock and Jillian Danson. This project was financed through teaching assistantships, a Stackhouse fellowship and through my business. I especially thank my clients and assistants for accommodating the irregularities in my schedule during these years. Bill Hodgins and John Baglione provided instruction and assistance with computer hardware and software while working in Beaufort. Katherine Dobrenen, Carmen Bradley and Kathy Snizaski provided database assistance. Dr. Richard Porcher, Ben Turner, Dr. Alfred P. "Hap" Wheeler loaned a motorboat, a kayak, and a pick-up truck respectively. Abel Lopez-Fernandez and Vianel Mendez-Sanchez donated their car. Numerous individuals helped me collect specimens. Some of them for exploration. José Luis López-Ramírez has been a friend closer than a brother throughout this project. Freddy Figueroa-Roblero and Cristían López-Fernandez have been like sons to me. Finally, I thank my father Jerry Allen Payne, my mother Ruth Price Payne and my stepmother Rose Green Payne who cultivated in me a love of nature and of education.

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CHAPTER ONE

INTRODUCTION

In 1986, I was studying Joseph Stalin in a Russian History class at the University of Georgia. Hearing the countless horrors that his man instigated on his people greatly depressed me. A friend recommended that I change my major to horticulture. Instead of meditating on the evil of the past I could not change, I could work with plants and make the world a better place. I didn't take much convincing. In 1991, I moved to Beaufort County, South Carolina. I started a gardening and nursery business there in 1993 which focused on coexisting with nature.

I was amazed by the botanical richness of my new home. It far surpassed the abandoned agricultural lands with which I was so familiar. Rare plants were everywhere. I was dismayed to see rapid construction overtake them and I could not comprehend that hardly anyone seemed to care. When I contacted "experts" about rare plant sites, I was told that there was nothing worth saving in Beaufort County or Beaufort County is already too far gone to save. My personal goal with this thesis is to demonstrate that there is still a lot left in Beaufort County worth saving.

The purpose of this project is to document the diversity of the native and naturalized flora of Beaufort County. Special emphasis has been placed on species that are rare in the state and those are newly reported for the county. The main factors affecting the flora are discussed. These include the geographical location, geology, climate, and historical impacts. Data collection methods are explained. Results are summarized and discussed. Two reports are included as appendices, an annotated checklist of the cited flora, and a selection of noteworthy collections of rare and newly reported taxa.

CHAPTER TWO

LOCATION AND GEOGRAPHY

Beaufort County lies near the southernmost corner of South Carolina. It borders Jasper County on the west and southwest. It is bordered on the northwest by Hampton County, on the east by Colleton County and on the southeast by the Atlantic Ocean. There are 1650 square kilometers of land, 832 square kilometers of non-forested wetland, and 873 square kilometers of bay or estuary in the county (Beaufort County Library 2007). It encompasses 64 large to moderate-sized islands, about 2,000 smaller ones and a portion of the mainland (Beaufort County Library 2007). The towns of Beaufort, Bluffton, Port Royal, Hilton Head and part of Yemassee are in Beaufort County. The mean average elevation is 6.4 meters above sea level. The highest elevation is 12.8 meters (Beaufort County Library 2007).

Beaufort is the most maritime of South Carolina's counties. All of it lies within the outer coastal plain. All but small portions adjoining Jasper County near Pritchardville community and adjoining Hampton County near the town of Yemassee are within the maritime strand province as defined by Porcher and Rayner (2001). Here vegetation is significantly influenced by windborne salt spray and/or water with significant concentrations of salt. Although five other counties partially occur within the maritime strand, only Beaufort and Charleston are predominately contained within it (Porcher 2001). Lying near the vertex of the Georgia Bight, it has the highest tidal amplitude of the southeastern United States. Averages in Port Royal Sound are over 2.4 meters compared to 1.5 meters in Charleston. Two high tides occur daily.

Three large estuaries dominate the county. Port Royal Sound is the largest and splits the county in the middle. Calibogue Sound lies partially in Jasper County on the south end of the county. St. Helena Sound lying partially in Colleton County is on the north end of the county. Many smaller estuaries which are locally called rivers and creeks branch off and interconnect these three sounds. Half of the state's salt marshes occur in Beaufort County. Because the tidal amplitude varies considerably over the month, extensive high marshes which are infrequently flooded surround the salt marsh (LowCountry Institute 2009). The borders of the salt marshes contain a narrow band with considerable botanical diversity but have received very little protection during development.

Two freshwater rivers occur partially within the county. The New River partially separating Beaufort and Jasper counties flows into Calibogue Sound. The Combahee River partially separating Beaufort and Colleton counties flows into St. Helena Sound. Several small streams flow into the May River in Bluffton, the lower portions of these creeks are called coves. There are other small freshwater streams, mostly unnamed in the county. Many streams have been channelized or confined in pipes for agriculture or real-estate development. The counties freshwater streams drain small areas in the coastal plain (mostly within the county). Brownwater swamp species such as *Platanus occidentalis* Linnaeus, *Acer negundo* Linnaeus, *Populus deltoides* Bartram ex Marshall var. *deltoides*. and *Acer saccharinum* Linnaeus which occur as natives in other maritime strand counties have not been collected as natives here. Tidal freshwater marshes occur on the New and Combahee Rivers. Brackish marshes line the smaller streams.

CHAPTER THREE

GEOLOGY AND SOILS

The sea advanced and retreated many times over the coastal plain during the Miocene and Pleistocene Epochs due to accumulation and thawing of ice. This resulted in sediments being deposited and planed off repeatedly. Seven abandoned shorelines have been detected in the coastal plain. The area between each one is treated as a separate terrace. Two terraces occur in Beaufort County the Pamlico Terrace ranging 0-7.6 meters and the Talbot Terrace from 7.6-12.8 meters (USDA, SCS 1980).

The Santee limestone formations that (Soblo 1989) described from Givhans Ferry State

Park and Old Santee Canal State Parks are buried deeply in Beaufort County (Barry 1980).

Anthropomorphic deposits of shell and concrete (often shell based) and phosphate tailings serve
as proxy for natural limestone deposits in providing habitat for the calcareous communities
described by Soblo (1989). Many depression wetlands which conform to the description of limesinks were frequently observed on Lady's Island and Port Royal Island (Barry 1980). These
however developed in an earlier geologic epoch when seepage waters filtered through underlying
lime deposits. The lime deposits are now well under the water table and no longer dissolving.

Our limesinks were generally dominated by heaths and other vegetation typical of acidic soils.

USDA, SCS (1980) does not list soil map units for the Talbot Terrace. Most of Beaufort County lies within the Pamlico Terrace. USDA, SCS (1980) report six soil map units for the county based on texture and drainage. Santee soils are very poorly drained soils that have a loamy surface layer and clayey subsoil. It makes up about 1% of the county and occurs along the

upper reaches of the New River and along the Coosawhatchie River on the northwestern border of the county. Argent Okeetee soils are somewhat poorly drained soils that have a loamy surface layer and a clayey subsoil. They make up about 1% of the county. Bladen- Coosaw-Wahee are poorly drained and somewhat poorly drained soils that have a loamy surface layer and a clayey subsoil, and somewhat poorly drained soils that have a thick sandy surface layer and a loamy subsoil. They are scattered throughout the northern part of Beaufort County and make up about 17% of the county. Wando-Seabrook-Seewee are excessively drained, moderately well drained, and somewhat poorly drained soils that are sandy throughout. Making up about 31% of the county, they are scattered throughout the southern part of Beaufort County. They are commonly the predominant soils on the uplands of the sea islands. Coosaw-Williman-Ridgeland are somewhat poorly drained soils that have a thick, sandy surface layer and a loamy subsoil, and somewhat poorly drained soils that are sandy throughout. Making up about 13% of the county, these nearly level soils are scattered throughout. Most are on the sea islands or bordered on one or more sides with tidal streams or marshes. Finally, Fripp-Baratari are excessively drained and poorly drained soils that are sandy throughout. Making up about 2% of the county, they consist of gently sloping to steep soils on narrow ridges and nearly level soils in narrow troughs. They formed in windblown marine sediment (dunes). They are on the more seaward part of the islands.

Many of the soils are too poorly drained for agriculture or construction (USDA, SCA 1980). Therefore, they retained a large portion of their native vegetation. However, beginning with the development of Hilton Head in the 1950's, extensive drainage systems were dug to facilitate large scale residential construction. The soil that was removed was used to fill in low-

lying areas creating additional construction sites. The creation and extension of sanitary sewer systems where septic fields would not drain enabled vast areas of wetlands to be developed. More recently, where insufficient fill dirt exists on site, massive amounts of soil have been trucked in. Often the fill dirt is tightly-packed mineral subsoil from outside the county. One result is that the mapped soil units for these areas are no longer accurate.

The county has very little topographic relief and most of the soils are sandy. Erosion and soil loss from farmland which was so problematic in the piedmont did not occur here (Porcher and Rayner 2001). This has resulted in faster re-vegetation after farming than eroded areas. The multitude of invasive exotics such as *Pueraria montana* (Loureiro) Merritt var. *lobata*, *Rosa multiflora* Thunberg ex Murray, *Elaeagnus umbellata* Thunberg var. *parvifolia* (Royle)

Schneider and *Lonicera japonica* Thunberg are much less common here. Bank erosion was noted on estuarine bluffs in developed areas of Bluffton and Beaufort and in the banks of the coves in Bluffton. The coves in Bluffton contained a much higher percentage of exotics than most areas of the county. Most notably this was the only location for *Firmiana simplex* (Linnaeus) W. Wight. The most abundant populations of *P. montana* var. *lobata* and *Tradescantia fluminensis* Vellozo were also there.

The tidal marshes which are at or near sea level are part of a more seaward terrace. They are commonly less developed and possess a higher percentage of weatherable minerals (USDA, SCS 1980). One soil-map units is distinguished on this terrace. Bohicket-Capers-Handsboro are very poorly drained mineral and organic soils that are flooded daily or occasionally by saltwater, and adjacent upstream areas that are flooded occasionally by freshwater. They are most extensive in the southern part of the county and extend miles inland adjacent to the tidally-influenced

streams. It makes up about 35% of Beaufort County. Most of the soils in this map unit are in marsh grasses. Large areas of the more inland positions were once used for rice production (USDA, SCS 1980).

CHAPTER FOUR

CLIMATE

Beaufort County's southerly location and maritime influence give it a subtropical climate (USDA, SCS 1980). The temperature moderating effect of the ocean is stronger here than anywhere else in the state. No part of the county lies more than 5 kilometers from tidally influenced water. The relatively stable water temperatures moderate extremes in air temperature. A gradient of this impact is noted within the county. Yemassee which lies in the most inland part of the county has greater daily fluctuations than Hilton Head or Beaufort (SCDNR, SCO 2010). The monthly maximum temperatures are higher and its monthly minimum temperatures are lower than those of Beaufort and Hilton Head. The highest and lowest temperatures in the county of 42 ° C and -18 ° C respectively were both recorded in Yemassee (SCDNR, SCO 2010).

The first freezing temperatures can be expected in the middle of November but the onset of frost tends to be quite variable form place to place (USDA, SCS 1980). The first frost at my home on Coosaw Island has occurred on November 16th, December 16th and January 2nd. Some years we have not had a killing frost. This is one of the major factors permitting plants with a generally more southern range to occur naturally and as introductions in Beaufort County. The summer high temperatures are not as high as those of the inner coastal plain and the lower piedmont. However, the nightly lows in the summer are much higher than inland locations and they are lower in Yemassee than elsewhere in the county (Barry 1980, SCDNR, SCO 2010). This is likely one reason that more northern invasive plants such as *Microstegium vimineum* (Trinius) A. Camus, *Arthraxon hispidus* (Thunberg) Makino var. *hispidus*, *Cichorium intybus* Linnaeus,

Anthoxanthum odoratum Linnaeus, Elaeagnus umbellata Thunberg var. parvifolia (Royle) Schneider were found only at the more inland portions of the county. It may also be a factor in the occurrence of Oxalis violacea Linnaeus, Anemone virginica Linnaeus var. virginica, Geum canadense Jacquin in the inland portions but not in the more coastal portions of the county.

Rainfall averages 132 centimeters a year (SCDNR, SCO 2010). The rainiest months are July followed by August and June. This coincides with a period of frequent scattered showers and thunderstorms. Thunderstorms would have served as the ignition source for natural fires. Therefore natural fires would likely have been most abundant during these months. The driest months are November followed by December and October (USDA, SCS 1980). Evapotranspiration is lower during the fall and winter so that the water table is often higher then despite the lowered precipitation. Seventy percent of the rain falls during the growing season (USDA, SCS 1980).

July through October is the tropical storm season (USDA, SCS 2010) Hurricanes are rare in the area but tropical storms bringing winds of up to 50 miles per hour occur an average of about every two or three years (USDA, SCS 1980). The most recent hurricanes to affect the county were in 1959, 1940 and 1893. The hurricanes of 1893 and 1940 caused severe flooding and wind damage. The last hurricane to hit the county was in 1959. Despite their irregular occurrence, their impact can be profound and long-lasting (Loope et al 1994). Only 21 tornadoes have been reported from the county (SCDNR, SCO 2010). Most of these are waterspouts which form over water and rarely reach landfall.

CHAPTER FIVE

HISTORICAL IMPACTS

The long-history of both indigenous, Eurasian and African modification and use of the Beaufort County landscape has left a marked impression on the flora of the county. Of the 1595 taxa reported in this study, 403 are clearly introduced. This is a direct product of human intervention. Other species such *Stachys floridana* Shuttleworth ex Bentham, *Liquidambar styraciflua* Linnaeus, *Quercus hemisphaerica* Bartram ex Willdenow and *Quercus virginiana* P. Miller are examples of native species that are much more abundant now than in pre-Eurasian landscapes. In this context a brief outline of the historical impacts on the vegetation is presented below.

Paleo-Indians were the first humans to visit Beaufort County. Archaeological evidence places them in nearby Allendale County as early as 14,000 BCE (Rowland, 1996.) Though occasionally visiting the area, they were known to have hunted mammoths and mastodons in nearby Edisto Island (Rowland 1996). Martin (1973) suggests that the Paleo-Indians hunted these and other mega-herbivores to extinction thereby dramatically affecting the vegetation.

By the Archaic Period (8,000-1,500 BCE) Indians were regular seasonal inhabitants of the area. Feeding heavily on shellfish they left extensive shell rings and shell mounds during the Archaic and Woodland Periods (1,500-500 BCE) (Rowland 1996). They also left many smaller shell middens. Shell cites provide habitat for numerous state rare plants and plants that are more common inland or further south by raising the soil pH and providing a source of calcium (McMillan and Porcher 2001, McMillan and Porcher 2005).

The shell from these deposits and the impact of their calcium has been distributed to other areas over the years. To protect their homes from being burned by Indians, Spanish settlers coated their dwellings with tabby, an oyster shell based concrete (Rowland 1996). Due to a scarcity of stone and brick-clay in the area, later settlers would construct fortresses, foundations of homes, and seawalls out of tabby. Beaufort County has more tabby ruins than anywhere else in the country (Beaufort County Library2007). Farmers ground oyster shells as a source of agricultural lime (Ruffin 1852). Early streets of Port Royal and Beaufort were made of oyster shells. Although recently consumed oyster shells were also used, many of these structures contained material from reutilized Indian shell deposits.

Other sources of calcium are conventional concrete and mortar from modern construction and the limestone crusher run that is utilized to underlay the county's roads. During this project, I have collected numerous rare calcicoles that are normally associated with Indian shell deposits on tabby and/or modern mortar. These include *Ipomoea macrorhiza* Michaux, *Clematis* catesbyana Pursh, *Trifolium carolinianum* Michaux, *Adiantum capillus-veneris* Linnaeus and *Psilotum nudum* (Linnaeus) Palisot de Beauvois.

Native Americans also affected the plant community by hunting, clearing for homes and agriculture which provided habitat for ruderal species. Some taxa such as *Ipomoea macrorhiza* Michaux and *Opuntia stricta* (Haworth) Haworth var. *stricta* may have been introduced through Indian agriculture (Weakley 2010). Their greatest impact on plant communities however was through their periodic burning to facilitate hunting, travel, and village defense (Delcourt and Delcourt 1997). Burning promoted habitat for numerous species. Early European and African settlers would also utilize fire for hunting, clearing land, and timber management on a smaller

scale due to fragmentation of the landscape. In recent years, smoke control problems have almost eliminated the use of fire as a management tool. Fire-adapted plants have become much less abundant.

Port Royal Sound is one of the deepest most accessible harbors on the southern coast of North America. It lies close to the hinge point where Spanish galleons leaving the New World laden with treasures caught the westerly winds to return to Spain. Therefore it was highly desirable to European powers. Between 1514 and 1686, the Spanish, French, Scottish and English explored the area near Beaufort and established colonies which were later destroyed or abandoned. For a while it was the capitol of La Florida. Numerous ships arrived from Europe, Latin America and the Caribbean (Rowland, Moore and Rogers 1996). Though these colonies did not last they must have left a lasting impact on our flora.

The first exotic plants were introduced to Beaufort during this time. Some were intentional since the cultivation of numerous crops was attempted. Others would have been unintentional such as contamination in seed stocks, livestock feed, bedding for humans and livestock and ballast. Beaufort would continue to be a port city for most of its history. Several plants associated with ballast occur in our flora including *Parapholis incurva* (Linnaeus) C. E. Hubbard, *Boerhavia coccinea* P. Miller, *Nicotiana longiflora* Cavanilles and *Veronica peregrina* Linnaeus var. *xalapensis* (Kunth) Pennell. Horses, cattle, sheep, pigs and goats were introduced by 1566 and soon became feral. The cattle and pigs escaped and roamed freely feeding and damaging native vegetation while dispersing introduced species. Feral animals, especially hogs, have continued to have a profound impact on local ecology to this day.

Between 1690 and 1700, some Scottish and Englishmen came or returned to the area to establish plantations and trade with the Indians. In 1711, the town of Beaufort was formally established (Rowland 1996).

Population growth is probably the greatest factor impacting vegetation changes today. Population remained relatively low until the mid 1900's. Attacks upon the town by competing powers were one of the major impediments. The Yemassee burned Beaufort during the Yemassee War (1715-1720). Privateers menaced the area during the War of Spanish Succession (1744-1748) and the French and Indian War (1756-1763). British forces overran the county during the Revolutionary War (1775-1783). They blockaded the port and raided plantations during the War of 1812-1814. Most recently Union forces occupied Beaufort and Hilton Head and raided surrounding areas during the Civil War (1861-1865) (Rowland, Moore and Rogers 1996). Additional factors reducing population growth were mosquito borne diseases and catastrophic hurricanes of the 1890's and 1940's (Helsley 2005).

The first slaves in Beaufort were Native American but they were soon joined and outnumbered by imported African slaves. African slaves soon far outnumbered white settlers. Being immune to malaria which sickened and killed many of the white settlers, they often ran enterprises with little or no white supervision (Rowland, Moore and Rogers 1996). In particular, Carney (2001) demonstrates that many facets of rice culture in South Carolina were learned from African slaves who modified West African rice culture for our climate. Their descendents made up the majority of the county's population until recent years. In many parts of the county, their culture is still dominant. African-American traditions have greatly influenced land use throughout Beaufort County's history.

Slave labor enabled vast extractive and agricultural enterprises to thrive in the antebellum era. The wealth created by their labor caused the town of Beaufort to become the most wealthy and cultured town of its size on the East Coast (Rowland, Moore and Rogers 1996). The town of Bluffton also developed during this period as a summer retreat for planters to escape the "bad air" of rice plantations. Smaller villages also developed on St. Helena Island which have since been abandoned (Rowland, Moore and Rogers 1996). Two of the counties' planters, Stephen Elliot and Joseph Hinson Mellichamp became accomplished botanists (Porcher and Rayner 2001). International trade was frequently conducted. Many exotic landscape species were introduced and escaped during this period. The chief economic enterprises during this era were cattle, timber, indigo, cotton and rice. Since many of the barrier islands have poor soil and were less accessible, they were largely reserved as "hunting islands" during this time (Rowland, Moore and Rogers 1996).

Much of the land had been burned periodically by lightning or by Native Americans. The resulting open grassy woodlands provided ideal grazing for livestock, chiefly cattle but also sheep, goats and horses. Livestock were often kept on islands or peninsulas reducing or eliminating the need for fencing. Since most native grasses cannot tolerate heavy grazing, they were soon supplemented by exotic grasses and legumes. Animals purchased from outside the area and supplemental feed have served as additional introduction sources.

Many of our herbaceous exotics may have been initially introduced through cattle ranching. Cattle ranching became less prominent with the subsequent introduction of plantation crops (Rowland, Moore and Rogers 1996). Though only a few small scale farms and stables continue to operate in the county, they continue to affect our flora. The populations reported in

this thesis of several locally or regionally uncommon Eurasian introductions were associated with livestock operations. These include *Sisymbrium irio* Linnaeus, *Urtica urens* Linnaeus, *Rumex obtusifolius* Linnaeus and *Rumex acetosella* Linnaeus. These two *Rumex* are common inland but are very uncommon in the county. Additionally, two neotropical species which are first reported for the state in this thesis *Chloris elata* Desvaux and *Cenchrus brownii* Roemer & J. A Schultes may have been introduced through livestock operations.

Apart from the local market for fuel and timber, Beaufort was also a ship-building center. The curved dense limbs of live oak (*Quercus virginiana* P. Miller) were ideal for building the hulls of ships (Rowland, Moore and Rogers 1996). Many times entire trees were cut for a few choice limbs. Ships were built on groves adjacent to deep creeks (Rowland, Moore and Rogers 1996). For this reason, no original-growth, live oak stands exist in our area with the possible exception of the interior of St. Phillips Island where timbering was not possible. Live oak harvesting ended with the introduction of metal hulled ships (Porcher and Rayner 2001).

Timber harvesters began cutting pine in the maritime forest after the live oak harvest ended. Our maritime forests are secondary growth (Porcher and Rayner 2001). Pine has continued to be the preferred timber harvested up to the present day. Hilton Head was heavily harvested of natural growth pine shortly before the initiation of the first resort developments in the second half of the 20th century (Helsley 2005). Timbering pine and leaving the intermixed hardwoods has become a standard land preparation practice for housing construction in the county. Therefore it is common to find fire adapted pine flatwoods species growing where no pines occur. Much of the area that was recently annexed into Bluffton was managed for timber until recently.

Bald cypress (*Taxodium distichum* (Linnaeus) L. C. Richard) has been logged from swamps in the area. Generally the hardwoods have lesser commercial value and were not harvested. Unlike the associated hardwoods, bald cypress does not stump sprout and is shade-intolerant. This results in dominance by hardwoods particularly *Nyssa aquatica* Linnaeus and *Nyssa biflora* Walter (LowCountry Institute 2009). Signs of logging bald cypress were noted during vegetation surveys of the Great Swamp of the New River near Bluffton. Canals had been dug in the swamp and a rail line with a loading area crossed it. It was not clear whether these engineering works were for removing harvested cypress logs or were from other commercial activities.

Carolina Rice (*Oryza sativa* Linnaeus) production began in the 1730's in Beaufort County. Originally rice was grown by the inland swamp method. Trees were cleared of swamps and outlets were dammed up to maintain water levels. Reservoirs to supply additional water were sometimes constructed as well. After the Revolution, tidal rice culture was adopted and soon dominated. Extensive swamps were cleared from the Combahee and New River. Dikes and tide gates were constructed on the river side to control water levels and prevent salt damage during droughts. The wealth generated from rice culture in the New River financed the building of many mansions and the Parish Church of Prince William Parish.

Emancipation of slaves followed by destructive hurricanes made rice culture unprofitable by the early 1900's. However rice culture has impacted the flora to the present day. The inland swamp fields have reverted to swamp forests with somewhat altered hydrology (Porcher and Rayner 2001). In some, the water control structures have been maintained. They are flooded in the winter so that waterfowl can reach these areas to feed on acorns and other seeds. These

managed plots are known as "green tree reservoirs" (LowCountry Institute 2009). The tidal fields have not reverted to swamp forests but have remained open herbaceous communities. The abandoned ones are now extensive tidal freshwater marshes. Many have been purchased for hunting preserves. In these the dikes and tidal gates are maintained and the fields are managed to encourage species favorable to waterfowl (Porcher and Rayner 2001)

Indigo production began in the 1750's in Beaufort County. Two species were grown West Indian indigo (*Indigofera suffruticosa* P. Miller) and African indigo (*Indigofera tinctoria* Linnaeus). British subsidies encouraged cultivation. The Revolution ended subsidies. Indigo cultivation in South Carolina ended by the 1790's. Both *Indigofera spp.* were naturalized during the years of cultivation but were thought to be no longer present (Weakley 2008). Two populations of *I. suffruticosa* were discovered during the course of this project.

Sea Island cotton (*Gossypium barbadense* Linnaeus) cultivation soon replaced indigo (Rowland, Moore and Rogers 1996). St. Helena Island and Hilton Head Island were two major centers of production. Its cash value was much higher than upland cotton. Woodlands and forest were cut, small streams were channelized and wetlands were drained to provide planting areas. Land was treated with manure annually, often with marine sediments to preserve soil fertility (Rowland, Moore and Rogers 1996, Porcher and Ficke 2005). The boll weevil entered the county in 1918 and effectively ended Sea Island cotton production here (Helsley 2005).

Mining for phosphate was conducted at several locations in the area in the 1870's through 1890's. Rock phosphate was extracted from both water and surface mines (Helsley 2005). Calciphilic plants such as *Cornus asperifolia* Michaux, *Celtis laevigata* Willdenow and *Cercis canadensis* Linnaeus var. *canadensis* are frequent on tailings near abandoned mining areas.

Between 1913 and 1950, truck farming was the leading component of the economy. This necessitated construction of numerous rail lines and depots in the farming regions (Helsley 2005). Most of the farms have now closed. Recently closed farms are now dominated by *Pinus taeda* Linnaeus, *Quercus hemisphaerica* Bartram ex Willdenow, *Quercus nigra* Linnaeus, *Quercus virginiana* P. Miller and *Liquidambar styraciflua* Linnaeus. One additional impact of farming was the numerous ditches that were dug and tile drains that were placed to drain fields. These continue to impact the hydrology to this day.

Certain areas were set aside as "hunting islands" during the antebellum period (Rowland, Moore and Rogers 1996). Private hunting preserves developed after the Civil War (Helsley 2005). Often using prescribed fire to promote quail habitat, they also created excellent habitat for rare fire dependent plants. One such farm, Clarendon, contained without a doubt the best maintained pine flatwoods that I observed in the county. Locals commonly state that the entire county had been under cultivation. After surveying numerous areas with rare pineland endemics, it is obvious that these areas had not been cultivated. Many areas with low fertility, poorly drained soils were never suitable for agriculture. One negative affect from the hunting preserves is the introduction of exotic food and cover plants such as *Lespedeza bicolor* Turczaninow and *Elaeagnus umbellata* Thunberg var. *parvifolia* (Royle) Schneider.

Housing development has had the biggest impact on the vegetation over the last 50 years. In the 1950's real estate developers began converting large tracts of hunting preserves and timberland on Hilton Head to develop private gated communities. Previously the island was sparsely populated and mostly rural (Helsley 2001). Since then, most of the island has been converted to private gated communities. This pattern has since spread to numerous other parts of

the county. Islands and peninsulas are favored for these developments to facilitate enclosure. Construction in remote, formerly sparsely-populated areas has also resulted in widening of highway and new business construction. Besides replacing plant habitat with man-made materials, there have been numerous other effects on the flora. Wetlands have been drained and filled altering the hydrology. Some recent developments such as Sun City have removed all tree cover and covered the original soil with several meters of fill dirt completely changing soil chemistry and structure. Increased pumping of aquifer water for irrigation has resulted in salt water invasion.

Vast parcels have been converted to chemical-treated golf courses and lawns which contain almost no native vegetation. The exotic grasses rapidly invade and dominate neighboring natural areas. Numerous exotic landscape plants have been planted in areas which previously contained very few exotics. Many exotic ornamentals were collected as naturalized species during this project in adjacent natural areas including *Ophiopogon japonicus* (Thunberg) Ker-Gawler, *Ternstroemia gymnanthera* (Wight & Arnott) T. Sprague, *Nandina domestica* Thunberg and *Raphiolepis indica* (Linnaeus) Lindley. Other species have spread from weeds in landscape materials to become common associates in wetland communities such as *Scutellaria racemosa* Persoon. Though most of these gated communities have designated nature preserves, few are properly managed. Most of these private nature preserves gain exotic species over the years and consequently lose native species. Many represent relics of fire maintained communities but managers will not consider prescribed fire (Bailey, Mickler and Frost 2007). Concerns over litigation from downwind communities have greatly narrowed prescribed fire possibilities in timberlands, hunt preserves and other undeveloped properties. Even Victoria Bluff Heritage

Preserve which harbors *Liatris patens* Nesom & Kral, *Litsea aestivalis*(Linnaeus) Fernald and *Lyonia ferruginea* (Walter) Nuttall, no longer conducts prescribed burns due to concerns over litigation. Education is urgently necessary to raise awareness of the value of our native plant communities so as to ameliorate the effects of residential development.

CHAPTER SIX

METHODS

Distribution reports for plants based on field identification are problematic due to possible errors in identification or recording. The data in this study is based solely on personal field collections (over 3000) and from my examination of herbarium specimens from Beaufort County. All of my personal collections are deposited with the Clemson University Herbarium where they will be available for examination. Since the goal was to establish the state of the county's flora at the time of the study I actively attempted to collect a representative specimen from every native and naturalized taxa in the county before examining prior herbarium collections. I then examined all Beaufort County specimens present at the time (spring and early summer 2007) in both the Clemson University and Citadel Herbaria annotating them to the most current accepted nomenclature.

The initial target checklist was based on all plant species reported by Townsend and Sorrow (1999) from Beaufort County, the adjacent counties of Jasper, Hampton and Colleton and the closest heavily maritime county Charleston. Many other species were added while studying reference materials which disclosed possible additional taxa for the coastal plain of South Carolina and Georgia.

Specimens were collected from 2003-2010. This is a much longer period than typical for such a study (Townsend 1995, Waldrop 2001). It covers a much larger study area than Waldrop (2001) who focused o a single watershed and a much larger focus than Townsend (1995) who covered two counties but focused solely on rare plants. While identifying and researching data

on plants that had previously been collected, I became aware of additional taxa to seek. Personal collections can be divided into three periods; 2003—summer 2004, fall 2004—fall 2007, 2008— 2010. Specimens from the first period were gathered during contract vegetation survey work for the towns of Bluffton (along the May River Rd., Gibbet Rd, the New River Trail, and in along three streams in the historic section of Bluffton) and in the town Beaufort (all city park and Beaufort County Open Land Trust parcels within the city limits). These were gathered before enrollment in Clemson and receiving proper collection and recording instructions. They consist mainly of genera and species which I realized that I could not adequately identify in the field as well as populations of rare plants that I wanted to document. The second period began after receiving proper collection and recording instructions. During this period, I actively attempted to collect representative collections from all taxa, including those gathered during the prior period before adequate instruction. Many of these collections were made during contract predevelopment vegetation surveys for the town of Bluffton. The third period began after realizing that I had collected more than enough specimens and began trying to write my thesis. At this point, I was not actively seeking collections but only collecting new species encountered incidentally with the exception of contract work at Bray's Island.

Throughout this period, I used the living room in my home on Coosaw Island as the base of operation and my truck served as my chief research vehicle. I also travelled by motorboat, kayak and bicycle. Coordinates were taken with a hand-held GPS unit. Friends often assisted. From fall 2004—spring 2007, while school was in session, I travelled home frequently on the weekends and during breaks from study. During the rest of the time, I resided there full time. Upon consultation with Patrick McMillan, special attention was made to collect certain habitats

such as Native American shell sites, tabby ruins, graveyards, relict pinelands. Emphasis was also given to sand dunes and beach areas, phosphate tailings and tidal freshwater wetlands. However, my collection equipment was always nearby and I collected plants everywhere I went and in every conceivable habitat. This contrasts with a previous study in Clarendon and Williamsburg counties, where only likely habitat for rare species was surveyed (Townsend 1995). My approach was more time consuming, but it allowed me to encounter unexpected populations of state records. One example was *Eryngium baldwinii* Sprengel which was found in a roadside ditch in front of a grocery store. Roadsides, power line easements and retention ponds were often more species-rich even in rare plants than the fire-suppressed pine flatwoods they adjoined.

Examination of all plant parts is often necessary for positive identification. Ongoing taxonomic revision may reveal new taxa Attempts were made to collect a specimen form each reported taxa either in flower or fruit. Collections for each population were made for rare plants and of multiple collections for new plants. For dioecious species, attempts were made to collect both staminate and pistillate branches. Identification of herbaceous species often requires examination of all the plant parts. Where feasible a whole plant was collected from each reported population. For unwieldy specimens like *Arundo donax* Linnaeus representative portions of all of their parts (inflorescence, leaf, stem and root crown). In a few instances were populations would be negatively affected by collecting, a digital photograph was taken to serve as a voucher.

Multiple collections were made of many populations to provide exchange material for the Clemson University Herbarium. High home humidity promoted mold in many specimens. Many of these were discarded and collected again. For each population collected a site description was

recorded which usually included associated plants, how to locate the site, and geographical coordinates.

An access database was created to contain information pertaining to the species such as: previous occurrence in the county, nativity, rarity, origin, synonymy and nomenclatural relation to other sources as well as collection information such as date, collector and coordinates. I have continued to build on this database and plan to use it in future projects.

CHAPTER SEVEN

RESULTS AND DISCUSSION

The main purpose of this project was to document the native and naturalized flora of Beaufort County. New collections or herbaria collections annotated during the study document 1597 taxa from the county (See Appendix A). Of these 1140 are native, 401 are introduced and 7 are adventive. The remaining 49 taxa have disputed nativities. The breakdown of the higher level taxa is as follows: Pteridophytes 24 native, 1 adventive, 8 introduced, 3 disputed, 36 total; Gymnosperms 9 native, 3 introduced, 12 total; Nymphaeales 4 native, 4 total; Ceratophyllales 1 native, 1 total; Magnoliids 14 native, 2 introduced, 16 total; Monocots 387 native, 3 adventive, 103 introduced, 10 disputed, 503 total; Eudicots 702 native, 3 adventive, 285 introduced, 36 disputed, 1026 total. Of the nonnative taxa 55% were from the Old World, 42% were from elsewhere in the New World, 17% were from elsewhere in the Unites States and 42% were from tropical or subtropical areas of the world. Specimens were collected from 184 different families. The most specious families were Poaceae (229), Asteraceae (198), Cyperaceae (125), Fabaceae (104), Rosaceae (38), Lamiaceae (34) and Euphorbiaceae (30).

Table 1. Summary of collection results by higher level taxa and nativity. Placement of higher level taxa follows (Stevens 2007). Nativity information is derived from Weakley (2010) and from field observations during this project.

Nativity	Pterido-	Gymno-	Nym-	Cerato-	Magno-	Monocots	Eudicots	Totals
	phytes	sperms	phaeales	phyllales	liids			
Native	24	9	3	1	14	387	702	1140
Adventive	1	0	0	0	0	3	3	7
Intro-	8	3	0	0	2	103	285	401
duced								
Disputed	3	0	0	0	0	10	36	49
Totals	36	12	3	1	16	503	1026	1597

Table 2. Most specious families in Beaufort County: This table ranks families by the number of taxa for each documented in this project. The first thirty-one are reported here. The remaining families have less than ten taxa reported Placement in families generally follows Weakley (2010).

Family	Taxa reported
Poaceae	227
Asteraceae	197
Cyperaceae	125
Fabaceae	103
Rosaceae	38
Lamiaceae	32
Euphorbiaceae	30
Ericaceae	27
Fagaceae	25
Plantaginaceae	25
Polygonaceae	25
Convolvulaceae	21
Onagraceae	21
Rubiaceae	20
Apiaceae	19
Solanaceae	19
Apocynaceae	18
Juncaceae	18
Brassicaceae	17
Malvaceae	16
Caryophyllaceae	14
Hypericaceae	13
Oleaceae	13
Orchidaceae	13
Amaranthaceae	12
Ranunculaceae	12
Verbenaceae	12
Aquifoliaceae	11
Araliaceae	10
Chenopodicaceae	10
Violaceae	10

One goal of this project was to establish what the native flora of the county was at the time of the study so that those interested in preserving or restoring natural landscapes could make appropriate choices. I noted several species that are native elsewhere in the country which have naturalized through ornamental plantings. They are listed here to distinguish them from the native flora of the county. Without documentation of how and where they had been introduced they might have subsequently been mistaken as previously overlooked natives of the county. Among these are *Vittaria lineata* (Linnaeus) Smith, *Phlebodium aureum* (Linnaeus) J. Smith, *Blechnum serrulatum* L.C. Richard, *Tillandsia recurvata* (Linnaeus) Linnaeus, *Vernonia ovalifolia* Torrey & A. Gray, *Gaura lindheimeri* Engelmann & A. Gray, *Populus deltoides* Bartram ex Marshall var. *deltoides* and *Platanus occidentalis* Linnaeus var. *occidentalis*. It is not clear whether *Clinopodium brownei* (Swartz) Kuntze and *Salvinia minima* Baker where native or introduced. Utilizing locally-propagated material when possible reduces the risk of muddling the flora.

Exotic plants deserve special attention for their potential to become invasive in the wild. It was very disturbing to find that plants listed in other states as invasive are deliberately being introduced in South Carolina. *Panicum repens* Linnaeus is the most notable example of these. It was deliberately planted along road sides and retentions ponds in numerous sites in the county. It would be prudent if plants that are listed elsewhere in the country as invasive exotics should automatically be banned from introduction into the state. Other invasive plants have been introduced as weeds on other landscape plants particularly palm trees which have dug from the wild in Florida. The most notable are *Melinis repens* (Willdenow) Ziska ssp. repens,

Megathyrsus maximum (Jacquin) B.K. Simon & S.W.L. Jacobs, and *Parietaria judaica* Linnaeus.

Though costly at the outset, inspection of materials arriving from outside the state is far less expensive than eradication afterwards (Simberloff 2003). Several ornamentals which had shown little tendency to escape had been noted. These include *Cortaderia selloana* (J.A. & J.H. Schultes) Ascherson & Graebner, *Pistacia chinensis* Bunge, *Liriope spicatum* Loureiro, *Liriope muscari* (Decaisne) L. H. Bailey, *Ophiopogon japonicus* (Thunberg) Ker-Gawler and *Hibiscus mutabilis* Linnaeus. Evaluation of the biological potential for a plant to become invasive should be conducted before introducing a new species into an area (Westbrook 2004).

A primary emphasis of this project was to document plants that were not previously reported in the South Carolina Plant and Fish Atlas (Townsend and Sorrow 1999). This online database is updated periodically but at the onset of this study, only 938 taxa were reported for Beaufort County. This ranked it 24th out of the 46 six counties in the state. It is now ranked second after Berkeley County (McMillan 2010 pers. comm.). This was due to two causes. First, Beaufort County has not been botanized extensively in recent years. Second, Townsend and Sorrow (1999) largely inherited and built upon the nomenclature and distribution information of Radford, Ahles and Bell (1968). Radford, Ahles and Bell (1968) "lumped" a considerable number of species and infraspecific taxa that had been recognized by earlier botanical treatments. Based on numerous taxonomic revisions in subsequent years Weakley (2010) recognized and "split out" many of these formerly "lumped" taxa as well as many newly recognized taxa. A total of 769 new records for Beaufort County were amassed during the course of this study. Of these 695 were definitively new occurrences for the county that were not included in Townsend and Sorrow (1999) and an additional 74 may have previously been represented by collections but due to recent taxonomic revision their occurrence in Beaufort County was not clarified until this

study. A total of 261 new records were amassed for the state. Of these 154 were definitively new occurrences for the state. An additional 108 may have represented by earlier collections but due to recent taxonomic revision their occurrence in South Carolina was not clarified until this study. See Appendices A and B for further information about the new records.

Identification of plants is often based on a "best fit" to plants known to occur in a given area. Additionally, many researchers don't actively search for a species until they know to look for it. Therefore, producing an updated checklist for the county will improve accuracy of future field work. The addition of new taxa for the state will spread the benefit to other counties as well. This is particularly important when a locally uncommon or peripheral species could be misidentified for more widespread taxa. Such is the case with *Mikania cordifolia* (Linnaeus f.) Willdenow and Eryngium baldwinii Sprengel which are first reported for South Carolina here. They have been previously been confused with *Mikania scandens* (Linnaeus) Willdenow and Eryngium prostratum Nuttall ex A.P. de Candolle, which are widespread species. There are numerous other examples. New populations which appear to be peripheral or disjunct from the plants distribution should be evaluated for inclusion on the SC Rare list. This is particularly important when they are listed as rare in adjacent states like M. cordifolia and Cyperus thyrsiflorus Junghuhn. Most of the new native taxa were known from a more southern range. The question remains as to which of these were overlooked or misidentified in the past and which have expanded their range due to factors such as climate change and habitat modification.

A secondary emphasis was to document the occurrences of rare plants. The basis for rarity in this thesis was the inclusion on the SC Rare list (McMillan 2005). A total of 263 populations of 76 rare plants are reported from Beaufort County here. This compares with a total

of 66 rare plant occurrences representing 32 taxa reported for the county by the South Carolina Heritage Trust. Collections made during this study document 233 of these populations representing 69 taxa. Of these 51 taxa were not included for the county by the South Carolina Heritage Trust (2010) and 52 had no prior collections in the Clemson or Citadel herbaria. Examined specimens from other collectors validate an additional 30 populations and 7 additional taxa. Of these taxa 3 are not included for the county by the South Carolina Heritage Trust. Two of the collected taxa have federal status: *Lindera melissifolia* (Walter) Blume and *Litsea aestivalis* (Linnaeus) Fernald. Table 3 provides additional data about rare plants. Appendix B provides detailed collection information and distribution information about the cited collections.

Table 3: Rare plant populations reported from Beaufort County, South Carolina. Inclusion and ranking on the list is based on the South Carolina Rare List (McMillan 2005). Global and state ranking descriptions are from Natureserve (2010) and McMillan (2005).

			SC		SCHT	Pop.	Pop.
Species	US	G Rank	Rank	SCHT	ext.	Obs.	O.C.
Adiantum capillus-veneris		G5	S1			1	
Aletris obovata		G4/G5	S1	1			
Amphicarpum							
muhlenbergianum		G4	S2-S3			8	
Arenaria lanuginosa ssp.							
lanuginosa		G5	S1?			2	
Aristida condensata		G4?	S2			2	
Aristida spiciformis		G4	S2/S3			3	1
Asclepias connivens		G4?	S1	1			
Asclepias pedicellata		G4	S2	1		2	
Axonopus compressus		G?	S1			1	
Baccharis glomeruliflora		G4	S3?			10	
Callitriche peploides		G?	S1?			2	
Callitriche terrestris		G?	S2?			2	
Canna flaccida		G4?	S2	7		8	
Carex basiantha		G5	S2	1			1
Carex calcifugens		G4	S1Q				1
Carex dasycarpa		G?	S2/S3				2
Carex hyalinolepis		G4/G5	S2D	1			1
Carya myristiciformis		G4	S2	1			
Clematis catesbyana		G?	S2			5	2
Coelorachis cylindrica		G?	SH?			1	
Collinsonia serotina		G3/G4	S1			1	
Crocanthemum corymbosum		G?	S?			7	1
Crocanthemum georgianum		G4	S2	1		3	
Croton michauxii		G5	S2			2	
							1or
Cynanchum scoparium		G4	S1	4	3		2
Cyperus distinctus		G4	S1	3			1
Cyperus tetragonus		G4?	S2	1		2	
Dichanthelium strigosum							
var. glabrescens		G?	S1			2	
Dichanthelium webberianum		GNR	SNR	1			
Eleocharis parvula		G5	S1?			1	
Eleocharis rostellata		?	?			2	
Eleocharis tricostata		G4	S2?			1	

			SC		SCHT	Pop.	Pop.
Species	US	G Rank	Rank	SCHT	ext.	Obs.	O.C.
Epidendrum conopseum		G4	S3?	1			
Eriochloa michauxii		G3/G4	S1	1			
Eupatorium leptophyllum		G?	S2?			5	
Eupatorium recurvans		G3	S1?			9	
Eupatorium scabridum		G?	S1	1		3	
Forestiera godfreyi		G2	S1	1	2	1	1
Galactia elliottii		G5	S1			12	1
Gelsemium rankinii		G?	S?			2	
Ilex amelanchier		G4	S3			2	
Ipomoea imperati		G5	S1			1	
Ipomoea macrorhiza		G3/G5	S1	3		17	1
Liatris patens		G?	S1			10	1
Lilaeopsis carolinensis		G3/G5	S2			1	
Lilaeopsis chinensis		G?	S?			1	
Lindera melissifolia	FE	G2	S2	3		2	1
Lipocarpha aristulata		G?	PI			1	
Lipocarpha micrantha		G5	S2	1			
Listera australis		G4	S2			1	
Litsea aestivalis	FSC	G3	S?(50)	6		5	2
Ludwigia lanceolata		G3	S1			1	
Ludwigia ravenii		G2?	S1				1
Lyonia ferruginea		G5	S1	1		12	1
Lyonia fruticosa		G4?	SH			16	
Matelea flavidula		G?	S2			1	
Muhlenbergia sericea		GU	SU	1		2	1
Nyssa ogeche		G4/G5	S1	1			
Ophioglossum							
crotalophoroides		G5/T5	S?			1	
Ophioglossum petiolatum		G5	S1			1	
Opuntia stricta var. dilenii		G?	S1			2	
Opuntia stricta var. stricta		G?	S1			5	1
Orobanche uniflora		G5	S2			2	1
Parietaria floridana		G5	S2			3	
Pilea fontana		G5	S?			1	
Pinckneya bracteata		G3/G4	S1	2		1	
Potamogeton foliosus var.							
foliosus		G5	S?			1	
Psilotum nudum		G5	S1	1		2	
Quercus austrina		G5	S1	1		5	3

			SC		SCHT	Pop.	Pop.
Species	US	G Rank	Rank	SCHT	ext.	Obs.	O.C.
Quercus myrtifolia		G5	SNR	1			
Rhapidophyllum hystrix		G4	S1	3		9	
Rhexia cubensis		G4/G5	S1			2	
Rhynchospora careyana		G4Q	S3D			1	
Ruellia caroliniensis ssp.							
ciliosa		G5T3/T5	S1	1			
Sageretia minutiflora		G4	S3	11		2	4
Sagittaria chapmanii		G5/T3	S1			2	
Sagittaria subulata		G?	S2?			4	
Scleria reticularis		G3/G4	S1			1	
Scutelaria mellichampii		G?	S?			6	
Sideroxylon lanuginosum							
ssp. lanuginosum		G4/G5	S1			1	
Solidago austrina		G?	S1?			1	
Symphyotrichum elliottii		G5	S1?			1	1
Thalia dealbata		G5?	S1	1		2	1
Thelypteris ovata var. ovata		G4	S2D			1	
Tridens chapmanii		G?	S1D			1	
Xyris brevifolia		G5/G5	S1	1		1	
Total				64	5	231	31
Total				64	5	231	31

US- status under the United States Endangered Species Act: FE=federally endangered, FSC=federal species of concern.

G Rank- Global conservation status

S Rank - State conservation status

Conservation status ranks (G Rank and S Rank) 1= Critically imperiled—at very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors; 2= Imperiled—at high risk of extinction or elimination due to very restricted range, very few populations, steep declines, or other factors; 3= Vulnerable—at moderate risk of extinction or elimination due to a restricted range, relatively few populations, recent and widespread declines, or other factors; 4= Apparently secure—uncommon but not rare; some cause for long-term concern due to declines or other factors. 5= Secure—common; widespread and abundant; P= Peripheral; D= Disjunct; Q= Questionable taxa that may reduce conservation priority; ?= Status not known; NR=Rank not assessed.

SCHT- Populations reported in the South Carolina Heritage Trust database for Beaufort County (South Carolina Heritage Trust 2010). Some of these are based on populations reported from personal collections made during this project. Others are based on collections in the Clemson or Citadel herbaria which were examined for this project.

SCHT ext. - Extirpated populations reported in the South Carolina Heritage Trust database for Beaufort County (South Carolina Heritage Trust 2010).

Pops. obs. - Populations cited by personal collections made during the course of this project. Some were subsequently reported to the South Carolina Heritage Trust.

Pops. O. C.-Populations documented by collections other than my personal collections in the Clemson or Citadel herbaria. Some of these had been reported to the South Carolina Heritage Trust.

Though far more rare plant populations are now known in the county, it should be noted that few of these populations are secure or stable. Almost all were on private property. Several were reported during pre-development surveys and have since been destroyed. This calls attentions to the need to provide legal protection for rare plants at the state and local level. Others are declining due to habitat alteration or changes in management practices. Alteration of wetland hydrology for development affects plants far beyond the boundaries of the development. Many of the plants depend on open sunny habitat formerly maintained by fire. Prescribed fire is the most effective means to manage their habitat (Glitzenstein, Platt and Streng 1995). It is becoming increasingly rare in the county due to fear of litigation from nearby property owners. This is true even at Victoria Bluff Heritage Preserve.

Encountering fire dependent species in heavily degraded habitats throughout the county would seem to indicate that most of the county was subject to fire (Frost.) Knowing this is critical when developing interpretation and management plans for natural preserves. Previously, many of the preserves have been treated as they were mixed hardwood forests or maritime forests. Restoring fire would not only preserve the rare species but also stabilize the rapidly declining species that are reportedly common such as *Rhexia petiolata* Walter, *Ilex glabra* (Linnaeus) A. Gray and *Kalmia hirsuta* (Walter)(Weakley 2010).

Most of the conservation efforts in the county to this date have focused on preserving large trees. This is evidenced by the tree ordinance in the municipalities of Beaufort and Port Royal. Only two of the rare plants reported for the county attain the size of large trees. Five of the six families with most reported taxa are almost entirely herbaceous. These five families contain over a third of the species known from the county. To preserve our biodiversity we need

to focus more effort on preserving herbaceous plants, shrubs, and small trees and this may require fire.

The value of information is in its application. This project demonstrates that Beaufort County has a very rich and diverse flora. However, it is undergoing greater alteration than anywhere else in the state. It is hoped that firstly that by documenting the diversity of the flora, that this information will help raise awareness to its value and draw attention to preserving it.

APPENDICES

APPENDIX A ANNOTATED CHECKLIST OF THE VASCULAR FLORA OF BEAUFORT COUNTY

The primary objective of this project was to document the diversity of Beaufort County which is represented in the following checklist. Drastic changes have occurred in the county's land use in recent decades. Many previously reported populations have been extirpated. Additionally, taxonomic nomenclature has undergone dramatic revisions since Radford, Ahles and Bell (1968) confusing the placement of older reported species. Therefore the primary data for this checklist are my collections from the county between 2003 and 2010. These collections are available for examination in the Clemson University Herbarium. The secondary data are all Beaufort County collections from the herbaria of Clemson University and the Citadel which I examined and annotated based on the most current accepted nomenclature.

Organization of higher level taxa follows that of the Angiosperm Phylogeny Working Group (Stevens 2007). Families, genera, species and infraspecific taxa are hierarchical and arranged alphabetically. Nomenclature generally follows that of Weakley (2010). Since the collections were processed over several years, in some cases the nomenclature has changed since time of processing. Novelty or rarity are indicated before the taxonomic name where applicable. Plants that were not reported in the South Carolina Plant and Fish Atlas for South Carolina (Townsend and Sorrow 1999) or Beaufort County are indicated by (SC) or (BC) respectively. Novel taxa created by taxonomic division or revision in which the parent species has been reported from the state or county are indicated by (SC*) or (BC*) respectively. A (R) indicates a taxon that was reported on the SC Rare list (McMillan 2005). Detailed information about all rare and many novel plants is provided in Appendix B. Following the taxonomic name is a statement of nativity, source of introduction if known and applicable, observed abundance and habitat type. Collections are arranged chronologically. The following abbreviations are used for frequently cited persons. ABP= A. B. Pittman, ADR=Anibal Dominguez-Roblero, AFH= Alexis Figueroa-Herrera, APJ=Angel Peréz-José, BCL= Bruce C. Lampright, BH= B. Hassler, BT= Ben Turner, CAS = Cynthia A. Aulbach-Smith, CCC= Carlos Chacón-Calvo, CJ = C. Judge, CPD= Clemens Paul Dietze, DCP= Daniel Curtis Payne, FCS= Felipe Cruz-Silva, FJDR=Franciso Javier Dominguez-Roblero, GW= George Westerfield, HB= Hanuman Bull, JB= John Brubaker, JBN= John B. Nelson; JFT= John F. Townsend, JLLR= José Luis López-Ramírez, PDM= Patrick Dale McMillan, MO= Masamichi Ogasawara, PHW=Patricia Hollis Wallace, RDP= Richard Dwight Porcher, RM=Randy Moring, SJ= Sadie Jenkins, TK= Todd Kuntz, TMS = Theresa Martin Seigler, TP= Terry Putnam, TW= Tom Wentworth, WH= William Hodgins. Collections from the Citadel are indicated by (CITA-CLEMS), which is currently housed at Clemson. All others are in the general Clemson University herbarium.

Pteridophytes Aspleniaceae

Asplenium platyneuron (Linnaeus) Britton, Sterns & Poggenberg. Native. Frequent in calcareous areas: *DCP 1200*, 30 October 2004; *DCP 1278*, 31 October 2004.

Azollaceae

Azolla caroliniana Willdenow. Native. Abundant in freshwater wetlands: *DCP 3305*, 11 July 2005.

Blechnaceae

(SC) *Blechnum serrulatum* L. C. Richard. Introduced from farther south. Infrequent but increasing in ruderal areas: *DCP 1721*, 24 March 2005; *DCP 2058*, 30 May 2005.

Woodwardia areolata (Linnaeus) T. Moore. Native. Frequent in pineland wetlands and swamp forests: *DCP 1241*, 31 October 2004; *DCP 1266*, 31 October 2004; *DCP 1392*, 13 November 2004; *DCP 4066*, 27 November 2005.

Davalliaceae

(SC) *Nephrolepis cordifolia* (Linnaeus) Presl. Introduced. Infrequent in ruderal areas: *DCP 3606*, 9 August 2005.

Dennstaedtiaceae

Pteridium aquilinum (Linnaeus) Kuhn var. *pseudocaudatum* (Clute) Heller. Native. Abundant in pinelands: *DCP 1381*, 13 November 2004.

Dryopteridaceae

(BC) Athyrium asplenioides (Michaux) A. A. Eaton. Native. Infrequent in swamp forests: DCP 1302, 31 October 2004; DCP 1325, 1 November 2004; DCP 1748, 25 April 2005.

Cyrtomium falcatum (L.f.) K. Presl. Introduced from Asia. Infrequent in ruderal areas: *DCP 1656*, 6 January 2007.

Dryopteris ludoviciana (Kunze) Small. Native. Rare in calcareous areas: DCP 1285, 31 October 2004; DCP 1736, 27 March 2005; DCP 2055, 29 May 2005; DCP 2072, 30 May 2005.

(BC) Onoclea sensibilis Linnaeus var. sensibilis. Native. Frequent in swamp forests: DCP 4062, 27 November 2005; DCP 1308, 31 October 2004.

Polystichum acrostichoides (Michaux) Schott. Native. Infrequent in calcareous swamps: *DCP 1287*, 31 October 2004; *DCP 1323*, 1 November 2004.

Equisetaceae

(SC) *Equisetum hyemale* Linnaeus ssp. *affine* (Engelmann) Calder & R L. Taylor. Native. Rare in utility easement in pinelands.: *DCP 3261*, 6 July 2005.

Lycopodiaceae

Lycopodiella alopecuroides (Linnaeus) Cranfill. Native. Rare in pineland wetlands: DCP 4685, 14 June 2006.

- (BC) Lycopodiella appressa (Chapman) Cranfill. Native. Rare in pineland wetlands: *EJM* 0100, 4 June 1974.
- (BC) Lycopodiella prostrata (Harper) Cranfill. Native. Rare in pineland wetlands: BS 0001, 10 October 1971.

Lygodiaceae

(BC) *Lygodium japonicum* (Thunberg) Swartz. Introduced from Asia. Infrequent in ruderal areas: *DCP 1347*, 1 November 2004; *DCP 2095*, 5 June 2005.

Ophioglossaceae

Botrychium biternatum (Savigny) Underwood. Native. Infrequent in calcareous areas: *DCP 1328*, 1 November 2004; *DCP 1585*, 28 November 2004; *DCP 1740*, 1 April 2005. (BC)(R)*Ophioglossum crotalophoroides* Walter. Native. Infrequent in calcareous areas: *DCP 4336*, 12 February 2006.

(BC)(R)*Ophioglossum petiolatum* Hooker. Native. Infrequent in calcareous areas: *DCP 4222*, 5 January 2006.

Osmundaceae

(SC) *Osmunda cinnamomea* Linnaeus var. *glandulosa* Waters. Native. Rare, one small population observed in pinelands: *DCP 2223*, 21 June 2005.

Osmunda cinnamomea Linnaeus var. cinnamomea. Native. Frequent in pineland wetlands: DCP 1240, 31 October 2004; DCP 1747, 25 April 2005.

Osmunda regalis Linnaeus var. spectabilis (Willdenow) A. Gray. Native. Frequent in pineland wetlands, swamp forests and tidal freshwater wetlands: DCP 4617, 29 May 2006.

Polypodiaceae

(SC) *Phlebodium aureum* (Linnaeus) J. Smith. Introduced from farther south. Infrequent but increasing in ruderal areas: *DCP 3697*, 16 August 2005.

Pleopeltis polypodyoides (Linnaeus) E. G. Andrews & Windham ssp. *michauxiana* (Weatherby) E. G. Andrews & Windham. Native. Abundant, epiphytic on hardwood trees or epipetric on masonry: *DCP 1652*, 6 January 2007.

Psilotaceae

(R) *Psilotum nudum* (Linnaeus) Palisot de Beauvois. Native. Infrequent or overlooked in calcareous areas: *DCP 1217*, 30 October 2004; *DCP 1658*, 6 January 2007.

Pteridaceae

(BC)(R) *Adiantum capillus-veneris* Linnaeus. Native. Rare, epipetric on masonry in cemetery: *DCP 1655*, 6 January 2007.

Pteris multifida Poiret. Introduced from the tropics. Infrequent, epipetric on masonry in cemetery: *DCP 1657*, 6 January 2007.

(BC) *Pteris vittata* Linnaeus. Introduced from farther south and west. Rare, epiphytic on cultivated *Sabal palmetto*: *DCP 1198*, 30 October 2004.

Salviniaceae

(BC) Salvinia minima Baker. Probably introduced from farther south. Rare, one population observed in a freshwater wetland: DCP 3609, 9 August 2005.

Thelypteridaceae

- (BC) *Macrothelypteris torresiana* (Gaudichaud-Beaupre) Ching. Introduced from the Asian and African tropics. Infrequent in ruderal areas: *DCP 1341*, 1 November 2004; *DCP 4308*, 14 January 2006.
- (SC) *Thelypteris hispidula* (Decaisne) C. F. Reed var. *veriscolor* (R. St. John) Lellinger. Probably adventive from farther south. Infrequent in ruderal areas: *DCP 3221*, 3 July 2005.

Thelypteris kunthii (Desvaux) C. V. Morton. Native. Frequent in calcareous areas: *DCP* 4060. 27 November 2005.

- (BC)(R) *Thelypteris ovata* R. St. John var. *ovata*. Probably adventive from farther south. Infrequent along stream banks in Bluffton: *DCP 0325*, 30 June 2004.
- (BC) *Thelypteris palustris* Schott var. *pubescens* (Lawson) Fernald. Native. Frequent in tidal freshwater wetlands and swamp forests: *DCP 4783*, 15 July 2006.

Vittariaceae

(SC) *Vittaria lineata* (Linnaeus) J. Smith. Adventive from farther south and west. Infrequent, epiphytic on cultivated *Sabal palmeto*: *DCP 3696*, 16 August 2005.

<u>Gymnosperms</u>

Cupressaceae

Juniperus virginiana Linnaeus var. *silicicola* (Small) E. Murray. Native. Abundant in maritime forests and calcareous areas: *DCP 1259*, 31 October 2004.

Taxodium ascendens Brongniart. Native. Infrequent in pinelands: DCP 2148, 12 June 2005.

Taxodium distichum (Linnaeus) L. C. Richard. Native. Frequent in tidal freshwater wetlands and swamp forests: *DCP 2258*, 28 June 2005.

Cycadaceae

(SC) *Cycas revoluta* Thunberg. Introduced. Rare, one naturalized population observed around an abandoned homesite: *DCP 4830*, 19 July 2006.

Pinaceae

(SC) *Pinus clausa* (Chapman ex Engelmann) Vasey ex Sargent. Introduced from farther south. Rare, one extensive population observed on Coosaw Island, probably naturalized from a timber planting: *DCP 4854*, 22 July 2006.

Pinus echinata P. Miller. Native. Infrequent in moist pinelands: *DCP 4315*, 14 January 2006.

Pinus elliottii Engelmann var. elliottii. Native. Abundant in pinelands and maritime forests: DCP 1119, 16 October 2004; DCP 1151, 16 October 2004; DCP 1155, 16 October 2004; DCP 1158, 16 October 2004; DCP 1193, 17 October 2004; DCP 1612, 2 January 2005.

Pinus glabra Walter. Native. Infrequent in calcareous areas: *DCP 2262*, 28 June 2005; *DCP 2265*, 28 June 2005; *DCP 2281*, 28 June 2005.

Pinus palustris P. Miller. Native. Frequent in pinelands: *DCP 4159*, 28 December 2005. *Pinus serotina* Michaux. Native. Frequent in pinelands: *DCP 1456*, 13 November 2004.

Pinus taeda Linnaeus. Native. Abundant in ruderal areas, swamp forests and maritime forests: *DCP 1222*, 31 October 2005; *DCP 1403*, 13 November 2004; *DCP 1476*, 14 November 2004; *DCP 1485*, 14 November 2004.

(SC) *Pinus virginiana* P. Miller. Introduced from farther north. Rare, one population observed naturalizing from an old Christmas tree planting: *DCP 3621*, 11 August 2005.

Nymphaeales Nymphaeaceae

- (BC) *Nuphar advena* (Aiton) R. Brown. ex Aiton f. Native. Frequent in tidal freshwater wetlands: *DCP 3607*, 9 August 2005; *DCP 4624*, 29 May 2006.
- (BC) *Nymphaea mexicana* Zuccarini. Possibly Introduced from farther south by wild ducks. Rare in freshwater wetlands: *RDP 2838*, 6 June 1998 (CITA CLEMS).

Nymphaea odorata Aiton ssp. *odorata*. Native. Frequent in freshwater wetlands: *DCP* 4924, 20 August 2006.

<u>Ceratophyllales</u> Ceratophyllaceae

(BC) Ceratophyllum echinatum A. Gray in Torrey & A. Gray. Native. Rare in pineland wetlands: DCP 3303, 11 July 2005.

Magnoliids

Annonaceae

- (BC) *Asimina parviflora* (Michaux) Dunal. Native. Infrequent in calcareous areas: *DCP 1557*, 26 November 2004; *DCP 4521*, 18 May 2006.
- (BC) Asimina triloba (Linnaeus) Dunal. Native. Rare in mesic calcareous areas: *DCP 1329*, 1 November 2004; *DCP 1333*, 1 November 2004; *DCP 4061*, 27 November 2005.

Aristolochiaceae

Endodeca serpentaria Linnaeus) Rafinesque. Native. Frequent in calcareous areas: *DCP* 1808, 9 May 2005.

Hexastylis arifolia (Michaux) Small var. arifolia. Native. Infrequent in mesic forests: DCP 1304, 31 October 2004; DCP 1353, 1 November 2004.

Lauraceae

- (BC) *Cinnamomum camphora* (Linnaeus) J. Presl. Introduced from East Asia. Infrequent in ruderal areas, mainly north of the Broad River: *DCP 1415*, 13 November 2004; *DCP 1578*, 27 November 4 2004.
- (R) Lindera melissifolia (Walter) Blume. Native. Rare in pinelands: DCP 4271, 6 January 2006; RDP 2268, 9 August 1990 (CITA_CLEMS); DCP 2192, 19 June 2005.
- (R) Litsea aestivalis (Linnaeus) Fernald. Native. Infrequent and declining in pineland wetlands: DCP 5282, 6 August 2009; DCP 2191, 19 June 2005; RDP 1193, 11 August 1976 (CITA_CLEMS); RDP 2267, 9 August 1990 (CITA_CLEMS); DCP 2285, 1 July 2005; DCP 1152, 16 October 2004; DCP 1551, 26 November 2004.

Persea borbonia (Linnaeus) Sprengel. Native. Frequent but decreasing in maritime forests: DCP 1530, 25 November 2004; DCP 1631, 4 January 2005; DCP 3951, 15 October 2007.

Persea palustris (Rafinesque) Sargent. Native. Frequent, but decreasing rapidly in pinelands: DCP 1219, 31 October 2004; DCP 1383, 13 November 2004; DCP 1437, 13 November 2004.

Sassafras albidum (Nuttall) Nees. Native. Frequent in xeric pinelands and other disturbed xeric areas: DCP 3897, 2 October 2005.

Magnoliaceae

(SC) *Liriodendion tulipifera* Linnaeus var. 1. Native. Infrequently encountered, but often extensive populations in swamp forest ecotones: *DCP 1262*, 31 October 2004.

Magnolia grandiflora Linnaeus. Native. Frequent in swamp forests, fire protected mesic calcareous areas and suburban areas: *DCP 1263*, 31 October 2004.

Magnolia virginiana Linnaeus. Native. Frequent in pinelands: DCP 1358, 1 November 2004; DCP 1397, 13 November 2004; DCP 1441, 13 November 2004; DCP 4051, 27 November 2005;.

Piperaceae

(SC) *Peperomia pellucida* (Linnaeus) Kunth. Introduced from tropical America. Rare or overlooked, epipetric on masonry: *DCP 5161*, 12 August 2007; *DCP 5184*, 10 September 2007.

Saururaceae

Saururus cernuus Linnaeus. Native. Frequent in pineland wetlands and swamp forests: DCP 1273, 31 October 2004.

Monocots

Agavaceae

Manfreda virginica (Linnaeus) Salisbury ex Rose. Native. Rare, three small populations observed in xeric pinelands: *DCP 5258*, 27 October 2008.

Yucca aloifolia Linnaeus. Native. Frequent in xeric calcareous areas and dunes: *DCP* 3958, 17 October 2007.

Yucca filamentosa Linnaeus. Native. Frequent in xeric pinelands: DCP 2261, 28 June 2005.

(SC*) Yucca flaccida Haworth. Native. Frequent in xeric pinelands: DCP 1228, 31 October 2004.

Yucca gloriosa Linnaeus. Native. Frequent in dunes: DCP 4036, 27 November 2005.

Alismataceae

Echinodorus cordifolius (Linnaeus) Grisebach. Native. Infrequent in swamp forests: *DCP* 3315, 12 July 2005.

(BC)(R) Sagittaria chapmanii (J. G. Smith) C. Mohr. Native. Infrequent in pineland wetlands and swamp forests: DCP 3248, 4 July 2005; DCP 4842, 19 July 2006.

Sagittaria graminea Michaux. Native. Frequent in tidal freshwater wetlands: *DCP 3374*, 16 July 2005.

Sagittaria lancifolia Linnaeus var. lancifolia. Native. Infrequent in pineland wetlands: DCP 2216, 21 June 2005.

Sagittaria lancifolia Linnaeus var. media Micheli. Native. Frequent in tidal freshwater wetlands: DCP 3466, 25 July 2005; DCP 3694, 13 August 2005.

- (SC) *Sagittaria platyphylla* (Engelmann) J. G. Smith. Native. Infrequent in ruderal wetlands: *DCP 3703*, 19 August 2005.
- (SC) Sagittaria stagnorum Small. Native. Infrequent in depression wetlands: *DCP 3752*, 5 September 2005.
- (BC)(R)Sagittaria subulata (Linnaeus) Buchenau. Native. Frequent in depression wetlands and tidal freshwater wetlands: *DCP 3451*, 24 July 2005; *DCP 3489*, 26 July 2005; *DCP 4615*, 29 May 2006 *DCP 4808*, 19 July 2006.

Alliaceae

- (BC) *Allium ampeloprasum* Linnaeus. Introduced from Eurasia. Frequently persistant and spreading from former cultivation: *DCP 3762*, 5 March 2005.
- (BC) Allium canadense Linnaeus var. canadense. Native. Infrequent in ruderal areas: DCP 1824, 9 May 2005.

Allium vineale Linnaeus. Introduced from Eurasia. Abundant in ruderal areas: *DCP 1599*, 14 December 2004.

Nothoscordum bivalve (Linnaeus) Britton, Sterns & Poggenberg. Native. Infrequent in ruderal areas: *DCP 3774*, 12 March 2005.

- (SC) *Nothoscordum gracile* (Aiton) Stearn. Introduced from South America. Abundant in ruderal areas: *DCP 4633*, 1 June 2006.
- (BC) *Tristagma uniflorum* (Graham) Traub. Introduced from South America. Infrequent in ruderal areas: *DCP 5235*, 28 March 2008.

Alstroemeriaceae

(SC) Alstroemeria pulchella Linnaeus f.. Introduced from South America. Rare in ruderal areas: DCP 5088, 6 January 2007.

Amaryllidaceae

- (BC) *Crinum americanum* Linnaeus. Native. Rare, two populations observed in ruderal areas. One was associated with a brackish stream.: *DCP 3515*, 30 July 2005; *DCP 5022*, 19 August 2006.
- (BC) *Hymenocallis crassifolia* Herbert. Native. Frequent in tidal freshwater wetlands: *DCP* 2243, 27 June 2005.
- (BC) *Leucojum aestivum* Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP* 4337, 26 February 2005; *DCP* 4332, 11 February 2006.

Lycoris radiata (L'Héritier) Herbert. Introduced from East Asia. Infrequent in ruderal areas: *DCP 1405*, 13 November 2004.

- (BC) *Narcissus jonquilla* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP* 4333, 11 February 2006.
- (BC) *Narcissus pseudonarcissus* Linnaeus cv. Van Wilder. Introduced from Europe. Infrequent in ruderal areas: *DCP 3763*, 5 March 2005.
- (SC) *Narcissus tazetta* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP* 4334, 11 February 2006.

Zephyranthes atamasca (Linnaeus) Herbert. Native. Infrequently spreading from cultivated populations, native to mesic calcareous areas: *DCP 5112*, 25 March 2007.

Zephyranthes candida (Lindley) Herbert. Introduced from South America. Infrequently naturalized in ruderal areas: *DCP 5048*, 20 November 2006.

Anthericaceae

(SC) *Chlorophytum comosum* (Thunberg) Jaques. Introduced from Africa. Rarely naturalized, one small population observed in a ruderal area: *DCP 4641*, 6 June 2006.

Araceae

Arisaema triphyllum (Linnaeus) Schott ssp. *tripyllum*. Native. Frequent in swamp forests: *DCP 1305*, 31 October 2004; *DCP 1731*, 27 March 2005; *DCP 1755*, 25 April 2005.

(SC) *Colocasia esculenta* (Linnaeus) Schott. Introduced from tropical Asia. Frequent, spreading from former cultivation and trash heaps in mesic areas: *DCP 1006*, 16 September 2004.

Orontium aquaticum Linnaeus. Native. Infrequent in acidic swamps: *DCP 1728*, 24 March 2005.

Peltandra virginica (Linnaeus) Schott. Native. Frequent in tidal freshwater wetlands: *DCP 3235*, 4 July 2005.

Arecaceae

- (SC) *Butia capitata* (Martius) Beccari. Introduced from South America. Rare in ruderal areas: *DCP 5217*, 1 November 2007.
- (R) Rhapidophyllum hystrix (Pursh) H. A. Wendland & Drude ex Drude. Native. Rare in calcareous swamps near Bluffton and on Spring Island: *DCP 1290*, 31 October 2004; *DCP 1360*, 1 November 2004; *DCP 1363*, 1 November 2004; *DCP 1365*, 1 November 2004; *DCP 1371*, 1 November 2004; *DCP 3604*, 9 August 2005; *DCP 3759*, 5 March 2005; *DCP 3770*, 5 March 2005.

Sabal minor (Jacquin) Persoon. Native. Frequent in mesic ca lcareous pinelands and swamp forests: *DCP 1291*, 31 October 2004.

Sabal palmetto (Walter) Loddiges ex J. A. & J. H. Schultes. Native. Abundant in ruderal areas and maritime forests, Infrequent in pinelands: *DCP 3916*, 3 October 2005.

Serenoa repens (Bartram) Small. Native. Frequent in pinelands and maritime forests: DCP 1491, 14 November 2004.

(SC) Syagrus romanzoffianum (Chamisso) Glassman. Introduced from South America. Rare in ruderal areas: *DCP 4945*, 26 August 2006.

Asparagaceae

- (SC) *Asparagus aethiopicus* Linnaeus. Introduced from Africa. Infrequent but increasing in ruderal areas: *DCP 4303*, 10 January 2006; *DCP 5075*, 23 December 2006; *DCP 1649*, 6 January 2007.
- (BC) Asparagus officinalis Linnaeus. Introduced from Eurasia. Infrequent on disturbed beaches and salt marsh fringes: DCP 1791, 4 May 2005; DCP 3633, 12 August 2005.

Bromeliaceae

(SC) *Tillandsia recurvata* (Linnaeus) Linnaeus. Introduced from farther south and west. Frequent, epiphytic on cultivated *Quercus virginiana*: *DCP 4052*, 27 November 2005; *DCP 4414*, 24 March 2006; *DCP 4384*, 21 March 2006; *DCP 5076*, 23 December 2006.

Tillandsia usneoides (Linnaeus) Linnaeus. Native. Abundant, epiphytic: *DCP 3902*, 2 October 2005.

Cannaceae

(R) Canna flaccida Salisbury. Native. Infrequent and decreasing in pineland wetlands, freshwater wetlands and salt marsh fringes: DCP 3554, 2 August 2005; DCP 4042, 27 November

- 2005; DCP 4290, 7 January 2006; DCP 4849, 19 July 2006; DCP 4930, 25 August 2006; DCP 4905, 15 August 2006;.
- (SC) *Canna indica* Linnaeus. Introduced from the New World tropics. Infrequent in ruderal areas: *DCP 2098*, 5 June 2005.
- (SC) *Canna x generalis* L. H. Bailey (pro. sp.). Introduced, a hybrid of varius species. Rarely naturalized in ruderal areas: *DCP 3751*, 5 September 2005.

Commelinaceae

Commelina communis Linnaeus var. *ludens* (Miquel) C. B. Clarke. Introduced from the Old World. Frequent in ruderal areas: *DCP 3384*, 18 July 2005.

Commelina diffusa Burmann f.. Introduced from the Old World. Frequent in ruderal areas: DCP 0313, 24 June 2004; DCP 3742, 26 August 2005.

Commelina erecta Linnaeus var. angustifolia (Michaux) Fernald. Native. Frequent in xeric pinelands: DCP 3399, 19 July 2005.

(BC) Commelina virginica Linnaeus. Native. Frequent in swamp forests: DCP 3848, 2 October 2005.

Cuthbertia rosea (Ventenat) Small. Native. Rare in pinelands: DCP 0050, 26 May 2003; DCP 3737, 26 August 2005.

Murdannia keisak (Hassskarl) Handel-Mazzetti. Introduced from Asia. Abundant in swamp forests near Sheldon: *DCP 3907*, 2 October 2005.

Murdannia nudiflora (Linnaeus) Brenan. Introduced from Asia. Abundant in moist lawns: *DCP 1013*, 16 September 2004; *DCP 1002*, 16 September 2004; *DCP 3617*, 10 August 2005.

(SC) *Tradescantia fluminensis* Vellozo. Introduced from South America. Frequent in mesic ruderal areas: *DCP 0299*, 24 June 2004; *DCP 0309*, 24 June 2004; *DCP 1838*, 10 May 2005; *DCP 4914*, 15 August 2006.

Tradescantia ohiensis Rafinesque. Native. Frequent in calcareous areas, sometimes in maritime forests and dunes: *DCP 1627*, 3 January 2005.

Cyperaceae

Bolboschoenus robustus (Pursh) J. Soják. Native. Frequent tidal freshwater wetlands and other freshwater wetlands: DCP 3693, 13 August 2005; DCP 4039, 27 November 2005.

- (BC) *Bulbostylis barbata* (Rottbøll) C. B. Clarke. Introduced from the Old World tropics. Frequent in ruderal areas: *DCP 1028*, 16 September 2004; *DCP 3890*, 2 October 2005.
- (BC) Bulbostylis ciliatifolia (Elliott) Fernald. Native. Infrequent in xeric pinelands: DCP 5200, 11 October 2007.
- (BC) *Bulbostylis coarctata* (Elliott) Fernald. Native. Insufficient abundance data, xeric pinelands: *DCP 1677*, 10 January 2005; *DCP 4174*, 29 December 2005.

Bulbostylis stenophylla (Elliott) C. B. Clarke. Native. Insufficient abundance data, xeric pinelands: *DCP 4203*, 3 January 2006.

- (R) Carex basiantha Steudel. Native. Rare in calcareous areas: PDM 1460, 11 May 1996.
- (BC) *Carex bromoides* Schkuhr ex Willdenow ssp. *bromoides* Dewey. Native. Insufficient abundance data, swamp forests: *DCP 3771*, 6 March 2005.
- (SC) Carex calcifugens Naczi. Native. Rare in calcareous areas: PDM 1462, 11 May 1996.

Carex cephalophora Muhlenberg ex Willdenow. Native. Insufficient abundance data, calcareous areas: *JFT 922*, 24 May 1996; *PDM 2200*, 12 April 1997.

Carex complanata Torrey & Hooker. Native. Insufficient abundance data, swamp forests: DCP 0036, 23 May 2003.

(R) Carex dasycarpa Muhlenberg. Native. Infrequent in maritime forests and calcareous areas: RDP 2684, 24 May 1996 (CITA CLEMS); RDP 2697, 28 June 1996 (CITA CLEMS).

Carex debilis Michaux. Native. Frequent in swamp forests: DCP 0049, 26 May 2003; DCP 1756, 25 April 2005; DCP 2070, 30 May 2005.

Carex digitalis Willdenow. Native. Frequent in xeric ruderal areas: DCP 0129, 16 May 2004; DCP 0192, 12 June 2004; DCP 1787, 4 May 2005.

- (BC) Carex emmonsii Dewey ex Torrey. Native. Frequent in swamp forests: DCP 0012, 23 March 2003; DCP 0020, 23 March 2003; DCP 3772, 6 March 2005; DCP 4374, 21 March 2006; DCP 4376, 21 March 2006.
- (BC) Carex flaccosperma Dewey. Native. Insufficient abundance data, swamp forests: DCP 0021, 23 March 2003.
- (BC) Carex floridana Schweinitz. Native. Frequent in xeric maritime forests and xeric calcareous areas: DCP 0094, 12 May 2004; DCP 1695, 13 March 2005; DCP 3757, 5 March 2005; DCP 4405, 24 March 2006; DCP 4677, 10 June 2006.
- (BC) Carex gigantea Rudge. Native. Insufficient abundance data, swamp forests: DCP 4677, 10 June 2006.
- (BC) Carex glaucescens Elliott. Native. Insufficient abundance data, pineland wetlands and swamp forests: DCP 0068, 4 April 2003; DCP 0286, 24 June 2004; DCP 1270, 31 October 2004; DCP 1550, 26 November 2004; DCP 3425, 22 July 2005.
- (BC) Carex howei Mackenzie. Native. Insufficient abundance data, swamp forests: DCP 0013, 27 March 2003.
- (R) *Carex hyalinolepis* Steudel. Native. Insufficient abundance data, tidal freshwater wetlands: *JFT 1478*, 13 May 1997.

Carex intumescens Rudge var. intumescens. Native. Insufficient abundance data, swamp forests: DCP 0005, 27 March 2003.

- (BC) *Carex joorii* Bailey. Native. Insufficient abundance data, swamp forests: *DCP 1367*, 1 November 2004; *DCP 1370*, 1 November 2004.
- (BC) *Carex lonchocarpa* Willdenow. Native. Insufficient abundance data, tidal freshwater wetlands: *DCP 2251*, 27 June 2005.

Carex longii Mackenzie. Native. Frequent in ruderal areas: DCP 0143, 16 May 2004; DCP 0167, 1 June 2004; DCP 4158, 27 December 2005.

(BC) *Carex louisianica* Bailey. Native. Insufficient abundance data, swamp forests: *DCP 0032*, 23 May 2003; *DCP 4656*, 10 June 2006.

Carex lupuliformis Sartwell ex Dewey. Native. Insufficient abundance data, swamp forests: *RDP 2686*, 28 June 1996 (CITA_CLEMS).

Carex lupulina Muhlenberg ex Willdenow. Native. Insufficient abundance data, swamp forests: *DCP 3467*, 25 July 2005.

Carex lurida Wahlenberg. Native. Insufficient abundance data, swamp forests: DCP 0026, 27 March 2003; DCP 0031, 23 May 2003; DCP 0064, 23 May 2003.

- (SC) *Carex muhlenbergii* Schkuhr ex Willdenow var. *ennervis*. Native. Insufficient abundance data, ruderal areas: *DCP 0076*, 30 April 2004.
- (BC) *Carex muehlenbergii* Schkuhr ex Willdenow var. *muhlenbergii*. Native. Frequent in ruderal areas: *DCP 0118*, 15 May 2004; *DCP 0134*, 16 May 2004; *DCP 4436*, 25 March 2006.
- (BC) Carex oblita Steudel. Native. Insufficient abundance data, freshwater wetlands: DCP 0010, 23 March 2003.

Carex oxylepis Torrey & Hooker. Native. Insufficient abundance data, swamp forests: DCP 0002, 24 March 2003; DCP 0008, 21 March 2003.

- (BC) Carex pigra Naczi. Native. Insufficient abundance data, swamp forests: DCP 1823, 9 May 2005.
- (BC) Carex retroflexa Muhlenberg ex Willdenow. Native. Insufficient abundance data, mesic calcareous areas: DCP 2069, 30 May 2005.

Carex seorsa Howe. Native. Insufficient abundance data, swamp forests: DCP 0001, 14 March 2003; DCP 0215, 16 June 2004; DCP 0294, 24 June 2004.

Carex stipata Muhlenberg ex Willdenow var. *maxima* Chapman. Native. Insufficient abundance data, tidal freshwater wetlands: *DCP 2250*, 27 June 2005.

(BC) Carex striata Michaux var. striata. Native. Insufficient abundance data, pineland wetlands: DCP 4266, 6 January 2006; DCP 4389, 21 March 2006; DCP 4394, 22 March 2006.

Carex striatula Michaux. Native. Insufficient abundance data, tidal freshwater wetlands: DCP 0011, 23 March 2003; DCP 4619, 29 May 2006.

- (BC) Carex tribuloides Wahlenberg. Native. Insufficient abundance data, ruderal areas: DCP 0223, 16 June 2004.
- (BC) *Carex verrucosa* Muhlenberg. Native. Insufficient abundance data, pineland wetlands: *DCP 4841*, 19 July 2006.

Cladium jamaicense Crantz. Native. Frequent in tidal freshwater wetlands and salt marshes: *DCP 2240*, 27 June 2005.

Cyperus compressus Linnaeus. Native. Frequent in ruderal areas: *DCP 0228*, 16 June 2004; *DCP 0233*, 16 June 2004; *DCP 0243*, 16 June 2004; *DCP 3471*, 26 July 2005.

- (BC) *Cyperus croceus* Vahl. Native. Abundant in ruderal areas: *DCP 0162*, 1 June 2004; *DCP 0172*, 1 June 2004; *DCP 0310*, 24 June 2004; *DCP 1235*, 31 October 2004; *DCP 4217*, 4 January 2006.
- (R) Cyperus distinctus Steudel. Native. Rare in wetlands: CAS 1145, 22 August 1980.
- (BC) *Cyperus echinatus* (Linnaeus) Wood. Native. Frequent in ruderal areas: *DCP 0180*, 12 June 2004; *DCP 0206*, 12 June 2004; *DCP 0210*, 12 June 2004; *DCP 3486*, 26 July 2005.
- (SC) *Cyperus eragrostis* Lamarck. Introduced from tropical America. Rare or overlooked in ruderal areas: *DCP 0100*, 12 May 2004.
- (BC) *Cyperus erythrorhizos* Muhlenberg. Native. Infrequent in freshwater wetlands: *DCP* 3509, 29 July 2005.
- (BC) *Cyperus esculentus* Linnaeus var. *leptostachyus* Böckler. Native. Abundant in ruderal areas: *DCP 3701*, 17 August 2005.
- (SC) *Cyperus filiculmis* Vahl. Native. Insufficient abundance data, xeric pinelands and dunes: *DCP 3428*, 22 July 2005.
- (BC) Cyperus flavescens Linnaeus. Native. Insufficient abundance data, dunes: DCP 4896, 12 August 2006.

Cyperus haspan Linnaeus. Native. Frequent in tidal freshwater wetlands: *DCP 3463*, 25 July 2005 *DCP 3689*, 13 August 2005.

(BC) *Cyperus iria* Linnaeus. Native. Insufficient abundance data, swamp forests: *DCP 3727*, 26 August 2005.

Cyperus odoratus Linnaeus. Native. Insufficient abundance data, dunes: *DCP 4893*, 12 August 2006.

Cyperus plukenetii Fernald. Native. Infrequent in xeric pinelands: DCP 3407, 20 July 2005.

Cyperus polystachyos Rottböll. Native. Frequent in freshwater wetlands and salt marshes: *DCP 3436*, 23 July 2005; *DCP 3485*, 26 July 2005; *DCP 4187*, 30 December 2005.

Cyperus pseudovegetus Steudel. Native. Insufficient abundance data, freshwater wetlands: *DCP 0030*, 23 May 2003; *DCP 3496*, 26 July 2005.

Cyperus retrorsus Chapman. Native. Frequent in ruderal areas: *DCP 0146*, 16 May 2004; *DCP 0211*, 16 June 2004; *DCP 0219*, 16 June 2004; *DCP 0224*, 16 June 2004; *DCP 0311*, 24 June 2004; *DCP 4165*, 28 December 2005; *DCP 4215*, 4 January 2006; *DCP 4320*, 15 January 2006.

Cyperus rotundus Linnaeus.Possibly introduced. Frequent in ruderal areas and dunes: *DCP 0165*, 1 June 2004; *DCP 0216*, 16 June 2004; *DCP 4037*, 27 November 2005.

- (BC) *Cyperus strigosus* Linnaeus. Native. Insufficient abundance data, freshwater wetlands: *DCP 4041*, 27 November 2005.
- (BC) *Cyperus surinamensis* Rottböll. Native. Insufficient abundance data, salt marshes: *DCP* 3255, 5 July 2005.
- (R) *Cyperus tetragonus* Elliott. Native. Rare and decreasing in maritime forests and other calcareous areas: *DCP 4226*, 5 January 2006; *DCP 4899*, 12 August 2006.
- (SC) *Cyperus thyrsiflorus* Junghuhn. Native. Rare or overlooked in tidal freshwater wetlands: *DCP 4782*, 15 July 2006.

Cyperus virens Michaux. Native. Infrequent in freshwater wetlands: DCP 0029, 23 May 2003; DCP 4660, 10 June 2006.

- (BC) *Dulichium arundinaceum* (Linnaeus) Britton var. *arundinaceum*. Native. Infrequent in pinelands: *DCP 4639*, 4 June 2006.
- (BC) *Eleocharis acicularis* (Linnaeus) Roemer & J. A. Schultes. Native. Insufficient abundance data, freshwater wetlands: *DCP 4809*, 19 July 2006.

Eleocharis albida Torrey. Native. Insufficient abundance data, populations not observed: *DKW 0051*, 4 June 1974; *JFT 0910*, 24 May 2006.

Eleocharis baldwinii (Torrey) Chapman. Native. Insufficient abundance data, pinelands: *DCP 1153*, 16 October 2004; *DCP 3639*, 13 August 2005; *DCP 3704*, 19 August 2005.

- (BC) *Eleocharis engelmannii* Steudel. Native. Insufficient abundance data, ruderal wetlands: *DCP 4545*, 22 May 2006; *DCP 4585*, 23 May 2006; *DCP 4811*, 19 July 2006.
- (BC) *Eleocharis fallax* Weatherby. Native. Insufficient abundance data, salt marshes: *DCP* 3746, 28 August 2005.

Eleocharis flavescens (Poiret) Urban var. *flavescens*. Native. Insufficient abundance data, salt marshes: *DCP 0182*, 12 June 2004.

(BC) *Eleocharis melanocarpa* Torrey. Native. Insufficient abundance data, pineland wetlands: *DCP 0285*, 24 June 2004.

- (BC) *Eleocharis microcarpa* Torrey var. *microcarpa*. Native. Insufficient abundance data, pineland wetlands: *DCP 4767*, 14 July 2006.
- (BC) *Eleocharis obtusa* (Willdenow) J. A. Schultes. Native. Insufficient abundance data, freshwater wetlands: *DCP 5130*, 23 May 2003; *DCP 3538*, 30 July 2005.
- (BC)(R)*Eleocharis parvula* (Roemer & J. A. Schultes) Link ex Bluff. Native. Insufficient abundance data, salt marshes: *DCP 4779*, 15 July 2006.
- (BC) *Eleocharis quadrangulata* (Michaux) Roemer & J. A. Schultes. Native. Insufficient abundance data, pineland wetlands and salt marshes: *DCP 3627*, 11 August 2005; *DCP 5094*, 9 January 2007.
- (SC)(R)*Eleocharis rostellata* (Torrey) Torrey. Native. Insufficient abundance data, pineland wetlands: *DCP 4589*, 24 May 2006; *DCP 4847*, 19 July 2006.
- (BC)(R) *Eleocharis tricostata* Torrey. Native. Insufficient abundance data, pineland wetlands: *DCP 0089*, 12 May 2004.
- (BC) *Eleocharis tuberculosa* (Michaux) Roemer & J. A. Schultes. Native. Frequent in pineland wetlands: *DCP 3419*, 22 July 2005; *DCP 3674*, 13 August 2005; *DCP 4600*, 24 May 2006; *DCP 4676*, 10 June 2006; *DCP 4688*, 14 June 2006.

Fimbristylis autumnalis (Linnaeus) Roemer & J. A. Schultes. Native. Frequent in swamp forests: DCP 3495, 26 July 2005; DCP 3728, 26 August 2005.

Fimbristylis caroliniana (Lamarck) Fernald. Native. Frequent in salt marshes and dunes: *DCP 3624*, 11 August 2005; *DCP 4027*, 27 November 2005.

Fimbristylis castanea (Michaux) Vahl. Native. Frequent in salt marshes and dunes: DCP 0227, 16 June 2004; DCP 2171, 14 June 2005; DCP 4895, 12 August 2006.

Fimbristylis dichotoma (Linnaeus) Vahl. Presumably introduced. Insufficient abundance data, moist ditch in pinelands: *DCP 4058*, 27 November 2005.

(BC) Fimbristylis littoralis Gaudichaud. Possibly introduced. Infrequent in ruderal areas: RDP 2800, 5 November 1997 (CITA CLEMS).

Fimbristylis puberula (Michaux) Vahl var. puberula. Native. Insufficient abundance data, pinelands: DCP 0269, 16 June 2004.

(BC) *Fuirena breviseta* (Coville) Coville in Harper. Native. Insufficient abundance data, pineland wetlands: *DCP 0291*, 24 June 2004; *DCP 4097*, 21 January 2005.

Fuirena pumila (Torrey) Sprengel. Native. Insufficient abundance data, population not observed: CAS 1127, 22 August 1980.

- (BC) Kyllinga brevifolia Rottbøll. Native. Frequent in ruderal areas: DCP 4457, 11 May 2006.
- (BC) *Kyllinga gracillima* Miquel. Possibly Introduced from East Asia. Frequent in ruderal areas: *DCP 4560*, 23 May 2006.

Kyllinga odorata Vahl. Native. Frequent in pinelands: DCP 2210, 20 June 2005.

- (BC) *Kyllinga squamulata* Thonning ex Vahl. Introduced from tropical Asia. Infrequently encountered but extensive populations in lawns: *DCP 5039*, 8 October 2006.
- (BC)(R) *Lipocarpha aristulata* (Coville) G. Tucker. Possibly adventive from farther west. Infrequent or overlooked in ruderal areas: *DCP 3398*, 18 July 2005.

Rhynchospora caduca Elliott. Native. Frequent in pineland wetlands, swamp forests and other freshwater wetlands: DCP 1269, 31 October 2004; DCP 1536, 26 November 2004; DCP 4107, 21 January 2005; DCP 3349, 14 July 2005.

- (R) *Rhynchospora careyana* Fernald. Native. Infrequent in pineland wetlands: *DCP 4045*, 27 November 2005.
- (BC) *Rhynchospora cephalantha* Gray var. *cephalantha*. Native. Frequent in pineland wetlands: *DCP 0061*, 23 May 2003; *DCP 4074*, 15 July 2005; *DCP 3416*, 22 July 2005.
- (BC) *Rhynchospora chalarocephala* Fernald & Gale. Native. Frequent in pineland wetlands: *DCP 1681*, 10 January 2005; *DCP 4075*, 22 July 2005; *DCP 4098*, 21 December 2005.

Rhynchospora chapmanii M. A. Curtis. Native. Frequent in pinelands: *DCP 4131*, 26 December 2005; *DCP 4141*, 26 December 2005.

Rhynchospora colorata (Linnaeus) H. Pfeiffer. Native. Frequent in calcareous freshwater wetlands and salt marsh margins: *DCP 3265*, 6 July 2005.

Rhynchospora corniculata (Lamarck) Gray var. *corniculata*. Native. Frequent in freshwater wetlands: *DCP 3367*, 16 July 2005; *DCP 3371*, 16 July 2005; *DCP 3491*, 26 July 2005; *DCP 3707*, 19 August 2005.

- (BC) *Rhynchospora elliottii* A. Dietrich. Native. Frequent in pineland wetlands and other freshwater wetlands: *DCP 3536*, 30 July 2005; *DCP 3678*, 13 August 2005.
- (BC) *Rhynchospora fascicularis* (Michaux) Vahl var. *distans* (Michaux) Chapman. Native. Frequent in pinelands: *DCP 1142*, 16 October 2004; *DCP 1145*, 16 October 2004.
- (BC) *Rhynchospora fascicularis* (Michaux) Vahl var. *fascicularis*. Native. Frequent in pinelands: *DCP 1451*, 13 November 2004; *DCP 1452*, 13 November 2004; *DCP 1487*, 14 November 2004; *DCP 1493*, 14 November 2004; *DCP 3356*, 15 July 2005; *DCP 4134*, 26 December 2005; *DCP 4144*, 26 December 2005.
- (BC) *Rhynchospora globularis* (Chapman) Small var. *globularis*. Native. Frequent in pinelands and ruderal areas: *DCP 3389*, 18 July 2005.
- (BC) *Rhynchospora glomerata* (Linnaeus) Vahl var. *glomerata*. Native. Frequent in pinelands and ruderal areas: *DCP 3347*, 14 July 2005; *DCP 3498*, 26 July 2005.
- (BC) Rhynchospora gracilenta Gray. Native. Infrequent in pinelands: DCP 3359, 15 July 2005; DCP 3390, 18 July 2005.

Rhynchospora inexpansa (Michaux) Vahl. Native. Abundant in ruderal wetlands: *DCP 1495*, 14 November 2004; *DCP 1500*, 14 November 2004; *DCP 3417*, 22 July 2005; *DCP 4076*, 22 July 2005; *DCP 3537*, 30 July 2005; *DCP 3673*, 13 August 2005; *DCP 3677*, 13 August 2005.

Rhynchospora macrostachya Torrey ex A. Gray var. *macrostachya*. Native. Infrequent in freshwater wetlands: *DCP 3547*, 30 July 2005.

Rhynchospora microcephala (Britton) Britton ex Small. Native. Infrequent in pineland wetlands: *DCP 3497*, 26 July 2005.

Rhynchospora miliacea (Lamarck) A. Gray. Native. Infrequent in calcareous wetlands: *DCP 1297*, 31 October 2004; *DCP 4071*, 27 November 2005.

Rhynchospora mixta Britton. Native. Infrequent in swamp forests: *DCP 4070*, 27 November 2005.

Rhynchospora plumosa Elliott. Native. Infrequent in pinelands: DCP 4188, 30 December 2005; DCP 4253, 6 January 2006.

(BC) Rhynchospora rariflora (Michaux) Elliott. Native. Frequent in pinelands: DCP 4601, 24 May 2006.

- (SC) *Rhynchospora recognita* (Gale) Kral. Native. Frequent in pinelands ruderal areas: *DCP* 1669, 10 January 2005.
- (BC) *Rhynchospora torreyana* A. Gray. Native. Infrequent in pinelands: *DCP 1501*, 14 November 2004; *DCP 3350*, 14 July 2005.

Rhynchospora wrightiana Boeckler. Native. Infrequent in pinelands: DCP 3345, 14 July 2005; DCP 4130, 26 December 2005; DCP 4146, 26 December 2005.

- (BC) *Schoenoplectus americanus* (Persoon) Volk ex. Schinzius & (R) Keller. Native. Frequent in tidal freshwater wetlands: *DCP 3691*, 13 August 2005.
- (BC) Schoenoplectus pungens (Vahl) Palla var. pungens. Native. Frequent in salt marsh fringes: DCP 0177, 1 June 2004.
- (BC) *Schoenoplectus tabernaemontani* (C.C. Gmelin) Palla. Native. Frequent in tidal freshwater wetlands: *DCP 2249*, 27 June 2005; *DCP 3460*, 25 July 2005.
- (BC) *Scleria ciliata* Michaux var. *glabra* (Chapman) Fairey. Native. Insufficient abundance data, pineland wetlands: *DCP 0090*, 12 May 2004; *DCP 2208*, 20 June 2005.

Scleria muhlenbergii Steudel. Native. Insufficient abundance data, pineland wetlands: *DCP 3348*, 14 July 2005; *DCP 3381*, 17 July 2005.

(SC) *Scleria nitida* Willdenow. Native. Insufficient abundance data, pineland wetlands: *DCP* 1642, 5 January 2005; *DCP* 2057, 30 May 2005.

Scleria oligantha Michaux. Native. Insufficent data, mesic calcareous forests: DCP 2071, 30 May 2005.

- (SC) *Scleria pauciflora* Muhlenberg ex Willdenow var. *caroliniana* (Willdenow) Wood. Native. Insufficent data, pineland wetlands: *DCP 2220*, 21 June 2005.
- (BC) *Scleria pauciflora* Muhlenberg ex Willdenow var. *pauciflora*. Native. Insufficent data, pineland wetlands: *DCP 2109*, 7 June 2005.
- (R) Scleria reticularis Michaux. Native. Insufficent data, calcareous ditches adjacent to pinelands: DCP 3825, 20 July 2005.

Scleria triglomerata Michaux. Native. Abundant in xeric woodlands: DCP 2105, 7 June 2005; DCP 2116, 7 June 2005; DCP 2136, 12 June 2005.

Dioscoreaceae

(SC) *Dioscorea bulbifera* Linnaeus. Introduced from the Old World tropics. Rare but increasing in ruderal areas: *DCP 4021*, 24 November 2005.

Dioscorea floridana Bartlett. Native. Frequent in calcareous areas: DCP 1180, 17 October 2004; DCP 1208, 30 October 2004; DCP 4243, 6 January 2006.

Dioscorea villosa Linnaeus. Native. Infrequent in calcareous areas: *DCP 2053*, 28 May 2005.

Eriocaulaceae

Eriocaulon decangulare Linnaeus var. *decangulare*. Native. Rare in pineland wetlands: *DCP 0277*, 23 June 2004; *DCP 3422*, 22 July 2005; *DCP 4686*, 14 June 2006.

(BC) *Lachnocaulon anceps* (Walter) Morong. Native. Rare, one population observed in pinelands: *DCP 5274*, 26 May 2009.

Haemodoraceae

Lachnanthes caroliniana (Lamarck) Dandy. Native. Rare and decreasing in pinelands: *DCP 3352*, 15 July 2005.

Hemerocallidaceae

(BC) *Hemerocallis fulva* (Linnaeus) Linnaeus. Introduced from Asia. Infrequently naturalized around old homesites and along roadsides: *DCP 2179*, 16 June 2005.

Hyacinthaceae

Ornithogalum umbellatum Linnaeus. Introduced from Europe. Rarely naturalized, one population observed in a ruderal area: *DCP 5101*, 21 March 2007.

Hydrocharitaceae

Limnobium spongia (Bosc) Steudel. Native. Frequent in freshwater wetlands: *DCP 3302*, 11 July 2005; *DCP 3544*, 30 July 2005; *DCP 4287*, 7 January 2006.

Hypoxidaceae

Hypoxis hirsuta (Linnaeus) Coville. Native. Infrequent in dry woodlands: *DCP 5306*, 22 April 2010.

(BC) *Hypoxis curtissii* Rose in Small. Native. Frequent in swamp forests and tidal freshwater wetlands: *DCP 4657*, 10 June 2006; *DCP 4715*, 3 July 2006.

Hypoxis wrightii (Baker) Brackett. Native. Frequent in pinelands: DCP 4439, 26 March 2006.

Iridaceae

- (BC) *Crocosmia x crocosmiiflora* (V. Lemoine ex. E. Morr.) N.E. Brown. Introduced from Africa. Rarely naturalized in ruderal areas: *DCP 3947*, 15 October 2007.
- (BC) *Gladiolus communis* Linnaeus. Introduced from Africa. Rarely naturalized in ruderal areas: *DCP 5124*, 28 April 2007.
- (SC) *Gladiolus dalenii* Van Geel ssp. *dalenii*. Introduced from Africa. Frequently naturalized in ruderal areas: *DCP 2168*, 14 June 2005.

Iris virginica Linnaeus var. *virginica*. Native. Frequent in swamp forests: *DCP 1746*, 24 April 2005. *DCP 2247*, 27 June 2005; *DCP 4458*, 11 May 2006; *DCP 4655*, 10 June 2006; *DCP 4851*, 19 July 2006.

Sisyrinchium angustifolium P. Miller. Native. Insufficient abundance data, swamp forests: DCP 1829, 9 May 2005.

Sisyrinchium atlanticum Bicknell. Native. Insufficient abundance data, swamp forests: DCP 1822, 9 May 2005.

Sisyrinchium nashii Bicknell. Native. Insufficient abundance data, swamp forests: DCP 4580, 23 May 2006.

Sisyrinchium rosulatum Bicknell. Possibly adventive. Frequent in ruderal areas: DCP 4455, 11 May 2006; DCP 4456, 11 May 2006.

Juncaceae

(BC) *Juncus acuminatus* Michaux. Native. Insufficient abundance data, tidal freshwater wetlands and other freshwater wetlands: *DCP 4548*, 22 May 2006; *DCP 4618*, 29 May 2006.

Juncus biflorus Elliott. Native. Insufficient abundance data, freshwater wetlands: *DCP 3260*, 5 July 2005; *DCP 3424*, 22 July 2005; *DCP 4703*, 29 June 2006.

(BC) *Juncus bufonius* Linnaeus var. *bufonius*. Native. Frequent in ruderal areas: *DCP 4546*, 22 May 2006.

Juncus coriaceus MacKenzie. Native. Insufficient abundance data, pineland wetlands: *DCP 1521*, 25 November 2004; *DCP 4528*, 20 May 2006; *DCP 4582*, 23 May 2006.

(BC) *Juncus debilis* Gray. Native. Insufficient abundance data, freshwater wetlands: *DCP* 4592, 24 May 2006; *DCP* 4687, 14 June 2006.

Juncus dichotomus Elliott. Native. Insufficient abundance data, freshwater wetlands: *DCP 0222*, 16 June 2004; *DCP 0274*, 16 June 2004; *DCP 4547*, 22 May 2006.

Juncus diffusissimus Buckley. Native. Insufficient abundance data, freshwater wetlands: *DCP 4539*, 21 May 2006.

(BC) Juncus effusus Linnaeus ssp. solutus (Fernald& Wiegand) Hamet-Ahti. Native. Frequent in freshwater wetlands: DCP 0181, 12 June 2004; DCP 0221, 16 June 2004; DCP 3250, 5 July 2005.

Juncus elliottii Chapman. Native. Insufficient abundance data, pineland wetlands and freshwater wetlands: *DCP 4532*, 20 May 2006.

Juncus marginatus Rostkovius. Native. Insufficient abundance data, freshwater wetlands: *DCP 3391*, 18 July 2005; *DCP 4540*, 21 May 2006.

- (BC) *Juncus polycephalus* Michaux. Native. Insufficient abundance data, freshwater wetlands: *DCP 0153*, 1 June 2004; *DCP 3251*, 5 July 2005; *DCP 4837*, 19 July 2006.
- (BC) *Juncus repens* Michaux. Native. Frequent in pineland wetlands and swamp forests: *DCP* 3705, 19 August 2005.

Juncus roemarianus Scheele. Native. Abundant in salt marshes: *DCP 5145*, 16 May 2005.

Juncus scirpoides Lamarck var. 1. Native. Insufficient abundance data, pineland wetlands: DCP 1143, 16 October 2004; DCP 1638, 5 January 2005.

Juncus scirpoides Lamarck var. 2. Native. Insufficient abundance data, pineland wetlands: *DCP 3686*, 13 August 2005.

Juncus scirpoides Lamarck var. *scirpoides*. Native. Insufficient abundance data, pineland wetlands: *DCP 1496*, 14 November 2004.

Juncus tenuis Willdenow. Native. Abundant in ruderal areas: DCP 0009, 21 March 2003; DCP 4586, 23 May 2006.

Juncus validus Coville var. *validus*. Native. Insufficient abundance data, freshwater wetlands: *DCP 3252*, 5 July 2005.

Lemnaceae

- (BC) Landoltia punctata (G. F. W. Meyer) D. H. Les & D. J. Crawford. Introduced from the Southern Hemisphere. Frequent in ruderal areas: *DCP 2198*, 19 June 2005; *DCP 2297*, 2 July 2005; *DCP 3298*, 9 July 2005.
- (SC) *Lemna minor* Linnaeus. Native. Insufficient abundance data, freshwater wetlands: *DCP* 3610, 9 August 2005.

Lemna obscura (Austin) Daubs. Native. Insufficient abundance data, freshwater wetlands: *GS* 327, 10 October 1971.

Wolffia columbiana Karsten. Native. Insufficient abundance data, ponds and swamps: *GS* 327, 10 October 1971.

Wolfiella gladiata (Hegelmann) Hegelmann. Native. Insufficient abundance data, modified pineland depression wetlands: *DCP 2197*, 19 June 2005.

Liliaceae

- (SC) Aspidistra elatior Blume. Introduced from Asia. Rare, one naturalized population observed in a ruderal area: DCP 4831, 19 July 2006.
- (SC) *Lilium formosanum* A. Wallace. Introduced from Asia. Infrequent in ruderal areas: *DCP* 3507, 29 July 2005.

Marantaceae

(R) *Thalia dealbata* Fraser ex Roscoe. Native. Rare in pineland wetlands: *RDP 1629*, 26 May 1980 (CITA CLEMS); *DCP 3387*, 18 July 2005; *DCP 3619*, 10 August 2005.

Melanthiaceae

Amianthum muscitoxicum (Walter) A. Gray. Native. Rare in pinelands: DCP 2139, 12 June 2005.

Trillium maculatum Rafinesque. Native. Infrequent in mesic calcareous areas: *DCP 1685*, 26 February 2005; *DCP 1688*, 5 March 2005.

Nartheciaceae

Aletris farinosa Linnaeus. Native. Frequent in pinelands: *DCP 2111*, 7 June 2005; *DCP 4564*, 23 May 2006.

Orchidaceae

Cleistes divaricata (Linnaeus) Ames. Native. Rare in pineland wetlands: *DCP 2138*, 12 June 2005.

(BC) *Corallorhiza wisteriana* Conrad. Native. Rare or overlooked, remnant native populations in residential gardens: *DCP 1722*, 24 March 2005.

Habenaria repens Nuttall. Native. Infrequent in ruderal wetlands and freshwater wetlands: *DCP 3365*, 16 July 2005.

Hexalectris spicata (Walter) Barnhart var. spicata. Native. Rare in calcareous areas: RDP 1248, 1 July 1977, (CITA_CLEMS); RDP 2689, 28 June 1996 (CITA_CLEMS); JFT 1488, 14 May 1997.

- (R) Listera australis Lindley. Native. Rare or overlooked in swamp forests: *DCP 3760*, 5 March 2005.
- (BC) Platanthera cristata (Michaux) Lindley. Native. Rare in pinelands: DCP 3585, 5 August 2005.
- (SC) Spiranthes eatonii Ames ex R. Brown. Native. Rare in pinelands: DCP 2142, 12 June 2005.

(BC) Spiranthes odorata (Nuttall) Lindley. Native. Rare in swamp forests: RDP 2931, 13 October 1998.

Spiranthes praecox (Walter) S. Watson. Native. Insufficient abundance data, pinelands: DCP 2087, 1 June 2005; DCP 4572, 23 May 2006.

Spiranthes tuberosa Rafinesque. Native. Frequent on roadsides and in pinelands: *DCP* 2217, 21 June 2005.

Spiranthes vernalis Engelmann & A. Gray. Native. Frequent in pinelands, roadsides and lawns: *DCP 2061*, 30 May 2005; *DCP 2086*, 1 June 2005; *DCP 2089*, 2 June 2005; *DCP 2092*, 2 June 2005; *DCP 4454*, 11 May 2006; *DCP 4590*, 24 May 2006.

- (BC) *Tipularia discolor* (Pursh) Nuttall. Native. Infrequent in hardwood forests: *DCP 1691*, 13 March 2005.
- (SC) Zeuxine strateumatica (Linnaeus) Lindley Introduced from Asia. Infrequent weed in landscaped areas: *DCP 1720*, 24 March 2005.

Poaceae

Agrostis hyemalis (Walter) Britton, Sterns & Poggenberg. Native. Abundant in ruderal areas: *DCP 0160*, 1 June 2004; *DCP 0226*, 16 June 2004; *DCP 4413*, 24 March 2006; *DCP 4470*, 11 May 2006.

Agrostis perennans (Walter) Tuckerman. Native. Infrequent in ruderal areas: *DCP 5058*, 24 November 2006; *DCP 5198*, 10 October 2007.

- (SC) Agrostis stolonifera Linnaeus var. stolonifera. Adventive from farther north. Rare in ruderal areas: DCP 2202, 19 June 2005.
- (BC) *Aira caryophyllea* Linnaeus. Introduced from Europe. Rare in ruderal areas: *DCP 5273*, 23 May 2009;

Alopecurus carolinianus Walter. Native. Rare in swamp forests: DCP 5299, 22 April 2010.

(BC)(R)*Amphicarpum muhlenbergianum* (J. A. Schultes) Hitchcock. Native. Infrequent in pinelands: *DCP 4263*, 6 January 2006; *DCP 4270*, 6 January 2006; *DCP 4291*, 7 January 2006; *DCP 4387*, 21 March 2006; *DCP 4868*, 26 July 2006; *DCP 4873*, 30 July 2006; *DCP 4877*, 1 August 2006; *DCP 5082*, 5 January 2007.

Andropogon capillipes Nash var. capillipes 'dryland variant'. Native. Infrequent in pinelands: *PDM 6054*, 4 November 2001; *DCP 1637*, 5 January 2005.

Andropogon capillipes Nash var. 1. Native. Infrequent in pinelands: DCP 1136, 16 October 2004; DCP 1448, 13 November 2004.

Andropogon glaucopsis Elliott. Native. Frequent in pinelands: DCP 1502, 14 November 2004.

- (BC) Andropogon glomeratus (Walter) Britton, Sterns & Poggenberg var. glomeratus. Native. Rare in pinelands: DCP 4292, 7 January 2006.
- (BC) Andropogon gyrans Ashe. Native. Infrequent in pinelands: *DCP 1676*, 10 January 2005; *DCP 4088*, 20 December 2005; *DCP 4119*, 23 December 2005; *DCP 4121*, 23 December 2005; *DCP 4123*, 23 December 2005; *DCP 4192*, 30 December 2005.

Andropogon tenuispatheus (Nash) Nash. Native. Abundant in ruderal areas, salt marshes and dunes: *DCP 1404*, 13 November 2004; *DCP 1525*, 25 November 2004; *DCP 1527*, 25 November 2004; *DCP 4029*, 27 November 2005; *DCP 4139*, 26 December 2005.

(BC) Andropogon ternarius Michaux var. ternarius. Native. Infrequent in xeric pinelands: DCP 1561. 26 November 2004.

Andropogon virginicus Linnaeus smooth variant. Native. Rare in pinelands: *DCP 4313*, 14 January 2006.

Andropogon virginicus Linnaeus var. decipiens C.S. Campbell. Native. Frequent in pinelands: DCP 1147, 16 October 2004; DCP 1238, 31 October 2004; DCP 1315, 31 October 2004; DCP 1375, 1 November 2004; DCP 1435, 13 November 2004; DCP 1471, 14 November 2004; DCP 4163, 28 December 2005; DCP 4256, 6 January 2006.

Andropogon virginicus Linnaeus var. virginicus. Native. Abundant in ruderal areas: DCP 1526, 25 November 2004; DCP 4034, 27 November 2005; DCP 4296, 7 January 2006.

(BC) *Anthoxanthum odoratum* Linnaeus. Introduced from Europe. Rare on roadside: *DCP* 5302, 22 April 2010.

Aristida beyrichiana Trinius & Ruprecht. Native. Rare in pinelands: DCP 4200, 3 January 2006; DCP 4272, 6 January 2006.

(BC)(R) Aristida condensata Chapman. Native. Frequent in mesic pinelands: DCP 4100, 21 January 2005; DCP 4322, 29 December 2005.

Aristida lanosa Muhlenberg ex Elliott. Native. Infrequent in xeric pinelands: *DCP 4087*, 20 December 2005; *DCP 4246*, 6 January 2006.

Aristida longespica Poiret var. longespica. Native. Rare in xeric pinelands: DCP 4176, 29 December 2005.

(SC) Aristida oligantha Michaux Native. Rare in xeric pinelands: DCP 4008, 20 October 2005.

Aristida purpurascens Poiret. Native. Frequent in pinelands: *DCP 1128*, 16 October 2004; *DCP 1129*, 16 October 2004; *DCP 1183*, 17 October 2004; *DCP 4084*, 20 December 2005; *DCP 4181*, 29 December 2005; *DCP 4248*, 6 January 2006; *DCP 5025*, 7 October 2006.

- (R) Aristida spiciformis Elliott. Native. Rare in pinelands: CAS 1135, 22 August 1980; DCP 3974, 18 October 2005; DCP 4201, 3 January 2006; DCP 4269, 6 January 2006.
- (BC) Aristida tuberculosa Nuttall. Native. Infrequent in xeric pinelands: DCP 4175, 29 December 2005.
- (BC) *Aristida virgata* Trinius. Native. Frequent in pinelands: *DCP 1449*, 13 November 2004; *DCP 1472*, 14 November 2004; *DCP 1509*, 25 November 2004; *DCP 1556*, 26 November 2004; *DCP 4007*, 20 October 2005; *DCP 4120*, 23 December 2005; *DCP 4124*, 23 December 2005; *DCP 4189*, 30 December 2005; *DCP 5069*, 26 November 2006.

Arthraxon hispidus (Thunberg) Makino var. hispidus. Introduced from Southeast Asia.
 Infrequent but increasing in ruderal areas: DCP 3459, 24 July 2005; DCP 3912, 2 October 2005.
 Arundinaria gigantea (Walter) Muhlenberg. Native. Abundant in swamp forests: DCP 4223, 5 January 2006.

- (SC) Arundinaria tecta Walter. Native. Frequent but declining in pinelands: *DCP 1395*, 13 November 2004; *DCP 1463*, 13 November 2004; *DCP 4224*, 5 January 2006.
- (BC) *Arundo donax* Linnaeus. Introduced from the Old World. Infrequent in ruderal areas: *DCP 4285*, 7 January 2006.

Avena sativa Linnaeus. Introduced from Europe. Frequent around equestrian areas: *DCP 3528*, 30 July 2005; *DCP 4553*, 22 May 2006.

(BC)(R) *Axonopus compressus* (Swartz) Palisot de Beauvois. Probably introduced from farther south. Rare in pinelands: *DCP 4194*, 30 December 2005.

Axonopus fissifolius (Raddi) Kuhlm. Native. Abundant in pinelands and ruderal areas: DCP 1034, 16 September 2004; DCP 3414, 22 July 2005; DCP 3564, 4 August 2005.

Axonopus furcatus (Flugge) A. S. Hitchcock. Native. Infrequent in pinelands: CAS 2388, 27 July 1982; DCP 3563, 4 August 2005; DCP 4127, 26 December 2005.

Bothriochloa laguroides (Augustin de Candolle) Herter ssp. *torreyana* (Steudel) Allred & Gould. Introduced from farther south and west. Rare, one population observed in a ruderal area: *DCP 5262*, 4 November 2008.

Briza minor Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP 1761*, 25 April 2005.

- (BC) *Bromus catharticus* Vahl. Introduced from South America. Abundant in ruderal areas: *DCP 0175*, 1 June 2004; *DCP 0196*, 12 June 2004; *DCP 0234*, 16 June 2004; *DCP 4352*, 18 March 2006; *DCP 4428*, 25 March 2006.
- (BC) *Bromus japonicus* Thunberg. Introduced from Asia. Rare in ruderal areas: *DCP 4578*, 23 May 2006.
- (SC) *Cenchrus brownii* Roemer & J. A Schultes. Adventive from tropical America. Rare in ruderal areas: *DCP 5239*, 4 July 2008.

Cenchrus echinatus Linnaeus. Native. Frequent in ruderal areas: *DCP 1032*, 16 September 2004; *DCP 3480*, 26 July 2005.

Cenchrus longispinus (Hackel) Fernald. Native. Frequent in ruderal areas: *DCP 1001*, 16 September 2004; *DCP 3517*, 30 July 2005.

Cenchrus spinifex Cavanilles. Native. Frequent in ruderal areas: DCP 4010, 20 October 2005.

Cenchrus tribuloides Linnaeus. Native. Frequent in ruderal areas: DCP 1023, 16 September 2004.

(BC) Chasmanthium latifolium (Michaux) Yates. Native. Frequent in swamp forests: DCP 2246, 27 June 2005.

Chasmanthium laxum (Linnaeus) Yates. Native. Frequent in pinelands, maritime forests and swamp forests: DCP 1229, 31 October 2004; DCP 4597, 24 May 2006.

(SC) Chasmanthium sessiliflorum (Poiret) Yates var. 1. Native. Frequent in calcareous areas: DCP 1338. 1 November 2004.

Chasmanthium sessiliflorum (Poiret) Yates var. sessiliflorum. Native. Infrequent in calcareous areas: DCP 1345, 1 November 2004; DCP 3731, 26 August 2005; DCP 3738, 26 August 2005; DCP 3739, 26 August 2005.

(SC) *Chloris elata* Desvaux. Probably adventive from farther south. Rare, one small population observed in a pineland formerly used for grazing cattle: *DCP 5261*, 2 November 2008.

Cinna arundinacea Linnaeus. Native. Infrequent in swamp forests: DCP 3721, 26 August 2005; DCP 4786, 15 July 2006.

- (BC)(R) *Coelorachis cylindrica* (Michaux) Nash. Native. Rare, one population observed in a xeric pineland: *DCP 5171*, 27 August 2007.
- (SC) *Cortaderia selloana* (J. A. & J. H. Schultes) Ascherson & Graebner. Introduced from South America. Infrequent but increasing in ruderal areas: *DCP 3773*, 6 March 2005.

Cynodon dactylon (Linnaeus) Persoon var. *dactylon*. Introduced from Eurasia. Abundant in ruderal areas: *DCP 1617*, 2 January 2005.

- (BC) Dactylis glomerata Linnaeus. Introduced from Europe. Rare in ruderal areas: DCP 4466, 11 May 2006.
- (BC) *Dactyloctenium aegyptium* (Linnaeus) Wildenow. Introduced from the Old World tropics. Abundant in ruderal areas: *DCP 3474*, 26 July 2005; *DCP 4916*, 19 August 2006.
- (BC) *Danthonia sericea* Nuttall. Native. Rare, one population observed in a xeric calcareous pineland: *DCP 4573*, 23 May 2006.

Dichanthelium aciculare (Desvaux ex Poiret) Gould & Clark. Native. Frequent in pinelands and ruderal areas: DCP 1239, 31 October 2004; DCP 1247, 31 October 2004; DCP 1473, 14 November 2004; DCP 1507, 25 November 2004; DCP 4092, 21 January 2005; DCP 2114, 7 June 2005; DCP 4085, 20 December 2005.

Dichanthelium acuminatum (Swartz) Gould & Clark var. acuminatum. Native. Frequent in pineland wetlands and ruderal areas: DCP 0066, 23 May 2003; DCP 0078, 30 April 2004; DCP 0102, 12 May 2004; DCP 0114, 15 May 2004; DCP 0140, 1 DCP 0149, 16 May 2004; DCP 0158, 1 June 2004; DCP 0173, 1 June 2004; DCP 0202, 12 June 2004; DCP 0239, 16 June 2004; DCP 0247, 16 June 2004; DCP 1474, 14 November 2004.

Dichanthelium acuminatum (Swartz) Gould & Clark var. fasciculatum. Native. Insufficient abundance data, pinelands wetlands: DCP 4164, 28 December 2005.

- (BC) Dichanthelium boscii (Poiret) Gould & Clark. Native. Rare in calcareous areas: DCP 4522, 18 May 2006; DCP 4611, 28 May 2006.
- (BC) *Dichanthelium chamaelonche* (Trinius) Freckmann & Lelong. Native. Frequent in pinelands: *DCP 1154*, 16 October 2004; *DCP 1455*, 13 November 2004; *DCP 1498*, 14 November 2004; *DCP 2064*, 30 May 2005; *DCP 4115*, 23 December 2005; *DCP 4148*, 26 December 2005; *DCP 4199*, 3 January 2006.

Dichanthelium commutatum (Schultes) Gould var. commutatum. Native. Frequent in maritime forests and calcareous areas: DCP 0033, 23 May 2003; DCP 0086, 30 April 2004; DCP 0098, 12 May 2004; DCP 0104, 12 May 2004; DCP 0106, 12 May 2004; DCP 0107, 12 May 2004; DCP 0127, 16 May 2004; DCP 0142, 16 May 2004; DCP 0151, 16 May 2004; DCP 1364, 1 November 2004; DCP 4093, 21 January 2005; DCP 4068, 27 November 2005.

(SC) *Dichanthelium commutatum* (Schultes) Gould var. *asheii* (Pearson ex Ashe) Mohlenbrock. Native. Insufficient abundance data, calcareous areas: *DCP 0150*, 16 May 2004.

Dichanthelium dichotomum (Linnaeus) Gould var. *dichotomum*. Native. Frequent in ruderal areas, maritime forests and calcareous areas: *DCP 1668*, 10 January 2005; *DCP 2245*, 27 June 2005; *DCP 4125*, 23 December 2005.

Dichanthelium ensifolium (Baldwin ex Elliott) Gould. Native. Frequent in pinelands: DCP 1417, 13 November 2004; DCP 1459, 13 November 2004; DCP 1497, 14 November 2004; DCP 4530, 20 May 2006.

Dichanthelium lancearium (Trinius) Leblond in prep. Native. Frequent in xeric pinelands: DCP 1144, 16 October 2004; DCP 1411, 13 November 2004; DCP 1454, 13 November 2004; DCP 1518, 25 November 2004; DCP 1553, 26 November 2004; DCP 1554, 26 November 2004; DCP 3698, 16 August 2005; DCP 4116, 23 December 2005; DCP 4129, 26 December 2005; DCP 4143, 26 December 2005.

- *Dichanthelium laxiflorum* (Lamarck) Gould. Native. Frequent in ruderal areas: *DCP* 0148, 16 May 2004; *DCP* 0159, 1 June 2004; *DCP* 0312, 24 June 2004; *DCP* 1206, 30 October 2004; *DCP* 2264, 28 June 2005; *DCP* 4375, 21 March 2006.
- (SC) *Dichanthelium lucidum* (Ashe) LeBlond. Native. Frequent in pineland wetlands and swamp forests: *DCP 1268*, 31 October 2004; *DCP 1396*, 13 November 2004; *DCP 3465*, 25 July 2005.
- (BC) *Dichanthelium oligosanthes* (Schultes) Gould var. *oligosanthes*. Native. Frequent in xeric areas: *DCP 0115*, 15 May 2004; *DCP 0128*, 16 May 2004; *DCP 0168*, 1 June 2004; *DCP 0190*, 12 June 2004; *DCP 0208*, 12 June 2004; *DCP 4086*, 20 December 2005; *DCP 4091*, 21 January 2005; *DCP 4467*, 11 May 2006.
- (SC) *Dichanthelium oligosanthes* (Schultes) Gould var. *scribnerianum* (Nash) Gould. Native. Infrequent or overlooked in xeric areas: *DCP 4178*, 29 December 2005.
- Dichanthelium ovale (Elliott) Gould & Clark var. addisonii (Nash) Gould & Clark. Native. Insufficient abundance data, pinelands: DCP 4309, 14 January 2006.
- (BC) *Dichanthelium ovale* (Elliott) Gould & Clark var. *ovale*. Native. Frequent in pinelands: *DCP 0108*, 12 May 2004; *DCP 4250*, 6 January 2006; *DCP 5019*, 15 May 2006.
- (BC) *Dichanthelium scabriusculum* (Elliott) Gould & Clark. Native. Insufficient abundance data, pineland wetlands: *DCP 4869*, 26 July 2005.
- *Dichanthelium scoparium* (Lamarck) Gould. Native. Frequent in ruderal wetlands: *DCP* 0047, 26 May 2003; *DCP* 0229, 16 June 2004; *DCP* 0295, 24 June 2004; *DCP* 1236, 31 October 2004; *DCP* 1387, 13 November 2004.
- *Dichanthelium sphaerocarpon* (Elliott) Gould var. *sphaerocarpon*. Native. Insufficient abundance data, pinelands: *DCP 0065*, 23 May 2003.
- (SC) *Dichanthelium sphagnicola* (Nash) LeBlond. Native. Rare or overlooked in pinelands: *DCP 4117*, 23 December 2005; *DCP 4180*, 29 December 2005.
- (SC)(R) *Dichanthelium strigosum* (Muhlenberg) Freckmann var. *glabrescens* (Grisebach) Freckmann. Native. Insufficient abundance data, pinelands: *DCP 1519*, 25 November 2004; *DCP 1670*, 10 January 2005.
- (BC) *Dichanthelium strigosum* (Muhlenberg) Freckmann var. *leucoblepharis* (Trinius) Freckmann. Native. Frequent in pinelands and ruderal areas: *DCP 0060*, 23 May 2003; *DCP 4268*, 6 January 2006; *DCP 4311*, 14 January 2006.
- (BC) *Dichanthelium tenue* (Muhlenberg) Freckmann & Lelong. Native. Insufficient abundance data, pinelands: *DCP 1123*, 16 October 2004.
- (BC) *Dichanthelium villosissimum* (Nash) Freckmann var. *villosissimum*. Native. Insufficient abundance data, pinelands and ruderal areas: *DCP 0179*, 1 June 2004; *DCP 4475*, 11 May 2006.
- *Dichanthelium wrightianum* (Scribner) Freckmann. Native. Rare or overlooked in pinelands: *DCP 2115*, 7 June 2005.
- (SC) *Digitaria bicornis* (Lamarck) Roemer & J. A. Schultes. Native. Frequent in ruderal areas: *DCP 0213*, 16 June 2004; *DCP 1005*, 16 September 2004; *DCP 1020*, 16 September 2004; *DCP 2289*, 1 July 2005; *DCP 3829*, 1 October 2005.
- (BC) *Digitaria ciliaris* (Retzius) Köler. Native. Frequent in ruderal areas: *DCP 1019*, 16 September 2004; *DCP 1035*, 16 September 2004; *DCP 3470*, 26 July 2005; *DCP 3473*, 26 July 2005; *DCP 3834*, 1 October 2005.

Digitaria cognata (J. A. Schultes) Pilger. Native. Infrequent in pinelands: *DCP 4009*, 20 October 2005.

- (BC) *Digitaria ischaemum* (Schreber) Muhlenberg var. *ischaemum*. Native. Infrequent in ruderal areas: *DCP 3828*, 1 October 2005.
- (BC) *Digitaria ischaemum* (Schreber) Muhlenberg var. *mississippiensis* (Gattinger) Fernald. Native. Infrequent in ruderal areas: *DCP 3835*, 1 October 2005.
- (SC) *Digitaria longiflora* (Retzius) Persoon. Introduced from the Old World tropics. Infrequent in ruderal areas: *DCP 4627*, 30 May 2006.

Digitaria sanguinalis (Linnaeus) Scopoli. Introduced from Europe. Frequent in ruderal areas: DCP 0245, 16 June 2004; DCP 3437, 23 July 2005; DCP 3836, 1 October 2005; DCP 3863, 2 October 2005; DCP 3895, 2 October 2005; DCP 3919, 3 October 2005; DCP 3934, 2 October 2005; DCP 3976, 18 October 2005; DCP 4462, 11 May 2006.

- (BC) Digitaria serotina (Walter) Michaux. Native. Infrequent in ruderal areas: DCP 4407, 5 June 2006.
- (BC) Digitaria villosa (Walter) Persoon. Native. Frequent in pinelands: DCP 3924, 3 October 2005; DCP 3933, 2 October 2005; DCP 4162, 28 December 2005; DCP 5031, 8 October 2006.
- (BC) Digitaria violascens Link. Introduced. Infrequent in ruderal areas: DCP 3918, 3 October 2005.

Distichlis spicata (Linnaeus) Greene. Native. Frequent in salt marshes: DCP 0231, 16 June 2004; DCP 1039, 16 September 2004; DCP 3625, 11 August 2005.

Echinochloa colona (Linnaeus) Link. Introduced from the Old World tropics. Frequent in ruderal areas: *DCP 3595*, 7 August 2005; *DCP 4918*, 19 August 2006.

Echinochloa crusgalli (Linnaeus) Palisot de Beauvois var. *crusgalli*. Introduced. Insufficient abundance data, ruderal areas: *DCP 3744*, 28 August 2005; *DCP 4195*, 30 December 2005.

- (SC) *Echinochloa cruspavonis* (Kunth) J. A. Schultes var. *cruspavonis*. Native. Insufficient abundance data, ruderal wetlands: *DCP 3294*, 9 July 2005; *DCP 3565*, 4 August 2005; *DCP 3596*, 7 August 2005; *DCP 5024*, 7 October 2006.
- (SC) *Echinochloa muricata* (Palisot de Beauvois) Fernald var. *microstachya* Wiegand. Native. Insufficient abundance data, ruderal wetlands: *DCP 5166*, 18 August 2007.
- (SC) *Echinochloa muricata* (Palisot de Beauvois) Fernald var. *muricata*. Native. Insufficient abundance data, ruderal areas: *DCP 4850*, 19 July 2006; *DCP 5008*, 24 September 2006.

Echinochloa walteri (Pursh) Heller. Native. Rare in pineland depression wetlands and swamp forests: *DCP 4218*, 4 January 2006.

Eleusine indica (Linnaeus) Gaertner. Introduced from the Old World. Frequent in ruderal areas: *DCP 2275*, 28 June 2005; *DCP 3787*, 18 September 2005.

Elymus glabriflorus (Vasey) Scribner var. *glabriflorus*. Native. Insufficient abundance data, calcareous areas: *DCP 2257*, 28 June 2005; *DCP 4551*, 22 May 2006.

Elymus virginicus Linnaeus var. *jejunus* (Ramaley) Bush. Native. Insufficient abundance data, calcareous areas: *DCP 4804*, 19 July 2006.

Elymus virginicus Linnaeus var. *virginicus*. Native. Insufficient abundance data, calcareous areas: *DCP 4734*, 4 July 2006.

Eragrostis curvula (Schrader) Nees. Introduced from Africa. Frequent in ruderal areas: *DCP 1460*, 13 November 2004.

(SC) Eragrostis elliottii S. Watson. Native. Infrequent in pinelands and salt marshes: *DCP* 1146, 16 October 2004; *DCP* 1373, 1 November 2004; *DCP* 3932, 2 October 2005; *DCP* 4185, 30 December 2005.

Eragrostis hirsuta (Michaux) Nees. Native. Frequent in ruderal areas: *DCP 1559*, 26 November 2004; *DCP 3795*, 18 September 2005; *DCP 3950*, 15 October 2005; *DCP 4230*, 6 January 2006; *DCP 4286*, 7 January 2006.

- (BC) *Eragrostis lugens* Nees. Probably introduced from farther south and west. Frequent in ruderal areas: *DCP 3963*, 17 October 2005; *DCP 4160*, 28 December 2005; *DCP 4161*, 28 December 2005.
- (SC) *Eragrostis pectinacea* (Michaux) Nees ex Steudel var. *pectinacea*. Native. Infrequent in ruderal areas: *DCP 4840*, 19 July 2006; *DCP 4923*, 19 August 2006.
- (BC) *Eragrostis pilosa* (Linnaeus) Palisot de Beauvois. Introduced from the tropics. Infrequent in ruderal areas: *DCP 4628*, 30 May 2006.

Eragrostis refracta (Muhlenberg) Scribner. Native. Frequent in pinelands: DCP 1249, 31 October 2004; DCP 1374, 1 November 2004; DCP 3845, 1 October 2005; DCP 4109, 21 December 2005.

Eragrostis spectabilis (Pursh) Steudel. Native. Frequent in xeric areas: *DCP 1042*, 16 September 2004; *DCP 1679*, 10 January 2005; *DCP 3853*, 2 October 2005; *DCP 3957*, 17 October 2005; *DCP 4024*, 27 November 2005; *DCP 4177*, 29 December 2005.

Eremochloa ophiuroides (Munro) Hackel. Introduced from Southeast Asia. Frequent in ruderal areas: *DCP 1611*, 2 January 2005.

Eustachys petraea (Swartz) Desvaux. Native. Frequent in calcareous areas, salt marshes and dunes: *DCP 1461*, 13 November 2004.

(SC) Festuca subverticellata (Persoon) Alexeev. Native. Infrequent in calcareous wetlands: DCP 1802, 7 May 2005; DCP 4558, 23 May 2006.

Glyceria septentrionalis A. S. Hitchcock. Native. Infrequent in swamp forests: *DCP* 4577, 23 May 2006.

(BC) *Glyceria striata* (Lamarck) A. S. Hitchcock var. *striata*. Native. Infrequent in swamp forests: *DCP 5137*, 10 May 2007.

Gymnopogon ambiguus (Michaux) Britton, Sterns & Poggenberg. Native. Rare, one populationobserved in a xeric calcareous pineland: DCP 4245, 6 January 2006.

Heteropogon melanocarpus (Elliott) Elliott ex Bentham. Native. Infrequent in pinelands: *DCP 4237*, 6 January 2006; *DCP 4818*, 19 July 2006.

(BC) *Holcus lanatus* Linnaeus. Introduced from Europe. Rare, one population observed in a ruderal area: *DCP 2185*, 17 June 2005.

Hordeum pusillum Nuttall. Native. Abundant in ruderal areas: DCP 1754, 25 April 2005.

- (BC) *Hordeum vulgare* Linnaeus. Introduced from Eurasia. Rare in ruderal areas: *DCP 4556*, 22 May 2006.
- (BC) Leersia hexandra Swartz. Native. Infrequent in tidal freshwater wetlands: DCP 4730, 3 July 2006.
- (BC) Leersia lenticularis Michaux. Native. Infrequent in swamp forests: DCP 4658, 10 June 2006.
- (BC) Leersia oryzoides (Linnaeus) Swartz. Native. Infrequent in swamp forests: DCP 3811, 18 September 2005.

Leersia virginica Willdenow. Native. Frequent in tidal freshwater wetlands and swamp forests: *DCP 1335*, 1 November 2004; *DCP 3832*, 1 October 2005; *DCP 3908*, 2 October 2005.

- (SC) Leptochloa fascicularis (Lamarck) A. Gray var. fascicularis. Adventive from farther west. Infrequent in ruderal areas: DCP 3253, 5 July 2005.
- (SC) *Leptochloa panicea* (Retzius) Ohwi ssp. *brachiata* (Steudel) N. Snow. Native. Infrequent in salt marshes: *DCP 3748*, 28 August 2005.
- (BC) Lolium perenne Linnaeus var. aristatum Willdenow. Introduced from Eurasia. Frequent in ruderal areas: DCP 0077, 30 April 2004; DCP 4461, 11 May 2006; DCP 4518, 18 May 2006.
- (BC) Lolium perenne Linnaeus var. perenne. Introduced from Eurasia. Infrequent in ruderal areas: *DCP 5140*, 15 May 2007.
- (BC) Luziola fluitans (Michaux) Terrell & H. Robinson var. fluitans. Native. Frequent in freshwater wetlands: DCP 3815, 18 September 2005.
- (SC) *Megathrysus maximus* (Jacquin) B. K. Simon & S. W. L. Jacobs var. *maxima*. Introduced from Africa. Infrequent in ruderal areas: *DCP 5078*, 27 December 2006.
- (BC) Melica mutica Walter. Native. Infrequent in calcareous areas: DCP 4491, 13 May 2006.
- (SC) *Melinis repens* (Willdenow) Zizka. Introduced from Africa. Rare in ruderal areas: *DCP* 4764, 13 July 2006.
- (BC) *Microstegium vimineum* (Trinius) A. Camus. Adventive from Southeast Asia. Infrequent in mesic ruderal areas on the mainland: *DCP 1752*, 25 April 2005; *DCP 3913*, 2 October 2005.

Muhlenbergia capillaris (Lamarck) Trinius. Native. Infrequent in pinelands: JNP 280, 14 November 1970; DCP 3869, 2 October 2005; DCP 4122, 23 December 2005; DCP 4126, 23 December 2005; DCP 4186, 30 December 2005.

- (BC) *Muhlenbergia schreberi* J. F. Gmelin. Native. Frequent in ruderal areas: *DCP 3885*, 2 October 2005.
- (R) *Muhlenbergia sericea* (Michaux) P. M. Peterson. Native. Infrequent in salt marshes and dunes: *JNP 268*, 13 November 1970; *DCP 4118*, 23 December 2005; *DCP 5196*, 10 October 2007.

Oplismenus hirtellus (Linnaeus) Palisot de Beauvois ssp. setarius (Lamarck) Mez ex Ekman. Native. Abundant in maritime forests and calcareous areas: *DCP 1440*, 13 November 2004

Panicum amarum Elliott var. amarum. Native. Frequent in dunes: DCP 4025, 27 November 2005.

Panicum amarum Elliott var. amarulum (A. S. Hitchcock & Chase) P. G. Palmer. Native. Frequent in dunes. DCP 1608, 2 January 2005.

Panicum anceps Michaux var. *anceps*. Native. Rare, roadside adjacent to a swamp forest: *DCP 3724*, 26 August 2005.

Panicum anceps Michaux var. rhizomatum (A. S. Hitchcock & Chase) Fernald. Native. Frequent in pinelands: DCP 1124, 16 October 2004; DCP 1468, 14 November 2004; DCP 1666, 10 January 2005; DCP 4069, 27 November 2005.

Panicum dichotomiflorum Michaux var. dichotomiflorum. Native. Infrequent in pineland wetlands and ruderal wetlands: *DCP 3812*, 18 September 2005; *DCP 3942*, 15 October 2007. (BC) Panicum hemitomon J. A. Schultes. Native. Abundant in pineland wetlands: *DCP 1189*, 17 October 2004; *DCP 3524*, 30 July 2005; *DCP 5152*, 23 July 2007.

- (BC) Panicum longifolium Torrey var. longifolium. Native. Infrequent in pineland wetlands: DCP 1458, 13 November 2004.
- (SC) *Panicum miliaceum* Linnaeus. Introduced from Eurasia. Frequent in ruderal areas: *DCP* 3482, 26 July 2005.
- (BC) *Panicum repens* Linnaeus. Apparently introduced. Frequent and increasing in ruderal areas: *DCP 1314*, 31 October 2004; *DCP 4671*, 10 June 2006; *DCP 4692*, 14 June 2006.

Panicum rigidulum Bosc ex Nees var. condensum (Nash) Mohlenbrock. Native. Infrequent in ruderal wetlands: DCP 3754, 5 September 2005; DCP 3813, 18 September 2005.

(BC) *Panicum rigidulum* Bosc ex Nees var. *elongatum* (Pursh) Lelong. Native. Infrequent in ruderal wetlands: *DCP 0101*, 12 May 2004.

Panicum rigidulum Bosc ex Nees var. *rigidulum*. Native. Infrequent in pineland wetlands: *DCP 4096*, 21 January 2005.

Panicum verrucosum Muhlenberg. Native. Frequent in pineland wetlands: DCP 1132, 16 October 2004; DCP 1276, 31 October 2004; DCP 4238, 6 January 2006.

(SC) *Panicum virgatum* Linnaeus var. *cubense* Grisebach. Native. Infrequent in pineland wetlands: *DCP 4172*, 28 December 2005.

Panicum virgatum Linnaeus var. *virgatum*. Native. Frequent in pineland wetlands, maritime forests and salt marshes: *DCP 1665*, 10 January 2005.

(SC) *Parapholis incurva* (Linnaeus) C. E. Hubbard. Introduced from Europe. Rare, one population observed in a roadbed crossing a salt marsh: *DCP 5237*, 12 April 2008.

Paspalum boscianum Flugge. Native. Infrequent in ruderal areas: DCP 3602, 9 August 2005; DCP 3684, 13 August 2005.

Paspalum dilatatum Poiret. Introduced from South America. Infrequent in ruderal areas: DCP 3319, 12 July 2005.

- (BC) *Paspalum dissectum* (Linnaeus) Linnaeus. Native. Rare in ruderal areas: *DCP 5007*, 23 September 2006.
- (BC) *Paspalum distichum* Linnaeus. Native. Infrequent in pineland wetlands: *DCP 2215*, 21 June 2005; *DCP 4780*, 15 July 2006.

Paspalum floridanum Michaux. Native. Frequent in pinelands: *DCP 0287*, 24 June 2004; *DCP 3279*, 7 July 2005; *DCP 3346*, 14 July 2005; *DCP 3392*, 18 July 2005.

Paspalum fluitans (Elliott) Kunth. Native. Rare in swamp forests: RDP 2913, 29 October 1998(CITA CLEMS); DCP 5227, 23 November 2007.

Paspalum laeve Michaux var. laeve. Native. Frequent in pinelands and ruderal areas: DCP 0184, 12 June 2004; DCP 0209, 12 June 2004; DCP 0244, 16 June 2004.

Paspalum notatum Flügge. Introduced from South America. Abundant in ruderal areas: *DCP 3944*, 15 October 2007.

Paspalum plicatulum Michaux. Native. Infrequent in pinelands: DCP 2132, 8 June 2005; DCP 5071, 27 November 2006.

Paspalum praecox Walter var. curtisianum (Steudel) Vasey. Native. Infrequent in pinelands: DCP 1462, 13 November 2004; DCP 3558, 4 August 2005.

- (SC) *Paspalum scrobiculatum* Linnaeus. Introduced from Asia. Rare, one population observed in a ruderal area: *DCP 3557*, 4 August 2005.
- (SC) Paspalum setaceum Michaux var. ciliatifolium (Michaux) Vasey. Native. Frequent in ruderal areas: DCP 0194, 12 June 2004; DCP 0217, 16 June 2004; DCP 4939, 25 August 2006.

- (SC) Paspalum setaceum Michaux var. muhlenbergii (Nash) Fernald. Native. Frequent in pinelands: DCP 3280, 7 July 2005; DCP 3559, 4 August 2005.
- (SC) Paspalum setaceum Michaux var. setaceum. Native. Frequent in pinelands: DCP 0205, 12 June 2004; DCP 3281, 7 July 2005.

Paspalum urvillei Steudel. Introduced from South America. Abundant in ruderal areas: *DCP 3566*, 4 August 2005.

- (BC) *Paspalum vaginatum* Swartz. Native. Rare, one population observed in a salt marsh: *DCP* 5297, 17 August 2009.
- (SC) *Pennisetum glaucum* (Linnaeus) R. Brown. Introduced from the Eastern Hemisphere. Infrequently spreading from wildlife food plots: *DCP 4242*, 6 January 2006.
- (SC) *Phalaris angusta* Nees ex Trinius. Introduced from tropical America. Frequent in ruderal areas: *DCP 0178*, 1 June 2004; *DCP 1833*, 9 May 2005.
- (SC) *Phalaris aquatica* Linnaeus. Introduced from Europe. Locally abundant in ditches near Brays Island: *DCP 5312*, 30 April 2010.

Phalaris caroliniana Walter. Native. Rare in calcareous areas: DCP 5133, 8 May 2007.

- (BC) *Phanopyrum gymnocarpum* (Elliott) Nash. Native. Infrequent in swamp forests: *DCP* 1572, 26 November 2004.
- (SC) *Phyllostachys aurea* Carriere ex A. & C. Riviere. Introduced from Asia. Infrequent in ruderal areas: *DCP 1409*, 13 November 2004; *DCP 4373*, 20 March 2006.

Piptochaetium avenaceum (Linnaeus) Parodi. Native. Infrequent in calcareous areas: *DCP 1773*, 2 May 2005.

Poa annua Linnaeus. Introduced from Eurasia. Abundant in ruderal areas: *DCP 1633*, 4 January 2005.

- (BC) *Poa autumnalis* Muhlenberg ex Elliott. Native. Infrequent in swamp forests: *DCP 1765*, 25 April 2005; *DCP 1803*, 7 May 2005.
- (BC) *Poa chapmaniana* Scribner. Native. Infrequent in ruderal areas: *DCP 4366*, 20 March 2006; *DCP 4416*, 25 March 2006.
- (BC) *Poa compressa* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP 4396*, 22 March 2006; *DCP 4420*, 25 March 2006; *DCP 4468*, 11 May 2006.
- (BC) *Poa pratensis* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP 0123*, 16 May 2004; *DCP 2103*, 5 June 2005; *DCP 4473*, 11 May 2006.

Polypogon maritimus Willdenow var. *maritimus*. Introduced from Mediterranean Europe. Infrequent in ruderal areas: *DCP 4463*, 11 May 2006.

Polypogon monspielensis (Linnaeus) Desfontaines. Introduced from Europe. Frequent in ruderal areas: *DCP 1782*, 3 May 2005; *DCP 4509*, 15 May 2006.

Saccharum alopecuroides (Linnaeus) Nuttall. Native. Infrequent in pinelands: DCP 4169, 28 December 2005;

Saccharum alopecuroides (Linnaeus) Nuttall. Native. Infrequent in pinelands: DCP 4094, 21 January 2005.

- (BC) Saccharum baldwinii Sprengel. Native. Infrequent in pinelands: DCP 4046, 27 November 2005; DCP 4236, 6 January 2006.
- (BC) Saccharum brevibarbe (Michaux) Persoon var. brevibarbe. Native. Infrequent in pinelands: DCP 1563, 26 November 2004.

Saccharum brevibarbe (Michaux) Persoon var. contrortum (Elliott) R. Webster. Native. Infrequent in pinelands: *DCP 1127*, 16 October 2004; *DCP 1227*, 31 October 2004; *DCP 1504*, 14 November 2004; *DCP 4233*, 6 January 2006.

Saccharum giganteum (Walter) Persoon. Native. Frequent in pinelands: DCP 1271, 31 October 2004.

(BC) Sacciolepis indica (Linnaeus) Chase. Introduced from Asia. Infrequent in ruderal areas: DCP 4559, 23 May 2006; DCP 5194, 9 October 2007.

Sacciolepis striata (Linnaeus) Nash. Native. Frequent in pinelands and freshwater wetlands: DCP 1135, 16 October 2004; DCP 3713, 26 August 2005.

(SC) *Schedonorus arundinaceus* (Schreber) Dumortier. Introduced from Eurasia. Frequent in ruderal areas: *DCP 0144*, 16 May 2004; *DCP 1043*, 16 September 2004; *DCP 2186*, 17 June 2005.

Schizachyrium scoparium (Michaux) Nash var. scoparium. Native. Frequent in pinelands: DCP 1667, 10 January 2005; DCP 4110, 22 December 2005.

- (SC) *Schizachyrium scoparium* (Michaux) Nash var. *stoloniferum* (Nash) J. Wipff. Native. Frequent in pinelands and dunes: *DCP 4080*, 20 December 2005.
- (BC) Secale cereale Linnaeus. Introduced from Eurasia. Infrequent in ruderal areas: DCP 4555, 22 May 2006.

Setaria corrugata (Elliott) J. A. Schultes. Native. Insufficient abundance data, xeric woodlands associated with civil war era fortifications: *DCP 1040*, 16 September 2004; *DCP 4944*, 26 August 2006.

Setaria magna Grisebach. Native. Frequent in pineland wetlands: DCP 3743, 26 August 2005; DCP 4906, 15 August 2006.

Setaria parviflora (Poiret) Kerguélen. Native. Frequent in ruderal areas: *DCP 1038*, 16 September 2004; *DCP 2272*, 28 June 2005; *DCP 3258*, 5 July 2005; *DCP 3626*, 11 August 2005; *DCP 3871*, 2 October 2005.

(BC) *Setaria pumila* (Poiret) Roemer & J. A. Schultes ssp. *pumila*. Introduced. Frequent in ruderal areas: *DCP 3593*, 6 August 2005; *DCP 3736*, 26 August 2005; *DCP 4197*, 30 December 2005.

Setaria viridis (Linnaeus) Palisot de Beauvois var. viridis. Introduced from Eurasia. Infrequent in ruderal areas: *DCP 1258*, 31 October 2004; *DCP 3700*, 17 August 2005; *DCP 4879*, 2 August 2006; *DCP 5099*, 19 August 2006.

Sorghastrum elliottii (C. Mohr) Nash. Native. Frequent in calcareous areas: DCP 3854, 2 October 2005.

- (SC) *Sorghum bicolor* (Linnaeus) Moench var. *drummondii* (Nees ex Steudel) Mohlenbrock. Introduced. Infrequent in ruderal areas: *DCP 3520*, 30 July 2005.
- (BC) *Sorghum halepense* (Linnaeus) Persoon. Introduced from Eurasia. Frequent in ruderal areas: *DCP 2180*, 16 June 2005.

Spartina alterniflora Loiseleur. Native. Abundant in salt marshes: DCP 3745, 28 August 2005.

Spartina bakeri Merrill. Native. Rare in salt marshes: RDP 2723, 20 April 1997(CITA CLEMS); DCP 4317, 15 January 2006.

Spartina cynosuroides (Linnaeus) Roth. Native. Rare in tidal freshwater wetlands and salt marshes: *DCP 3375*, 16 July 2005.

Spartina patens (Aiton) Muhlenberg var. monogyna (M. A. Curtis) Fernald. Native. Frequent in salt marshes and dunes: DCP 1683, 17 January 2005; DCP 3397, 18 July 2005.

(BC) Sphenopholis nitida (Biehler) Scribner. Native. Infrequent in swamp forests: DCP 0161, 1 June 2004; DCP 4584, 23 May 2006.

Sphenopholis obtusata (Michaux) Scribner. Native. Abundant in ruderal areas: DCP 0133, 16 May 2004; DCP 1714, 22 March 2005; DCP 4356, 18 March 2006; DCP 4437, 25 March 2006; DCP 4471, 11 May 2006; DCP 4785, 15 July 2006.

- (BC) *Sphenopholis pensylvanica* (Linnaeus) A. S. Hitchcock. Native. Infrequent in mesic calcareous forests: *DCP 1757*, 25 April 2005.
- (BC) Sporobolus clandestinus (Biehler) A. S. Hitchcock. Native. Frequent in xeric pinelands and dunes: DCP 3803, 18 September 2005; DCP 4004, 20 October 2005; DCP 4111, 22 December 2005; DCP 5032, 8 October 2006; DCP 3962, 17 October 2007.

Sporobolus indicus (Linnaeus) R Brown. Introduced from tropical Asia. Frequent in compacted soil: DCP 3856, 2 October 2005; DCP 4900, 12 August 2006.

Sporobolus virginicus (Linnaeus) Kunth. Native. Frequent in salt marshes and dunes: DCP 0166, 1 June 2004; DCP 3277, 7 July 2005.

Steinchisma hians (Elliott) Nash. Native. Frequent in pineland wetlands: *DCP 3393*, 18 July 2005; *DCP 3539*, 30 July 2005; *DCP 4515*, 18 May 2006; *DCP 4598*, 24 May 2006; *DCP 5011*, 24 September 2006.

Stenotaphrum secundatum (Walter) Kuntze. Native. Frequent in ruderal areas and salt marshes: DCP 1614, 2 January 2005.

(R) *Tridens chapmanii* (Small) Chase. Native. Rare, one population observed on a roadside adjacent to a calcareous forest: *DCP 5254*, 21 October 2008.

Tridens flavus (Linnaeus) A. S. Hitchcock. Native. Abundant in calcareous areas: *DCP 4089*, 21 January 2005; *DCP 4225*, 5 January 2006; *DCP 5064*, 24 November 2006.

- (BC) *Triplasis americana* Palisot de Beauvois. Native. Insufficient abundance data, pinelands: *DCP 1182*, 17 October 2004.
- (BC) *Triplasis purpurea* (Walter) Chapman var. *purpurea*. Native. Infrequent in xeric pinelands and dunes: *DCP 3896*, 2 October 2005; *DCP 4894*, 12 August 2006; *DCP 5034*, 8 October 2006.

Tripsacum dactyloides (Linnaeus) Linnaeus var. *dactyloides*. Native. Frequent in calcareous usually ruderal areas: *DCP 3337*, 14 July 2005.

(BC) *Triticum aestivum* Linnaeus. Introduced from Eurasia. Rare in ruderal areas: *DCP 4554*, 22 May 2006.

Uniola paniculata Linnaeus. Native. Frequent in dunes: DCP 3960, 17 October 2007.

(SC) *Urochloa adspersa* (Tinius) R. Webster. Introduced from farther south. Rare in ruderal areas: *DCP 5173*, 1 September 2007.

Urochloa platyphylla (Munro ex Wright) R. Webster. Probably introducedfrom South America. Rare in ruderal areas: *DCP 3618*, 10 August 2005.

- (BC) *Urochloa ramosa* (Linnaeus) Nguyen. Introduced from Africa. Rare in ruderal areas: *DCP 4735*, 4 July 2006
- (BC) *Urochloa texana* (Buckley) R. Webster. Introduced from Texas. Rare in ruderal areas: *DCP 5172*, 28 August 2007.

(BC) *Vulpia myuorus* (Linnaeus) K. C. Gmelin. Introduced from Europe. Infrequent in ruderal areas: *DCP 5146*, 16 May 2005.

Vulpia octoflora (Walter) Rydberg var. octoflora. Native. Frequent in xeric calcareous ruderal areas: *DCP 0121*, 15 May 2004; *DCP 4403*, 23 March 2006; *DCP 4404*, 23 March 2006; *DCP 4417*, 25 March 2006; *DCP 4469*, 11 May 2006.

(BC) Zea mays Linnaeus ssp. mays. Introduced from farther south and west. Rare as a waif in ruderal areas: DCP 4632, 31 May 2006.

Zizania aquatica Linnaeus var. *aquatica*. Native. Frequent in tidal freshwater wetlands: *DCP 4775*, 15 July 2006.

Zizaniopsis miliacea (Michaux) Doll & Ascherson. Native. Frequent in tidal freshwater wetlands: *DCP 3241*, 4 July 2005.

Pontederiaceae

- (BC) *Eichornia crassipes* (Martius) Solms-Laub. Introduced from South America. Infrequent in ruderal ponds: *DCP 2066*, 30 May 2005.
- (SC) *Pontederia cordata* Linnaeus var. *lancifolia* (Muhlenberg ex Elliott) Torrey. Native. Infrequent in pineland wetlands and tidal freshwater wetlands: *DCP 3710*, 19 August 2005.

Pontederia cordata Linnaeus var. *cordata*. Native. Frequent in freshwater wetlands: *DCP* 3327, 14 July 2005.

Potamogetonaceae

- (BC) *Potamogeton diversifolius* Rafinesque. Native. Infrequent in freshwater wetlands: *DCP* 4694, 14 June 2006; *DCP* 4810, 19 July 2006.
- (BC)(R) *Potamogeton foliosus* Rafinesque var. *foliosus*. Native. Infrequent in freshwater wetlands: *DCP 4662*, 10 June 2006.

Ruscaceae

- (SC) *Liriope muscari* (Decaisne) L. H. Bailey. Introduced. Infrequent in ruderal areas: *DCP* 3945, 15 October 2007.
- (SC) *Liriope spicatum* Loureiro. Introduced. Infrequent in ruderal areas: *DCP 2214*, 20 June 2005.
- (SC) (Thunberg) Ker-Gawler. Introduced from Asia. Infrequent in ruderal areas: *DCP 1586*, 28 November 2004.

Smilacaceae

Smilax auriculata Walter. Native. Frequent in maritime forests and dunes: DCP 3899, 2 October 2005; DCP 4410, 24 March 2006.

Smilax bona-nox Linnaeus. Native. Frequent in upland areas: *DCP 4409*, 24 March 2006. Smilax glauca Walter. Native. Frequent in upland areas: *DCP 1244*, 31 October 2004.

Smilax hispida Rafinesque. Native. Infrequent in calcareous areas: DCP 0193, 12 June 2004; DCP 4537, 21 May 2006.

Smilax laurifolia Linnaeus. Native. Frequent in pineland wetlands: *DCP 1274*, 31 October 2004.

Smilax pumila Walter. Native. Frequent in pinelands: DCP 4863, 26 July 2005.

(BC) *Smilax rotundifolia* Linnaeus. Native. Frequent in swamp forests: *DCP 0062*, 26 May 2003; *DCP 0092*, 12 May 2004; *DCP 0186*, 12 June 2004; *DCP 0302*, 24 June 2004.

Smilax smallii Morong. Native. Frequent in upland areas: DCP 3915, 3 October 2005.

(BC) Smilax walteri Pursh. Native. Infrequent in tidal freshwater wetlands: DCP 0043, 26 May 2003.

Typhaceae

(BC) *Sparganium americanum* Nuttall. Native. Infrequent in swamp forests: *DCP 3706*, 19 August 2005.

Typha angustifolia Linnaeus. Native. Frequent in tidal freshwater wetlands: *DCP 3290*, 9 July 2005.

Typha domingensis Persoon. Native. Frequent in sunny often brackish or ruderal wetlands: *DCP 3264*, 6 July 2005.

Typha latifolia Linnaeus. Native. Abundant in wetlands, usually ruderal: *DCP 3262*, 6 July 2005.

Typha x glauca Godron (pro. sp.). Native. Collected once, probably more abundant but undercollected in ruderal wetlands: *DCP 5038*, 22 May 2006.

Xyridaceae

Xyris ambigua Beyrich ex Kunth. Native. Frequent in pineland wetlands: *DCP 1150*, 16 October 2004; *DCP 1490*, 14 November 2004; *DCP 1494*, 14 November 2004; *DCP 3412*, 22 July 2005; *DCP 4140*, 26 December 2005; *DCP 4259*, 6 January 2006.

- (R) *Xyris brevifolia* Michaux. Native. Infrequent in pineland wetlands: *DCP 4212*, 3 January 2006.
- (BC) *Xyris caroliniana* Walter. Native. Insufficient abundance data, pineland wetlands: *DCP* 1457, 13 November 2004; *DCP* 1488, 14 November 2004; *DCP* 3525, 30 July 2005.

Xyris fimbriata Elliott. Native. Infrequent in pineland wetlands: *DCP 4211*, 3 January 2006.

(BC) *Xyris iridifolia* Chapman. Native. Infrequent in pineland wetlands: *DCP 5093*, 9 January 2007

Xyris jupicai L. C. Richard. Native. Infrequent in pineland wetlands: *DCP 1639*, 5 January 2005; *DCP 4264*, 6 January 2006.

(BC) *Xyris platylepis* Chapman. Native. Insufficient abundance data, pineland wetlands: *DCP 1450*, 13 November 2004; *DCP 1513*, 25 November 2004; *DCP 4095*, 21 January 2005; *DCP 3685*, 13 August 2005.

Zingiberaceae

(SC) *Hedychium coronarium* Koenig. Introduced from Asia. Rarely naturalized in ruderal areas: *DCP 4913*, 17 August 2006.

Eudicots

Acanthaceae

Dyschoriste oblongifolia (Michaux) Kuntze. Native. Infrequent in pinelands: *DCP 0275*, 23 June 2004; *DCP 4683*, 14 June 2006.

Justicia ovata (Walter) Lindau var. *ovata*. Native. Frequent in swamp forests: *DCP 3718*, 26 August 2005.

Ruellia caroliniensis (J. F. Gmelin) Steudel. Native. Frequent in calcareous areas: *DCP* 1203, 30 October 2004.

Adoxaceae

Sambucus canadensis Linnaeus. Native. Frequent in moist ruderal areas: *DCP 3635*, 12 August 2005.

Viburnum dentatum Linnaeus var. dentatum. Native. Infrequent in swamp forests: DCP 2123, 8 June 2005; DCP 4063, 27 November 2005.

Viburnum nudum Linnaeus. Native. Infrequent in swamp forests: DCP 1326, 1 November 2004; DCP 1544, 26 November 2004; DCP 1840, 11 May 2005.

- (BC) *Viburnum obovatum* Walter. Native. Infrequent in tidal freshwater wetlands along the Combahee River: *DCP 3440*, 24 July 2005.
- (BC) *Viburnum prunifolium* Linnaeus. Native. Rare in swamp forests on the mainland: *DCP* 3726, 26 August 2005.

Viburnum rufidulum Rafinesque. Native. Infrequent in xeric calcareous areas: DCP 1177, 17 October 2004; DCP 1558, 26 November 2004; DCP 1560, 26 November 2004.

Aizoaceae

(BC) Sesuvium maritimum (Walter) Britton, Sterns & Poggenberg. Native. Infrequent in salt marshes: DCP 3623, 11 August 2005.

Sesuvium portulacastrum (Linnaeus) Linnaeus. Native. Frequent in salt marshes: DCP 3955. 17 October 2007.

Trianthema portulacastrum Linnaeus. Introduced from the Gulf Coast. Rare in ruderal areas: *ECW* 0000, 14 July 1969.

Altingiaceae

Liquidambar styraciflua Linnaeus. Native. Abundant and increasing in mesic fire-suppressed pinelands and swamp forests: *DCP 1223*, 31 October 2004.

Amaranthaceae

Alternanthera philoxeroides (Martius) Grisebach. Introduced from tropical America. Abundant in ruderal areas: *DCP 3369*, 16 July 2005.

(BC) *Amaranthus albus* Linnaeus. Nativity uncertain. Rare in ruderal areas: *DCP 5182*, 10 September 2007.

Amaranthus blitum Linnaeus. Introduced. Frequent in ruderal areas: DCP 2274, 28 June 2005; DCP 2276, 28 June 2005; DCP 3296, 9 July 2005; DCP 3472, 26 July 2005.

Amaranthus cannabinus (Linnaeus) J.D. Sauer. Native. Frequent in tidal freshwater wetlands: DCP 3690, 13 August 2005; DCP 3695, 13 August 2005.

Amaranthus hybridus Linnaeus. Nativity disputed, probably from elsewehere in eastern North America. Insufficient abundance data, ruderal areas: *DCP 5180*, 9 September 2007.

(BC) Amaranthus palmeri S. Watson. Introduced from farther south and west. Infrequent in ruderal areas: DCP 4907, 15 August 2006.

Amaranthus spinosus Linnaeus. Introduced from tropical America. Frequent in ruderal areas: DCP 3529, 30 July 2005; DCP 4055, 27 November 2005.

Amaranthus viridis Linnaeus. Introduced from South America. Infrequent in ruderal areas: DCP 1025, 16 September 2004; DCP 3219, 3 July 2005; DCP 4942, 26 August 2006.

(SC) Celosea argentea Linnaeus. Introduced from the tropics. Rare in ruderal areas: DCP 5051, 20 November 2006.

Froelichia floridana (Nuttall) Moquin-Tandon. Native. Infrequent in xeric areas: DCP 2284, 1 July 2005.

(BC) Froelichia gracilis (Hooker) Moquin-Tandon. Introduced from Midwestern U.S.. Rare, one population observed in a xeric residential garden: *DCP 5168*, 21 August 2007.

Iresine rhizomatosa Standley. Native. Infrequent in salt marshes: *DCP 1621*, 2 January 2005.

Anacardiaceae

(SC) *Pistacia chinensis* Bunge. Introduced from Asia. Infrequent in ruderal areas: *DCP 1776*, 3 May 2005; *DCP 1784*, 4 May 2005.

Rhus copallinum Linnaeus var. *copallinum*. Native. Abundant in pinelands, ruderal areas, maritime forests and dunes: *DCP 1389*, 13 November 2004; *DCP 3671*, 13 August 2005.

Toxicodendron pubescens P. Miller. Native. Rare, one population observed in calcareous areas: *DCP 1767*, 25 April 2005.

Toxicodendron radicans (Linnaeus) Kuntze var. *radicans*. Native. Frequent in upland forests, woodlands and ruderal areas: *DCP 1795*, 4 May 2005;

Apiaceae

Centella erecta (Linnaeus f.) Fernald. Native. Abundant in pinelands, ruderal areas and maritime forests: *DCP 2211*, 20 June 2005.

Chaerophyllum tainterieri Hooker var. *tainturieri*. Native. Abundant in ruderal areas: *DCP 0084*, 30 April 2004; *DCP 4426*, 25 March 2006.

Ciclospermum leptophyllum (Persoon) Sprauge ex Britton. Native. Infrequent in ruderal areas: DCP 4464, 11 May 2006.

Cicuta maculata Linnaeus var. *maculata*. Native. Infrequent in tidal freshwater wetlands: *DCP 2239*, 27 June 2005.

(BC) *Cicuta mexicana* Coulter & Rose. Native. Infrequent in swamp forests: *DCP 3380*, 17 July 2005.

Daucus carota Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP* 3286, 9 July 2005.

Daucus pusillus Michaux. Native. Infrequent in ruderal areas: DCP 2082, 1 June 2005. Eryngium aquaticum Linnaeus var. aquaticum. Native. Frequent in tidal freshwater

wetlands: DCP 2238, 27 June 2005.

(SC) Eryngium baldwinii Sprengel. Native. Rare in pinelands: DCP 1602, 17 December 2004; DCP 2294, 2 July 2005; DCP 4057, 27 November 2005.

Eryngium prostratum Nuttall ex Augustin de Candolle. Native. Rare in ditches and roadsides in pinelands: *DCP 4289*, 7 January 2006.

(BC) Eryngium yuccifolium Michaux var. yuccifolium. Native. Rare in pinelands: DCP 3278, 7 July 2005.

Foeniculum vulgare P. Miller. Introduced from Mediterranean Europe. Rarely naturalized in railroad beds and fallow fields: *DCP 4791*, 16 July 2006.

(BC)(R) *Lilaeopsis carolinensis* Coulter & Rose. Native. Rare in freshwater wetlands: *DCP* 5300, 22 April 2010.

(BC)(R) *Lilaeopsis chinensis* (Linnaeus) Kuntze. Native. Frequent in tidal freshwater wetlands: *DCP 3242*, 4 July 2005.

Ptilimnium capillaceum (Michaux) Rafinesque. Native. Frequent in pineland wetlands and tidal freshwater wetlands: DCP 2218, 21 June 2005; DCP 3211, 2 July 2005; DCP 3240, 4 July 2005.

Sanicula canadensis Linnaeus var. floridana (Bicknell) H. Wolff. Native. Abundant in calcareous areas: DCP 2273, 28 June 2005; DCP 3341, 14 July 2005; DCP 4523, 18 May 2006.

Sium suave Walter. Native. Frequent in tidal freshwater wetlands: DCP 4778, 15 July 2006.

Spermolepis divaricata (Walter) Rafinesque ex Seringe. Native. Frequent in xeric ruderal areas: DCP 0080, 30 April 2004; DCP 4418, 25 March 2006; DCP 4503, 15 May 2006.

- (BC) *Spermolepis echinata* (Nuttall ex Augustin de Candolle) Heller. Introduced from the South Central United States. Infrequent in ruderal areas: *DCP 5127*, 28 April 2007.
- (BC) *Thaspium trifoliatum* (Linnaeus) A. Gray var. *aureum* (Linnaeus) Britton. Native. Rare in mesic forests: *RDP 2668*, 26 April 1996(CITA_CLEMS)

Apocynaceae

- (BC) *Apocynum cannabinum* Linnaeus. Native. Infrequent in ruderal areas: *DCP 3431*, 22 July 2005.
- (BC) Asclepias amplexicaulis J.E.Smith. Native. Infrequent in xeric pinelands: *DCP 0276*, 23 June 2004; *DCP 2166*, 13 June 2005; *DCP 2266*, 28 June 2005; *DCP 4506*, 15 May 2006.
- (SC) *Asclepias curassavica* Linnaeus. Introduced from South America. Rare but increasing in ruderal areas: *DCP 5090*, 9 January 2007.

Asclepias humistrata Walter. Native. Infrequent in xeric pinelands: DCP 2164, 13 June 2005; DCP 2267, 28 June 2005.

Asclepias lanceolata Walter. Native. Rare, two small populations observed in pinelands and tidal freshwater wetlands: DCP 3598, 8 August 2005; DCP 3692, 13 August 2005.

- (R) Asclepias pedicellata Walter. Native. Rare and decreasing in pinelands: *DCP 1523*, 25 November 2004; *DCP 2209*, 20 June 2005.
- (BC) Asclepias perennis Walter. Native. Rare in tidal freshwater wetlands: DCP 4716, 3 July 2006.

Asclepias tuberosa Linnaeus ssp. tuberosa. Native. Infrequent in pinelands: DCP 2129, 8 June 2005; DCP 2137, 12 June 2005; DCP 3402, 20 July 2005.

Asclepias variegata Linnaeus. Native. Rare in calcareous areas: DCP 2051, 28 May 2005.

- (BC) Catharanthus roseus (Linnaeus) G. Don. Introduced from Madagascar. Rare in ruderal areas: DCP 3941, 15 October 2007.
- (BC) Cynanchum angustifolium Persoon. Native. Frequent in salt marshes: DCP 2190, 19 June 2005.
- (R) *Cynanchum scoparium* Nuttall. Native. Rare in calcareous areas: *RDP 2732*, 12 May 1997; *JFT 1484*, 13 May 2007.

Gonolobus gonocarpus (Walter) Perry. Native. Infrequent in calcareous areas: DCP 1306, 31 October 2004; DCP 4643, 6 June 2006; DCP 4807, 19 July 2006.

- (SC) Gonolobus suberosus (Linnaeus) R. Brown. Native. Infrequent in calcareous areas: *DCP 2183*, 17 June 2005; *DCP 2235*, 26 June 2005; *DCP 2282*, 1 July 2005; *DCP 3216*, 3 July 2005; *DCP 4814*, 19 July 2006.
- (R) *Matelea flavidula* (Chapman) Woodson. Native. Rare, one population observed in calcareous areas: *DCP 3220*, 3 July 2005.

Trachelospermum difforme (Walter) A. Gray. Native. Infrequent in mesic pinelands and swamp forests: *DCP 0040*, 26 May 2003; *DCP 4065*, 27 November 2005; *DCP 4729*, 3 July 2006.

- (SC) *Trachelospermum jasminoides* (Lindley) Lemaire. Introduced. Rare in ruderal areas: *DCP 5084*, 6 January 2007; *DCP 5092*, 9 January 2007.
- (BC) *Vinca major* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP 1600*, 14 December 2004.

Aquifoliaceae

Ilex ambigua (Michaux) Torrey *'sensu stricto'*. Native. Infrequent in pinelands: *DCP 0096*, 12 May 2004; *DCP 0257*, 16 June 2004; *DCP 1528*, 25 November 2004; *DCP 1529*, 25 November 2004; *DCP 2075*, 30 May 2005.

(BC)(R) *Ilex amelanchier* M. A. Curtis ex Chapman. Native. Frequent in swamp forests and tidal freshwater wetlands along the New River: *DCP 0023*, 4 April 2003; *DCP 4661*, 10 June 2006.

Ilex cassine Linnaeus var. *cassine*. Native. Infrequent in pineland wetlands: *DCP 2080*, 30 May 2005.

Ilex coriacea (Pursh) Chapman. Native. Rare, one population observed in pineland wetlands: *DCP 4937*, 26 August 2006.

- (SC) *Ilex cornuta* Lindley. Introduced from China. Rarely naturalized in ruderal areas: *DCP* 2151, 13 June 2005.
- (BC) *Ilex decidua* Walter var. *decidua*. Native. Frequent in swamp forests: *DCP 1827*, 9 May 2005; *DCP 4721*, 3 July 2006.

Ilex glabra (Linnaeus) A. Gray. Native. Frequent in pinelands: *DCP 1390*, 13 November 2004; *DCP 1422*, 13 November 2004; *DCP 1446*, 13 November 2004; *DCP 1481*, 14 November 2004; *DCP 1549*, 26 November 2004; *DCP 1552*, 26 November 2004; *DCP 3415*, 22 July 2005. *Ilex myrtifolia* Walter. Native. Infrequent in pineland wetlands: *DCP 3523*, 30 July 2005.

Ilex opaca Aiton var. *opaca*. Native. Frequent in pinelands, maritime forests, swamp forests and calcareous areas: *DCP 1253*, 31 October 2004.

(BC) *Ilex verticillata* (Linnaeus) A. Gray. Native. Infrequent in swamp forests: *DCP 3442*, 24 July 2005.

Ilex vomitoria Aiton. Native. Abundant in pinelands, maritime forests and calcareous areas: *DCP 3866*, 2 October 2005.

Araliaceae

Aralia spinosa Linnaeus. Native. Frequent in calcareous areas: DCP 2121, 8 June 2005;

- (SC) *Hedera colchica* (K. Koch) K. Koch. Introduced from Caucasus. Infrequent in ruderal areas: *DCP 4829*, 19 July 2006.
- (BC) *Hedera helix* Linnaeus var. *helix*. Introduced from Europe. Infrequent in ruderal areas: *DCP 1587*, 28 November 2004.

Hydrocotyle bonariensis Comm. ex Lamarck. Native. Abundant in ruderal areas and dunes: *DCP 0152*, 1 June 2004; *DCP 0195*, 12 June 2004; *DCP 3263*, 6 July 2005.

(BC) *Hydrocotyle prolifera* Kellogg. Native. Insufficient abundance data, ruderal areas: *DCP* 3289, 9 July 2005.

Hydrocotyle ranunculoides Linnaeus f.. Native. Insufficient abundance data, freshwater wetlands: *DCP 3293*, 9 July 2005.

(BC) *Hydrocotyle sibthorpioides* Lamarck. Introduced from Africa. Rare in ruderal areas: *DCP* 5138, 12 May 2007.

Hydrocotyle umbellata Linnaeus. Native. Insufficient abundance data, ruderal areas: *DCP* 0105, 12 May 2004; *DCP* 3292, 9 July 2005.

Hydrocotyle verticellata Thunberg. Native. Insufficient abundance data, salt marshes: *DCP 3276*, 7 July 2005.

- (SC) *Tetrapanax papyriferus* (Hook.) C. Koch. Introduced from South China. Infrequently spreading from former cultivation: *DCP 3628*, 12 August 2005; *DCP 5021*, 19 August 2006. Asteraceae
- (BC) *Acanthospermum australe* (Loefling) Kuntze. Introduced from South America. Rare or overlooked in ruderal areas: *DCP 2091*, 2 June 2005; *DCP 3891*, 2 October 2005.

Achillea millefolium Linnaeus. Native and Introduced. Circumboreal. Rare in ruderal areas: *DCP 4501*, 15 May 2006.

- (BC) *Acmella repens* (Walter) L. C. Richard in Persoon. Native. Infrequent in tidal freshwater wetlands: *DCP 4713*, 2 July 2006.
- (BC) *Ageratina altissima* King & H.E. Robinson var. *altissima*. Native. Rare, population not observed: *PDM 2048*, 25 October 1996.

Ageratina aromatica (Linnaeus) Spach. Native. Rare in pinelands: *DCP 1162*, 16 October 2004; *DCP 1179*, 17 October 2004.

Ambrosia artemisiifolia Linnaeus. Native. Abundant in ruderal areas: *DCP 3827*, 18 September 2005.

- (BC) Ambrosia trifida Linnaeus var. trifida. Probably adventive from farther north. Rare, one specimen observed in ruderal areas: DCP 5156, 18 July 2007.
- (BC) Ampelaster carolinianus (Walter) Nesom. Native. Frequent in tidal freshwater wetlands: DCP 3456, 24 July 2005.
- (BC) Arnica acaulis (Walter) Britton, Sterns & Poggenberg. Native. Rare in pinelands: DCP 1834, 9 May 2005.
- (BC) *Artemisia ludoviciana* Nuttall. Introduced from farther west. Rare, one naturalized population observed in ruderal areas: *DCP 4363*, 19 March 2006.
- (BC) *Artemisia vulgaris* Linnaeus. Introduced from Eurasia. Abundant in ruderal areas: *DCP* 4648, 8 June 2006; *DCP* 4020, 23 November 2006.

Baccharis angustifolia Michaux. Native. Frequent in salt marshes: DCP 3864, 2 October 2005.

(R) *Baccharis glomeruliflora* Persoon. Native. Frequent in pineland wetlands and tidal freshwater wetlands: *DCP 1088*, 3 October 2004; *DCP 1168*, 16 October 2004; *DCP 1590*, 28 November 2004; *DCP 1591*, 28 November 2004; *DCP 1643*, 5 January 2005; *DCP 1735*, 27 March 2005; *DCP 3336*, 14 July 2005; *DCP 3344*, 14 July 2005; *DCP 3455*, 24 July 2005; *DCP 4859*, 23 July 2006.

Baccharis halimifolia Linnaeus. Native. Abundant in ruderal areas and salt marshes: *DCP 4011*, 20 October 2005; *DCP 4012*, 20 October 2005.

Bidens alba (Linnaeus) Augustin de Candolle var. *radiata* (Schultz-Bipontinus) Ballard ex T. E, Melchert. Adventive from the New World tropics. Rare in ruderal areas: *DCP 3788*, 18 September 2005.

Bidens bipinnata Linnaeus. Native. Infrequent in ruderal areas: *DCP 3833*, 1 October 2005; *DCP 3801*, 18 September 2005.

(BC) *Bidens frondosa* Linnaeus. Native. Rare, one small population observed in a swamp forest ditch: *DCP 5199*, 10 October 207;

Bidens laevis (Linnaeus) Britton, Sterns & Poggenberg. Native. Infrequent in swamp forests: *DCP 3909*, 2 October 2005.

- (BC) Bidens mitis (Michaux) Sherff. Native. Infrequent in freshwater wetlands: DCP 3846, 1 October 2005.
- (SC*) *Bidens pilosa* Linnaeus. Introduced from tropical America. Abundant in ruderal areas: *DCP 5260*, 28 October 2008.

Bigelowia nudata (Michaux) Augustin de Candolle var. *nudata*. Native. Rare in pinelands: *JNK 199a*, 7 October 1973.

Boltonia asteroides (Linnaeus) L'Heritier de Brutelle. Native. Frequent in tidal freshwater wetlands: *DCP 3910*, 2 October 2005.

Borrichia frutescens (Linnaeus) Augustin de Candolle. Native.Common in salt marshes: *DCP 2170*, 14 June 2005.

Carphephorus odoratissimus (J. F. Gmelin) Herbert var. *odoratissimus*. Native. Frequent in pinelands: *DCP 1388*, 13 November 2004; *DCP 1508*, 25 November 2004.

Carphephorus paniculatus (J. F. Gmelin) Cassini. Native. Infrequent in pinelands: DCP 1482, 14 November 2004; DCP 4193, 30 December 2005.

- (SC) *Carthamus tinctoria* Linnaeus. Introduced. Rare, one population observed in a xeric ruderal area: *DCP 2175*, 15 June 2005.
- (BC) *Centaurea cyanus* Linnaeus. Introduced from Mediterranean Europe. Rare, one population observed in a ruderal area: *DCP 4612*, 29 May 2006.

Chrysogonum virginianum Linnaeus var. *brevistolon* Nesom. Native. Rare, population not observed: *WL 288*, 9 April 1972.

Chrysopsis mariana (Linnaeus) Elliott. Native. Frequent in xeric pinelands: *DCP 4227*, 5 January 2006; *DCP 5065*, 24 November 2006.

- (SC) Chrysopsis trichophylla (Nuttall) Elliott. Native. Rare in xeric areas: DCP 3926, 3 October 2005.
- (BC) *Cichorium intybus* Linnaeus. Introduced from Europe. Rare, one population observed in a ruderal area: *DCP 5281*, 17 July 2009.
- (BC) Cirsium horridulum Michaux var. horridulum. Native. Frequent in xeric areas: DCP 5144, 16 May 2005.
- (BC) Cirsium horridulum Michaux var. vittatum (Small) (R) W. Long. Native. Infrequent in pinelands: DCP 2099, 5 June 2005.

Cirsium nuttallii Augustin de Candolle. Native. Frequent in mesic calcareous ruderal areas: DCP 0314, 30 June 2004; DCP 1279, 31 October 2004.

Conoclinium coelestinum (Linnaeus) Augustin de Candolle. Native.Infrequently naturalized in ruderal areas: *DCP 3810*, 18 September 2005.

Conyza bonariensis (Linnaeus) Cronquist. Introduced from South America. Frequent in ruderal areas: DCP 3794, 18 September 2005; DCP 4513, 17 May 2006.

Conyza canadensis (Linnaeus) Cronquist. Native. Frequent in ruderal areas: DCP 4744, 6 July 2006.

Conyza parva Cronquist. Native. Frequent in ruderal areas and dunes: DCP 3232, 3 July 2005; DCP 3858, 2 October 2005.

Coreopsis basalis (Dietrich) Blake. Introduced from farther west. Locally abundant in xeric ruderal areas: *DCP 1783*, 4 May 2005.

Coreopsis lanceolata Linnaeus. Native. Infrequent in ruderal areas: DCP 3308, 11 July 2005; DCP 4397, 22 March 2006; DCP 4595, 24 May 2006.

Coreopsis major Walter var. rigida (Nuttall) F. E. Boynton. Native. Infrequent in pinelands: DCP 3410, 20 July 2005.

(SC) *Cosmos sulphureus* Cavanilles. Introduced from tropical America. Infrequently naturalized in ruderal areas: *DCP 3477*, 26 July 2005.

Croptilon divaricatum (Nuttall) Rafinesque. Native. Frequent in xeric ruderal areas: DCP 3893, 2 October 2005.

Eclipta prostrata (Linnaeus) Linnaeus. Native. Infrequent in ruderal areas: *DCP 2277*, 28 June 2005.

Elephantopus carolinianus Raeuschel. Native. Infrequent in mesic calcareous areas: *DCP* 1209. 30 October 2004.

Elephantopus elatus Bertaloni. Native. Frequent in ruderal areas: *DCP 1024*, 16 September 2004; *DCP 3830*, 1 October 2005; *DCP 3948*, 15 October 2007.

Elephantopus nudatus A. Gray. Native. Frequent in pinelands: DCP 1414, 13 November 2004; DCP 1515, 25 November 2004; DCP 3806, 18 September 2005; DCP 3851, 2 October 2005.

- (BC) *Elephantopus tomentosus* Linnaeus. Native. Infrequent in xeric areas: *DCP 4941*, 25 August 2006.
- (SC) *Emila fosbergi* Nicholson. Introduced from the Old World tropics. Rare, weed in residential garden: *DCP 5252*; 15 October 2008.
- (SC) *Emilia sonchifolia* (Linnaeus) Augustin de Candolle var. *sonchifolia*. Introduced from the Old World tropics. Rare in ruderal areas: *DCP 3969*, 19 October 2005.

Erechtites hieracifolia (Linnaeus) Rafinesque ex Augustin de Candolle var. *hieracifolia*. Native. Frequent in natural and anthropomorphic disturbances: *DCP 3715*, 26 August 2005.

Erigeron annuus (Linnaeus) Persoon. Native. Insufficient abundance data, ruderal areas: *DCP 3949*. 15 October 2007.

(BC) Erigeron philadelphicus Linnaeus var. philadelphicus. Native. Insufficient abundance data, ruderal areas: DCP 4459, 11 May 2006

Erigeron quercifolius Lamarck. Native. Frequent in ruderal areas, maritime forests and dunes: *DCP 1771*, 2 May 2005.

Erigeron strigosus Muhlenberg ex Willdenow var. *beyrichii* (Fischer & C. A Meyer)Torrey & A. Gray ex A. Gray. Native. Insufficient abundance data, ruderal areas: *DCP* 4478, 11 May 2006.

- (BC) *Erigeron vernus* (Linnaeus) Torrey & A. Gray. Native. Infrequent in pinelands: *DCP* 2113, 7 June 2005.
- (BC) Eupatorium album Linnaeus. Native. Frequent in pinelands: DCP 0263, 16 June 2004; DCP 3358, 15 July 2005.

Eupatorium capillifolium (Lamarck) Small. Native. Abundant in ruderal areas: DCP 3861, 2 October 2005.

- (BC) Eupatorium compositifolium Walter. Native. Infrequent in disturbed xeric pinelands: DCP 4083, 20 December 2005.
- (BC) Eupatorium glaucescens Elliott. Native. Insufficient abundance data, pinelands: DCP 1514, 25 November 2004.

Eupatorium hyssopifolium Linnaeus. Native. Insufficient abundance data, pinelands: DCP 3881, 2 October 2005; DCP 5029, 8 October 2006.

(BC) (R) Eupatorium leptophyllum Augustin de Candolle. Native. Infrequent in pineland wetlands: DCP 0284, 24 June 2004; DCP 1188, 17 October 2004; DCP 2286, 1 July 2005; DCP 5191, 25 September 2007; DCP 5275, 26 May 2009.

Eupatorium leucolepis (Augustin de Candolle) Torrey & A. Gray. Native. Insufficient abundance data, pinelands: *DCP 3601*, 9 August 2005.

Eupatorium perfoliatum Linnaeus var. *perfoliatum*. Native. Infrequent in freshwater wetlands: *DCP 3809*, 18 September 2005.

Eupatorium pilosum Walter. Native. Insufficient abundance data, pinelands: *DCP 0039*, 23 May 2003; *DCP 5073*, 28 November 2006.

(SC)(R) Eupatorium recurvans Small. Native. Infrequent in pinelands: *DCP 1090*, 3 October 2004; *DCP 1163*, 16 October 2004; *DCP 3842*, 1 October 2005; *DCP 3847*, 1 October 2005; *DCP 4136*, 26 December 2005; *DCP 5056*, 24 November 2006; *DCP 5068*, 26 November 2006; *DCP 5230*, 23 November 2007; *DCP 5231*, 23 November 2007.

Eupatorium rotundifolium Linnaeus. Native. Frequent in pinelands: DCP 1169, 16 October 2004; DCP 3208, 2 July 2005; DCP 3340, 14 July 2005; DCP 3409, 20 July 2005.

SC,(R) *Eupatorium scabridum* Elliott. Native. Infrequent in pinelands: *DCP 1131*, 16 October 2004; *DCP 4938*, 25 August 2006; *DCP 5229*, 23 November 2007.

Eupatorium semiserratum Augustin de Candolle. Native. Frequent in swamp forests: DCP 0038, 26 May 2003; DCP 0048, 26 May 2003; DCP 3714, 26 August 2005; DCP 5003, 23 September 2006.

Eupatorium serotinum Michaux. Native. Frequent in swamp forests and salt marshes: *DCP 3903*, 2 October 2005.

(BC) Eupatorium torreyanum Short & Peter. Native. Infrequent in pinelands: DCP 3840, 1 October 2005.

Eurybia compacta Nesom. Native. Infrequent in pinelands: DCP 4002, 20 October 2005.

- (SC) Euthamia hirtipes (Fernald) Sieren. Native. Infrequent in pinelands: DCP 4001, 20 October 2005.
- (SC) *Euthamia minor* (Michaux) Greene. Native. Frequent in pinelands and dunes: *DCP 3843*, 1 October 2005.
- (SC) *Euthamia minor* (Michaux) Greene. Native. Frequent in pinelands and dunes: *DCP 1470*, 14 November 2004; *DCP 4038*, 27 November 2005.

Euthamia tenuifolia (Pursh) Nuttall. Native. Infrequent in freshwater wetlands: DCP 4106, 21 January 2005.

Eutrochium dubium (Willdenow ex Poiret) E.E. Lamont. Native. Rare, one population observed in a swamp forest near Bluffton: *DCP 4710*, 29 June 2006.

Facelis retusa (Lamarck) Schultz-Bipontinus. Introduced from South America. Frequent in lawns and other dry ruderal areas: *DCP 1750*, 25 April 2005.

- (BC) Fleischmannia incarnata (Walter) King & H. E. Robinson. Native. Infrequent in calcareous areas: *DCP 0255*, 16 June 2004.
- (BC) *Gaillardia pulchella* Fougeroux var. *pulchella*. Introduced from farther south and west. Rarely naturalized in ruderal areas: *DCP 3307*, 11 July 2005.
- (BC) Galinsoga quadriradiata Ruiz & Pavon. Introduced from Central America. Rare weed in plant nurseries: *DCP 3295*, 9 July 2005; *DCP 4460*, 11 May 2006.

Gamochaeta antillana (Urban) Anderberg. Native. Insufficient abundance data, ruderal areas: *DCP 4452*, 11 May 2006.

Gamochaeta argyrinea Nesom. Native. Insufficient abundance data, ruderal areas: DCP 4370, 20 March 2006.

Gamochaeta calviceps (Fernald) Cabrera. Native. Insufficient abundance data, ruderal areas: *DCP 4331*, 11 February 2006.

Gamochaeta chionesthes Nesom. Probably introduced from South America. Insufficient abundance data, ruderal areas: DCP 4371, 20 March 2006; DCP 4450, 11 May 2006.

- (SC) *Gamochaeta coarctata* (Willdenow) Kerguélen. Introduced. Insufficient abundance data, ruderal areas: *DCP 4340*, 18 March 2006; *DCP 4453*, 11 May 2006; *DCP 4489*, 11 May 2006.
- (SC) *Gamochaeta pensylvanica* (Wildenow) Cabrera. Native. Insufficient abundance data, ruderal areas: *DCP 0085*, 30 April 2004; *DCP 4451*, 11 May 2006; *DCP 4487*, 11 May 2006.

Gamochaeta purpurea (Linnaeus) Cabrera. Native. Insufficient abundance data, ruderal areas: *DCP 4488*, 11 May 2006; *Gamochaeta purpurea* (Linnaeus) Cabrera. Native. Insufficient abundance data, ruderal areas: *DCP 3423*, 22 July 2005.

(SC) *Gamochaeta simplicicaulis* (Willdenow ex Sprengel) Cabrera. Nativity uncertain. Insufficient abundance data, ruderal areas: *DCP 4602*, 26 May 2006.

Helenium amarum (Rafinesque) H. Rock var. *amarum*. Introduced from farther west. Frequent in xeric ruderal areas: *DCP 3329*, 14 July 2005.

Helianthus angustifolius Linnaeus. Native. Frequent in pinelands and ruderal areas: *DCP* 4170, 28 December 2005.

(SC) *Helianthus annuus* Linnaeus. Introduced from farther west. Rare in ruderal areas: *DCP* 1690, 13 March 2005.

Helianthus atrorubens Linnaeus. Native. Infrequent in pinelands: DCP 1191, 17 October 2004; DCP 5062, 24 November 2006; DCP 5259, 28 October 2008.

Helianthus debilis Nuttall ssp. *cucumerifolius* (Torrey & A. Gray) Heiser. Introduced from the Gulf Coast. Rare in ruderal areas: *DCP 1797*, 4 May 2005.

Helianthus floridanus Gray ex Chapman. Native. Rare in pinelands: DCP 4695, 14 June 2006.

(BC) *Helianthus hirsutus* Rafinesque. Native. Infrequent in pinelands and swamp forests: *DCP* 3725, 26 August 2005; *DCP* 5047, 19 November 2006; *DCP* 5063, 24 November 2006.

Helianthus microcephalus Torrey & A. Gray. Native. Infrequent in xeric calcareous areas: DCP 0075, 30 April 2004; DCP 0091, 12 May 2004; DCP 3592, 6 August 2005.

- (BC) Helianthus petiolaris Nuttall ssp. petiolaris. Introduced from the Great Plains. Rare, one population observed in a fallow agricultural field: DCP 4908, 15 August 2006.
- (SC) *Heterotheca latifolia* Buckley var. *latifolia*. Introduced from the south-central United States and adjacent Mexico. Frequent in xeric ruderal areas: *DCP 3961*, 17 October 2007; *DCP 4082*, 20 December 2005.

Heterotheca subaxillaris (Lamarck) Britton & Rusby. Native. Frequent in dunes: DCP 4026, 27 November 2005.

Hieracium gronovii Linnaeus. Native. Infrequent in pinelands: *DCP 0267*, 16 June 2004; *DCP 2212*, 20 June 2005; *DCP 4823*, 19 July 2006; *DCP 5070*, 26 November 2006.

Hypochaeris brasiliensis (Lessing) Grisebach var. *tweediei* (Hooker & Arnott) Baker. Introduced from South America. Frequent in ruderal areas: *DCP 0088*, 30 April 2004; *DCP 1003*, 16 September 2004; *DCP 1026*, 16 September 2004.

Hypochaeris glabra Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP 0111*, 12 May 2004; *DCP 0117*, 15 May 2004; *DCP 1703*, 21 March 2005.

- (SC) *Hypochaeris microcephala* (Schultz-Bipontinus) Cabrera var. *albiflora* (Kuntze) Cabrera. Introduced from South America. Infrequent but increasing in ruderal areas: *DCP 2062*, 30 May 2005.
- (BC) *Hypochaeris radicata* Linnaeus. Introduced from Eurasia. Frequent in ruderal areas: *DCP* 4646, 8 June 2006.

Ionactis linariifolia (Linnaeus) Greene. Native. Infrequent in pinelands: *DCP 4244*, 6 January 2006.

(SC) *Iva annua* Linnaeus var. *annua*. Introduced from farther west. Infrequent in ruderal areas: *DCP 3611*, 9 August 2005.

Iva frutescens Linnaeus var. *frutescens*. Native. Frequent in salt marshes: *DCP 3634*, 12 August 2005.

Iva imbricata Walter. Native. Frequent in dunes: DCP 4891, 12 August 2006.

Krigia cespitosa (Rafinesque) Chambers. Native. Frequent in ruderal areas: *DCP 1753*, 25 April 2005.

(BC) Krigia dandelion (Linnaeus) Nuttall. Native. Rare, one population observed in a frequently mown roadside: *DCP 1760*, 25 April 2005.

Krigia virginica (Linnaeus) Willdenow. Native. Frequent in ruderal areas: *DCP 1781*, 3 May 2005.

- (BC) Lactuca canadensis Linnaeus. Native. Frequent in ruderal areas: DCP 4698, 17 June 2006; DCP 4745, 6 July 2006.
- (BC) Lactuca floridana (Linnaeus) Gaertner. Native. Frequent in ruderal areas: DCP 4472, 11 May 2006.

Lactuca graminifolia Michaux var. graminifolia. Native. Frequent in ruderal areas: DCP 0099, 12 May 2004; DCP 0112, 15 May 2004; DCP 4483, 11 May 2006.

Lactuca hirsuta Muhlenberg ex Nuttall. Native. Frequent in ruderal areas: *DCP 4768*, 15 July 2006; *DCP 4878*, 1 August 2006.

(BC) Lactuca serriola Linnaeus. Introduced. Frequent in ruderal areas: DCP 0082, 30 April 2004; DCP 4696, 16 June 2006.

Leucanthemum vulgare Lamarck. Introduced from Eurasia. Rare, one population observed in a ruderal area: DCP 4576, 23 May 2006; DCP 4587, 23 May 2006.

Liatris elegans (Walter) Michaux var. *elegans*. Native. Frequent in pinelands: *DCP 3805*, 18 September 2005; *DCP 3927*, 3 October 2005.

Liatris elegans (Walter) Michaux var. *kralii* Mayfield. Native. Frequent in pinelands: *DCP 1126*, 16 October 2004; *DCP 1181*, 17 October 2004.

- (SC) Liatris patens Nesom & Kral. Native. Infrequent in pinelands: PDM 6055, 4 November 2001; DCP 1095, 3 October 2004; DCP 1130, 16 October 2004; DCP 1137, 16 October 2004; DCP 1186, 17 October 2004; DCP 1190, 17 October 2004; DCP 5201, 11 October 2007; DCP 5204, 11 October 2007; DCP 5211, 16 October 2007; DCP 5212, 16 October 2007; DCP 5298, 21 November 2009.
- (BC) *Liatris spicata* (Linnaeus) Willdenow var. *spicata*. Probably introduced from farther northwest. Rare in pinelands, possibly naturalized from cultivated plants: *DCP 4047*, 27 November 2005.
- (BC) *Liatris squarrosa* (Linnaeus) Michaux var. *hirsuta* (Rydberg) Gaiser. Native. Rare in pinelands: *DCP 3401*, 20 July 2005.

Liatris virgata Nuttall. Native. Infrequent in pinelands: *DCP 3875*, 2 October 2005; *DCP 3876*, 2 October 2005; *DCP 5030*, 8 October 2006.

Melanthera nivea (Linnaeus) Small. Native. Infrequent in calcareous areas: *DCP 1574*, 26 November 2004.

(SC) *Mikania cordifolia* (Linnaeus f.) Willdenow. Native. Infrequent in calcareous areas: *DCP 1207*, 30 October 2004; *DCP 1211*, 30 October 2004; *DCP 1324*, 1 November 2004; *DCP 1330*, 1 November 2004; *DCP 1800*, 7 May 2005; *DCP 1842*, 11 May 2005; *DCP 3680*, 13 August 2005.

Mikania scandens (Linnaeus) Wildenow. Native. Frequent in freshwater wetlands: *DCP* 1280, 31 October 2004.

Oclemena reticulata (Pursh) Nesom. Native. Infrequent in pinelands: DCP 1522, 25 November 2004; DCP 2147, 12 June 2005.

Packera anonyma (Wood) W.A. Weber & Á. Löve. Native. Rare in ruderal field: DCP 5318, 5 May 2010.

Packera glabella (Poiret) C. Jeffrey. Native. Frequent in tidal freshwater wetlands also observed once in a suburban roadside ditch: DCP 1777, 3 May 2005; DCP 3454, 24 July 2005.

- (SC) Packera tomentosa (Michaux) C. Jeffrey. Native. Rare in pinelands: DCP 0028, 21 March 2003; DCP 1742, 3 April 2005.
- (BC) *Pityopsis aspera* (Shuttleworth ex Small) Small var. *adenolepis* (Fernald) Semple & Bowers. Native. Insufficient abundance data, pinelands: *DCP 1477*, 14 November.
- (BC) *Pityopsis graminifolia* (Michaux) Nuttall var. *tenuifolia* (Torrey) Semple & Bowers. Native. Insufficient abundance data, pinelands: *DCP 3800*, 18 September 2005; *DCP 3844*, 1 October 2005.

Pityopsis graminifolia (Michaux) Nuttall var. *graminifolia*. Native. Insufficient abundance data, pinelands: *DCP 3804*, 18 September 2005; *DCP 3873*, 2 October 2005; *DCP 4081*, 20 December 2005

(SC) *Pityopsis graminifolia* (Michaux) Nuttall var. *latifolia* Fernald. Native. Insufficient abundance data, pinelands: *DCP 1506*, 14 November 2004; *DCP 3894*, 2 October 2005; *DCP 3922*, 3 October 2005.

Pluchea camphorata (Linnaeus) Augustin de Candolle. Native. Frequent in freshwater wetlands: *DCP 5052*, 22 November 2006.

Pluchea foetida (Linnaeus) Augustin de Candolle var. *foetida*. Native. Infrequent in freshwater wetlands: *CAS 1120*, 22 August 1980.

Pluchea foetida (Linnaeus) Augustin de Candolle var. *imbricata* Kearney. Native. Frequent in pineland wetlands and tidal freshwater wetlands: *DCP 3372*, 16 July 2005; *DCP 3432*, 22 July 2005.

Pluchea odorata (Linnaeus) Cassini var. *odorata*. Native. Frequent in salt marshes: *DCP* 3747, 28 August 2005.

Pluchea rosea Godfrey. Native. Infrequent in pineland wetlands: *DCP 3205*, 2 July 2005; *DCP 3638*, 12 August 2005.

Pseudognaphalium obtusifolium (Linnaeus) Hilliard & Burtt. Native. Frequent in xeric areas: DCP 3956, 17 October 2007.

Pterocaulon pycnostachyum (Michaux) Elliott. Native. Infrequent in pinelands: DCP 4606, 26 May 2006.

Pyrrhopappus carolinianus (Walter) Augustin de Candolle. Native. Abundant in ruderal areas: *DCP 4149*, 27 December 2005.

- (SC) *Ratibida columnifera* (Nuttall) Wooton & Standley. Introduced from farther west. Infrequent in ruderal areas: *DCP 0174*, 1 June 2004; *DCP 5147*, 14 July 2005.
- (BC) *Rudbeckia fulgida* Aiton var. *fulgida*. Native. Infrequent in xeric calcareous areas: *DCP 3228*, 3 July 2005.
- (BC) *Rudbeckia hirta* Linnaeus var. *angustifolia* (T. V. Moore) Perdue. Native. Infrequent in xeric pinelands. Some populations may be naturalized from ornamental plantings: *DCP 2135*, 12 June 2005; *DCP 3334*, 14 July 2005; *DCP 4852*, 19 July 2006.
- (SC) *Rudbeckia hirta* Linnaeus var. *pulcherrima* Farwell. Native. Infrequent in xeric calcareous pinelands: *DCP 2196*, 19 June 2005.
- (BC) *Rudbeckia laciniata* Linnaeus var. *digitata* (Miller) Fiori. Native. Rare, one small population observed, habitat severely altered: *DCP 4626*, 30 May 2006.
- (SC) *Senecio vulgaris* Linnaeus. Introduced from Eurasia. 26 October 2004; *DCP 4302*, 10 January 2006.
- (BC) Sericocarpus linifolius (Linnaeus) Britton, Sterns & Poggenberg. Native. Infrequent in pinelands: RDP 2835, 6 June 1998(CITA_CLEMS).

Sericocarpus tortifolius (Michaux) Nees. Native. Infrequent in pinelands: DCP 1125, 16 October 2004; DCP 1171, 16 October 2004; DCP 3841, 1 October 2005; DCP 5206, 11 October 2007.

(BC) Silphium asteriscus Linnaeus var. dentatum (Elliott) Chapman. Native. Infrequent in open xeric woodlands: DCP 4474, 11 May 2006.

Smallanthus uvedalius (Linnaeus) Mackenzie ex Small. Native. Infrequent in calcareous areas: *DCP 1534*, 26 November 2004.

Solidago altissima Linnaeus. Native. Abundant in ruderal areas: DCP 0185, 12 June 2004; DCP 3859, 2 October 2005; DCP 4168, 28 December 2005.

- (BC) *Solidago arguta* Aiton var. *caroliniana* (A. Gray) G. Morton. Native. Infrequent in pinelands: *DCP 4314*, 14 January 2006; *DCP 5061*, 24 November 2006.
- (SC) Solidago austrina Small. Native. Frequent in pinelands: DCP 3879, 2 October 2005.
- (BC) Solidago erecta Pursh. Native. Frequent in pinelands: DCP 5057, 24 November 2006. Solidago fistulosa P. Miller. Native. Frequent in pineland wetlands: DCP 1134, 16 October 2004; DCP 1378, 13 November 2004; DCP 4155, 27 December 2005.
- (BC) *Solidago gracillima* Torrey & A. Gray. Native. Infrequent in pinelands: *DCP 4262*, 6 January 2006.
- (BC) Solidago leavenworthii Torrey & A. Gray. Native. Infrequent in pinelands: *DCP 3878*, 2 October 2005; *DCP 4153*, 27 December 2005.
- Solidago odora Aiton var. odora. Native. Infrequent in pinelands: DCP 3930, 3 October 2005.
- Solidago petiolaris Aiton. Native. Infrequent in pinelands: *DCP 0273*, 16 June 2004. *Solidago puberula* Nuttall var. *pulverulenta* (Nuttall) Chapman. Native. Infrequent in pinelands: *DCP 4789*, 15 July 2006.
- (SC) Solidago rugosa P. Miller. Native. Infrequent in pinelands and calcareous areas: *DCP 1204*, 30 October 2004; *DCP 1242*, 31 October 2004; *DCP 4156*, 27 December 2005; *DCP 5036*, 8 October 2006.
- *Solidago sempervirens* Linnaeus var. *mexicana* (Linnaeus) Fernald. Native. Abundant in salt marshes and dunes: *DCP 3862*, 2 October 2005.
- Solidago tortifolia Elliott. Native. Frequent in pinelands: DCP 3874, 2 October 2005; DCP 4241, 6 January 2006.
- Soliva sessilis Ruiz & Pavón. Introduced from South America. Frequent in lawns: DCP 4350, 18 March 2006.
- (BC) *Sonchus asper* (Linnaeus) Hill. Introduced from Europe. Frequent in ruderal areas: *DCP* 4346, 18 March 2006.
- Sonchus oleraceus Linnaeus. Introduced from Europe. Frequent in ruderal areas: DCP 0083, 30 April 2004; DCP 4368, 20 March 2006.
- (SC) *Sphagneticola trilobata* (Linnaeus) Pruski. Introduced from tropical America. Infrequent in ruderal areas: *DCP 4790*, 16 July 2006; *DCP 5085*, 6 January 2007.
- (SC) *Symphyotrichum bahamense* (Britton) Nesom. Native. Rare or overlooked in ruderal areas: *DCP 3837*. 1 October 2005.
- Symphyotrichum concolor (Linnaeus) Nesom. Native. Rare in pinelands: DCP 4247, 6 January 2006; DCP 4274, 6 January 2006.
- Symphyotrichum dumosum (Linnaeus) Nesom. Native. Frequent in pinelands: *DCP 0154*, 1 June 2004; *DCP 1094*, 3 October 2004; *DCP 1133*, 16 October 2004; *DCP 1117*, 16 October 2004; *DCP 1165*, 16 October 2004; *DCP 1166*, 16 October 2004; *DCP 1433*, 13 November 2004; *DCP 1436*, 13 November 2004; *DCP 4254*, 6 January 2006; *DCP 5054*, 22 November 2006; *DCP 5059*, 24 November 2006.
- (BC)(R) Symphyotrichum elliottii (Torrey & A. Gray) Nesom. Native. Infrequent in pinelands: RDP 2917, 13 October 1998 (CITA CLEMS); DCP 5072, 28 November 2006.
- (BC) Symphyotrichum lanceolatum (Willdenow) Nesom ssp. lanceolatum. Native. Infrequent in calcareous areas: *DCP 1210*, 30 October 2004.

- (BC) *Symphyotrichum lateriflorum* (Linnaeus) Löve and Löve. Native. Frequent in pinelands and calcareous areas: *DCP 1201*, 30 October 2004; *DCP 1432*, 13 November 2004; *DCP 4064*, 27 November 2005; *DCP 5060*, 24 November 2006.
- (BC) Symphyotrichum patens (Aiton) Nesom var. patens. Native. Infrequent in pinelands: DCP 4182, 29 December 2005; DCP 4275, 6 January 2006.
- *Symphyotrichum pilosum* (Willdenow) Nesom var. *pilosum*. Native. Frequent in ruderal areas: *DCP 5053*, 22 November 2006.
- (BC) *Symphyotrichum subulatum* (Michaux) Nesom. Native. Infrequent in salt marshes: *DCP* 5067, 24 November 2006.
- Symphyotrichum tenuifolium (Linnaeus) Nesom. Native. Frequent in salt marshes: DCP 0230, 16 June 2004; DCP 3872, 2 October 2005; DCP 5066, 24 November 2006.
- Symphyotrichum undulatum (Linnaeus) Nesom. Native. Frequent in calcareous areas:
- DCP 0183, 12 June 2004; DCP 5255, 21 October 2008; DCP 5256, 21 October 2008.
- Symphyotrichum walteri (Alexander) Nesom. Native. Frequent in pinelands: DCP 4239, 6 January 2006.
- (BC) *Taraxacum erythrospermum* Andrzejowski ex Besser. Introduced from Eurasia. Frequent in ruderal areas: *DCP 3766*, 5 March 2005.
- (BC) *Taraxacum officinale* G.H. Weber ex Wiggers. Introduced from Eurasia. Frequent in ruderal areas: *DCP 4324*, 10 February 2006.
- (BC) *Tetragonotheca helianthoides* Linnaeus. Native. Rare, one small population observed in a xeric calcareous pineland: *DCP 4508*, 15 May 2006.
- (SC) *Thymophylla tenuiloba* (de Candolle) Small var. *tenuiloba*. Introduced from farther south and west. Infrequent on xeric frequently mown roadsides: *DCP 4512*, 17 May 2006; *DCP 5134*, 8 May 2007.
- (SC) *Tithonia rotundifolia* (Mill.) S. F. Blake. Introduced from Mexico. Rarely naturalized, two populations observed in ruderal areas: *DCP 3475*, 26 July 2005; *DCP 5050*, 20 November 2006.
- *Verbesina occidentalis* (Linnaeus) Walter. Native. Frequent in mesic calcareous areas: *DCP 1535*, 26 November 2004.
- (BC) *Verbesina virginica* Linnaeus var. *virginica*. Native. Frequent in xeric calcareous areas: *DCP 3860*, 2 October 2005.
- *Verbesina walteri* Shinners. Native. Infrequent in calcareous areas: *DCP 1567*, 26 November 2004.
- (BC) Vernonia angustifolia Michaux var. angustifolia. Native. Infrequent in pinelands: DCP 3819, 20 July 2005.
- Vernonia angustifolia Michaux var. scaberrima (Nuttall) A. Gray. Native. Frequent in pinelands: DCP 1170, 16 October 2004; DCP 3820, 20 July 2005.
- (BC) *Vernonia noveboracensis* (Linnaeus) Michaux. Native. Frequent in swamp forests: *DCP* 3712, 26 August 2005.
- *Vernonia ovalifolia* Torrey & A. Gray Apparently introduced from Georgia and Florida. Infrequent but increasing in residential gardens. *DCP 5246*; 18 August 2008.
- *Vernonia x recurva* (Gleason) Cronquist. Native. Infrequent in pinelands: *DCP 2295*, 2 July 2005; *DCP 3818*, 20 July 2005.

Xanthium strumarium Linneus var. glabratum. Native. Infrequent weed in agricultural fields: DCP 4053, 27 November 2005.

- (BC) *Youngia japonica* (Linnaeus) Augustin de Candolle. Introduced from Asia. Abundant in residential landscapes: *DCP 1650*, 6 January 2007.
- (SC) Zinnia violacea Cavanilles. Introduced from New World tropics. Rarely naturalized in ruderal areas: *DCP 3476*, 26 July 2005.

Balsaminaceae

(BC) *Impatiens capensis* Meerburg. Native. Infrequent in swamp forests and tidal freshwater wetlands: *DCP 4774*, 15 July 2006.

Basellaceae

(SC) *Anredera vesicaria* (Lamarck) Gaertner f.. Probably introducedfrom the New World tropics. Infrequent in ruderal areas: *DCP 4016*, 23 November 2006; *DCP 4017*, 23 November 2006.

Bataceae

Batis maritima Linnaeus. Native. Frequent in salt marshes: DCP 2169, 14 June 2005.

Berberidaceae

- (BC) *Nandina domestica* Thunberg. Introduced from Asia. Rare in ruderal areas: *DCP 2077*, 30 May 2005; *DCP 4525*, 19 May 2006.
- (BC) *Podophyllum peltatum* Linnaeus. Native. Rare in calcareous areas: *DCP 1763*, 25 April 2005.

Betulaceae

- (BC) Alnus serrulata (Aiton) Willdenow. Native. Rare in tidal freshwater wetlands: *DCP 3244*, 4 July 2005.
- (BC) *Betula nigra* Linnaeus. Native. Infrequent in ruderal areas and tidal freshwater wetlands: *DCP 3449*, 24 July 2005.
- (BC) Carpinus caroliniana Walter var. caroliniana. Native. Infrequent in mesic calcareous areas: DCP 1541, 26 November 2004; DCP 1569, 26 November 2004; DCP 3446, 24 July 2005.
- (BC) Ostrya virginiana (P. Miller) K. Koch. Native. Infrequent in calcareous swamps: DCP 1543, 26 November 2004.

Bignoniaceae

Bignonia capreolata Linnaeus. Native. Frequent in maritime forests and swamp forests: *DCP 1256*, 31 October 2004.

Campsis radicans (Linnaeus) Seeman ex Bureau. Native. Frequent in pinelands and xeric ruderal areas: *DCP 5020*, 19 August 2006.

- (BC) Catalpa bignonioides Walter.Introduced from the South Central United States. Infrequent in ruderal areas: DCP 3749, 28 August 2005; DCP 4805, 19 July 2006.
- (SC) *Macfadyena unguis-cati* (Linnaeus) A. H. Gentry. Introduced from tropical America. Infrequent in ruderal areas: *DCP 1654*, 10 January 2005; *DCP 1789*, 4 May 2005.

Boraginaceae

Heliotropium curassavicum Linnaeus var. curassavicum. Possibly Introduced from farther south. Rare in salt marshes: BZ 339, 3 April 1976; GW 153, 3 April 1976; RMH 158, 3 April 1976.

Heltiotropium amplexicaule M. Vahl. Introduced from South America. Rare in ruderal areas: DCP 2085, 1 June 2005.

Onosmodium virginianum (Linnaeus) Augustin de Candolle. Native. Infrequent in xeric pinelands: *DCP 2268*, 28 June 2005.

Brassicaceae

- (BC) *Arabidopsis thaliana* (Linnaeus) Heynhold. Introduced from Eurasia. Rare in ruderal areas: *DCP 5103*, 23 March 2007.
- (SC) *Brassica oleracea* Linnaeus var. *acephala* Augustin de Candolle. Introduced from the Old World. Rarely naturalizing in ruderal areas: *DCP 5120*, 2 April 2007.
- (BC) *Brassica rapa* Linnaeus var. *rapa*. Introduced from Europe. Rarely naturalizing in ruderal areas: *DCP 5108*, 25 March 2007.
- (BC) Cakile eduntula (Bigelow) Hooker. Native. Frequent in dunes: DCP 1607, 2 January 2005; DCP 4882, 30 July 2006.

Capsella bursa-pastoris (Linnaeus) Medikus. Introduced from Europe. Infrequent in ruderal areas: *DCP 1632*, 4 January 2005.

- (SC) *Cardamine debilis* D. Don. Introduced from Eurasia. Infrequent or overlooked in plant nurseries: *DCP 5189*, 11 September 2007.
- (BC) *Cardamine hirsuta* Linnaeus. Introduced from Europe. Abundant in ruderal areas: *DCP* 1697, 20 March 2005.
- (BC) *Cardamine parviflora* Linnaeus var. *arenicola* Britton) O. E. Schulz. Native. Infrequent or overlooked in ruderal areas: *DCP 4304*, 10 January 2006; *DCP 4357*, 18 March 2006; *DCP 5106*, 23 March 2007.

Cardamine pensylvanica Muhlenberg ex Willdenow. Native. Infrequent in tidal freshwater wetlands: *DCP 4760*, 29 May 2006.

Descaurainia pinnata (Walter) Britton var. *pinnata*. Native. Abundant in ruderal areas: *DCP 1606*, 2 January 2005; *DCP 1715*, 22 March 2005.

Lepidium didymum Linnaeus. Introduced from South America. Abundant in ruderal areas: *DCP 4343*, 18 March 2006.

Lepidium virginicum Linnaeus var *virginicum*. Native. Abundant in xeric ruderal areas: *DCP 0072*, 30 April 2004.

Raphanus raphanistrum Linnaeus. Introduced from Mediterranean Europe. Frequent in ruderal areas: *DCP 3764*, 5 March 2005; *DCP 4173*, 29 December 2005.

- (BC) *Raphanus sativus* Linnaeus. Introduced from Mediterranean Europe. Infrequent in ruderal areas: *DCP 4484*, 11 May 2006; *DCP 4697*, 16 June 2006.
- (BC) *Rapistrum rugosum* (Linnaeus) Allioni var. *rugosum*. Introduced from Mediterranean Europe. Rare in ruderal areas: *DCP 5277*, 8 June 2009.

Rorippa teres (Michaux) R. Stuckey var. teres. Native. Rare in pineland wetlands: DCP 5102, 23 March 2007.

- (SC) Sisymbrium irio Linnaeus. Introduced from Eurasia. Rare, one population observed in an equestrian area: DCP 4500, 15 May 2006.
- (BC) *Thlaspi arvense* Linnaeus. Introduced from Europe. Rare in ruderal areas: *SRH 0935*, 8 May 1989.

Cactaceae

(SC*) *Opuntia humifusa* (Rafinesque) Rafinesque var. *austrina*. Native. Frequent in xeric areas: *DCP 3405*, 20 July 2005; *DCP 4077*, 27 November 2005; *DCP 4480*, 11 May 2006.

Opuntia pusilla (Haworth) Nuttall. Native. Frequent in dunes: DCP 1610, 2 January 2005.

(SC*)(R)*Opuntia stricta* (Haworth) Haworth var. *dillenii* (Ker-Gawler) L. Benson. Native. Infrequent in xeric calcareous areas: *DCP 4892*, 12 August 2006; *DCP 4903*, 12 August 2006. (SC*)(R)*Opuntia stricta* (Haworth) Haworth var. *stricta*. Native. Infrequent in xeric calcareous areas: *JBN 24694*, 17 April 2004; *DCP 1609*, 2 January 2005; *DCP 1615*, 2 January 2005; *DCP 1616*, 2 January 2005; *DCP 3556*, 4 August 2005; *DCP 4902*, 12 August 2006.

Campanulaceae

Lobelia cardinalis Linnaeus. Native. Frequent in tidal freshwater wetlands: DCP 3236, 4 July 2005; DCP 4781, 15 July 2006.

Lobelia elongata Small. Native. Frequent in freshwater wetlands: DCP 1281, 31 October 2004; DCP 4072, 27 November 2005; DCP 4099, 21 December 2005.

Lobelia nuttallii J. A. Schultes. Native. Frequent in pinelands: DCP 2107, 7 June 2005; DCP 2126, 8 June 2005; DCP 2144, 12 June 2005.

(BC) Lobelia puberula Michaux. Native. Rare, two populations observed in xeric pinelands on the mainland: DCP 4231, 6 January 2006; DCP 4571, 23 May 2006.

Triodanis biflora (Ruiz & Pavon) Greene. Native. Frequent in ruderal areas: *DCP 1817*, 9 May 2005.

Triodanis perfoliata (Linnaeus) Nieuwland. Native. Frequent in ruderal areas: *DCP 1772*, 2 May 2005.

(BC) *Wahlenbergia marginata* (Thunberg) Alphonse de Candolle. Introduced from Oceania and East Asia. Frequent in xeric ruderal areas: *DCP 1251*, 31 October 2004; *DCP 1686*, 5 March 2005.

Cannabaceae

(SC) Cannabis sativa Linnaeus. Introduced from Asia. Infrequent in ruderal areas: DCP 1696, 5 March 2005; DCP 3282, 8 July 2005.

Celtis laevigata Wildenow. Native. Abundant in calcareous areas: *DCP 1307*, 31 October 2004; *DCP 3247*, 4 July 2005.

Caprifoliaceae

Lonicera japonica Thunberg. Introduced from Asia. Abundant in ruderal areas: *DCP 1303*, 31 October 2004; *DCP 1581*, 27 November 4 2004.

Lonicera sempervirens Linnaeus var. sempervirens. Native. Frequent in xeric areas: DCP 1768, 2 May 2005.

Caryophyllaceae

- (R) *Arenaria lanuginosa* (Michaux) Rohrbach ssp. *lanuginosa*. Native. Rare in calcareous areas: *DCP 1199*, 30 October 2004; *DCP 3768*, 5 March 2005.
- (BC) Arenaria leptocladus (Reichenbach) Guss. Introduced. DCP 1660, 6 January 2007.
- (BC) *Arenaria serpyllifolia* Linnaeus. Introduced. Frequent in ruderal areas: *DCP 3767*, 5 March 2005.
- (BC) *Cerastium brachypodum* (Englemann ex A. Gray) B. L. Robinson. Possibly Introduced from farther west. Infrequent or overlooked in ruderal areas: *DCP 4326*, 10 February 2006.

Cerastium glomeratum Thuillie. Introduced from Europe. Abundant in ruderal areas: *DCP 3775*, 12 March 2005.

- (BC) Cerastium pumilum W. Curtis.Introduced from Europe. Infrequent or overlooked in ruderal areas: DCP 4441, 26 March 2006.
- (SC) *Drymaria cordata* (Linnaeus) Willdenow ex Schultes. Native.Locally abundant in ruderal areas: *DCP 0308*, 24 June 2004; *DCP 1015*, 16 September 2004; *DCP 5083*, 6 January 2007.

Sagina decumbens (Elliott) Torrey & A. Gray. Native. Frequent in ruderal areas: *DCP* 1719, 24 March 2005.

(BC) Scleranthus annuus Linnaeus. Introduced from Europe. Infrequent in ruderal areas: DCP 0169, 1 June 2004; DCP 4435, 25 March 2006.

Silene antirrhinna Linnaeus. Native. Frequent in ruderal areas: DCP 2090, 2 June 2005; DCP 4419, 25 March 2006.

Spergula arvensis Linnaeus var. *arvensis*. Introduced from Europe. Infrequent in ruderal areas: *DCP 5158*, 7 May 2007.

Spergula arvensis Linnaeus var. *sativum* (Boenninghausen) Mertens. & Koch. Introduced from Europe. Infrequent in ruderal areas: *DCP 1751*, 25 April 2005.

(BC) *Spergularia salina* J. & K. Presl. Native. Infrequent in salt marshes: *DCP 1664*, 6 January 2007.

Stellaria media (Linnaeus) Villars. Introduced from Europe. Frequent weed in disturbed soil: *DCP 1628*, 4 January 2005.

(BC) *Polycarpon tetraphyllum* (Linnaeus) Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP 1724*, 24 March 2005.

Cabombaceae

(BC) *Cabomba caroliniana* A. Gray. Native. Rare, one population observed in a channelized fresh-water stream: *DCP 4670*, 10 June 2006.

Celastraceae

- (BC) *Euonymus americanus* Linnaeus. Native. Rare in calcareous areas: *DCP 5045*, 19 November 2006.
- (SC) *Euonymus japonicus* Thunberg. Introduced from Asia. Rarely naturalized in ruderal areas: *DCP 3488*, 26 July 2005; *DCP 4307*, 14 January 2006.
- (SC) *Euonymus japonicus* Thunberg. Introduced from Asia. Rarely naturalized in ruderal areas: *DCP* 3488, 26 July 2005; *DCP* 4307, 14 July 2006.

Chenopodiaceae

Atriplex pentandra (Jacquin) Standley in N. L. Britton et al.. Native. Frequent in salt marshes and dunes: DCP 3952, 17 October 2005; DCP 4921, 19 August 2006.

Atriplex prostrata Boucher ex Augustin de Candolle. Probably introduced from Eurasia. Frequent in salt marshes: *DCP 4920*, 19 August 2006.

Chenopodium album Linnaeus. Both native and introduced. Frequent in ruderal areas: *DCP 3965*, 17 October 2007.

(SC) Chenopodium standleyanum Aellen. Native. Frequent in ruderal areas: DCP 3929, 3 October 2005.

Dysphania anthelmintica (Linnaeus) Mosyakin & Clemants. Native. Frequent in ruderal areas and dunes: *DCP 3857*, 2 October 2005.

(BC) *Dysphania pumilio* (R. Brown) Mosyakin & Clemants. Introduced from Australia. Rare or overlooked, one population observed in a parking lot: *DCP 5181*, 10 September 2007.

Salicornia bigelovii Torrey. Native. Abundant in salt marshes: DCP 3935, 2 October 2005; DCP 3936, 2 October 2005.

(SC) Salsola caroliniana Walter. Nativity unclear. Frequent in dunes: *DCP 4881*, 30 July 2006; *DCP 4884*, 6 August 2006.

Sarcocornia pacifica (Standley) A.J. Scott. Native. Abundant in salt marshes: *DCP 3868*, 2 October 2005.

Suaeda linearis (Elliott) Moquin. Native. Frequent in salt marshes: DCP 3925, 3 October 2005.

Cistaceae

(BC) Crocanthemum canadense (Linnaeus) Britton. Native. Infrequent in xeric areas: DCP 2127, 8 June 2005.

Crocanthemum carolinianum (Walter) Spach. Native. Frequent in xeric areas: DCP 4361, 19 March 2006.

- (R) *Crocanthemum corymbosum* (Michaux) Britton. Native. Infrequent in pinelands: *JFT 2032*, 21 April 2000; *DCP 1613*, 2 January 2005; *DCP 3518*, 30 July 2005; *DCP 4050*, 27 November 2005; *DCP 4653*, 9 June 2006; *DCP 4678*, 14 June 2006; *DCP 5203*, 11 October 2007; *DCP 5205*, 11 October 2007.
- (BC)(R) *Crocanthemum georgianum* (Chapman) Barnhart. Native. Infrequent in xeric pinelands: *DCP 5040*, 14 May 2006; *DCP 4507*, 15 May 2006; *DCP 4756*, 11 July 2006.

Lechea mucronata Rafinesque. Native. Frequent in pinelands: DCP 0203, 12 June 2004; DCP 0261, 16 June 2004; DCP 1230, 31 October 2004; DCP 1566, 26 November 2004; DCP 3269, 6 July 2005; DCP 3403, 20 July 2005; DCP 3404, 20 July 2005.

- (SC) Lechea pulchella Rafinesque var. ramosissima (Hodgdon) Sorrie & Weakley. Native. Infrequent in pinelands: *DCP 1516*, 25 November 2004; *DCP 3207*, 2 July 2005; *DCP 3408*, 20 July 2005; *DCP 4191*, 30 December 2005.
- (BC) Lechea tenuifolia Michaux. Native. Infrequent in pinelands: DCP 4198, 3 January 2006.

Cleomaceae

(BC) *Cleome gynandra* Linnaeus. Introduced from Africa. Infrequent in roadsides and agricultural fields: *DCP 4871*, 30 July 2006.

Clethraceae

Clethra alnifolia Linnaeus. Native. Frequent but declining in pinelands: DCP 1377, 13 November 2004.

Convolvulaceae

Calystegia sepium (Linnaeus) R. Brown. Native. Rare, one population observed in a ruderal area: *DCP 3363*, 16 July 2005; *DCP 3434*, 23 July 2005.

(BC) *Cuscuta compacta* Antoine Laurent de Jussieu ex Choisy var. *compacta*. Native. Frequent in pinelands and ruderal areas: *DCP 3796*, 18 September 2005; *DCP 4003*, 20 October 2005; *DCP 4128*, 26 December 2005.

Cuscuta gronovii Willdenow ex J. A. Schultes. Native. Insufficient abundance data, maritime forests: *DCP 4904*, 15 August 2006.

Cuscuta pentagona Engelmann. Native. Insufficient abundance data, ruderal areas: DCP 2153, 13 June 2005; DCP 3266, 6 July 2005.

Dichondra carolinensis Michaux. Native. Abundant in ruderal areas and maritime forests: *DCP 4183*, 29 December 2005.

(SC) *Ipomoea batatas* (Linnaeus) Lamarck. Introduced from tropical America. Rare, one extensive natural population observed in a ruderal area: *DCP 3321*, 12 July 2005.

Ipomoea cordatotriloba Dennstedt var. *cordatotriloba*. Native. Abundant in ruderal areas: *DCP 1582*, 27 November 4 2004; *DCP 3630*, 12 August 2005; *DCP 3790*, 18 September 2005; *DCP 4023*, 26 November 2005.

Ipomoea hederacea Jacquin. Native. Infrequent in ruderal areas: *DCP 3920*, 3 October 2005; *DCP 5242*, 17 August 2008.

- (SC) *Ipomoea hederifolia* Linnaeus. Introduced from tropical America. Frequent in ruderal areas: *DCP 3791*, 18 September 2005; *DCP 5193*, 27 September 2007; *DCP 5214*, 21 October 2007.
- (R) *Ipomoea imperati* (Vahl) Grisebach. Native. Frequent in dunes: *DCP 4031*, 27 November 2005.
- (SC) *Ipomoea indica* (Burman) Merrill. Introduced from the tropics. Two extensive clonal populations observed spreading from cultivation: *DCP 5219*, 1 November 2007; *DCP 5249*, 21 August 2008.

Ipomoea lacunosa Linnaeus. Native. Rare in ruderal areas: DCP 5241, 17 August 2008.

(R) *Ipomoea macrorhiza* Michaux. Native. Infrequent in calcareous areas: *RDP 2844*, 3 June 1998(CITA_CLEMS); *RDP 2892a*, 5 September 1998(CITA_CLEMS); *RDP 2892b*, 5 September 1998(CITA_CLEMS); *DCP 0281*, 23 June 2004; *DCP 1173*, 17 October 2004; *DCP 1175*, 17 October 2004; *DCP 1185*, 17 October 2004; *DCP 1187*, 17 October 2004; *DCP 1215*, 30 October 2004; *DCP 1216*, 30 October 2004; *DCP 1402*, 13 November 2004; *DCP 2236*, 26 June 2005; *DCP 3382*, 17 July 2005; *DCP 4867*, 26 July 2005; *DCP 3551*, 31 July 2005; *DCP 3632*, 12 August 2005; *DCP 3741*, 26 August 2005; *DCP 5215*, 21 October 2007; *DCP 5223*, 11 November 2007.

Ipomoea pandurata (Linnaeus) G.F.W. Meyer. Native. Infrequent in xeric pinelands: *DCP 4885*, 8 August 2006.

Ipomoea quamoclit Linnaeus. Introduced from tropical America. Infrequent in ruderal areas: *DCP 4886*, 8 August 2006.

Ipomoea sagittata Poiret. Native. Infrequent in salt marshes: DCP 3330, 14 July 2005.

Jaquemontia tamnifolia (Linnaeus) Grisebach. Probably adventive from farther south. Abundant in ruderal areas: *DCP 3532*, 30 July 2005.

Stylisma humistrata (Walter) Chapman. Native. Frequent in xeric pinelands: DCP 4705, 29 June 2006.

(BC) Stylisma patens (Desrousseaux) Myint ssp. patens. Native. Frequent in xeric pinelands: DCP 0103, 12 May 2004; DCP 2159, 13 June 2005; DCP 4654, 9 June 2006.

Cornaceae

Cornus asperifolia Michaux. Native. Frequent in calcareous areas: DCP 1288, 31 October 2004; DCP 1593, 28 November 2004; DCP 5055, 22 November 2006.

Cornus florida Linnaeus. Native. Infrequent native in calcareous areas or naturalized around abandoned homesites: *DCP 4505*, 15 May 2006.

Cornus foemina P. Miller. Native. Infrequent in swamp forests: *DCP 1368*, 1 November 2004; *DCP 1828*, 9 May 2005; *DCP 2253*, 27 June 2005; *DCP 5046*, 19 November 2006.

Cucurbitacaeae

Melothria pendula Linnaeus var. *pendula*. Native. Abundant in ruderal areas and maritime forests: *DCP 1310*, 31 October 2004.

Citrullus lanatus (Thunberg) Matsumura & Nakai var. *lanatus*. Introduced from the Old World. Frequent as a waif in ruderal areas: *DCP 3550*, 31 July 2005.

- (SC) *Coccinia grandis* (Linnaeus) Voight. Introduced from Asia. Rare, one population observed aggressively spreading clonally from cultivation onto adjacent properties: *DCP 5186*, 11 September 2007.
- (BC) *Cucumis melo* Linnaeus. Introduced from Africa. Infrequent in ruderal areas: *DCP 4888*, 11 August 2006.
- (SC) *Cucurbita pepo* Linnaeus var. *ovifera* (Linnaeus) Harz. Native. Rare, one population observed in a ruderal area: *DCP 2287*, 1 July 2005.
- (SC) *Lagenaria siceraria* (Molina) Standley. Introduced from Old World. Infrequent in ruderal areas: *DCP 3549*, 31 July 2005.

Cyrillaceae

(BC) *Cyrilla racemiflora* Linnaeus. Native. Infrequent in pineland wetlands: *DCP 2079*, 30 May 2005.

Droseraceae

Drosera brevifolia Pursh. Native. Infrequent and declining in pinelands: *DCP 3683*, 13 August 2005.

Drosera capillaris Poiret. Native. Infrequent and declining in pinelands: *DCP 3413*, 22 July 2005.

Ebenaceae

Diospyros virginiana Linnaeus var. *virginiana*. Native. Frequent in pineland wetlands: *DCP 3865*, 2 October.

Elaeagnaceae

Elaeagnus pungens Thunberg var. Introduced from Japan. Frequent in ruderal areas: *DCP 1413*, 13 November 2004.

(SC) *Elaeagnus umbellata* Thunberg var. *parvifolia* (Royle) Schneider. Introduced from Asia. Rare, one population observed in a ruderal area: *DCP 3245*, 4 July 2005.

Ericaceae

Chimaphila maculata (Linnaeus) W. Barton. Native. Small populations are frequently encountered in pinelands: *DCP 1410*, 13 November 2004.

(BC) *Eubotrys racemosa* (Linnaeus) Nuttall. Native. Infrequent in pineland wetlands: *DCP 1434*, 13 November 2004; *DCP 1774*, 2 May 2005.

Gaylussacia dumosa (Andrews) Torrey and A. Gray var. dumosa. Native. Frequent in pinelands: DCP 0280, 23 June 2004; DCP 1141, 16 October 2004; DCP 2296, 2 July 2005. (SC) Gaylussacia nana (A. Gray) Small. Native. Infrequent in pinelands: DCP 1317, 31 October 2004; DCP 1484, 14 November 2004; DCP 5228, 23 November 2007.

Gaylussacia tomentosa (A. Gray) Pursh ex Small. Native. Frequent in pinelands: *DCP 0288*, 24 June 2004; *DCP 1121*, 16 October 2004; *DCP 1380*, 13 November 2004; *DCP 1400*, 13 November 2004; *DCP 1423*, 13 November 2004; *DCP 1425*, 13 November 2004; *DCP 1443*, 13 November 2004; *DCP 1483*, 14 November 2004.

Kalmia hirsuta Walter. Native. Rare and decreasing in pinelands: *DCP 1511*, 25 November 2004.

- (BC) Leucothoe axillaris (Lamarck) D. Don. Native. Rare on stream banks: DCP 4910, 17 August 2006; DCP 4936, 25 August 2006.
- (R) Lyonia ferruginea (Walter) Nuttal. Native. Frequent in Bluffton area pinelands but rapidly declining: DAR 2452, 30 October 1985; DCP 1318, 31 October 2004; DCP 1319, 31 October 2004; DCP 1379, 13 November 2004; DCP 1475, 14 November 2004; DCP 1479, 14 November 2004; DCP 1634, 5 January 2005; DCP 1635, 5 January 2005; DCP 1636, 5 January 2005; DCP 2059, 30 May 2005; DCP 3267, 6 July 2005; DCP 4749, 14 June 2006. (SC)(R)Lyonia fruticosa (Michaux) G. S. Torrey. Native. Frequent in Bluffton area pinelands but rapidly declining: DCP 0301, 24 June 2004; DCP 1092, 3 October 2004; DCP 1093, 3 October 2004; DCP 1096, 3 October 2004; DCP 1164, 16 October 2004; DCP 1316, 31 October 2004; DCP 1376, 13 November 2004; DCP 1401, 13 November 2004; DCP 1426, 13 November 2004; DCP 1427, 13 November 2004; DCP 1431, 13 November 2004; DCP 1469, 14 November 2004; DCP 1480, 14 November 2004; DCP 1531, 26 November 2006; DCP 1532, 26 November 2006.

Lyonia ligustrina (Linnaeus) Augustin de Candolle var. foliosiflora (Michaux) Fernald. Native. Frequent in pinelands: *DCP 1545*, 26 November 2004; *DCP 1546*, 26 November 2004; *DCP 4691*, 14 June 2006.

Lyonia lucida (Lamarck) K. Koch. Native. Frequent in pinelands and swamp forests: *DCP 1275*, 31 October 2004.

Lyonia mariana (Linnaeus) D. Don. Native. Infrequent in pinelands: *DCP 1091*, 3 October 2004; *DCP 1775*, 2 May 2005.

Monotropa uniflora Linnaeus. Native. Infrequent in pinelands: *DCP 1420*, 13 November 2004.

(BC) *Rhododendron atlanticum* (Ashe) Rehder. Native. Infrequent in pinelands: *DCP 2140*, 12 June 2005.

Rhododendron canescens (Michaux) Sweet. Native. Infrequent in swamp forests: *DCP* 5104, 23 March 2007.

(BC) *Rhododendron viscosum* (Linnaeus) Torrey. Native. Frequent in tidal freshwater wetlands: *DCP 3457*, 24 July 2005.

Vaccinium arboreum Marshall. Native. Frequent in xeric woodlands: DCP 1465, 14 November 2004.

- (BC) Vaccinium crassifolium Andrews. Native. Infrequent in mesic pinelands: DCP 2112, 7 June 2005; DCP 2149, 12 June 2005.
- (BC) *Vaccinium elliottii* Chapman. Native. Frequent in pinelands: *DCP 0265*, 16 June 2004; *DCP 0324*, 30 June 2004; *DCP 1246*, 31 October 2004; *DCP 1354*, 1 November 2004; *DCP 1361*, 1 November 2004; *DCP 1399*, 13 November 2004.
- (BC) *Vaccinium formosum* H. C. Andrews. Native. Infrequent in pineland wetlands and swamp forests: *DCP 0022*, 23 March 2003; *DCP 1505*, 14 November 2004.

Vaccinium fuscatum Aiton. Native. Frequent in pineland wetlands: DCP 0248, 16 June 2004; DCP 0258, 16 June 2004; DCP 0272, 16 June 2004; DCP 0289, 24 June 2004; DCP 0321, 30 June 2004; DCP 0322, 30 June 2004; DCP 0323, 30 June 2004; DCP 1398, 13 November 2004; DCP 1442, 13 November 2004; DCP 4943, 26 August 2006.

Vaccinium myrsinites Lamarck. Native. Infrequent in pinelands: DCP 1156, 16 October 2004; DCP 1430, 13 November 2004; DCP 1444, 13 November 2004.

- (SC) *Vaccinium stamineum* Linnaeus var. *1*. Native. Insufficient abundance data, pinelands: *DCP 4753*, 11 July 2006.
- (SC) *Vaccinium stamineum* Linnaeus var. *caesium* (Greene) D. B. Ward. Native.Insufficient abundance data, pinelands: *DCP 2056*, 30 May 2005; *DCP 4788*, 15 July 2006.

Vaccinium stamineum Linnaeus var. *stamineum*. Native. Insufficient abundance data, pinelands: *DCP 3275*, 6 July 2005.

Vaccinium tenellum Aiton. Native. Frequent in pinelands: DCP 0015, 23 March 2003; DCP 0266, 16 June 2004; DCP 0270, 16 June 2004; DCP 0290, 24 June 2004; DCP 1355, 1 November 2004; DCP 1382, 13 November 2004; DCP 1467, 14 November 2004.

Vaccinium virgatum Aiton. Native. Infrequent in pinelands: DCP 0298, 24 June 2004.

Euphorbiaceae

(SC) *Acalypha arvensis* Poeppig. Introduced from tropical America. Rare in ruderal areas: *DCP 5220*, 7 November 2007.

Acalypha gracilens A. Gray. Native. Abundant in ruderal areas: *DCP 3889*, 2 October 2005; *DCP 5002*, 23 September 2006.

- (BC) *Acalypha rhomboidea* Rafinesque. Native. Infrequent in ruderal areas: *DCP 5160*, 9 August 2007; *DCP 5164*, 13 August 2007.
- (BC) *Acalypha virginica* Linnaeus. Native. Infrequent in ruderal areas: *DCP 5183*, 10 September 2007.

Chamaesyce bombensis (Jacqin) Dugand. Native. Frequent in dunes. DCP 4030, 27 November 2005.

- (SC) *Chamaesyce glyptosperma* (Englemann) Small. Nativity uncertain. Frequent in ruderal areas. *DCP 5174*,1 September 2007.
- (BC) *Chamaesyce hirta* (Linnaeus) Millspaugh. Possibly introduced. Insufficient abundance data, ruderal areas: *WE 2938*, 4 January 2000.
- (SC) Chamaesyce hyssopifolia (Linnaeus) Small. Native. Frequent in ruderal areas: DCP 2279, 28 June 2005; DCP 3284, 9 July 2005; DCP 3964, 17 October 2007; DCP 3972, 19 October 2005.

Chamaesyce maculata (Linnaeus) Small. Possibly introduced. Insufficient abundance data, ruderal areas: *DCP 2278*, 28 June 2005.

(SC) *Chamaesyce opthalmica* (Persoon) Burch. Nativity uncertain. Insufficient abundance data, ruderal areas: *DCP 3288*, 9 July 2005; *DCP 3971*, 19 October 2005.

Chamaesyce polygonifolia (Linnaeus) Small. Native. Frequent in dunes. *DCP 4033*, 27 November 2005.

- (BC) *Chamaesyce prostrata* (Aiton) Small. Introduced from tropical America. Insufficient abundance data, ruderal areas: *DCP 5216*, 21 October 2007.
- (SC) *Chamaesyce serpens* (Kunth) Small. Introduced from South America. Insufficient abundance data, ruderal areas: *DCP 4919*, 19 August 2006.

Cnidoscolus stimulosus (Michaux) Engelmann & A. Gray. Native. Frequent in xeric areas: *DCP 1798*, 4 May 2005.

Croton capitatus Michaux var. *capitatus*. Adventive from farther west. Infrequent in ruderal areas: *DCP 3516*, 30 July 2005.

Croton glandulosus Linnaeus var. *septentrionalis* Mueller of Aargau. Possibly introduced or adventive from farther south. Frequent in ruderal areas: *DCP 2084*, 1 June 2005; *DCP 3887*, 2 October 2005.

(BC) (R) Croton michauxii Webster. Native. Rare in pinelands: DCP 4681, 14 June 2006; DCP 5247, 21 August 2008.

Croton punctatus Jacquin. Native. Frequent in dunes: DCP 1618, 2 January 2005; DCP 4035, 27 November 2005.

Euphorbia cyathophora Murray. Native. Abundant in ruderal areas: DCP 3900, 2 October 2005; DCP 4526, 19 May 2006.

- (BC) *Euphorbia dentata* Michaux. Introduced from farther west. Infrequent but increasing in ruderal areas: *DCP 4835*, 19 July 2006.
- (SC) Euphorbia graminea Jacquin. Introduced. Infrequent but increasing in ruderal areas: *DCP 1597*, 11 December 2004; *DCP 3968*, 19 October 2005; *DCP 4550*, 22 May 2006; *DCP 5087*, 6 January 2007.
- (SC) *Euphorbia heterophylla* Linnaeus. Nativity uncertain. Infrequent in ruderal areas: *DCP 3814*, 18 September 2005.
- (BC) *Euphorbia marginata* Pursh. Introduced from farther west. Infrequent in ruderal areas: *DCP 4636*, 1 June 2006.
- (BC) Euphorbia obtusata Pursh. Native. Rare in pinelands: DCP 4640, 5 June 2006. Euphorbia pubentissima Michaux. Native. Infrequent in pinelands: DCP 0252, 16 June 2004; DCP 0264, 16 June 2004; DCP 3670, 13 August 2005.

- (BC) *Ricinus communis* Linnaeus. Introduced from the tropics. Rarely naturalized in ruderal areas: *DCP 4536*, 21 May 2006.
- (BC) Stillingia sylvatica Garden ex Linnaeus ssp. sylvatica. Native. Rare in pinelands: DCP 4682, 14 June 2006.

Tragia urens Linnaeus. Native. Infrequent in xeric pinelands: *DCP 0053*, 26 May 2003; *DCP 3406*, 20 July 2005.

Triadica sebifera (Linnaeus) Small. Introduced from Asia. Abundant in freshwater wetlands and ruderal areas: *DCP 3789*, 18 September 2005.

(SC) *Vernicia fordii* (Hemsley) Airy-Shaw. Introduced from China. Infrequent in ruderal areas: *DCP 3629*, 12 August 2005.

Fabaceae

Aeschynomene indica Linnaeus. Native. Frequent in freshwater wetlands: DCP 3702, 19 August 2005; DCP 3838, 1 October 2005; DCP 3911, 2 October 2005.

- (BC) *Albizia julibrissin* Durazzini. Introduced from tropical Asia. Infrequent in ruderal areas: *DCP 1788*, 4 May 2005.
- (SC) Alysicarpus vaginalis (Linnaeus) Augustin de Candolle. Introduced from the Old World tropics. Infrequent but increasing in ruderal areas: *DCP 3613*, 9 August 2005; *DCP 4014*, 12 November 2005.
- (BC) Amorpha fruticosa Linnaeus. Native. Rare in moist forests: DCP 5294, 7 August 2009.
- (BC) Amphicarpaea bracteata (Linnaeus) Fernald var. bracteata. Native. Infrequent in calcareous areas: *DCP 5209*, 15 October 2007.
- (BC) Amphicarpaea bracteata (Linnaeus) Fernald var. comosa. Native. Infrequent in calcareous areas: DCP 1213, 30 October 2004.

Apios americana Medikus. Native. Frequent in tidal freshwater wetlands and swamp forests: *DCP 3904*, 2 October 2005.

- (BC) *Baptisia alba* (Linnaeus) Ventenat. Native to surrounding area, but native populations not observed. Rare, one population observed in pinelands, possibly naturalized from cultivated plants: *DCP 4707*, 29 June 2006.
- (BC) *Baptisia tinctoria* (Linnaeus) Ventenat. Although, native to surrounding counties, convincingly native populations have not been observed within the county. Rare, one population observed in pinelands, possibly naturalized from cultivated plants: *DCP 4706*, 29 June 2006.

Centrosema virginianum (Linnaeus) Bentham. Native. Frequent in pinelands and maritime forests: DCP 0119, 15 May 2004; DCP 3931, 3 October 2005.

Cercis canadensis Linnaeus var. canadensis. Native. Infrequent in calcareous areas: DCP 4520, 18 May 2006.

(SC) *Chamaecrista fasciculata* (Michaux) Greene var. *brachiata* (Pollard) Isely. Native. Rare or overlooked in pinelands and ruderal areas: *DCP 3797*, 18 September 2005.

Chamaecrista fasciculata (Michaux) Greene var. *fasciculata*. Native. Abundant in pinelands and ruderal areas: *DCP 3342*, 14 July 2005.

Chamaecrista nicticans (Linnaeus) Moench var. *aspera* (Muhlenberg ex Elliott) Irwin & Barneby. Native. Abundant in ruderal areas: *DCP 1580*, 27 November 4 2004; *DCP 3784*, 18 September 2005.

Chamaecrista nicticans (Linnaeus) Moench var. *nicticans*. Native. Abundant in pinelands and ruderal areas: *DCP 1016*, 16 September 2004.

Clitoria mariana Linnaeus var. mariana. Native. Frequent in xeric woodlands: DCP 2131, 8 June 2005.

- (BC) *Crotalaria lanceolata* E. Meyer. Introduced from Africa. Infrequent in ruderal areas: *DCP 3614*, 9 August 2005; *DCP 5207*, 13 October 2007.
- (BC) *Crotalaria ochroleuca* G. Don. Introduced from Africa. Infrequent in ruderal areas: *DCP* 5208, 13 October 2007.

Crotalaria purshii Augustin de Candolle. Native. Infrequent in pinelands: *DCP 3395*, 18 July 2005.

(BC) *Crotalaria rotundifolia* Walter ex J. F. Gmelin var. *vulgaris* Windler. Native. Frequent in pinelands: *DCP 2207*, 20 June 2005; *DCP 4751*, 11 July 2006.

Crotalaria spectabilis Roth. Introduced from Asia. Abundant in ruderal areas: *DCP 3839*, 1 October 2005.

- (BC) Dalea pinnata (J. F. Gmelin) Barneby var. pinnata. Native. Rare, one population observed in a xeric pineland: DCP 4005, 20 October 2005.
- (BC) *Desmodium canescens* (Linnaeus) Augustin de Candolle. Native. Insufficient abundance data, calcareous areas: *DCP 4770*, 15 July 2006.
- (BC) *Desmodium ciliare* (Muhlenberg ex Willdenow) Augustin de Candolle. Native. Insufficient abundance data, pinelands: *DCP 3877*, 2 October 2005.
- (BC) *Desmodium fernaldii* Schubert. Native. Insufficient abundance data, xeric areas: *DCP* 5012, 24 September 2006; *DCP* 5017, 24 September 2006.
- (SC) *Desmodium incanum* Augustin de Candolle. Probably adventive from farther south. Infrequent in ruderal areas: *DCP 1651*, 6 January 2005; *DCP 4299*, 9 January 2006.

Desmodium lineatum Augustin de Candolle. Native. Insufficient abundance data, xeric areas: DCP 0201, 12 June 2004; DCP 5010, 24 September 2006.

- (BC) Desmodium nudiflorum (Linnaeus) Britton, Sterns & Poggenberg. Native. Rare in calcareous areas: DCP 1202, 30 October 2004; DCP 2226, 21 June 2005.
- (BC) *Desmodium obtusum* (Muhlenberg ex Willdenow) Augustin de Candolle. Native. Insufficient abundance data, ruderal areas: *DCP 5009*, 24 September 2006.
- (BC) *Desmodium paniculatum* (Linnaeus) Augustin de Candolle var. *paniculatum*. Native. Insufficient abundance data, xeric areas: *DCP 0204*, 12 June 2004; *DCP 3717*, 25 August 2005; *DCP 3888*, 2 October 2005; *DCP 5001*, 23 September 2006; *DCP 5027*, 7 October 2006.
- (BC) Desmodium perplexum Schubert. Native. Frequent in calcareous areas: DCP 5035, 8 October 2006.

Desmodium tortuosum (Swartz) Augustin de Candolle. Native. Frequent in ruderal areas: *DCP 1577*, 27 Novembe4 2004; *DCP 3287*, 9 July 2005; *DCP 3479*, 26 July 2005.

(BC) *Desmodium viridiflorum* (Linnaeus) Augustin de Candolle. Native. Insufficient abundance data, xeric pinelands: *DCP 1562*, 26 November 2004; *DCP 5014*, 24 September 2006.

Erythrina herbacea Linnaeus. Native. Frequent in pinelands and maritime forests: *DCP* 1439, 13 November 2004.

(R) Galactia elliottii Nuttall. Native.Locally abundant in pinelands in the Bluffton area also observed once on a Native American shell deposit near St. Helena Island: RDP 2770, 2 August

1997(CITA_CLEMS); *DCP 0317*, 30 June 2004; *PDM 7931*, 8 July 2004; *DCP 1118*, 16 October 2004; *DCP 1510*, 25 November 2004; *DCP 1604*, 2 January 2005; *DCP 2060*, 30 May 2005; *DCP 3268*, 6 July 2005; *DCP 3870*, 2 July 2005; *DCP 3940*, 2 July 2005; *DCP 4690*, 14 June 2006; *DCP 4839*, 19 July 2006; *DCP 4874*, 30 July 2006.

(BC) Galactia mollis Michaux. Native. Rare, one population observed in a xeric pineland: DCP 3430, 22 July 2005.

Galactia regularis (Linnaeus) Britton, Sterns & Poggenberg. Native. Frequent in xeric pinelands and calcareous areas: *DCP 0249*, 16 June 2004; *DCP 3233*, 3 July 2005; *DCP 3511*, 29 July 2005; *DCP 4750*, 11 July 2006.

Galactia volubilis (Linnaeus) Britton. Native. Frequent in pinelands and maritime forests: DCP 0278, 23 June 2004; DCP 3394, 18 July 2005; DCP 4684, 14 June 2006.

Gleditsia triacanthos Linnaeus. Probably adventive from farther west. Rare in ruderal areas: *DCP 3914*, 3 October 2005.

Glottidium vesicarium (Jacquin) Harper. Native. Abundant in ruderal areas: *DCP 1579*, 27 Novembe4 2004.

Indigofera caroliniana P. Miller. Native. Frequent in xeric pinelands, maritime forests and calcareous areas: *DCP 3310*, 11 July 2005; *DCP 4897*, 12 August 2006.

- (SC) *Indigofera hirsuta* Linnaeus. Introduced from Africa. Infrequent in ruderal areas: *DCP* 4015, 12 November 2005; *DCP* 4079, 13 December 2005.
- (SC) *Indigofera spicata* Forsskål. Introduced from the Old World tropics. Rare in a gravel parking lot: *DCP 4887*, 10 August 2006.
- (SC) *Indigofera suffruticosa* P. Miller. Introduced from the New World tropics.Infrequent in ruderal areas: *DCP 5210*, 16 October 2007; *DCP 5264*, 9 November 2008.

Kummerowia striata (Thunberg) Schindler. Introduced from Asia. Frequent in ruderal areas: *DCP 1004*, 16 September 2004; *DCP 1029*, 16 September 2004.

(BC) Lathyrus latifolius Linnaeus. Introduced from Europe. Infrequent in ruderal areas: DCP 4748, 6 July 2006.

Lespedeza angustifolia (Pursh) Elliott. Native. Frequent in pinelands: DCP 3880, 2 October 2005; DCP 4000, 20 October 2005; DCP 5015, 24 September 2006.

- (BC) Lespedeza bicolor Turczaninow. Introduced from East Asia. Rare in ruderal areas: DCP 5245, 20 August 2008.
- (BC) Lespedeza capitata Michaux. Native. Infrequent in pinelands: DCP 4151, 27 December 2005.
- (BC) Lespedeza cuneata (Dumont-Cours) G. Don. Introduced from Asia. Abundant in ruderal areas: DCP 1464, 14 November 2004; DCP 5028, 8 October 2006.
- (SC) Lespedeza hirta (Linnaeus) Hornemann var. curtissii (Clewell) Isely. Native. Frequent in pinelands: DCP 0138, 16 May 2004; DCP 1089, 3 October 2004.
- (SC) Lespedeza hirta (Linnaeus) Hornemann var. hirta. Native. inrequent in pinelands: DCP 0138, 16 May 2004; DCP 5256, 21 October 2008.

Lespedeza repens (Linnaeus) W. Barton. Native. Infrequent in pinelands: DCP 3526, 30 July 2005; DCP 4792, 15 July 2006.

Lespedeza stuevei Nuttall. Native. Insufficient abundance data, pinelands: DCP 5033, 8 October 2006.

Lespedeza virginica (Linnaeus) Britton. Native. Insufficient abundance data, pinelands: *DCP 5016*, 24 September 2006.

(SC) Leucaena leucocephala (Lamarck) de Witt ssp. leucocephala. Introduced from the New World tropics. Rare, one population observed in a ruderal area: *DCP 5178*, 7 September 2007.

Medicago arabica (Linnaeus) Hudson. Introduced from Mediterranean Europe. Frequent in ruderal areas: *DCP 4351*, 18 March 2006.

Medicago lupulina Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP 4327*, 10 February 2006; *DCP 4365*, 19 March 2006.

Medicago polymorpha Linnaeus. Introduced from Mediterranean Europe. Frequent in ruderal areas: *DCP 4353*, 18 March 2006.

(BC) *Medicago sativa* Linnaeus. Introduced from Europe. Rare on roadside: *DCP 5317*, 5 May 2010.

Melilotus albus Medikus. Introduced from Eurasia. Frequent in ruderal areas: *DCP 2081*, 30 May 2005.

Melilotus indicus (Linnaeus) Allioni. Introduced from Mediterranean Europe. Frequent in ruderal areas: *DCP 0071*, 30 April 2004; *DCP 4364*, 19 March 2006.

Orbexilum pedunculatum (P. Miller) Rydberg var. psoralioides (Walter) Isely. Native. Infrequent in pinelands: DCP 3203, 2 July 2005; DCP 3599, 8 August 2005.

Phaseolus polystachios (Linnaeus) Britton, Sterns & Poggenberg. Native. Rare in calcareous areas: *DCP 4927*, 22 August 2006; *DCP 5248*, 21 August 2008.

(SC) *Pisum sativum* Linnaeus. Introduced from the Old World. Rare as a waif in ruderal areas: *DCP 4424*, 25 March 2006.

Pueraria montana (Loureiro) Merritt var. lobata (Willdenow) van de Maesen & S. Almeida. Introduced from Asia. Infrequent in ruderal areas: DCP 4372, 20 March 2006.

Rhynchosia difformis (Elliott) Augustin de Candolle. Native. Frequent in pinelands: DCP 0256, 16 June 2004; DCP 2270, 28 June 2005; DCP 2291, 28 June 2005; DCP 3855, 2 October 2005.

(SC) *Rhynchosia minima* (Linnaeus) Augustin de Candolle. Possibly Introduced from the Old World. Rare, one population observed in pinelands: *DCP 5222*, 7 November 2007.

Rhynchosia reniformis Augustin de Candolle. Native. Infrequent in pinelands: *DCP* 2269, 28 June 2005.

- (BC) *Rhynchosia tomentosa* (Linnaeus) Hooker & Arnott var. *tomentosa*. Native. Infrequent in pinelands: *DCP 3339*, 14 July 2005.
- (BC) *Robinia hispida* Linnaeus var. *hispida*. Probably introducedfrom farther north. Rare in ruderal areas: *DCP 4642*, 6 June 2006.

Robinia pseudoacacia Linnaeus. Introduced from farther northwest. Infrequently naturalized from formerly cultivated plants in ruderal areas: *DCP 0024*, 4 April 2003.

Senna obtusifolia (Linnaeus) Irwin & Barneby. Probably introducedfrom the New World tropics. Frequent in ruderal areas: *DCP 3531*, 30 July 2005.

Senna occidentalis (Linnaeus) Link. Introduced from the Old World tropics. Frequent in ruderal areas: *DCP 4763*, 13 July 2006.

(BC) Sesbania drummondii (Rydberg) Cory. Introduced from farther south and west. Rare, one population observed in gravel parking lot: DCP 4915, 19 August 2006.

(BC) Sesbania herbacea (P. Miller) McVaugh. Possibly Introduced from farther south. Abundant in moist ruderal areas: *DCP 3782*, 18 September 2005.

Sesbania punicea (Cavanilles) Bentham. Introduced from South America. Frequent in moist ruderal areas: *DCP 1575*, 27 Novembe4 2004.

Strophostyles helvula (Linnaeus) Elliott. Native. Abundant in maritime forests, ruderal areas, salt marshes and dunes: *DCP 1009*, 16 September 2004; *DCP 1037*, 16 September 2004.

- (SC) *Strophostyles leiosperma* (Torrey & A. Gray) Piper. Possibly Introduced from farther west. Rare or overlooked in ruderal pinelands and ruderal salt marsh fringes: *DCP 3553*, 2 August 2005; *DCP 3586*, 6 August 2005.
- (BC) *Strophostyles umbellata* (Muhlenberg ex Willdenow) Britton. Native. Frequent in pinelands: *DCP 3388*, 18 July 2005.

Stylosanthes biflora (Linnaeus) Britton, Sterns & Poggenberg. Native. Infrequent in xeric pinelands: DCP 3426, 22 July 2005.

- (BC) *Tephrosia florida* (F.G.Dietrich) C.E.Wood. Native. Frequent in pinelands: *DCP 0253*, 16 June 2004; *DCP 4752*, 11 July 2006.
- (BC) *Tephrosia hispidula* (Michaux) Persoon. Native. Frequent in pinelands: *DCP 0254*, 16 June 2004; *DCP 2108*, 7 June 2005; *DCP 2146*, 12 June 2005; *DCP 2213*, 20 June 2005.

Tephrosia spicata (Walter) Torrey & Gray. Native. Frequent in pinelands: *DCP 0147*, 16 May 2004; *DCP 2078*, 30 May 2005; *DCP 4605*, 26 May 2006; *DCP 4787*, 15 July 2006.

- (BC) *Tephrosia virginiana* (Linnaeus) Persoon. Native, at least in surrounding counties. Rare, one population observed in pinelands, possibly naturalized from cultivated plants: *DCP 4704*, 29 June 2006.
- (BC) *Trifolium arvense* Linnaeus. Introduced from Mediterranean. Frequent in xeric roadsides: *DCP 1837*, 9 May 2005.

Trifolium campestre Schreber. Introduced from Eurasia. Frequent in ruderal areas: *DCP* 1711, 22 March 2005.

Trifolium carolinianum Michaux. Native. Infrequent in xeric calcareous ruderal areas: *DCP 0069*, 10 April 2003; *DCP 1759*, 25 April 2005; *DCP 4349*, 18 March 2006; *DCP 4402*, 23 March 2006.

Trifolium dubium Sibthorp. Introduced from Europe. Frequent in ruderal areas: *DCP* 1700, 20 March 2005; *DCP* 1712, 22 March 2005.

Trifolium incarnatum Linnaeus. Introduced from Europe. Frequent on roadsides: *DCP* 3776, 12 March 2005.

(SC) *Trifolium nigrescens* Viviani. Introduced. Rare in ruderal areas: *DCP 5125*, 28 April 2007.

Trifolium repens Linnaeus. Introduced from Eurasia. Frequent in ruderal areas: *DCP* 4347, 18 March 2006.

(SC) *Trifolium vesiculosum* Savi. Introduced from Europe. Infrequent along highways: *DCP* 2188, 17 June 2005.

Vicia acutifolia Elliott. Native. One population observed in pineland depression wetland converted into stormwater retention pond: *DCP 4429*, 25 March 2006.

(BC) *Vicia grandiflora* Scopoli. Introduced from Europe. Rare in ruderal areas: *DCP 1698*, 20 March 2005.

- (BC) *Vicia hirsuta* Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP 1701*, 20 March 2005.
- (BC) *Vicia lathyroides* Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP* 1716, 22 March 2005.
- (SC) *Vicia sativa* Linnaeus ssp. *nigra* (Linnaeus) Erhart. Introduced from Europe. Frequent in ruderal areas: *DCP 1717*, 22 March 2005; *DCP 1726*, 24 March 2005.

Vicia tetrasperma (Linnaeus) Schreber. Introduced from Europe. Frequent in ruderal areas: DCP 0081, 30 April 2004; DCP 1699, 20 March 2005.

(BC) *Vicia villosa* Roth ssp *varia* (Host) Corbière. Introduced from Europe. Infrequent in ruderal areas: *DCP 5132*, 7 May 2007.

Vigna luteola (Jacquin) Bentham. Native. Frequent in ruderal salt marsh edges: *DCP* 3510, 29 July 2005; *DCP* 3552, 31 July 2005.

Vigna unguiculata (Linnaeus) Walpers. Introduced from tropical Africa. One naturalized population observed in a ruderal area: *DCP 3631*, 12 August 2005.

(BC) *Wisteria floribunda* (Willdenow) Augustin de Candolle. Introduced from Japan. Infrequently naturalized in ruderal areas: *DCP 4385*, 21 March 2006.

Wisteria frutescens (Linnaeus) Poiret. Native. Infrequent in pinelands and tidal freshwater wetlands: *DCP 2141*, 12 June 2005.

(BC) *Wisteria sinensis* (Sims) Augustin de Candolle. Introduced from China. Frequent in ruderal areas: *DCP 4386*, 21 March 2006.

Zornia bracteata Walter ex J. F. Gmelin. Native. Infrequent in xeric pinelands: DCP 4006. 20 October 2005.

Fagaceae

(SC) Castanea mollisima Blume. Introduced from China. Frequent in ruderal areas: *DCP* 2256, 27 June 2005; *DCP* 4875, 30 July 2006.

Castanea pumila (Linnaeus) P. Miller. Native. Infrequent in pinelands: *DCP 1254*, 31 October 2004; *DCP 4524*, 18 May 2006.

Fagus grandifolia Erhart var. caroliniana (Loudon) Fernald & Rehder. Native. Infrequent, calcareous areas mostly on the mainland. DCP 1294, 31 October 2004; DCP 1339, 1 November 2004; DCP 1356, 1 November 2004.

Quercus alba Linnaeus. Native. Infrequent in rich mesic forests: *DCP 1340*, 1 November 2004; *DCP 1351*, 1 November 2004; *DCP 1537*, 26 November 2004; *DCP 1573*, 26 November 2004.

(R) *Quercus austrina* Small. Native. Infrequent in xeric calcareous pinelands and other calcareous areas: *RDP 2687a*, 28 June 1996(CITA_CLEMS); *RDP 2687b*, 28 June 1996(CITA_CLEMS); *RDP 2722*, 13 October 1996(CITA_CLEMS); *PDM 2051*, 25 October 1996; *JFT 2030*, 21 April 2000; *DCP 0260*, 16 June 2004; *DCP 0282*, 23 June 2004; *DCP 0315*, 30 June 2004; *DCP 2094*, 2 June 2005; *DCP 4817*, 19 July 2006.

Quercus elliottii Wilbur. Native. Infrequent in pinelands: DCP 2110, 7 June 2005; DCP 2143, 12 June 2005; DCP 2145, 12 June 2005.

Quercus falcata Michaux. Native. Frequent in pinelands and maritime forests: DCP 0093, 12 May 2004; DCP 0305, 24 June 2004; DCP 4826, 19 July 2006.

(SC) Quercus falcata Michaux x Quercus hemisphaerica Bartram ex Willdenow. Native. Rare in xeric ruderal areas: DCP 4651, 8 June 2006; DCP 5044, 9 June 2006.

Quercus geminata Small. Native. Abundant in pinelands, maritime forests and dunes:; DCP 1157, 16 October 2004; DCP 1160, 16 October 2004; DCP 1161, 16 October 2004; DCP 1192. 17 October 2004.

Quercus hemisphaerica Bartram ex Willdenow. Native. Abundant in fire suppressed pinelands, ruderal aresas and maritime forests: *DCP 1120*, 16 October 2004; *DCP 1159*, 16 October 2004; *DCP 1394*, 13 November 2004; *DCP 1466*, 14 November 2004; *DCP 1539*, 26 November 2004.

Quercus incana Bartram. Native. Infrequent in xeric pinelands: DCP 2195, 19 June 2005. Quercus laevis Walter. Native. Infrequent in xeric pinelands: DCP 1603, 1 January 2005; DCP 2193, 19 June 2005.

Quercus laurifolia Michaux. Native. Frequent in swamp forests: DCP 1289, 31 October 2004; DCP 1350, 1 November 2004; DCP 1548, 26 November 2004.

Quercus lyrata Walter. Native. Frequent in tidal freshwater wetlands: DCP 3453, 24 July 2005.

Quercus margarettiae Ashe ex Small. Native. Frequent in xeric pinelands: DCP 0279, 23 June 2004; DCP 2205, 19 June 2005.

Quercus michauxii Nuttall. Native. Frequent in swamp forests: DCP 1237, 31 October 2004; DCP 1277, 31 October 2004; DCP 1298, 31 October 2004; DCP 1321, 1 November 2004; DCP 1322, 1 November 2004; DCP 1334, 1 November 2004; DCP 1336, 1 November 2004; DCP 1570, 26 November 2004; DCP 1571, 26 November 2004; DCP 4675, 10 June 2006.

- (SC) *Quercus minima* (Sargent) Small. Native. Rare or overlooked in xeric pinelands; *DCP 3439*, 23 July 2005; *DCP 4689*, 14 June 2006.
- (BC) *Quercus muhlenbergii* Engelmann. Native. Infrequent in swamp forest ecotones: *DCP* 1749, 25 April 2005.

Quercus nigra Linnaeus. Native. Abundant in pinelands, swamp forests and ruderal areas: DCP 1226, 31 October 2004; DCP 1385, 13 November 2004.

Quercus pagoda Rafinesque. Native. Frequent in swamp forest ecotones: *DCP 1233*, 31 October 2004; *DCP 1313*, 31 October 2004.

Quercus phellos Linnaeus. Native. Frequent in swamp forests: DCP 1821, 9 May 2005. Quercus stellata Wangenheim. Native. Infrequent in pinelands: DCP 2194, 19 June 2005. Quercus velutina Lamarck. Native. Frequent in pinelands: DCP 1349, 1 November 2004; DCP 1540, 26 November 2004; DCP 1807, 7 May 2005.

Quercus virginiana P. Miller. Native. Abundant and increasing in ruderal areas and maritime forests: *DCP 0120*, 15 May 2004; *DCP 1224*, 31 October 2004; *DCP 1447*, 13 November 2004; *DCP 1630*, 4 January 2005; *DCP 2201*, 19 June 2005; *DCP 2203*, 19 June 2005 *DCP 2204*, 19 June 2005; *DCP 3322*, 12 July 2005.

Fumariaceae

Corydalis micrantha (Engelmann ex A. Gray) A. Gray var. australis (Chapman) G. B. Ownbey. Native. Infrequent in ruderal areas: *DCP 0073*, 30 April 2004; *DCP 3765*, 5 March 2005.

(BC) Fumaria officinalis Linnaeus. Introduced from Europe. Rare, one population observed in a railroad bed: DCP 4360, 18 March 2006.

Gelsemiaceae

(BC)(R) Gelsemium rankinii Small. Native. Frequent in tidal freshwater wetlands along the New River: DCP 0027, 4 April 2003; DCP 0025, 8 April 2003.

Gelsemium sempervirens St. Hilaire. Native. Abundant in pinelands, maritime forests and calcareous areas: *DCP 0006*, 10 March 2003; *DCP 1231*, 31 October 2004; *DCP 1257*, 31 October 2004; *DCP 1272*, 31 October 2004.

Gentianaceae

(BC) Gentiana villosa Linnaeus. Native. Rare in pinelands: RDP 2903, 13 October 1998(CITA CLEMS); DCP 1372, 1 November 2004.

Sabatia brevifolia Rafinesque. Native. Infrequent in pinelands: DCP 3755, 5 September 2005.

- (BC) Sabatia calycina (Lamarck) Heller. Native. Infrequent in swamp forests: DCP 3234, 4 July 2005; DCP 4620, 29 May 2006.
- (BC) Sabatia difformis (Linnaeus) Druce. Native. Infrequent in pinelands: DCP 2230, 24 June 2005; DCP 4673, 10 June 2006.

Sabatia dodecandra (Linnaeus) Britton, Sterns & Poggenberg. Native. Infrequent in tidal freshwater wetlands: *DCP 2244*, 27 June 2005; *DCP 3370*, 16 July 2005.

(BC) Sabatia quadrangula Wilbur. Native. Infrequent in pinelands: *DCP 3555*, 4 August 2005. Sabatia stellaris Pursh. Native. Infrequent in salt marshes: *DCP 2172*, 14 June 2005; *DCP 2173*, 14 June 2005; *DCP 4040*, 27 November 2005.

Geraniaceae

Geranium carolinianum Linnaeus var. *carolinianum*. Native. Abundant in ruderal areas: *DCP 1770*, 2 May 2005.

Haloragaceae

(BC) *Myriophyllum aquaticum* (Conceicao Vellozo) Verdcourt. Introduced from South America. Frequent in ruderal areas: *DCP 4622*, 29 May 2006; *DCP 4672*, 10 June 2006.

Myriophyllum pinnatum (Walter) Britton, Sterns & Poggenberg. Native. Frequent in freshwater wetlands: *DCP 4316*, 15 January 2006; *DCP 4377*, 21 March 2006.

(SC) *Proserpinaca intermedia* Mackenzie. Native. Infrequent in freshwater wetlands: *DCP* 0004, 22 March 2003.

Proserpinaca palustris Linnaeus var. *crebra* Fernald & Griscom. Native. Infrequent in freshwater wetlands: *DCP 3291*, 9 July 2005; *DCP 3492*, 26 July 2005.

Proserpinaca pectinata Lamarck. Native. Infrequent in freshwater wetlands: *DCP 4674*, 10 June 2006; *DCP 5023*, 19 July 2006.

Hamamelidaceae

(BC) *Hamamelis virginiana* Linnaeus. Native. Frequent in pinelands: *DCP 1282*, 31 October 2004; *DCP 1299*, 31 October 2004.

Hydrangeaceae

(BC) *Decumaria barbara* Linnaeus. Native. Infrequent in calcareous swamp forests: *DCP* 1286, 31 October 2004.

Hydroleaceae

Hydrolea quadrivalvis Walter. Native. Rare in ditches adjacent to pinelands: *DCP 3361*, 16 July 2005.

Hydrophyllaceae

- (SC) *Nama jamaicense* Linnaeus. Introduced from tropical America. Infrequent in ruderal areas: *DCP 0220*, 16 June 2004; *DCP 2122*, 8 June 2005; *DCP 4297*, 9 January 2006.
- (BC) *Nemophila aphylla* (Linnaeus) Brummitt. Native. Rare in ruderal areas: *DCP 5100*, 21 March 2007.

Hypericaceae

Hypericum cistifolium Lamarck. Native. Frequent in pinelands: DCP 1149, 16 October 2004.

Hypericum crux-andreae (Linnaeus) Crantz. Native. Frequent in pinelands: DCP 0283, 24 June 2004; DCP 1512, 25 November 2004; DCP 3729, 26 August 2005; DCP 4295, 7 January 2006.

- (SC) *Hypericum densiflorum* Pursh. Native. Infrequent in tidal freshwater wetlands: *DCP* 3443, 24 July 2005.
- (BC) Hypericum galioides Lamarck. Native. Infrequent in pineland wetlands: DCP 3357, 15 July 2005; DCP 3522, 30 July 2005.

Hypericum gentianoides (Linnaeus) Britton, Sterns & Poggenberg. Native. Frequent in xeric areas: *DCP 3326*, 14 July 2005.

Hypericum gymnanthum Engelmann & A. Gray. Native. Frequent in xeric ruderal pinelands: *DCP 3324*, 14 July 2005.

Hypericum hypericoides (Linnaeus) Crantz. Native. Abundant in pinelands, maritime forests, calcareous areas and tidal freshwater wetlands: *DCP 1221*, 31 October 2004; *DCP 1386*, 13 November 2004.

(BC) Hypericum mutilum Linnaeus var. mutilum. Native. Frequent in ruderal wetlands: DCP 3325, 14 July 2005; DCP 3368, 16 July 2005; DCP 3462, 25 July 2005.

Hypericum setosum Linnaeus. Native. Infrequent in pinelands: *DCP 4865*, 26 July 2005; *DCP 4240*, 6 January 2006.

- (BC) Hypericum suffruticosum P. Adams & Robson. Native. Rare in xeric pinelands: DCP 3600, 9 August 2005.
- (BC) *Hypericum tenuifolium* Pursh. Native. Infrequent in pinelands: *DCP 4208*, 3 January 2006.
- (BC) *Triadenum virginicum* (Linnaeus) Rafinesque. Native. Frequent in tidal freshwater wetlands: *DCP 2252*, 27 June 2005;
- (BC) *Triadenum walteri* (J. G. Gmelin) Gleason. Native. Frequent in tidal freshwater wetlands: *DCP 2248*, 27 June 2005; *DCP 4777*, 15 July 2006.

Iteaceae

Itea virginica Linnaeus. Native. Infrequent in swamp forests: *DCP 1264*, 31 October 2004; *DCP 1418*, 13 November 2004; *DCP 1841*, 11 May 2005.

Juglandaceae

Carya alba (Linnaeus) Nuttall ex Elliott. Native. Infrequent in pinelands, maritime forests and calcareous areas: DCP 2200, 19 June 2005; DCP 4769, 15 July 2006.

(BC) Carya aquatica (Michaux f.) Nuttall. Native. Infrequent in swamp forests and tidal freshwater wetlands: DCP 2263, 28 June 2005; DCP 3444, 24 July 2005.

Carya cordiformis (Wangenheim) K. Koch. Native. Infrequent in calcareous areas: DCP 2224, 21 June 2005; DCP 3494, 26 July 2005; DCP 3681, 13 August 2005; DCP 3506, 29 July 2005.

Carya glabra (P. Miller) Sweet var. megacarpa (Sargent) Sargent. Native. Frequent in pinelands, maritime forests and calcareous areas: DCP 0044, 26 May 2003; DCP 0079, 30 April 2004; DCP 0095, 12 May 2004; DCP 0109, 12 May 2004; DCP 1243, 31 October 2004; DCP 1292, 31 October 2004; DCP 1342, 1 November 2004; DCP 1343, 1 November 2004; DCP 1568, 26 November 2004; DCP 3682, 13 August 2005.

Carya illinoinensis (Wangenheim) K. Koch. Introduced from the south central United States. Frequent in ruderal areas: DCP 1825, 9 May 2005.

(BC) Carya pallida (Ashe) Engler and Graebner. Native. Infrequent in xeric pinelands and xeric calcareous areas: DCP 2074, 30 May 2005.

Juglans nigra Linnaeus. Native. Infrequent in calcareous areas: DCP 1438, 13 November 2004.

Lamiaceae

Callicarpa americana Linnaeus. Native. Frequent in maritime forests and calcareous areas: *DCP 1218*, 31 October 2004.

- (BC)(R) *Collinsonia anisata* Sims. Native. Rare in frequently burned calcareous oak/pine woodland: *DCP 5319*, 3 June 2010.
- (SC) *Clerodendron bungei* Steudel. Introduced from Asia. Infrequent, spreading agressively from former cultivation and from trash piles: *DCP 1785*, 4 May 2005; *DCP 3513*, 30 July 2005.

Clerodendrum indicum (Linnaeus) Kuntze. Introduced from the Malaysian Archipelago. Infrequent, spreading agressively from former cultivation: *DCP 3351*, 14 July 2005.

- (SC) *Clinopodium brownei* (Swartz) Kuntze. Native in Georgia, possibly introdued here with landscape material. Rare, one population observed in a freshwater wetland: *DCP 3608*, 9 August 2005.
- (BC) *Clinopodium georgianum* Harper. Native. Rare in pinelands and maritime forests: *BD 4*, 14 October 1977; *DCP 4049*, 27 November 2005.

Glechoma hederacea Linnaeus. Introduced from Eurasia.Infrequent in ruderal areas: *DCP 4354*, 18 March 2006.

(SC) *Hedeoma hispida* Pursh. Probably adventive from farther south and west. Rare, one population observed in a ruderal area: *DCP 1832*, 9 May 2005.

Hyptis alata (Rafinesque) Shinners. Native. Infrequent in calcareous wetlands: *DCP* 3720, 26 August 2005.

(SC) *Hyptis mutabilis* (A. Richard) Briquet. Introduced from South America. Rare in ruderal areas: *DCP 3505*, 29 July 2005.

Lamium amplexicaule Linnaeus var. *amplexicaule*. Introduced from Eurasia. Abundant in ruderal areas: *DCP 1646*, 6 January 2007.

- (BC) *Lamium purpureum* Linnaeus. Introduced from Eurasia. Infrequent in ruderal areas: *DCP* 1707, 22 March 2005.
- (BC) *Lycopus americanus* Muhlenberg ex W. Barton. Native. Infrequent in swamp forests: *DCP 1826*, 9 May 2005; *DCP 4234*, 6 January 2006.
- (BC) Lycopus rubellus Moench. Native. Frequent in swamp forests: DCP 4561, 23 May 2006; DCP 5079, 27 December 2006.
- (SC) *Mentha suaveolens* Ehrhart. Introduced from Europe. Infrequent in ruderal areas: *DCP* 3222, 3 July 2005.
- (SC) *Mentha aquatica* Linnaeus var. *citrata* (Erhart) Briquet. Introduced from Europe. Infrequent in ruderal areas: *DCP 4737*, 5 July 2006.
- (BC) *Mentha x piperita* Linnaeus (pro sp.) var. *piperita*. Introduced from Europe. Infrequent in ruderal areas: *DCP 5151*, 23 July 2007.

Monarda punctata Linnaeus var. *punctata*. Native. Frequent in xeric areas: *DCP 3852*, 2 October 2005.

Perilla frutescens (Linnaeus) Britton var. crispa (Bentham) Deane. Introduced from India. Infrequent in ruderal areas: DCP 3612, 9 August 2005.

Physostegia leptophylla Small. Native. Infrequent in tidal freshwater wetlands: *DCP 3239*, 4 July 2005.

(BC) *Physostegia virginiana* (Linnaeus) Bentham ssp. *virginiana*. Native to surrounding area. Observed populations were probably naturalized from cultivation. Infrequent in ruderal areas: *DCP 3478*, 26 July 2005.

Prunella vulgaris Linnaeus var. *lanceolata* (W. Barton) Fernald. Native. Infrequent in ruderal areas near Sheldon Community: *DCP 1830*, 9 May 2005.

- (BC) *Pycnanthemum muticum* (Michaux) Persoon. Native. Infrequent in pinelands: *DCP 0042*, 26 May 2003.
- (SC) *Pycnanthemum pycnanthemoides* (Leavenworth) Fernald var. *pycnanthemoides*. Native. Infrequent in pinelands: *DCP 3672*, 13 August 2005.
- (BC) Salvia coccinea P.J. Buchoz ex Etlinger. Introduced from farther south and west.Infrequent in ruderal areas: DCP 4634, 1 June 2006.

Salvia lyrata Linnaeus. Native. Abundant in calcareous areas: DCP 1812, 9 May 2005; DCP 1831, 9 May 2005; DCP 3230, 3 July 2005.

Scutelaria integrifolia Linnaeus. Native. Frequent in pinelands and calcareous areas: *DCP 1205*, 30 October 2004.

(BC)(R)*Scutelaria mellichampii* Small. Native. Infrequent in calcareous areas near Bluffton: *DCP 0251*,16 June 2004; *DCP 0316*, 30 June 2004; *DCP 1176*, 17 October 2004; *DCP 4813*, 19 July 2006; *DCP 4820*, 19 July 2006.

Scuttellaria lateriflora Linnaeus. Native. Infrequent in tidal freshwater wetlands: DCP 4855, 29 May 2006.

- (BC) *Scuttelaria racemosa* Persoon. Introduced from South America. Frequent in moist lawns and ditches in newer residential developments: *DCP 0235*, 16 June 2004.
- (SC) *Stachys agraria* Chamisso & Schlechtendahl. Native. Rare in ruderal area. *DCP 5301*, 22 April 2010.

Stachys floridana Shuttleworth ex Bentham. Introduced from farther south. Frequent weed around homesites: *DCP 1589*, 28 November 2004.

Teucrium canadensis Linnaeus. Native. Frequent in pineland wetlands, swamp forests and salt marshes: *DCP 3332*, 14 July 2005.

Trichostema dichotomum Linnaeus. Native. Frequent in xeric pinelands: DCP 1225, 31 October 2004; DCP 3802, 18 September 2005; DCP 3923, 3 October 2005.

Lentibulariaceae

Pinguicula caerulea Walter. Native. Rare and decreasing in pinelands: *DCP 4527*, 20 May 2006.

Utricularia gibba Linnaeus. Native. Frequent in natural and ruderal wetlands: *DCP 2222*, 21 June 2005; *DCP 2298*, 2 July 2005; *DCP 3490*, 26 July 2005.

(BC) Utricularia inflata Walter. Native. Infrequent in acidic wetlands: DCP 0067, 24 March 2003.

Linaceae

Linum medium (Planchon) Britton var. *texanum* (Planchon) Fernald. Native. Frequent in pinelands: *DCP 2219*, 21 June 2005; *DCP 3206*, 2 July 2005; *DCP 3343*, 14 July 2005; *DCP 3722*, 26 August 2005; *DCP 4604*, 26 May 2006.

(BC) *Linum usitatissimum* Linnaeus. Introduced from Europe. Rare in ruderal areas: *DCP* 5279, 12 July 2009.

Loganiaceae

(BC) *Mitreola petiolata* (J. F. Gmelin) Torrey & A. Gray. Native. Rare, one population observed in pinelands: *DCP 3637*, 12 August 2005.

Lythraceae

- (BC) *Ammannia coccinea* Rottbøll. Native. Infrequent in freshwater wetlands: *DCP 3435*, 23 July 2005.
- (BC) *Ammannia latifolia* Linnaeus. Native. Infrequent in freshwater wetlands: *DCP 4288*, 7 January 2006.

Cuphea carthagenensis (Jacquin) Macbride. Introduced from South America. Frequent in ruderal areas: DCP 3209, 2 July 2005.

Decodon verticillatus (Linnaeus) Elliott. Native. Frequent in freshwater wetlands: DCP 4883, 5 August 2006.

(SC) Lagerstroemia indica Linnaeus. Introduced from Asia. Infrequent but increasing in ruderal areas: *DCP 1786*, 4 May 2005.

Lythrum lanceolatum Elliott. Native. Frequent in salt marshes: *DCP 3333*, 14 July 2005; *DCP 3622*, 11 August 2005.

Lythrum lineare Linneaus. Native. Rare in tidal freshwater wetlands: DCP 3687, 13 August 2004.

Rotala ramosior (Linnaeus) Koehne. Native. Infrequent in moist roadsides: *DCP 3385*, 18 July 2005.

Malvaceae

- (BC) Abutilon theophrasti Medikus. Introduced from Asia. Rare, one population observed in a ruderal area: DCP 5169, 22 August 2007.
- (BC) Firmiana simplex (Linnaeus) W.Wight. Introduced from Southeast Asia. Locally abundant along disturbed stream banks in Bluffton: DCP 0297, 24 June 2004; DCP 4911, 17 August 2006.

Hibiscus aculeatus Walter. Native. Infrequent in pinelands: DCP 3204, 2 July 2005.

Hibiscus moscheutos Linnaeus ssp. *moscheutos*. Native. Frequent in tidal freshwater wetlands salt marshes: *DCP 2241*, 27 June 2005.

- (SC) *Hibiscus mutabilis* Linnaeus. Introduced. Infrequent but increasing in ruderal areas: *DCP* 2299, 2 July 2005.
- (SC) *Hibiscus syriacus* Linnaeus. Introduced from East Asia. Infrequent in ruderal areas: *DCP* 3309, 11 July 2005.

Kosteletzkya virginica (Linnaeus) K. Presl. ex A. Gray var. *virginica*. Native. Infrequent in salt marshes: *DCP 2255*, 27 June 2005.

Malvaviscus drummondii Torrey & A. Gray. Probably introducedfrom farther south. Frequent in ruderal suburban areas: *DCP 1663*, 6 January 2007.

Melochia corchorifolia Linnaeus. Introduced from the Old World tropics. Frequent in ruderal areas: *DCP 3530*, 30 July 2005.

Modiola caroliniana (Linnaeus) G. Don. Native. Frequent in ruderal areas: *DCP 1805*, 7 May 2005.

(SC) *Pavonia hastata* Cavanilles. Introduced from tropical America. Infrequent in ruderal areas: *DCP 5218*, 1 November 2007.

Sida acuta Burman f.. Introduced from the tropics.Infrequent in ruderal areas: *DCP 4652*, 8 June 2006; *DCP 5224*, 11 November 2007.

Sida elliottii Torrey & A. Gray var. elliottii. Native. Rare, population not observed: CAS 2417, 24 September 1982

Sida rhombifolia Linnaeus. Introduced. Abundant in ruderal areas: DCP 3816, 19 July 2005; DCP 3824, 20 July 2005.

(BC) *Sida spinosa* Linnaeus. Introduced from the tropics. Rare, one population observed in a ruderal area: *DCP 5280*, 17 July 2009.

Tilia americana Linnaeus var. *caroliniana* (P. Miller) Castig. Native. Frequent in calcareous areas: *RDP 2698*, 28 June 1996; *RDP 2753*, 14 June 1997 (CITA_CLEMS); *DCP 2093*, 2 June 2005; *DCP 4821*, 19 July 2006; *DCP 4928*, 22 August 2006.

Melastomataceae

Rhexia alifanus Walter. Native. Infrequent in pinelands: DCP 4864, 26 July 2005. (BC)(R)Rhexia cubensis Grisebach. Native. Infrequent in pinelands: DCP 2118, 8 June 2005; DCP 3360, 15 July 2005.

(SC) *Rhexia mariana* Linnaeus var. *exalbida* Michaux. Native. Frequent in pinelands: *DCP* 2292, 2 July 2005; *DCP* 3202, 2 July 2005; *DCP* 3354, 15 July 2005.

Rhexia mariana Linnaeus var. mariana. Native. Frequent in pinelands: DCP 0293, 24 June 2004; DCP 2117, 8 June 2005; DCP 2293, 2 July 2005.

Rhexia nashii Small. Native. Frequent in pinelands: *DCP 0318*, 30 June 2004; *DCP 1148*, 16 October 2004; *DCP 1248*, 31 October 2004; *DCP 1250*, 31 October 2004; *DCP 1517*, 25 November 2004; *DCP 3299*, 11 July 2005; *DCP 3353*, 15 July 2005.

Rhexia petiolata Walter. Rare in mesic calcareous oak pine woodland: DCP 5320, 3 June 2010.

- (SC) *Rhexia virginica* Linnaeus var. *purshii* (Sprengel) C. W. James. Native. Infrequent in pineland wetlands: *DCP 3201*, 2 July 2005.
- (BC) *Rhexia virginica* Linnaeus var. *virginica*. Native. Infrequent in pineland wetlands: *DCP* 3355, 15 July 2005.

Meliaceae

Melia azederach Linnaeus. Introduced from Southeast Asia. Infrequent in ruderal areas: *DCP 1769*, 2 May 2005.

Menispermaceae

(BC) Cocculus carolinus Linnaeus. Native. Frequent in calcareous areas: DCP 4822, 19 July 2006; DCP 4828, 19 July 2006.

Menyanthaceae

(SC) *Nymphoides peltata* (S. G. Gmelin) Kuntze. Introduced from Europe. Rare, one extensive population observed in a ruderal area: *DCP 5190*, 23 September 2007.

Molluginaceae

Mollugo verticillata Linnaeus. Introduced from tropical America. Frequent in ruderal areas: *DCP 2088*, 2 June 2005; *DCP 4552*, 22 May 2006.

Moraceae

(BC) *Broussonetia papyrifera* (Linnaeus) L'Héritier ex Ventenat. Introduced from East Asia. Frequent in ruderal areas: *DCP 4019*, 23 November 2006.

Fatoua villosa Thunberg. Introduced from Asia. Frequent in ruderal areas, especially landscaped areas: DCP 3884, 2 October 2005; DCP 2288, 1 July 2005.

- (BC) Ficus carica Linnaeus. Introduced from Asia. Rarely naturalized in ruderal areas: DCP 4819, 19 July 2006.
- (SC) *Ficus pumila* Linnaeus. Introduced from Asia. Rarely naturalized in ruderal areas: *DCP* 5086, 6 January 2007.

Maclura pomifera (Rafinesque) C. K. Schneider. Introduced from the south- central United States. Infrequent in ruderal areas: *DCP 5081*, 1 January 2007.

Morus alba Linnaeus. Introduced from Asia. Frequent in ruderal areas: *DCP 3849*, 2 October 2005.

Morus rubra Linnaeus. Native. Infrequent in calcareous areas: *DCP 1296*, 31 October 2004; *DCP 1408*, 13 November 2004.

Myricaceae

(BC) *Morella caroliniensis* (P. Miller) Small. Native. Rare in pineland wetlands: *DCP 4391*, 22 March 2006; *DCP 4529*, 20 May 2006.

Morella cerifera (Linnaeus) Small. Native. Abundant in ruderal areas, swamp forests, maritime forests and salt marshes: *DCP 1220*, 31 October 2004.

Morella pumila (Michaux) Small. Native. Frequent but declining in pinelands: *DCP* 1384. 13 November 2004.

Myrsinaceae

(SC) *Ardisia crenata* Sims. Introduced from Asia. Infrequent but increasing in ruderal areas: *DCP 0319*, 30 June 2004; *DCP 4214*, 4 January 2006.

Nyctaginaceae

(SC) *Boerhavia coccinea* P. Miller. Introduced from tropical America. Rare, one population was observed in a ruderal area: *DCP 3886*, 2 October 2005.

Boerhavia erecta Linnaeus.Possibly Introduced from farther south and west. Infrequent in ruderal areas: *DCP 5170*, 23 August 2007.

Mirabilis jalapa Linnaeus. Introduced from tropical America. Infrequent in ruderal areas: *DCP 3314*, 11 July 2005.

Nyssaceae

(BC) *Nyssa aquatica* Linnaeus. Native. Frequent in tidal freshwater wetlands and swamp forests: *DCP 4762*, 29 May 2006.

Nyssa biflora Walter. Native. Frequent in pinelands: *DCP 0268*, 16 June 2004; *DCP 1359*, 1 November 2004; *DCP 1839*, 11 May 2005; *DCP 2259*, 28 June 2005; *DCP 4880*, 1 August 2006.

Oleaceae

- (BC) Chionanthus virginicus Linnaeus. Native. Rare in swamp forests: DCP 1820, 9 May 2005.
- (R) Forestiera godfreyi L.C. Anderson. Native. Rare, one population observed in calcareous areas: *JFT 1485*, 13 May 1997; Native. Rare, one population observed in a calcareous area: *DCP 0070*, 1 March 2004.

Fraxinus americana Linnaeus. Native. Infrequent in calcareous areas: DCP 0306, 24 June 2004; DCP 1293, 31 October 2004; DCP 1312, 31 October 2004; DCP 1794, 4 May 2005.

Fraxinus caroliniana P. Miller. Native. Frequent in tidal freshwater wetlands: *DCP 4728*, 3 July 2006.

(BC) Fraxinus pennsylvanica Marsh var. pennsylvanica. Native. Infrequent in swamp forests: DCP 1348, 1 November 2004.

Fraxinus pennsylvanica Marsh var. subintegerrima (Vahl) Fernald. Native. Infrequent in swamp forests: DCP 4801, 17 July 2006.

Fraxinus profunda (Bush) Bush. Native. Frequent in tidal freshwater wetlands: DCP 3445, 24 July 2005; DCP 3450, 24 July 2005; DCP 3448, 24 July 2005.

(SC) *Jasminum nudiflorum* Lindley. Introduced from China. Rarely naturalized in ruderal areas: *DCP 4481*, 11 May 2006.

Ligustrum japonicum Thunberg. Introduced from Japan and Korea. Infrequent in ruderal areas: *DCP 4306*, 14 January 2006; *DCP 4935*, 25 August 2006.

- (SC) Ligustrum lucidum Aiton f.. Introduced from Japan and Korea. Frequent in ruderal areas: *DCP 3921*, 3 October 2005; *DCP 4305*, 14 January 2006; *DCP 4827*, 19 July 2006.
- (BC) Ligustrum sinense Loureiro. Introduced from China. Frequent in ruderal areas: DCP 3850, 2 October 2005.

Osmanthus americanus (Linnaeus) Bentham & Hooker. Native. Infrequent in pinelands and maritime forests: *DCP 1407*, 13 November 2004; *DCP 1478*, 14 November 2004; *DCP 4411*, 24 March 2006; *DCP 4412*, 24 March 2006.

Onagraceae

Gaura angustifolia Michaux. Native. Frequent in xeric pinelands: DCP 0262, 16 June 2004; DCP 3257, 5 July 2005; DCP 3379, 17 July 2005.

Gaura filipes Spach. Native. Rare in xeric pinelands: DCP 5268, 18 November 2008.

- (SC) *Gaura lindheimeri* Engelmann & A. Gray.Introduced from farther west. Rare in ruderal areas: *DCP 3306*, 11 July 2005.
- (BC) *Ludwigia alata* Elliott. Native. Insufficient abundance data, tidal freshwater wetlands: *DCP 3688*, 13 August 2005.

Ludwigia alternifolia Linnaeus. Native. Frequent in freshwater wetlands: DCP 3376, 17 July 2005; DCP 4167, 28 December 2005; DCP 4171, 28 December 2005.

- (BC) *Ludwigia arcuata* Walter. Native. Rare, one population observed in a pineland: *DCP* 5126, 28 April 2007.
- (BC) Ludwigia decurrens Walter. Native. Frequent in freshwater wetlands: DCP 3438, 23 July 2005; DCP 3785, 18 September 2005.

Ludwigia glandulosa Walter. Native. Insufficient abundance data, pineland wetlands: *DCP 3822*, 20 July 2005; *DCP 3823*, 20 July 2005.

- (BC) *Ludwigia grandiflora* (Michaux) Greuter & Burdet ssp. *hexapetala* (Hooker & Arnott) Nesom & Kartesz. Introduced from tropical America. Rare, one population observed in a ruderal pond: *DCP 4803*, 19 July 2006.
- (SC)(R) *Ludwigia lanceolata* Elliott. Native. Insufficient abundance data, ruderal wetlands: *DCP 4221*, 5 January 2006.

Ludwigia leptocarpa (Nuttall) Hara. Native. Frequent in ruderal wetlands: *DCP 3433*, 23 July 2005.

Ludwigia linearis Walter var. *linearis*. Native. Insufficient abundance data, pineland wetlands: *DCP 4104*, 21 January 2005.

- Ludwigia maritima Harper. Native. Frequent in pineland wetlands: DCP 3331, 14 July 2005; DCP 3378, 17 July 2005; DCP 4152, 27 December 2005.
- (BC) *Ludwigia microcarpa* Michaux. Native. Insufficient abundance data, pineland wetlands: *DCP 3821*, 20 July 2005.
- (SC) *Ludwigia octovalvis* (Jacquin) Raven. Native. Frequent in ruderal wetlands: *DCP 3335*, 14 July 2005; *DCP 4073*, 27 November 2005.
- Ludwigia palustris (Linnaeus) Elliott. Native. Frequent in freshwater wetlands: DCP 0156, 1 June 2004; DCP 3328, 14 July 2005; DCP 4298, 9 January 2006.
- (BC) *Ludwigia ravenii* Peng. Native. Rare in pineland wetlands: *CAS 1122*, 22 August 1980. *Ludwigia sphaerocarpa* Elliott. Native. Insufficient abundance data, freshwater wetlands: *DCP 3753*, 5 September 2005.
- (BC) *Oenothera biennis* Linnaeus. Native. Frequent in ruderal areas: *DCP 4150*, 27 December 2005.
- Oenothera humifusa Nuttall. Native. Frequent in ruderal areas and dunes: DCP 1778, 3 May 2005; DCP 4032, 27 November 2005.

Oenothera laciniata Hill. Native. Frequent in ruderal areas: DCP 1779, 3 May 2005.

Orobanchaceae

Agalinis fasciculata (Elliott) Rafinesque. Native. Frequent in pinelands and xeric roadsides: *DCP 3781*, 18 September 2005; *DCP 5213*; 21 October 2007.

- (SC) Agalinis laxa Pennell. Native. Rare in pinelands: DCP 5202, 11 October 2007.
- (BC) *Agalinis purpurea* (Linnaeus) Pennell. Native. Infrequent in pinelands ruderal areas: *DCP 5006*, 23 September 2006; *DCP 5074*, 24 November 2006; *DCP 5257*, 21 October 2008.
- Aureolaria flava (Linnaeus) Farwell var. flava. Native. Infrequent in xeric areas: DCP 3730, 26 August 2005; DCP 3799, 18 September 2005.
- (BC) Aureolaria pectinata (Nuttall) Pennell. Native. Infrequent in xeric areas: DCP 3928, 3 October 2005.
- (SC) Buchnera floridana Gandoger. Native. Frequent in pinelands: DCP 1780, 3 May 2005. Conopholis americana (Linnaeus) Wallroth. Native. Rare in calcareous areas: DCP 3732, 26 August 2005; DCP 5115, 25 March 2007.
- (R) *Orobanche uniflora* Linnaeus. Native. Infrequent or overlooked. Parasitic on hardwoods: *RDP 2817a*, 28 February 1998; *DCP 1713*, 22 March 2005; *DCP 4380*, 21 March 2006. *Seymeria cassioides* (J. F. Gmelin) Blake. Native. Infrequent in pinelands: *DCP 3997*, 20 October 2007.

Oxalidaceae

- (SC) Oxalis brasiliensis Loddiges. Introduced from South America. Infrequent in ruderal areas: DCP 1725, 24 March 2005; DCP 4425, 25 March 2006.
- (BC) Oxalis corniculata Linnaeus. Introduced. Frequent in ruderal areas: DCP 4367, 20 March 2006; DCP 4442, 26 March 2006.
- Oxalis dillenii Jacquin. Native. Frequent in ruderal areas: DCP 4339, 18 March 2006. Oxalis rubra St. Hilaire. Introduced from South America. Frequent in ruderal areas: DCP 1659, 6 January 2007.

Oxalis violacea Linnaeus. Native. Rare in calcareous areas: DCP 5113, 25 March 2007.

Papaveraceae

Argemone albiflora Hornemann ssp. albiflora. Native. Infrequent in ruderal areas: DCP 4644, 8 June 2006.

(BC) Sanguinaria canadensis Linnaeus. Native. Rare in calcareous areas: DCP 1687, 5 March 2005.

Passifloraceae

(SC) Passiflora caerulea Linnaeus x Passiflora amethystina C. Mikan 'Purple Haze'. Introduced from South America. Rare, one extensive clonal population observed escaping from cultivation: *DCP* 4925,22 August 2006.

Passiflora incarnata Linnaeus. Native. Frequent in ruderal areas: DCP 5080, 27 December 2006.

Passiflora lutea Linnaeus var. lutea. Native. Frequent in calcareous areas: DCP 3943, 15 October 2007.

Pedaliaceae

(SC) *Sesamum orientale* Linnaeus. Introduced from the Old World. Rarely naturalized in ruderal areas: *DCP 3270*, 6 July 2005.

Phrymaceae

(BC) *Mazus pumilus* (Burmann f) Steenis. Introduced from East Asia. Infrequent in ruderal areas: *DCP 1704*, 21 March 2005.

Phyllanthaceae

Phyllanthus caroliniensis Walter ssp. *caroliniensis*. Native. Rare in ruderal areas: *DCP* 3535, 30 July 2005.

- (BC) *Phyllanthus tenellus* Roxburgh. Introduced from the Mascarene Islands. Abundant in ruderal areas: *DCP 3883*, 2 October 2005.
- (SC) *Phyllanthus urinaria* Linnaeus ssp. *urinaria*. Introduced from Southeast Asia. Abundant in ruderal areas: *DCP 0189*, 12 June 2004; *DCP 3882*, 2 October 2005.

Phytolaacaceae

Phytolacca americana Linnaeus. Native. Infrequent in ruderal areas: *DCP 2254*, 27 June 2005; *DCP 3735*, 26 August 2005.

(SC) *Phytolacca rigida* Small. Native. Frequent in ruderal areas and maritime forests: *DCP 1010*, 16 September 2004; *DCP 1011*, 16 September 2004; *DCP 1041*, 16 September 2004.

Plantaginaceae

Bacopa monnieri (Linnaeus) Wettstein. Native. Frequent in freshwater wetlands and salt marshes: *DCP 0300*, 24 June 2004; *DCP 4541*, 22 May 2006.

Callitriche heterophylla Pursh ssp. heterophylla. Native. Infrequent in swamp forests: DCP 4579, 23 May 2006.

- (R) *Callitriche peploides* Nuttall. Native. Insufficient abundance data, moist ruderal areas: *DCP 4415*, 24 March 2006; *DCP 4433*, 25 March 2006.
- (BC)(R) *Callitriche terrestris* Raffinesque emend. Torrey. Native. Insufficient abundance data, moist ruderal areas: *DCP 4543*, 22 May 2006; *DCP 4504*, 15 May 2006.
- (BC) *Gratiola neglecta* Torrey. Native. Insufficient abundance data, ruderal wetlands: *DCP* 3366, 16 July 2005.
- (BC) *Gratiola pilosa* Michaux. Native. Infrequent in pineland wetlands: *DCP 0292*, 24 June 2004; *DCP 4379*, 21 March 2006.

Gratiola virginiana Linnaeus. Native. Insufficient abundance data, ruderal wetlands: *DCP 4378*, 21 March 2006.

- (BC) *Lindernia crustacea* (Linnaeus) F. Mueller. Introduced from Malaysia. Frequent in ruderal areas: *DCP 3973*, 19 October 2005; *DCP 4759*, 11 July 2006.
- (BC) *Lindernia dubia* (Linnaeus) Pennell var. *anagallidea* (Michaux) Cooperrider. Native. Frequent in freshwater wetlands: *DCP 3546*, 22 July 2005; *DCP 4390*, 22 March 2006.
- (BC) *Mecardonia acuminata* (Walter) Small var. *acuminata*. Native. Frequent in freshwater wetlands: *DCP 4108*, 21 January 2005; *DCP 1818*, 9 May 2005.

Micranthemum umbrosum (J. F. Gmelin) Blake. Native. Abundant in freshwater wetlands: *DCP 0157*, 1 June 2004; *DCP 3362*, 16 July 2005.

Nuttallanthus canadensis (Linnaeus) D.A. Sutton. Native. Frequent in ruderal areas: DCP 1708. 22 March 2005.

Penstemon australis Small. Native, at least in surrounding counties. Rare, one population observed in pinelands, possibly naturalized from cultivated plants: *DCP 4048*, 27 November 2005; *DCP 4708*, 29 June 2006.

Plantago aristata Michaux. Introduced from farther west. Infrequent in ruderal areas: *DCP 1836*, 9 May 2005.

Plantago heterophylla Nuttall. Native. Infrequent in ruderal areas: *DCP 0007*, 21 March 2003.

- (BC) *Plantago lanceolata* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP 0074*, 30 April 2004; *DCP 4476*, 11 May 2006.
- (BC) *Plantago major* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP* 4538, 21 May 2006.
- (BC) *Plantago rugelii* Decaisne. Native. Frequent in ruderal areas and salt marshes: *DCP* 3411, 20 July 2005.

Plantago virginica Linnaeus. Native. Frequent in ruderal areas: *DCP 1718*, 24 March 2005.

Plantago wrightiana Decaisne. Native. Frequent in ruderal areas: DCP 2167, 13 June 2005; DCP 4479, 11 May 2006; DCP 5042, 14 May 2006.

(BC) *Scoparia dulcis* Linnaeus. Probably adventive from farther south. Rare in disturbed calcareous pinelands: *DCP 4669*, 10 June 2006.

Veronica arvensis Linnaeus. Introduced from Eurasia. Frequent in ruderal areas: *DCP* 4325, 10 February 2006.

(BC) *Veronica hederifolia* Linnaeus. Introduced from Europe. Rare, one population observed in a ruderal area: *DCP 5270*, 3 May 2009.

- (BC) *Veronica peregrina* Linnaeus var. *peregrina*. Native. Frequent in ruderal areas: *DCP* 1696, 13 March 2005.
- (BC) *Veronica peregrina* Linnaeus var. *xalapensis*(Kunth) Pennell. Native. Infrequent or overlooked in lawns and other ruderal areas: *DCP 4432*, 25 March 2006.

Platanaceae

(BC) *Platanus occidentalis* Linnaeus var. *occidentalis* Native. Frequent in ruderal areas: *DCP* 1595, 28 November 2004.

Plumbaginaceae

Limonium carolinianum (Walter) Britton. Native. Frequent in salt marshes: *DCP 3867*, 2 October 2005.

Polemoniaceae

- (SC) *Phlox carolina* Linnaeus ssp. *angusta* Wherry. Native. Infrequent in swamp forests: *DCP* 1819, 9 May 2005.
- (SC) *Phlox carolina* Linnaeus ssp. *carolina* Native. Infrequent in pinelands: *DCP 3603*, 9 August 2005.

Phlox drummondii Hooker. Introduced from Texas. Abundant in xeric fields and roadsides: *DCP 2271*, 28 June 2005.

Polygalaceae

Polygala grandiflora Walter var. *grandiflora*. Native. Infrequent in pinelands: *DCP 2054*, 28 May 2005; *DCP 3229*, 3 July 2005.

Polygala lutea Linnaeus. Native. Infrequent in pinelands: DCP 4260, 6 January 2006.

Polygala mariana P. Miller. Native. Infrequent in pinelands: *DCP 2125*, 8 June 2005; *DCP 2221*, 21 June 2005.

Polygala polygama Walter var. *polygama*. Native. Infrequent in pinelands: *DCP 0259*, 16 June 2004; *DCP 2290*, 1 July 2005.

Polygonaceae

- (SC) Antigonon leptopus Hooker & Arnott. Introduced from Mexico and Central America. Rare, one naturalized population spreading from a formerly cultivated area: *DCP 4747*, 6 July 2006.
- (BC) Fallopia scandens (Linnaeus) Holub var. 1. Native. Infrequent in ruderal areas: DCP 3338, 14 July 2005.
- (BC) Fallopia scandens (Linnaeus) Holub var. scandens. Native. Infrequent in ruderal areas: DCP 3259, 5 July 2005.

Persicaria arifolia (Linnaeus) Haraldson. Native. Frequent in tidal freshwater wetlands: *DCP 3906*, 2 October 2005.

Persicaria densiflora (Meisner) Moldenke. Native. Infrequent in swamp forests: RDP 2808, 5 November 1997(CITA CLEMS); DCP 5226, 23 November 2007.

Persicaria hirsuta (Walter) Small. Native. Infrequent in pinelands: DCP 2206, 19 June 2005; DCP 4743, 5 July 2006.

Persicaria hydropiperoides (Michaux) Small var. hydropiperoides. Native. Frequent in ruderal wetlands: DCP 0059, 23 May 2003; DCP 3210, 2 July 2005; DCP 3493, 26 July 2005; DCP 3786, 18 September 2005.

Persicaria hydropiperoides (Michaux) Small var. *opelousana* (Riddell ex Small) J. S. Wilson. Native. Frequent in ruderal wetlands: *DCP 3400*, 20 July 2005; *DCP 3545*, 30 July 2005.

- (SC) *Persicaria lapathifolia* (Linnaeus) S. F. Gray. Native. Infrequent in ruderal wetlands: *DCP 3272*, 6 July 2005; *DCP 3534*, 30 July 2005; *DCP 3783*, 18 September 2005.
- (BC) *Persicaria longiseta* (de Brujin) Moldenke. Introduced from Asia. Insufficient abundance data, ruderal areas: *DCP 4054*, 27 November 2005.

Persicaria maculosa S. F. Gray. Introduced from Eurasia. Insufficient abundance data, ruderal areas: *DCP 3273*, 6 July 2005.

Persicaria punctata (Elliott) Small. Native. Insufficient abundance data, ruderal wetlands: *DCP 3567*, 4 August 2005; *DCP 3831*, 1 October 2005.

(BC) *Persicaria sagittata* (Linnaeus) Gross ex Nakai. Native. Infrequent in swamp forests: *DCP 3719*, 26 August 2005.

Persicaria setacea (Baldwin) Small. Native. Insufficient abundance data, calcareous ditches adjacent to pinelands: *DCP 3826*, 20 July 2005.

Persicaria virginiana (Linnaeus) Gaertner. Native. Infrequent in swamp forests: *DCP* 4059, 27 November 2005.

Polygonum aviculare Linnaeus. Native. Infrequent in calcareous areas: *DCP 4872*, 30 July 2006.

- (BC) *Polygonum erectum* Linnaeus. Native. Frequent in calcareous areas: *DCP 2177*, 15 June 2005; *DCP 3301*, 11 July 2005; *DCP 4757*, 11 July 2006; *DCP 4824*, 19 July 2006; *DCP 4825*, 19 July 2006.
- (BC) *Reynoutria japonica* Houttuyn. Introduced from East Asia. Infrequent in ruderal areas: *DCP 4876*, 8 August 2006.
- (BC) *Rumex acetosella* Linnaeus. Introduced from Europe and Western Asia. Frequent in ruderal areas: *DCP 5135*, 10 May 2007.
- (BC) *Rumex conglomeratus* Murray. Introduced. Infrequent in ruderal areas: *DCP 2101*, 5 June 2005; *DCP 4736*, 4 July 2006.

Rumex crispus Linnaeus. Introduced. Abundant in ruderal areas: DCP 4423, 25 March 2006.

Rumex hastatulus Baldwin ex. Elliott. Native. Abundant in ruderal areas: *DCP 4338*, 18 March 2006.

Rumex obtusifolius Linnaeus. Introduced from Eurasia. Infrequent in ruderal areas: DCP 5238, 4 June 2008.

Rumex pulcher Linnaeus. Introduced. Infrequent in ruderal areas: DCP 1710, 22 March 2005; DCP 4637, 4 June 2006.

Rumex verticellatus Linnaeus. Native. Frequent in tidal freshwater wetlands: DCP 1806, 7 May 2005; DCP 3464, 25 July 2005.

Portulacaceae

Portulaca amalis Spegaz. Introduced from South America. Frequent in ruderal areas: *DCP 3468*, 26 July 2005.

Portulaca oleracea Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP* 3323, 12 July 2005.

Portulaca pilosa Linnaeus. Native. Frequent in xeric areas: DCP 3285, 9 July 2005; DCP 3386, 18 July 2005.

(SC) *Talinum paniculatum* (Jacquin) Gaertner. Introduced from the West Indies. Infrequent in ruderal areas: *DCP 3548*, 31 July 2005; *DCP 3898*, 2 October 2005.

Primulaceae

(BC) Anagallis arvensis Linnaeus var. arvensis. Introduced from Europe. Infrequent in ruderal areas: DCP 4596, 24 May 2006.

Centunculus minimus Linnaeus. Native. Rare in pinelands: DCP 1743, 3 April 2005.

Samolus parviflorus Rafinesque. Native. Infrequent in salt marshes and swamp forests: DCP 2073, 30 May 2005.

Ranunculaceae

- (SC) *Anemone virginiana* Linnaeus var. *virginiana*. Native. Rare in calcareous areas: *DCP* 1815, 9 May 2005; *DCP* 2227, 21 June 2005.
- (R) Clematis catesbiana Pursh. Native. Frequent in calcareous areas: CAS 2036, 13 October 1981; RDP 2696, 28 June 1996 (CITA_CLEMS); DCP 4300, 9 January 2006; DCP 4832, 19 July 2006; DCP 4926, 22 August 2006; DCP 5037, 22 August 2006; DCP 5091, 9 January 2007.

Clematis crispa Linnaeus. Native. Frequent in tidal freshwater wetlands: *DCP 2242*, 27 June 2005.

- (BC) *Clematis terniflora* Augustin de Candolle. Introduced from East Asia. Frequent in ruderal areas, especially suburban areas: *DCP 4929*, 23 August 2006; *DCP 5097*, 9 January 2007.
- (BC) *Ranunculus abortivus* Linnaeus. Native. Rare, one population observed in a ruderal area: *DCP 5271*, 3 May 2009.
- (BC) *Ranunculus carolinianus* Augustin de Candolle. Native. Infrequent in tidal freshwater wetlands: *DCP 4621*, 29 May 2006.
- (BC) *Ranunculus muricatus* Linnaeus. Introduced from Europe. Infrequent but increasing in ruderal areas: *DCP 1706*, 22 March 2005.
- (BC) *Ranunculus parviflorus* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP 1709.* 22 March 2005.

Ranunculus pusillus Poiret. Native. Frequent in freshwater wetlands: DCP 4358, 18 March 2006; DCP 4516, 18 May 2006.

(BC) *Ranunculus recurvatus* Poiret var. *recurvatus*. Native. Infrequent in calcareous areas: *DCP 1197*, 30 October 2004; *DCP 1764*, 25 April 2005.

Ranunculus sardous Crantz. Introduced from Europe. Infrequent in ruderal areas: *DCP* 4421, 25 March 2006.

Ranunculus sceleratus Linnaeus var. *sceleratus*. Native. Infrequent in ruderal wetlands: *DCP 4542*, 22 May 2006.

Rhamnaceae

Berchemia scandens (Hill) K. Koch. Native. Frequent in calcareous areas: DCP 1300, 31 October 2004.

Ceanothus americanus Linnaeus var. intermedius (Pursh) Torrey & A. Gray. Native. Infrequent in xeric calcareous areas: DCP 1178, 17 October 2004; DCP 2154, 13 June 2005. Frangula caroliniana (Walter) A. Gray. Native. Infrequent in calcareous areas: DCP

4647, 8 June 2006.

(R) *Sageretia minutiflora* (Michaux) C. Mohr. Native. Rare in calcareous areas: *LAC 115*, 26 July 1979 (CITA_CLEMS); *RDP 2692*, 28 June 1996 (CITA_CLEMS); *RDP 2745*, 25 April 1997 (CITA_CLEMS); *RDP 2751*, 14 June 1997 (CITA_CLEMS); *DCP 1605*, 2 January 2005; *DCP 5089*, 9 January 2007.

Rosaceae

- (BC) *Amelanchier arborea* (Michaux f.) Fernald var. *arborea*. Native. Rare in calcareous areas: *DCP 3734*, 26 August 2005.
- (BC) Amelanchier canadensis (Linnaeus) Medikus. Native. Rare in calcareous areas: DCP 0003, 10 March 2003.
- (BC) *Aronia arbutifolia* (Linnaeus) Persoon. Native. Frequent in pinelands: *DCP 1429*, 13 November 2004.
- (BC) Crataegus aestivalis (Walter) Torrey & A. Gray. Native. Infrequent in tidal freshwater wetlands: DCP 4393, 22 March 2006; DCP 4714, 3 July 2006.
- (BC) Crataegus alabamensis Beadle. Native. Insufficient abundance data, pinelands: DCP 1645, 6 January 2007.
- (BC) *Crataegus crus-galli* Linnaeus. Native. Insufficient abundance data, swamp forests: *DCP* 1738, 1 April 2005.
- (BC) *Crataegus macrosperma* Ashe. Native. Insufficient abundance data, swamp forests: *DCP* 1739, 1 April 2005.
- (BC) *Crataegus marshallii* Eggleston. Native. Insufficient abundance data, swamp forests: *DCP 5117*, 25 March 2007.
- (SC) *Crataegus mendosa* Beadle. Native. Insufficient abundance data, calcareous pinelands: *DCP 2076*, 30 May 2005.
- (BC) Crataegus uniflora Muenchhausen. Native. Insufficient abundance data, xeric areas: DCP 0051, 23 May 2003; DCP 0139, 16 May 2004; DCP 1174, 17 October 2004.
- (BC) *Crataegus viridis* Linnaeus. Native. Insufficient abundance data, swamp forests: *DCP* 3723, 26 August 2005.
- (SC) *Crataegus visenda* Beadle. Native. Insufficient abundance data, xeric areas: *DCP 0145*, 16 May 2004.
- (SC) *Cydonia oblonga* P. Miller. Introduced from Asia. Rare, one naturalized population observed in a ruderal area: *DCP 3223*, 3 July 2005.
- (SC) *Eriobotrya japonica* (Thunberg) Lindley. Introduced from East Asia. Infrequent in ruderal areas: *DCP 2176*, 15 June 2005.
- (BC) Geum canadense Jacquin. Native. Rare in calcareous areas: DCP 1799, 25 April 2005; DCP 2052, 28 May 2005.
- (BC) *Malus angustifolia* (Aiton) Michaux. Native. Infrequent in swamp forests: *DCP 1737*, 1 April 2005; *DCP 3512*, 29 July 2005; *DCP 4392*, 22 March 2006.
- *Potentilla indica* (Andrews) T. Wolf. Introduced from Asia. Frequent in ruderal areas: *DCP 4184*, 29 December 2005.
- (BC) Potentilla simplex Michaux. Native. Infrequent in ruderal areas: DCP 1835, 9 May 2005.

Prunus angustifolia Marshall var. *angustifolia*. Native. Frequent in ruderal areas: *DCP* 4758. 11 July 2006.

Prunus caroliniana (P. Miller) Aiton. Native. Frequent in ruderal areas, maritime forests and calcareous areas: *DCP 3901*, 2 October 2005.

(BC) *Prunus persica* (Linnaeus) Batsch. Introduced from China. Infrequent in ruderal areas: *DCP 4738*, 5 July 2006.

Prunus serotina Erhart var. *serotina*. Native. Frequent in pinelands maritime forests: *DCP 1393*, 13 November 2004.

- (BC) *Prunus umbellata* Elliott. Native. Infrequent in xeric pinelands: *DCP 5116*, 25 March 2007.
- (SC) *Pyracantha fortuneana* (Maximowicz) Li. Introduced from Asia. Infrequent in ruderal areas: *DCP 4870*, 26 July 2005.
- (SC) *Pyracantha koidzumii* (Hayata) Rehder. Introduced from Taiwan. Infrequent in ruderal areas: *DCP 3966*, 17 October 2007.
- (SC) *Pyrus pyrifolia* (Burmann f.) Nakai. Introduced from Asia. Infrequent in ruderal areas: *DCP 1565*, 26 November 2004; *DCP 5167*, 18 August 2007.
- (SC) *Raphiolepis indica* (Linnaeus) Lindey. Introduced. Rarely naturalized in ruderal areas: *DCP 4044*, 27 November 2005.
- (BC) Rosa bracteata J. C. Wendland. Introduced. Infrequent in ruderal areas: *DCP 1406*, 13 November 2004; *DCP 4645*, 8 June 2006.
- (BC) *Rosa laevigata* Michaux. Introduced from Asia. Infrequent in ruderal areas: *DCP 1762*, 25 April 2005; *DCP 3953*, 17 October 2007.
- (BC) Rosa multiflora Thunberg ex Murray. Introduced from Asia. Infrequent in ruderal areas: DCP 2120, 8 June 2005.

Rosa palustris Marshall. Native. Frequent in tidal freshwater wetlands: *DCP 2237*, 27 June 2005.

(BC) Rosa wichuraiana Crepin. Introduced. Infrequent in ruderal areas: DCP 4490, 13 May 2006.

Rubus argutus Link. Native. Frequent in ruderal areas: *DCP 0232*, 16 June 2004; *DCP 1796*, 4 May 2005; *DCP 4742*, 5 July 2006.

(BC) Rubus cuneifolius Pursh. Native. Insufficient abundance data, ruderal areas: DCP 4741, 5 July 2006.

Rubus flagellaris Willdenow. Native. Frequent in ruderal areas: DCP 1811, 9 May 2005; DCP 4362, 19 March 2006; DCP 5119, 2 April 2007.

Rubus trivialis Michaux. Native. Frequent in ruderal areas: DKW 8, 6 April 1974.

(SC) *Spiraea prunifolia* Siebold & Zuccarini. Introduced from Korea, China and Taiwan. Rare, one population observed in spreading from former cultivation in graveyard: *DCP 4609*, 28 May 2006; *DCP 5109*, 25 March 2007.

Rubiaceae

(BC) *Cruciata pedemontana* (Bellardi) Ehrend. Introduced from Europe. Rare, one population observed in a ruderal area: *DCP 4434*, 25 March 2006.

Diodia teres Walter. Native. Frequent in xeric ruderal areas: DCP 3798, 18 September 2005.

Diodia virginiana Linnaeus. Native. Frequent in freshwater wetlands: *DCP 3792*, 18 September 2005; *DCP 4712*, 2 July 2006.

Galium aparine Linnaeus. Native. Abundant in ruderal areas: DCP 4342, 18 March 2006.

(BC) Galium circaezans Michaux var. circaezans. Native. Rare in xeric calcareous pinelands: DCP 4574, 23 May 2006.

Galium hispidulum Michaux. Native. Frequent in calcareous areas: DCP 1625, 3 January 2005.

Galium obtusum Bigelow var. *obtusum*. Native. Rare in pineland wetlands: *DCP 4430*, 25 March 2006.

Galium orizabense Hem sley ssp. *laevicaule*. Native. Rare in freshwater wetlands: *DCP* 4815, 19 July 2006.

Galium pilosum Aiton var. puncticulosum (Michaux) Torrey & A. Gray. Native. Infrequent in xeric calcareous pinelands: DCP 4680, 14 June 2006.

Galium tinctorium (Linnaeus) Scopoli var. *floridanum* Wiegand. Native. Insufficient abundance data, swamp forests: *DCP 4398*, 22 March 2006.

Galium tinctorium (Linnaeus) Scopoli var. *tinctorium*. Native. Insufficient abundance data, freshwater wetlands: *DCP 0034*, 23 May 2003; *DCP 4544*, 22 May 2006.

(BC) Galium uniflo rum Michaux. Native. Insufficient abundance data, calcareous areas: *DCP* 1809, 9 May 2005; *DCP* 4610, 28 May 2006.

Houstonia procumbens (Walter ex. G.F. Gmelin) Standley. Native. Abundant in pinelands and maritime forests: *DCP 1661*, 6 January 2007.

Houstonia pusilla Schoepf. Native. Infrequent but locally abundant in lawns and roadsides on the mainland: *DCP 4401*, 23 March 2006.

Mitchella repens Linnaeus. Native. Frequent in mesic calcareous areas and swamp forests: *DCP 1391*, 13 November 2004.

(BC) Oldenlandia corymbosa Linnaeus. Introduced from South America. Frequent in ruderal areas: *DCP 1014*, 16 September 2004; *DCP 1021*, 16 September 2004; *DCP 3970*, 19 October 2005.

Oldenlandia uniflora Linnaeus. Native. Infrequent in pinelands:; DCP 1140, 16 October 2004; DCP 1520, 25 November 2004; DCP 3998, 20 October 2007.

(R) *Pinckneya bracteata* (Bartram) Rafinesque. Native. Rare in pineland wetlands: *DCP* 4934, 25 August 2006.

Richardia brasiliensis Gomes. Introduced from South America. Frequent in ruderal areas: *DCP 1234*, 31 October 2004.

Richardia scabra Linnaeus. Introduced from South America. Infrequent in ruderal areas: *DCP 3271*, 6 July 2005; *DCP 3483*, 26 July 2005.

Cephalanthus occidentalis Linnaeus. Native. Frequent in pineland wetlands and freshwater wetlands: DCP 1284, 31 October 2004.

Rutaceae

(SC) *Citrus* x *aurantium* Linnaeus (pro sp.). Introduced from Asia. Infrequent in ruderal areas: *DCP 1705*, 21 March 2005.

Zanthoxylum clava-herculis Linnaeus. Native. Frequent in calcareous areas: *DCP 1622*, 3 January 2005; *DCP 3954*, 17 October 2007.

Salicaceae

- (BC) *Populus alba* Linnaeus. Introduced from Europe. Infrequent in ruderal areas: *DCP 4812*, 19 July 2006.
- (BC) *Populus deltoides* Bartram ex. Marshall var. *deltoides*. Probably not native to Beaufort County, but to brownwater swamps in adjacent counties. Infrequent in ruderal areas: *DCP 2300*, 2 July 2005.
- (BC) *Populus heterophylla* Linnaeus. Native. Frequent in calcareous swamp forests: *DCP* 4733, 4 July 2006.

Salix caroliniana Michaux. Native. Abundant in freshwater wetlands: DCP 1576, 27 November 4 2004; DCP 4399, 22 March 2006; DCP 4400, 22 March 2006.

- (BC) Salix nigra Marshall. Native. Infrequent in freshwater wetlands: DCP 0320, 30 June 2004; DCP 1428, 13 November 2004.
- (BC) *Salix sericea* Marshall. Native. Rare, one population observed in a roadside ditch adjacent to a swamp forest: *DCP 4588*, 23 May 2006.

Sapindaceae

- (SC*) *Acer drummondii* Hooker & Arnott ex Nuttall. Native. Frequent in pinelands and swamp forests: *DCP 1445*, 13 November 2004; *DCP 3249*, 4 July 2005; *DCP 3311*, 11 July 2005; *DCP 3421*, 22 July 2005.
- (SC*) *Acer rubrum* Linnaeus var. *trilobum* Torrey & Gray ex K. Koch. Native. Abundant in pinelands and swamp forests: *DCP 1167*, 16 October 2004; *DCP 1265*, 31 October 2004; *DCP 1486*, 14 November 2004; *DCP 1596*, 28 November 2004.
- (SC*) *Acer rubrum* Linnaeus var. *rubrum*. Probably introducedfrom farther north. Rare in ruderal areas: *DCP 2178*, 16 June 2005.

Aesculus pavia Linnaeus var. *pavia*. Native. Frequent in calcareous areas: *DCP 1734*, 27 March 2005; *DCP 1766*, 25 April 2005.

Sapotaceae

- (BC)(R) Sideroxylon lanuginosum Michaux ssp. lanuginosum. Native. Infrequent in calcareous areas: DCP 1758, 25 April 2005.
- (BC) *Sideroxylon lycioides* Linnaeus. Native. Infrequent in calcareous areas: *DCP 1583*, 27 November 2004.

Sideroxylon tenax Linnaeus. Native. Frequent in xeric calcareous area: DCP 1555, 26 November 2004.

Sarraceniaceae

Sarracenia minor Walter. Native. Rare and decreasing in pineland wetlands: DCP 1492, 14 November 2004; DCP 1503, 14 November 2004

Scrophulariaceae

Verbascum thapsus Linnaeus. Introduced from Europe. Frequent in ruderal areas: *DCP* 2234, 25 June 2005.

Verbascum virgatum Stokes. Introduced from Europe. Frequent in ruderal areas: *DCP* 4502, 15 May 2006.

Simaroubaceae

(BC) *Ailanthus altissima* (P. Miller) Swingle. Introduced from East Asia. Rare in ruderal areas: *DCP 2106*, 7 June 2005.

Solanaceae

(SC) *Daturia inoxia* J. S. Miller. Introduced from Mexico. Infrequent in ruderal areas: *DCP* 5162, 13 August 2007.

Datura stramonium Linnaeus.Probably introducedfrom farther south and west. Infrequent in ruderal areas: *DCP 4519*, 18 May 2006.

Lycium barbarum Linnaeus. Introduced from Europe. Rare, one population observed in a ruderal area: *DCP 3283*, 9 July 2005.

- (SC) *Nicotiana longiflora* Cavanilles. Introduced from South America. Rare, one population observed in a parking lot: *DCP 4917*, 19 August 2006.
- (BC) *Petunia x hybrida* Vilmorin. Introduced from South America. Infrequent in ruderal areas: *DCP 2174*, 15 June 2005.

Physalis angulata Linnaeus var. *angulata* Linnaeus. Native. Frequent in ruderal areas: *DCP 3214*, 3 July 2005; *DCP 3217*, 3 July 2005; *DCP 4056*, 27 November 2005.

- (BC) *Physalis grisea* (Waterfall) M. Martinez. Native. Insufficient abundance data, ruderal areas: *DCP 3213*, 3 July 2005; *DCP 3215*, 3 July 2005.
- (BC) *Physalis heterophylla* Nees. Native. Infrequent in xeric calcareous areas: *DCP 0200*, 12 June 2004; *DCP 1792*, 4 May 2005.

Physalis pubescens Linnaeus var. *pubescens*. Native. Insufficient abundance data, calcareous ruderal areas: *DCP 3212*, 3 July 2005; *DCP 3218*, 3 July 2005.

Physalis virginiana P. Miller var. *virginiana*. Native. Insufficient abundance data, calcareous areas: *DCP 1810*, 9 May 2005.

Physalis walteri Nuttall. Native. Frequent in maritime forests and dunes: *DCP 0132*, 16 May 2004; *DCP 2083*, 1 June 2005.

Salpichroa origanifolia (Lamarck) Baillon. Introduced from South America. Abundantly naturalized, a weed spreading from former cultivation in older neighborhoods onPort Royal Island: *DCP 4018*, 23 November 2006.

Solanum carolinense Linnaeus var. carolinense. Native. Frequent in ruderal areas: DCP 4635, 1 June 2006.

- (SC) *Solanum carolinense* Linnaeus var. *floridanum* (Shuttleworth ex Dunal) Chapman. Native. Rare or overlooked, one population observed in a ruderal area: *DCP 5049*, 20 November 2006.
- (SC) *Solanum lycopersicum* Linnaeus. Introduced from South America. Infrequent waif in ruderal areas: *DCP 3364*, 16 July 2005; *DCP 5267*, 18 November 2008.

Solanum pseudogracile Heiser. Native. Frequent in ruderal areas, maritime forests and dunes: *DCP 3699*, 17 August 2005; *DCP 4427*, 25 March 2006.

(BC) Solanum ptychanthum Dunal. Native. Infrequent in ruderal areas: *DCP 3967*, 19 October 2005; *DCP 4739*, 5 July 2006.

Solanum sisymbrifolium Lamarck. Introduced from South America. Rare in ruderal areas: DCP 3605, 9 August 2005.

(SC) *Solanum viarum* Dunal. Introduced from South America. Rare in ruderal areas: *DCP* 4765, 13 July 2006.

Styracaceae

- (BC) *Styrax americanus* Lamarck var. *americanus*. Native. Frequent in tidal freshwater wetlands: *DCP 3441*, 24 July 2005.
- (BC) Styrax grandifolius Aiton. Native. Rare in xeric pinelands: DCP 2165, 13 June 2005.

Symplocaceae

Symplocos tinctoria (Linnaeus) L'Heritier de Brutelle. Native. Abundant in pinelands: *DCP 1260*, 31 October 2004.

Tamaricaceae

Tamarix gallica Linnaeus. Introduced from the western Mediterranean region of Europe. Insufficient abundance data, ruderal areas: *DCP 4922*, 19 August 2006.

(SC) *Tamarix parviflora* Augustin de Candolle. Introduced from southeastern Europe. Insufficient abundance data, ruderal areas: *DCP 4898*, 12 August 2006.

Tetrachondraceae

Polypremum procumbens Linnaeus. Native. Frequent in ruderal areas: *DCP 3793*, 18 September 2005.

Theaceae

Gordonia lasianthus (Linnaeus) Ellis. Native. Frequent but decreasing in pineland wetlands: DCP 1357, 1 November 2004; DCP 1412, 13 November 2004; DCP 1424, 13 November 2004.

Stewartia malacodendron Linnaeus. Native. Rare in ecotones between pinelands and acidic swamps: *DCP 3481*, 26 July 2005.

(SC) *Ternstroemia gymnanthera* (Wight & Arnott) T. Sprague. Introduced from Asia. Rare in ruderal areas: *DCP 4931*, 26 August 2006.

Turneraceae

Piriqueta caroliniana (Walter) Urban var. *caroliniana*. Native. Rare in pinelands: *DCP* 3521, 30 July 2005.

Ulmacae

- (BC) Planera aquatica J. F. Gmelin. Native. Rare in tidal freshwater wetlands: *DCP 4616*, 29 May 2006.
- (BC) *Ulmus alata* Michaux. Native. Infrequent in calcareous swamp forests: *DCP 1801*, 7 May 2005; *DCP 1813*, 9 May 2005.
- (BC) *Ulmus americana* Linnaeus var. *americana*. Native. Frequent in calcareous swamp forests: *DCP 1804*, 7 May 2005; *DCP 2119*, 8 June 2005.
- (SC) *Ulmus americana* Linnaeus var. *floridana* (Chapman) Little. Native. Frequent in calcareous swamp forests: *DCP 1592*, 28 November 2004; *DCP 1594*, 28 November 2004.

(SC) *Ulmus parvifolia* Jacquin. Introduced from Asia. Infrequent in ruderal areas: *DCP 3917*, 3 October 2005; *DCP 4746*, 6 July 2006.

Ulmus rubra Muhlenberg. Native. Frequent in calcareous swamp forests: DCP 1295, 31 October 2004; DCP 1369, 1 November 2004; DCP 1542, 26 November 2004; DCP 1601, 17 December 2004.

Urticaceae

Boehmeria cylindrica (Linnaeus) Swartz. Native. Abundant in freshwater wetlands: *DCP* 1283, 31 October 2004.

- (SC) *Laportea aestuans* (Linnaeus) Chew. Introduced from the tropics.Infrequent but increasing in ruderal areas: *DCP 5185*, 11 September 2007.
- (R) *Parietaria floridana* Nuttall. Possibly introduced. Infrequent in calcareous areas: *DCP* 3769, 5 March 2005; *DCP* 1723, 24 March 2005; *DCP* 1745, 3 April 2005.
- (SC) *Parietaria judaica* Linnaeus. Introduced from Europe. Rare but increasing in ruderal areas: *DCP 4766*, 13 July 2006; *DCP 5221*, 7 November 2007.
- (BC)(R) *Pilea fontana* (Lunell) Rydberg. Native. Infrequent in tidal freshwater wetlands: *DCP 5148*, 15 July 2007.
- (BC) *Pilea microphylla* (Linnaeus) Liebmann. Adventive from farther south. Rare or overlooked in ruderal areas: *DCP 4514*, 17 May 2006.

Urtica urens Linnaeus. Introduced from Eurasia. An abundant population has long persisted at one local stable: *DCP 4499*, 15 May 2006.

Valerianaceae

(BC) *Valerianella radiata* (Linnaeus) Dufresne. Native. Frequent in ruderal areas: *DCP 1744*, 3 April 2005.

Verbenaceae

Glandularia pulchella (Sweet) Troncoso. Introduced from South America. Rarely naturalized in ruderal areas: *DCP 4443*, 26 March 2006.

Lantana camara Linnaeus. Introduced from the West Indies. Frequent in ruderal areas: *DCP 3959*, 17 October 2007.

Lantana depressa Small var. *floridana*. Probably introducedfrom farther south. Frequent in ruderal areas: *DCP 1624*, 3 January 2005; *DCP 4482*, 11 May 2006.

- (SC) *Lantana montevidensis* (Sprengel) Briquet. Introduced from South America. Frequent in ruderal areas: *DCP 1790*, 4 May 2005.
- (BC) Lantana urticoides Hayek. Introduced from the West Indies. Frequent in ruderal areas: DCP 3225, 3 July 2005 DCP 3514, 30 July 2005; DCP 4369, 20 March 2006.

Phyla nodiflora (Linnaeus) Greene. Native. Abundant in ruderal areas, freshwater wetlands, salt marshes and dunes: *DCP 4301*, 10 January 2006.

(BC) Stylodon carneus (Medikus) Moldenke. Native. Infrequent in xeric pinelands: DCP 2163, 13 June 2005.

Verbena bonariensis Linnaeus. Introduced from South America. Frequent in ruderal areas: *DCP 2181*, 16 June 2005.

Verbena brasiliensis Velloso. Introduced from South America. Frequent in ruderal areas: *DCP 2187*, 17 June 2005.

(BC) *Verbena halei* Small. Introduced from farther west. Infrequent in ruderal areas: *DCP* 4630, 31 May 2006.

Verbena rigida Sprengel. Introduced from South America. Rare in ruderal areas: *DCP* 5272, 14 May 2009.

(SC) Verbena scabra Vahl. Native. Frequent in mesic sunny calcareous areas: DCP 3420, 22 July 2005; DCP 3508, 29 July 2005; DCP 3905, 2 October 2005.

Violaceae

- (SC) *Viola affinis* Le Conte. Native. Frequent in swamp forests: *DCP 0016*, 23 March 2003; *DCP 1732*, 27 March 2005.
- (BC) *Viola arvensis* Murray. Introduced from Europe. Rare, one population observed in the railroad beds in Yemassee: *DCP 1816*, 9 May 2005.
- (BC) *Viola bicolor* Pursh. Native. Locally abundant in ruderal areas near the Marine Corps Air Station: *DCP 4359*, 18 March 2006.

Viola lanceolata Linnaeus var. *lanceolata*. Native. Frequent in pinelands: *DCP 1727*, 24 March 2005.

- (BC) *Viola primulifolia* Linnaeus. Native. Frequent in pinelands and swamp forests: *DCP 1252*, 31 October 2004; *DCP 1733*, 27 March 2005.
- (BC) *Viola sagittata* Aiton. Native. One small population observed in pinelands: *DCP 4438*, 26 March 2006.
- (BC) *Viola septemloba* LeConte. Native. Infrequent in pinelands: *DCP 1741*, 1 April 2005; *DCP 5118*, 25 March 2007.

Viola sororia Willdenow. Native. Infrequent in ruderal areas and hardwood forests: *DCP* 3758, 5 March 2005; *DCP* 4329, 10 February 2006.

- (SC) *Viola tricolor* Linnaeus. Introduced. Rarely naturalizing from cultivation: *DCP 1729*, 24 March 2005.
- (BC) Viola villosa Walter. Native. Frequent in xeric pinelands: DCP 4090, 21 January 2005.

Viscaceae

Phoradendron serotinum (Rafinesque) M.C. Johnston ssp. *serotinum*. Native. Frequent, parasitic on hardwood trees: *DCP 3808*, 18 September 2005.

Vitaceae

Ampelopsis arborea (Linnaeus) Koehne. Native. Abundant in ruderal areas and maritime forests: *DCP 1301*, 31 October 2004.

Parthenocissus quinquefolia (Linnaeus) Planchon. Native. Abundant in pinelands, ruderal areas and maritime forests: *DCP 2225*, 21 June 2005.

Vitis aestivalis Michaux var. *aestivalis*. Native. Frequent in ruderal areas upland forests and woodlands: *DCP 0110*, 12 May 2004; *DCP 0131*, 16 May 2004; *DCP 0199*, 12 June 2004; *DCP 0236*, 16 June 2004; *DCP 0238*, 16 June 2004; *DCP 0271*, 16 June 2004. *DCP 0303*, 24 June 2004.

- (BC) *Vitis cinerea* (Engelmann in A. Gray) Engelmann ex. Milardet var. *baileyana* (Munson) Comeaux. Native. Frequent in upland forests and woodlands: *DCP 0198*, 12 June 2004; *DCP 4492*, 13 May 2006.
- (BC) *Vitis cinerea* (Engelmann in A. Gray) Engelmann ex. Milardet var. *floridana* Munson. Native. Frequent in upland forests and woodlands: *DCP 0041*, 23 May 2003; *DCP 0187*, 12 June 2004; *DCP 0307*, 24 June 2004; *DCP 4486*, 11 May 2006.

Vitis rotundifolia Michaux var. rotundifolia. Native. Abundant in forest and woodlands: DCP 0097, 12 May 2004; DCP 0191, 12 June 2004; DCP 1245, 31 October 2004; DCP 4494, 13 May 2006.

(BC) *Vitis vulpina* Linnaeus. Native. Frequent in forests and woodlands: *DCP 0087*, 30 April 2004; *DCP 0188*, 12 June 2004; *DCP 0304*, 24 June 2004; *DCP 4493*, 13 May 2006.

Zygophyllaceae

Tribulus terrestris Linnaeus. Introduced from Mediterranean Europe. Infrequent in ruderal areas: *DCP 0214*, 16 June 2004; *DCP 4549*, 22 May 2006; *DCP 4856*, 23 July 2006.

Appendix B

Noteworthy collections from Beaufort County: rare plant occurrences and a selection of newly

reported taxa reports

A special emphasis was placed on documenting populations of rare plants and newly reported plants in the county. Detailed collection information is provided for all of the cited rare plant occurrences. Due to the vast number of new species reported, time and space do not permit detailed accounts of all of them. A selection of the new taxa is reported here. Appendix A lists all novel taxa. Organization is alphabetical by botanical name. Where novel taxa have been divided from previously recognized taxa, these are grouped together. Information from the cited collections follows. Collections are arranged chronologically. The following abbreviations are used for frequently cited persons. ABP= A. B. Pittman, ADR=Anibal Dominguez-Roblero, AFH= Alexis Figueroa-Herrera, APJ=Angel Peréz-José, BCL= Bruce C. Lampright, BH= B. Hassler, BT= Ben Turner, CAS = Cynthia A. Aulbach-Smith, CCC= Carlos Chacón-Calvo, CJ = C. Judge, CPD= Clemens Paul Dietze, DCP= Daniel Curtis Payne, FCS= Felipe Cruz-Silva, FJDR=Franciso Javier Dominguez-Roblero, GW= George Westerfield, HB= Hanuman Bull, JB= John Brubaker, JBN= John B. Nelson; JFT= John F. Townsend, JLLR= José Luis López-Ramírez, PDM= Patrick Dale McMillan, MO= Masamichi Ogasawara, PHW=Patricia Hollis Wallace, RDP= Richard Dwight Porcher, RM=Randy Moring, SJ= Sadie Jenkins, TK= Todd Kuntz, TMS = Theresa Martin Seigler, TP= Terry Putnam, TW= Tom Wentworth, WH= William Hodgins. Collections from the Citadel are indicated by (CITA-CLEMS), which is currently housed at Clemson. All others are in the general Clemson University herbarium (CLEMS). The importance of these new collections is outlined in the significance paragraph following the collection information.

Acalypha arvensis Poeppig (EUPHORBIACEAE)—Beaufort County: In association with Parietaria judaica, Alternanthera philoxeroides, Kyllinga sps., Paspalum notatum, Emilia sonchifolia, Euphorbia graminifolia, Dichondra carolinensis, Hydrocotyle sps., etc. moist lawn adjacent to Kangaroo Express Convenience Store, corner of Buckingham Landing Rd. and Fording Island Rd., (Hwy. 278) Between Bluffton and Hilton Head.. Landscaping and house plants are sometimes brought up from Florida wholesale nurseries and sold to the public at this location, 32° 14' 03" N., 80° 48' 12" W., 7 October 2007, DCP 5220 with JLLR.

Significance: This is the first report in the continental United States for this neotropical species north of Florida. It represents a range extension northeastward of over 290 kilometers (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, USDA, NRCS 2010, Weakley, 2010, Wunderlin and Hansen, 2010). It is not native to Florida (Wunderlin and Hansen 2010). It apparently is a recent introduction as it was not reported by Small (1933).

Acer drummondii Hooker & Arnott ex Nuttall (SAPINDACEAE)—**Beaufort County**: In association with *Vaccinium myrsinites, Osmunda cinnamomea, Morella cerifera, Ilex glabra, etc.*, shallow depression wetland within recently timbered, fire-suppressed *Pinus elliottii*/

Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd, Bluffton 32° 14' 20" N. 80° 51' 51" W. 13 November 2004, DCP with AFH; In association with Liquidambar styraciflua, Gonolobus sp., Triadica sebifera, Ilex opaca, Berchemia scandens, Elephantopus carolinianus, Morus rubra, Cirsium nuttallii, Diospyros virginiana, Morella cerifera, etc., hardwood swamp adjacent to tidal freshwater creek, Sugar Hill Boat Landing Off of River Rd. and Combahee River, near Big Estate Community, 32° 39' 58" N., 80° 45' 19" W., 4 July 2005, DCP 3249; In association with Carya glabra, Pinus taeda, Magnolia grandiflora, Liquidambar styraciflua, Osmunda cinnamomea var. cinnamomea, Quercus nigra, etc., woodlands adjacent to the parking lot, east side of Wal-Mart. Near intersection of Hwy 170 & Hwy 280. Town of Beaufort, 11 July 2005. DCP 3311 with JLLR.; In association with Xyris ambigua, Drosera capillaris, Axonopus fissifolius, Ilex glabra, Rhynchospora cephalantha, Rhynchospora inexpansa, Eleocharis tuberculosa, Verbena scabra, Eriocaulon decangulare, Gamochaeta sp., Juncus biflorus, Taxodium ascendens, Hypericum cistifolium, Rhexia alifanus, Diodia virginica, Hypericum mutilum var. mutilum, Cuphea carthagenensis, Polygala lutea, Buchnera sp., Pinus serotina, Clethra alnifolia, etc.. Unmarked wetland preserve, Iron Gate subdivision, Laurel Bay area, 22 32° 27' 38" N., 80° 46' 50" W. 22 July 2005, DCP 3421.

Acer rubrum Linnaeus var. rubrum (SAPINDACEAE)—Beaufort County: Volunteer at base of mature Quercus hemisphaerica in association with Sabal palmetto, Wisteria sinensis, Prunus caroliniana, Hedera helix, Oplismenus hirtellus ssp. hirtellus, etc., residential garden at 201 Laurens St., City of Beaufort. (No Acer rubrum have been planted in this garden.), 32° 26' 06" N., 80° 39' 55" W., 16 June 2005, DCP 2178.

Acer rubrum Linnaeus var. trilobum Torrey & Gray ex K. Koch (SAPINDACEAE)—Beaufort **County**. In association with Osmunda cinnamomea, Woodwardia virginica, Baccharis glomeruliflora, Pinus elliottii, Serenoa repens, Lyonia lucida, Lyonia mariana, Vaccinium myrsinites, Ilex glabra, Lyonia ferruginea or fruticosa, etc., along edge of Bruin Rd, close to utility line crossing, predevelopment survey for Tabby Roads Subdivision, Bluffton, SC, 32° 14' 11.6" N., 80° 51' 17.2" W., 16 October 2004, DCP 1167; With Liriodendron tulipifera, Magnolia grandiflora, Woodwardia areolata, and Itea virginica in ecotone. Predevelopment survey for Buckwalter Park, west side of Buckwalter Pkwy., Bluffton, S.C. 32° 15' 09" N. 80° 54' 10" W., 31 October 2004, DCP 1265 with FCS; Shallow depression wetland within recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton. 32° 14' 21" N., 80° 51' 47" W., 14 November 2004, DCP 1486 with JLLR; In association with Cornus asperifolia, Pinus elliottii, Arundinaria sp., Ulmus americana var. floridana, Sabal minor, Liquidambar styraciflua, etc., seepage area on the north side of Hwy. 46 (May River Rd.) near intersection with Palmetto Bluff Rd., near Bluffton, 32° 14' 22" N. 80° 54' 12" W., 28 November 2005, DCP 1596.

Significance: These collections confirm that these three taxa of hardwood trees occur in South Carolina and particularly in Beaufort County. *A. drummondii* was formerly considered a subspecies of *A. rubrum* (Weakley 2010) .Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) do not distinguish infraspecific taxa for the species. Subsequent sources such as Liu, Peet and Weakley (2006) and USDA, NRCS (2010) lack proper citations for their distribution information within South Carolina. *A. drummondii* and *A. rubrum* var. *trilobum*

appear to be fairly abundant and native within the county. *A. rubrum* var. *rubrum* does not appear to be part of the native flora of the county. Its presence is apparently the result of seed shed from landscape material brought in from the piedmont and Blue Ridge provinces.

Adiantum capillus-veneris Linnaeus (PTERIDACEAE)—Beaufort County: Uncommon, epipetric on tombs, in association with *Pleopeltis polypodioides* ssp. *michauxiana, Macfadyena unguis-cati, Cyrtomium falcatum, Pteris multifida, Psilotum nudum, Oxalis rubra, Arenaria leptocladus, Houstonia procumbens, Clematis catesbyana, Lantana* sp., *Malvaviscus drummondii, Cinnamomum camphora, Sabal palmetto, Juniperus silicicola, Quercus virginiana, Cocculus carolinus, etc,* St. Helena's Episcopal Church graveyard, Church St., Town of Beaufort, 32° 26' 05" N., 80° 40' 30" W., 6 January 2005, *DCP1655*.

Significance: This native fern is listed as rare in South Carolina, Kentucky and North Carolina (McMillan 2005, USDA, ARS 2010). This is the first report for Beaufort County. It has previously been reported from Charleston, Dorchester, Darlington, Georgetown, Greenwood and Florence counties (Townsend and Sorrow 1999). Though documented from the Gulf coastal plain of Georgia, it has not been reported from the adjacent counties in Georgia's Atlantic coastal plain. It is documented from twenty-four states, mostly along the southern tier and Puerto Rico (USDA, ARS 2010). It also occurs in British Columbia, Mexico, the West Indies, temperate and tropical portions of Central and South America, Eurasia and Africa. The Old World populations may prove to be a separate species (Weakley 2010). Restricted to calcareous habitats, the population observed here was on masonry in a graveyard dating from the eighteenth century.

Agalinis laxa Pennell (OROBANCHACEAE)—Beaufort County: In association with Bulbostylis ciliatifolia, Liatris patens, Crocanthemum corymbosum, Ilex vomitoria, Quercus geminata, Quercus nigra, Serenoa repens, Andropogon capillipes 'dryland variety', Pterocaulon pycnostachyum, Andropogon ternarius var. ternarius, Pinus taeda, Pityopsis sps., Lechea sps., Eragrostis, sps., Hypericum stans, Vaccinium myrsinites, Dichanthelium sps., etc. North side of Cherokee Farms Rd., Just north of intersection with Joe Frazier Rd., Laurel Bay area, 32° 25' 51.8" N. 80° 45' 56.6" W., 11 October 2007, DCP 5202.

Significance: This native herbaceous hemiparasitic herb is not included in Townsend and Sorrow (1999) for South Carolina. Citing Bruce Sorrie's database of coastal plain endemics, Liu, Peet and Weakley (2006) report *Agalinis laxa* for both Berkeley and Beaufort County, South Carolina. It is also known from Georgia and Florida (Liu, Peet and Weakley, 2006). These collections provide additional documentation for *A. laxa* in South Carolina.

Agrostis stolonifera Linnaeus var. stolonifera (POACEAE) — Beaufort County: 1 m. colony associated with *Phyla nodiflora, Eupatorium capillifolium, Paspalum urvillei, Gaura sp., Solidago altissima, Erigeron quercifolius, Cirsium horridulum* var. horridulum, etc. roadside, south side of Gannet Pt. Rd. between Coosaw River Dr. and Dog Creek Rd. Coosaw Island, 32° 28' 48" N., 80° 35' 29" W., 20 June 2005, *DCP 2202*.

Significance: This collection clarifies that *A. stolonifera* var. *stolonifera* as described by Weakley (2010) occurs in South Carolina and particularly in its southern maritime strand.

Taxonomic confusion between three taxa of Agrostis has made the distribution of A. stolonifera var. stolonifera in South Carolina unclear. Weakley (2010) indicates this by bracketing the distribution data. Although Hitchcock and Chase (1950) distinguished the three taxa and reported A. stolonifera var. stolonifera under the name A. stolonifera as adventive in South Carolina, other authors have combined it with other taxa. A. stolonifera var. stolonifera, A. stolonifera var. palustris (Hudson) Farwell and A. gigantea Roth were all included under Agrostis stolonifera Linnaeus by Radford, Ahles and Bell (1968) (Weakley 2010). Townsend and Sorrow (1999) report A. gigantea for eighteen counties in the inner coastal plain and piedmont of South Carolina but do not report A. stolonifera for the state. Only one of these counties, Clarendon, extends into the outer coastal plain. Liu, Peet and Weakley (2006) report A. stolonifera for nineteen counties in South Carolina, two of which extend into the outer coastal plain (Berkeley and Clarendon). Infraspecific taxa are not distinguished however. Within South Carolina, they report A. gigantea from Berkeley County only. Harvey (2003) recognizes A. gigantea but apparently includes A. stolonifera var. stolonifera and A. stolonifera var. palustris under A. stolonifera. Harvey (2003) reports that A. stolonifera is generally considered to be a Eurasian introduction but that some northern salt marshside and lakeside populations may be native. Hitchcock and Chase (1950) report it as native to North America but adventive South Carolina. A few horses are being raised near the collection site. It is possible that this particular population was introduced through the horses or their feed.

Alstroemeria pulchella Linnaeus f. (ALSTROEMERIACEAE) — Beaufort County: Spreading abundantly from former cultivation, population 6 meters by 6 meters in area in association with Trachelospermum asiaticum, Euphorbia graminea, Alstroemeria pulchella, Hedera colchica, Quercus hemisphaerica, Quercus virginiana, Prunus caroliniana, Celtis laevigata, Stachys floridana, etc., former site of Buds and Blooms Nursery (a retail container nursery), Hwy 21 Lady's Island 32° 24' 56" N., 80° 39' 04" W., 6 January 2007, DCP 5088.

Significance: This is the first report for this Brazilian ornamental perennial naturalizing in South Carolina. It is grown in greenhouses for it cut flowers in the north and as an outdoor ornamental for its showy flowers in the warmer parts of the United States. There it has escaped and apparently become naturalized. (Holmes 2002) Although USDA, NRCS (2010) reports it for Florida only. Holmes (2002) reports it for Georgia, Alabama, Mississippi and Louisiana as well. The location of the Georgia populations is not given (Jones and Coile 1988, Sweeney and Giannasi 2000, Liu, Peet and Weakley 2006).

Though many color strains have been bred and sold through ornamental nurseries, only the traditional brick red and yellow form readily naturalizes in our area. This form is more commonly shared among friends than purchased from nurseries. It aggressively spreads in home gardens. The fusiform tubers infiltrate other plantings fragmenting when pulled. This species is exceedingly difficult to contain or eradicate without herbicides.

Alysicarpus vaginalis (Linnaeus) Augustin de Candolle (FABACEAE)—**Beaufort County**: In association with *Ambrosia artemisiifolia, Eleusine indica, Conyza bonariensis, Solidago altissima, Croton capitatus, etc.*, landscape debris disposal area. Spring Island 32° 19' 27" N. 80° 49' 09" W, 9 August 2005, *DCP 3613*; Weed in planted *Liriope sp.* in narrow landscape bed, in front of Grayco True Value Store in association with *Eleusine indica* and *Digitaria sp.*, Hwy 21,

Lady's Island, 32° 24' 44" N., 80° 38' 54" W., 12 November 2006, *DCP 4014*. It was originally collected on 8 August 2005 and transplanted to Clemson University Greenhouse to await flowering.

Significance: This is the first report of this Old World tropical legume for South Carolina (Townsend and Sorrow1999, Liu, Peet and Weakley 2006, USDA, NRCS 2020, Weakley 2010). It lies more than 110 kilometers northeast of the closest documented population in Tattnall County, Georgia (Liu, Peet and Weakley 2006). Though reported from North Carolina as well, locations where not given in the sources checked (Liu, Peet and Weakley 2006, USDA, NRCS 2010, Weakley 2010). Weakley (2010) reports that it rarely naturalizes from forage plantings. Neither of the Beaufort County sites has been used agriculturally in several decades indicating that this species has alternate methods of distribution than previously reported.

Amaranthus albus Linnaeus (AMARANTHACEAE)—**Beaufort County:** Gravel parking area across from Tire and Lube Center at Wal-Mart. West of intersection of Hwy 280 and Hwy 170, Burton area, 32° 25' 30.6" N., 80° 44' 07.3" W., 10 September 2007, *DCP 5182* (det. Kenneth Robertson).

Significance: This is the fourth reported county in South Carolina for this introduced ruderal annual (Townsend and Sorrow, Mosyakin and Robertson 2003). It was previously known from Berkeley, Richland and Florence counties (Townsend and Sorrow 1999).

Amaranthus palmeri S. Watson (AMARANTHACEAE)—**Beaufort County:** Abundant in fallowed agricultural field behind Adam's St. Baptist Church on the corner of Bermuda Bluff Rd. and Land's End Rd., St. Helena Island, 32° 20′ 03″ N., 80° 37′ 33″ W., 15 August 2006, *DCP* 4907.

Significance: This is the first report for this invasive ruderal annual for Beaufort County and the second from the maritime strand counties (Mosyakin and Robertson 2003). It is largely known from the inner coastal plain and piedmont. The closest previous reports were from Allendale and Berkeley counties. Native to the southwestern United States and northern Mexico, it is now present in at least thirty states (Mosyakin and Robertson 2003).

Ambrosia trifida Linnaeus var. *trifida* (ASTERACEAE)—**Beaufort County:** One plant seen, volunteer under bird feeder in residential garden, 4 Moss Creek Ct., Moss Creek Plantation (a gated residential community off of Hwy. 278 near Bluffton), 32° 14' 24" N., 80° 48' 28" W., 18 July 2007, *DCP 5156 with JLLR*.

Significance: This is the first report for the southern outer coastal plain of South Carolina for this robust annual of moist floodplains and ruderal sites. It is rare in the coastal plain south of Virginia (Weakley, 2010). The closest previously documented occurrence is in Aiken County. Florence County contains the only other documentation from the outer coastal plain (Townsend and Sorrow 1999). Townsend and Sorrow (1999) do not recognize infraspecific taxa for this species but only one is known from the flora area. The closest documented occurrences to the southwest are in Lowndes County, Georgia and Clay County, Florida (Jones and Coile, 1988, Liu, Peet and Weakley, 2006). It is apparently not native to Beaufort County but adventive as a contaminant in bird seed.

Ammannia latifolia Linnaeus (LYTHRACEAE)—Beaufort County: In association with Juncus sp., Eleocharis sp., Ludwigia octovalvis, Mikania scandens, Canna flaccida, etc. Retention pond on east side of Lady's Island Feed and Seed Store, Hwy 21, Lady's Island, 32° 24' 11.5" N., 80° 37' 36.7" W., 7 January 2006, DCP 4288 with JLLR.

Significance: This is the second report for this native wetland species from South Carolina and the first southwest of the Santee River. Townsend and Sorrow (1999) report this native wetland species under its synonym *Ammannia teres* Rafinesque for Georgetown County only. This population lies more than 80 kilometers southwest and 90 kilometers northeast of the closest reported populations in Georgetown County, South Carolina and McIntosh County, Georgia respectively.

Amphicarpaea bracteata (Linnaeus) Fernald var. *bracteata* (FABACEAE)—**Beaufort County:** Abundant on sandy roadside adjacent to wooded area, Ethel Grant Lane, Coosaw Island, 32° 28′ 55" N., 80° 35′ 05" W., 15 October 2007, *DCP 5209*.

Amphicarpaea bracteata (Linnaeus) Fernald var. comosa Fassett (FABACEAE)—Beaufort County: In association with Morus rubra, Aristolochia serpentaria Euonymus americanus, Cornus florida, Juglans nigra, Carya tomentosa, and Berchemia scandens Ruins of Old Sheldon Church, Old Sheldon Church Rd. south of Yemassee S.C. 32° 37' 08" N., 80° 46' 52" W., 30 October 2004, DCP 1213 with FCS and JLLR.

Significance: These collections establish that both varieties of this native perennial vine occur in South Carolina and in Beaufort County in particular. They also provide a habitat description for the varieties in the maritime strand. Three to five subspecific taxa are now recognized in what was considered a singles species. Two of these occur in our area. Weakley (2010) states "the distribution and habitats of the two varieties in our area require herbarium and field investigation". Townsend and Sorrow reported A. bracteata "sensu lato" for the county. Liu, Peet and Weakley (2006) report A. bracteata var. bracteata no closer than Charlotte County, Virginia to the northeast and Wayne County, Mississippi to the west. They report A. bracteata var. comosa no closer than Columbia County, Florida to the southwest and Tuscaloosa County, Alabama to the west.

Amphicarpum muhlenbergianum (J. A. Schultes) Hitchcock (POACEAE)—Beaufort County: Growing in association with Taxodium ascendens, Eubotrys racemosa, Andropogon glaucopsis, Panicum hemitomon, Xyris jupicai, Dichanthelium strigosum var. leucoblepharis, Carex striata, Dichanthelium lancearium, etc., in an area that has burned every other year, margin of depression pond, Clarendon Plantation (a private hunting preserve) near the Gray's Hill Community, 32° 29' 17.6" N.,80° 46' 26.8" W., 6 January 2006, DCP 4263 with RM and JLLR; Growing in association with Pinus sp., Lindera melissifolia, Aristida beyrichiana, Aristida spiciformis, etc., area burned every other year, Clarendon Plantation (a private hunting preserve) near the Gray's Hill Community. 32° 29' 22.2" N., 80° 45' 39.0" W., 6 January 2006, DCP 4270 with RM and JLLR; 85 m. x 15 m. population, in association with Eragrostis refracta, Lyonia lucida, Magnolia virginiana, Andropogon glomeratus var. glomeratus, Rhexia nashii, Dichanthelium lancearium, Hypericum crux-andreae, etc., treeless area southeast of power lines in Beaufort Industrial Park, off of Burton Hill Rd. Burton Area, 32° 26' 03.6" N., 80° 43' 17.7"

W., 7 January 2006, *DCP 4291*; in association with *Panicum hemitomon, Crocanthemum corymbosum, Liatris spicata, Penstemon australis, Clinopodium georgianum, Pityopsis* sp., etc., northeast side of pond, Newhall Preserve, off of Palmetto Bay Rd. Hilton Head Island, 32° 09' 45.4" N., 80° 46' 22.5" W., 20 March 2006, *DCP 4387*,; abundant around sides of stormwater retention pond (apparently created by digging out depression wetland), in association with *Pinus palustris, Clethra alnifolia, Ilex glabra*, etc., between Food Lion parking lot and Laurel Bay Rd., Laurel Bay area, 32° 27' 11.7" N., 80° 46' 16.2" W., 26 July 2006, *DCP 4868*; in association with *Galactia elliottii, Clethra alnifolia, Ilex glabra*, etc., degraded pine flatwoods on Ephraim Rd. near intersection with Land's End Rd., St. Helena Island. 32° 21' 40" N.,, 80° 35' 35" W., 30 July 2006, *DCP 4873*; Abundant around dump site over filled in depression wetland. behind Food Lion shopping center, junction of Pine Grove Rd and Shanklin Rd., Laurel Bay area, 32° 27' 09.8" N., 80° 46' 12.0" W., 8 August 2006, *DCP 4877*; remnant population, upper margin on east side of ditch bank, East side of Sam's Point Rd., semi-cultivated residential yard, formerly fire-maintained pineland, 1 Attaway Lane, 32° 28' 00" N., 80° 37' 55" W., 5 January 2007, *DCP 5082*.

Significance: This native wetland grass of the Coastal Plain is listed as rare in both North Carolina and South Carolina. These collections represent the first published documentations for Beaufort County. It has previously been reported for Aiken, Bamberg, Barnwell, Berkeley, Charleston, Jasper, and Orangeburg counties (Townsend and Sorrow 1999). It also occurs in Georgia, Florida and Alabama (USDA, ARS 2010).

Anredera vesicaria (Lamarck) Gaertner f. (BASELLACEAE)—Beaufort County: Dominant vine, naturalized in overgrown hedgerow in association with Carya illinoinensis, Quercus hemisphaerica, Vitis sp., Prunus caroliniana, Celtis laevigata and Ficus carica. Southeast corner of intersection of North St. and Ribault Rd. 2204 North St, City of Beaufort, 23 November 2005. DCP4016; Naturalized on former homesite. In association with Carya illinoinensis, Quercus hemisphaerica, Broussonetia papyrifera, Mirabilis jalapa, Prunus caroliniana, Salpichroa origanifolia, Artemisia vulgaris, Morus alba, Ligustrum lucidum, etc., southeast corner of intersection of Prince St. and Hamar St., City of Beaufort. 23 November 2005. DCP4017. **Significance:** These are the first reports of this neotropical vine in the continental United States outside of Florida and Texas (Townsend and Sorrow 1999, Vincent 2003, Liu, Peet and Weakley, 2006, USDA, NRCS 2010, Weakley, 2010). These populations are more than 310 kilometers northeast of the closest previously documented populations in Volusia County, Florida (Wunderlin and Hansen 2008). It is sometimes cultivated for its showy inflorescences and fragrant flowers (Vincent, 2003). These populations may have escaped and naturalized from former plantings. However the area where DCP 4017 was collected appears to have been a relict depression wetland surrounded by an African-American community instead of a homesite as originally thought. The nearby residents had no recollection of a home existing at the lot. The lot dips to the middle making it inappropriate for home construction. The area may have been used as a gardening debris dumpsite. No other A. vesicaria had been observed nearby, however. Vincent (2003) and USDA, NRCS (2010) indicates it is native, Wunderlin and Hansen (2008) consider it introduced in Florida. It also occurs in Mexico, the West Indies, Central America, South America, Eurasia, Africa, the Pacific Islands and Australia (Vincent 2008).

Ardisia crenata Sims (MYRSINACEAE)—Beaufort County: Naturalized in association with Rhexia nashii, Salix nigra, Vaccinium fuscatum, Vaccinium elliottii, Thelypteris ovata var. ovata, etc. along tributary stream of Heyward Cove between Church St. and Bruin Rd., Town of Bluffton 32° 14′ 11" N., 80° 51′ 29" W., 30 June 2004, DCP 319 with FJDR; Several plants naturalized near path with Oplismenus hirtellus ssp. setarius, Morella cerifera, Eupatorium capillifolium, Rubus trivialis, Pinus taeda, Dichanthelium scoparium, Eleusine indica, etc., Blue Heron Preserve, Moss Creek Plantation (a gated community) off of Hwy 278 in the Greater Bluffton Area, 32° 16′ 20.4" N., 80° 48′ 21.2" W., 4 January 2006, DCP 4214.

Significance: These are the first records of this Asiatic ornamental shrub naturalizing in the continental United States outside of Florida and Louisiana (Wunderlin and Hansen 2008, USDA, NRCS 2010). It represents a range extension northeastward of over 290 kilometers from the closest previously documented population in Alachua County, Florida (Wunderlin and Hansen 2008). In Florida it is a category 1 exotic plant pest (FLEPPC 2007, Wunderlin and Hansen, 2008). It should be evaluated for inclusion as an invasive species in South Carolina as well.

Arenaria lanuginosa (Michaux) Rohrbach ssp. lanuginosa (CARYOPHYLLACEAE)—
Beaufort County: A few plants growing on mortar with Pteris vittata and Asplenium
platyneuron at ruins of Old Sheldon Church, Old Sheldon Church Rd. south of Yemassee S.C.
32° 37' 07" N., 80° 46' 50" W., 30 October 2004, DCP 1199 with FCS and JLLR; Epipetric on
tabby ruins of plantation house. In association with Narcissus pseudonarcissus 'Van Wilder',
Raphanus raphanistrum, Corydalis micrantha var. australis, Taraxacum laevigatum, Arenaria
serpyllifolia, Parietaria floridana, Leucojum aestivum, Asplenium platyneuron, etc. on Spring
Island 32° 19' 53" N., 80° 48' 55" W., 26 February 2005, DCP 3768.

Significance: This native diminutive calcicole is listed as rare in South Carolina, North Carolina,
Tennessee and Virginia (USDA, ARS 2010, Weakley 2010). It is also reported from Jasper and
Orangeburg counties (Townsend and Sorrow 1999). Both of the above cited populations were
epipetric on tabby ruins. It is known the eleven states of the historic Confederacy and Mexico
(USDA, ARS 2010).

Arenaria leptocladus (Reichenbach) Guss (CARYOPHYLLACEAE)—Beaufort County: Epipetric on tombs. In association with Pleopeltis polypodioides ssp. michauxiana, Macfadyena unguis-cati, Adiantum capillus-veneris, Cyrtomium falcatum, Pteris multifida, Psilotum nudum, Oxalis rubra, Houstonia procumbens, Clematis virginiana, Lantana sp., Malvaviscus drummondii, Cinnamomum camphora, Sabal palmetto, Juniperus silicicola, Quercus virginiana, Cocculus carolinus, etc., St. Helena's Episcopal Church graveyard, Church St., Town of Beaufort, 32° 26' 05" N., 80° 40' 30" W., 6 January 2005, DCP 1660 with JLLR.

Significance: This is the second reported county occurrence in South Carolina and the first from the outer coastal plain for this calciphilic Eurasian winter annual (Weakley 2010). It was previously known from Richland County.

Aristida condensata Chapman (POACEAE)—Beaufort County: In association with Pinus palustris, Quercus hemisphaerica, Sorghastrum elliottii, Tridens flavus, Viola villosa,

Dichanthelium oligosanthes var. oligosanthes, Dichanthelium aciculare, Dichanthelium commutatum var. commutatum, Saccharum alopecuroides, etc., in an African-American cemetery on the south side of May River Road (Hwy 46) Bluffton, 32° 14' 14.4" N., 80° 52' 37.8" W., 21 December 2005, DCP 4100; Growing under power lines on xeric roadside with Bulbostylis coarctata, Aristida tuberculosa, Aristida lanosa, Aristida longespica var. longespica, Sporobolus clandestinus, Dalea pinnata var. pinnata, Zornia bracteata, Digitaria cognata, etc. West side of Shanklin Rd. between Trask Pkwy (Hwy 21) and Railroad tracks adjacent to U.S. Dept. of Defense Property, Laurel Bay Area, 32° 28' 01" N., 80° 44' 17" W., 29 December 2005, DCP 4322.

Significance: This native bunch grass is listed as rare in South Carolina and North Carolina (Weakley 2010). It also occurs in Georgia, Florida, Alabama and Mississippi. This is the first record for Beaufort County. It has previously been reported from Lexington, Richland, Kershaw, Barnwell, Orangeburg, Calhoun, Sumter, Lee, Colleton, Florence and Georgetown counties.

Aristida oligantha Michaux (POACEAE)—**Beaufort County**: On xeric shoulder of Shanklin Rd. adjacent to U.S. Dept. of Defense Property in association with *Sporobolus clandestinus*, *Dalea pinnata* var. *pinnata*, *Zornia bracteata*, *Aristida virgata*, *Digitaria cognata*, *Cenchrus sp.*, *etc.*, Laurel Bay area, 32° 28' 01" N., 80° 44' 17" W., 20 October 2005, *DCP 4008*.

Significance: This is the first report for this native bunch grass from the southern outer coastal plain of South Carolina (Townsend and Sorrow 1999, Weakley 2010). In South Carolina, it is primarily restricted to the inner coastal plain and piedmont. The closest previously documented populations occur in Aiken County to the west and Williamsburg and Georgetown counties to the northeast (Townsend and Sorrow, 1999)

Aristida spiciformis Elliott (POACEAE)—Beaufort County: CAS 1135; Along margin of depression wetland under power lines adjacent to Burnt Church Rd. Adjacent plant community is fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Tabby Roads Subdivision (under development) in Bluffton, 32° 14' 07" N., 80° 51' 15" W., 18 October 2005, DCP 3974; Growing under the power lines with Lechea tenuifolia, Dichanthelium chamaelonche, Aristida beyrichiana, Dichanthelium lancearium, Bulbostylis stenophylla, Panicum verrucosum, Hypericum tenuifolium, Xyris caroliniana, Dichanthelium aciculare, etc., across an internal road (no road sign) from Preservation Tree Service, Beaufort Industrial Village, South side of Burton Hill Road. Burton area. 32° 26' 02.6" N., 80° 43' 15.4" W., 3 January 2006, DCP 4201; In association with Pinus sp., Amphicarpum muhlenbergianum, Lindera melissifolia, Aristida beyrichiana, etc. Area burned every other year, Clarendon Plantation (a private hunting preserve) Near the Gray's Hill Community, 32° 29' 22.2" N., 80° 45' 39.0" W., 6 January 2006, DCP 4269 with RM and JLLR.

Significance: This native bunch grass is listed as rare in South Carolina and North Carolina, although the documentation for North Carolina is unknown (Weakley 2010). It is also been reported from Jasper, Hampton, Colleton and Georgetown counties (Townsend and Sorrow 1999, McMillan et al. 2002).

Artemisia ludoviciana Nuttall (ASTERACEAE)—Beaufort County: Growing in association with Paspalum notatum, Eremochloa ophiuroides, Rumex hastatulus, Lepidium virginicum, Vicia lathyroides, Salvia lyrata, Monarda punctata, etc., shoulder of Gannet Point Rd., 32° 28′ 10.0″ N., 80° 35′ 57.3″ W., 19 March 2006, DCP 4363.

Significance: This is the second report (after Georgetown County) from the outer coastal plain and the first from the southern outer coastal plain of South Carolina for this western North American introduction (Townsend and Sorrow 1999, Weakley 2010). It primarily occurs in the inner coastal plain and piedmont of South Carolina (Townsend and Sorrow 1999).

Arundinaria gigantea (Walter) Walter (POACEAE)—Beaufort County: Remnant in hedgerow of semi-natural garden in association with Morella cerifera, Ampelopsis arborea, Parthenocissus quinquefolia, Rubus sp., Mikania scandens, Liquidambar styraciflua, Pinus elliottii, Rhynchospora plumosa, Lechea pulchella, Andropogon gyrans, Carphephorus paniculatus, Drosera sp., etc. Pearson residence, #4 Moss Creek Ct., Moss Creek Plantation (a gated community) off of Hwy 278 in the Greater Bluffton Area, 32° 14' 24.3" N., 80° 48' 28.4" W., 5 January 2006, DCP 4223.

Arundinaria tecta Walter (POACEAE)—Beaufort County: In association with Mitchella repens, Woodwardia areolata, Prunus serotina, Quercus hemisphaerica, Dichanthelium lucidum, Magnolia virginiana, Vaccinium elliottii, Gaylussacia tomentosa, Lyonia fruticosa, etc., predevelopment survey for Calhoun Promenade, NW corner of May River Rd. and Bluffton Rd., Bluffton, 32° 14′ 20.8" N., 80° 51′ 39.0" W., 13 November 2004, DCP1395 with AFH; Roadside adjacent to recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd, Bluffton. 32° 14′ 23.1" N., 80° 51′ 46.1" W., 13 November 2004, DCP 1463 with AFH; Growing with Tridens flavus, Persea pubescens, Asplenium platyneuron, Oplismenus hirtellus ssp. setarius, Sabal palmetto, Pinus taeda, Callicarpa americana, Ipomoea cordatotriloba var. cordatotriloba, Quercus hemisphaerica, Ilex vomitoria, etc., Blue Heron Preserve, Moss Creek Plantation (a gated community) off of Hwy 278 in the Greater Bluffton Area, 32° 16′ 20.2" N., 80° 48′ 30.9" W., 4 January 2006, DCP 4224.

Significance: These collections establish that both of these species of native bamboo occur in South Carolina and in Beaufort County. Townsend and Sorrow (1999) did not distinguish them as separate taxa but included them both as *A. gigantea*. *A. tecta* is far more frequently encountered than *A. gigantea* in the county. This indicates that fire was an important factor in most of the area. Due to fire suppression, much of the *A. tecta* is grown very tall and outwardly appears to be *A. gigantea* (Weakley 2010).

Asclepias curassavica Linnaeus (APOCYNACEAE)—Beaufort County: Naturalized in uncultivated area along property line between two residential lots. One of the lots is currently under construction. In association with Ligustrum lucidum, Melia azederach, Juniperus virginiana var. silicicola, Salvia lyrata, Verbascum thapsus, Cornus asperifolia, Ilex vomitoria, Quercus virginiana, Quercus hemisphaerica, etc., east side of 27 Amelia Circle, Hilton Head Island, 32° 13' 22" N., 80° 45' 32" W., 9 January 2007, DCP 5090.

Significance: This is the first report of this South American milkweed naturalizing in South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, USDA, NRCS 2010,

Weakley, 2010). It lies more than 310 kilometers northeast of the closest documented population in Volusia County, Florida (Wunderlin and Hansen, 2007). It is frequently cultivated in "butterfly gardens" as a larval host for the monarch butterfly, *Danaus plexippus* (Opler and Malikul 1992). *A. curassavica* grows and reproduces more readily than native milkweeds. It normally persists in Beaufort County and multiplies around landscapes. Observing it naturalize12 April 2008 at Dicks Point, Pinckney Island National Wildlife Refuge, I noted that it has long-distance dispersal capabilities. Weakley (2010) referred to it a "sometimes slightly persistent". It is also reported to the northwest in Tennessee (USDA, NRCS, 2010). This indicates that it would be winter-hardy throughout South Carolina. It should be monitored and considered for listing by the South Carolina Exotic Plant Pest Council.

Asclepias pedicellata Walter (APOCYNACEAE)—Beaufort County: 1 plant observed in recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton. 32° 14' 22.2" N., 80° 51' 48.0" W., 25 November 2004, DCP 1523 with JLLR; In association with Elephantopus sp., Dichanthelium sp., Pterocaulon pycnostachyum, Polygala lutea, Lyonia mariana, Pteridium aquilinum var. pseudocaudatum, Clethra alnifolia, etc. on top of slope from drainage way at edge of fairway. Behind 585 and 589 Sam's Point Rd. Golf Professionals Club Golf course, Royal Pines Subdivision, Lady's Island, 32° 27' 52" N., 80° 38' 01" W., 17 June 2005, DCP 2209.

Significance: This native pineland milkweed is listed as rare in South Carolina, North Carolina and Georgia (Weakley 2010). It is also reported from Colleton, Charleston, Georgetown and Horry counties (Townsend and Sorrow 1999).

Asparagus aethiopicus Linnaeus (ASPARAGACEAE)—Beaufort County: Naturalized along the edge of the salt marsh in a residential garden, 100 Laurens St., Beaufort, 32° 26' 06" N., 80° 39' 52" W., 6 January 2005, *DCP 1649*; Growing from leaf bases of planted *Butia capitata* in landscape bed at Shell Convenience Store, Lady's Island Shopping Center, Hwy 21, Lady's Island, 32° 24' 59.9" N., 80° 39' 24.9" W., 10 January 2006, *DCP 4303*; Abundantly epiphytic on cultivated *Phoenix sp.* at entrance to Hampton Hall Plantation (a gated residential community) Buckwalter Plantation, Town of Bluffton, 32° 15' 25" N., 80° 54' 12" W., 23 December 2006, *DCP 5075*.

Significance: Townsend and Sorrow (1999) do not report this African ornamental plant as naturalizing in South Carolina. Weakly (2010) citing R. Stalter (pers. comm. 2009) reports it from South Carolina. Apart from R. Stalter's report, it has not been previously reported outside of Florida (Townsend and Sorrow 1999, Straley and Utech 2002, Liu, Peet and Weakley, 2006, USDA, NRCS 2010, Weakley, 2010). These collections represent a 200 kilometer northeastern range extension from Nassau County, Florida (Wunderlin and Hansen, 2009). This species is frequently cultivated as A. densiflorus (Kunth) Jessop (Straley and Utech, 2002). DCP 1649 is the result of avian dispersal from potted plants grown on the same property. The other cited populations are introduced as unintentional epiphytes on Arecaceae from Florida. This species is reliably cold hardy in Beaufort County. It is rated as a category 1 invasive plant in Florida (FLEPPC, 2007). It should be monitored for consideration as an invasive in South Carolina.

Axonopus compressus (Swartz) Palisot de Beauvois (POACEAE)—Beaufort County: In association with *Pinus elliottii, Panicum dichotomiflorum* var. *dichotomiflorum, Echinochloa crusgalli* var. *crusgalli, Eragrostis refracta, Panicum anceps* var. *rhizomatum, Panicum virgatum* var. *virgatum,* etc. on island on west side of Coosaw River Dr., between Coosaw Island and Judge Island, 32° 28' 20.1" N., 80° 34' 22.4" W., 30 December 2005, DCP 4194.

Significance: This native sod-forming grass is listed as rare in South Carolina (McMillan 2005). This is the first verified report for South Carolina. Previously, unverified reports have been made from Berkeley and Colleton counties (Townsend and Sorrow 1999 and McMillan 2005).

Baccharis glomeruliflora Persoon (ASTERACEAE)—Beaufort County: Three plants observed in small depression wetland surrounded by fire-suppressed pine flatwoods. In association with Osmunda cinnamomea, Woodwardia virginica, Acer rubrum, Pinus elliottii, Serenoa repens, Lyonia lucida, Lyonia mariana, Vaccinium myrsinites, Ilex glabra, Lyonia ferruginea or fruticosa, etc. along edge of Bruin Rd, close to utility line crossing. Predevelopment survey for Tabby Roads subdivision, Bluffton, SC. 32° 14' 11.6" N., 80° 51' 17.2" W., 16 October 2004, DCP 1168 with JLLR: (Pistillate plant) along drainage ditch under powerlines in fire suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. In association with Erythrina herbacea, Serenoa repens, Ligustrum sinense, Morella pumila, Morella cerifera, Lyonia lucida, Castanea alnifolia, Tridens flavus, Sassafras albidum, etc. on the southeast corner of Goethe Rd. and Dr. Mellichamp Dr., Bluffton. 32° 14' 21" N., 80° 51' 47" W., 28 November 2004, DCP 1590 with JLLR; (Staminate plant) along drainage ditch under powerlines in fire suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. In association with Erythrina herbacea, Serenoa repens, Ligustrum sinense, Morella pumila, Morella cerifera, Lyonia lucida, Castanea alnifolia, Tridens flavus, Sassafras albidum, etc. on SE corner of Goethe Rd. and Dr. Mellichamp Dr., Bluffton. 32° 14′ 21" N., 80° 51′ 47" W., 28 November 2004, *DCP 1591* with *JLLR*; (Pistillate plant) In association with Liquidambar styraciflua, Morella cerifera, Acer rubrum, Hypericum hypericoides, Viola lanceolata, Lyonia lucida, Persea palustris, etc. in recently logged depression wetland along Buck Island Rd. Bluffton. 32° 14' 52" N., 80° 52' 53" W., 5 January 2005, DCP 1643; In association with Crataegus alabamensis, Quercus nigra, Morella cerifera, Liquidambar styraciflua, Ilex vomitoria, Galium hispidulum, Ouercus virginiana, Pinus palustris, Smilax pumila, Symplocos tinctoria, etc. in small depression wetland along roadside at 216 Sam's Pt. Rd. Lady's Island. 32° 25' 55" N., 80° 38' 26" W., 6 January 2005, DCP 1644; In association with Viola affinis, Viola primulifolia, Dryopteris ludoviciana, Hexastylis arifolia, Arisaema triphyllum ssp. triphyllum, Ostrya virginiana, Acer sp., Magnolia grandiflora, etc. Wetland area associated with a channelized blackwater stream. Adjacent to Perimeter Walk Business Park on the south side of Hwy. 170 between Hwy. 802 and Hwy. 280, 27 March 2005, DCP 1735; 1 shrub observed at site. In association with Tripsacum dactyloides, Morella cerifera, Vitis rotundifolia, Campsis radicans, Liquidambar styraciflua, Galium sp., etc. in cleared but as yet undeveloped housing lot adjacent to remnant *Pinus palustris* flatwoods. N.,W. corner of Sam's Pt. Rd. and Royal Pines Blvd. Lady's Island. 32° 28' 06" N., 80° 37' 54" W., 14 July 2005, DCP 3336; About 20 plants along drainage ditch in association with Linum medium var. texanum, Rhynchospora wrightiana, Paspalum floridanum, Scleria verticillata, Gaura angustifolia, Rhynchospora colorata, Boehmeria cylindrica, Ulmus alata, Cicuta maculata var. mexicana, Osmunda cinnamomea var. cinnamomea, etc. on southeast corner of the intersection

of Little Capers Rd. and Holly Hall Rd., Lady's Island, 32° 26' 39" N., 80° 37' 36" W., 14 July 2005, *DCP 3344*; Right bank of the Combahee River, south of the Colleton County Boat Landing, 32° 41' 14" N., 80° 47' 20" W., 24 July 2005, *DCP 3455* with *TMS*; In association with *Pinus taeda, Morella cerifera, Liquidambar styraciflua, Thelypteris kunthii,* etc. in channelized stream (drainage canal) in front of the S.C D.M.V. office, Munch Rd., Burton area, 32° 25' 00" N., 80° 44' 18" W., 23 July 2006, *DCP 4859*.

Significance: This dioecious shrub is listed as rare in South Carolina and North Carolina. The observed habitat of depression wetlands within former pine flatwoods and tidal freshwater wetlands differs greatly from the reported "wet hammocks, marsh edges and interdune swales" (Weakley 2010). It was previously reported from Berkeley, Charleston, Colleton, Georgetown, Horry and Jasper counties. It also occurs in Georgia, Florida, Alabama and Mississippi (USDA, ARS 2010).

Bidens alba (Linnaeus) Augustin de Candolle var. **radiata** (Schultz-Bipontinus) Ballard ex T.E. Melchert (ASTERACEAE)—**Beaufort County**: Growing with *Agalinis fasciculata, Sesbania herbacea, Persicaria lapathifolia, Chamaecrista nicticans* var. *aspera, Ludwigia decurrens, Eleusine indica, Triadica sebifera, etc.* Hwy. 21 at east end of Airport Circle. Ladies Island.18 September 2005, *DCP 3788*.

Bidens pilosa Linnaeus (ASTERACEAE)—**Beaufort County**: Four specimens observed among much larger population of *Bidens alba* var. *radiata*. In association with *Desmodium tortuosum*, *Paspalum notatum*, *Dysphania anthelmintica*, *Digitaria sps.*, *Cenchrus sps.*, *Solidago altissima*, *etc.*, less than 1 meter from edge of the pavement along weedy recently modified roadside, northeast corner of frontage road leading to Broad River fishing pier, at the northwest corner of intersection of Hwy 170 and Hwy 802, Port Royal Island, 32° 24' 44.4" N., 80° 46' 02.3" W., 28 October 2008, *DCP 5260*.

Significance: These collections confirm that both of these neotropical ruderal herbs occur in Beaufort County. Due to taxonomic confusion, the distribution of the two within the state and in the southeast has been unclear. Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) submerged both taxa under *B. pilosa* (Weakley 2010). Ballard (1986) demonstrated that the two are distinct species.

Although USDA, NRCS (2010) reports both taxa, it shows photographs consistent with *B. alba* var. *radiata* for both species. The distribution for both extends too far to the north for these neotropical taxa. *B. alba* var. *radiata* has 5-8 ray florets with l6-16mm long ligules. Its cypselas are 2-awned. In contrast *B. alba* var. *radiata* is either rayless or has short ligules that are less than 3 mm. long. Its cypselas have 3 to 5 awns. Within the county, *B. alba* var. *radiata* is far more abundant, occurring on many roadsides. I have observed *B. pilosa* 'sensu stricto' on one occasion. *B. pilosa* 'sensu stricto' is a rare introduction occurring on ballast, waste near woolcombing mills and in other disturbed areas (Weakley 2010).

Blechnum serrulatum L. C. Richard (BLECHNACEAE)—**Beaufort County**: Spreading from base of planted *Sabal palmetto*. *Blechnum serrulatum* has been persistent here for over 3 years, residence of Terry Putnam, 114 Moss Creek Dr. Moss Creek Plantation (A gated community) off of Hwy 278 near town of Bluffton. 24 March 2005, *DCP 1721 with TP* and *JLLR*; Growing

around base of planted *Sabal palmetto* in residential garden, 114 Moss Creek Dr., Moss Creek Plantation, near Bluffton, 24 May 2005, *DCP 2058*.

Significance: These are the first reports of this neotropical fern outside of Florida within the continental United States (Townsend and Sorrow1999, USDS, NRCS 2010, Weakley 2010). These collections represent a northeastern range extension of over 225 kilometers from St. Johns and Columbia counties (Wunderlin and Hansen 2008). It is considered native in Florida (Wunderlin and Hansen 2008). All South Carolina locations appear to be the result of unintentional introduction with landscape material. The Beaufort County population was first observed in 2004. It was still present and had spread from the original population in January 2008. It has also been collected in Jasper County (DCP 3568 and 3578).

Boerhavia coccinea P. Miller (NYCTAGINACEAE)—**Beaufort County:** Abundantly naturalized. In association with *Croton glandulosus var. septentrionalis, Desmodium sp., Acalypha gracilens, Bulbostylis barbata, Acanthospermum australe, Eragrostis* sp., etc. in a xeric yard of old but still occupied farm house, 20 Sherman Dr., Coosaw Island, 32° 28' 43" N., 80° 35' 08" W., 2 October 2005, *DCP 3886*.

Significance: This collection confirms that this pantropical perennial occurs in South Carolina and in Beaufort County. This is either the first or second report for South Carolina. This neotropical perennial forb was previously confused with its congener B. diffusa Linnaeus. In B. coccinea the leaves are distributed throughout the plant. The branches are spreading villous or hispid to minutely and finely pubescent. Inflorescences are both axillary and terminal with more than five flowers per cluster. The fruits are either clavate or obovate tapering to both ends. The apices of the fruits are either round or narrowly round-conic. (Spellenberg 2003) In B. diffusa, the leaves are mostly concentrated toward the base of the plant. Branches are glabrate or glabrous Inflorescences are mostly terminal with one to five flowers per cluster. The fruits are obpyramidal with broadly conic apices. (Spellenberg 2003) The taxonomic confusion between these two species has resulted in differing distribution accounts for B. coccinea Spellenberg (2003), Weakley (2008) and USDA, NRCS (2010) citing Weakley (2010) report B. coccinea for South Carolina. Weakley (2010) gives no reference for his inclusion of B. coccinea for South Carolina There is also a note "disentangle coccinea from diffusa and rewrite key" within his treatment of the genus. Radford, Ahles and Bell (1968) reported B. coccinea from one collection on ballast in 1885 in New Hanover County, North Carolina. They stated that it apparently was not established. Weakley (2010) state that B. coccinea is apparently well-established on the Wilmington (New Hanover County) waterfront. Radford, Ahles and Bell (1968) did not report B. diffusa for either of the Carolinas. Liu, Peet and Weakley (2006) report B. diffusa from one location in the Carolinas (Charleston County, South Carolina). Townsend and Sorrow (1999) also report B. diffusa for Charleston County only. Neither Liu, Peet and Weakley (2010) nor Townsend and Sorrow (1999) report B. coccinea for the state. The closest documented occurrences reported in Liu, Peet and Weakley (2006) are New Hanover County, North Carolina and Hillsborough County, Florida to the northeast.

Spellenberg (2003) reports the species from Maryland south and westward sporadically along the coast to Texas and along the Mexican border states to California, also Nevada. Outside the United States it is reported from Mexico, the West Indies, Central America, South America, Eurasia, Africa and Australia. It is considered adventive along the Gulf and Atlantic coasts of the

United States. The population represented by this collection appears to have escaped from a horticultural planting many decades ago. Frequent mowing around the perimeter of this population prevents its further spread.

Bothriochloa laguroides (Augustin de Candolle) Herter ssp. **torreyana** (Steudel) Allred & Gould (POACEAE)—**Beaufort County:** 4 individuals observed, no sign of cultivation, top of rip rap revetments on edge of salt marsh on east side of Distant Island Dr. at north end of Distant Island, 32° 23' 29.3" N., 80° 38' 13.8" W., 4 November 2008, *DCP 5262*.

Significance: This collection gives clear documentation for this western North American warm season grass from South Carolina (Weakley 2010). Weakley (2010) referenced Kartesz (1999) reporting this western North American warm season grass's occurrence in South Carolina. Liu, Peet and Weakley (2006), Townsend and Sorrow (1999) do not include it for South Carolina.

Brassica oleracea Linnaeus var. **acephala** Augustin de Candolle (BRASSICACEAE)— **Beaufort County**: Volunteer in fallow agricultural field. Northeast side of Joe Frazier Rd., about 100 meters north of Broad River Blvd., Burton area, 32° 25' 28" N., 80° 44' 59" W., 2 April 2007, *DCP 5120*.

Significance: This is the first report of this commonly cultivated cool season vegetable crop naturalizing in South Carolina (Townsend and Sorrow 1999).

Callitriche peploides Nuttall (PLANTAGINACEAE)—Beaufort County: Growing in bare patches in moist shaded lawn. In association with Stenotaphrum secundatum, Eremochloa ophiuroides, Stellaria media, Youngia japonica, Veronica peregrina var. peregrina, etc. 48 Sherman Dr. Coosaw Island. 32° 28' 41.0" N., 80° 34' 56.8" W., 24 March 2006, DCP 4415; Growing in bare patches in lawn in front of Grayco Building Center, Hwy 21, Lady's Island, 32° 27' 52.4" N., 80° 38' 46.8" W., 25 March 2006, DCP 4433.

Significance: This diminutive wetland species is listed as rare in South Carolina (McMillan, 2005). McMillan (2005) also reports it from Colleton and Jasper counties. Townsend and Sorrow (1999) include Hampton, Williamsburg and Georgetown as well. It occurs southward to Florida, westward to Texas and is disjunct in Tennessee and Arkansas. It also occurs in Mexico and Central America.

Callitriche terrestris Rafinesque emend. Torrey (PLANTAGINACEAE)—Beaufort County: Growing in moist lawn in front of Beaufort County Detention Center in association with Soliva sp., Hypochaeris brasiliensis, Digitaria sp., Eremochloa ophiuroides, Phyla nodiflora, etc. on southwest corner of Ribault Rd. and Boundary St. City of Beaufort. 32° 26' 14.7" N., 80° 41' 12.0" W., 15 May 2006, DCP 4504; In association with Bacopa monnieri, Ranunculus sp, Galium sp., Eleocharis sp., Juncus bufonius var. bufonius, Juncus dichotomus, etc. Ditch on Hwy 278 in front of Moss Creek Village near Bluffton, 32° 14' 08.7" N., 80° 48' 19.3" W., 22 May 2006, DCP 4543.

Significance: This diminutive wetland species is listed as rare in South Carolina (McMillan, 2005). These are the first reports for Beaufort County. It is also known from Spartanburg, York, Richland, Calhoun, Sumter Charleston and Georgetown counties (Townsend and Sorrow 1999, and McMillan 2005). It is widespread occurring in most states from Nova Scotia to Wisconsin

south to Florida and Texas. It also occurs in Mexico (USDA, ARS 2010, Weakley 2010). The above cited populations were in moist lawns. The reported habitat is small stream wetlands and seepage areas within forests (Weakley 2005).

Canna flaccida Salisbury (CANNACEAE)—Beaufort County: In association with Utricularia gibba, Persicaria sp., Pontederia cordata var. cordata, Salix caroliniana, Juncus sp., Triadica sebifera, etc. in freshwater wetland, northeast corner of Piney Ln. and Coosaw River Dr., Coosaw Island. 32° 28' 46" N., 80° 34' 48" W., 2 August 2005, DCP 3554; In association with Bolboschoenus robustus, Sabatia stellaris, Cyperus strigosus, Sesbania vesicaria, Eleocharis sp., etc. Retention pond at intersection of Sea Pines Dr. and South Beach Villas, Sea Pines Plantation, Hilton Head 32° 07' 04" N., 80° 49' 40" W., 27 November 2005, DCP 4042 with CCC and JLLR; In association with Juncus sp., Eleocharis sp., Ludwigia octovalvis, Mikania scandens, Ammannia latifolia, etc. retention pond on east side of Lady's Island Feed and Seed Store, Hwy 21, Lady's Island, 32° 24' 11.5" N., 80° 37' 36.7" W., 7 January 2006, DCP 4290 with JLLR; Growing in moist depressions under first set of powerlines west of Hwy 278 between Hwy 46 and Burnt Church Rd., Bluffton area in association with *Proserpinaca pectinata*, *Juncus* sp., Rhynchospora sp., Carex sp., Eleocharis sp., Canna flaccida, Galactia elliottii, Woodwardia virginica, Lachnanthes caroliniana, Sagittaria sp., Echinochloa sp., etc. 32° 13′ 56" N., 80° 52' 02" W., 19 July 2006, DCP 4849; In association with Setaria magna, Salix caroliniana, Canna flaccida, Teucrium canadense, Boehmeria cylindrica, etc. Depression wetland on east side of Land's End Rd. @ 220 meters north of Seaside Rd., St. Helena Island, 32° 18' 41" N., 80° 38' 17" W., 15 August 2006, DCP 4905; Large, apparently natural population with Acer sp., Nyssa biflora, Morella cerifera, Ilex glabra, Cyrilla racemiflora, Apios americana, etc. Along roadside at Port Royal Arboretum, Port Royal Plantation (a gated community off of Hwy. 278), Hilton Head Island, 32° 13' 25.0" N., 80° 41' 04.3" W., 25 August 2006, DCP 4930. Significance: This robust herbaceous wetland species is on the SC Rare List. It is reported from Jasper, Colleton, Charleston, Georgetown and Horry counties as well. It ranges south to Florida

and west to Texas and south into Central America (Weakley 2010).

Canna x generalis L. H. Bailey (CANNACEAE)—Beaufort County: Naturalized in association with Persicaria sp., Lythrum lanceolatum, etc. in a roadside ditch in front of undeveloped residential lot on the corner of Shell Pt. Rd. and Broad River Blvd., Shell Point community, 32° 22' 52" N., 80° 44' 27" W., 5 September 2005, DCP 3751.

Canna indica Linnaeus (CANNACEAE)—Beaufort County: 13 x 4 meter patch naturalized along drainage ditch in association with Dichanthelium scoparium, Sambucus canadensis, Robinia pseudoacacia, Ambrosia artemisiifolia, Dysphania ambrosioides, Rhexia sp., Campsis radicans, Melia azederach, etc., Stroup Lane, Dale area, 32° 32' 56" N., 80° 42'31" W., 5 June 2008, DCP 2098.

Significance: These collections clarify that both of these taxa have naturalized in South Carolina and particularly in Beaufort County. Townsend and Sorrow (1999) report C. x generalis for Barnwell, Clarendon, Florence, Dillon and Horry counties. However following Radford, Ahles and Bell (1968), Townsend and Sorrow (1999) they do not report *C. indica* for South Carolina. This is likely the result of C. indica being misidentified as C. x generalis instead of C. x

generalis being more widespread. Weakley (2010) and Kress and Prince (2000) both indicate *C. indica* has naturalized in South Carolina. Weakley does not provide citation.

C. indica is widespread in tropical and subtropical areas worldwide. It is believed to be native to the neotropics and introduced in the continental United States. It was formerly widely cultivated for its narrow red flowers. It was crossed with *C. glauca* Linnaeus to produce *C.* x *generalis* It is self-fertile and readily produces seed which are spread by gravity or water (Kress and Prince, 2000). I have observed it to be extremely resilient in the landscape. It naturalizes far more frequently than *C.* x *generalis* in Beaufort County.

Cannabis sativa Linnaeus (CANNABACEAE)—Beaufort County: Growing in planting bed next to walkway to Taco Bell, Junction of Hwy 170 and Hwy 280, Burton area, 32° 26' 22" N., 80° 42' 17" W., 5 March 2005, DCP 1686; One 5 meter tall seedling was found growing among rip-rap at boat ramp, Sam's Pt. Boat Landing, Lady's Island, 8 July 2005, DCP 3282 with TMS. Significance: This is the first report for this annual Asian species for the outer coastal plain of South Carolina (Weakley 2010). Townsend and Sorrow (1999) report it for Pickens, Laurens and Richland counties only. Weakley (2010) states "Though perhaps not truly naturalized or persistent, Cannabis is treated here since clandestine cultivated plots will be encountered fairly regularly by the field biologist, especially in fairly remote areas in the mountainous parts of our area". Neither of these collections were the result of cultivation. Both were apparently the result of seeds discarded while preparing Cannabis for recreational usage. The high visibility of both areas indicates that seedling Cannabis can be expected in any area urban, suburban or rural.

Cardamine debilis D. Don (BRASSICACEAE)—Beaufort County:

Weed in soil around containerized plants in retail garden center, Garden Gate Nursery, 2513 Boundary Street, Burton area, 32° 26' 27" N., 80° 42' 32" W., 11 September 2007, *DCP 5189*. *Significance*: This collection represents the first report for this Eurasian ruderal annual for South Carolina (Townsend and Sorrow 1999, Weakley 2010). It is a range extension northeastward of over 100 kilometers from the closest documented population in McIntosh County, Georgia (Jones and Coile, 1988, Liu, Peet and Weakley 2006, Weakley 2010). It has been collected in various widely scattered states (USDA, NRCS, 2007).

Carex basiantha Steudel (CYPERACEAE)—**Beaufort County:** Mesic calcium-rich oak/beech/magnolia forest with an extraordinary diversity of Carices and ephemeral herb species in Trillium Park a proposed development reserve within the Spring Island Community. 11 May1996, *PDM 1460*.

Significance: This calciphilic sedge is on the SC rare list (McMillan 2005). It is also known from Berkeley, Colleton, Dorchester and Hampton counties (McMillan 2005). Townsend and Sorrow (1999) include Florence and Orangeburg counties as well. It ranges from southeastern North Carolina south to northern peninsular Florida west to east Texas, and north to northwest Georgia, central Tennessee and central Arkansas (Weakley 2010).

Carex calcifugens Naczi (CYPERACEAE)—**Beaufort County:** Mesic calcium-rich oak/beech/magnolia forest with an extraordinary diversity of Carices and ephemeral herb

species, Spring Island, Trillium Park, a proposed development reserve within the Spring Island Community, 11 May 1996, *PDM 1462*.

Significance: This calciphilic sedge is listed as rare in South Carolina.(McMillan 2005) This is the first published report of it occurring in Beaufort County. It is not included in Townsend and Sorrow (1999). It was first described by Naczi, Bryson and Cochrane (2002) referencing populations in Aiken, Allendale, Barnwell, Charleston, Dorchester and Orangeburg counties. It ranges from eastern North Carolina to northern Florida, strictly on the coastal plain (Naczi, Bryson and Cochrane 2002).

Carex dasycarpa Muhlenberg (CYPERACEAE)—**Beaufort County:** Rich woods over calciumbased soil at White Point, Pinckney Island, 28 June 1996, *RDP 2684;* Deciduous forest over calcium, Spring Island. 24 May 1996, *RDP 2697* (CITA_CLEMS).

Significance: This sedge of sandy maritime woodlands and bluffs is listed as rare in South Carolina and Georgia (McMillan 2005, Weakley 2010). It is also known from Charleston, Hampton and Georgetown counties (Townsend and Sorrow 1999, McMillan 2005). It ranges south to Florida and west to Mississippi (Weakley 2010).

Carex flaccosperma Dewey (CYPERACEAE)—**Beaufort County:** Along the proposed New River Trail (a powerline easement running along the border of Sun City Hilton Head between the abandoned rail line and Hwy 170) Town of Bluffton, 32° 14' 34" N., 81° 00' 03" W., 27 March 2003, *DCP* 0021.

Significance: This collection provides clarification and confirmation about the distribution and abundance of this native mesic forest sedge in South Carolina and particularly in Beaufort County. Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) submerged *C. pigra* Naczi under *C. flaccosperma*. Although Townsend and Sorrow (1999) report *C. flaccosperma* 'sensu lato' for most counties of the state (but not Beaufort), it is not clear what counties can be attributed to *C. flaccosperma* 'sensu stricto' and which to *C. pigra*. Liu, Peet and Weakley (2006) do not provide support their distribution for *C. flaccosperma* 'sensu stricto' with vouchered specimens. Sweeney and Giannasi (2000) distinguish the two taxa. They report *C. flaccosperma* in Grady and Decatur counties in southwest Georgia and in various counties northwest of the Fall Line. Weakley (2010) that distribution and abundance need additional herbarium investigation.

Carex hyalinolepis Steudel (CYPERACEAE)—**Beaufort County:** Located in a mucky depression within small maritime forest island just north of Rose Island and just west of Daws Island. Plants are dominating this marshy area to the exclusion of almost all other plants. 13 May 1997, *JFT 1478*.

Significance: This wetland sedge is listed as rare in South Carolina and North Carolina (McMillan 2005, Weakley 2010). It has been extirpated from Pennsylvania (USDA, ARS 2010). It is also known from Berkeley, Charleston, Colleton, Darlington and Marion counties (McMillan 2005). Weakley (2010) gives its range as New Jersey, south to Florida, west to Texas, north in the interior to Kansas; disjunct around the Great Lakes in Michigan, Indiana and southern Ontario. USDA, ARS (2010) shows a broader and more continuous distribution.

Carex oblita Steudel (CYPERACEAE)—**Beaufort County**: In moist areas along the southern section of the proposed New River Trail (utility line easement between Hwy 46 and the New River, on site of abandoned railroad) Town of Bluffton 32° 13' 59.1" N., 81° 00' 24.9" W., 23 March 2003, *DCP10*.

Significance: This is the first report for this native sedge from the southern maritime strand. Additional documentation for the species as a distinct taxon is provided for the state. As it was submerged taxonomically under *C. venusta* Dewey in Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999), county distribution is not unavailable (Weakley 2010). *C. venusta* has been collected no closer than Allendale and Georgetown counties (Townsend and Sorrow 1999). Liu, Peet and Weakley (2006) report these same collections. They do not report any unambiguous collections for *C. oblita* from South Carolina or Georgia. Sweeney and Giannasi (2000) do not include *C. oblita* as a distinct species nor do they report *C. venusta* from the maritime counties.

Carex pigra Naczi (CYPERACEAE)—Beaufort County: In association with Quercus phellos, Sisyrinchium atlanticum, Sisyrinchium angustifolium, Allium canadense var. canadense, Phlox carolina ssp. angusta, Trachelospermum difforme, Mitchella repens, Coreopsis sp., Morus rubra, Ulmus alata, Pteridium aquilinum var. pseudocaudatum, Hexastylis arifolia, etc. on edge of Castle Hall Rd. between Yemassee Heights Housing Project and Sheldon Church Rd. 32° 40' 51" N., 80° 50' 33" W., 9 May 2005, DCP 1823.

Significance: This is the first report for Beaufort County and the fourth reported county for South Carolina for this native mesic forest sedge. It was previously known from Berkeley, Newberry and Barnwell counties only (Liu, Peet and Weakley 2006). Sweeney and Giannasi (2000) do not report it from the adjacent counties of Georgia but from one county each in the southwest and northwest corners of that state. Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) did not include this species as separate taxon but submerged it under *C. flaccosperma* Dewey (Weakley 2010). Distribution and abundance need additional herbarium investigation (Weakley 2010). This collection assists in that process.

Carthamus tinctorius Linnaeus (ASTERACEAE)—Beaufort County: A few plants observed growing on an abandoned homesite with Carya illinoinensis, Celtis laevigata, Prunus caroliniana, Sabal palmetto, Cinnamomum camphora, Gelsemium sempervirens, Hedera helix, Passiflora lutea, Ligustrum lucidum, etc. NE. Corner of Union St. and Baggett St. Town of Beaufort, 15 June 2005, DCP 2175.

Significance: This is the first report of safflower escaping in the southeastern United States (Keil 2006, Liu, Peet and Weakley 2006, USDA, NRCS 2010). The closest documented reports to the north and west are in Ohio and New Mexico respectively (Keil 2006, USDA, NRCS 2010). Native to the Mediterranean it has been cultivated successfully as an oil seed, vegetable dye, birdseed and as an ornamental since prehistoric times (Keil 2006). It has been a successful crop in every state west of the 100th meridian. It is principally grown in California and Arizona (Keil 2006). After collecting and identifying this specimen, Weakley (2010) added *C. creticus* to the flora. Dixie Damrel (pers. comm. 2010) confirmed the identification of this specimen. Safflower is not cultivated commercially in the southeast. As it reportedly does not attract squirrels, it is commonly used in birdseed. This population is probably derived from birdseed.

Castanea mollissima Blume (FAGACEAE)—Beaufort County: Mature tree growing in residential yard, apparently spontaneous, southeast intersection of Bible Camp Rd. and Hwy 21, St. Helena Island. 32° 24′ 00" N., 80° 33′ 21" W., 27 June 2005, DCP 2256; Mature tree in woodlands at Fort Fremont. Near intersection of Land's End Rd. and Seaside Rd. Land's End Community, St. Helena Island, 32° 18′ 20" N., 80° 38′ 35" W., 30 July 2006, DCP 4875.

Significance: This is the first report of this Asiatic tree naturalizing in South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, Weakley, 2008). These populations are more than 75 kilometers northeast and 250 kilometers southwest of the closest previous documentation in Bulloch County, Georgia and Scotland County, North Carolina respectively (Liu, Peet and Weakley 2006).

Catharanthus roseus (Linnaeus) G. Don (APOCYNACEAE)—Beaufort County: Naturalized. In association with Passiflora lutea, Paspalum notatum, Liriope muscari, Talinum paniculatum, Eleusine indica, Digitaria sp., Desmodium tortuosum, Phyllanthus tenellus, Sida rhombifolia, Callicarpa americana, Andropogon sp., etc., construction site, east of Greenlawn Dr., City of Beaufort, 32° 26′ 36″ N., 80° 41′ 22″ W., 15 October 2005, DCP 3941.

Significance: This is the first documentation of this Madagascan bedding plant naturalizing in Beaufort County and the second known county for South Carolina (Weakley 2010). It was previously reported for Charleston County (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, Weakley 2010).

Celosia argentea Linnaeus (AMARANTHACEAE)—**Beaufort County:** Scattered individuals spreading onto vacant lot adjacent to plant nursery. Growing in association with *Quercus hemisphaerica, Persea borbonia, Osmanthus americanus, Morus rubra, Pueraria montana* var. *lobata, Prunus caroliniana, etc.* 2809 Smilax Avenue, Town of Port Royal 32° 23' 12" N., 80° 42' 06" W., 20 November 2006, *DCP 5051*.

Significance: This collection provides documentation that this Asian native has naturalized in South Carolina and particularly in Beaufort County (Robertson 2003). Robertson reports it from South Carolina but does not include North Carolina. No other source searched includes it for South Carolina (Radford, Ahles and Bell 1968, Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, USDA, NRCS 2010, Weakley 2010). All but Townsend and Sorrow (1999) report it for North Carolina. This is the wild progenitor of *C. cristata* Linnaeus.

Cenchrus brownii Roemer & J. A. Schultes (POACEAE)—Beaufort County: An abundant weed in sandy, circumneurtal, unlimed, organic vegetable garden, it was first observed here in 2008. Associated non-cultivated taxa include Pinus taeda, Ruellia carolinensis, Zanthoxylum clava-herculis, Eragrostis spectabilis, Talinum paniculatum, Digitaria sp., Crocanthemum carolinianum, Cynodon dactylon, etc.. Garden site had been fallowed from row crop and/or grazing in the late 1960's. Dense naturally regenerated stands of Pinus taeda were cleared and burned off between 2004 and 2007. Composted horse manure from stables on St. Helena Island and Coosaw Island was incorporated extensively in 2007 and 2008. C. brownii were probably introduced with manure as they do not occur in adjacent unmanured areas. It is possible however

that it was present under former cultivation and released from the seedbank by burning and tilling, 48 Sherman Dr., Coosaw Island. 32° 28' 41" N., 80° 34' 58" W. 4 July 2008. *DCP5239*. *Significance:* This collection represents the first documentation for this taxon from South Carolina. It represents a northeastern range extension of over 330 kilometers from the closest extant population in Thomas County, Georgia (Stieber and Wipff 2003). It was collected once from North Carolina in 1885 (Hitchcock and Chase 1959, USDA, NRCS 2010, Weakley 2010). (Weakley 2010) did not give the location for this collection. Radford, Ahles and Bell (1968) did not include it.

C. brownii is a neotropical grass which is common in the Caribbean, Central America and the northern coast of South America. It occurs infrequently in sandy waste places and forest borders in Georgia, Florida and Alabama and as a disjunct in Texas (Stieber and Wipff 2003). Stieber and Wipff (2003) consider it native in Georgia, Florida and Alabama but possibly introduced in Texas. Hitchcock and Chase (1959) consider it adventive in North Carolina.

Whether *C. brownii* is native to Beaufort County or adventive via agriculture is unclear. Extensive gaps are noted in the currently known native population range. Field botanists are apt to ignore *Cenchrus* because they are weedy and unpleasant to work with. Burning and tillage may have exposed seeds buried before the land was fallowed and became too shady for annual grasses. It is also possible that it was recently introduced via horse manure. Feed and horses are commonly transported from Georgia or Florida where *C. brownii* was previously known to occur

All but two *Cenchrus* in the southeastern United States have spiny involucres which penetrate the flesh when handled making them unpleasant to work with. *C. brownii* and *C. myosuroides* Kunth do not. In *C. myosuroides* the lobes of the involucre are united only at the base and the plant is perennial. *C. brownii* is an annual. Its involucre lobes are united above the base but interlock at the tip (Hitchcock and Chase 1959).

Centaurea cyanus Linnaeus (ASTERACEAE)—**Beaufort County:** Growing out of opening in concrete for stop sign on traffic island at intersection of Hwy 278 and Hwy 170, 32° 17' 40.7" N., 80° 56' 12.0" W., 29 May 2006, *DCP 4612 with TMS*.

Significance: Though abundant inland, this is the first documentation of this ruderal Mediterranean European species from the southern maritime strand counties of South Carolina (Weakley 2010). The closest reported populations to the northwest are in Allendale County and to the northeast are in Horry County (Townsend and Sorrow 1999).

Cerastium brachypodum (Engelmann ex A. Gray) B. L. Robinson (CARYOPHYLLACEAE)—**Beaufort County:** Growing with *Medicago lupulina, Senecio vulgaris, Hypochaeris glabra, Descurainia pinnata, Poa annua, etc.* in a narrow strip of closely-mown lawn in front of 2524 Trask Parkway (Hwy. 21), City of Beaufort, 32° 26' 23.1" N., 80° 42' 34.4" W., 10 February 2006, *DCP 4326*.

Significance: This diminutive winter annual is possibly an introduction from farther west (Weakley 2010). This is the first report of it occurring in the coastal plain of South Carolina. The closest previously reported population lies more than 190 kilometers to the northwest in Laurens County (Townsend and Sorrow 1999).

Cerastium pumilum W. Curtis (CARYOPHYLLACEAE)—**Beaufort County:** Growing in dry sandy area next to Food Lion grocery store, Lady's Island, 32° 26′ 03.7" N., 80° 38′ 29.6" W., 26 March 2006, *DCP 4441*.

Significance: This rare European winter annual in South Carolina has previously been reported from Laurens County only (Townsend and Sorrow 1999, Weakley 2010). This is the second reported county from the state and the first from the coastal plain. It is more 190 kilometers from the previously reported site.

Chamaecrista fasciculata (Michaux) Greene var. brachiata (Pollard) Isely (FABACEAE)—Beaufort County: Xeric roadside with Aureolaria laevigata, Pityopsis graminifolia var. tenuifolia,, Bidens bipinnata, Trichostema dichotomum, Sporobolus clandestinus, etc., corner of Short's Landing Rd. and Sunrise Blvd., Lady's Island, 32° 25' 19" N., 80° 38' 15" W., 5 Sept 2005, DCP3797.

Significance: This collection represents the first documentation of this native annual legume for South Carolina. This taxon should be evaluated for inclusion on South Carolina Department of Natural Resources Rare, Threatened and Endangered Species List. Townsend and Sorrow (1999) report *C. fasciculata* for almost every county in the state including Beaufort County. They do not distinguish infraspecific taxa for this native species however. Weakley (2006) only includes the typical variety in South Carolina. He gives the distribution of var. *brachiata* as East Georgia south to southern Florida and west to the western panhandle of Florida.

C. fasciculata var. *brachiata* can be distinguished from the typical variety by larger (1.5-2.5 mm) undepressed petiolar glands versus a smaller (<1.5 mm) depressed petiolar glands, larger pods (6-10 cm. long) vs. (4- 6 cm. long), glabrous to glabrescent surface versus a usually pubescent surface. Growing up to 24 dm. tall, *C. fasciculata* var. *brachiata* is much larger than the typic variety which grows no more than 10 dm. tall (Weakley 2010).

Chamaesyce glyptosperma (Engelmann) Small (EUPHORBIACEAE)—Beaufort County: Sandy disturbed area adjacent to the parking lot of Tire Kingdom, 118 Parris Island Gateway, Burton area, 32° 25' 55" N., 80° 43' 30" W., 1 September 2007, DCP 5174.

Significance: This is the first report for this ruderal annual in South Carolina (Townsend and Sorrow 2010, Weakley 2010). Thought widespread in New England, north of the Ohio River and west of the Mississippi, it is largely absent from the southeast (USDA, ARS 2010). The closest populations are more than 530 kilometers to the northwest in Bedford County, Tennessee (Chester, Wofford and Kral 1997, Liu, Peet and Weakley 2006). The next closest are to the southwest in coastal Louisiana and to the north in New York (Liu, Peet and Weakley 2006, USDA, NRCS 2010). It is native to the United States. Whether it is native in South Carolina or adventive from further north or west is not clear (USDA, NRCS, 2007).

Chamaesyce hyssopifolia (Linnaeus) Small (EUPHORBIACEAE)—Beaufort County: Associated with *Eleusine indica, Amaranthus blitum, etc.* Weed in gravel parking area of residential property on Pigeon Point Rd. Town of Beaufort, 32° 26' 55.5" N., 80° 40' 16.7" W., 28 June 2005, *DCP 2279;* Weed in flower bed at the corner of Barnwell Bluff Rd. and Pigeon Point Rd. City of Beaufort, 32° 26' 21.8" N., 80° 40' 12.4" W., 9 July 2005, *DCP 3284;* In association with *Atriplex pentandra, Rosa laevigata, Zanthoxylum clava-herculis, Sesuvium*

portulacastrum, Pseudognaphalium obtusifolium, Yucca aloifolia, Lantana camara, Uniola paniculata, Heterotheca latifolia, Sporobolus clandestinus, Eragrostis lugens, Chenopodium album, etc., at The Sands (a beach-like area created in part from dredge-spoil) in the Town of Port Royal. 32° 22' 17" N., 80° 41' 13" W., 17 October 2005, DCP 3964; In association with Solanum ptychanthum, Euphorbia graminea, Emilia sonchifolia var. sonchifolia, Oldenlandia corymbosa, Chamaesyce ophthalmica, Lindernia crustacea, etc. at former site of Palms on the Parkway Nursery, Food Lion Shopping Center, Hwy 21, Lady's Island 32° 24' 45" N., 80° 38' 49" W., 19 October 2005, DCP 3972.

Chamaesyce maculata (Linnaeus) Small (EUPHORBIACEAE)—Beaufort County: Weed in gravel parking area of residential property on Pigeon Point Rd., associated with Eleusine indica, Chamaesyce hyssopifolia, etc 32° 26′ 55.5" N., 80° 40′ 16.7" W., 28 June 2005, DCP 2278.

Significance: These collections establish that these two native ruderal species occur in South Carolina and particularly in Beaufort County. Distribution for these taxa is confused because of taxonomic confusion between various members of this genus. Weakley (2010) states that C. hyssopifolia has been confused with C. nutans Lagasca y Segura. Weakley (2010) further reports that what he treats as C. nutans was referred to as Euphorbia maculata Linnaeus in Radford, Ahles and Bell (1968). Radford, Ahles and Bell (1968) treated C. hyssopifolia and C. hypericifolia (Linnaeus) Millspaugh as synonymous with E. maculata. What is treated as C. maculata in Weakley was referred to as Euphorbia supina Rafinesque in Radford, Ahles and Bell (1968). When I labeled the specimens and began writing this section (2004-2007), Weakley treated these taxa as Chamaesyce. The newest treatment includes them all as Euphorbia.

Townsend and Sorrow (1999) report C. maculata and C. hyssopifolia as widespread in South Carolina. However, it is not clear to which taxa these reports actually refer.

Chamaesyce ophthalmica (Persoon) Burch (EUPHORBIACEAE)—**Beaufort County:** Growing in crack in pavement at Smokers' Express Gas Station at intersection of Hwy 170 and Hwy 280, Burton area, 32° 25' 33." N., 80° 40' 39" W., 9 July 2005, *DCP3288;* In association with *Solanum ptychanthum, Euphorbia graminea, Emilia sonchifolia* var. *sonchifolia, Oldenlandia corymbosa, Chamaesyce hyssopifolia, Lindernia crustacea, etc.* at former site of Palms on the Parkway Nursery, Food Lion Shopping Center, Hwy 21, Lady's Island 32° 24' 45" N., 80° 38' 49" W., 19 October 2005, *DCP 3971*.

Significance: This is the first report for this prostrate ruderal species (USDA, NRCS 2010, Weakley 2010) for South Carolina. Small (1933) included it (as *C. gemella* (Lagasca) Small from peninsular Florida, the Keys, the West Indies, Central America and South America. It is widespread in Florida but uncommon elsewhere in North America (Weakley 2010). It is also reported from Georgia, Louisiana and Pennsylvania (USDA, NRCS 2010). Though cited from Georgia by Duncan and Kartesz (1981) they do not provide documentation for the inclusion. Jones and Coile (1988) and Carter, Baker and Morris (2009) do not include it for that state. Since Carter, Baker and Morris (2009) attempted to update the occurrence of all dicots not included in Jones and Coile (1988), it appears that Duncan and Kartesz (1981) may have been unfounded. Therefore the closest documented population appears to be more than 180 kilometers southwest of here in Duval County, Florida (Liu, Peet and Weakley 2006, Wunderlin and Hansen 2006). Based on the earlier drafts of Weakley, I originally identified *DCP 3288* as *C. hirta* (Linnaeus)

Millspaugh. Collections of *C. hirta* should be reexamined to determine if *C. ophthalmica* has been collected elsewhere.

Chamaesyce prostrata (Aiton) Small (EUPHORBIACEAE)—**Beaufort County:** Xeric, sandy roadside, west side of Dolly Lane at corner of Friendship Lane, Coosaw Island, 32° 28' 23.3" N., 80° 35' 30.2" W.,21 October 2007, *DCP5216*.

Significance: This is the first report for this creeping ruderal species from the Carolinas (Townsend and Sorrow 1999, Liu, Peet and Weakley, 2006 USDA, NRCS, 2010, Weakley, 2010). This population lies more than 325 km. from the closest population to the west in Lamar County, Georgia; more than 350 km. from the closest population to the southwest in Taylor County, Florida; and more than 500 km. from the closest population to the northwest in Dickenson County, Virginia. Weakley (2010) states that "only three species of Chamaesyce are definitely native: C. bombensis, C. cordifolia and C. polygonifolia." C. humistrata is "apparently adventive from further west, but possibly native in some areas." Small (1933) listed the distribution as west of the Blue Ridge. This could be a confirmation that the Eastern populations are in fact adventives. However, Chamaesyce spp. are often ignored or overlooked due to their diminutive and weedy nature. This is evidenced by the addition of three new members of this genus to the flora of South Carolina through this thesis. The habitat for this population was not consistent with Weakley's (2010) habitat description "exposed river shores, gravel bars, disturbed areas; but is consistent with Small's (1933) "dry or sandy soil, various provinces."

Chamaesyce serpens (Kunth) Small (EUPHORBIACEAE)—Beaufort County: Gypsum gravel parking lot of Port Royal Dry Stack Marina, State Port of Port Royal Property, Town of Port Royal, 32° 22' 22" N., 80° 41' 15" W., 19 August 2006, DCP 4919 with JLLR. Significance: This is the first report for this prostrate ruderal plant from South Carolina (Townsend and Sorrow 1999, Weakley 2010). It lies more than 120 kilometers northeast and 230 kilometers southwest of the closest documented populations in Glynn County, Georgia and Brunswick County, North Carolina respectively (Liu, Peet and Weakley 2010). It is apparently native (Wunderlin and Hansen 2008, USDA, ARS 2010, Weakley 2010).

Chasmanthium sessiliflorum (Poiret) Yates var. *1* (POACEAE)—**Beaufort County:** Growing in rich moist forest with *Quercus michauxii, Carya sp.*, and *Fraxinus sp.*, pre-development survey for Buckwalter Townhomes, East side of Buckwalter Pkwy., Bluffton S.C. 32° 16' 15" N., 80° 54' 36" W., 1 November 2004, *DCP 1338 with FCS*.

County: Native. Infrequent in calcareous areas: Growing with *Quercus michauxii*, and *Gonolobus sp.*, in *rich* moist forest, pre-development survey for Buckwalter Townhomes, East side of Buckwalter Pkwy., Bluffton S.C. 32° 16′ 16.8" N., 80° 54′ 43.7" W., 1 November 2004, *DCP 1345* with *FCS*; In association with *Aureolaria flava* var. *flava*, *Conopholis americana*, *Amelanchier arborea* var. *arborea*, *Euonymus americanus*, *Dioscorea sp.*, *Pinus glabra*, *etc.*. Along Old Sheldon Church Rd. near Yemassee, 32° 49′ 05" N., 80° 48′ 24" W., 26 August 2005, *DCP 3731* with *JLLR*; In association with *Cuthbertia rosea*, *Phytolacca americana*, *Setaria sp.*, *Conopholis americana*, *Carya glabra*, *Sabal minor*, *Erythrina herbacea*, *Tripsacum dactyloides*, *Nyssa sp.*, *Aesculus pavia*, *Pinus glabra*, *etc.* along Old Sheldon Church Rd. Near Yemassee,

32° 36' 42" N., 80° 46' 19" W., 26 August 2005, *DCP 3738* with *JLLR*,; In association with *Mikania cordifolia, Trillium maculatum, Ilex vomitoria, Euonymus americanus, Callicarpa americana, Amphicarpaea bracteata* var. *comosa, Aesculus pavia*, etc. near ruins of Old Sheldon Church, Old Sheldon Church Rd., Sheldon, S.C., 32° 37' 08" N., 80° 46' 52" W., 26 August 2005, *DCP 3739* with *JLLR*.

Significance: These collections establish that both the typic variety and the new proposed variety of this native bunch grass occur in Beaufort County (Weakley 2010). Townsend and Sorrow (1999) do not separate infraspecific taxa. They report the species for most counties including Beaufort.

Chenopodium standleyanum Aellen (CHENOPODIACEAE)—Beaufort County: In association with *Pityopsis graminifolia* var. *latifolia, Trichostema dichotomum, Digitaria villosa, Suaeda linearis, Chrysopsis trichophylla, Liatris elegans* var. *elegans, Aureolaria pectinata, Solidago odora* var. *odora, Centrosema virginianum, Quercus hemisphaerica, Quercus virginiana, Ilex vomitoria, Sideroxylon tenax, etc.,* Horsehole Park, Cuthbert St., City of Beaufort, 32° 26′ 51" N., 80° 40′ 49" W., 3 October 2005, *DCP 3929*.

Significance: Townsend and Sorrow (1999) report this native ruderal species for Clarendon and York counties only (Weakley 2010). This is the first report from the maritime strand counties and from the southwestern half of the state.

Chloris elata Desvaux (POACEAE)—Beaufort County: One robust plant with more than 50 culms was observed. Many culms are more than 1.5 meters tall. Some stems are decumbent and rooting at the nodes. In association with *Pinus elliottii, Pluchea sp., Axonopus fissifolius*, Eupatorium capillifolium, Conyza bonariensis, Paspalum urvillei, Andropogon tenuispatheus, Cynodon dactylon, Baccharis halimifolia, Morella cerifera, Panicum virgatum var. virgatum, Sabal palmetto, Ilex vomitoria, etc. on edge of old logging/ pasture access road adjacent to brackish marsh, in severely degraded *Pinus elliottii* flatwoods, which was managed for cattle in the 1960's and 1970's. About 30 meters west of Coosaw River Dr. along gated logging/pasture access road, Coosaw Island, 32° 28' 36" N., 80° 34' 29" W., 2 November 2008, DCP 5261. Significance: This is the first report of this neotropical bunch grass for South Carolina (Townsend and Sorrow 1999, Barkworth 2003, Weakley 2010). This collection represents range extension northward of over 730 kilometers from the closest documented population in Dade County, Florida (Wunderlin and Hansen, 2010). Citing state floral atlas data, Barkworth (2003) also reports it for Flagler County. This appears spurious as, Wunderlin and Hansen (2008) do not report it there. USDA, NRCS (2010) citing Lowe (1921) reports it for Mississippi as well. Lowe (1921), however, reported Chloris barbata (Linnaeus) Nash from Starkville, the site of an agricultural station. The two species have been confused in the past (Wunderlin and Hansen 2008) and the identity of the Mississippi population remains in doubt. It appears however, that this population is no longer extant as Barkworth (2003) does not report any Chloris for Mississippi.

(USDA, NRCS 2010) indicates *C. elata* is introduced in the United States. Barkworth (2003) and Wunderlin and Hansen (2008) consider it native in Florida. It extends southward to the Caribbean, Peru and Argentina (Barkworth 2003). Many species of *Chloris* provide good forage

(Barkworth 2003). The Beaufort County population is probably a result of intentional or accidental introduction with cattle.

Chlorophytum comosum (Thunberg) Jaques (ANTHERICACEAE)—Beaufort County: Several plants observed over a 9 square meter area on a vacant lot near road bed of abandoned dirt road or drainage swale. Area is "bush-hogged" several times a year. No evidence of former homes seen. No other homes occur close by. In association with Bignonia capreolata, Persea borbonia, Parthenocissus quinquefolia, Ilex vomitoria, Campsis radicans, Erythrina herbacea, Quercus nigra, Quercus virginiana, Wisteria sinensis, Aralia spinosa, Morus alba, Passiflora lutea, Cocculus carolinus, etc., William Dr., Lady's Island, 32° 24' 58.4" N., 80° 38' 54.3" W., 6 June 2006, DCP 4641.

Significance: This is the third reported state occurrence for this tropical and southern African houseplant in the continental United States and a northeastern range extension of undeterminable distance (USDA, ARS 2010). It has previously been reported from Georgia and Florida. USDA, NRCS (2010) Cites "Moore, Jennifer A. pers. comm." for its occurrence in Georgia. The location is not known since other sources do not include it (Jones and Coile 1988, Sweeney and Giannasi 2000, Liu, Peet and Weakley 2006). Wunderlin and Hansen (2008) report no closer than Hillsborough and Indian River counties. Hanging baskets of *Chlorophytum comosum* are commonly set outside in the warm months. Plantlets fall to the ground and spread in residential gardens. What is remarkable about the South Carolina population is that it has existed for many years without any human assistance.

Chrysopsis trichophylla (Nuttall) Elliott (ASTERACEAE)—Beaufort County: In association with *Pityopsis graminifolia* var. *latifolia, Trichostema dichotomum, Digitaria villosa, Suaeda linearis, Liatris elegans* var. *elegans, Aureolaria pectinata, Chenopodium standleyanum, Solidago odora* var. *odora, Centrosema virginianum, Quercus hemisphaerica, Quercus virginiana, Ilex vomitoria, Sideroxylon tenax, etc.* in Horsehole Park, Cuthbert St., City of Beaufort, 32° 26' 51" N., 80° 40' 49" W., 3 October 2005, *DCP 3926. Significance:* These collections provide clarification that this native composite as circumscribed by Weakley (2010) occurs in South Carolina and particularly in Beaufort County. Radford, Ahles and Bell (1968) recorded it from Colleton, Hampton and Orangeburg counties as *Heterotheca trichophylla* (Nuttall) Shinners. Townsend and Sorrow (1999) have apparently submerged it into a broad *C. gossypina* (Michaux) Elliott and do not include *C. trichophylla* as a separate taxon. Townsend and Sorrow (1999) report *C. gossypina* for most counties of the coastal plain and lower piedmont but they do not include Beaufort.

Cicuta mexicana Coulter & Rose (APIACEAE)—Beaufort County: In association with Gaura angustifolia, Scleria muhlenbergii, Liatris sp., Pityopsis sp., Lechea sp., Asclepias sp., Crocanthemum sp., Sideroxylon tenax, etc., powerline easement at SW corner of Little Capers Rd. at Holly Hall Rd., Lady's Island, 32° 26' 39" N., 80° 37' 36" W., 17 July 2005, DCP 3380. Significance: This collection adds a third county to the known distribution for this robust wetland plant. It was previously known from Georgetown and Charleston counties only (Townsend and Sorrow1999).

Citrus x aurantium Linnaeus (pro sp.) (RUTACEAE)—Beaufort County: One 6' tall volunteer plant growing in un-landscaped portion of residential garden, in association with Quercus virginiana, Callicarpa americana, Carya sp., Serenoa repens, Melanthera nivea, Piptochaetium avenaceum, Bignonia repens, Ilex vomitoria, Prunus caroliniana, etc. 55 Peninsula Dr., Moss Creek Plantation (a gated community) near Bluffton, 32° 14' 36" N., 80° 48' 04" W., 21 March 2005, DCP 1705.

Significance: This is the first report for *Citrus sinensis* naturalizing in South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley, 2006, USDA, NRCS, 2010, Weakley, 2010). *Citrus* are commonly grown as yard trees in Beaufort County. Their seeds are dispersed by humans and animals eating the fruit. Trees also volunteer where commercially purchased fruit are eaten or discarded. It is not uncommon to find volunteer *Citrus* in the county.

Clematis catesbyana Pursh (RANUNCULACEAE)—Beaufort County: Climbing vine; very abundant in sunny disturbed areas and roadsides through abandoned fields; central Callawassie Island, 13 October 1981, CAS 2036 with BH; Along road at Shell Point, Pinckney Island, 28 June 1996, RDP 2696; Growing on vacant lot formerly occupied by Hendrix Furniture Store on the southwest corner of the intersection of North St. and Charles St. with Bidens laevis, Arundinaria sp., Sabal palmetto, Juniperus silicicola, Salvia coccinea, etc., City of Beaufort. 32º 26' 01.8" N., 80° 40' 24.1" W., 9 January 2006, DCP 4300; Climbing in shrubs on east side of roadway leading to boat landing in association with *Quercus falcata*, *Juglans nigra*, *Ilex vomitoria*, Ligustrum lucidum, Cocculus carolinus, Hedera colchica, Aspidistra elatior, Smallanthus uvedalius, Piptochaetium avenaceum, Ipomoea macrorhiza, etc., Bluffton Oyster Factory Park, Town of Bluffton. 32° 13' 56" N., N., 80° 52' 02" W., 19 July 2006, DCP 4832; Growing with Pueraria montana, Ailanthus altissima, Lantana sp., Bidens pilosa, Euphorbia cyathophora, Malvaviscus drummondii, Nandina domestica, Prunus caroliniana, Quercus hemisphaerica, Celtis laevigata, etc. 814 Charles St. (SW corner of Charles St. and Washington St.) 32° 26' 12.4" N., 80° 40' 20.3" W., 22 August 2006, *DCP 4926*; Growing in association with *Ilex* vomitoria, Passiflora lutea, Rhus copallinum, Solidago odora, Callicarpa americana, Smilax pumila, Verbesina virginica, Vaccinium arboreum, Carya glabra var. megacarpa, Clitoria mariana, Vitis rotundifolia, Vitis rotundifolia, etc. In natural vegetation behind a woodshop near the edge of salt marsh at 90 Gannet Point Rd., Coosaw Island in the vicinity of 32° 28' 28.0" N., 80° 35' 45.4" W., 22 August 2006, DCP 5037; Abundant in thicket on undeveloped parcel along roadside adjacent to 27 Amelia Circle. In association with Ligustrum lucidum, Melia azederach, Juniperus virginiana var. silicicola, Salvia lyrata, Sageretia minutiflora, Prunus caroliniana, Prunus angustifolia, Verbascum thapsus, Cornus asperifolia, Ilex vomitoria, Quercus virginiana, Ouercus hemisphaerica, etc. on Hilton Head Island, 32° 13' 22" N., 80° 45' 32" W., 9 January 2007, DCP 5091.

Significance: This native calciphilic vine is listed as rare in South Carolina, North Carolina and Virginia (McMillan 2005). McMillan (2005) reports it from Beaufort and Colleton County. Townsend and Sorrow (1999) excludes Colleton but includes Charleston and Georgetown counties. It ranges in the coastal plain from southeastern Virginia south to Florida and west to Louisiana. It also occurs inland in calcareous areas of Tennessee, Arkansas, Missouri, and the mountains of North Carolina and Virginia (USDA, ARS 2010). Many of the observed sites were associated with anthropomorphic calcium deposits, some of them of recent origin.

Clinopodium brownei (Swartz) Kuntze (LAMIACEAE)—Beaufort County: Growing in pond and in moist soil along edge in association with Nuphar advena, Pontederia cordata, Sacciolepis striata, Hydrocotyle sps., Murdannia sp., Onoclea sensibilis, Boehmeria cylindrica, Alternanthera philoxeroides, Salvinia minima, etc. on Spring Island 32° 19' 52" N., 80° 48' 60" W., 9 August 2005, DCP 3608.

Significance: This is the first report for this perennial mint from South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, Weakley 2010). It represents a northeastern range extension of 180 kilometers from the closest documented population in Duval County, Florida (Wunderlin and Hansen, 2008). The closest reports in Georgia (Thomas County) are more than 290 kilometers to the southwest (Jones and Coile 1988). It is also known from Mississippi, Louisiana and Texas (USDA, NRCS 2010). A native in Georgia, it is on the Georgia Special Concern List and should be considered for inclusion on the South Carolina Rare, Threatened and Endangered Species List. However several years prior to this collection, many of the ponds on Spring Island were landscaped to appear "natural" with material provided by Florida based companies. It is possible that this population is the result of intentional or accidental introduction from farther south. More research is needed to determine whether this species is native in South Carolina.

Clinopodium georgianum Harper (LAMIACEAE)—Beaufort County: Dry oak-pine woods at boardwalk area, Hunting Island, about 15 miles east of the town of Beaufort, S.C., 14 October 1977, BD 4; Possibly naturalized from wildflower planting >15 years ago in association with Liatris spicata var. spicata, Carphephorus odoratissimus, Pityopsis sp. Crocanthemum corymbosum, Penstemon australis, Panicum hemitomon, Solidago odora var. odora, etc. along margin of pond created by excavating depression wetland surrounded by fire-suppressed pinesaw palmetto flatwoods in Audubon Newhall Preserve, Bay Pines Rd. Hilton Head 32° 09' 45" N., 80° 46' 23" W., 27 November 2005, DCP 4049.

Significance: These are the first reports of this woody mint from Beaufort County. It largely occurs in the inner coastal plain and piedmont. The only other reports from the outer coastal plain are from Clarendon and Jasper counties (Townsend and Sorrow 1999). Beanie Newhall who started the Newhall Preserve brought in seeds and divisions of some plants from elsewhere in the county but also from other parts of South Carolina and even North Georgia. She did not leave a record of her introductions. Therefore although the population represented by DCP 4049 is thriving and appears natural, it has always been unclear whether it was native to the site or even to the county. The population represented by BD 4 indicates that it is native to the county. I have never observed C. georgianum on Hunting Island, and the habitat doesn't seem appropriate. This was a plant taxonomy class student collection. The students sometimes visited the Parish Church of Prince William Parish which appears to be a more suitable location for the species. Perhaps it was collected there instead and confused on the label.

Clerodendrum bungei Steudel (LAMIACEAE)—Beaufort County: Naturalized in rubble and sand of abandoned homesite. House razed between 1-5 years ago. In association with Lagerstroemia indica, Malvaviscus drummondii, Nothoscordum gracile, Tradescantia ohiensis, Sisyrinchium rosulatum, Phytolacca americana, Solidago altissima, Morus alba, Wisteria

sinensis, and Passiflora lutea, NW corner of intersection of Boundary St. and Lovejoy St. Beaufort, S.C. 32° 26' 26" N., 80° 41' 09" W., 4 May 2005, *DCP 1785 with JLLR;* Naturalized from former landscape planting. In association with, *Lantana urticoides, Sporobolus indicus, Callicarpa americana, Stenotaphrum secundatum, Paspalum notatum, Sida rhombifolia, Salvia lyrata, etc.*, Honey Horn Plantation, Hilton Head Island, 32° 12' 41" N., 80° 44' 22" W., 30 July 2005, *DCP 3513 with CC and JLLR*.

Significance: This the second report for this eastern Asian ornamental shrub in South Carolina and the first for the coastal plain. Hill and Horn (1997) first reported it from Spartanburg County as frequently planted in upstate South Carolina. Townsend and Sorrow (1999) do not include it. Due to its foul smelling leaves and rapid vegetative spread, it is rarely cultivated anymore in Beaufort County. Abandoned plantings persist and spread aggressively. The author observed but did not collect from extensively naturalized populations in moist ravines along Pigeon Point Road in the City of Beaufort and along Alston Road on Lady's Island.

Coccinia grandis (Linnaeus) Voigt (CUCURBITACEAE)—Beaufort County: Growing out of untended concrete planter in front of Martini's Nightclub spreading vegetatively several meters under concrete from vegetable planting at the Atlantic Inn next door. Plant is apparently pistillate producing parthenocarpic fruit, 2247 Boundary Street, City of Beaufort 32° 26' 29.4" N., 80° 41' 51.8" W., 11 September 2007, DCP 5186.

Significance: This is the third reported state in the continental United States this Old World tropical vegetable (Global Invasive Species Database 2005). This population represents a northeastern range extension of over 380 kilometers from the closest population in Brevard County, Florida (Wunderlin and Hansen 2008). It was also known from Texas (USDA, NRCS, 2010). Commonly cultivated worldwide around homes and workplaces by Asian immigrants for edible fruits and shoot tips, it has escaped and become an invasive forest-smothering pest on many Pacific Islands. Succulent stems store water and assist in establishment. Vines reproduce by seeds as well as stem and root fragmentation (Global Invasive Species Database 2005) In South Carolina it is commonly cultivated South Asian immigrants near their homes and places of business. It is especially common near motels. It is cold hardy in Beaufort County and should be sought elsewhere in the maritime strand and outer coastal plain.

Coelorachis cylindrica (Michaux) Nash (POACEAE)—Beaufort County: Edge of conservation set aside area adjacent to Ray Gilligan residence and across from retention pond on Glencairn Dr., Hampton Hall Plantation (A gated residential community off of Buckwalter Parkway), Town of Bluffton, 32° 14′ 09" N., 80° 55′ 12"W., 27 August 2007, DCP 5171.

Significance: This bunch grass of formerly prairie-like and fire-maintained woodlands is on the SC rare list (McMillan 2005, Weakley 2010). This is the first report for our coastal plain (Townsend and Sorrow 1999, McMillan 2005). Weakley (2010) reported that it was possibly extirpated in South Carolina. Townsend and Sorrow (1999) and McMillan (2005) report it from Lancaster and York counties. This also confirms that this species is still extant in South Carolina.

Colocasia esculenta (Linnaeus) Schott (ARACEAE)—**Beaufort County:** Naturalized along the edge of the salt marsh in passive city park space at Bellamy Curve. Bend in Hwy 21 where

Boundary St. becomes Carteret St. City of Beaufort, 32° 26' 23" N., 80° 40' 11" W., 16 September 2004, *DCP 1006*.

Significance: This collection provides documentation that this tropical ornamental species has naturalized in South Carolina and particularly in Beaufort County (Weakley 2010). Weakley (2010) reports it for South Carolina but provides not supporting documentation. USDA, ARS (2010) reports it here citing Weakley (2010). Townsend and Sorrow (1999) do not include it. Serviss, McDaniel and Bryson (2000) and Liu, Peet and Weakley (2006) do not report it north of Georgia. Though generally infertile in our area, it spreads vegetatively and is dispersed by fragmentation (Weakley 2010). Local populations seem to have escaped from residential gardens and from rubbish piles. Many individuals develop contact dermatitis from handling the plants.

Collinsonia anisata Sims (LAMIACEAE)—Beaufort County: Growing in association with Pinus echinata, Quercus stellata, Erythrina herbacea, etc. in a frequently burned mesic calcareous area, Horseshoe Field Hunt Unit, Brays Island Plantation, 3 June 2010, DCP 5319 with BCL. This native mint is on the SC Rare list (McMillan 2005). This is the second confirmed county occurrence in South Carolina and the first from the maritime strand. It is known from Orangeburg County (Townsend and Sorrow 1999). It is reported on the South Carolina Heritage Trust database for Richland County but these reports have not been verified (McMillan 2005). Weakley (2010) does not report it from South Carolina. He reports as Central Georgia south and west to the Florida panhandle, west to southern Mississippi.

Commelina erecta Linnaeus var. angustifolia (Michaux) Fernald (COMMELINACEAE)—Beaufort County: In association with Froelichia floridana, Paspalum notatum, Cnidoscolus stimulosus, Opuntia pusilla, Sideroxylon tenax, Crotalaria rotundifolia var. vulgaris, etc on xeric roadside, Sherman Dr., Coosaw Island in the vicinity of 32° 28' 44" N., 80° 35' 07" W., 19 July 2005, DCP 3399.

Significance: Two varieties are described for this widespread species of xeric areas (Weakley 2010). Radford Ahles and Bell (1968) and Townsend and Sorrow (1999) did not distinguish infraspecific taxa (Weakley 2010). Liu, Peet and Weakley (2006) have no distribution data for the varieties in South Carolina. Weakley (2010) states that taxonomy and distribution of the two varieties need further study. This establishes that *C. erecta* var. angustifolia occurs in Beaufort County. It is common in xeric areas. Though, I sought it, I never found the typic variety in the county.

County: Naturalized in degraded pine flatwoods. Native soil has been covered with up to 10 cm. of fill dirt. In association with *Pinus serotina, Pinus elliottii, Morella cerifera, Pueraria montana* var. *lobata, Celtis laevigata, Eupatorium capillifolium, Liquidambar styraciflua, Baccharis halimifolia, Albizia julibrissin, Rhus copallinum, Platanus occidentalis* var. *occidentalis, Populus deltoides* var. *deltoides, Morus alba, Ipomoea macrorhiza, etc.* on right bank of channelized intermittent headwater stream draining into Huger Cove, south side of Mellichamp Rd. between Bluffton Rd. (Hwy 46) and Goethe Rd. Bluffton.,32° 14' 22" N 80° 51' 43" W., 6 March 2005, *DCP 3773 with JLLR*.

Significance: Townsend and Sorrow (1999) report this South American ornamental grass for Allendale and Clarendon counties only. This is the third county record for South Carolina and the first for the maritime strand. I have observed it naturalized at two other sites in Beaufort County and also in Anderson County.

Cosmos sulphureus Cavanilles (ASTERACEAE)—**Beaufort County:** Extensively naturalized in and around vegetable and flower garden from planting more than 20 years ago, Heister residence, 176 Bay Pines Rd., Laurel Bay Area, 32° 27' 33" N., 80° 46' 72" W., 25 July 2005, *DCP 3477*.

Significance: These collections confirm that this showy annual composite has naturalized in South Carolina and particularly in Beaufort County. Weakley (2010) and Kiger (2006) indicate that it occurs in both Carolinas but provides no citation for the occurrence. USDA, ARS (2010) bases presence in the Carolinas on Weakley (2010). In contrast, Radford, Ahles and Bell (1968), Townsend and Sorrow (1999) and Liu, Peet and Weakley (2006) all include *C. bipinnatus* Cavanilles but exclude *C. sulphureus* for the Carolinas. Liu, Peet and Weakley (2006) report *C. sulphureus* no closer than Putnam County, Florida, Lowndes County, Georgia, Sevier County Tennessee and Dinwiddie County, Virginia. Both species are commonly cultivated reseeding annuals. Though of tropical American origin, they are commonly included in "wildflower" seed mixes (Weakley 2010). *C. sulphureus* has undoubtedly naturalized elsewhere in South Carolina.

Crataegus alabamensis Beadle (ROSACEAE)—Beaufort County: In association with Baccharis glomeruliflora, Quercus nigra, Morella cerifera, Liquidambar styraciflua, Ilex vomitoria, Galium hispidulum, Quercus virginiana, Pinus palustris, Smilax pumila, Symplocos tinctoria, etc. near small depression wetland along roadside at 216 Sam's Pt. Rd. Lady's Island, 32° 25' 55" N., 80° 38' 26" W., 6 January 2005, DCP 1645.

Crataegus mendosa Beadle (ROSACEAE)—Beaufort County: Thinned but otherwise natural woodland. Associated with an unusual assortment of species including *Pinus palustris, Pinus echinata, Pinus glabra, Piptochaetium avenaceum, Asimina parviflora, Amelanchier sp., Quercus austrina, Quercus geminata, Ostrya virginiana, Hypericum hypericoides, Callicarpa americana, Carya alba, Carya glabra, and Sideroxylon tenax* in residential subdivision under construction adjacent to Midway Farms Subdivision, Pritchardville Community, 32° 13' 45" N., 80° 59' 10" W., 30 May 2005, *DCP 2076 with WH and JLLR*.

Crataegus visenda Beadle (ROSACEAE)—Beaufort County: In association with Cyperus retrorsus, Tephrosia spicata, Dichanthelium laxiflorum, Dichanthelium acuminatum var. acuminatum, Dichanthelium commutatum var. ashei, Dichanthelium commutatum var. commutatum, etc., Pigeon Point Park, Town of Beaufort, 32° 26' 35" N., 80° 40' 21" W., 16 May 2004, DCP 145 with FJDR.

Significance: This establishes that these three taxa occur in South Carolina and particularly in Beaufort County. The taxonomic treatment in Weakley (2010) includes far more species than Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999). These three taxa were not distinguished as distinct taxa in the earlier treatments. Their distribution is not well established. C. alabamensis and C. visenda were two of the taxa included as part of C. flava Aiton in the earlier treatments. Townsend and Sorrow (1999) report C. flava for most counties, but not Beaufort. Liu, Peet and Weakley (2008) document good specimens of C. alabamensis from

Kershaw and Chesterfield counties only. They do not report it from Georgia. Liu, Peet and Weakley (2008) do not report *C. visenda* from either of the Carolinas but document it no closer than Marion County, Florida, Floyd County, Georgia and Alabama. *C. mendosa* was "allied with" or related to *C. austrina* Beadle *C. pulcherrima* and *C. venusta* Beadle. None of these were reported in Radford, Ahles and Bell (1968) or Townsend and Sorrow (1999) for the Carolinas. Liu, Peet and Weakley (2010) report *C.* mendosa from McCormick County, South Carolina and Tuscaloosa County, Alabama only.

Crinum americanum Linnaeus (AMARYLLIDACEAE)—Beaufort County: Naturalized from former landscape planting. In association with Liriope sp., Ophiopogon japonicus, Stenotaphrum secundatum, Crocosmia x crocosmiiflora, etc. at Honey Horn Plantation, Hilton Head Island 32° 12' 41" N., 80° 44' 22" W., 30 July 2005, DCP 3515 with CC and JLLR; Extensive colony above and below high-tide mark in blackwater stream near its confluence with larger estuary. At this point in the stream, salt-tolerant vegetation dominates. Approximately 7 meters below garden fence of residential property, left bank of Huger Cove downstream from Bridge St. in association with Tetrapanax papyriferus, Campsis radicans, Vinca major, Sabal palmetto, Celtis laevigata, Cocculus carolinus, Phytolacca rigida, etc. Area is over 5 meters down slope from the fence of the closest garden. It shows no sign of cultivation, 19 August 2006, DCP 5022. Significance: These collections confirm a second county occurrence for the state and the first southwest of the Santee River for this showy swamp forest species (Weakley 2010). It was previously known from Georgetown County only (Townsend and Sorrow 1999). Weakley (2010) reports it for Georgia without citation. Jones and Coile (1988), Sweeney and Giannasi (2000) and Liu, Peet and Weakley (2006) exclude it from that state. It is also reported from Florida and North Carolina. Weakley (2010) report it as a rare native. The population represented by DCP 3515 is clearly naturalized from an abandoned ornamental planting. The population represented by DCP 5022 may represent a natural population or one derived from garden throw-outs. Interviewing the adjacent property owners as to the source of these populations may help ascertain the origin of this population.

Crocanthemum corymbosum (Michaux) Britton (CISTACEAE)—Beaufort County: Adjacent to Intracoastal Waterway across from apartment complex at 290 Squire Pope Road. 21 April 200 JFT 2032 with RDP, JB, ABP and CJ; In association with Opuntia stricta var. stricta, Opuntia pusilla, Eremochloa ophiuroides, Pinus elliottii, Quercus virginiana, Rubus trivialis, Ilex vomitoria, Morella cerifera, Persea borbonia, Eustachys petraea, Cirsium horridulum var. horridulum, Salsola sp., Cakile edentula, Hydrocotyle bonariensis, Sabal palmetto, etc. in sand dunes at Hunting Island State Park, 32° 21' 20" N., 80° 26' 44" W., 2 January 2005, DCP 1613 with TMS; In association with Pinus serotina, Rhexia cubensis, Ilex glabra, Smilax laurifolia, Ilex cassine, Osmunda cinnamomea, etc.. Severely- degraded pine flatwoods remnant. Honey Horn Plantation, Hilton Head Island, 32° 12' 50" N., 80° 44' 22" W., 30 July 2005, DCP 3518 with CCC and JLLR; In association with Stylisma patens var. angustifolia, Sassafras albidum, Quercus hemisphaerica, Pinus taeda, Cnidoscolus stimulosus, Indigofera caroliniana, Pityopsis sp., Tephrosia sp., Callicarpa americana, Clitoria mariana, Lespedeza sp., etc. on the northeast corner of the intersection of Sunset Bluff Rd. and Hwy 21, Lady's Island. 32° 25' 06.1" N., 80°

39' 22.4" W., 4 June 2006, DCP 4653; In association with Liatris spicata var. spicata, Clinopodium georgianum, Carphephorus odoratissimus, Pityopsis sp., Penstemon australis, Panicum hemitomon, Solidago odora var. odora, etc. Margin of pond created by excavating depression wetland. Surrounded by fire-suppressed pine-saw palmetto flatwoods. Audubon Newhall Preserve. Bay Pines Rd. Hilton Head 32° 09' 45" N., 80° 46' 23" W., 27 November 2005, DCP 4050; In association with Crotalaria sp., Galium pilosum var. puncticulosum, Croton michauxii, Morella cerifera, Callicarpa americana, Solidago odora, Pityopsis sp., Pinus taeda, Zanthoxylum clava-herculis, etc. Grassy parking area for Moreland Landing, Palmetto Bluff (a gated residential community), Bluffton. 32° 10' 40.7" N., 80° 55' 29.4" W., 14 June 2006, DCP 4678 with JLLR; In association with Bulbostylis ciliatifolia, Liatris patens, Agalinis laxa, Ilex vomitoria, Quercus geminata, Quercus nigra, Serenoa repens, Andropogon capillipes 'dryland variety', Pterocaulon pycnostachyum, Andropogon ternarius var. ternarius, Pinus taeda, Pityopsis sps., Lechea sps., Eragrostis, sps., Hypericum stans, Vaccinium myrsinites, Dichanthelium sps., etc. North side of Cherokee Farms Rd., Just north of intersection with Joe Frazier Rd., Laurel Bay area, 32° 25' 51.8" N., 80° 45' 56.6" W., 11 October 2007, DCP 5203; In association with, Liatris patens, Sericocarpus tortifolius, Morella pumila, Andropogon ternarius, Agalinis laxa, Serenoa repens, Pterocaulon pycnostachyum, Andropogon ternarius var. ternarius, Pitvopsis sps., etc. on the north side of Cherokee Farms Rd., Between Gerald Lane and Needles Lane, Laurel Bay area, 32° 25' 53.2" N., 80° 46' 06.8" W., 11 October 2007, DCP 5205.

Significance: This herbaceous perennial is listed as rare in South Carolina and North Carolina (McMillan 2005, Weakley 2010). It is also known from Charleston and Georgetown counties. It ranges from eastern North Carolina south to southern Florida, west to southern Mississippi.

Crocanthemum georgianum (Chapman) Barnhart (CISTACEAE)—Beaufort County: Growing in dry sandy area along railroad between 11th St. and 12th St. In association with *Spermolepis* divaricata, Plantago wrightiana, Coreopsis sp., etc., Town of Port Royal, 32° 22' 37" N., 80° 41' 48" W., 14 May 2006, DCP 5040; In association with Cornus florida, Asclepias amplexicaulis, Tetragonotheca helianthoides, Endodeca serpentaria, Ceanothus americanus, Silphium sp., Aureolaria sp., Ouercus elliottii, Pinus palustris, Stylodon carneus, Indigofera caroliniana, Zornia bracteata, etc. Roadside across from 541 Sam's Point Rd., Lady's Island, 32° 27′ 37.9″ N., 80° 38′ 00.2″ W., 15 May 2006, *DCP 4507*; Growing in infrequently mown dry sandy field. In association with Galactia regularis, Crotalaria rotundifolia var. vulgaris, Tephrosia florida, Cyperus sp., Crocanthemum sp., Asclepias humistrata, Vaccineum arboreum, Stylisma sp., Desmodium sp., Cnidoscolus stimulosus, etc. at the northwest corner of Dulamo Rd. and Ranger Dr., St. Helena Island, 32° 25' 04.8 N., 80° 32' 08.3" W. 11 July 2006, DCP 4756. Significance: This herbaceous perennial is listed as rare in South Carolina and North Carolina (McMillan 2005, Weakley 2010). Although reported by McMillan (2005) for Beaufort, Colleton, Darlington, Georgetown and Horry counties, Townsend and Sorrow (1999) report it for Colleton, Georgetown and Horry counties only.

Crocosmia x *crocosmiiflora* (V. Lemoine ex E. Morr.) N.E. Brown (IRIDACEAE)—**Beaufort** County: In association with *Andropogon sp., Crocosmia* x *crocosmiiflora, Elephantopus elatus,*

Erigeron annuus, Eragrostis hirsuta, etc. on construction site, east of Greenlawn Dr., City of Beaufort, 32° 26' 36" N., 80° 41' 18" W.,15 October 2005, *DCP 3947*.

Significance: This is the second reported county for this South African ornamental of hybrid origin (Goldblatt and Brown 2002). It was previously known from Jasper County only.

Crotalaria ochroleuca G. Don (FABACEAE)—**Beaufort County:** Weedy roadside on the southeast corner of Coosaw River Dr. and Gannett Point Rd., Coosaw Island 32° 28' 57.5" N., 80° 35' 30.4" W., 13 October 2007, *DCP 5208*.

Significance: Several species of *Crotalaria* were introduced into the southeastern United States to improve worn out agricultural soils. Townsend and Sorrow (1999) report this African species for Charleston County only (Weakley 2010). This is the second county record for South Carolina.

Croton michauxii Webster (EUPHORBIACEAE)—Beaufort County: In association with Crotalaria sp., Galium pilosum var. puncticulosum, Crocanthemum corymbosum, Morella cerifera, Callicarpa americana, Solidago odora, Pityopsis sp., Pinus taeda, Zanthoxylum clavaherculis, etc. in grassy parking area for Moreland Landing, Palmetto Bluff (a gated residential community), Bluffton, 32° 10′ 40.7" N., 80° 55′ 29.4" W., 14 June 2006, DCP 4681 with JLLR; Spontaneous in landscape beds on higher end of newly constructed apartment complex. Complex was constructed on slopes between xeric circumneutral pastureland and acidic swampland, formerly part of Myrtle Bush Farms (timber farming and row crop operation). Dr. John Gray, owner of Myrtle Bush Farms reports that it was apparently naturally regenerated pineland and has not been prescribe burned since before the 1940's, 32° 25′ 47" N., 80° 43′ 47" W., 21 August 2008, DCP 5247.

Significance: This herbaceous perennial of disturbed sandy soils is considered rare in South Carolina (McMillan, 2005). These are the first reports from Beaufort County. It was previously known from Jasper, Georgetown and Horry counties only (Townsend and Sorrow 1999, McMillan 2005). It ranges from South Carolina south to Florida, west to Texas, north in the interior to Missouri, Illinois and Iowa (Weakley 2010). USDA, ARS (2010) also report Virginia, Maryland and Connecticut.

Cruciata pedemontana (Bellardi) Ehrend (RUBIACEAE)—**Beaufort County:** One plant observed growing under planted *Ilex vomitoria* 'nana' next to Food Lion grocery store on Lady's Island, 32° 26' 03.7" N., 80° 38' 29.6" W., 25 March 2006, *DCP 4434*.

Significance: This is the third report for South Carolina and the first for the coastal plain for this European lawn weed (Weakley 2010). Townsend and Sorrow (1999) report it for Spartanburg and Cherokee counties. This population lies more than 250 kilometers southeast of those populations.

Cucumis melo Linnaeus (CUCURBITACEAE)—**Beaufort County:** Volunteer on mounds of soil and rubble in area used by S.C.D.O.T. for temporary storage, Hwy 802 between Hwy 21 and bridge to town of Port Royal, Lady's Island, 32° 24' 17.6" N., 80° 39' 31.5" W., 11 August 20006, *DCP 4888*.

Significance: This is the third reported county for this western African annual vine. It was documented from Spartanburg and Horry counties only (Townsend and Sorrow 1999).

Cucurbita pepo Linnaeus (CUCURBITACEAE)—Beaufort County: Several plants growing on top of 3' m. tall white sand mound (overburden removed for site preparation) In association with Paspalum notatum, Solanum sp., Ambrosia artemisiifolia, Helianthus annuus, Passiflora lutea, Erechtites hieraciifolius, etc. on vacant lot (some prep work for house construction) adjoining 1231 Rodgers St. Pigeon Point Neighborhood, Town of Beaufort, 32° 26' 31" N., 80° 40' 39" W., 1 July 2005, DCP 2287.

Significance: This is the first report of this cucurbit naturalizing from the coastal plain of South Carolina. The closest other reports are in Bulloch County, Georgia (Jones and Coile 1988, USDA, NRCS 2010). Radford, Ahles and Bell (1968) reports *C. pepo* 'sensu lato' for Spartanburg County. Townsend and Sorrow (1999) maps *C. pepo* 'sensu lato' for Spartanburg and Calhoun counties. The reports in Radford, Ahles and Bell as "the common pumpkin of cultivation" indicate the population in Spartanburg County is *C. pepo* var. *pepo*. Decker (1988) distinguished *C. pepo* ssp. *ovifera* from *C. pepo* ssp. *pepo*, on the basis of smaller reproductive and vegetative parts than ssp. *pepo*. and a mature rind that is almost always hard.(Decker 1988) reports that plants of this subspecies can often sustain themselves in the wild. Many of these cultivars were originated in the eastern United States (Decker 1988). Sanjur et al (2002) demonstrate that the hard shell gourds represented by *C. pepo* ssp. *ovifera* and its wild progenitors are a distinct clade from the fleshy pumpkins represented by *C. pepo* var. *pepo*

Cydonia oblonga P. Miller (ROSACEAE)—**Beaufort County:** Large thicket at corner of mobile home, Daniel Brown Estate (family compound / heirs' property) Vinewood Lane, Wallace Plantation Community, St. Helena Island, 32° 22' 49" N., 80° 35' 26" W., 3 July 2005, *DCP 3223*.

Significance: This is the first report of this Eurasian shrub naturalizing in the southeastern United States (Townsend and Sorrow 1999, Liu Peet and Weakley 2010). The closest previous report is from Maryland (USDA, ARS 2010). *C. oblonga* was commonly used as a rootstock for *Pyrus*. In this instance the graft failed. This population spread from the rootstock.

Cynanchum scoparium Nuttall (APOCYNACEAE)—Beaufort County: Located on shell midden within extensive salt marsh on northwest side of Daws Island. The mound is likely of native Indian origin. It is approximately 3 meters above the marsh and approximately 30-40 yards across'. The vines are climbing in dense mats in the understory shrubs (Forestiera godfreyi) and into canopy trees (Celtis laevigata and Melia azederach). Vines are being fed on by caterpillars of the monarch butterfly. 13 May 1997, JFT 1484 with RDP and TW; Indian shell mound ten feet above Spartina marsh. No flowers evident. Elevated shell mound, interior of north end of Daws Island. 12 May 1997, RDP 2732.

Significance: This coastal calciphilic vine is on the rare list in South Carolina (McMillan, 2005). Within South Carolina, it is only known from Beaufort County (Townsend and Sorrow 1999, McMillan 2005). It also occurs in Georgia, Florida and Mississippi (USDA, ARS 2010).

Cyperus distinctus Steudel (CYPERACEAE)—**Beaufort County:** Locally abundant in a poorly drained area 200 yards north of secondary road 7-243, .5 mile west of the traffic circle on Hilton Head Island, 22 August 1980, *CAS 1145*.

Significance: This coastal wetland sedge is listed as rare in South Carolina (McMillan, 2005). It is also known from Charleston County (McMillan, 2005). It ranges south to Florida and occurs as a disjunct in Louisiana (USDA, ARS 2010).

Cyperus esculentus Linnaeus var. leptostachyus Böckler (CYPERACEAE)—Beaufort County: In association with Physalis walteri, Croton glandulosus var. septentrionalis, Paspalum notatum, Acalypha sp., Lepidium virginicum, Cocculus carolinus, Plantago virginica, Rubus trivialis, Lactuca sp., Dysphania ambrosioides, Hypochaeris brasiliensis, Pyrrhopappus carolinianus, Silene antirrhina, Specularia sp., Galium hispidulum, etc. in infrequently mown field around recently reoccupied residence, 156 Coosaw River Dr., Coosaw Island, 32° 28' 47" N., 80° 34' 60" W., 17 August 2005, DCP 3701.

Significance: This collection establishes that this variety of pantropical and warm temperate weedy sedge occurs in South Carolina and particularly in Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) did not distinguish infraspecific taxa for it. Though Radford, Ahles and Bell (1968) reported the species for numerous counties including Beaufort, Townsend and Sorrow (1999) report it for Barnwell County only.

Cyperus eragrostis Lamarck (CYPERACEAE)—Beaufort County: In association with Lactuca graminifolia var. graminifolia, Panicum rigidulum var. elongatum, Dichanthelium acuminatum var. acuminatum, Stylisma patens ssp. patens, Dichanthelium commutatum var. commutatum, Dichanthelium oligosanthes var. oligosanthes, Carya glabra ssp. megacarpa, Vitis aestivalis var. aestivalis, Hypochaeris glabra, etc. at Beaufort County Boat Landing, North end of Pigeon Point Rd., Town of Beaufort, 32° 27' 07" N., 80° 40' 14" W., 12 May 2004, DCP 100 with FJDR.

Significance: This is the second reported county occurrence for this introduced tropical American sedge (Weakley 2010). It was known from Berkeley County only (Liu, Peet and Weakley 2010). It is not included in Townsend and Sorrow (1999).

Cyperus filiculmis Vahl (CYPERACEAE)—Beaufort County: In association with Stylosanthes biflora, Liatris sp., Hypericum hypericoides, Lespedeza sp., Solidago sp., Pityopsis sp., Andropogon sp., Galactia sp., Centrosema virginiana, Sassafras albidum, Eupatorium sp., Pteridium aquilinum var. pseudocaudatum, Dyschoriste oblongifolia, Vernonia sp., etc in powerline easement adjacent to Dorothy Smith's Property, Shanklin Rd., Laurel Bay area, 32° 27' 36" N., 80° 45' 12" W., 22 July 2005, DCP 3428.

Significance: This collection provides documentation that this native sedge occurs in South Carolina and particularly in Beaufort County. Weakley describes three currently described taxa that were treated as one taxon in Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999). County level distribution for the particular taxa is not known. These are *C. filiculmis, C. lupulinus* (Sprengel) Marcks ssp. *lupulinus* and *C. lupulinus* (Sprengel) Marcks ssp. *macilentus*.

In Radford, Ahles and Bell (1968) they were treated as *C. filiculmis*. In Townsend and Sorrow (1999), they were treated as *C. lupulinus*. I did not encounter *C. lupulinus* ssp. *lupulinus* or *C. lupulinus* ssp. *macilentus* during the course of the study. Though, the lumped taxa are reported from most counties of the state. They have not previously been reported from Beaufort.

Cyperus flavescens Linnaeus (CYPERACEAE)—Beaufort County: On sand dunes with Fimbristylis castanea, Uniola paniculata, Eustachys petraea, Cyperus sp., Triplasis purpurea, Iva imbricata, Tamarix parviflora, etc. Pritchard Island., 12 August 2006, DCP 4896 with HB and JLLR.

Significance: This is the first report for this pantropical native sedge for the southern outer coastal plain of South Carolina. The closest previously documented populations are more than 80 kilometers to the northeast in Georgetown County and 90 kilometers to the northwest in Barnwell County (Townsend and Sorrow 1999, Weakley 2010).

Cyperus surinamensis Rottböll (CYPERACEAE)—Beaufort County: In association with Juncus effusus ssp. solutus, Juncus polycephalus, Juncus validus var. validus, Leptochloa fascicularis var. fascicularis, Typha sp., Solidago sempervirens var. mexicana, Fimbristylis sp., Aeschynomene sp., Sabatia stellaris, etc. in retention pond adjacent to brackish marsh, Airport Circle, Lady's Island, 32° 24' 38" N., 80° 37' 51" W., 4 July 2005, DCP 3255.

Significance: This is the second report of this native pantropical sedge for South Carolina and the first for the maritime strand counties (Weakley 2010). It was previously reported for Orangeburg County (Townsend and Sorrow 1999).

Cyperus tetragonus Elliott (CYPERACEAE)—Beaufort County: Growing with Asplenium platyneuron, Oplismenus hirtellus ssp. setarius, Youngia japonica, Ilex vomitoria, Liquidambar styraciflua, Sanicula canadensis, Quercus hemisphaerica, Pinus taeda, Callicarpa americana, etc. along entrance to Blue Heron Preserve, Moss Creek Plantation (a gated community) off of Hwy 278 in the Greater Bluffton Area. 32° 16' 19.5" N., 80° 48' 32.4" W., 4 January 2006, DCP 4226; Growing in maritime forest near dormitories on Pritchard's Island, 12 August 2006, DCP 4889.

Significance: This calciphilic sedge is on the rare list in South Carolina, Georgia and North Carolina. It is also known from Charleston, Colleton, Hampton and Jasper counties (McMillan 2005). It ranges from eastern North Carolina south to Florida and disjunct in New Mexico and Arizona (Weakley 2010). USDA, ARS (2010) also reports occurrence in all states between Florida and New Mexico.

Cyperus thyrsiflorus Junghuhn (CYPERACEAE)—Beaufort County: In association with Lobelia cardinalis, Impatiens capensis, Zizania aquatica, Triadenum walteri, Eleocharis sp., Paspalum distichum, Peltandra virginica, Pluchea sp., Amaranthus sp., Samolus parviflorus, Eryngium aquaticum var. aquaticum, Hibiscus moscheutos, etc., edge of tidal freshwater marsh, Sugar Hill Boat Landing, off of River Rd. and Combahee River near Big Estate Community., 32° 39' 56.4" N., 80° 45' 16.0" W., 15 July 2006, DCP 4782 with JLLR.

Significance: This is the first record of this native sedge in South Carolina. It and represents a northeastern range extension of over100 kilometers from the closest known population in Liberty

County, Georgia (Jones and Coile 1988, Towns and Sorrow 1999, Sweeney and Giannasi 2000). It is a Georgia Special Concern species known from only one county (Weakley 2010). It should be considered for inclusion in South Carolina's Rare, Threatened and Endangered Species List. Small misapplied the name *C. hermaphroditus* (Jacquin) Standley for this native sedge. It is outwardly very similar to *C. tetragonus* Elliott. *C. thyrsiflorus* has narrower spikelets (.5-1 mm wide) as opposed to (1.5-2m wide in *C. tetragonus*. The habitat differs as well. *C. thyrsiflorus* occurs in swamps and streambanks. *C. tetragonus* occurs in maritime forests and dunes. *C. thyrsiflorus* is previously known from Georgia and Florida westward through the Gulf States to Texas and northward into Arkansas (Weakley 2010).

Dactylis glomerata Linnaeus (POACEAE)—Beaufort County: Growing in association with Dichanthelium oligosanthes var. oligosanthes, Poa compressa, Vulpia octoflora, Agrostis hyemalis, Sphenopholis obtusata, Lactuca floridana, Poa pratensis, Silphium asteriscus var. dentatum, Plantago lanceolata, Erigeron strigosus var. beyrichii, Quercus virginiana, Quercus hemisphaerica, etc., long abandoned but infrequently mown homesite. Across from Ollie's Restaurant and It's Only Natural, Hwy 21, Lady's Island, 32° 25' 06" N., 80° 39' 36" W., 11 May 2006, DCP 4466.

Significance: This is the first record of this European pasture grass in the southern outer coastal plain of South Carolina (Weakley 2010). Within the state, it occurs predominately in the inner coastal plain and piedmont. It only reaches the outer coastal plain in Marion and Georgetown counties (Townsend and Sorrow1999).

Datura inoxia J. S. Miller (SOLANACEAE)—**Beaufort County:** Naturalized in association with *Digitaria sp., Cassia occidentalis, Sorghum halepense, Desmodium tortuosum, Morus alba, Ipomoea pandurata, Ambrosia artemisiifolia, Mirabilis alba, Eleusine indica, etc.* in xeric, sandy, vacant residential lot at the S.E. corner of Casablanca Cir., and Ribault Rd., Town of Port Royal (This lot is part of a sinkhole that has been progressively filled over many years. It has never been occupied by a residence or business), 32° 23′ 25.6″ N., 80° 41′ 09.3″ W., 13 August 2007, *DCP 5162*.

Significance: This is the first record for this escaped Mexican ornamental for the outer coastal plain and possibly the first for the state (Weakley 2010). Townsend and Sorrow (1999) do not include *D. inoxia* for South Carolina but report *D. wrightii* for Richland and Aiken counties. However some taxonomic treatments had submerged *D. inoxia* in *D. wrightii* and other had included both in *D. meteloides*. Therefore, Weakley (2010) states in regard to these two taxa that "it is currently not known in our area which records apply to which taxon".

Desmodium fernaldii Schubert (FABACEAE)—**Beaufort County:** In association with *Morella cerifera, Ilex vomitoria, Pityopsis sps., Pinus taeda, etc* at northeast corner of Friendship Rd. and Sherman Dr., Coosaw Island, 32° 28' 43" N., 80° 35' 15" W., 24 September 2006, *DCP 5012;* Natural in residential garden with *Desmodium incanum, Trifolium carolinianum, Desmodium paniculatum, Sanicula canadensis, etc.* 100 Laurens St. (The Old Point Neighborhood) City of Beaufort, 32° 26' 04.4" N 80° 39' 52.2" W., 24 September 2006, *DCP 5017 with JLLR.* **Significance:** These are the first reports of this native legume from the southern maritime strand counties (Weakley 2010). Its distribution centers primarily in the inner coastal plain and lower

piedmont. It was previously reported to the west in Hampton County and to the northeast in Horry County (Townsend and Sorrow 1999).

Desmodium incanum Augustin de Candolle (FABACEAE)—**Beaufort County:** Dense patch (two square meters in diameter) at base of mature *Quercus virginiana* in residential garden, smaller specimens are scattered elsewhere in same garden,100 Laurens St., Beaufort, SC, 32° 26' 04.4" N., 80° 39' 52.2" W., 2 January 2005, *DCP 1651*; 2m. x 2m. plant growing at base of mature *Quercus virginiana* with *Stenotaphrum secundatum*, *Sabal palmetto*, *Gladiolus* x *gandavensis*, *etc.* in residential garden, several smaller clumps present in same garden, I first observed this plant at this site in 1992. It was quite large at that time as well. No landscape materials have been planted at this location for many years, southeast corner of home, 100 Laurens St. (The Old Point Neighborhood) City of Beaufort, 32° 26' 04.4" N., 80° 39' 52.2"W., 9 January 2006, *DCP 4299 with JLLR*.

Significance: These collections represent the first documentation for this ruderal pantropical legume for the Carolinas and a northeastern range extension of over 150 km. from the closest documented population in Camden County, Georgia (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, Weakley 2010). It is also known from Florida and Texas (USDA, NRCS 2010). Its nativity is disputed. Weakley (2010) states it is probably introduced or adventive from tropical America. Wunderlin and Hansen (2008) regard it as non-native. USDA, NRCS (2010) considers it native.

The above cited population was well-established in 1992 when I first observed it. It has spread slowly but steadily in the intervening years. *D. incanum* has extensive underground stolons and exhibits no reproductive seasonality. The site is well protected from cold weather by proximity to water, man-made structures and the overhanging trees. It flowers and fruits all year. The above-ground portions are occasionally killed back but begin growth during warm spells. I have also collected it in adjacent Jasper County (*DCP 3570*) where it was obviously introduced with *Sabal palmetto* brought in from Collier County, Florida.

Desmodium paniculatum (Linnaeus) Augustin de Candolle var. **paniculatum** (FABACEAE)— **Beaufort County:** In association with *Vitis cinerea* var. baileyana, *Physalis heterophylla*, Desmodium lineatum, Dichanthelium acuminatum var. acuminatum, Lechea mucronata, Paspalum setaceum var. setaceum, Cyperus echinatus, etc. Mossy Oaks Fire-station and Mossy Oaks City Park, Mossy Oaks Rd., Town of Beaufort, 32° 24' 04" N.,80° 41' 36" W., 12 June 2004, DCP 204 with FJDR; In association with Vernonia noveboracensis, Sacciolepis striata, Eupatorium semiserratum, Justicia ovata var. ovata, Persicaria sagittata, Hyptis alata, Cinna arundinacea, Linum sp., Crataegus sp., Panicum anceps var. anceps, Helianthus sps., Viburnum prunifolium, Cyperus iria, Fimbristylis autumnalis, Hypericum sps., Eupatorium perfoliatum, Wisteria frutescens, Phyllanthus carolinensis, Leersia sps., Carya aquatica, Ulmus alata, etc.., Along Old Sheldon Church Rd. Near Yemassee, 32° 40′ 23" N., 80° 49′ 58" W., 26 August 2005, DCP 3717; In association with Boerhavia diffusa, Croton glandulosus var. septentrionalis, Bulbostylis barbata, Acanthospermum australe, Eragrostis sps., etc.. Xeric yard of old but still occupied farm house, 20 Sherman Dr., Coosaw Island. 32 ° 28' 43" N., 80 ° 35' 08" W., 2 October 2005, DCP 3888; Growing in side yard at Pearson Residence in association with Acalypha gracilens, Erythrina herbacea, Galactia sp., Bidens pilosa, Phyllanthus urinaria,

Oplismenus setarius, Callicarpa americana, etc. #4 Moss Creek Ct., Moss Creek Plantation (a gated residential community) off of Hwy. 278 near Bluffton 32° 14' 24" N., 80° 48' 28" W., 23 September 2006, *DCP 5001;* Fire suppressed pine/ saw palmetto/ little gallberry flatwoods, common space at Toppin Dr. and Victoria Dr., Moss Creek Plantation (a gated residential community) off of Hwy. 278 near Bluffton, 32° 15' 41" N., 80° 48' 30" W., 7 October 2006, *DCP 5027*.

Significance: Weakley (2010) reports two varieties for this legume in South Carolina, *D. paniculatum* var. *paniculatum* and *D. paniculatum* var. *epetiolatum* Schubert. Townsend and Sorrow (1999) do not recognize infraspecific taxa. This establishes that the typic variety is common in Beaufort County. *D. paniculatum* var. *epetiolatum* was not encountered.

Dichanthelium commutatum (Swartz) Gould var. **ashei** (Pearson ex Ashe) Mohlenbrock (POACEAE)—**Beaufort County:** In association with *Crataegus visenda, Cyperus retrorsus, Tephrosia spicata, Dichanthelium laxiflorum, Dichanthelium acuminatum* var. *acuminatum, Dichanthelium commutatum* var. *commutatum, etc.* in Pigeon Point Park, Town of Beaufort, 32° 26' 35" N., 80° 40' 21" W., 16 May 2004, *DCP 150 with FJDR*.

Dichanthelium commutatum (Schultes) Gould var. commutatum (POACEAE)—Beaufort **County:** Growing on the northeast section of the proposed New River Trail. (a powerline easement running along the border of Sun City Hilton Head between the abandoned rail line and Hwy 170) Town of Bluffton, 32° 15' 58" N., 80° 58' 35" W., 23 May 2003, DCP 0033; In association with Melilotus indicus, Lepidium virginicum var. virginicum, Corydalis micrantha ssp. australis, Plantago lanceolata, Helianthus microcephalus, Carex muhlenbergii, Lolium perenne var. aristatum, Dichanthelium acuminatum var. acuminatum, Carya glabra var. megacarpa, Spermolepis divaricata, Vicia tetrasperma, Lactuca serriola, Sonchus oleraceus, Chaerophyllum tainturieri var. tainturieri, Vitis vulpina, Hypochaeris brasiliensis var. tweediei, etc. City of Beaufort property, east side of Hwy 21, between Lady's Island Boat Landing and the Beaufort River bridge. Lady's Island, 32° 14' 36" N., 80° 48' 04"W., 30 April 2004, DCP 0086 with FJDR: In association with Helianthus microcephalus, Smilax rotundifolia, Ouercus falcata, Carex floridana, Carya glabra var. megacarpa, Ilex ambigua, Vitis rotundifolia, etc. in Beaufort County Open Land Trust Parcel, Ribault Rd. Town of Beaufort, 32° 34' 39" N., 80° 41' 11" W.; 12 May 2004, DCP 0098 with FJDR; In association with Lactuca graminifolia var. graminifolia, Cyperus eragrostis, Panicum rigidulum var. elongatum, Dichanthelium acuminatum var. acuminatum, Stylisma patens ssp. patens, Dichanthelium oligosanthes var. oligosanthes, Carya glabra ssp. megacarpa, Vitis aestivalis var. aestivalis, Hypochaeris glabra, etc. Beaufort County Boat Landing, North end of Pigeon Point Rd., Town of Beaufort, 32° 27' 07" N., 80° 40' 14" W., 12 May 2004, DCP 104 with FJDR; In association with Lactuca graminifolia var. graminifolia, Cyperus eragrostis, Panicum rigidulum var. elongatum, Dichanthelium acuminatum var. acuminatum, Stylisma patens ssp. patens, Dichanthelium oligosanthes var. oligosanthes, Carya glabra ssp. megacarpa, Vitis aestivalis var. aestivalis, Hypochaeris glabra, etc. at Beaufort County Boat Landing, North end of Pigeon Point Rd., Town of Beaufort, 32° 27' 07" N., 80° 40' 14" W., 12 May 2004, DCP 106 with FJDR; In association with Lactuca graminifolia var. graminifolia, Cyperus eragrostis, Panicum rigidulum var. elongatum, Dichanthelium acuminatum var. acuminatum, Stylisma patens ssp. patens, Dichanthelium oligosanthes var. oligosanthes, Carya glabra ssp. megacarpa, Vitis aestivalis var. aestivalis,

Hypochaeris glabra, etc. Beaufort County Boat Landing, North end of Pigeon Point Rd., Town of Beaufort, 32° 27' 07" N., 80° 40' 14" W., 12 May 2004, DCP 107 with FJDR; In association with Galactia sp., Hypochaeris glabra, Silphium sp., Dichanthelium oligosanthes var. oligosanthes, etc. in Evergreen Cemetery, Town of Beaufort, 32° 26' 19" N., 80° 40' 48" W., 16 May 2004, DCP 127 with FJDR; Growing in association with Carex longii, Schedonorus arundinaceus, etc. Calhoun Gardens Park, Town of Beaufort, 32º 24' 28" N., 80º 41' 08" W., 16 May 2004, DCP 142 with FJDR; Growing in association with Crataegus visenda, Cyperus retrorsus, Tephrosia spicata, Dichanthelium laxiflorum, Dichanthelium acuminatum var. acuminatum, Dichanthelium commutatum var. ashei, etc. Pigeon Point Park, Town of Beaufort, 32° 26' 35" N., 80° 40' 21" W., 16 May 2004, DCP 151 with FJDR; In association with Liquidambar styraciflua, Nyssa biflora, Acer rubrum, Magnolia grandiflora, Morella cerifera, Persea palustris, and Ilex opaca var. opaca in floodplain of channelized tributary of Rosedhu Creek for predevelopment survey of Buckwalter Park, west side of Buckwalter Pkwy., Bluffton S.C. 32° 15' 08" N., 80° 54' 25" W., 1 November 2004, DCP 1364 with FCS: In association with Rhynchospora mixta, Rhynchospora miliacea, Lobelia elongata, Sabal minor, Persea pubescens, Magnolia grandiflora, Lvonia lucida, Berchemia scandens, Fraxinus sp., Liriodendron tulipifera, Arundinaria sp., Panicum anceps var. rhizomatum, Quercus michauxii, Magnolia virginiana, etc. in hardwood forest adjacent to blackwater stream ravine on north side of Hwy 46 between Bluffton and Pritchardville. 32° 14′ 14″ N., 80° 57′ 07″ W.; 27 November 2005, DCP 4068; In association with Pinus palustris, Quercus hemisphaerica, Sorghastrum elliottii, Tridens flavus, Viola villosa, Dichanthelium oligosanthes var. oligosanthes, Dichanthelium aciculare, Saccharum alopecuroides, Aristida condensata, etc. in an African-American cemetery on the south side of May River Road (Hwy 46) Bluffton, 32° 14' 14.4" N., 80° 52' 37.8" W., 21 December 2005, DCP 4093.

Significance: These collections provide documentation that both varieties of this native grass occur in South Carolina and particularly in Beaufort County. Hitchcock and Chase (1950, Radford, Ahles and Bell (1968) Townsend and Sorrow (1999), and USDA, ARS (2010) do not distinguish infraspecific taxa for this species. On the species level, it is widespread occurring in twenty-nine states and every county in South Carolina (Townsend and Sorrow 1999, USDA, NRCS 2010). Though distinguished by Freckmann and Lelong (2003), they map distribution at the species level only. Little range information is provided for the varieties noting only that D. commutatum var. ashei grows in open dry woodlands and that the typic variety grows in wet to dry woodlands and extends to South America. Weakley (2010) report the typic variety from Maine south to Florida and wert to Michigan, Missouri, Oklahoma and Texas. He reports D. commutatum var. ashei from Massachusetts south to Florida and Mississippi and west to Michigan, Missouri and Oklahoma. Liu, Peet and Weakley reliably document D. commutatum var. ashei only from Jackson and Davidson counties, North Carolina and report not reliable documentation for the typic variety. These collections demonstrate that typic variety is far more frequently encountered in Beaufort County.

Dichanthelium oligosanthes (Schultes) Gould var. **oligosanthes** (POACEAE)—**Beaufort** County: In association with *Lactuca graminifolia* var. *graminifolia, Physalis sp., Dichanthelium acuminatum* var. *acuminatum, Paspalum laeve, Hypochaeris glabra, Carex muhlenbergii, etc.* Mercy Cemetery, Town of Beaufort, 32° 26' 26" N., 80° 40' 58" W., 15 May 2004, *DCP 115*

with FJDR; In association with Galactia sp., Hypochaeris glabra, Silphium sp., Dichanthelium commutatum var. commutatum, etc. Evergreen Cemetery, Town of Beaufort, 32° 26' 19" N., 80° 40' 48" W., 16 May 2004, DCP 128 with FJDR; In association with Lactuca canadensis, Cyperus rotundus, Sporobolus virginicus, Carex longii, Scleranthus annuus, etc. in Polk Park and Battery Saxton Park. South side of Boundary St. Town of Beaufort, 32° 26' 29" N., 80° 41' 46" W., 1 June 2004, DCP 168 with FJDR; Growing in association with Vitis rotundifolia, Carex digitalis, Smilax hispida, etc., Beaufort County Open Land Trust Parcel on Ribault Rd. between Bay and Simms St. Town of Beaufort, 32° 25' 55" N., 80° 41' 10" W., 12 June 2004, DCP 190 with FJDR; Beaufort Co. Open Land Trust Parcels, 410 and 411 Ribault Rd., Town of Beaufort, 32° 26' 03" N., 80° 41' 12" W., 12 June 2004, DCP 208 with FJDR; In association with Schizachvrium scoparium var. stoloniferum, Pitvopsis graminifolia var. graminifolia, Heterotheca latifolia var. latifolia, Aristida purpurascens, Eupatorium compositifolium, Dichanthelium aciculare, Aristida lanosa, and Andropogon gyrans on xeric roadside of Viola Smalls Lane, Coosaw Island, 32° 28' 22" N., 80° 35' 29" W., 20 December 2005, DCP 4086: In association with Pinus palustris, Quercus hemisphaerica, Sorghastrum elliottii, Tridens flavus, Viola villosa, Dichanthelium aciculare, Dichanthelium commutatum var. commutatum, Saccharum alopecuroides, Aristida condensata, etc. In an African-American cemetery on the south side of May River Road (Hwy 46) Bluffton, 32° 14' 14.4" N., 80° 52' 37.8" W., 21 December 2005, DCP 4091, Growing in association with Dactylis glomerata, Poa compressa, Vulpia octoflora, Agrostis hyemalis, Sphenopholis obtusata, Lactuca floridana, Poa pratensis, Silphium asteriscus var. dentatum, Plantago lanceolata, Erigeron strigosus var. beyrichii, Quercus virginiana, Quercus hemisphaerica, etc. in long abandoned but infrequently mown homesite across from Ollie's Restaurant and Its Only Natural, Hwy 21, Lady's Island, 32° 25' 06" N., 80° 39' 36" W., 11 May 2006, DCP 4467.

Dichanthelium oligosanthes (Schultes) Gould var. scribnerianum (Nash) Gould (POACEAE)—Beaufort County: Growing on north side of railroad tracks adjacent to U.S. Dept of Defense Property on west side of Shanklin Rd. Associates include *Eragrostis spectabilis*, Dichanthelium aciculare, Dichanthelium sphagnicola, Symphyotrichum patens var. patens, Digitaria cognata, Andropogon ternarius, Pteridium aquilinum var. pseudocaudatum, etc. in the Laurel Bay Area, 32° 28' 01.9" N., 80° 44' 24.5" W., 29 December 2005, DCP 4178. Significance: These collections provide documentation that both varieties of this xeric-site grass occur in South Carolina and particularly in Beaufort County. This is possibly the first documentation for D. oligosanthes var. scribnerianum for the state. Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) did not distinguish these taxa but submerged them both into Panicum oligosanthes Schultes (Weakley 2010). According to Weakley (2010), D. oligosanthes var. oligosanthes is occasional in the coastal plain. Weakley (2010) does not include South Carolina in the distribution of D. oligosanthes var. scribnerianum. He reports it from the mountains in Georgia and Virginia, the piedmont in Delaware, Georgia and Virginia and the coastal plain in North Carolina and Virginia. It grows in "calcareous maritime forests, dry thin woods and openings, dry prairies usually in basic soil" (Weakley 2010). It is rare in the coastal plain. It is on the North Carolina Watch List. It should be evaluated for inclusion on the South Carolina Rare List

Dichanthelium ovale (Elliott) Gould & Clark var. ovale (POACEAE)—Beaufort County: In association with Lactuca graminifolia var. graminifolia. Cyperus eragrostis. Panicum rigidulum var. elongatum, Dichanthelium acuminatum var. acuminatum, Stylisma patens ssp. patens, Dichanthelium commutatum var. commutatum, Carya glabra ssp. megacarpa, Vitis aestivalis var. aestivalis, Hypochaeris glabra, etc. Beaufort County Boat Landing, North end of Pigeon Point Rd., Town of Beaufort, 32° 27' 07" N., 80° 40' 14" W., 12 May 2004, DCP 108 with FJDR; In association with Pinus palustris, Rhynchospora plumosa, Symphyotrichum dumosum, Andropogon virginicus var. decipiens, Xyris ambigua, Polygala lutea, Dichanthelium chamaelonche, Dichanthelium lancearium, Solidago gracillima, etc. Area burned every other year. "Kennedy Field" Clarendon Plantation (a private hunting preserve) Near the Gray's Hill Community. 32° 29' 09.5" N., 80° 46' 23.6" W., 6 January 2006, DCP 4250 with RM and JLLR; In association with Cornus florida, Asclepias amplexicaulis, Crocanthemum georgianum, Tetragonotheca helianthoides, Aristolochia serpentaria, Ceanothus americanus, Silphium sp., Aureolaria sp., Ouercus elliottii, Pinus palustris, Stylodon carneus, Indigofera caroliniana, Zornia bracteata, etc. Roadside across from 541 Sam's Point Rd., Lady's Island, 32° 27' 37.9" N. 80° 38' 00.2" W., 15 May 2006, DCP 5019.

Significance: These collections confirm that this native pineland grass occurs in South Carolina and particularly in Beaufort County. It was considered synonymous with *Panicum malacon* Nash in Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999). *P. malacon* was reported for Aiken, Lexington and Richland counties only. However, the description for *P. malacon* in Radford, Ahles and Bell (1968) differs greatly from that of Hitchcock and Chase (1950) and Small (1933) (Weakley 2010). Furthermore, specimens labeled *P. malacon* at the University of North Carolina herbarium from the sandhills upon which the reported distribution in South Carolina is based are misidentified specimens of *D. oligosanthes* (Schultes) Gould var. *oligosanthes* (Weakley 2010).

Dichanthelium sphagnicola (Nash) LeBlond (POACEAE)—Beaufort County: In association with Pinus elliottii, Morella cerifera, Andropogon glaucopsis, Andropogon tenuispatheus, Schizachyrium scoparium, Panicum anceps var. rhizomatum, Dichanthelium chamaelonche, Dichanthelium lancearium, Muhlenbergia sericea, Andropogon gyrans, etc. Small island on west side of Coosaw River Dr. South of Coosaw Island. 32° 28′ 26″ N., 80° 34′ 33″ W., 23 December 2005, DCP 4117; Growing on north side of railroad tracks adjacent to U.S. Dept of Defense Property on west side of Shanklin Rd. Associates include Eragrostis spectabilis, Dichanthelium oligosanthes var. scribnerianum, Dichanthelium aciculare, Symphyotrichum patens var. patens, Digitaria cognata, Andropogon ternarius, Pteridium aquilinum var. pseudocaudatum, etc. in Laurel Bay Area, 32° 28′ 01.9″ N., 80° 44′ 24.5″ W., 29 December 2005, DCP 4180.

Significance: This is the first report of this native grass and a northeastern range extension from the closest known population in Chatham County, Georgia (Weakley 2010). It extends southward to Florida. It occurs in edges of sphagnum bogs, cypress swamps and moist shady places (Hitchcock and Chase 1950, Weakley 2010).

Dichanthelium strigosum (Muhlenberg) Freckmann var. **glabrescens** (Grisebach) Freckmann (POACEAE)—**Beaufort County:** Recently timbered, fire-suppressed *Pinus elliottii/ Serenoa*

repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton. 32° 14' 21" N 80° 51' 47" W., 25 November 2004, DCP 1519 with JLLR; In association with widely spaced mature naturally regenerated Pinus taeda, Panicum virgatum var. virgatum, Schizachyrium scoparium var. scoparium, Panicum anceps var. rhizomatum, Rhynchospora recognita, Chasmanthium laxum, Seymeria cassioides, Dichanthelium dichotomum var. dichotomum, Morella cerifera, Ilex vomitoria, Sphagnum sp., etc. in depression wetland with extremely slight topography southeast of 48 Sherman Dr., Coosaw Island, 32° 26' 05" N 80° 39' 52" W., 6 January 2005, DCP 1670.

Significance: This minute grass is on the SC rare list (McMillan 2005). This is the first report for Beaufort County and the second reported county for the state. Though reported by McMillan (2005) for Jasper County, Weakley (2010) does not include South Carolina in its range.

Townsend and Sorrow (1999) does not distinguish infraspecific taxa for this species and reports the species for Hampton and Georgetown counties only. It ranges from southeast North Carolina south to south Georgia and Florida and west to Louisiana. It also occurs in Belize and the West Indies and Belize (Weakley 2010).

Digitaria bicornis (Lamarck) Roemer & J. A. Schultes (POACEAE)—Beaufort County: Morrall Park, Beaufort Arsenal, and Carnegie Park, Near corner of Craven St. and Carteret St., Town of Beaufort, 32° 25' 58" N., 80° 40' 13"W., 16 June 2004, DCP 213 with FJDR; Weed in lawn at Calhoun Gardens, a city park on the east side of Ribault Rd. Between the entrances to Spanish Point Rd., City of Beaufort, 32° 24' 28" N., 80° 41' 08" W., 16 September 2004, DCP 1005; Weed in moist lawn of Lovejoy Park on the NW corner of Ribault Rd. and Boundary St. City of Beaufort, 32° 26' 25" N 80° 41' 10" W., 16 September 2004, DCP 1020; In association with Callicarpa americana, Zanthoxylum clava-herculis, Rhus copallinum, Sassafras albidum, Aralia spinosa, Verbascum thapsus, Erythrina herbacea, etc. in residential property, Mattis Rd. St. Helena Island. 32° 23' 31" N., 80° 36' 13" W., 28 June 2005, *DCP 2289*; Common throughout lawn in residential gardeN.,#2 Moss Creek Ct., Moss Creek Plantation, A gated residential community off of Hwy 278 near Bluffton, 32° 14' 23" N., 80° 48' 29" W., 1 October 2005, DCP 3829. Significance: This is the second reported county occurrence for this weedy grass in South Carolina. It was documented from Florence County only (Townsend and Sorrow 2010). It occurs in the southeastern United States, California, Mexico, Costa Rica, the Caribbean and northern South America (Wipff 2003). It is unclear whether it is native or introduced in our area (Weakley 2010).

Digitaria ischaemum (Schreber) Muhlenberg var. ischaemum (POACEAE)—Beaufort County: Common throughout lawn in residential garden., #2 Moss Creek Ct., Moss Creek Plantation, a gated residential community off of Hwy 278 near Bluffton, 32° 14' 23" N.,80° 48' 29" W., 1 October 2005, DCP 3828. Digitaria ischaemum (Schreber) Muhlenberg var. mississippiensis (Gattinger) Fernald(POACEAE)—Beaufort County: In association with Digitaria ciliaris, Digitaria sanguinalis, Symphyotrichum bahamense, Aeschynomene indica, Cynodon dactylon, etc. in extremely disturbed, infrequently mown non-saline field. Soil is compacted from disturbance and filling with off-site soils. The site puddles heavily after rains but dries down excessively during longer dry periods, undeveloped lot in Moss Creek Village

Shopping Center off of Hwy 278 near Bluffton, 32 ° 14' 13" N., 80 ° 48' 23" W., 1 October 2005, *DCP 3835*.

Significance: Digitaria ischaemum is an extremely widespread Eurasian weedy grass. (Wipff 2003) It is reported for all 48 contiguous states (USDA, NRCS, 2009) and 19 of South Carolina's counties. It has not previously been reported for Beaufort County (Townsend and Sorrow 1999). D. ischaemum var. ischaemum and D. ischaemum var. mississippiensis were distinguished by Hitchcock and Chase (1950) and the drafts of Weakley which I used to identify these collections. Other references do not recognize infraspecific taxa for this species (Wipff 2003, Liu, Peet and Weakley 2006, USDA, NRCS 2010). These collections confirm that both of the varieties exist in Beaufort County.

Digitaria longiflora (Retzius) Glassman (POACEAE)—Beaufort County: Growing in lawn uphill from stormwater retention pond in association with *Stenotaphrum secundatum*, *Eremochloa ophiuroides, Cynodon dactylon, Poa annua, etc.* on Celadon Dr., Celadon subdivision, Lady's Island, 32° 25' 47" N., 80° 38' 18" W., 30 May 2006, *DCP 4627*. *Significance:* This weedy Old World tropical grass has previously been collected within the continental United States from Florida, Maryland and Wisconsin only (Wipff 2003, USDA, NRCS 2010, Weakley, 2010). It has long been established in South Florida (Hitchcock and Chase, 1950). USDA, NRCS (2010) erroneously reports this grass as native. These collections are more than 180 kilometers northeast of the closest previously documented populations in Duval County, Florida (Wunderlin and Hansen 2007). This is the only stoloniferous perennial *Digitaria* in our area (Hitchcock 1950).

Digitaria serotina (Walter) Michaux (POACEAE)—**Beaufort County:** Growing in *Stenotaphrum secundatum* lawn at Peter Fleming residence. 32 Saw Timber Dr., Moss Creek Plantation (a gated residential community in the Bluffton area). Specimen was collected and cultivated to await reproduction, pressed 5 June 2006, 32° 15' 30.7" N., 80° 48' 45.2" W., 23 March 2006, *DCP 4407*.

Significance: These collections confirm a third county occurrence for South Carolina and the first occurrence from the maritime strand counties for this native annual ruderal grass. Townsend and Sorrow (1999) report it for Allendale and Orangeburg counties only.

Dioscorea bulbifera Linnaeus (DIOSCOREACEAE)—**Beaufort County:** In association with *Ilex cornuta, Yucca aloifolia, Ligustrum sinense, Morus alba, Lonicera japonica, Liriope sp., etc.* on edge of heavily-degraded sinkhole. Across from 1205 Harrington St., Town of Beaufort, 27 November 2005, *DCP 4021*.

Significance: This is the fifth reported state occurrence for this Old World tropical vine and a northeastern range extension of over 160 kilometers from the closest reported population in Nassau County, Florida (Brown 2002, Wunderlin and Hansen 2008, USDA, NRCS 2010). It is also known from Mississippi, Louisiana and Texas (USDA, NRCS 2010, Brown 2002). It is a category 1 exotic plant pest in Florida (FLEPPC 2007). Its spread should be monitored in South Carolina. Dioscorea sps. are commonly cultivated for food and medicine in Asia and Africa (Martin 1974). I have observed South Asian immigrants cultivated them for food around their places of business. The general population cultivates them as ornamentals. Wild forms are

generally toxic or only edible after special processing. The edible forms do not generally survive long in the wild (Martin 1974).

Drymaria cordata (Linnaeus) Willdennow ex Schultes var. cordata

(CARYOPHYLLACEAE)—**Beaufort County:** In association with *Fraxinus americana, Smilax rotundifolia, Vitis cinerea* var. *floridana, Tradescantia fluminensis, Cyperus croceus, Cyperus retrorsus, Dichanthelium laxiflorum, Commelina diffusa, etc.*, city park along Fuller Parkway, Town of Beaufort, 32° 25' 41" N., 80° 41' 17" W., 24 June 2004, *DCP 308 with FJDR;* Weed in lawn, passive city park, Fuller Parkway, City of Beaufort, 32° 25' 41" N., 80° 41' 17 W., 16 September 2004, *DCP 1015;* Growing with *Nuttallanthus canadensis, Plantago virginica, Hypochaeris brasiliensis, Poa annua, Paspalum notatum, Vicia lathyroides, Cardamine hirsuta, etc.* in residential lawn, Morning Mist Dr., Shell Point neighborhood, near town of Port Royal, 32° 22' 47" N., 80° 44' 48" W., 6 January 2007, *DCP 5083*.

Significance: This is the first report of this pantropical herbaceous perennial weed for South Carolina and a northeastern range extension of over 180 kilometers from the closest previously documented population in Atkinson County, Georgia (Jones and Coile 1988, Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, Wunderlin and Hansen 2008). Weakley (2010) and USDA, NRCS (2010) consider it native. Hartman (2005) considered the North American populations introduced since the earliest collections were made in Florida in the early 1900's.

Dysphania pumilio (R. Brown) Mosyakin and Clemants (CHENOPODIACEAE)—**Beaufort County:** Gravel parking area across from Tire and Lube Center at Wal-Mart, West of intersection of Hwy 280 and Hwy 170, Burton area, 32° 25' 30.6" N., 80° 44' 07.3" W., 10 September 2007, *DCP 5181*.

Significance: This collection confirms a second county for the state and the first from the coastal plain for this diminutive Old World ruderal species. Hill and Horn (1997) first reported it from Abbeville County (Weakley 2010). Townsend and Sorrow (1999) report no other collections for the state.

Echinochloa crusgalli (Linnaeus) Palisot de Beauvois var. crusgalli (POACEAE)—Beaufort County: In association with Spartina alterniflora, Eleocharis sp., Pluchea odorata var. odorata, Leptochloa filiformis, Distichlis spicata, Fimbristylis castanea, Iva frutescens var. frutescens, Panicum virgatum, Sesbania herbacea, etc. in brackish roadside ditch at the corner of Airport Circle and Atkins Bluff Rd., Lady's Island, 32° 24' 31" N., 80° 37' 40" W., 28 August 2005 DCP 3744; In association with Pinus elliottii, Axonopus compressus, Panicum dichotomiflorum var. dichotomiflorum, Eragrostis refracta, Panicum anceps var. rhizomatum, Panicum virgatum var. virgatum, etc. on island on west side of Coosaw River Dr., between Coosaw Island and Judge Island, 32° 28' 20.1" N., 80° 34' 22.4" W., 30 December 2005 DCP 4195.

Echinochloa cruspavonis (Kunth) J. A. Schultes var. cruspavonis (POACEAE)—Beaufort County: In association with Galinsoga quadriradiata, Amaranthus blitum, Erechtites hieraciifolius, Landoltia punctata, Ludwigia sp., Hydrocotyle umbellata, Mikania scandens, Micranthemum umbrosum, etc. in ditch and retention pond next to Beaufort Wal-Mart garden center near the intersection of Hwy. 170 and Hwy. 280, Burton area, 9 July 2005, DCP 3294; In association with Paspalum urvillei, Persicaria punctata, Saururus cernuus, Trachelospermum

difforme, Digitaria sp., Pluchea sp., etc. Ditch along Dog Creek Rd. between Friendship Road and Relative Lane, Coosaw Island, 4 August 2005, DCP 3565; In association with Persicaria sp., Juncus sp., Alternanthera philoxeroides, Paspalum urvillei, Pontederia cordata var. cordata, Diodia virginica, Hypericum mutilum, etc. in roadside ditch, corner of Sherman Dr. and Coosaw River Dr., Coosaw Island, 32° 28' 43" N., 80° 34' 45" W., 7 August 2005, DCP 3596; Spontaneous in semi-natural garden next to brackish marsh, Pearson Residence. #4 Moss Creek Ct., Moss Creek Plantation (a gated residential community) off of Hwy. 278 near Bluffton, 32° 14' 24" N., 80° 48' 28" W., 7 October 2006, DCP 5024.P

Echinochloa muricata (Palisot de Beauvois) Fernald *var. microstachya* Wiegand (POACEAE)—Beaufort County: Weed along roadside in Jewell Park. A city park flooded by spring tides at the S.W. corner of King St. and New St., City of Beaufort, 32° 26' 03" N., 80° 40' 05" W., 18 August 2007, *DCP 5166*.

Echinochloa muricata (Palisot de Beauvois) Fernald var. muricata (POACEAE)—Beaufort County: Growing in dry disturbed area adjacent to depression wetlands under first set of powerlines west of Hwy 278 between Hwy 46 and Burnt Church Rd., Bluffton area with a mixture of depression wetland species and ruderal species. Associates include Proserpinaca pectinata, Juncus sps., Rhynchospora sp., Carex sps., Eleocharis sps., Canna flaccida, Galactia elliottii, Woodwardia virginica, Lachnanthes caroliniana, Sagittaria sps., Eremochloa ophiuroides, Cynodon dactylon, Eupatorium capillifolium, etc. 32° 13' 56" N., 80° 52' 02" W., 19 July 2006, DCP 4850; Growing in sandy causeway adjacent to salt marsh south of Sherman Dr. on Coosaw River Dr., Coosaw Island 32° 28' 39" N., 80° 34' 39" W. 24 September 2006, DCP 5008.

Significance: These collections establish that all four of these ruderal wetland grasses occur in South Carolina and particularly in Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) did not distinguish them but included them all as part of E. crusgalli. Although E. crusgalli 'sensu lato' is reported for almost every county in the state including Beaufort, it is unclear to which of these currently recognized taxa these reports belong. Echinochloa crusgalli var. crusgalli a weedy Eurasian introduction appears to be the most abundant (Michael 1993). Michael (1993) reports it throughout the country. E. cruspavonis is a native species found in scattered locations from British Columbia to Arizona, east to Florida, and south into South America. It favors marshes and wet places at lower elevations, often being found in the water E. cruspavonis var. cruspavonis is generally the more southern of the two varieties, extending through Mexico and the Caribbean to Bolivia and Argentina. It appears, presumably as an adventive species, as far north as Humboldt County, California. (Michael 1993). Liu, Peet and Weakley (2006) document it no closer than Franklin County, Florida. Echinochloa muricata is native to North America, growing from southern Canada to northern Mexico in moist, often disturbed sites (but not rice fields). Echinochloa muricata var. microstachya is the common variety in the western part of North America, extending east to the Missouri River and the Texas panhandle. Liu, Peet and Weakley (2006) report it from York, Lexington, Edgefield and Jasper counties. *Echinochloa muricata* var. *muricata* is the common variety in eastern North America (Michael 1993) Liu, Peet and Weakley (2006) report it from several counties, the closest being Aiken and Berkeley counties.

Elaeagnus umbellata Thunberg var. *parvifolia* (Royle) Schneider (ELAEAGNACEAE)— **Beaufort County:** Several plants naturalized on edge of grassy roadway, in association with Liquidambar styraciflua, Triadica sebifera, Paspalum notatum, Cirsium nuttallii, Diospyros virginiana, Morella cerifera, Celtis laevigata, Acer drummondii, etc., Sugar Hill Boat Landing, along edge of Twickenham Plantation, off of River Rd. and Combahee River, near Big Estate Community, 32° 39' 58" N., 80° 45' 19" W. 4 July 2005, DCP 3425.

Significance This is the first report of this invasive Eurasian shrub naturalizing in the outer coastal plain of South Carolina (Townsend and Sorrow, 2009). It has been widely planted in wildlife food plots. Within the state, it occurs mainly in the piedmont and Blue Ridge (Townsend and Sorrow 1999, Weakley 2010).

Eleocharis engelmannii Steudel (CYPERACEAE)—Beaufort County: In association with Bacopa monnieri, Ranunculus sp, Callitriche terrestris, Galium sp., Juncus dichotomus, etc. Ditch on Hwy 278 in front of Moss Creek Village, near Bluffton, 32° 14′ 08.7" N., 80° 48′ 19.3" W., 22 May 2006, DCP 4545; Growing in raised path next to a drainage canal in association with Sisyrinchium nashii, Sphenopholis obtusata, Juncus coriaceus, Juncus tenuis, Juncus diffusissimus, Phalaris angusta, etc. Surrounding area is mesic, hardwood forest. Southeast of Hwy 170, northeast of entrance to Perimeter Walk Shopping Center, Port Royal Island. In the vicinity of 32° 24′ 09" N 80° 45′ 35" W., 23 May 2006, DCP 4585; Growing on shoreline of wildlife pond with Sagittaria sp., Eleocharis aciculare, etc. at Pinckney Island National Wildlife Refuge, 32° 14′ 32.9" N., 80° 46′ 09.7" W., 19 July 2006, DCP 4811 with CPD.

Significance: This is the first report for this native spikerush for the maritime strand and

Significance: This is the first report for this native spikerush for the maritime strand and southern outer coastal plain counties of South Carolina (Weakley 2010). It has previously been reported from five counties. The closest of theses are Saluda to the northwest and Marion to the northeast (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006).

Eleocharis fallax Weatherby (CYPERACEAE)—Beaufort County: In association with Echinochloa crusgalli var. crusgalli, Spartina alterniflora, Pluchea odorata var. odorata, Leptochloa panicea ssp. brachiata, Distichlis spicata, Fimbristylis castanea, Iva frutescens var. frutescens, Panicum virgatum, Sesbania herbacea, etc. in brackish roadside ditch at the corner of Airport Circle and Atkins Bluff Rd., Lady's Island, 32° 24' 31" N., 80° 37' 40" W., 28 August 2005, DCP 3746.

Significance: This is the second reported county for this native brackish marsh sedge for South Carolina and the first from the southern maritime strand counties. Townsend and Sorrow (1999) report it for Georgetown County only. It is a species of Special Concern in Georgia (Weakley, 2008). It should be considered for inclusion on the South Carolina Rare List.

Eleocharis parvula (Roemer & J. A. Schultes) Link ex Bluff (CYPERACEAE)—**Beaufort** County: In association with *Impatiens capensis, Zizania aquatica, Triadenum walteri, Sium suave, Paspalum distichum, Lobelia cardinalis, Peltandra virginica, Pluchea* sp., *Amaranthus* sp., *Samolus parviflorus, Eryngium aquaticum* var. *aquaticum, Hibiscus moscheutos*, etc. on edge of tidal freshwater marsh, Sugar Hill Boat Landing, off of River Rd. and Combahee River near Big Estate Community, 32° 39' 56.4" N., 80° 45' 16.0" W., 15 July 2006, *DCP 4779* with *JLLR*.

Significance: This wetland sedge is rare in South Carolina, North Carolina, Virginia, Georgia, Michigan, Ohio, New Hampshire and Pennsylvania (McMillan 2005, USDA, ARS 2010, Weakley, 2010). This is the first report from Beaufort County. Previously, it was known from Charleston and Georgetown counties only (McMillan 2005). Townsend and Sorrow (1999) reported Sumter County as well. It is widespread, occurring in forty-three states, Canada, Mexico, Central America, South America, Eurasia and Africa (USDA, ARS 2010, Weakley 2010).

Eleocharis rostellata (Torrey) Torrey (CYPERACEAE)—Beaufort County: Growing in highway ditch adjacent to degraded pine flatwoods with *Phyla nodiflora, Proserpinaca palustris* var. *crebra, Juncus debilis Ludwigia palustris, Centella erecta, Micranthemum umbrosum, Galium obtusum var. obtusum,* etc. In front of Carolina Volvo, Northeast side of Hwy 278 north of Burnt Church Road, Greater Bluffton area, 32° 15' 09.1" N., 80° 50' 41.1" W., 24 May 2006, DCP 4589; Growing in moist depressions under first set of powerlines west of Hwy 278 Between Hwy 46 and Burnt Church Rd., Bluffton area in association with *Proserpinaca pectinata, Juncus* sp., *Rhynchospora* sp., *Canna flaccida, Galactia elliottii, Woodwardia virginica, Lachnanthes caroliniana, Sagittaria* sp., *Echinochloa* sp., etc., 32° 13' 56" N., 80° 52' 02" W. 19 July 2006, *DCP 4847*.

Significance: This wetland sedge is listed as rare in South Carolina, North Carolina, Virginia, Florida, Illinois, Maine, Minnesota, Pennsylvania, Rhode Island, Washington and Wisconsin (McMillan 2005, USDA, ARS 2010, Weakley, 2010). This is the first verified report from South Carolina. Previous reports from Georgetown County lack proper documentation (McMillan, 2005) Verified reports in Georgia area also lacking (Weakley, 2010). The closest other documented populations are to the southwest in Taylor County, Florida and to the northeast in Brunswick County, North Carolina. (Liu, Peet and Weakley 2006, Wunderlin and Hansen, 2010) This is a widespread species occurring in more than forty states, Canada, Mexico and the West Indies (USDA, ARS 2010, Weakley 2010).

Eleocharis tricostata Torrey (CYPERACEAE)—**Beaufort County:** Depression wetland at the southwest corner of Gibbet Rd. and Hwy 170, Bluffton, 32° 15' 19" N., 80° 58' 03" W., 12 May 2004, *DCP 89* with *FJDR*.

Significance: This depression wetland sedge is listed as rare in South Carolina, Delaware, North Carolina, Virginia, Maryland, Massachusetts, Michigan, Pennsylvania, New York and Rhode Island (McMillan 2005, USDA, ARS 2010, Weakley 2010). This is the first report for Beaufort County. It was previously known from Aiken, Bamberg, Barnwell, Berkeley, Calhoun, Charleston, Clarendon, Dillon, Hampton and Sumter counties. (McMillan, 2005) Townsend and Sorrow (1999) also include Allendale, Saluda, Richland and Georgetown counties. It ranges from Michigan, New York and Massachusetts south to Florida and Alabama (Weakley, 2010) USDA, ARS (2010) also reports Louisiana.

Emilia fosbergii Nicholson (ASTERACEAE)—**Beaufort County:** Spontaneous in several locations throughout native plant display garden. Uncultivated remnant vegetation includes *Celtis laevigata, Clematis catesbyana, Verbesina walteri, Verbesina virginica, Smallanthus uvedalius, Zanthoxylum clava-herculis, Sabal palmetto, Lonicera sempervirens and Quercus*

virginiana. It was probably introduced with landscape material in 2007, Lots 13 Trading Post Trail, Spring Island, 32° 20' 39" N., 80° 50' 18" W., 15 October 2008, *DCP 5252*. *Significance:* This is the first report for this tropical Asian weed in South Carolina (Townsend and Sorrow 1999, Barkley 2006, Weakley 2010). It represents a northeastern range extension of over 230 kilometers from the closest known populations in Clay County, Florida. Barkley (2006) reports it from Florida, Louisiana and Texas. Carter, Baker and Morris (2009) first reported it from Georgia (Lowndes County) in 2009.

Emilia sonchifolia (Linnaeus) Augustin de Candolle var. *sonchifolia* (ASTERACEAE)— **Beaufort County:** Former site of landscaping nursery Food Lion Shopping Center, NE corner of Hwy 21 and Sam's Point Rd. in the vicinity of 32° 24' 45" N 80° 38' 49" W. 19 October 2005, *DCP 3969*.

Significance: This is the second reported county in South Carolina and the first from the outer coastal plain for this pantropical weed (Weakley 2010). It was previously reported from Richland County only (Townsend and Sorrow 1999). Nelson and Kelly (1997) first reported it from South Carolina from a single plant collected in 1994. Weakley (2010) questioned how well established *E. sonchifolia* is in our area. I have observed it often as a weed in containerized plants shipped from Florida. It is never very abundant in landscapes or long persistent. However, due to the heavy traffic in landscaped material from Florida, it will doubtless become more common with time. I have also collected it in Jasper County *DCP 4101*.

Equisetum hyemale Linnaeus ssp. affine (Engelmann) Calder & R. L. Taylor (EQUISETACEAE)—Beaufort County: In association with Solidago altissima, Eupatorium capillifolium, Phyla nodiflora, Juncus sps., Gaura sp., Mikania scandens, Salix caroliniana, Bacopa monnieri, etc. adjacent to degraded Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods in power line easement at Buckingham Plantation Dr. near Bluffton, 32° 14' 05" N., 80° 48' 44" W., 6 July 2005, DCP3261.

Significance: This native pteridophyte has previously been reported from Lexington, Horry, Oconee and Cherokee counties only (Townsend and Sorrow 1999). This collection adds a fifth county record and the first from the southern outer coastal plain.

Eragrostis elliottii S. Watson (POACEAE)—Beaufort County: In and around depression wetlands. In association with Gratiola hispida, Oldenlandia uniflora, Liatris patens, Andropogon glaucopsis, Litsea aestivalis, Rhynchospora distans, Rhexia sp., Xyris sp., etc. Under utility lines. Predevelopment survey for Tabby Roads Subdivision, corner of Bruin Rd. and Burnt Church Rd., Bluffton, SC. 32° 14′ 06.9" N., 80° 51′ 14.5" W, 16 October 2004, DCP 1146 with JLLR; Edge of 5 year old clear cut along Buckwalter Parkway, moist area in association with Eupatorium capillifolium, Rhexia sps., Clethra alnifolia, Andropogon virginicus var. decipiens, etc., Bluffton, 32° 15′ 00.9" N., 32° 54′ 06.9" W., 1 November 2004, DCP 1373 with FCS; In association with Solidago sempervirens var. mexicana, Digitaria sanguinalis, Baccharis angustifolia, Diospyros virginiana var. virginiana, Ilex vomitoria, Limonium carolinianum, Sarcocornia pacifica, Salicornia bigelovii, Setaria parviflora, Symphyotrichum tenuifolium, etc.. Sandy roadside along causeway to Judge Island, Coosaw Island, 32° 28′ 20" N.,80° 34′ 07" W., 2 October 2005, DCP 3932; In association with Muhlenbergia capillaris, Cyperus polystachyos,

Spartina patens, Andropogon tenuispatheus, Fimbristylis castanea, Baccharis angustifolia, Pinus elliottii, etc. on west end of island on west side of Coosaw River Dr. between Coosaw Island and Judge Island, 32° 28' 20.1" N., 80° 34' 22.4" W., 30 December 2005, DCP 4185. Significance: This is the first report of this native bunchgrass for Beaufort County and the fourth reported county for South Carolina (Weakley 2010). Radford, Ahles and Bell (1968) reported it for Jasper, Georgetown and Richland counties. Townsend and Sorrow (1999) did not include it. It ranges from North Carolina south to Florida and west to Texas. It is rare favoring ultisol wet pine savannas, maritime wet grasslands, inland edges of brackish marshes, inland edges of freshwater tidal marshes and calcareous wet pine savannahs (Weakley 2010).

Eragrostis pectinacea (Michaux) Nees ex Steudel var. *pectinacea* (POACEAE)—**Beaufort** County: Growing in gravel parking lot around self-storage units on south side of Hwy 278 between Burnt Church Road and Hwy 46 (Bluffton Rd.) in the greater Bluffton area near 32° 13' 56" N., 80° 52' 02" W., 19 July 2006, *DCP 4840*; Growing out of gypsum gravel in filled salt marsh in association with *Dactyloctenium aegyptium, Tamarix sp., Sesbania drummondii, Nicotiana longiflora, Chenopodium sp., etc.* at Port Royal Dry Stack Marina parking lot, State Port of Port Royal Property, Town of Port Royal, 32° 22' 22" N., 80° 41' 15" W., 19 August 2006, *DCP 4923*.

Eragrostis pilosa (Linnaeus) Palisot de Beauvois Beaufort County: Growing near stormwater retention pond in association with Stenotaphrum secundatum, Eremochloa ophiuroides, Cynodon dactylon, Poa annua, Ludwigia sp., Diodia sp., Persicaria sp., etc. on Celadon Dr., Celadon subdivision, Lady's Island, 32° 25' 41.3" N., 80° 38' 07.5" W., 30 May 2006, DCP 4628. Significance: These collections clarify that both of these previously confused taxa occur in South Carolina and particularly in Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) stated that they included E. pectinacea as part of E. pilosa. Apparently Townsend and Sorrow (1999) continued this practice as they do not report *E. pectinacea* for the state. Weakley (2010) erroneously reported that his treatment of E. pilosa was equivalent to that of Radford, Ahles and Bell (1968). This casts doubt on the distribution in Liu, Peet and Weakley (2006). Peterson (2007) reports E. pilosa as a Eurasian native that has naturalized throughout the United States and in many parts of the world. He divides it into a widespread typic variety and E. pilosa var. perplexa (L.H. Harvey) S.D. Koch which he reports from Wyoming, North Dakota, Nebraska, Colorado, and northwestern Texas only. Peterson's treatment was not available when I identified these specimens so they have been identified to the specific level only. It is assumed from the distribution that they are the typic variety. Peterson (2007) treats E. pectinacea as native from Canada to Argentina. He divides it into three varieties. E. pectinacea var. pectinacea is the most widespread occurring throughout the range of the species. E. pectinacea var. miserrima (E. Fournier) J. Reeder ranges from Florida and Texas south to Brazil. E. pectinacea var. tracyi (Hitchcock) P. M. Peterson is known only from four counties in Florida.

Eriobotrya japonica (Thunberg) Lindley (ROSACEAE)—**Beaufort County:** Naturalized on an abandoned homesite with *Carya illinoinensis, Celtis laevigata, Prunus caroliniana, Sabal palmetto, Cinnamomum camphora, Gelsemium sempervirens, Hedera helix, Passiflora lutea, Ligustrum lucidum, etc.* at the northeast corner of Union St. and Baggett St., Town of Beaufort, 15 June 2005, *DCP 2176*.

Significance: This is the first documentation for this evergreen Asiatic ornamental tree from South Carolina (Weakley 2010). It represents a northeastern range extension of more than 220 kilometers from the closest previously documented population in Clay County, Florida (Wunderlin and Hansen 2008). It was known from California, Louisiana (USDA, NRCS 2010). It has recently been documented from Lowndes County, Georgia (Carter, Baker and Morris 2009)

Eryngium baldwinii Sprengel (APIACEAE)—Beaufort County: 3m x 2 m colony on closely mowed right of way adjacent to degraded slash pine, saw palmetto flatwoods. Associates include Eupatorium recurvans, Ageratina aromatica, Pteridium aquilinum var. pseudocaudatum, Serenoa repens, Clethra alnifolia, Vaccinium myrsinites, Vernonia sp., Morella pumila, Ilex glabra, Gaylussacia sp. etc. east of powerline crossing on Bruin Rd. Predevelopment survey for Tabby Roads Subdivision, Bluffton, 32° 14' 06" N 84° 51' 17" W., 17 December 2004, DCP 1602; 3meter x 2 meter colony on closely mowed right of way adjacent to degraded slash pine, saw palmetto flatwoods. Associates include Eupatorium recurvans, Ageratina aromatica, Pteridium aquilinum var. pseudocaudatum, Serenoa repens, Clethra alnifolia, Vaccinium myrsinites, Vernonia sp., Morella pumila, Ilex glabra, Gaylussacia sp. etc. east of powerline crossing on Bruin Rd., predevelopment survey for Tabby Roads Subdivision, Bluffton, 32° 14' 06" N 84° 51' 17" W. 2 July 2005. DCP 2294; In association with Fimbristylis dichotoma, Diodia virginica, Alternanthera philoxeroides, Phyla nodiflora, Digitaria sp., Micranthemum umbrosum and Oldenlandia sp. Closely-mown ditch along May River Rd. (Hwy 46) at confluence of ditch draining Piggly Wiggly parking lot, Bluffton, 32° 14' 14.2" N., 80° 52' 10.2" W. 27 November 2005, DCP 4057.

Significance: This is the first report for this diminutive pineland endemic from South Carolina and a northeastern range extension of over 130 kilometers from the closest previously documented population in Camden County, Georgia (Jones and Coile 1988, Liu, Peet and Weakley 2006). It is also known from Florida (USDA, NRCS 2010, Weakley, 2010). Liu, Peet and Weakley (2006) report it for Louisiana as well.

E. baldwinii can be distinguished from E. prostratum by having heads that are longer than wide versus heads that about as wide as long. Furthermore, the bracts on E. baldwinii extend conspicuously behind the width of the head. The bracts on E. prostratum barely extend beyond the base of the head. Both of these populations were very small and confined to moist, closely mown areas near severely fire-suppressed Pinus palustris/Serenoa repens/Ilex glabra woodlands. Areas away from the roadside were too thick to allow growth of such a diminutive species. Construction is now well underway at Tabby Roads. A construction entrance destroyed most of that population at that site. I potted the remaining plants in 2006 and am growing them in containers in my nursery until a suitable site for reintroduction can be located. Road widening, ditch clearing, or herbicide use could eliminate the Piggly Wiggly site as well.

Euonymus japonicus Thunberg (CELASTRACEAE)—Beaufort County: Naturalized near former homesite in association with Clethra alnifolia, Pinus taeda, Carya cordiformis, Morella cerifera, Magnolia grandiflora, Nyssa sp., Ilex glabra, etc. at intersection of Isabelle Blvd. and Parris Island Gateway (Hwy 280) Burton Area 32° 24′ 32" N., 80° 44′ 01" W., 25 July 2005, DCP 3488; Naturalized around former homesite. In association with Ligustrum sinense, Carya illinoinensis, Albizia julibrissin, Quercus virginiana, Juniperus silicicola, Wisteria sinensis,

Stenotaphrum secundatum, Sisyrinchium sp., Youngia japonica, Lagerstroemia indica, Ligustrum lucidum, Ligustrum japonicum, Euonymus japonicus, Macrothelypteris torresiana, Thelypteris kunthii, Lygodium japonicum, etc. on undeveloped lot in Okatie Center (a commercial development) at end of unnamed road parallel to Hwy 170 southwest of intersection of Hwy 170 and Hwy 278 within sight of intersection of Hwy. 278 and Hwy. 170, 32° 17' 28.9" N 80° 56' 18.6" W., 14 January 2006, DCP 4307.

Significance: This is the first report of this Japanese shrub naturalizing in South Carolina and the sixth reported state occurrence in the continental United States (Townsend and Sorrow, Weakley 2010). The closest known population is in Columbus County, North Carolina (Liu, Peet and Weakley 2006). It is also known from Indiana, Louisiana, Mississippi and Virginia (USDA, NRCS 2010).

Eupatorium leptophyllum Augustin de Candolle (ASTERACEAE)—Beaufort County: In association with Taxodium ascendens, Panicum hemitomon, Litsea aestivalis, Lachnanthes caroliniana, Rhexia virginica, Rhexia nashii, Rhexia mariana var. purpurea, Rhexia mariana var. exalbida, Hypericum galioides, Eupatorium album, Rhynchospora gracilenta, Rhynchospora cephalantha var. cephalantha, etc. in depression wetland S.E. corner of intersection of Gibbet Rd. and Hwy. 170, Bluffton, 32° 15' 17" N., 80° 58' 01" W, 17 October 2004, DCP 1188 with JLLR and ADR; In association with Pteridium aquilinum var. pseudocaudatum, Clethra alnifolia, Vaccinium myrsinites, Morella pumila, Ilex glabra, etc. Area recently disturbed from road construction in degraded Pinus palustris flatwoods. (All mature Pinus palustris) have been logged. Canopy is mostly Quercus hemisphaerica, Liquidambar styraciflua, and Nyssa biflora. Herbaceous vegetation is only present in disturbed areas.) 100 m. east of Sam's Point Rd. along Mary Elizabeth Rd., Lady's Island 32° 15' 39" N., 80° 59' 31" W. 25 September 2007, DCP 5191.

Significance: This robust herbaceous perennial is on the SC rare list (McMillan 2005). It is rare north of Florida (Weakley 2010). These collections represent the first documentation from Beaufort County. McMillan (2005) reported it from Allendale, Barnwell, Berkeley and Clarendon counties. Townsend and Sorrow (1999) exclude Clarendon but include Richland counties. Occurring in limesink depression ponds and clay-based Carolina bays in the coastal plain, it ranges from southeast North Carolina south to Florida and west to South Georgia and south Alabama. It is also present in the Bahamas and Cuba (Weakley 2010).

Eupatorium recurvans Small (ASTERACEAE)—Beaufort County: Growing with Lespedeza hirta var. curtissii along edge of Bruin Rd. adjacent to fire-suppressed Pinus elliottii/ Ilex glabra/ Serenoa repens, predevelopment survey for Tabby Roads Subdivision, Bluffton, SC. 32° 14' 12" N., 80° 51' 14" W., 3 October 2004, DCP 1090 with JLLR; 5 stems right here, 2 other populations on this site. In association with Pinus elliottii, Serenoa repens, Lyonia lucida, Lyonia mariana, Vaccinium myrsinites, Ilex glabra, Lyonia ferruginea or fruticosa, etc. Fire suppressed pine flatwoods along edge of Bruin Rd. Predevelopment survey for Tabby Roads Subdivision. Bluffton, SC. 32° 14' 11.6" N., 80° 51' 12.6" W., 16 October 2004, DCP 1163 with JLLR: In association with Crotalaria spectabilis, Eupatorium torreyanum, Sericocarpus tortifolius, Euthamia minor, Pityopsis graminifolia var. tenuifolia, Eragrostis refracta, etc. in remnant vegetation around storm-water retention pond. Plant community was formerly Pinus elliottii / Serenoa repens/ Ilex glabra flatwoods at edge of Home Depot parking lot, 1100 Fording Island

Rd. (NE of the intersection of Burnt Church Rd. and Fording Island Rd.) Near Bluffton. 32 ° 15' 16" N., 80° 50' 41" W., 1 October 2005, DCP 3842; In association with Bidens mitis, Sesbania herbacea, Dichanthelium scoparium, Helianthus angustifolius, etc. on roadside of Hwy 278 west of Indian Hill Cemetery, near Bluffton. 32 ° 17' 24" N., 80 ° 53' 56" W., 1 October 2005, DCP 3847; In association with Andropogon glaucopsis, Pinus elliottii, Pinus palustris, Clethra alnifolia, Rhynchospora wrightiana, Rhynchospora chapmanii, Rhynchospora fascicularis var. fascicularis, Andropogon tenuispatheus, etc. Area recently cleared for residential development across from intersection of Stevic Ct. and Reed Rd. Lady's Island. 32° 26' 37.6" N., 80° 38' 05.0" W., 26 December 2005, DCP 4136 with PHW and JLLR; In association with Solidago arguta var. caroliniana, Symphyotrichum dumosum, Solidago erecta, Helianthus hirsutus, Lobelia puberula, Tridens flavus, Chrysospsis mariana, Quercus alba, Panicum rhizomatum var. rhizomatum, Chasmanthium laxum, Arundinaria tecta, etc. #7 Old Bailey Rd. East side of Old Bailey Rd. where it joins Hwy 170 on its eastern end. Okatie Area. 32° 21' 30.1" N., 80° 52' 29.9" W., 22 November 2006, DCP 5056; In association with Liatris spicata var. spicata. Clinopodium georgianum, Carphephorus odoratissimus, Pityopsis sp., Penstemon australis, Panicum hemitomon, Solidago odora var. odora, etc., margin of pond created by excavating depression wetland. Surrounded by fire-suppressed pine-saw palmetto flatwoods, Audubon Newhall Preserve. Bay Pines Rd. Hilton Head 32° 09' 45" N., 80° 46' 23" W., 22 November 2006, DCP 5068; In association with Gaylussacia nana, Eupatorium scabridum, Lyonia lucida, Pinus serotina, Pinus palustris, Pinus elliottii, Pteridium aquilinum var. pseudocaudatum, Andropogon sp., Serenoa repens, Panicum hemitomon, Pityopsis sp., Dichanthelium chamaelonche, Euthamia sp., Kalmia hirsuta, Morella cerifera, Centella erecta, Aristida sp., Vaccinium elliottii, Hypericum crux-andreae, Xyris sp., Agalinis fasciculata, Vaccinium myrsinites, etc. Whooping Crane Preserve, preserved open space within Hilton Head Plantation, a gated residential community, Hilton Head Island. 32° 14′ 12.8" N., 32° 43′ 18.4" W., 23 November 2007, DCP 5230 with JLLR: In association with Gaylussacia nana, Eupatorium scabridum, Lyonia lucida, Pinus serotina, Pinus palustris, Pinus elliottii, Pteridium aquilinum var. pseudocaudatum, Andropogon sp., Serenoa repens, Panicum hemitomon, Pitvopsis sp., Dichanthelium chamaelonche, Euthamia sp., Kalmia hirsuta, Morella cerifera, Centella erecta, Aristida sp., Vaccinium elliottii, Hypericum crux-andreae, Xyris sp., Agalinis fasciculata, Vaccinium myrsinites, etc. Whooping Crane Preserve, preserved open space within Hilton Head Plantation, a gated residential community, Hilton Head Island. 32° 14′ 12.8" N., 32° 43′ 18.4" W., 23 November 2007, DCP 5231 with JLLR.

Significance: This herbaceous perennial of moist pinelands is rare in South Carolina and North Carolina (McMillan 2005, Weakley 2010). These are the first reports from Beaufort County. McMillan (2005) reported it for Berkeley, Horry and Sumter counties. Townsend and Sorrow (1999) excluded Berkeley but included Lee and Marion counties. It ranges from southern North Carolina south to southern Florida.

Eupatorium scabridum Elliott (ASTERACEAE)—**Beaufort County:** In association with *Panicum verrucosum, Ilex glabra, Pteridium aquilinum,* etc. Utility right-of- way adjacent to fire suppressed pine flatwoods. Corner of Bruin Rd. and Burnt Church Rd. Predevelopment survey for Tabby Roads Subdivision. Bluffton, SC. 32° 14' 07.9" N., 80° 51' 23.2" W.,16 October 2004, *DCP 1131;* Not cultivated. A few plants seen growing along Sparkleberry Way (a foot path) in

Port Royal Arboretum. Most of the surrounding way area recently been moved. In association with *Elephantopus tomentosus*, *Clethra alnifolia*, *Ilex glabra*, etc. Fort Walker Dr., Port Royal Plantation (a gated community off of Hwy. 278) Hilton Head Island. 32° 13' 23.0" N., 80° 41' 06.9" W., 25 August 2006, *DCP 4938*; In association with *Gaylussacia nana*, *Eupatorium recurvans*, *Lyonia lucida*, *Pinus serotina*, *Pinus palustris*, *Pinus elliottii*, *Pteridium aquilinum* var. *pseudocaudatum*, *Andropogon* sp., *Serenoa repens*, *Panicum hemitomon*, *Pityopsis* sp., *Dichanthelium chamaelonche*, *Euthamia* sp., *Kalmia hirsuta*, *Morella cerifera*, *Centella erecta*, *Aristida* sp., *Vaccinium elliottii*, *Hypericum crux-andreae*, *Xyris* sp., *Agalinis fasciculata*, *Vaccinium myrsinites*, etc., Whooping Crane Preserve, preserved open space within Hilton Head Plantation, a gated residential community, Hilton Head Island, 32° 14' 12.8" N., 32° 43'18.4" W., 23 November 2007, *DCP 5229* with *JLLR*.

Significance: This herbaceous perennial of maritime woodlands is listed as rare in South Carolina (McMillan 2005). It is also known from Colleton County (McMillan 2005). It ranges south to Florida and west to Louisiana, Arkansas and Oklahoma. USDA, ARS (2010) also reports it for Missouri and Texas.

Eupatorium torreyanum Short & Peter (ASTERACEAE)—**Beaufort County:** In association with *Crotalaria spectabilis, Sericocarpus tortifolius, Eupatorium recurvans, Euthamia minor, Pityopsis graminifolia var. tenuifolia, Eragrostis refracta,* etc., remnant vegetation around storm-water retention pond. Plant community was formerly *Pinus elliottii, Serenoa repens, Ilex glabra* flatwoods next to Home Depot parking lot, 1100 Fording Island Rd. (NE of the intersection of Burnt Church Rd. and Fording Island Rd.) near Bluffton, 32 ° 15' 16" N., 80 ° 50' 41" W., 1 October 2005, *DCP 3840*.

Significance: This is the second reported county occurrence for this native herbaceous perennial. Townsend and Sorrow (1999) reported it from Jasper County under the synonym *E. hyssopifolium* Linnaeus var. *laciniatum* Gray.

Euphorbia dentata Michaux (EUPHORBIACEAE)—**Beaufort County:** Growing in oyster shell along the boat landing, Bluffton Oyster Factory Park, Town of Bluffton, 32° 13′ 56" N 80° 52′ 02" W., 19 July 2006, *DCP 4835*.

Significance: This is the first report for this introduced ruderal species for the southern outer coastal plain of South Carolina (Weakley 2010). The closest previously documented populations lie more than 90 kilometers to the northwest in Barnwell Co., 140 to the north in Clarendon County and 220 kilometers to the northeast in Horry County (Townsend and Sorrow 1999).

Euphorbia graminea Jacquin (EUPHORRBIACEAE)—Beaufort County: A few plants seen growing underneath cultivated *Morella cerifera* along the edge of the Lowe's parking lot on the southwest side of Hwy 278 near Bluffton 32° 14' 28" N., 80° 49' 36" W, 11 December 2004, DCP 1597; In association with Solanum ptychanthum, Emilia sonchifolia var. sonchifolia, Oldenlandia corymbosa, Chamaesyce ophthalmica, Chamaesyce hyssopifolia, Lindernia crustacea, etc. at former site of Palms on the Parkway Nursery, Food Lion Shopping Center, Hwy 21, Lady's Island 32° 24' 45" N., 80° 38' 49" W., 19 October 2005, DCP 3968; Growing in dry detention pond at intersection of Hwy 802 and Professional Dr. in association with Salvia lyrata, Poa annua, Erigeron quercifolius, Quercus virginiana, Medicago lupulina, Sida

rhombifolia, etc. in Port Royal, SC. 32° 23' 40.8" N., 80° 41' 03.6" W., 22 May 2006, DCP 4550; Naturalized in association with Trachelospermum asiaticum, Alstroemeria pulchella, Hedera colchica, Quercus hemisphaerica, Quercus virginiana, Prunus caroliniana, Celtis laevigata, Stachys floridana, etc. at former site of Buds and Blooms Nursery (a retail container nursery) Hwy 21, Lady's Island 32° 24' 56" N., 80° 39' 04" W., 6 January 2007, DCP 5087. Significance: This is the first report for this introduced annual ruderal species from South Carolina (Townsend and Sorrow 1999, USDA, NRCS 2010). Within the continental United States, it has previously been reported from Florida only (Liu, Peet and Weakley 2006, USDA, NRCS 2010). These collections represent a northeastern range extension of over 330 kilometers from the closest documented population in Leon County, Florida (Wunderlin and Hansen 1998).

Euphorbia marginata Pursh (EUPHORRBIACEAE)—**Beaufort County:** Abundant. Growing in rubble and sand where residence was torn down the year before. In association with *Amaranthus sp., Richardia brasiliensis, Diodia teres, Lepidium virginicum, Rumex hastatulus, etc.* 344 Sam's Point Rd., Lady's Island. Surrounding intact woodlands are pine flatwoods. Plant was potted and pressed in August 2006, 344 Sam's Point Rd., Lady's Island, 32° 26' 38.2" N., 80° 38' 22.1" W., 4 June 2006, *DCP 4636*.

Significance: This is the second report of this escaped garden annual for South Carolina and the first for the maritime strand counties. Townsend and Sorrow (1999) report it for Lee County. It is native to western North America (Weakley 2010). This white-bracted self-sowing annual is seldom seen in commercial nurseries. More often it is shared among friends.

Euthamia hirtipes (Fernald) Sieren (ASTERACEAE)—**Beaufort County:** On roadside adjacent to moist fire-suppressed pineland at the corner of Coosaw River Dr. and Sherman Dr., Coosaw Island, 32° 28' 43" N., 80° 34' 44" W., 20 October 2005, *DCP 4001*.

Euthamia minor (Michaux) Greene (ASTERACEAE)—Beaufort County: Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton, 32° 14' 24" N., 80° 51' 47" W., 14 November 2004, DCP 1470 with JLLR; In association with Crotalaria spectabilis, Eupatorium torreyanum, Sericocarpus tortifolius, Eupatorium recurvans, Pityopsis graminifolia var. tenuifolia, Eragrostis refracta, etc., remnant vegetation around storm-water retention pond. Plant community was formerly Pinus elliottii, Serenoa repens, Ilex glabra flatwoods, Home Depot parking lot,1100 Fording Island Rd. (NE of the intersection of Burnt Church Rd. and Fording Island Rd.),near Bluffton, 32° 15' 16" N. 80° 50' 41" W., 1 October 2005, DCP 3843; In association with Uniola paniculata, Yucca gloriosa, Opuntia humifusa var. austrina, Pinus elliottii, Heterotheca subaxillaris, Fimbristylis caroliniana, Andropogon tenuispatheus, Andropogon virginicus var. virginicus, Panicum amarum var. amarum, Ipomoea imperati, etc. in the dunes at marker #12, Sea Pines Plantation, Hilton Head.32° 06' 35" N., 80° 49' 29" W., 27 November 2005, DCP 4038 with CCC and JLLR.

Euthamia tenuifolia (Pursh) Nuttall (ASTERACEAE)—Beaufort County: In association with Paspalum urvillei, Dichanthelium scoparium, Saccharum giganteum, Melochia corchorifolia, Arundinaria tecta, Ludwigia linearis var. linearis, Ludwigia decurrens, Rhynchospora caduca, etc. in power-line easement at intersection of Barrel Landing Rd. and Running Deer Rd.,

southeast of intersection of Hwy 170 and Hwy 278, 32° 17' 37.1" N., 80° 56' 05.1" W., 21 December 2005, *DCP 4106*.

Significance: These collections confirm that all three of these native fall-blooming herbaceous perennials occur in South Carolina and particularly in Beaufort County. Radford, Ahles and Bell combined *E. hirtipes* and *E. tenuifolia* under *Solidago tenuifolia* Pursh and Townsend and Sorrow (1999) combined all three under E. tenuifolia (sensu lato) (Weakley 2010).

Fallopia scandens (Linnaeus) Holub var. var. scandens (POLYGONACEAE)—Beaufort County: In association with Ligustrum sinense, Dysphania ambrosioides, Diospyros virginiana, Solidago altissima, Bidens sp., Paspalum urvillei, Lepidium virginicum, Ambrosia artemisiifolia, Sorghum halepense, etc. on sandy roadside of Airport Circle, Lady's Island, 32° 24' 20" N., 80° 37' 47" W., 4 July 2005, DCP 3259.

Significance: In South Carolina, his native ruderal vine primarily occurs in the fall line counties and northwestward (Townsend and Sorrow 1999, Weakley 2010). This is the second report from the outer coastal plain (the first being in adjacent Hampton County) and the first from the maritime strand (Townsend and Sorrow 1999, Weakley 2008).

Ficus pumila Linnaeus (MORACEAE)—**Beaufort County:** Spreading abundantly from former cultivation. It is trailing throughout much of property, in association with *Trachelospermum asiaticum, Euphorbia graminea, Alstroemeria pulchella, Hedera colchica, Quercus hemisphaerica, Quercus virginiana, Prunus caroliniana, Celtis laevigata, Stachys floridana, etc. at former site of Buds and Blooms Nursery (a retail container nursery) Hwy 21, Lady's Island 32° 24' 56" N 80° 39' 04" W., 6 January 2007, <i>DCP 5086*.

Significance: This collection provides documentation and clarification that this Asian vine has naturalized in South Carolina (Weakley 2010). The closest documented occurrences are in Leon and Marion counties, Florida (Wunderlin and Hansen 2008). Reports from Weakley (2010) for South Carolina and USDA, NRCS for Georgia do not appear to be based on herbarium records. It is not reported from these areas by Jones and Coile (1988) and Townsend and Sorrow (1999). The only report north of Florida in Liu, Peet and Weakley (2006) is a cultivated specimen in Aiken County.

Forestiera godfreyi L. C. Anderson (OLEACEAE)—Beaufort County: Located on shell midden within extensive salt marsh on northwest side of Daws Island. The mound is likely of native Indian origin. It rises approximately 3 meters above the marsh and approximately 3-40 yards across. This shrub is the dominant understory species on ½ of the island. Few plants with dark blue/black fruit at this time. Often draped with vines of Cynanchum scoparium.32° 20' 35.3" N., 80° 46' 54.3" W., 13 May 1997, JFT 1485 with RDP, PDM and TW; Only staminate plants observed. In association with Cornus asperifolia, Ilex vomitoria, Tilia sp., Morus rubra, Cercis canadensis, Serenoa repens, Fraxinus americanus, Aesculus pavia, Carex floridana, etc. On top of shell ring. South Bluff Heritage Preserve. Viola Smalls Lane, Coosaw Island. 32° 14' 36" N., 80° 48' 04" W., 1 March 2004, DCP 70.

Significance: This dioecious shrub is listed as rare in South Carolina. It is also known from Colleton and Charleston counties (Townsend and Sorrow 1999). It occurs in Georgia and Florida as well (Weakley 2010)

Froelichia gracilis (Hooker) Moquin-Tandon (AMARANTHACEAE)—**Beaufort County:** Growing in dry sandy lawn and perennial border at residence of Leo and Rachel Sweatte, 1707 Lafayette St., City of Beaufort, 32° 26′ 46″ N., 80° 40′ 53" W., 21 August 2007, *DCP 5168*. *Significance:* This is the first report of this Midwestern ruderal annual from the maritime strand of South Carolina (Weakley, 2010). It is predominately found in the inner coastal plain and lower piedmont of South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006)

Gaillardia pulchella Fougeroux var. pulchella (ASTERACEAE)—Beaufort County: Naturalized along margin of salt marsh as part of a roadside "wildflower planting" about 5 m. from this site. The planting was abandoned more than 5 years prior to the collection date. In association with Gaura lindheimeri, Coreopsis tinctoria, Ambrosia artemisiifolia, Agalinis sp., Euthamia sp., Paspalum urvillei, Solidago altissima, Sabatia stellaris, Fimbristylis castanea, Eupatorium capillifolium, etc. at intersection of Hwy 802 and Islands Causeway, Lady's Island, 32° 23' 49" N., 80° 39' 47" W., 11 July 2005, DCP 3307.

Significance: Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) did not distinguish infraspecific taxa for this showy short-lived perennial. This collection provides documentation that this variety which was introduced from farther south and west through ornamental plantings has naturalized in South Carolina and particularly in Beaufort County (Weakley 2010). Liu, Peet and Weakley (2006) show no clearly documented records closer than Duval County, Florida (190 kilometers to the southwest) and Moore County, North Carolina (290 kilometers to the northeast). The variety with fleshy leaves which is native to sand flats behind dunes, *G. pulchella* var. *picta* (Sweet) A. Gray, was not encountered during this study.

Galactia elliottii Nuttall (FABACEAE)—Beaufort County: Power-line through longleaf pine flatwoods, under power-line along SC-46 just west of Hwy. 278, 2 August 1997, RDP 2770 (CITA-CLEMS); Edge of athletic track at M. C. Riley Elementary School, Burnt Church Rd., Town of Bluffton 32° 14' 05" N., 80° 51' 18" W., 30 June 2004, DCP 317; Along road edge of fire-suppressed slash pine flatwoods. Community dominants include *Pinus elliottii*, *Serenoa* repens, Lyonia lucida, Lyonia fruticosa Clethra alnifolia, Gaylussacia tomentosa and Ilex glabra. Predevelopment survey for Tabby Roads Subdivision SW of intersection of Bruin Rd and Pritchard St., Town of Bluffton, 32° 14' 13" N., 80° 51' 24" W., 16 October 2004, DCP 1118 with JLLR; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton. 32° 14' 24" N., 80° 51' 48" W., 25 November 2004, DCP 1510 with JLLR; In association with Sageretia minutiflora, Descurainia pinnata var. pinnata, Ouercus hemisphaerica, Juniperus silicicola Morella cerifera, Serenoa repens, Persea borbonia, Osmanthus americanus, Ilex vomitoria, Verbesina virginica, etc. Native American shell deposit at Butch's Island Boat Landing, on Hwy 21 between St. Helena Island and Harbor Island, 32° 24' 32" N., 80° 28' 06" W., 2 January 2005, DCP 1604 with TMS; In association with Pinus palustris,, Serenoa repens, Ilex glabra, Indigofera caroliniana, Lyonia lucida, Andropogon glaucopsis, Clethra alnifolia, Vaccinium myrsinites, etc. Off of Foreman Hill Rd. East of Bluffton. 32° 13' 42" N., 80° 50' 49" W., 30 May 2005, DCP 2060; In association with Gratiola pilosa, Centella erecta, Pinus palustris, Pteridium aquilinum var. pseudocaudatum, Ludwigia

sp., Orbexilum pedunculatum var. psoralioides, Clethra alnifolia, Ilex glabra, Persea palustris, etc. on roadside, north side of Gibbet Rd. across from depression wetland, near intersection with Hwy 170. 32° 15' 19" N., 80° 58' 01" W., 2 July 2005, DCP 3870 with JLLR; In association with Gratiola pilosa, Centella erecta, Pinus palustris, Pteridium aquilinum var. pseudocaudatum, Ludwigia sp., Galactia elliottii, Clethra alnifolia, Ilex glabra, Persea palustris, etc. on roadside, north side of Gibbet Rd. across from depression wetland, near intersection with Hwy 170, 32° 15' 14" N., 80° 58' 00" W., 2 July 2005, *DCP 3940* with *JLLR*; 3meter x 55meter colony growing along edge of powerlines running parallel to Hwy 278 adjacent to firesuppressed pine flatwoods. In association with Lyonia ferruginea, Lechea mucronata, Lyonia mariana, Quercus nigra, Serenoa repens, Liquidambar styraciflua, Vaccinium myrsinites, Ilex glabra, Gratiola pilosa, Apios americana, Pterocaulon pycnostachyum, Lyonia lucida, Carya glabra, Clethra alnifolia, etc. 80 meters east of the parking lot of Tangier Outlet Center, near Bluffton, 32° 14' 16" N., 80° 49' 04" W., 6 July 2005, DCP 3268; Growing under thinned Pinus palustris in association with Ouercus minima, Lyonia ligustrina var. foliosiflora, Pteridium aquilinum, Pityopsis sp., Ilex glabra, etc. Currently undeveloped property at the corner of Moreland Rd. and White House Rd., Palmetto Bluff (a gated residential community), Bluffton, 32° 11' 20.6" N., 80° 54' 40.0" W., 14 June 2006, DCP 4690 with JLLR; Growing under first set of powerlines west of Hwy 278 between Hwy 46 and Burnt Church Rd., Bluffton area, In association with Proserpinaca pectinata, Juncus sp., Rhynchospora sp., Carex sp., Eleocharis sp., Canna flaccida, Woodwardia virginica, Lachnanthes caroliniana, Sagittaria sp., Echinochloa sp., etc. 32° 13' 56" N., 80° 52' 02" W., 19 July 2006, DCP 4839; In association with Galactia elliottii, Clethra alnifolia, Ilex glabra, etc. in degraded pine flatwoods on Ephraim Rd. near intersection with Land's End Rd. Helena Island, 32° 21' 40" N., 80°35' 35" W., 30 July 2006, DCP 4874.

Significance: This native leguminous vine on the SC Rare list (McMillan 2005) It is also known from Charleston and Jasper counties (McMillan 2005) Townsend and Sorrow (1999) includes Williamsburg County as well. It ranges south to southern Florida (Weakley 2010).

Gamochaeta antillana (Urban) Anderberg (ASTERACEAE)—**Beaufort County:** Growing in association with *Gamochaeta chionesthes, Gamochaeta pensylvanica, Gamochaeta coarctata, Spiranthes vernalis, Sisyrinchium rosulatum, Kyllinga sp., Eremochloa ophiuroides, etc.* in lawn around buildings at Tide Watch Shopping Center, Lady's Island, 32° 24' 39" N.,80° 38' 44.3" W., 11 May 2006, *DCP 4452*.

Gamochaeta argyrinea Nesom (ASTERACEAE)—**Beaufort County:** Growing in association with *Sonchus oleraceus, Lantana urticoides, Gamochaeta purpurea, Pueraria montana* var. *lobata, Phyllostachys aurea, etc.* in heavily disturbed area adjacent to the parking lot of Bateaux restaurant, Whitehall Rd. Lady's Island, 32° 25' 14" N.,80° 39' 57" W., 20 March 2006, *DCP* 4370.

Gamochaeta calviceps (Fernald) Cabrera (ASTERACEAE)—**Beaufort County:** Growing with *Dichondra carolinense, Paspalum notatum, Polypremum procumbens, Eremochloa ophiuroides, Richardia brasiliensis, etc.* in graveyard of Friendship Baptist Church at the corner of Friendship Dr. and Dog Creek Rd., Coosaw Island 32° 28' 47" N., 80° 35' 14" W., 10 February 2006, *DCP* 4331.

Gamochaeta coarctata (Willdenow) Kerguélen (ASTERACEAE)—Beaufort County: Growing in association with Rumex hastatulus, Oxalis dillenii, Galium aparine, Lepidium didymum, Sonchus asper, Trifolium repens, Vicia sativa ssp. nigra, Geranium carolinianum, Eremochloa ophiuroides, Hypochaeris brasiliensis, Pyrrhopappus carolinianus, Poa annua, etc. in lawn at Tide Watch Shopping Center, Hwy 21 Lady's Island, 32° 24' 37" N. 80° 38' 42" W., 18 March 2006, DCP 4340; Growing in association with Gamochaeta chionesthes, Gamochaeta pensylvanica, Gamochaeta antillana, Spiranthes vernalis, Sisyrinchium rosulatum, Kyllinga sp., Eremochloa ophiuroides, etc. in lawn around buildings, Tide Watch Shopping Center, Lady's Island 32° 24' 39" N., 80° 38' 44.3" W., 11 May 2006, DCP 4453; Growing in association with Hypochaeris brasiliensis, Persea borbonia, Callicarpa americana, Wisteria sinensis, Houstonia procumbens, Stenotaphrum secundatum, Parthenocissus quinquefolia, Quercus hemisphaerica, etc. in mostly uncultivated residential garden on Sam's Point Rd., Lady's Island, 32° 25' 03" N 80° 38' 47" W., 11 May 2006, DCP 4489.

Gamochaeta chionesthes Nesom (ASTERACEAE)—Beaufort County: Growing in association with Sonchus oleraceus, Lantana urticoides, Gamochaeta pensylvanica, Pueraria montana var. lobata, Phyllostachys aurea, etc. in heavily disturbed area adjacent to the parking lot of Bateaux restaurant, Whitehall Rd. Lady's Island, 32° 25' 14" N., 80° 39' 57" W., 20 March 2006, DCP 4371; Growing in association with Gamochaeta pensylvanica, Gamochaeta antillana, Gamochaeta coarctata, Spiranthes vernalis, Sisyrinchium rosulatum, Kyllinga sp., Eremochloa ophiuroides, etc. in lawn around buildings at Tide Watch Shopping Center, Lady's Island 32° 24' 39" N., 80° 38' 44.3" W., 11 May 2006, DCP 4450.

Gamochaeta pensylvanica (Willdenow) Cabrera (ASTERACEAE)—Beaufort County: In association with Melilotus indicus, Lepidium virginicum var. virginicum, Corydalis micrantha ssp. australis, Plantago lanceolata, Helianthus microcephalus, Carex muhlenbergii, Lolium perenne var. aristatum, Dichanthelium acuminatum var. acuminatum, Carya glabra var. megacarpa, Spermolepis divaricata, Vicia tetrasperma, Lactuca serriola, Sonchus oleraceus, Chaerophyllum tainturieri var. tainturieri, Dichanthelium commutatum var. commutatum, Vitis vulpina, Hypochaeris brasiliensis var. tweediei, etc. City of Beaufort property, east side of Hwy 21, between Lady's Island Boat Landing and the Beaufort River bridge, Lady's Island, 32° 14′ 36″ N., 80° 48′ 04″ W., 30 April 2004, DCP 85 with FJDR; Growing in association with Gamochaeta chionesthes, Gamochaeta antillana, Gamochaeta coarctata, Spiranthes vernalis, Sisyrinchium rosulatum, Kyllinga sp., Eremochloa ophiuroides, etc. in lawn around buildings at Tide Watch Shopping Center, Lady's Island, 32° 24′ 39″ N.,80° 38′ 44.3″ W., 11 May 2006, DCP 4451; Growing among shrubbery in front of Beaufort Post Office, corner of Charles St. and King St., 32° 26′ 02″ N., 80° 40′ 21″ W., 11 May 2006, DCP 4487.

Gamochaeta purpurea (Linnaeus) Cabrera 'sensu stricto' (ASTERACEAE)—**Beaufort** County: In association with *Xyris ambigua, Drosera capillaris, Axonopus fissifolius, Ilex glabra, Rhynchospora cephalantha, Rhynchospora inexpansa, Eleocharis tuberculosa, Verbena scabra, Eriocaulon decangulare, Acer drummondii, Juncus biflorus, Taxodium ascendens, Hypericum cistifolium, Rhexia alifanus, Diodia virginica, Hypericum mutilum var. mutilum, Cuphea carthagenensis, Polygala lutea, Buchnera sp., Pinus serotina, Clethra alnifolia, etc..* Unmarked wetland preserve. Iron Gate subdivision, Laurel Bay area, 32° 27' 38" N., 80° 46' 50" W. 22 July 2005, *DCP 3423*; Growing in association with *Hypochaeris brasiliensis, Persea borbonia, Callicarpa americana, Wisteria sinensis, Houstonia procumbens, Stenotaphrum*

secundatum, Parthenocissus quinquefolia, Quercus hemisphaerica, etc. in mostly uncultivated residential garden, Sam's Point Rd., Lady's Island, 32° 25' 03" N., 80° 38' 47" W., 11 May 2006, DCP 4488.

Significance: The above cited collections document that these seven ruderal herbs occur in South Carolina and particularly in Beaufort County (Nesom 2006). When Nesom (2006) revised the treatment of this genus, the county distribution reflected in Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) lost its utility. Nesom (2006) reported twelve species of Gamochaeta in North America, eight of which occur in ruderal sites of the southeastern United States. The seven above reported species were all included under Gnaphalium purpureum Linnaeus in Radford, Ahles and Bell (1968). In Townsend and Sorrow they were reported under either Gamochaeta purpurea (Linnaeus) Cabrera 'sensu lato' or Gamochaeta falcata (Lamarck) Cabrera. Liu, Peet and Weakley provide good herbarium records for some of the species in South Carolina: G. antillana from Berkeley and Florence counties, G. argyrinea as close as Bladen, County North Carolina but not from South Carolina, no records for G. calviceps, G. chionesthes from Aiken County, G. coarctata from Aiken County, G. pensylvanica from Berkeley County and no herbarium records of G. purpurea in the Southeast.

Gamochaeta simplicicaulis (Willdenow ex Sprengel) Cabrera (ASTERACEAE)—**Beaufort** County: Growing on roadside adjacent to pine flatwoods in association with *Lyonia mariana*, *Lyonia lucida*, *Dichanthelium sp.*, *Pinus palustris*, *Pinus serotina*, *Clethra alnifolia*, *Sassafras albidum*, *etc*. Burnt Church Rd., Greater Bluffton area, 32° 14' 40.4" N., 80° 50' 49.7" W., 26 May 2006, *DCP 4602*.

Significance: This collection represents the first report of South American ruderal species for Beaufort County and confirms that it is still present in the state after a forty-five year gap in collections (Weakley 2010). Pruski (1997) first reported it from the United from Florida. The first collections from the country were made between 1957 and 1961 in Berkeley, Charleston, Georgetown, Horry, Jasper and Williamsburg counties, South Carolina. These specimens were misidentified as Gamochaeta purpurea (Linnaeus) Cabrera and Gamochaeta americana (P. Miller). Nesom (1999) reported the species from the state citing theses specimens in 1997. He also reported it from North Carolina. He concluded that" it was probable that its current distribution is broader than the report indicates." G. simplicicaulis blooms in late summer to early fall, whereas all other Gamochaeta in our area are primarily spring bloomers.

Gaura lindheimeri Engelmann & A. Gray (ONAGRACEAE)—Beaufort County: Naturalized along margin of salt marsh from a roadside "wildflower planting" about 5 meters from this site. The planting was abandoned more than 5 years prior to the collection date in association with Gaillardia pulchella var. pulchella, Coreopsis tinctoria, Ambrosia artemisiifolia, Agalinis sp., Euthamia sp., Paspalum urvillei, Solidago altissima, Sabatia stellaris, Fimbristylis castanea, Eupatorium capillifolium, etc. at intersection of Hwy 802 and Islands Causeway, Lady's Island, 32° 23' 49" N., 80° 39' 47" W., 11 July 2005, DCP 3306.

Significance: This is the first report for this showy summer-blooming perennial naturalizing in South Carolina. This population lies more than 400 kilometers northeast of the closest previous report in Liberty County, Florida (Jones and Coile 1988, Townsend and Sorrow 1999, Liu, Peet and Weakley, 2006, USDA, NRCS 2010, Wunderlin and Hansen 2007, Weakley, 2010). Native

to south-central and southeastern Texas and southern Louisiana, it is widely cultivated and occasionally established elsewhere (Darst and Gholson 2004). Darst and Gholson (2004) first reported it from Florida from a 2003 collection. It had been reported much earlier from Mississippi (1938) and Alabama (1957) (Darst and Gholson (2004).

Gaylussacia nana (A. Gray) Small (ERICACEAE)—Beaufort County: In association with Lyonia fruticosa and/or ferruginea, Symplocos tinctoria, Ilex glabra, Vaccinium myrsinites, Pinus elliottii, and Clethra alnifolia. Pre-development survey for Buckwalter Park, west side of Buckwalter Pkwy., Bluffton, S.C. 32° 14′ 12″ N., 80° 54′ 13″ W., 31 October 2004, DCP 1317 with FCS; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., BlufftoN.,32° 14′ 22″ N 80° 51′ 48″ W., 14 November 2004, DCP 1484 with JLLR; In association with Eupatorium scabridum, Eupatorium recurvans, Lyonia lucida, Pinus serotina, Pinus palustris, Pinus elliottii, Pteridium aquilinum var. pseudocaudatum, Andropogon sps., Serenoa repens, Panicum hemitomon, Pityopsis sps., Dichanthelium chamaelonche, Euthamia sps., Kalmia hirsuta, Morella cerifera, Centella erecta, Aristida sps., Vaccinium elliottii, Hypericum crux-andreae, Xyris sps., Agalinis fasciculata, Vaccinium myrsinites, etc. at Whooping Crane Preserve, preserved open space within Hilton Head Plantation, a gated residential community, Hilton Head Island, 32° 14′ 12.8″ N., 32° 43′18.4″ W., 23 November 2007, DCP 5228 with JLLR.

Significance: This ericaceous shrub was not included as a distinct taxon in Townsend and Sorrow (1999). It was probably submerged under *G. tomentosa* (A. Gray) Pursh ex Small (Weakley 2010) following the treatment and distribution in Radford, Ahles and Bell (1968). Both *G. tomentosa* 'sensu stricto' and *G. nana* are frequently encountered in pinelands in our area. Both taxa have been previously documented from the county (Weakley 2010). This serves as reminder that *G. nana* should be added to the South Carolina Plant and Fish Atlas. The distribution for *G. tomentosa* should be evaluated to determine which of the indicated counties belong to each of these distinct taxa.

Gelsemium rankinii Small (GELSEMIACEAE)—Beaufort County: In association with Rosa palustris, Eryngium aquaticum var. aquaticum, Cicuta maculata var. maculata, Cladium jamaicense, Hibiscus moscheutos ssp. moscheutos, Eupatorium serotinum, Spartina cynosuroides, Osmunda regalis, Kosteletzkya virginica, etc. on left bank of New River, north of Hwy 46 Bridge. 32° 14' 21" N., 81° 00' 52" W, 8 April 2003, DCP 25 with Ben Turner; Growing in the Great Swamp of the New River along the northern section of the proposed New River Trail (utility line easement along abandoned rail line between Hwy 46 and Sun City Hilton Head) Town of Bluffton, 32° 15' 39" N., 80° 59' 31" W., 4 April 2003, DCP 0027.

Significance: This evergreen vine is listed as rare in South Carolina and North Carolina (Weakley 2004, McMillan 2005). These are the first reports from the southern coastal plain of South Carolina. It was previously known from Georgetown, Horry, Marion, Lee, Kershaw and Richland counties. It ranges from southeastern North Carolina south through coastal South Carolina and Georgia to the Florida panhandle and west to eastern Louisiana (Weakley 2010).

Gladiolus communis Linnaeus (IRIDACEAE)—**Beaufort County:** Naturalized around former homesite at the S.E. corner of Piney Ln. and Coosaw River Dr., 32° 28' 47" N., 80° 34' 50" W., 28 April 2007, *DCP 5124*.

Significance: This collection confirms this Mediterranean native occurs in the coastal plain of South Carolina and particularly in Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) and Liu, Peet and Weakley (2006) report it for Spartanburg County only. Townsend and Sorrow (1999) also includes Union County. Goldblatt (2002) reports it for the state but does not report geographical provinces. Weakley (2010), however reports it for the coastal plain of South Carolina but not for the piedmont without giving citation for the difference in distribution. This appears to be a misprint in Weakley. This species is infrequently seen persisting and slowly spreading from old plantings. It is rarely available in the horticultural trade. Locally it is known as "Byzantine Gladiola".

Gladiolus dalenii Van Geel ssp. dalenii (IRIDACEAE)—Beaufort County: Naturalized in association with Paspalum notatum, Paspalum urvillei, Tripsacum dactyloides, Stachys floridana, Centella erecta, Salvia lyrata, Passiflora incarnata, Callicarpa americana, Physalis walteri, Verbesina virginica, etc. In front of J. & D. Seafood, 889 Sam's Point Rd., Lady's Island, 32° 29' 08" N., 80° 36' 55" W., 14 June 2005, DCP 2168.

Significance: This is the third reported state occurrence for this sub-Saharan African native (Goldblatt 2002). It was previously known only from Alabama and Louisiana (Goldblatt 2002, Weakley 2010). This appears to be more the result of taxonomic confusion than rarity. Townsend and Sorrow (1999) report the hybrid species Gladiolus x gandavensis Van Houtte from twelve counties scattered throughout South Carolina but do not report G. dalenii ssp. dalenii. USDA, NRCS (2010) report G. x gandavensis for ten states centered in the southeast but fails to include G. dalenii ssp. dalenii. Goldblatt (2002) states that hybrid gladiolas "reproduce mainly vegetatively and persist for some years where winters are mild; they show no evidence of spreading into native vegetation." He does not include hybrid gladiolas as a naturalized species in North America but lasts four Gladiolus species that are known to naturalize. This suggests that the voucher specimens of G. x gandavensis should be reexamined to determine if they were correctly identified or if they belong to one of the four other species known to occur in the United States.

I have never encountered *G.* x *gandavensis* naturalized in Beaufort County. *Gladiolus dalenii* ssp. *dalenii* is by far our most commonly naturalized *Gladiolus*. It was apparently a very popular ornamental at one time. It has spread abundantly around abandoned homesites and along roadsides. *G. dalenii* ssp. *dalenii* has shorter inner tepals (less than 60 mm.) than *G.* x. *gandavensis* (60-70mm). It has white, cream, orange or red tepals. *Gladiolus communis* Linnaeus and *Gladiolus italicus* P. Miller have pink, reddish or light purple tepals with white markings on the outer three tepals (Weakley, 2010). Goldblatt (2002) reported *Gladiola tristis* from California only. It is not included in Weakley (2010) but should be considered as an option as well when identifying specimens.

Hedeoma hispida Pursh (LAMIACEAE)—**Beaufort County:** In association with *Phalaris angusta*, *Trifolium campestre*, *Paspalum notatum*, *Erigeron quercifolius*, *Geranium carolinianum*, *Allium canadense* var. *canadense*, *Hordeum pusillum*, *Vulpia octoflora*, *etc.*,

roadside at junction of Castle Hall Rd. and Hwy 21 (Frampton Rd.) between Yemassee and Pocotaligo. 32° 39' 36" N., 80° 50' 45" W., 9 May 2005. *DCP1832*.

Significance: This is the first report for this diminutives annual mint from the outer coastal plain of South Carolina. Hill and Horn (1997) first documented it from South Carolina from Kershaw, York and Spartanburg counties (Townsend and Sorrow (1999) additionally report it from Richland and Chester counties. Irving (1980) reported it no closer than the eastern panhandle of Florida, central Alabama, north central Tennessee and southern Ohio. It now occurs in every state east of Texas and Montana except for North Carolina and Virginia (USDA, NRCS, 2009). It is unclear whether this it is a recent arrival adventive from further south and west or if it was previously overlooked (Weakley 2010) This collection and those reported by Hill and Horn (1997) where from disturbed sites.

Hedera colchica (K. Koch) K. Koch (ARALIACEAE)—Beaufort County: Naturalized over large area from nearby abandoned home site. In association with Quercus falcata, Juglans nigra, Ilex vomitoria, Ligustrum lucidum, Cocculus carolinus, Clematis catesbyana, Aspidistra elatior, Smallanthus uvedalius, Piptochaetium avenaceum, Ipomoea macrorhiza, etc. in Blufton Oyster Factory Park, Town of Blufton, 32° 13′ 56″ N., 80° 52′ 02″ W., 19 July 2006, DCP 4829.

Significance: This collection provides clarification that evergreen vine is part of the naturalized flora of South Carolina and particularly in Beaufort County. Townsend and Sorrow (1999) does not include it. Weakley (2010) includes it for the coastal plain of South Carolina stating "persistent after cultivation, perhaps not naturalized". No documentation is provided for South Carolina. USDA, NRCS (2010) reports it for North Carolina, South Carolina, and Arizona (citing Weakley for South Carolina). Liu, Peet and Weakley (2006) report it no closer than 380 kilometers to the northeast in Orange County, North Carolina. *H. colchica* is more heat-tolerant than *H. helix* Linnaeus var. *helix*. It is more commonly planted in our area and is more commonly encountered as an escape.

Hedychium coronarium Koenig (ZINGIBERACEAE)—**Beaufort County:** Naturalized along left bank of Huger Cove downstream from Bridge St., n association with *Crinum americanum*, *Campsis radicans, Vinca major, Sabal palmetto, Celtis laevigata, Cocculus carolinus, Tetrapanax papyriferus, Phytolacca rigida, etc.* Area is over 5 meters down slope from the fence of the closest residential garden. It shows no sign of cultivation, Bluffton, 32° 13' 59" N., 80° 51' 50 W., 17 August 2006, *DCP4913*.

Significance: This is the first report for South Carolina and the first substantiated report of this fragrant Asian introduction outside of Florida and Louisiana in the continental United States (Weakley 2010). USDA, NRCS (2010) erroneously cites Rogers (1984) for its occurrence in Georgia. Small (1933) attributed it to Georgia and Louisiana. Rogers (1984) reported that he could not substantiate the Georgia or Louisiana collections. I have not researched the sources cited by USDA, NRCS (2010) for Louisiana to determine whether Small's reports have since been substantiated or if these references simply refer back to Small (1933) Rogers (1984) states that it has escaped in various wet habitats in Florida. Wunderlin and Hansen (2008) report it as close as Putnam and Alachua counties.

Helianthus annuus Linnaeus (ASTERACEAE)—**Beaufort County:** Growing in leaf litter in curb on Ribault Rd. between Old Shell Rd. and Pinckney Blvd. in the town of Port Royal, 32° 23' 20" N., 80° 41' 12" W., 13 March 2005, *DCP 1690*.

Significance: This is the first report of this waif from the southern maritime strand counties in South Carolina (Townsend and Sorrow 1999)

Helianthus petiolaris Nuttall ssp. *petiolaris* (ASTERACEAE)—**Beaufort County:** Abundant in fallowed agricultural field behind Adam's St. Baptist Church at corner of Bermuda Bluff Rd. and Land's End Rd., St. Helena Island, 32° 20' 03" N., 80° 37' 33" W., 15 August 2006, *DCP* 4908.

Significance: This is the first report of this Great Plains native for the maritime strand. This Great Plains native is known from disturbed areas on sandy soil. (Weakley 2010) Townsend and Sorrow (1999) report it for Bamberg, Marlboro, Fairfield and Anderson counties.

Heterotheca latifolia Buckley var. latifolia (ASTERACEAE)—Beaufort County: In association with Atriplex pentandra, Rosa laevigata, Zanthoxylum clava-herculis, Sesuvium portulacastrum, Pseudognaphalium obtusifolium, Yucca aloifolia, Lantana camara, Uniola paniculata, Sporobolus clandestinus, Eragrostis lugens, Chamaesyce hyssopifolia, Chenopodium album, etc. at The Sands (a beach-like area created in part from dredge-spoil), Town of Port Royal, 32° 22' 17" N., 80° 41' 13" W., 17 October 2005, DCP 3961; In association with Schizachyrium scoparium var. stoloniferum, Pityopsis graminifolia var. graminifolia, Aristida purpurascens, Eupatorium compositifolium, Dichanthelium aciculare, Dichanthelium oligosanthes var. oligosanthes, Aristida lanosa, and Andropogon gyrans on xeric roadside of Viola Smalls Lane, Coosaw Island, 32° 28' 22" N., 80° 35' 29" W., 20 December 2005, DCP 4082.

Heterotheca subaxillaris (Lamarck) Britton & Rusby (ASTERACEAE)—Beaufort County: In association with Uniola paniculata, Yucca gloriosa, Opuntia humifusa var. austrina, Pinus elliottii, Fimbristylis caroliniana, Andropogon tenuispatheus, Andropogon virginicus var. virginicus, Panicum amarum var. amarum, Ipomoea imperati, etc. in the dunes at the south end of the beach, Sea Pines Plantation, Hilton Head 32° 07' 13" N., 80° 49' 35" W., 27 November 2005, DCP 4026 with CCC and JLLR.

Significance: These collections clarify that both of these short-lived perennials occur in South Carolina and particularly in Beaufort County. Townsend and Sorrow (1999) apparently does not distinguish these taxa, but includes both under *H. subaxillaris* (sensu lato). Weakley (2010) indicates that *H. latifolia* var. *latifolia* is a ruderal species introduced from the south central United States and adjacent Mexico whereas *H. subaxillaris* (sensu stricto) is a native species of coastal dunes and sand flats.

Hibiscus mutabilis Linnaeus (MALVACEAE)—Beaufort County: Naturalized in degraded pine flatwoods. Native soil has been covered with up to 10 cm. of fill dirt. In association with Pinus serotina, Pinus elliottii, Morella cerifera, Pueraria montana var. lobata, Celtis laevigata, Eupatorium capillifolium, Liquidambar styraciflua, Baccharis halimifolia, Albizia julibrissin, Rhus copallinum, Platanus occidentalis var. occidentalis, Populus deltoides var. deltoides, Morus alba, Ipomoea macrorhiza, etc. along right bank of channelized intermittent headwater

stream draining into Huger Cove. South side of Mellichamp Rd. between Bluffton Rd. (Hwy 46) and Goethe Rd. BlufftoN.,32° 14' 22" N 80° 51' 43" W., 2 July 2005, *DCP with JLLR*. *Significance:* This is the fourth reported state occurrence for this flamboyant ornamental shrub. USDA, ARS (2010) report it for Alabama and Louisiana. Small (1933) reported it for Florida as well. Wunderlin and Hansen (2008) excluded it for Florida reporting no validating specimens to confirm Small. It is commonly cultivated in Beaufort County. In the last few years, I have observed it naturalizing in several other sites far from intentional plantings of the species.

Hibiscus syriacus Linnaeus (MALVACEAE)—**Beaufort County:** Naturalized in association with *Rhexia sp., Oenothera sp., Triadica sebifera, Juncus sp., Dichanthelium scoparium, Rubus trivialis, Pluchea sp., Diodia virginica, Persicaria sp., Ludwigia sp., Morus alba, etc. in a moist area of vacant lot at the N.W. corner of Mayfair Ct. and Sam's Point Rd., Lady's Island, 32° 25' 03" N., 80° 38' 49" W., 11 July 2005, <i>DCP 3309*.

Significance: This is the first report for the outer coastal plain of South Carolina for this East Asian ornamental shrub. It was known from Aiken County and seven upper piedmont counties (Townsend and Sorrow 1999).

Hydrocotyle sibthorpioides Lamarck (ARALIACEAE)—**Beaufort County:** Weed in mesic *Stenotaphrum secundatum* lawn along sidewalk at 308 Scott St., City of Beaufort, 32° 25' 57" N., 80° 40' 15" W., 12 May 2007, *DCP 5138*.

Significance: This is the first report of this Old World lawn weed for the outer coastal plain of South Carolina. Townsend and Sorrow (1999) report it for Lexington, Richland and Sumter counties. This seems to confirm Weakley's (2010) comment that it is "apparently becoming more common as a lawn weed".

Hypochaeris microcephala (Schultz-Bipontinus) Cabrera var. *albiflora* (Kuntze) Cabrera (ASTERACEAE)—**Beaufort County:** Abundant but localized in association with *Eupatorium capillifolium, Glottidium vesicarium, Paspalum urvillei, Axonopus fissifolius, Hypochaeris brasiliensis, Dichanthelium spp.*, etc. around base of cell phone tower and on nearby roadsides. Disturbed area surrounded by fire-suppressed *Pinus elliottii/ Serenoa repens/ Ilex glabra* woodland off of Foreman Hill Rd, east of Bluffton, 32 ° 13' 42" N., 80 ° 50' 49" W., 30 May 2005, *DCP 2062*.

Significance: This is the first report of this weedy South American species for South Carolina (Townsend and Sorrow 1999, Weakley 2010). It is a northeastern range extension of over 20 kilometers from the closest previously documented population at Fort Pulaski, Chatham County, Georgia. It has also been reported for Louisiana, and Texas (USDA, NRCS 2010, Weakley 2010). I have since seen it many other places in the county.

Ilex amelanchier M. A. Curtis ex Chapman (AQUIFOLIACEAE)—**Beaufort County:** Growing near trestle, north of Hwy 46 on the proposed New River Trail (a powerline easement on an abandoned railroad between the New River and Sun City Hilton Head) Town of Bluffton, 32° 15' 52" N., 80° 59' 23" W., 4 April 2003, *DCP 23*; In association with *Fraxinus* sp., *Dulichium arundinaceum, Taxodium distichum, Saururus cernuus*, etc. in the Great Swamp of the New

River, west of Sun City Hilton Head (a gated residential community, Greater Bluffton Area 32° 17' 22.1" N., 80° 59' 35.9" W.,10 June 2006, *DCP 4661* with *MO*.

Significance: This deciduous holly is on the SC Rare list (McMillan 2005). This is the first record from Beaufort County. Townsend and Sorrow (1999) report it from Lexington, Richland, Lee, Darlington, Orangeburg, Dorchester, Williamsburg, Georgetown, Marion and Horry counties. McMillan (2005) indicates that there are only unverified records from Orangeburg and Aiken counties but report verified populations from Charleston County. It ranges from southeastern North Carolina south to the Florida panhandle and west to southeastern Louisiana (Weakley 2010).

Ilex cornuta Lindley (AQUIFOLIACEAE)—Beaufort County: Naturalized at edge of large depression wetland in association with Sambucus canadensis, Rubus sp., Elaeagnus pungens, Carya illinoinensis, Magnolia grandiflora, Sabal palmetto, Hedera helix, Morus alba, etc. back of vacant lot (some prep work for house construction) adjoining 1231 Rodgers St. Pigeon Point Neighborhood, Town of Beaufort, 32° 26′ 31" N., 80° 40′ 39" W., 13 July 2005, DCP 2151. Significance: This is the first report for this Chinese tree naturalizing in South Carolina (Townsend and Sorrow 1999, Weakley 2010). The closest earlier reports are from Moore County, North Carolina and Tuscaloosa County, Alabama (Liu, Peet and Weakley 2006, USDA, ARS 2010).

Indigofera hirsuta Linnaeus (FABACEAE)—Beaufort County: The specimen was taken from a plant that was collected and raised in the Clemson University greenhouse to await flowering. Plant originally collected as a weed in flower garden, At least 10 plants present. 389 Broad River Dr., Shell Point neighborhood. Port Royal Island, 12 November 2005, DCP 4015; Weed in flower garden, At least 10 plants present. Specimen was transplanted and grown in Clemson University greenhouse to await fruiting, 389 Broad River Dr., Shell Point neighborhood, Port Royal Island, 13 December 2005. DCP4079.

Significance: This is the second time that this Old World legume has been reported from South Carolina (Wunderlin and Hansen 2008, Weakley 2010). Nelson and Kelly (1997) first reported it from a wildlife food plot in Sumter County. They did not believe that it was intentionally planted. Citing its known northern limit in South Georgia (Calhoun, Atkinson and Charlton counties), they questioned whether it could survive cooler temperatures of South Carolina (Joes and Coile 1988, Nelson and Kelly 1997). It is also known from Mississippi (Weakley 2010), Alabama and Florida (USDA, ARS 2010). As an annual the key to surviving winter is to produce seed. The above cited specimens fruited, after going through transplant shock, fruited by early December. Many portions of the county often do not experience freezing temperatures mid December or even early January. Legumes produce extremely long-lived seeds. It would be expected that this species will establish. I observed the same population on 30 September 2007. I have also observed in two other locations. The observed populations seem to have been introduced as a contaminant in "wildflower seed mixtures".

Indigofera spicata Forsskål (FABACEAE)—**Beaufort County:** Abundant in gravel parking lot and adjacent mulched landscaped beds. Ozzie's Used Car Lot on Trask Pkwy (Hwy 21) Burton area. 32° 26' 39.8" N 80° 43' 37.8" W. 10 August 2006. *DCP4887*.

Significance: Florida is the only state within the continental United States where this Old World tropical taxon has previously been reported (Townsend and Sorrow 1999, Liu, Peet and Weakley, 2006, USDA,NRCS 2010,Weakley 2010). This collection represents a northeastern range extension of more than 225 kilometers from the nearest documented population in Duval County. (Wunderlin and Hansen 2007) This species was formerly promoted as a pasture legume but was later found to be toxic to sheep, cows, rabbits, mice, and chickens. (Wagner et al, 1999), (Hegart and Pound, 1968)

Indigofera suffruticosa P. Miller (FABACEAE)—**Beaufort County:** One plant observed on sandy, shelly roadside in front of wooded residential lot. Three stems arising from single woody stem at point where cut during roadside mowing. Southeast corner of 58 Friendship Dr. in association with Paspalum sp., Eupatorium capillifolium, Dysphania anthelmintica, Quercus hemisphaerica, Rubus trivialis, Smilax sp., etc.. Plant lies about 75 meters north of area where horses are raised. No *I. suffruticosa* were observed near stables or paddocks. No exotic species occur in immediate vicinity of *I. suffruticosa* plant. Road bank was cut deeply in preparation of road paving within the last three years. Apparently, this plant was released from the seed bank at this time, Coosaw Island. 32° 28' 36.6" N., 80° 35' 19.5" W., 16 October 2007, DCP5210; 5 plants observed near old chimney in infrequently mown field. In association with Andropogon virginicus var. virginicus, Eremochloa ophiuroides, Rubus trivialis, Triadica sebifera, Wisteria sinensis, Quercus virginiana, Panicum rhizomatum, Paspalum urvillei, Eustachys petraea, Spartina patens, Pterocaulon pycnostachyum, Eragrostis spectabilis, Andropogon tenuispatheus, Schizachyrium stoloniferum, etc.. No cultivation or livestock tending have taken place on this site in over 10 years. Near marshes of the Coosaw River, north side of Coosaw River Dr. between Gannet Point Road and Marshall Lane, Coosaw Island, 32° 29' 03.6" N., 80° 32' 25.4" W., 9 November 2008, DCP 5264.

Significance: This is the first recent report of this perennial legume in South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, Weakley 2010). These are the northernmost recent reports on the Atlantic seaboard. USDA, ARS (2010) indicates occurrence in Georgia. Jones and Coile (1988) and Liu, Peet and Weakley (2006) do not report it there. Liu, Peet and Weakley (2006) indicates the closest populations are 325 kilometers southwest in Putnam County, Florida and to the west in Mississippi and Louisiana. Although Weakley (2007) says it is native in south Florida, Wunderlin and Hansen (2008) consider it non-native. During the eighteenth century, this neotropical legume along with the tropical African species, Indigofera tinctoria Linnaeus were widely cultivated for exported dyes in coastal Georgia, South Carolina and to a lesser part in North Carolina (Weakley 2010). During that time both species escaped and become locally established as weeds in the coastal plain of Georgia and the Carolinas (Weakley 2010). Cultivation declined greatly with the loss of British subsidies after the Revolutionary and ended during the 1790's (Rowland, Moore and Rogers 1996). Neither of these two species has been documented in recent years from Georgia, or the Carolinas (Weakley 2010). Radford, Ahles and Bell (1968) did not include them. Weakley (2010) suggested that they were no longer present in our area. Though it is possible that the above cited populations represent recent reintroductions from Florida, it is more plausible *I. suffruticosa* has been present in the area but overlooked or misidentified as *I. caroliniana* P. Miller.

Ipomoea batatas (Linnaeus) Lamarck (CONVOLVULACEAE)—Beaufort County:

Dominant, not cultivated, no evidence of recent cultivation, in association with Paspalum dilatatum, Quercus virginiana, Portulaca oleracea, Sporobolus indicus, Paspalum notatum, Digitaria sp., Cynodon dactylon, Borrichia frutescens, Strophostyles sp., Solidago sempervirens, Eustachys petraea, Sarcocornia pacifica, Melanthera nivea, Sideroxylon tenax, Rhus copallinum, Prunus caroliniana, Chamaecrista sp., Sassafras albidum, Quercus hemisphaerica, etc. at Buckingham Landing near Bluffton, 32° 13' 50" N., 80° 47' 59" W., 13 July 2005, DCP 3321.

Significance: This is possibly the first documentation of this neotropical vegetable crop naturalizing in South Carolina (Townsend and Sorrow 1999). Weakley (2010) reports it from South Carolina but does not provide documentation. Radford, Ahles and Bell (1968) reported it a rare escape from cultivation in Duplin County, North Carolina. Liu, Peet and Weakley (2006) report this same population in North Carolina and report it no closer to the south than Gilchrist County, Florida. It has been cultivated in Beaufort for over three centuries. During the antebellum era, it was one of the most frequently cultivated food crops (Rowland and Sanders 2996). I have observed this population over many years. It appears to have established for at least a decade. It is competing well with the native vegetation in a high calcium, xeric, site adjacent to salt marshes. I have never seen viable seed but it scrambles over and through native vegetation and roots and the nodes. Weakley (2010) reports that it rarely persists in fields and waste areas. Small (1933) reported it from pinelands, hammocks and waste places in southern peninsular Florida. It is possible that this population and those reported by Small (1933) were descended from earlier more resilient varieties of sweet potato before modern breeding efforts.

Ipomoea hederifolia Linnaeus (CONVOLVULACEAE)—**Beaufort County:** Growing with *Ambrosia artemisiifolia, Bidens laevis, Strophostyles helvula, Diodia virginiana, Oenothera biennis, Polypremum procumbens, Conyza bonariensis, Eragrostis sp., Cuscuta compacta, etc. on road shoulder at the N.W. corner of Cougar Dr. and Hwy 21, Lady's Island, 32° 24' 43" N., 80° 38' 38" W., 18 September 2005. <i>DCP 3791;* Growing on chain-link fence at the northwest corner of the Beaufort General Store property (not cultivated) at the southeast corner of Harrington St. and Boundary St., City of Beaufort, 36° 26' 22.4" N., 80° 40' 434.9" W. 27 September 2007. *DCP 5193;* Edge of partially filled sinkhole on northwest corner of Calhoun and Harrington St.., City of Beaufort, 32° 26' 26.7" N., 80° 40' 34.4" W., 21 October 2007, *DCP 5214*.

Significance: This is the first report for this tropical American morning-glory in South Carolina (Townsend and Sorrow, USDA, NRCS 2010, Weakley 2010) The collections are more than 75 kilometers east and more than 625 km. southwest of the closest reported populations in Bulloch County, Georgia and New Kent County, Virginia respectively (Liu, Peet and Weakley 2006, USDA,NRCS 2010).

I suspect that examination of herbarium specimens will indicate that this taxon has long been present in South Carolina but was previously misidentified as *I. coccinea* Linnaeus. *I. hederifolia* closely resembles *I. coccinea* and was formerly classified as *I. coccinea* var. *hederifolia*. *I. hederifolia* has shorter calyces (4-4.5mm.) and erect fruits. *I. coccinea* (sensu strict) has longer calyces (5-) (6-8 (-9) mm. and reflexed fruit (Weakley 2010). However, the key in Radford, Ahles and Bell (1968) would lead to *I. coccinea* when identifying *I. hederifolia*.

Townsend and Sorrow (1999) report *I. coccinea* in many counties of the state including Beaufort, Colleton, Hampton and Dorchester. Although I sought *I. coccinea* in Beaufort, I never encountered it in the field or the herbarium. I also collected *I. hederifolia* from Charleston County *DCP 5195*, Hampton County *DCP 5253*. I never observed *I. coccinea* in these counties either. I have observed *I. coccinea* in Pickens County.

It appears that *I. coccinea* has a more northerly and *I. hederifolia* a more southerly distribution. (USDA, NRCS 2010) reports *I. hederifolia* from Georgia and Florida westward across the southern tier of the country to New Mexico. Disjunct populations are reported in Virginia (one county), Vermont (two counties) Massachusetts and Hawaii. *I. coccinea* is reported from Massachusetts west to Michigan and south to Florida and Texas. Wunderlin and Hansen (2008) do not report *I. coccinea* from Florida. Jones and Coile (1988) shows both in Georgia, *I coccinea* mainly above the Fall Line and *I. hederifolia* completely below it. Its nativity is disputed. Weakley (2010) reports *I. hederifolia* as introduced whereas both Wunderlin and Hansen (2008) and USDA, NRCS (2010) reports *I. hederifolia* as native.

Ipomoea imperati (Vahl) Grisebach (CONVOLVULACEAE)—**Beaufort County:** In association with *Uniola paniculata, Yucca gloriosa, Opuntia humifusa* var. *austrina, Pinus elliottii, Heterotheca subaxillaris, Fimbristylis caroliniana, Andropogon tenuispatheus, Andropogon virginicus* var. *virginicus, Panicum amarum* var. *amarum,* etc., dunes, Beach Marker # 5, Sea Pines Plantation, Hilton Head 32° 07' 02" N., 80° 49' 41" W., 27 November 2005, *DCP 4031* with *CCC and JLLR*.

Significance: This maritime morning-glory is listed as rare in South Carolina and North Carolina (McMillan 2005, Weakley 2010). It is also reported from Charleston, Georgetown, Horry and Jasper counties (Townsend and Sorrow 1999, McMillan 2005). It ranges south to southern Florida and west to Texas. It is extensively distributed in the tropics (Weakley, 2010).

Ipomoea indica (Burmann) Merrill (CONVOLVULACEAE)—**Beaufort County:** Vine has spread vegetatively to every residential lot on this block from planting at corner of northeast corner of Duke St. and West St., Seeds have not been observed. City of Beaufort, 32° 26' 10.3" N.,80° 40' 17.9" W., 1 November 2007, *DCP 5219;* Almost completely cloaking overgrown *Elaeagnus pungens* hedge in an area 180 meters long and 30 meters wide on a large earth berm separating Moss Creek Plantation and Moss Creek Business Park. Vines are climbing over 15 meters in mature *Liquidambar styraciflua* and *Pinus taeda*. It has apparently escaped from an adjacent residential garden, North side of Moss Creek Village Dr., Greater Bluffton area, 32° 14' 13" N., 80° 48' 18" W., 21 August 2008, *DCP 5249*.

Significance: This is the first report of this pantropical species naturalizing in South Carolina (USDA, ARS 2007). It is previously known from Alabama, California, Florida, Georgia, Hawaii, Louisiana, Mississippi and Texas (USDA, NRCS 2010). USDA, ARS (2010) reports it as an introduction but Wunderlin and Hansen (2008) report it as native in Florida. It was first collected from the West Indies (Wunderlin and Hansen 2008). This is a commonly sold ornamental vine. I have not seen it produce viable seed. It grows far more prolifically than the other *Ipomoea* in our flora. It sends out adventitious roots wherever the shoots touch the ground. Although the foliage is killed back during harsh winters, the underground portions are reliably perennial in our area.

Ipomoea macrorhiza Michaux (CONVOLVULACEAE)—Beaufort County:

Unnamed hammock Bluffton quadrangle, Habitat: Shell hammock supporting maritime forest, 3 June 1998, RDP 2844 (CITA-CLEMS); Unnamed hammock Bluffton quadrangle. Habitat: vine on edge of forested hammock early morning. Four flowers open but all were severely lacerated. It appears the laceration was due to insects. By nine o' clock no other flowers had opened, 5 September 1998, RDP 2892 a, b (CITA-CLEMS); Over 100 stems, along margins of grassy parking area, Bluffton Oyster Factory, Town of Bluffton. 32° 13' 54" N., 80° 52' 02" W., 23 June 2004, DCP 281 with FJDR: Climbing on trees in an area 40 meters along roadside and 8 meters along edge of graveyard. In association with Liquidambar styraciflua, Ostrya virginiana, Ilex opaca, Osmanthus americanus, Crataegus sp., Erythrina herbacea, Vaccinium arboreum, Symplocos tinctoria, etc. at St. Luke's Church, Hwy 170, Greater Bluffton area, 32° 16' 22.1" N., 80° 57' 01.6" W, 17 October 2004, DCP 1173 with JLLR and ADR; Population 28 meters long and 8 meters deep near cluster of mailboxes, in association with Tridens flavus, Carya glabra, Scutellaria mellichampii, Hamamelis virginiana, Saccharum sp., Ruellia carolinensis, Ceanothus americanus var. intermedius, Dioscorea sp, Erythrina herbacea, Vaccinium arboreum, etc. on northeast corner of Davis Rd. and Hwy. 170, Greater Bluffton area, 32° 16' 28.5" N., 80° 56' 54.6" W, 17 October 2004, DCP 1175 with JLLR and ADR (population reported by WH); 1 vine. In association with Zanthoxylum clava-herculis, Prunus caroliniana, Callicarpa americana, Albizia julibrissin, etc. in fencerow on the south side of Hwy 46 about 20 meters east of Solomon Lane, near Pritchardville community, 32° 14' 22.5" N., 80° 58' 24.4" W, 17 October 2004, DCP 1185 with JLLR and ADR; In association with Vitis rotundifolia, Lonicera japonica, Smilax sp., Wisteria sinensis, etc. in fencerow behind mailboxes at southwest corner of Hwy 46 and Stillwell Rd. Near Pritchardville community. 32° 14' 18.3" N., 80° 58' 07.0" W, 17 October 2004, DCP 1187 with JLLR and ADR: A few small scattered vines growing in Citizens Cemetery in association with *Piptochaetium avenaceum*, *Callicarpa americana*, Oplismenus setarius, Mitchella repens, and other calcicoles. S.C. 32° 26' 21" N., 80° 40' 53" W., 30 October 2004, DCP 1215; Growing on fence adjacent to driveway and street at edge of cultivated area under Magnolia grandiflora at vacant homesite, 1110 Greene St., City of Beaufort, 32° 26' 16" N., 80° 40' 29" W., 30 October 2004, DCP 1216; Extensive colony. On abandoned homesite with Pinus taeda, Callicarpa americana, Andropogon tenuispatheus, Morus rubra, Rosa bracteata, Lycoris radiata, Prunus caroliniana, Ilex vomitoria etc. for predevelopment survey for Calhoun Promenade, between May River Dr. (Hwy 46) and Mellichamp Rd. on Bluffton Rd. (Hwy 46), Bluffton, 32° 14' 19" N., 80° 51' 38.5" W., 13 November 2004, DCP 1402 with AFH; Abundant vine in fencerow and in shrubbery in association with Gonolobus suberosus, Ilex vomitoria, Quercus virginiana, etc. Northwest corner of Little Capers Rd. and Alumni Rd., Lady's Island, 26 June 2005, DCP 2236; Growing in association with Gonolobus sp., Sanicula canadensis, Carya glabra, Callicarpa americana, Dichanthelium oligosanthes, Clematis sp., Verbesina virginica, Chasmanthium sp., etc. Bluff adjacent to marsh on east side of Long Cove Dr., Coosaw Island. 32° 27' 58" N., 80° 36' 01" W., 17 July 2005, DCP 3382; In association with Citrullus lanatus var. lanatus, Lagenaria siceraria, etc. around rubbish pile on undeveloped lot adjacent to wetland at northeast corner of Friendship Rd. and Coosaw River Dr., Coosaw Island. 32° 28' 55" N., 80° 35' 03" W., 31 July 2005, DCP 3551; In association with Prunus caroliniana, Lantana montevidensis, Sorghum halepense, Celtis laevigata, Helianthus debilis ssp. cucumerifolius, Morus alba, Vigna unguiculata, etc. long

abandoned homesite on north side of Hwy 21 (Trask Pkwy) opposite of intersection with Hwy 280. Burton area, 32° 26' 31" N., 80° 43' 17" W., 12 August 2005, *DCP 3632*; One vine was seen climbing in the shrubbery in the grave yard on the west side of the church, St Helena's Episcopal Church, Town of Beaufort, 27 August 2005, DCP 3741; One large vine. In association with Quercus falcata, Ligustrum sinense, Quercus virginiana, Pinus taeda, Callicarpa americana, Clethra alnifolia, Ilex glabra, etc. in narrow uncultivated strip between Food Lion Parking Lot and Laurel Bay Rd. Laurel Bay area, 32° 27' 11.4" N., 80° 46' 08.1" W., 26 July 2006, DCP 4867; 7 meter x 3 meter colony at edge of partially filled sinkhole on northwest corner of Calhoun and Harrington St., 32° 26' 26.7" N., 80° 40' 34.4" W., 21 October 2007, DCP 5215; Vacant lot on south side of Alvin Ord's Restaurant, East side of Ribault Rd., Town of Port Royal, 32° 23' 49.5" N., 80° 41' 07.1" W., 11 November 2007, DCP 5223. Significance: This calciphilic morning-glory is on the SC Rare list and is rare north of Florida (Townsend and Sorrow 1999, McMillan 2005). Sixteen additional populations were discovered in Beaufort County during the field work for this thesis. Several of them are reproducing sexually. Previously, the only extant natural population known from South Carolina was a single clone growing on rapidly eroding island in Beaufort County. The RDP collections cited above were from this population. Attempts by Patrick McMillan and Richard D. Porcher to germinate seeds from this population proved unsuccessful (Townsend and Sorrow 1999, Porcher and Rayner 2001, McMillan 2005, McMillan 2007). Some of the populations are growing on Native American shell deposits while others are growing on post-settlement anthropogenic calcium and others appear to be on natural calcium deposits. It ranges from North Carolina south to south Florida and west to southern Alabama (Weakley 2010).

Ipomoea triloba Linnaeus (CONVOLVULACEAE)—**Beaufort County:** Spontaneous, climbing on ruderal and remnant longleaf pine flatwoods vegetation adjacent to large outbuilding in a semi-cultivated residential yard which was formerly fire-maintained pineland, 1 Attaway Lane, Lady's Island, 32° 28' 00" N., 80° 37' 55" W.. 11 September 2008, *DCP 5250;* Trailing on ground in weedy median in Highway 802 in front of Bi-Lo in Midtown Shopping Center, Shell Point area, Town of Port Royal, 32° 22' 41.7" N., 80° 43' 28.1" W., 4 November 2008, *DCP 5263*.

Significance: These collections document the fourth reported state occurrence for this pantropical vine (Weakley 2010). It is a northeastern range extension of over 210 kilometers from the closest known population in St. Johns County, Florida (Wunderlin and Hansen 2008). It is not considered native in Florida (Wunderlin and Hansen 2008). It is also known from California and Hawaii (USDA, NRCS 2010). Repeated interceptions of *I. triloba* seed in shipments of sesame from Guatemala led to regulatory treatments to devitalize seed prior to importation. The source of introduction for Beaufort County is not known. It is similar in appearance to *I cordatotriloba* Dennstedt var. *cordatotriloba*.

Jasminum nudiflorum Lindley (OLEACEAE)—**Beaufort County:** Naturalized in association with *Opuntia humifusa* var. *humifusa*, *Lantana depressa* var. *floridana*, *Quercus hemisphaerica*, *Prunus caroliniana*, *Ilex vomitoria*, *Borrichia frutescens*, *etc.* on Whitehall Point, Lady's Island, 32° 25' 20" N., 80° 40' 03" W., 11 May 2006, *DCP 4481*.

Significance: This is the first report of this Chinese ornamental shrub naturalizing in South Carolina (Weakley 2010). It is the fourth known state occurrence. It was previously known from Georgia, Maryland and New Jersey (USDA, NRCS 2010)

Juncus effusus Linnaeus ssp. solutus (Fernald& Wiegand) Hamet-Ahti (JUNCACEAE)—Beaufort County: In association with Cyperus echinatus, Eleocharis flavescens, Symphyotrichum undulatum, Paspalum laeve var. laeve, Solidago altissima, Smilax rotundifolia, Vitis cinerea var. floridana, Vitis vulpina, etc. Beaufort County Open Land Trust Parcel overlooking the Beaufort River (an estuary) 1802 & 1806 Bay St. Town of Beaufort, 32° 25' 59" N., 80° 41' 01" W., 12 June 2004, DCP 181 with FJDR; In association with Carex tribuloides, Cyperus retrorsus, Symphyotrichum sp., Agrostis hyemalis, Fimbristylis castanea, Cyperus croceus, Dichanthelium scoparium, Symphyotrichum tenuifolium, Distichlis spicata, Rubus argutus, Cyperus compressus, Bromus catharticus, Scutellaria racemosa, etc. Dowling Pond Park, Battery Creek Rd., Town of Beaufort, 32° 24' 21" N., 80° 41' 40" W. 16 June 2004, DCP 221 with FJDR; In association with Juncus polycephalus, Juncus validus var. validus, Leptochloa fascicularis var. fascicularis, Cyperus surinamensis, Typha sp., Solidago sempervirens var. mexicana, Fimbristylis sp., Aeschynomene sp., Sabatia stellaris, etc. in retention pond adjacent to brackish marsh on Airport Circle, Lady's Island, 32° 24' 38" N., 80° 37' 51" W., 4 July 2005, DCP 3250.

Significance: Townsend and Sorrow (1999) have apparently confused the distribution of this native sedge with that of the European *J. effusus* ssp. *effusus* (Weakley 2010). They reported this native sedge from Barnwell and Cherokee counties only (Townsend and Sorrow 1999) These collections confirm its occurrence in the outer coastal plain of South Carolina.

Kyllinga gracillima (CYPERACEAE)—Beaufort County: Growing on ditch bank on west side of Bluffton Rd. (Hwy 46) at powerline crossing in association with Lycopus sp., Micranthemum umbrosum, Persea palustris, Serenoa repens, Juncus spp., Hydrolea quadrivalvis, Cynoctonum mitreola, Festuca subverticillata, Sacciolepis indica., etc. in Bluffton, 32° 15' 18.9" N., 80° 51' 15.3" W., 23 May 2006, DCP 4560.

Significance: This is the second reported county for this sedge (Townsend Sorrow 1999). Hill and Horn (1997) first reported it from Charleston County. Hill and Horn (1997) considered and East Asian introduction. Other writers consider it native (Weakley 2010). Distribution is unclear due to taxonomic confusion with *Kyllinga brevifolia* Rottbøll.

Kyllinga squamulata Thonning ex Vahl (CYPERACEAE)—**Beaufort County:** Growing as a weed in moist lawn at the Pearson Residence. #4 Moss Creek Ct., Moss Creek Plantation (a gated residential community) off of Hwy 278 near BlufftoN.,32° 14' 24" N., 80° 48' 28" W., 7 October 2006, *DCP 5039*.

Significance: This collection adds documentation to the occurrence of this tropical Asian introduction in South Carolina (Weakley 2010). Weakley (2010) reports it as uncommon in the coastal plain of Florida, Georgia and South Carolina no citation is provided for this distribution however. It is apparently spreading very rapidly. Tucker (2002) reported it as an introduction in the West Indies and Florida. Wunderlin and Hansen (2008) report it as far north as Clay County,

Florida (250 kilometers to the southwest). Townsend and Sorrow (1999) and Liu, Peet and Weakley (2006) did not include it. As recently as 2008, Weakley did not include it either.

Lagenaria siceraria (Molina) Standley (CUCURBITACEAE)—**Beaufort County:** In association with *Citrullus lanatus* var. *lanatus, Ipomoea macrorhiza, Talinum paniculatum, etc.* around rubbish pile on undeveloped lot adjacent to wetland on the N.E. corner of Friendship Rd. and Coosaw River Dr., Coosaw Island, 32° 28′ 55″ N., 80° 35′ 03″ W., 31 July 2005, *DCP* 3549.

Significance: This collection provides confirmation that this Old World vine has naturalized in South Carolina and particularly in Beaufort County (Weakley 2010). Weakley (2010) reports it from the coastal plain, piedmont and mountains of Georgia, South Carolina, North Carolina and Virginia. Weakley (2010) provides no citation for the occurrence in South Carolina however. Radford, Ahles and Bell (1968), Hill and Horn (1997) and Townsend and Sorrow (1999) do not report for the state. Liu, Peet and Weakley (2006) record it no closer than Meriwether County, Georgia and Columbus County, North Carolina.

Lagerstroemia indica Linnaeus (LYTHRACEAE)—Beaufort County: Naturalizing abundantly in rubble and sand of abandoned homesite. House razed between 1-5 years ago. In association with Clerodendrum bungei, Malvaviscus drummondii, Nothoscordum gracile, Tradescantia ohiensis, Sisyrinchium rosulatum, Phytolacca americana, Solidago altissima, Morus alba, Wisteria sinensis and Passiflora lutea at NW corner of intersection of Boundary St. and Lovejoy St. Beaufort, S.C. 32° 26′ 26″ N., 80° 41′ 09″ W., 4 May 2005, DCP 1786 with JLLR. Significance: This is the third reported county occurrence of this Asian ornamental tree naturalizing in South Carolina (Weakley 2010). It was previously known from Marion and Laurens counties only (Townsend and Sorrow 1999).

Lantana montevidensis (Sprengel) Briquet (VERBENACEAE)—Beaufort County: Growing with Morus alba, Fraxinus americana, Smallanthus uvedalius, Prunus caroliniana, Aesculus pavia var. pavia, Albizia julibrissin, Celtis laevigata, Osmanthus americanus, Physalis heterophylla, Helianthus debilis ssp. cucumerifolius, Macfadyena unguis-cati, Cnidoscolus stimulosus, etc. at former homesite on north side of Hwy 21 at intersection of Hwy. 280, 32° 26′ 31" N., 80° 43′ 16" W., 4 May 2005, DCP 1790 with JLLR.

Significance: This is the first report of this South American ornamental shrub naturalizing in South Carolina (Townsend and Sorrow 1999, Jepson Online Interchange 2010). It is northeastern range extension of more than 70 kilometers from Bulloch and McIntosh counties in Georgia (Jones and Coile 1988, Liu, Peet and Weakley 2006, USDA, ARS 2010, Weakley 2010)

Laportea aestuans (Linnaeus) Chew (URTICACEAE)—Beaufort County: At base or recently planted *Trachycarpus fortunei* at the northwest corner of a city park, southeast corner of King St. and East St., City of Beaufort, 32° 24' 45" N.,80° 38' 49" W., 11 September 2007, *DCP 5185*. Significance: This is the first record for this pantropical weed in South Carolina (Boufford 1997). The only previous reports within the continental United States were from California and Florida (Townsend and Sorrow 1999, USDA, NRCS 2010, Weakley 2010). This represents a range extension northward of over 600 kilometers from Palm Beach County, Florida (Wunderlin

and Hansen 2008). It is considered non-native in Florida (Wunderlin and Hansen, 2008). I have since observed it twice more in the county. Both were on containerized plants which had originally come from Florida. Both had overwintered in the area.

L. aestuans can be distinguished from *L. canadensis* (Linnaeus) Weddell by possessing two types of trichomes; stinging hairs and non-stinging, stipitate glandular hairs. It also has auriculate leaf bases and smaller achenes (less than 1.5 mm.). In contrast *L. canadensis* has non-auriculate leaf bases, stinging hairs only and larger achenes (larger than 2 mm.) (Boufford 1997).

Lathyrus latifolius Linnaeus (FABACEAE)—**Beaufort County:** Naturalized in seldom maintained residential lot, climbing on porch, fences, and other vegetation spreading to adjacent properties, NW corner of Charles St. and Green St. Town of Beaufort, 32° 26' 17" N., 80° 40' 23" W., 6 July 2006, *DCP 4748*.

Significance: This is the first report of this introduced leguminous vine in the maritime strand or the southern half of the state. The closest known populations are in Richland, Lee and Florence counties.

Lechea pulchella Rafinesque var. ramosissima (Hodgdon) Sorrie & Weakley (CISTACEAE)—Beaufort County: Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton, 32° 14' 21" N., 80° 51' 47" W., 25 November 2004, DCP 1516 with JLLR; In association with Packera tomentosa, Hibiscus aculeatus, Pluchea rosea, Eupatorium rotundifolium, Cuphea carthagenensis, Persicaria sp., Helianthus angustifolius, Hyptis alata, etc. Under powerlines between Hwy. 278 and Matthews Rd. 32° 17' 30" N., 80° 56' 07" W., 2 July 2005, DCP 3207; In association with Eupatorium rotundifolium, Coreopsis major var. rigida, Wisteria frutescens, Cuscuta sp., etc in utility easement east of the entrance to the Environments Inc. office complex, Bay Pines Rd., Laurel Bay Area. 32° 27' 34" N., 80° 46' 16" W., 19 July 2005, DC P 3408; In association with Pinus elliottii, Rhynchospora plumosa, Aristida virgata, Andropogon gyrans, Carphephorus paniculatus, Drosera sp., etc. in island on west side of Coosaw River Dr., between Coosaw Island and Judge Island, 32° 28' 20.1" N., 80° 34' 22.4" W., 30 December 2005, DCP 4191.

Significance: These collections provide documentation for this native pineland species in South Carolina and particularly in Beaufort County. County-level distribution in the state is currently unknown because this infraspecific taxon was not distinguished by Radford, Ahles and Bell (1968) or Townsend and Sorrow (1999). They submerged it under L. leggettii 'sensu lato' or L. pulchella 'sensu lato' respectively which also includes L. pulchella var. pulchella (Weakley 2010). Hodgdon (1938) named this as a distinct taxon: L. leggettii Britton & Hollick var. ramosissima Hodgdon. Though listed as a provisional taxon by Weakley as far back as 2004, the current combination was formally described by Sorrie and Weakley (2007). I did not observe or collect L. pulchella var. pulchella in Beaufort County.

Lechea tenuifolia Michaux (CISTACEAE)—Beaufort County: Growing under the power lines with Dichanthelium chamaelonche, Aristida beyrichiana, Aristida spiciformis, Dichanthelium lancearium, Bulbostylis stenophylla, Panicum verrucosum, Hypericum tenuifolium, Xyris caroliniana, Dichanthelium aciculare, etc. across an internal road (no road sign) from

Preservation Tree Service, Beaufort Industrial Village, South side of Burton Hill Road, Burton Area, 32° 26′ 02.6″ N., 80° 43′ 15.4″ W., 3 January 2006, *DCP 4198*.

Significance: This is the first report for this dry pineland species from the southern outer coastal plain counties (Weakley 2010). The closest known populations are in Aiken and Georgetown counties (Townsend and Sorrow 1999).

Lespedeza hirta (Linnaeus) Hornemann var. *curtissii* (Clewell) Isely (FABACEAE)—**Beaufort County:** In association with *Desmodium paniculatum, Desmodium viridiflorum, Crataegus uniflora, Dichanthelium acuminatum* var. *acuminatum, etc.*, Horsehole Park, Town of Beaufort, 32° 26′ 51" N., 80° 40′ 50" W., 16 May 2004, *DCP 138 with FJDR;* Growing with *Eupatorium recurvans* along edge of Bruin Rd. in fire-suppressed slash pine/ saw palmetto/little gallberry flatwoods, predevelopment survey for Tabby Roads Subdivision, Bluffton, SC. 32° 14′ 12" N 80° 51′ 14" W., 3 October 2004, *DCP 1089 with JLLR*.

Lespedeza hirta (Linnaeus) Hornemann var. hirta (FABACEAE)—Beaufort County: In association with Tridens chapmanii, Erythrina herbacea, Symplocos tinctoria, Cercis canadensis, Carya alba, Ilex vomitoria, Vaccinium arboreum, Dioscorea sps., Sporobolus clandestinus, Rudbeckia sps., Tridens flavus, Helianthus atrorubens, Melanthera nivea, Solidago odora, Nyssa biflora, Quercus virginiana, Quercus nigra, Aesculus pavia, etc. on roadside adjacent to wooded buffer of golf course. East side of Callawassie Dr. between South Chechessee Creek Rd, and Tucker Point Rd. Okatie area 32° 21' 31.8" N., 80° 51' 48.3" W. 21 October 2008, DCP5256.

Significance: These collections clarify that both varieties of this native perennial legume occur in South Carolina and particularly Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) did not distinguish infraspecific taxa for this species.

Liatris patens Nesom and Kral (ASTERACEAE)—Beaufort County: North of Victoria Bluffs Heritage Preserve, near Victoria Bluffs development, north of Rte. 278, north of Bluffton, local, along roadside through *Pinus palustris/Pinus elliottii/Serenoa repens* flatwoods on sandy spodosol soils, 4 November 2001, PDM 6055; Southwest of the intersection of Hwy 46 and Buckwalter Pkwy along roadside adjacent to degraded slash pine/saw palmetto/little gallberry flatwoods, in association with Lyonia ferruginea. Close to Quercus austrina grove, Bluffton, 32° 14' 05" N., 80° 54' 06" W., 3 October 2004, DCP 1095 with JLLR; 15 plants growing with Solidago odora, Aristida sp., Dichanthelium sp., Galactia elliottii, and Smilax pumila under powerline adjacent to fire suppressed slash pine flatwoods just north of M.C. Riley school grounds, predevelopment survey for Tabby Roads Subdivision SW of intersection of Bruin Rd and Pritchard St. Bluffton, 32 ° 14' 08" N., 80 ° 51' 23" W., 16 October 2004, *DCP 1130* with JLLR; 15 reproductive stems. Population is 6 meters x 3 meters. Near depression wetlands, in association with Gratiola hispida, Oldenlandia uniflora, Eragrostis elliottii, Andropogon glaucopsis, Litsea aestivalis, Rhynchospora distans, Rhexia nashii, Xyris ambigua, etc., under utility lines, predevelopment survey for Tabby Roads Subdivision. Corner of Bruin Rd. and Burnt Church Rd., Bluffton, SC. 32° 14' 07" N., 80° 51' 17" W., 16 October 2004, DCP 1137 with JLLR; In association with Pityopsis sp., Quercus nigra, Quercus hemisphaerica, Pinus taeda, Ilex glabra, Vaccinium tenellum, Stillwell Rd. Midway Farms Community, Near Pritchardville community. 32° 14′ 03.5" N., 80° 58′ 30.1" W., 17 October 2004, DCP 1186 with JLLR and ADR; In association with Pinus elliottii var. elliottii, Quercus geminata, Helianthus atrorubens, Lyonia mariana, Symplocos tinctoria, Pityopsis sp., Vaccinium myrsinites, Clethra alnifolia, Pterocaulon pycnostachyum, etc., on west side of Hwy 46, east of Sun City Hilton Head construction entrance, 32° 15' 56" N., 80° 57' 30" W., 17 October 2004, DCP 1190 with JLLR and ADR; About 100 reproductive stems. In association with Bulbostylis ciliatifolia, Agalinis laxa, Crocanthemum corvmbosum, Ilex vomitoria, Ouercus geminata, Ouercus nigra, Serenoa repens, Andropogon capillipes 'dryland variety', Pterocaulon pycnostachyum, Andropogon ternarius var. ternarius, Pinus taeda, Pityopsis sp., Lechea sp., Eragrostis, sp., Hypericum stans, Vaccinium myrsinites, Dichanthelium sp., etc. North side of Cherokee Farms Rd., Just north of intersection with Joe Frazier Rd., Laurel Bay area. 32° 25' 51.8" N., 80° 45' 56.6" W., 11 October 2007, DCP 5201; In association with Crocanthemum corymbosum, Sericocarpus tortifolius, Morella pumila, Andropogon ternarius, Agalinis laxa, Serenoa repens, Pterocaulon pycnostachyum, Andropogon ternarius var. ternarius, Pityopsis sp., etc. on north side of Cherokee Farms Rd. between Gerald Lane and Needles Lane, Laurel Bay area, 32° 25' 53.2" N., 80° 46' 06.8" W., 11 October 2007, *DCP 5204*; Extensive population in infrequently mown area in front of billboard adjacent to fire-suppressed *Pinus palustris/ Pinus elliottii/ Ilex* glabra/ Serenoa repens flatwoods on the southeast corner of Laurel Bay Rd. and Joe Frazier Rd., Laurel Bay area. 32° 27' 28.1" N., 80° 47' 03.9" W., 16 October 2007, DCP 5211; infrequently mown roadside adjacent to fire-suppressed Pinus palustris/ Pinus elliottii/ Ilex glabra/ Serenoa repens flatwoods. Southeast side of Bay Pines Rd. just northeast of Laurel Bay Rd., Laurel Bay area, 32° 27' 18.4" N., 80° 46' 37.6" W., 16 October 2007, *DCP 5212*.

Significance: Liatris patens was first described botanically by Kral and Nesom (2003). It was formerly included in the SC Rare list under *L. gracilis* Pursh (Kral and Nesom 2003, McMillan 2005). The field work for this thesis adds ten new populations for this species in the state. Previously one population was known from Beaufort County, cited above as *PDM* 6055. An additional population collected by McMillan in Jasper County was also known. Additionally, these collections extend the known range in South Carolina more than twenty kilometers to the northeast.

Ligustrum japonicum (OLEACEAE)—Beaufort County: Thunberg. Naturalized on former homesite in association with Ligustrum sinense, Carya illinoinensis, Albizia julibrissin, Quercus virginiana, Juniperus silicicola, Wisteria sinensis, Stenotaphrum secundatum, Sisyrinchium sp., Youngia japonica, Lagerstroemia indica, Ligustrum japonicum, Euonymus japonicus, Macrothelypteris torresiana, Thelypteris kunthii, Lygodium japonicum, etc. on undeveloped lot in Okatie Center (a commercial development) at end of unnamed road parallel to Hwy 170 southwest of intersection of Hwy 170 and Hwy 278, within sight of intersection of Hwy. 278 and Hwy. 170, 32° 17' 28.9" N 80° 56' 18.6" W., 14 January 2006, DCP 4306; Several shrubs seen in wet and dry areas, (not planted) spreading from nearby properties in association with Acer sp., Nyssa biflora, Morella cerifera, Ilex glabra, Cyrilla racemiflora, Apios americana, Clethra alnifolia, Osmunda cinnamomea, etc. in Port Royal Plantation (a gated community off of Hwy. 278) Hilton Head Island, 32° 13' 23.0" N., 80° 41' 06.9" W.,25 August 2006, DCP 4935.

Ligustrum lucidum Aiton f. (OLEACEAE)—Beaufort County: Naturalized in ruderal area behind the Dollar Connection Store, 10 Sams' Point Rd., Lady's Island 32° 24' 49" N., 80° 38' 46" W., 3 October 2005, DCP 3921; Naturalized on former homesite in association with

Ligustrum sinense, Carya illinoinensis, Albizia julibrissin, Quercus virginiana, Juniperus silicicola, Wisteria sinensis, Stenotaphrum secundatum, Sisyrinchium sp., Youngia japonica, Lagerstroemia indica, Ligustrum japonicum, Euonymus japonicus, Macrothelypteris torresiana, Thelypteris kunthii, Lygodium japonicum, etc. on undeveloped lot in Okatie Center (a commercial development) at end of unnamed road parallel to Hwy 170 southwest of intersection of Hwy 170 and Hwy 278, within sight of intersection of Hwy. 278 and Hwy. 170, 32° 17' 28.9" N 80° 56' 18.6" W., 14 January 2006, DCP 4305; Naturalized in association with Quercus falcata, Juglans nigra, Ilex vomitoria, Cocculus carolinus, Clematis catesbyana, Hedera colchica, Aspidistra elatior, Smallanthus uvedalius, Piptochaetium avenaceum, Ipomoea macrorhiza, etc., Bluffton Oyster Factory Park, Town of Bluffton, 32° 13' 56" N 80° 52' 02" W., 19 July 2006, DCP 4827.

Significance: These collections establish that both of these invasive Asian shrubs have naturalized in South Carolina and particularly in Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) considered L. lucidum to be synonymous with L. japonicum and did not report it for the state. Townsend and Sorrow (1999) apparently followed Radford, Ahles and Bell's treatment by reporting only L. japonicum. In the past, L. lucidum was more commonly planted than L. japonicum. In our area, L. lucidum has naturalized more often than L. japonicum. However, L. lucidum is rarely if ever sold anymore and L. japonicum has become more popular in the trade. It is expected that L. japonicum will become more invasive in the coming years.

Lilaeopsis carolinensis Coulter & Rose (APIACEAE)—**Beaufort County:** Abundant along edge of # 14 Tee Pond Bray's Island Golf Course, 32°33'36.04" N., 80°47'33.67" W., 22 April 2010, *DCP 5300* with *BCL*.

Significance: This wetland species is listed as rare in South Carolina, Georgia, North Carolina and Virginia (McMillan 2005, Weakley 2010). This is the first report from the southern coastal plain of South Carolina. It was previously known from Clarendon, Georgetown and Horry counties only (Townsend and Sorrow 1999) The Georgetown County reports lack verification (McMillan 2005). It ranges from southeastern Virginia south to Florida and west to Texas. It also occurs in South America (Weakley 2010).

Lilaeopsis chinensis (Linnaeus) Kuntze (APIACEAE)—Beaufort County: In association with Boltonia sp., Sagittaria sp., Sium suave, Zizaniopsis miliacea, Peltandra virginica, Pluchea sp., Amaranthus sp., Impatiens capensis, Eryngium aquaticum var. aquaticum, Hibiscus moscheutos, etc. in tidal freshwater marsh at Sugar Hill Boat Landing off of River Rd. and Combahee River, near Big Estate Community, 32° 40′ 00″ N., 80° 45′ 18″ W., 4 July 2005, DCP 3242.

Significance: This native low-growing wetland species is on the SC Rare list (McMillan 2005). This is the first report for Beaufort County. It was previously known from Charleston, Colleton, Dorchester, Georgetown and Horry counties (McMillan 2005). It ranges from Nova Scotia south to Florida and west to Texas (Weakley 2010).

Lilium formosanum A. Wallace (LILIACEAE)—Beaufort County: Naturalized. In association with Verbena scabra, Cyperus sp., Ambrosia artemisiifolia, Digitaria sp., Sida rhombifolia, Solidago altissima, Pteridium aquilinum, Conoclinium coelestinum, Sorghum halepense, Boehmeria cylindrica, Verbesina virginica, Panicum virgatum, Dichanthelium scoparium,

Cirsium nuttallii, Elephantopus carolinianus, etc. in powerline easement at intersection of Old Jericho Rd. and Jackson St., Burton area, 32° 25' 20" N., 80° 43' 33" W., 29 July 2005, *DCP* 3507.

Significance: This is the first report of this Asian lily from South Carolina and the third state occurrence in the country (Townsend and Sorrow 1999, Skinner 2002, Liu, Peet and Weakley 2006, USDA, NRCS 2010). It is known from Florida and Louisiana (USDA, NRCS 2010) Skinner (2002) reports that many, if not all of the reports from these states may be attributed to the more frequently naturalized Lilium philippinense Baker. Wunderlin and Hansen (2008) exclude formosanum and include L. philippinense for Florida. Though Liu, Peet and Weakley (2006) attribute L. formosanum to Richmond County, North Carolina; Weakley (2010) reports that the record is in fact L. philippinense. D. Damrel (pers. comm. 2010) confirmed that the perianth parts of the Beaufort County specimen "fit within the stated length for L. formosanum"

Lindera melissifolia (Walter) Blume (LAURACEAE)—Beaufort County: Low depression in pineland, Marine Corps Air Station, 32° 29' 34.3" N., 80° 43' 58.9" W., RDP 2268; 30 m x 10 m colony at widest dimensions on margin of large depression wetland, in association with *Litsea* aestivalis, Quercus hemisphaerica, Pinus serotina, Quercus virginiana, Woodwardia virginica, Panicum hemitomon, Ilex glabra, etc., across from Royal Pines subdivision, James Byrnes Dr., Lady's Island 32° 28' 28.1" N., 80° 38' 15" W., 19 June 2005, DCP 2192; In association with Pinus sp., Amphicarpum muhlenbergianum, Aristida beyrichiana, Aristida spiciformis, etc. Area burned every other year, Clarendon Plantation (a private hunting preserve) Near the Gray's Hill Community, 32° 29' 22.2" N., 80° 45' 39.0"W., 6 January 2006, DCP 4271 with RM and JLLR. Significance: This aromatic dioecious shrub is federally endangered (Weakley 2010). The two above-cited populations have not previously been reported. It also occurs in Berkeley, Colleton and Dorchester Counties (McMillan 2005). It has a very scattered distribution in southeastern and central North Carolina, eastern South Carolina, southwestern Georgia, northwestern Florida, southwest Alabama, northwest Mississippi, southeast Missouri, northeast Arkansas, southeast Arkansas and southeast Louisiana. Recent collections are unknown from Florida and Louisiana. It is nearly extirpated in North Carolina (Weakley 2010)

Lipocarpha aristulata (Coville) Tucker (CYPERACEAE)—**Beaufort County:** In moist sand at edge of dirt road on the northwest corner of Sherman Dr. and Coosaw River Dr., Coosaw Island, 32° 28' 43" N., 80° 34' 44" W., 18 July 2005, *DCP 3398*.

Significance: This diminutive sedge is on the SC Rare list (McMillan 2005). It was previously known only from Jasper County (Townsend and Sorrow 1999, McMillan 2005). It also occurs in Florida and is widespread west of the Mississippi River (USDA, ARS 2010). The eastern populations may be adventive (Weakley 2010).

Liriope muscari (Decaisne) L. H. Bailey (RUSCACEAE)—**Beaufort County**: In association with *Catharanthus roseus, Passiflora lutea, Paspalum notatum, Talinum paniculatum, Eleusine indica, Digitaria sp., Desmodium tortuosum, Phyllanthus tenellus, Sida rhombifolia, Callicarpa americana, Andropogon sp., etc., in construction site, east of Greenlawn Dr., City of Beaufort, 32° 26' 36" N., 80° 41' 22" W., 15 October 2005, <i>DCP 3945*.

Significance: This is the first report of this Asiatic groundcover from the outer coastal plain and the third from the state (Weakley 2010). It was known from Lexington, Richland and Spartanburg counties (Townsend and Sorrow 1999).

Liriope spicatum Loureiro (RUSCACEAE)—**Beaufort County**: Naturalized in degraded pine flatwoods at edge of Golf Professionals Club Golf Course, Royal Pines subdivision, Lady's Island, 32° 27' 54" N., 80° 38' 03" W., 17 June 2005, *DCP 2214*.

Significance: This is the first report of this Asiatic groundcover naturalizing in South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley 2010). The closest known populations are to the south in Alachua and Jackson counties, Florida (Wunderlin and Hansen 2008, USDA, NRCS 2010). It is also known from Alabama, Washington D. C., Illinois, Maryland and Mississippi (USDA, NRCS 2010).

Listera australis Lindley (ORCHIDACEAE)—**Beaufort County:** Growing with *Rhapidophyllum hystrix, Hexastylis arifolia, Sabal minor, Liquidambar styraciflua, Woodwardia areolata, Ilex opaca, etc.* on edge of trail at Live Oak Rd., Spring Island 32° 20' 41" N., 80° 49' 28" W., 5 March 2005, *DCP 3760*.

Significance: This spring-blooming orchid is listed as rare in South Carolina, Florida, Kentucky, New York, Pennsylvania, Tennessee and Vermont (USDA, ARS 2010). It is also reported from Berkeley, Charleston, Colleton, Dorchester, Georgetown and Jasper counties (McMillan 2005) Townsend and Sorrow (2009) also include Aiken County. Mainly a southeastern coastal plain species, it ranges from New Jersey south to west-central peninsular Florida and west to east Texas. It also occurs scattered inland of the coastal plain and north into Vermont and southern Canada (Weakley 2010).

Litsea aestivalis (Linnaeus) Fernald (LAURACEAE)—Beaufort County: Low depression in pineland, Marine Corps Air Station, 32° 29' 34.3" N., 80° 43' 58.9" W., 9 August 1990, RDP 2267 (CITA_CLEMS); One plant in depression wetland, in association with Pinus sp., Ilex glabra, Carex sp., Dichanthelium sp., etc., pre-development survey of the Sandhill Tract, south side of Hwy 278 east of the Okatie River, Town of Bluffton, 32° 16' 31" N., 80° 55' 60" W., 26 November 2004, DCP 1551 with JLLR; Margin of large depression wetland, in association with Lindera melissifolia, Quercus hemisphaerica, Pinus serotina, Quercus virginiana, Woodwardia virginica, Panicum hemitomon, Ilex glabra, etc. Across from Royal Pines subdivision, James Byrnes Dr., Lady's Island 32° 28' 28.1" N., 80° 38' 15" W., 19 June 2005, DCP 2191; In association with Eupatorium leptophyllum, Lachnanthes caroliniana, Ilex glabra, Serenoa repens, Pinus serotina, Pinus palustris, etc. in remnant depression wetland in residential subdivision, formerly fire-maintained pine flatwoods, north side of Southern Magnolia Dr., between Cordata Ct. and Sams Point Rd., Lady's Island., 32° 27' 02.9" N. 80° 38' 15.1" W., 1 July 2005, DCP 2285.

Significance: This deciduous shrub is a federal species of concern. It is on the rare list in Georgia, South Carolina, North Carolina and Virginia (Weakley 2010). In South Carolina, it is also known from Berkeley, Charleston, Colleton, Georgetown, Horry, Jasper and Orangeburg counties. Unverified reports have been made from Kershaw County (McMillan 2005). It ranges from Maryland south to north Florida. It possibly also occurred in Louisiana (Weakley 2010)

Ludwigia lanceolata Elliott (ONAGRACEAE)—Beaufort County: In association with Euthamia minor, Digitaria sp., Conyza parva, Polypremum procumbens, Cynodon dactylon, Eupatorium capillifolium, etc. Road shoulder on the west side of Hwy 170 north of intersection of Snake Rd. Adjacent to small marsh island 32° 21' 54.7" N., 80° 51' 50.8" W., 5 January 2006, DCP 4221.

Significance: This wetland herbaceous perennial is listed as rare in South Carolina and North Carolina (McMillan 2005, Weakley 2010). This is the first record for Beaufort County. It was previously known from Berkeley County only (McMillan 2005). Townsend and Sorrow (1999) do not report for the state, possibly due to taxonomic confusion with the *Ludwigia alata* Elliott. It ranges from southeastern North Carolina south to central peninsular Florida and west to the Florida panhandle (Weakley 2010).

Ludwigia octovalvis (Jacquin) Raven (ONAGRACEAE)—Beaufort County: In association with Ambrosia artemisiifolia, Smilax bona-nox, Lonicera japonica, Juncus sp., Paspalum urvillei, Triadica sebifera, Diospyros virginiana, Ampelopsis arborea, Chamaecrista sp., etc Ion ditch bank across from 26 Coosaw River Dr., Coosaw Island. 32° 28' 59" N., 80° 35' 49" W. 14 July 2005, DCP 3335; Weed in vegetable garden with Xanthium strumarium var. glabratum, Persicaria longiseta, Amaranthus spinosus, Physalis angulata var. angulata, etc. 162 Simmonsville Rd. (Near Bluffton), 32° 18' 22" N., 80° 52' 27" W. 17 November 2005, DCP 4073

Significance: These collections provide additional documentation for the occurrence of this ruderal wetland species in South Carolina and particularly in Beaufort County (Weakley 2010). It was not reported in Townsend and Sorrow (1999) or Liu, Peet and Weakley (2006). USDA, NRCS cites Nelson, J. pers. comm. for including South Carolina, the location is not given. It is now reported from all coastal states from North Carolina to Texas. Though widespread in tropical America, it is rare in Georgia and the Carolinas (Weakley 2010).

Ludwigia ravenii Peng (ONAGRACEAE)—**Beaufort County:** Corolla absent, stamens four, abundant along the margin of an overgrown pocosin east secondary road 7-163 one third mile southwest of the junction with US 278 near Santee Cooper Bluffton Power Station, 22 August 1980, *CAS 1122*.

Significance: This herbaceous wetland perennial is on the SC Rare list (McMillan 2005). This is the first verified report for South Carolina and the first report for Beaufort County. Previously only unverified reports were known from Berkeley County (Townsend and Sorrow, McMillan 2005). It is a coastal plain endemic ranging from southeast Virginia south to northeast Florida. There are no known records for Georgia (Weakley 2010)

Lyonia ferruginea (Walter) Nuttall (ERICACEAE)—Beaufort County: Abundant in slash pine-saw palmetto flatwoods at the Victoria Bluff Natural Area; 1600 ft. NNW from the junction of US 278 and the road that separates the area from Moss Creek Plantation; some branches with small leaves and fruits that appear to be (but aren't) off the wood of the new year as in L. fruticosa. 30 October 1985, DAR 2452; Pocosin, Moss Creek Plantation, 11 August 1976, RDP 1194a; In association with Lyonia fruticosa, Gaylussacia nana, Lyonia lucida, Pinus elliottii,

Serenoa repens, Ilex glabra etc., pre-development survey for Buckwalter Park., Buckwalter Parkway, Town of Bluffton. 32° 14' 12" N., 80° 54' 16" W., 31 October 2004, DCP 1318 with FCS; In association with Lyonia fruticosa, Gaylussacia nana, Lyonia lucida, Pinus elliottii, Serenoa repens, Ilex glabra etc., pre-development survey for Buckwalter Park., Buckwalter Parkway, Town of Bluffton. 32° 14' 12.5" N., 80° 54' 13.1" W., 31 October 2004, DCP 1319 with FCS: In association with Pinus elliottii, Serenoa repens, Lyonia fruticosa, Clethra alnifolia, Solidago fistulosa, Gaylussacia tomentosa, Pteridium aquilinum var. pseudocaudatum, Vaccinium tenellum, Persea palustris, Morella pumila, Quercus nigra, Hypericum hypericoides, Dichanthelium scoparium, Carphephorus odoratissimus, Rhus copallinum var. copallinum, Ilex glabra, etc., predevelopment survey for Calhoun Promenade, NW corner of May River Rd, and Bluffton Rd., Bluffton, 32° 14' 23" N., 80° 51' 39" W., 13 November 2004, DCP 1379 with AFH; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton, 32° 14' 24" N., 80° 51' 47" W., 14 November 2004, DCP 1475 with JLLR; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton. 32° 14' 23" N., 80° 51' 47" W., 14 November 2004, DCP 1479 with JLLR; In association with Gordonia lasianthus, Pinus sp., Clethra alnifolia, Serenoa repens, Andropogon capillipes 'dry land variant', *Ilex glabra, Morella cerifera, Aronia arbutifolia*, etc. at Bluffton Elementary School walking trail, Buckwalter Parkway, Bluffton, 32° 14' 55" N., 80° 53' 49" W., 5 January 2005, DCP 1634; In association with Gordonia lasianthus, Pinus sp., Clethra alnifolia, Serenoa repens, Andropogon capillipes 'dry land variant', Ilex glabra, Morella cerifera, Aronia arbutifolia, etc., Bluffton Elementary School walking trail, Buckwalter Parkway, Bluffton, 32° 14' 55" N., 80° 53' 49" W., 5 January 2005, DCP 1635; In association with Gordonia lasianthus, Pinus sp., Clethra alnifolia, Serenoa repens, Andropogon capillipes 'dry land variant', *Ilex glabra*, *Morella cerifera*, *Aronia arbutifolia*, etc., Bluffton Elementary School walking trail, Buckwalter Parkway, Bluffton, 32° 14′ 55" N., 80° 53′ 49" W., 5 January 2005, DCP 1636: In association with Pinus palustris., Serenoa repens, Ilex glabra, Indigofera caroliniana, Lyonia lucida, Andropogon glaucopsis, Clethra alnifolia, Vaccinium myrsinites, etc. Off of Foreman Hill Rd. East of Bluffton. 32° 13' 42" N., 80° 50' 49" W., 30 May 2005, DCP 2059; 4 Plants noted growing along edge of powerlines running parallel to Hwy 278 adjacent to fire-suppressed pine flatwoods, in association with Galactia elliottii, Lechea mucronata, Lyonia mariana, Quercus nigra, Serenoa repens, Liquidambar styraciflua, Vaccinium myrsinites, Ilex glabra, Gratiola pilosa, Apios americana, Pterocaulon pycnostachyum, Lyonia lucida, Carya glabra, Clethra alnifolia, etc. 80 meters east of the parking lot of Tangier Outlet Center near Bluffton, 32° 14' 16" N., 80° 49' 04" W., 6 July 2005, DCP 3267; Growing under thinned Pinus palustris in association with Dyschoriste oblongifolia, Galactia elliottii, Quercus laevis, Erythrina herbacea, Morella pumila, Serenoa repens, Symplocos tinctoria, Vaccinium myrsinites, Persea palustris, Hamamelis virginiana, Pterocaulon pycnostachyum, etc. on currently undeveloped property, Palmetto Bluff (a gated residential community), Bluffton, 32° 10' 49.1" N., 80° 54' 26.9" W., 14 June 2006, DCP 4749.

Significance: This evergreen shrub of the pine flatwoods is on the SC rare list (McMillan 2005). It is also known from Jasper County (Townsend and Sorrow 1999, McMillan 2005). It ranges south to south central Florida and west to the Florida panhandle (Weakley 2010).

Lyonia fruticosa (Michaux) G. S. Torrey (ERICACEAE)—Beaufort County: In association with Pinus elliottii, Serenoa repens, Clethra alnifolia, Solidago fistulosa, Gaylussacia tomentosa, Pteridium aquilinum var. pseudocaudatum, Vaccinium tenellum, Persea palustris, Morella pumila, Quercus nigra, Hypericum hypericoides, Dichanthelium scoparium, Rhus copallinum var. copallinum, Ilex glabra, etc. at the northwest corner of May River Rd. and Bluffton Rd., Bluffton, 32° 14' 23" N., 80° 51' 39" W., 24 June 2004, DCP 301 with FJDR; Fire-suppressed slash pine/ saw palmetto/little gallberry flatwoods, predevelopment survey for Tabby Roads subdivision, Corner of Bruin Rd. and Burnt Church Rd., Bluffton, SC. 32° 14' 12" N., 80° 51' 16" W., 3 October 2004, DCP 1092 with JLLR; Fire-suppressed slash pine/saw palmetto/little gallberry flatwoods, predevelopment survey for Tabby Roads Subdivision, corner of Bruin Rd. and Burnt Church Rd., Bluffton, SC. 32° 14' 12" N., 80° 51' 20" W., 3 October 2004, DCP 1093 with JLLR; Southwest of the intersection of Hwy 46 and Buckwalter Pkwy., along roadside adjacent to degraded slash pine/saw palmetto/little gallberry flatwoods, close to Quercus austrina grove, Bluffton, 32° 14' 05" N., 80° 54' 06" W., 3 October 2004, DCP 1096 with JLLR; Abundant, in association with Pinus elliottii, Serenoa repens, Lyonia lucida, Lyonia mariana, Vaccinium myrsinites, Ilex glabra, etc. Fire suppressed pine flatwoods at the corner of Bruin Rd. and Burnt Church Rd., predevelopment survey for Tabby Roads Subdivision, Bluffton, 32° 14' 11.6" N., 80° 51' 12.6" W., 16 October 2004, DCP 1164 with JLLR; In association with Gaylussacia nana, Ilex glabra, Vaccinium myrsinites, Pinus elliottii, and Clethra alnifolia. Pre-development survey for Buckwalter Park, west side of Buckwalter Pkwy., Bluffton, S.C. 32° 14' 12" N., 80° 54' 16" W., 31 October 2004, DCP1316 with FCS; In association with Pinus elliottii, Serenoa repens, Clethra alnifolia, Solidago fistulosa, Lyonia ferruginea, Gaylussacia tomentosa, Pteridium aquilinum var. pseudocaudatum, Vaccinium tenellum, Persea palustris, Morella pumila, Quercus nigra, Hypericum hypericoides, Dichanthelium scoparium, Carphephorus odoratissimus, Rhus copallinum var. copallinum, Ilex glabra, etc., predevelopment survey for Calhoun Promenade, NW corner of May River Rd. and Bluffton Rd., Bluffton, 32° 14' 23" N., 80° 51' 39" W., 13 November 2004, DCP 1376 with AFH; In association with Mitchella repens, Woodwardia areolata, Prunus serotina, Quercus hemisphaerica, Arundinaria tecta, Dichanthelium lucidum, Magnolia virginiana, Vaccinium elliottii, Lyonia fruticosa, etc., predevelopment survey for Calhoun Promenade, northwest corner of May River Rd. and Bluffton Rd., Bluffton. 32° 14' 20.8" N., 80° 51' 39.0" W., 13 November 2004, DCP 1401 with AFH; In association with Aronia arbutifolia, Serenoa repens, Lyonia lucida, Ilex glabra, Pinus elliottii, Vaccinium myrsinites, Clethra alnifolia, etc., predevelopment survey for Calhoun Promenade, NW corner of May River Rd. and Bluffton Rd., Bluffton. 32° 14' 22.3" N., 80° 51' 40.0" W., 13 November 2004, DCP 1426 with AFH; In association with Aronia arbutifolia, Serenoa repens, Lyonia lucida, Ilex glabra, Pinus elliottii, Vaccinium myrsinites, Clethra alnifolia, etc., predevelopment survey for Calhoun Promenade, at northwest corner of May River Rd. and Bluffton Rd., Bluffton, 32° 14' 22.3" N., 80° 51' 40.0" W.,13 November 2004, DCP 1427 with AFH; In association with Aronia arbutifolia, Serenoa repens, Lyonia lucida, Ilex glabra, Pinus elliottii, Vaccinium myrsinites, Clethra alnifolia, etc., predevelopment survey for Calhoun Promenade, NW corner of May River Rd. and Bluffton Rd., Bluffton, 32° 14' 23" N., 80° 51' 40" W.,13 November 2004, DCP 1431 with AFH; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment

survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton, 32° 14' 24" N.,80° 51' 47" W., 14 November 2004, DCP 1469 with JLLR; Recently timbered, firesuppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd, Bluffton, 32° 14' 23" N., 80° 51' 47" W.,14 November 2004, DCP 1480 with JLLR; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton, 32° 14' 22.2" N., 80° 51' 48.0" W., 25 November 2004, DCP 1524 with JLLR; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton, 32° 14' 21" N., 80° 51' 47" W., 26 November 2004, DCP 1531 with JLLR; Recently timbered, fire-suppressed Pinus elliottii/ Serenoa repens/ Ilex glabra flatwoods. Predevelopment survey for Polly's Place, SW corner of Hilderbrand Rd. and Goethe Rd., Bluffton, 32° 14' 20" N., 80° 51' 47" W., 26 November 2004, DCP 1532 with JLLR. Significance: These are the first reports of this evergreen shrub from South Carolina in recent years (Weakley 2010). It is on the SC rare list (McMillan 2005) It is not currently included in Townsend and Sorrow (1999) or USDA, ARS (2010) for South Carolina. It ranges south to south central Florida and west to the Florida panhandle (Weakley 2010).

Macfadyena unguis-cati (Linnaeus) A. H. Gentry (BIGNONIACEAE)—Beaufort County: In association with *Pleopeltis polypodioides* ssp. *michauxiana*, *Adiantum capillus-veneris*, *Cyrtomium falcatum*, *Pteris multifida*, *Psilotum nudum*, *Oxalis rubra*, *Arenaria leptocladus*, *Houstonia procumbens*, *Clematis virginiana*, *Lantana sp.*, *Malvaviscus drummondii*, *Cinnamomum camphora*, *Sabal palmetto*, *Juniperus silicicola*, *Quercus virginiana*, *Cocculus carolinus*, *etc.* in St. Helena's Episcopal Church graveyard. Church St. Town of Beaufort, 32° 26' 05" N 80° 40' 30" W., 6 January 2005, *DCP 1654 with JLLR*; Growing with *Morus alba*, *Fraxinus americana*, *Smallanthus uvedalius*, *Prunus caroliniana*, *Aesculus pavia* var. *pavia*, *Albizia julibrissin*, *Celtis laevigata*, *Osmanthus americanus*, *Physalis heterophylla*, *Helianthus debilis* ssp. *cucumerifolius*, *Lantana montevidensis Cnidoscolus stimulosus*, etc. at former homesite on north side of Hwy 21 at intersection of Hwy. 280, 32° 26' 31" N.,80° 43' 16" W., 4 May 2005, *DCP 1789 with JLLR*.

Significance: (Townsend and Sorrow 1999) do not include this tropical American vine for South Carolina (Weakley 2010). Though Weakley (2010) reported it as locally common and naturalized in Charleston, he cites no reference for this statement. Manning (2000) reported it as naturalized in Florida, southern Georgia, Louisiana, Texas, and perhaps other states near the Gulf of Mexico. Liu, Peet and Weakley (2006) map it no closer than Glynn County, Georgia. These collections provide documentation for its occurrence in South Carolina and particularly in Beaufort County.

Matelea flavidula (Chapman) Woodson (APOCYNACEAE)—**Beaufort County**: Several vines observed at edge of mowed area. In association with *Quercus virginiana*, *Clitoria mariana*, *Carya alba*, *Rudbeckia sp.*, *Elephantopus sp.*, *Carex sp.*, *and Cnidoscolus stimulosus* at ruins of Chapel of Ease, Lands End Road, St. Helena Island 32° 22' 31" N., 84° 34' 36" W., 3 July 2005, *DCP 3220*.

Significance: This calciphilic vine is listed as rare in South Carolina and Florida (McMillan 2005, USDA, NRCS 2010). It is also known from Berkeley, Calhoun, Charleston and Dorchester counties (McMillan 2005). Ranging south to the Florida panhandle, it is rare throughout its range. (Weakley 2010) Populations in North Carolina are dubious (Weakley 2010). USDA, ARS (2010) also reports occurrence in Tennessee, Alabama and Mississippi.

Megathyrsus maximus (Jacquin) B. K. Simon & S. W. L. Jacobs (POACEAE)—**Beaufort County:** Growing at former site of "Palms on the Parkway" a landscape nursery in association with *Chenopodium sp., Amaranthus sp., Chamaesyce sp., etc* at Food Lion Shopping Center, northeast corner of Hwy 21 and Sam's Point Rd, In the vicinity of 32° 24′ 45" N., 80° 38′ 49" W., 27 December 2006, *DCP 5078*.

Significance: This is the first report of this tropical African grass for South Carolina. The closest known populations are more than 220 kilometers to the southwest in Columbia County, Florida. In Georgia, it is known from Lowndes, Spalding and Thomas counties (Carter, Baker and Morris 2009). It also occurs in Alabama, Arizona, California, Hawaii, Louisiana, Oklahoma and Texas. Originally introduced as a forage grass, it has formerly limited to southern Florida and southern Texas (Hitchcock and Chase 1951). It is considered invasive in Florida and Hawaii (HEAR 1999, FLEEPC 2007). When observed again in September 2007, the original plant was much larger and five additional plants were observed nearby. The above cited population conforms to the narrow-leaf form described by Futch and Hall (2004). Futch and Hall (2004) report that narrowleaf guineagrass "can literally fill a citrus tree with branches and grow through and out of the top of the tree." The Beaufort County population appeared to have been introduced on soil attached to palms from Florida.

Melinis repens (Willdenow) Zizka (POACEAE)—**Beaufort County**: At former site of "Palms on the Parkway" a landscape nursery in Food Lion Shopping Center at the NE corner of Hwy 21 and Sam's Point Rd., Lady's Island in the vicinity of 32° 24′ 45" N., 80° 38′ 49" W., 13 July 2006 *DCP* 4764.

Significance: This collection represents the first documentation for this invasive African grass from South Carolina (Weakley 2010). It represents a northeastern range extension of over 160 km. from the closest known populations in Ware County, Georgia (Carter, Baker and Morris 2009). These are probably the northernmost populations on the East Coast. The populations reported in North Georgia in Liu, Peet and Weakley (2006) are apparently mapping errors passed on from (Wipff 2003). Weakley (2010) reports that the occurrence reported for North Carolina in USDA, NRCS (2010) was in error. Occurrence reported for Maryland by USDA, NRCS (2010) are also not supported by (Wipff 2003). The discovery of this species is problematic as it is considered a Category 1 invasive species in Florida (FLEPPC 2007). Though present in Georgia for over twenty years it, its initial spread (Jones and Coile 1988, Sweeney and Giannasi 2000). Recently it has been observed spreading down highways and railroads into additional areas

(Carter, Baker and Morris 2009). Landry (1996) suggested introduction into Louisiana from interstate traffic as well. It also occurs in Texas, New Mexico, Arizona and California. The nursery which had formerly occupied the site where it was found primarily sold palm trees which had brought from Florida. It is probable that *M. repens* was introduced with soil attached to the base of the palms.

Mentha aquatica Linnaeus var. *citrata* (Ehrhart) Fresen (LAMIACEAE)—**Beaufort County**: Naturalized in lawn, temporary storage and parking area of "The Greenery", in association with *Stenotaphrum secundatum, Sambucus canadensis, Baccharis halimifolia, etc.* Northeast side of Hwy 278 near Bluffton, 32° 15′ 09.7" N 80° 50′ 33.1" W., Transplanted to await flowering 5 July 2006, Pressed 8 October 2006, *DCP 4737*.

Significance: This is the first record for this Eurasian mint from South Carolina (Radford, Ahles and Bell 1968, Townsend and Sorrow 1999, Weakley 2010). Though Radford, Ahles and Bell reports as a rare escape from Orange County, North Carolina, Weakley (2010) reports it no closer than Virginia. No populations are reported from Georgia (Jones and Coile 1988, Liu, Peet and Weakley 2006, Carter, Baker and Morris 2009).

Mentha suaveolens Ehrhart (LAMIACEAE)—**Beaufort County**: Abundantly naturalized around homesite in association with *Allium ampeloprasum*, *Narcissus sp., Leucojum aestivum*, *Paspalum urvillei*, *Paspalum notatum*, *etc.* at the Daniel Brown Estate (family compound / heirs' property) Vinewood Lane, Wallace Plantation Community, St. Helena Island, 32° 22' 49" N., 80° 35' 26" W. 23 July 2005, *DCP 3222* with Sadie Jenkins.

Significance: These collections provide documentation for the occurrence of this European mint in South Carolina and particularly in Beaufort County (Weakley 2010). It was not included in Radford, Ahles and Bell (1968), Townsend and Sorrow (1999) or Liu, Peet and Weakley (2006) for South Carolina. USDA, NRCS (2010) report it citing Hulten and Fries (1986). Weakley (2010) states that "the distribution, habitats, phenology, and abundance of all *Mentha* species need substantial additional herbarium investigation." The data here assists in that process.

Mikania cordifolia (Linnaeus f.) Willdenow (ASTERACEAE)—**Beaufort County:** In association with *Ilex vomitoria, Dioscorea floridana, Conoclinium coelestinum* along fencerow. Ruins of Old Sheldon Church, Old Sheldon Church Rd. south of Yemassee S.C. 32° 37' 08" N., 80° 46' 51" W., 30 October 2004, *DCP 1207 with FCS and JLLR*; Climbing in fencerow with *Ilex vomitoria, Dioscorea floridana, Podophyllum peltatum, Trillium*

maculatum, Amphicarpaea bracteata, Smallanthus uvedalius, etc. near ruins of parish church of Prince William Parish, Old Sheldon Church Rd. South of Yemassee, 32° 37' 07" N., 80° 46' 53" W., 30 October 2004, DCP 1211 with JLLR and FCS; In association with Quercus michauxii, Athyrium asplenioides, Viburnum nudum, Asplenium platyneuron, and Chasmanthium sessiliflorum var. sessiliflorum Pre-development survey for Buckwalter Townhomes, east side of Buckwalter Pkwy., Bluffton, S.C. 32° 16' 07" N 80° 54' 45" W., 1 November 2004, DCP 1324 with FCS; In association with Quercus michauxii, Athyrium asplenioides, Viburnum nudum, Asplenium platyneuron, and Chasmanthium sessiliflorum var. sessiliflorum, pre-development survey for Buckwalter Townhomes, east side of Buckwalter Pkwy., Bluffton, S.C. 32° 16' 07" N., 80° 54' 45" W., 1 November 2004, DCP 1327 with FCS; In association with Quercus

michauxii, Mikania cordifolia, Athyrium asplenioides, Viburnum nudum, Asplenium platvneuron, and Chasmanthium sessiliflorum var. sessiliflorum. Pre-development survey for Buckwalter Townhomes, east side of Buckwalter Pkwy., Bluffton, S.C. 32 ° 16' 09" N 80 ° 54' 38.7" W., 1 November 2004, DCP 1330 with FCS: Growing in association with Ulmus alata, Festuca subverticillata, Poa autumnalis, Ulmus americana var. americana, Modiola caroliniana, Rumex verticillatus, Ouercus velutina, Celtis laevigata, Verbesina occidentalis, Sabal minor, Melanthera nivea, etc., Steel Bridge boat landing, Combahee River at Hwy. 17. 32° 39' 10" N., 80° 41' 02" W., 7 May 2005, DCP 1800; Growing with Viburnum nudum, Itea virginica, Liriodendron tulipifera, Sabal minor, Carpinus caroliniana var. caroliniana, Aesculus pavia, Rhapidophyllum hystrix, Ouercus michauxii, Magnolia grandiflora, Magnolia virginiana, etc. in hardwood forest adjacent to blackwater stream, Pritchardville 32° 14' 14" N., 80° 57' 07" W., 11 May 2005, DCP1842; In association with Carva cordiformis, Callicarpa americana, Solanum sp., Quercus nigra, Mitchella repens, Nyssa sp., Quercus michauxii, etc. in wooded area at culde-sac on Col. Mustard Rd. Old Field Plantation, a gated residential community off of Hwy. 170 in the Okatie area, 32° 20' 19" N., 80° 55' 20" W., 13 August 2005, DCP 3680. Significance: These are the first records for this robust neotropical vine in South Carolina (Townsend and Sorrow 2010). These are cited in Weakley (2010) as P. McMillan (pers. comm. 2005). They represent a northeastern range extension from Bryan County, Georgia (Holmes 2000). It ranges from northern Argentina through the wet American tropics to the southeastern United States (Weakley 2010). Its known range has dramatically increased over the years. Small (1933) reported it from hammocks in southern peninsular Florida and the Keys. Holmes (1981) reported it for north Florida, southern Mississippi and southern Louisiana. Lelong (1988) reported it for Alabama from a 1977 collection on a shell mound. Holmes, Thomas and Lipscomb (1992) made the first reports from Texas. The Texas collections were made in 1971 and 1980. The first was misidentified as M. scandens (Linnaeus) Willdenow and the second one had been overlooked. It was reported from coastal Georgia in 2000. It has also been collected from Colleton County DCP 3589. Holmes (1981) says it is the most widespread member of the genus. All of the Beaufort County populations were growing in mesic, circumneutral habitats. Most were in forested situations. Most of the populations were on the mainland. I also observed it on the Shell Ring in the Sea Pines Forest Preserve. It is a Georgia Species of Special Concern (Weakley 2010). It should be considered for inclusion on the South Carolina Rare List.

Muhlenbergia sericea (Michaux) P.M. Peterson (POACEAE)—Beaufort County: Interdune near ocean, Forest Beach, Hilton Head Island, JP 268; In association with Pinus elliottii, Morella cerifera, Andropogon glaucopsis, Andropogon tenuispatheus, Schizachyrium scoparium, Panicum anceps var. rhizomatum, Dichanthelium chamaelonche, Dichanthelium lancearium, Andropogon gyrans, etc. on small island on west side of Coosaw River Dr. south of Coosaw Island, 32° 28' 26" N., 80° 34' 33" W., 23 December 2005, DCP 4118; Roadside under planted pin at corner of Kinloch Rd. and Jenkins Rd., Near Dale Community, 32° 36' 51.5" N., 80° 42' 22.0" W., 10 October 2007, DCP 5196.

Significance: This maritime bunchgrass is on the South Carolina rare list (McMillan 2005). It is also known from Charleston, Georgetown and Jasper counties. It ranges from North Carolina south to Florida and west to Texas (Weakley 2010). Weakley (2010) states that it is "apparently

limited to barrier islands". Both of the above cited populations had maritime influence but neither occurred on barrier islands.

Nama jamaicense Linnaeus (HYDROPHYLLACEAE)—Beaufort County: In Stenotaphrum secundatum lawn in city park at southeast corner of Carteret St. and Craven St. Town of Beaufort, 32° 25′ 58" N., 80° 40′ 13" W., 16 June 2004, DCP 220 with FJDR; In association with Eremochloa ophiuroides, Dichondra carolinensis, Cyperus croceus, Stenotaphrum secundatum, etc. in sparsely vegetated lawn on sandy, shelly soil, City of Beaufort Park, SW corner of Craven St. and New St., City of Beaufort, 32° 25′ 57" N 80° 40′ 09" W., 8 June 2005, DCP 2122; Weed in lawn at St. Helena Episcopal Day School 32°26′01.6"N., 80°40′23.9"W., 9 January 2006, DCP 4297.

Significance: These collections add a second county occurrence for this neotropical lawn weed and confirm its continued presence in our flora (Weakley 2010). Though Weakley (2010) includes it for South Carolina, Townsend and Sorrow (1999) do not. Perhaps they excluded it because Radford, Ahles and Bell (1968) knew it as "a waif in our area known from a single collection in Charleston County. Weakley (2010) considers it an introduction in the South Carolina but native in south Florida and south Texas. Wunderlin and Hansen (2008) do not consider it native. The closest recently reported populations are in Leon County, Florida (Wunderlin and Hansen 2008). It is also reported from south Alabama, south Louisiana and Texas (USDA, NRCS 2010. The lawns where it was collected were poorly maintained lawns in the historic district with high levels of anthropogenic calcium. They had not been replanted for many years. The extremely prostrate nature of the plant allows it to be easily overlooked. It is probably much more widespread.

Nandina domestica Thunberg (BERBERIDACEAE)—**Beaufort County:** Naturalized on vacant lot. Growing in association with *Vitis sp., Euphorbia cyathophora, Carya illinoinensis, Celtis laevigata, etc.* northeast corner of intersection of railroad tracks and 11th St. Town of Port Royal 32° 22' 36.2" N., 80° 41' 47.1" W., 19 May 2006, *DCP 4525*.

Significance: This is the first reported county occurrence for this escaped Asian ornamental shrub from the southern coastal plain of South Carolina and the fifth for the state. Townsend and Sorrow (1999) report it for Pickens, Spartanburg and Horry counties only.

Nemophila aphylla (Linnaeus) Brummitt (HYDROPHYLLACEAE—Beaufort County: In association with *Ornithogalum umbellatum, Carya illinoinensis, Morus alba, Artemisia vulgaris, Anredera vesicaria, Celtis laevigata, etc.* n undeveloped residential lot at the southeast corner of Prince St. and Hamar St. City of Beaufort, 32° 26' 07" N., 80° 40' 54" W., 21 March 2007, *DCP 5100*.

Significance: This is the first record of this spring ephemeral from the southern outer coastal plain and the second record from the maritime strand. It mainly grows farther inland in South Carolina. The closest previous reports to the northwest are in Aiken County. The only other reports from the outer coastal plain are from Georgetown and Sumter counties (Townsend and Sorrow 1999). Since it is reported from mesic nutrient rich floodplain forests, it was surprising to find it in a sandy ruderal site.

Nicotiana longiflora Cavanilles (SOLANACEAE)—Beaufort County: Growing out of gypsum gravel in filled salt marsh. In association with Dactyloctenium aegyptium, Sesbania drummondii, Chamaesyce serpens, Chenopodium sp., etc. in the Port Royal Dry Stack Marina parking lot, State Port of Port Royal Property, Town of Port Royal. It is abundant within parking lot but absent outside fenced area, 32° 22' 22" N., 80° 41' 15" W., 19 August 2006, DCP 4917.

Significance: This is the first report of this South American tobacco from South Carolina. The closest documented population is more than 125 kilometers southwest in Glynn County, Georgia (Jones and Coile 1988, Carter, Baker and Morris 2009). It had been collected from ballast near Mobile, Alabama near the turn of the twentieth century then again in 1971 from the railroad tracks there (Lelong 1988). The collections from Mississippi in the early 1970's were also from railroad yards (Rogers 1973). The Beaufort County collections were near the point where trains and trucks loaded material to the now closed state port. It apparently was introduced to the site with transported materials. Several other unusual taxa were collected at this site.

Nymphoides peltata (S. G. Gmelin) Kuntze (MENYANTHACEAE)—Beaufort County: Abundantly naturalized along southern margin of large retention pond. This pond shows no signs of landscaping, south of Lowcountry Medical Group and north of Shell Point Park, Shell Point Neighborhood, 32° 27' 37.9" N., 80° 43' 49.0" W., 23 September 2007, DCP 5190.

Significance: This is the first record of this aquatic European plant from South Carolina and the most southeastern record in the United States (Liu, Peet and Weakley 2010, USDA, NRCS 2010, Weakley 2010). The next closest population is more than 350 kilometers to the northwest in Chatham County, North Carolina (Liu, Peet and Weakley 2006). Though commonly naturalized to the north and west of our area, it is largely absent from the southeast. The next closest reports are in Mississippi, Tennessee, Kentucky, Ohio and Maryland (USDA, NRCS 2010). Weakley (2010) states "It is sold for cultivation in water gardens and will likely become more widely naturalized.

USDA, NRCS (2010) lists this taxon as invasive or potentially invasive in four New England states (Connecticut, Maine, Massachusetts, and Vermont) and two Pacific Northwest States (Oregon and Washington). The pond where this population occurs is located where it is visually insignificant to the surrounding properties. No signs of landscaping were noted in the area. It appears that this population was not deliberately planted but has spread from another site. It should be considered for inclusion in South Carolina's illegal aquatic plant list.

Ophioglossum crotalophoroides Walter (OPHIOGLOSSACEAE)—Beaufort County: Growing in plastic planter with Ligustrum japonicum on sidewalk in front of Piggly Wiggly grocery store at the southeast corner of Ribault Rd. and Boundary St. (Hwy. 21) City of Beaufort, 32° 26' 21.7" N., 80° 41' 06" W., 10 February 2006, DCP 4336.

Significance: This diminutive fern is on the rare list in South Carolina and Tennessee (McMillan 2005, USDA, NRCS 2010). This is the first report for Beaufort County (McMillan 2005). It was previously known from Berkeley, Colleton, Dorchester, Hampton, Jasper and Richland counties. Townsend and Sorrow (1999) also include Richland County. It ranges from eastern North Carolina south to Florida and west to Texas (Weakley 2010). USDA, ARS (2010) also reports it for Tennessee, Arkansas, Missouri and Oklahoma. It is rare or overlooked north of Georgia. It also occurs in Mexico, the West Indies, Central America and South America (Weakley 2010).

Ophioglossum petiolatum Hooker (OPHIOGLOSSACEAE)—Beaufort County: In association with Cerastium tomentosum, Soliva, Spiranthes sp., Murdannia sp, Poa annua, etc. in closely-mown landscape island on west side of Circle K convenience store, Moss Creek Plaza, Hwy 278, greater Bluffton area, 32° 14′ 11.4″ N., 80° 48′ 20.0″ W., 5 January 2006, DCP 4222.

Significance: This diminutive fern is on the SC Rare list (McMillan 2005). This is the first report for Beaufort County (McMillan 2005). It was previously known from Berkeley, Colleton and Horry counties (Townsend and Sorrow 1999, McMillan 2005). It is widespread in the southeastern United States ranging from southeastern Virginia south to Florida and west to Texas and Oklahoma. USDA, ARS (2010) also include Arkansas, Missouri and a disjunct population in Hawaii. It is rare or overlooked north of Georgia. It also occurs in the West Indies, Mexico, northern South America and Asia (Weakley 2010). Wagner and Wagner in FNA (1993) suggest that this species is likely introduced in North America.

Opuntia humifusa (Rafinesque) Rafinesque var. austrina (Small) Dress (CACTACEAE)— **Beaufort County:** In association with *Liatris squarrosa* var. *hirsuta, Asclepias tuberosa* ssp. tuberosa, Lechea mucronata, Tragia urens, Cyperus plukenetii, Ipomoea macrorhiza, Trichostema dichotomum, Paspalum notatum, Cnidoscolus stimulosus, Monarda punctata, Diodia teres, Clitoria mariana, Zornia bracteata, Croptilon divaricatum, Centrosema virginiana, Pinus palustris, etc. on sandy roadside along Shanklin Rd. near the intersection with Bay Pines Rd., Laurel Bay Area. 32° 27' 38" N., 80° 45' 09" W., 19 July 2005, DCP 3405; In association with Uniola paniculata, Yucca gloriosa, Pinus elliottii, Heterotheca subaxillaris, Fimbristylis caroliniana, Andropogon tenuispatheus, Andropogon virginicus var. virginicus, Panicum amarum var. amarum, Ipomoea imperati, etc., beach marker #9., Sea Pines Plantation. Hilton Head 32° 07' 02" N. 80° 49' 41" W. 27 November 2005, DCP 4077 with CCC and JLLR; In association with Jasminum nudiflorum, Lantana depressa var. floridana, Quercus hemisphaerica, Prunus caroliniana, Ilex vomitoria, Borrichia frutescens, etc., Whitehall Point, Lady's Island, Lady's Island, 32° 25' 20" N., 80° 40' 03" W., 11 May 2006, DCP 4480. Opuntia stricta (Haworth) Haworth var. dillenii (Ker-Gawler) L. Benson (CACTACEAE)— **Beaufort County:** Along trail at Rhode's boat landing, in association with *Quercus virginiana*, Pinus elliottii, Ilex vomitoria, Morella cerifera, etc., Pritchard Island, 12 August 2006, DCP 4903 with HB and JLLR.

Opuntia stricta (Haworth) Haworth var. stricta (CACTACEAE)—Beaufort County: Pads graygreen, massive at plant base, nearly cylindrical, flattened above, and vertically held; buds present no open flowers; scattered in a few shrubby patches just above wrack line of inland side of a narrow maritime forest stringer. About 0.4 mi. W of dorm/lab at Pritchard's Island, immediately SW of Fripp Inlet and about 13 air mi ESE of Beaufort; 32.2988 N, 80.5262 W 8-10'elevation, Saint Phillips Island 7.5' topo quad. JBN 24694; In association with Opuntia stricta var. stricta, Opuntia pusilla, Eremochloa ophiuroides, Pinus elliottii, Crocanthemum corymbosum, Quercus virginiana, Rubus trivialis, Ilex vomitoria, Morella cerifera, Persea borbonia, Eustachys petraea, Cirsium horridulum var. horridulum, Salsola sp., Cakile edentula, Hydrocotyle bonariensis, Sabal palmetto, etc. in sand dunes at Hunting Island State Park. 32° 21' 20" N 80° 26' 44" W., 2 January 2005, DCP 1609 with TMS; In association with Stenotaphrum secundatum, Cynodon dactylon, Croton punctatus, Dichanthelium sp., Uniola paniculata, Pinus

elliottii, Quercus virginiana, Ilex vomitoria, Morella cerifera, Persea borbonia, Salsola sp., Sabal palmetto, Spartina patens, etc., sand dunes at Hunting Island State Park, 32° 21' 09" N 80° 26' 48" W., 2 January 2005, DCP 1615 with TMS; In association with Stenotaphrum secundatum, Cynodon dactylon, Croton punctatus, Dichanthelium sp., Uniola paniculata, Pinus elliottii, Quercus virginiana, Ilex vomitoria, Morella cerifera, Persea borbonia, Salsola sp., Sabal palmetto, Spartina patens, etc., sand dunes at Hunting Island State Park, 32° 21' 09" N., 80° 26' 48" W., 2 January 2005, DCP 1616 with TMS; In association with Dichanthelium sp., Juncus sp., Panicum virgatum var. virgatum, Andropogon sp., Schizachyrium sp., Pterocaulon pycnostachyum, Euthamia sp., Lechea sp., etc. in fire-suppressed Pinus elliottii flatwoods, S.W. of the intersection of Coosaw River Dr. and Sherman Dr., Coosaw Island, 32° 28' 46" N. 80° 34' 48" W., 4 August 2005, DCP 3556; Opening in maritime forest at Rhodes cabin in association with Quercus virginiana, Pinus elliottii, Ilex vomitoria, Morella cerifera, etc., Pritchard Island, 12 August 2006, DCP 4902 with HB and JLLR.

Significance: Due to recent taxonomic revisions, the distribution of the above cited *Opuntia* taxa in South Carolina is unclear. This establishes that the above three are present in South Carolina and particularly in Beaufort County. *O. stricta* var. *stricta* is the most frequently encountered of the three in Beaufort County. Both varieties of *O. stricta* are listed as rare in South Carolina (McMillan 2005). Small (1933) indicated that *O. stricta* var. *stricta* was the cactus that "Spanish records tell us the aborigines feasted on for three months of each year and also cured, like figs, for food when out of season." *O. humifusa* var. *austrina* ranges south to Florida and west to Texas (Weakley 2010). *O. stricta* var. *dillenii* ranges from southeast South Carolina south to Florida. It also possibly occurs in North Carolina. It is restricted to barrier islands (Weakley 2010). *O. stricta* var. *stricta* ranges from south central North Carolina south to southern peninsular Florida with a single collection from Isle of Wight County, Virginia (Weakley, 2010).

Orobanche uniflora Linnaeus (OROBANCHACEAE)—Beaufort County: Roadside shoulder in planted rye grass on U.S. 17 at main entrance to Nemours Plantation; several plants growing along shoulder of road, ten feet from mailbox on east side of entrance road, 28 February 1998, RDP 2817a; Growing with Rumex pulcher, Trifolium campestre, Trifolium dubium, Sphenopholis obtusata, Vicia sp., Juncus sp., Hydrocotyle sp., etc. in ditch along Broad River Rd. near Hwy 280, adjacent to entrance to self-storage units and across from entrance to Bi-Lo, Shell Point neighborhood, near town of Port Royal. 32° 22' 38" N., 80° 43' 30" W., 23 March 2005, DCP 1713; Growing in association with Hypochaeris brasiliensis, Trifolium sp., Vicia tetrasperma, Taraxacum sp., Paspalum notatum, etc South side of Hwy 278 near Bluffton, 32° 16' 12.6" N., 80° 51' 51.3" W., 20 March 2006, DCP 4380.

Significance: This holoparasitic herbaceous perennial is on the South Carolina rare list (McMillan 2005). It is also known from Charleston, Greenville, Jasper, Lancaster, Lexington, Oconee, Pickens, Spartanburg and Union counties. Reports from Laurens County have not been verified (McMillan 2005). It occurs in almost every state in the union as well as southern Canada. It is rare in Florida and in Georgia's coastal plain (Weakley 2010).

Packera tomentosa (Michaux) C. Jeffrey (ASTERACEAE)—**Beaufort County:** Growing on the southern section of the proposed New River Trail. (utility line easement between Hwy 46 and the New River on site of abandoned railroad) Town of Bluffton, 32° 13′ 50″ N 81° 00′ 32″ W, 21

March 2003, *DCP28*, In association with *Packera tomentosa*, *Centunculus minimus*, *Valerianella radiata*, *Hibiscus aculeatus*, *Cirsium horridulum* var. *horridulum*, *Drosera sp.*, *Centella erecta*, *Hyptis alata*, *Helianthus angustifolius*, *Scutellaria integrifolia*, *Ilex glabra*, *Vaccinium tenellum*, *Persea palustris*, *etc.* Under powerlines running between Hwy. 278 and Matthews Rd. near Intersection of Hwy. 278 and Hwy 170, 32° 17' 30" N., 80° 56' 07" W., 3 April 2005, *DCP* 1742

Significance: These are the first documentations for this yellow-flowered stoloniferous perennial from our maritime strand or southern outer coastal plain counties. Though known from the maritime strand in both North Carolina and Georgia, it occurs mainly near and above the fall line in South Carolina. Marlboro and Florence counties were previously the most coastward occurrences. These populations are more than 40 kilometers northeast of the closest report in Bryan County, Georgia and more than 125 kilometers from the closest in state report in Aiken County (Townsend and Sorrow 1999, Liu, Peet and Weakley 2007). Two other populations that I have observed and propagated but not collected have since been destroyed due to highway construction.

Panicum miliaceum Linnaeus (POACEAE)—Beaufort County: In association with Richardia scabra, Fimbristylis autumnalis, Cyperus spp., Cynodon dactylon, Digitaria sanguinalis, Ludwigia decurrens, Paspalum urvillei, Eleusine indica, etc. at recently clear-cut site on Lawson Rd., Laurel Bay Area, 32° 27' 21" N., 80° 46' 34" W., 25 July 2005, DCP 3482.

Significance: This is the first report for this Eurasian annual ruderal grass from South Carolina (Townsend and Sorrow 1999, USDA, NRCS 2010, Weakley 2010. It is rare in Florida, North Carolina and Virginia (Weakley 2010). The closest prior reports are 280 kilometers west in Sumter County, Georgia 310 kilometers south in Volusia County, Florida and 380 kilometers northwest in Cherokee County, North Carolina (Sweeney and Giannasi 2000, Liu, Peet and Weakley 2006, Wunderlin and Hansen 2008) Weakley (2010) reports that is planted in wildlife food plots and sometimes persists or self-sows. The above cited population is near residences and has not been associated with wildlife food plots for over several decades if it ever was. I have also observed P. miliaceum as a weed in a residential garden. It is being spread by other means in our area

Panicum repens Linnaeus (POACEAE)—**Beaufort County:** In pile of waste dirt on edge of dirt road, predevelopment survey for Buckwalter Park, West side of Buckwalter Rd., Bluffton S.C. 32° 14′ 12″ N 80° 54′ 16″ W., 31 October 2004, *DCP 1314 with FCS;* Growing in retention pond at end of nature trail on Sun City Blvd. In association with *Acer sp., Liquidambar styraciflua, Boehmeria cylindrica, Morella cerifera, Ulmus sp., Baccharis halimifolia, Micranthemum umbrosum, Mikania scandens, etc.*, Sun City Hilton Head (a gated residential community), Greater Bluffton Area 32° 17′ 15.3″ N 80° 57′ 55.3″ W., 10 June 2006, *DCP 4671 with Masamichi Ogasawara;* Growing on banks of pond created by dredging a blackwater stream. In association with *Scutellaria mellichampii, Zanthoxylum clava-herculis, Sabal palmetto, Ostrya virginiana, Serenoa repens, etc.* on currently undeveloped property at the bridge on Main Road, Palmetto Bluff (a gated residential community), Bluffton, 32° 12′ 09.9″ N 80° 53′ 04.0″ W., 14 June 2006, *DCP 4692 with JLLR*.

Significance: This is the first report of this European grass from the maritime strand or from the southern outer coastal plain (Weakley 2010). It is previously known from Aiken, Lexington, Richland and Florence counties (Townsend and Sorrow 1999). The date of introduction is unclear. It is not reported in Radford, Ahles and Bell (1968), Hill and Horn (1997) or Nelson and Kelly (1997) for South Carolina. It was first reported from North Carolina in 1971 (Weakley 2010). It apparently was first collected in Georgia in 1996 (Carter, Baker and Morris 2009). It is a category 1 invasive weed in Florida (FLEEPC 2007) and a noxious weed in Alabama, Arizona, Hawaii and Texas (USDA NRCS 2010).

Parapholis incurva (Linnaeus) C. E. Hubbard (POACEAE)—**Beaufort County:** Roadway at edge of salt marsh adjacent to shell-midden complex, Dick Point, Pinckney Island National Wildlife Refuge, 32° 15' 21.9" N., 80° 46' 08.1" W., 12 April 2008, *DCP 5237*. *Significance:* This is the first report of this European grass from South Carolina (Townsend and Sorrow 1999, Weakley 2010). The closest known populations are more than 390 kilometers to the northeast in Carteret County, North Carolina. The next closest population is in Alabama (USDA, NRCS 2010). It is not reported for Georgia or Alabama (Sweeney and Giannasi 2000, Wunderlin and Hansen 2008).

Parietaria floridana Nuttall (URTICACEAE)—Beaufort County: Under beach house on northeast part of Hunting Island. 6 April 1968, S. W. Leonard and A. E. Radford 1253; Growing at base of brick wall under cultivated *Ilex cornuta*, in association with *Polycarpon tetraphyllum, Gamochaeta* sp., *Stellaria media, Cerastium glomeratum, Facelis retusa, Lamium purpureum, Plantago virginica, Poa annua*, etc., S.C D.M.V. office, Munch Rd., Burton area, 32° 25' 00" N., 80° 44' 18" W., 25 March 2005, *DCP 1723*; Growing out of leaf bases on *Butia capitata* and *Cycas revoluta* at Palm Tree Nursery, Matthews Rd, near Intersection of Hwy. 278 and Hwy 170. 32° 17' 24" N., 80° 56' 06" W., 3 April 2005, *DCP 1745*; Abundant and localized in 20 square meter patch under *Broussonetia papyrifera* grove between ruins of plantation house and restaurant. In association with *Allium ampeloprasum, Narcissus pseudonarcissus* 'Van Wilder', *Raphanus raphanistrum, Corydalis micrantha* var. *australis, Taraxacum laevigatum, Arenaria serpyllifolia, Leucojum aestivum, Asplenium platyneuron*, etc., Spring Island 32° 19' 53" N., 80° 48' 55" W., 26 February 2005, *DCP 3769*.

Significance: This calciphilic annual is on the SC rare list (McMillan 2005). It is also known from Charleston and Colleton counties (McMillan 2005). It ranges from North Carolina south to Florida and west to Texas on the outer coastal plain. Disjunct populations occur in the Piedmont of Delaware. It is rare north of Florida (Weakley 2010). Weakley (2010) suggest that it is partly introduced. Parietaria praetermissa Hinton was previously include in P. floridana. The two cannot be reliably distinguished without mature achenes (Weakley 2010). Unfortunately, the above cited specimens did not contain mature achenes.

Parietaria judaica Linnaeus (URTICACEAE)—**Beaufort County:** In illicit landscape debris disposal site in association with *Solanum viarum*, SW end of Food Lion Shopping Center, NE corner of Hwy 21 and Sam's Point Rd., Lady's Island, in the vicinity of 32° 24' 45" N., 80° 38' 49" W, 13 July 2006, *DCP 4766*; Dominant in an area 3 meters wide and 13 meters long beside a drainage ditch. In association with *Parietaria judaica*, *Alternanthera philoxeroides*, *Kyllinga*

sps., Paspalum notatum, Emilia sonchifolia, Euphorbia graminifolia, Dichondra carolinensis, Hydrocotyle sps., etc. in moist lawn adjacent to Kangaroo Express Convenience Store, corner of Buckingham Landing Rd. and Fording Island Rd., (Hwy. 278) Between Bluffton and Hilton Head.. Landscaping and house plants are sometimes brought up from Florida wholesale nurseries and sold to the public at this location, 32° 14' 03" N., 80° 48' 12" W., 7 October 2004, DCP 5221 with JLLR.

Significance: These are the first reports for this European weed from South Carolina (Townsend and Sorrow 1999, Weakley 2010). It lies more than 625 km. from the closest population to the southwest in Escambia County, Florida (Liu, Peet and Weakley 2006, Wunderlin and Hansen, 2008, USDA, NRCS 2010). The next closest documented population is in Virginia. The location of this population is not given (USDA, NRCS 2010, Weakley 2010). This is the only long-lived Parietaria in the United States. It was first reported from Louisiana (Boufford 1997). The above cited populations were probably introduced with landscape material. The population represented by DCP 4766 was observed again in September 2007 indicating that it will likely persist in our flora. P. judaica is one of the main causes of allergic diseases in the Mediterranean area (González-Rioja R. et al. 2007).

Paspalum scrobiculatum Linnaeus (POACEAE)—Beaufort County: In association with Axonopus fissifolius, Dichanthelium sp., Paspalum praecox, Paspalum setaceum, Panicum virgatum var. virgatum, Eupatorium capillifolium, Pinus elliottii, Morella cerifera, etc. in degraded Pinus elliottii flatwoods used for raising cattle some decades ago on the southeast side of Coosaw River Dr., Between Sherman Dr. and Judge Island., Coosaw Island, 32° 28' 36" N., 80° 34' 33"W., 2 August 2005, DCP 3557.

Significance: This is the first report for this Indian grass from South Carolina (Townsend and Sorrow 1999, Weakley 2010). The closest documented population is more than 250 kilometers southwest in Tift County, Georgia (Allen and Hall 2003). It is also reported from Alabama, Hawaii, Maryland, New Jersey and Texas (USDA, NRCS 2010). It is grown as a grain in India where it is called kodo. The North American populations probably represent escapes from cultivation. Many species of *Paspalum* were introduced as forage and have since become weedy. Because weeds are under-represented in most herbaria, the distribution maps of such species probably understate their prevalence (Allen and Hall 2003).

Paspalum setaceum Michaux var. *ciliatifolium* (Michaux) Vasey (POACEAE)—**Beaufort** County: Tic Toc Park. North St. Town of Beaufort, 32° 26′ 04″ N., 80° 41′ 29″ W., 12 June 2004, *DCP 194 with FJDR;* Morrall Park, Beaufort Arsenal, and Carnegie Park, Near corner of Craven St. and Carteret St., Town of Beaufort, 32° 25′ 58″ N., 80° 40′ 13″ W., 16 June 2004, *DCP 217 with FJDR;* Not cultivated, abundant throughout dry areas. In association with *Elephantopus tomentosus, Ilex vomitoria, Salvia lyrata, Mitchella repens, Quercus nigra, Pinus taeda, etc.* at Port Royal Arboretum, Fort Walker Dr., Port Royal Plantation (a gated community off of Hwy. 278) Hilton Head Island, in the vicinity of 32° 13′ 23.0″ N 80° 41′ 06.9″ W., 25 August 2006, *DCP 4939*.

Paspalum setaceum Michaux var. **muhlenbergii** (Nash) Fernald (POACEAE)—**Beaufort** County: In association with *Eryngium yuccifolium* var. *yuccifolium*, *Paspalum floridanum*,

Rhynchosia sp., Sabatia stellaris, Paspalum urvillei, Fimbristylis castanea, Hydrocotyle bonariensis, Dichanthelium sp., etc. on sandy roadside, northeast side of Coosaw River Dr.. east end of Coosaw Island, 32° 28' 24" N., 80° 34' 12" W., 7 July 2005, DCP 3280; Growing in association with Axonopus fissifolius, Dichanthelium sp., Drosera sp., Eupatorium capillifolium, etc., Coosaw Island, 32° 28' 36" N., 80° 34' 33" W., 4 August 2005, DCP 3559.

Paspalum setaceum Michaux var. setaceum (POACEAE)—Beaufort County: In association with Vitis cinerea var. baileyana, Physalis heterophylla, Desmodium lineatum, Dichanthelium acuminatum var. acuminatum, Lechea mucronata, Desmodium paniculatum, Cyperus echinatus, etc., Mossy Oaks Fire-station and Mossy Oaks City Park, Mossy Oaks Rd., Town of Beaufort,. 32° 24′ 04″ N., 80° 41′ 36″ W., 12 June 2004, DCP 205 with FJDR; In association with Polygala mariana, Linum sp., Spiranthes sp., Buchnera sp., Euthamia sp., Pityopsis sp., Solidago sp., Tephrosia sp., etc. on sandy roadside, northeast side of Coosaw River Dr. between Piney Lane and Sherman Drive, Coosaw Island, 32° 28′ 43″ N., 80° 34′ 48″ W., 7 July 2005, DCP 3281.

Significance: These collections clarify that all three of these native grasses occur in South Carolina and particularly in Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) do not distinguish infraspecific taxa for this species (Weakley 2010). Liu, Peet and Weakley (2006) do not map distribution below the species level for *P. setaceum* var. ciliatifolium or *P. setaceum* var. muhlenbergii. They document *P. setaceum* var. setaceum only once in Baldwin County, Alabama. Though the species is reported for most counties including Beaufort, it is not clear which varieties the county occurrences belong to (Townsend and Sorrow 1999).

Pavonia hastata Cavanilles (MALVACEAE)—**Beaufort County:** Naturalized in residential lot from ornamental plantings two lots west of here,1307 Calhoun St., City of Beaufort, 32° 26′ 26.7" N., 80° 40′ 35.3" W., 1 November 2007, *DCP 5218*.

Significance: This is the first record of this South American introduction from South Carolina and a northeastern range extension of more than 130 kilometers from Camden County, Georgia (Carter, Baker and Morris 2009, Weakley 2010). It is also known from Florida (Carter, Baker and Morris 2009, USDA, NRCS 2010). I have observed it naturalized around nurseries where it had been sold several years before.

Peperomia pellucida (Linnaeus) Kunth (PIPERACEAE)—**Beaufort County:** Naturalized in shady portions of residential garden, originally introduced as weeds in containerized nursery material at the residence of Daniel and Callie Littlejohn, 4026 Shell Point Rd, Shell Point Community. Homeowner reports that this taxon has been present in her garden for many years. 32° 22' 46" N., 80° 44' 41" W., 9 August 2007, *DCP 5161*; Weed on ground near containerized plants in retail nursery (Garden Gate Nursery) at 2513 Boundary St., Burton area, 32° 26' 27.1 N., 80° 42' 31.9" W., 10 September 2007, *DCP 5184*.

Significance: This is the first report of this tropical American species in South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley, 2006USDA, NRCS 2010, Weakley 2010). The closest reports are from Georgia "in the vicinity of Savannah" Weakley (2010). It also

occurs in Florida, Alabama, Louisiana, Texas and Hawaii (Boufford 1997, USDA, NRCS 2010). It is widely cultivated as food and medicine and is now naturalized throughout the tropics (Wagner, Herbst, and Sohmer 1999). Though native to the American tropics, its native range is disputed (Wagner, Herbst, and Sohmer 1999). (Howard (1973) called it the only truly weedy species of *Peperomia* in the Lesser Antilles. He reported as a common adventive on rock paths and walls in gardens. Boufford (1982) described it as a fairly recent introduction to the United States, first collected in 1957. It was then known from Florida, Georgia and Louisiana, usually around nurseries and greenhouse. Boufford (1982) stated "It will be interesting to see if this plant continues to expand its range." Interestingly it shows antibacterial activity against *Staphylococcus aureus, Bacillus subtilis, Pseudomonas aeruginosa, and Escherichia coli*; and could have potential as a broad spectrum antibiotic (Boufford 1997).

Phalaris angusta Nees ex Trinius (POACEAE)—Beaufort County: In association with Schoenoplectus pungens var. pungens, Dichanthelium villosissimum var. villosissimum, etc. in City of Beaufort Park Space overlooking Battery Creek (an estuary) on the south side of Boundary St., east of Applebee's restaurant. 32° 26'27" N., 80° 42' 05" W., 1 June 2004, DCP 0178 with FJDR; In association with Hedeoma hispida, Trifolium campestre, Paspalum notatum, Erigeron quercifolius, Geranium carolinianum, Allium canadense var. canadense, Hordeum pusillum, Vulpia octoflora, etc. on roadside at junction of Castle Hall Rd. and Hwy. 21 (Frampton Rd.) between Yemassee and Pocotaligo, 32° 39' 36" N., 80° 50' 45" W., 9 May 2005, DCP 1833.

Significance: These collections provide documentation for the location of this tropical American grass in South Carolina. Weakley (2010) reports it as uncommon in waterfowl impoundments and marshes in the coastal plain of Florida, Georgia and South Carolina. It was not included in Hill and Horn (1997), Nelson and Kelly (1997), Townsend and Sorrow (1999), Barkworth (2003) or Liu, Peet and Weakley (2006) for South Carolina. Hitchcock and Chase (1950) reported it from Mississippi, Louisiana and Texas only. Barkworth (2003) reported in the coastal region between Texas and Georgia in the southeast, but also on the west coast and in South America. It is possibly adventive in North America (Barkworth 2003) or native in Florida and Texas (Weakley 2010). Barkworth (2003) gives the habitat as open grasslands and prairies. It is now the most commonly encountered *Phalaris* in Beaufort County. It occurs in many ruderal sites. It is possibly native in Florida and Texas (Weakley 2010).

Phyllostachys aurea Carrière ex A. & C. Rivière (POACEAE)—Beaufort County: 5 meter tall thicket on edge of property, in association with *Pinus taeda, Callicarpa americana, Morus rubra, Quercus nigra, Liquidambar styraciflua, Prunus caroliniana, Vaccinium arboreum, Cercis canadensis, Ilex vomitoria, etc.*, pre-development survey for Calhoun Promenade, between May River Dr. (Hwy 46) and Mellichamp Rd. on Bluffton Rd. (Hwy 46), Bluffton, 32° 14' 14.6" N., 80° 51' 39.7" W., 13 November 2004, *DCP 1409 with AFH;* Growing in association with *Sonchus oleraceus, Lantana urticoides, Gamochaeta spp., Pueraria montana* var. *lobata, etc.*, heavily disturbed area adjacent to the parking lot of Bateaux restaurant, Whitehall Rd. Lady's Island, 32° 25' 14" N., 80° 39' 57" W., 20 March 2006, *DCP 4373*.

Significance: This is the first report of this Asian bamboo for the maritime strand counties (Weakley 2010). It has been reported from Aiken, Lexington, Lee, York, and Spartanburg counties (Townsend and Sorrow 1999).

Physalis grisea (Waterfall) M. Martinez (SOLANACEAE)—Beaufort County:

In association with *Physalis pubescens* var. *pubescens, Phytolacca rigida, Digitaria sp., Solanum carolinense* var. *carolinense, Triadica sebifera, Zanthoxylum clava-herculis, Passiflora incarnata, Callicarpa americana, Melothria pendula, etc.* in area being cleared for new residential subdivision behind Oxford Amoco and adjacent to Praise Assembly of God Church. Shell Point Neighborhood, Town of Port Royal, 32° 22' 50" N., 80° 44' 04" W. 3 July 2005, DCP 3213; In association with *Physalis pubescens* var. *pubescens, Phytolacca rigida, Digitaria sp., Solanum carolinense* var. *carolinense, Triadica sebifera, Zanthoxylum clava-herculis, Passiflora incarnata, Callicarpa americana, Melothria pendula, etc.* in area being cleared for new residential subdivision behind Oxford Amoco and adjacent to Praise Assembly of God Church. Shell Point Neighborhood in Town of Port Royal, 32° 22' 50" N., 80° 44' 04" W. 3 July 2005, *DCP 3215*.

Significance: This is the first report of this ground cherry from the outer coastal plain of South Carolina and the second report from the coastal plain. It is mainly known from the upper piedmont. The only other report from the coastal plain was from Darlington County.

Phytolacca americana Linnaeus (PHYTOLACCACEAE)—Beaufort County: In association with Rosa palustris, Eryngium aquaticum var. aquaticum, Cicuta maculata var. maculata, Hibiscus moscheutos ssp. moscheutos, Eupatorium serotinum, Osmunda regalis, Kosteletzkya virginica, Hymenocallis crassifolia, etc. on the left bank of the New River north of Hwy 46 Bridge, 32° 14' 45" N., 81° 00' 53" W., 27 June 2005, DCP 2254 with BT; In association with Cuthbertia rosea, Setaria sp., Chasmanthium sessiliflorum var. sessiliflorum, Conopholis americana, Carya glabra, Sabal minor, Erythrina herbacea, Tripsacum dactyloides, Nyssa sp., Aesculus pavia, Pinus glabra, etc. along Old Sheldon Church Rd. near Yemassee, 32° 36' 42" N., 80° 46' 19" W., 26 August 2005, DCP 3735.

Phytolacca rigida Small (PHYTOLACCACEAE)—**Beaufort County:** Along the edge of the salt marsh in passive city park space at Bellamy Curve, the bend in Hwy 21 where Boundary St. becomes Carteret St., City of Beaufort, 32° 26′ 23″ N., 80° 40′ 11″ W., 16 September 2004, DCP 1010; Along the edge of the salt marsh in passive city park space at Bellamy Curve the bend in Hwy 21 where Boundary St. becomes Carteret St. City of Beaufort, 32° 26′ 23″ N., 80° 40′ 11″ W., 16 September 2004, DCP 1011; Battery Saxton and Polk Park, Civil War fortification and adjacent passive park on the south side of Boundary St., along Battery Creek (estuary) City of Beaufort, 32° 26′ 29″ N., 80° 41′ 46″ W., 16 September 2004, DCP 1041. **Significance:** These collections provide documentation that both of these robust ruderal species occur in South Carolina and particularly in Beaufort County. Radford, Ahles and Bell (1968) and Townsend and Sorrow (2010) do not distinguish these species but apparently include both under a broad *P. americana*. Weakley (2010) says that *P. rigida* occurs in dune slacks, dune slopes, edges of tidal marshes, disturbed areas on barrier islands, xeric sandhills near the coast. He also states that it is rare in South Carolina. For *P. americana*, he states it is common and that it will

quickly colonize exposed mineral soil, even in undisturbed forests and that it is most abundant as a weed of urban, suburban and agricultural disturbances. In Beaufort County, *P. rigida* is much more commonly encountered in Beaufort County. *P. rigida* is a frequent colonizer of all types of soil disturbance on all of the islands. *P. americana* is much less common occurring on the mainland portion of the county.

Pilea fontana (Lunell) Rydberg (URTICACEAE)—**Beaufort County:** In association with *Viburnum obovatum, Leersia* sp., *Boehmeria cylindrica, Triadica sebifera, Fraxinus* sp., *Quercus lyrata, Cephalanthus occidentalis, Saururus cernuus, Campsis radicans, Ampelopsis arborea, Styrax americana*, etc. on right bank of Combahee River downstream from the railroad trestle, near Yemassee, 32° 41′ 56" N., 80° 49′ 26" W., 15 July 2007, *DCP 5148* with *MO. Significance:* This annual wetland species is on the SC rare list (McMillan 2005). This is the first report for Beaufort County. It was previously known for Berkeley, Colleton and Dorchester counties (McMillan 2005). Townsend and Sorrow (1999) also include Calhoun and Georgetown counties. It is widespread ranging from eastern Canada west to Minnesota and North Dakota south to Florida, Indiana and Nebraska (Weakley 2010).

Pilea microphylla (Linnaeus) Liebmann (URTICACEAE)—**Beaufort County:** Growing out of cracks in brick walkway No horticultural plantings were observed at this property. Conversation with the current property owner indicates that this naturalized population is most likely the result of accidental introduction on masonry at Tucker's Dry Cleaner at the corner of Youmans Dr. and Hwy. 21, Lady's Island, 32° 24' 56.3" N., 80° 39' 16.1" W., 17 May 2006, *DCP 4514*.

Significance: This is the third reported county occurrence for South Carolina. It was known from Richland and Charleston counties. (Townsend and Sorrow 1999) These collections represent the first documentation for a third county in the state. Radford, Ahles and Bell (1968) recorded this taxon as "a weed in and around greenhouses; not established as part of our flora". Weakley (2007) recorded it as growing on "old rock and brick walls, urban areas; rare" and "well-established in Charleston, SC and Savannah, Ga." Weakley's description much more aptly describes the Beaufort County populations. However, in both of these instances, *P. microphylla* was growing on relatively new brick walkways instead of old brick walls. The populations in South Carolina are presumably adventive (Weakley 2010) from a native range of Southern Florida, the West Indies and Mexico south to tropical South America (Wagner, Herbst and Sohmer 1999).

Pinckneya bracteata (Bartram) Rafinesque (RUBIACEAE)—**Beaufort County:** 26 stems were counted in apparently natural population. 2 stems were over 1 m tall. All others were less than 1m. No evidence of sexual reproduction observed. In seepage area of severely altered blackwater stream (Most of the drainage system has been converted to a brackish "lagoon".) In association with *Acer* sp., *Nyssa biflora, Ilex cassine, Decodon verticillata, Cyrilla racemiflora, Clethra alnifolia, Osmunda cinnamomea, Ligustrum japonicum,* etc., "Overlook Pt." Port Royal Arboretum, Port Royal Plantation (a gated community off of Hwy. 278), Hilton Head Island, 32° 13' 23.0" N., 80° 41' 06.9" W., 25 August 2006, *DCP 4934*.

Significance: This small tree is on the SC rare list (McMillan 2005). It is also known from Charleston, Darlington and Jasper counties (Townsend and Sorrow 1999, McMillan, 2005). The populations in Charleston and Dorchester counties have not been seen in over twenty years (McMillan 2005). It ranges south to northeast and panhandle Florida. It is also rare in Georgia (Weakley 2010).

Pinus clausa (Chapman ex Engelmann) Vasey ex Sargent (PINACEAE)—**Beaufort County:** Naturalized, apparently a remnant of former experimental planting that is now divided between various residential properties on the west side of Gannet Point Rd. between Coosaw River Dr. and Dog Creek Rd., Coosaw Island in the vicinity of 32° 28' 45" N., 80° 35' 29" W., 22 July 2006, *DCP* 4854.

Significance: This is the first report for this conifer in South Carolina (Townsend and Sorrow 1999, Weakley 2010). It is native to northern peninsular Florida and southern Alabama (Kral 1993) Experimental plantings are known from Wayne and Pulaski counties in Georgia, North Carolina and Mississippi (Jones and Coile 1988, Liu, Peet and Weakley 2006, USDA, NRCS 2010)

Pinus virginiana P. Miller (PINACEAE)—**Beaufort County:** Seedling in roadside ditch adjacent to overgrown and abandoned Christmas Tree Farm on Coosaw River Dr, north of Gannet Point Rd., Coosaw Island 32° 28′ 57" N., 80° 35′ 34" W., 11 August 2005, *DCP 3621*. **Significance:** This is the first report of this conifer from the outer coastal plain of South Carolina (Townsend and Sorrow 1999, Weakley 2010). This population is not native here but naturalized from a Christmas tree farm.

Polygonum erectum Linnaeus (POLYGONACEAE)—Beaufort County: Growing on an abandoned homesite with Carya illinoinensis, Celtis laevigata, Prunus caroliniana, Sabal palmetto, Cinnamomum camphora, Gelsemium sempervirens, Hedera helix, Passiflora lutea, Ligustrum lucidum, etc. NE. Corner of Union St. and Baggett St. Town of Beaufort, 15 June 2005, DCP 2177; In association with Sideroxylon tenax, Celtis laevigata, Ligustrum sinense, Atriplex sp., Chenopodium sp., Suaeda linearis, etc. in shell hash near site of old ferry landing. West side of Sam's Point Rd. at Lucy Creek (an estuary) 32° 29° 03" N 80° 36' 04" W., 11 July 2005, DCP 3301; Growing in limestone crusher run at H. E. Trask Sr. County boat landing at end of County Rd. 744 on Colleton River near Bluffton in the vicinity of 32° 17' 17" N., 80° 48' 35"W., 19 July 2006, DCP 4825.

Significance: This is the first report of this native ruderal species for the coastal plain and the second for South Carolina. Townsend and Sorrow (1999) report it for Spartanburg County only.

Pontederia cordata Linnaeus var. **cordata** (PONTEDERIACEAE)—**Beaufort County:** Depression wetland at the intersection of Piney Lane and Coosaw River Dr. Coosaw Island, 32° 28' 46" N., 80° 34' 49" W., 14 July 2005, *DCP 3327*.

Pontederia cordata Linnaeus var. **lancifolia** (Muhlenberg ex Elliott) Torrey (PONTEDERIACEAE)—**Beaufort County:** In association with *Sparganium americanum*,

Rhynchospora corniculata, Euthamia minor, Boehmeria cylindrica, Cephalanthus occidentalis, Limnobium spongia, Saururus cernuus, etc. in blackwater swamp on Hwy 170, adjacent to the entrance to Oldfield Plantation, Okatie area, 32° 20′ 56″ N., 80° 55′ 30″ W., 19 August 2005, DCP 3710.

Significance: These collections provide confirmation that both of these varieties of this common wetland species occur in South Carolina and particularly in Beaufort County. Though reported by Weakley (2010), Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) did not recognize infraspecific taxa. Liu, Peet and Weakley (2006) did not report specimens identified to the varietal level from South Carolina. Townsend and Sorrow (1999) report the *P. cordata* 'sensu lato' for most counties including Beaufort.

Potamogeton foliosus Rafinesque var. *foliosus* (POTAMOGETONACEAE)—**Beaufort** County: In association with *Fraxinus* sp., *Dulichium arundinaceum, Taxodium distichum, Saururus cernuus*, etc. in The Great Swamp of the New River, west of Sun City Hilton Head (a gated residential community, Greater Bluffton Area 32° 17' 19.8" N., 80° 59' 34.2" W., 10 June 2006, *DCP 4662* with *MO*.

Significance: This aquatic herb is on the rare list in South Carolina, Maryland and New Hampshire (McMillan 2005, USDA, NRCS 2010). This is the first report for Beaufort County and possibly the first verified report for the maritime strand. Previously it has been reported from Aiken, Jasper and Orangeburg counties. Those from Jasper County have not been verified (McMillan 2005). Townsend and Sorrow (1999) do not include Jasper but include Charleston and Georgetown counties. It is widespread occurring throughout the United States, southern Canada and in Mexico (USDA, NRCS 2010, Weakley 2010).

Psilotum nudum (Linnaeus) Palisot de Beauvois (PSILOTACEAE)—Beaufort County: Under planted *Prunus caroliniana* hedge with *Trachelospermum asiaticum*, adjacent to sidewalk and parking area on west side of Environments office complex 603 Carteret St, Beaufort, 32° 26′ 02" N., 80° 40′ 29" W., 30 October 2004, DCP 1217 with FCS and JLLR; Epipetric on tombs. In association with Pleopeltis polypodioides ssp. michauxiana, Macfadyena unguis-cati, Adiantum capillus-veneris, Cyrtomium falcatum, Pteris multifida, Oxalis rubra, Arenaria leptocladus, Houstonia procumbens, Clematis virginiana, Lantana sp., Malvaviscus drummondii, Cinnamomum camphora, Sabal palmetto, Juniperus silicicola, Quercus virginiana, Cocculus carolinus, etc., St. Helena's Episcopal Church graveyard, Church St. Town of Beaufort, 32° 26′ 05" N., 80° 40′ 30" W., 6 January 2005, DCP 1658 with JLLR.

Significance: This diminutive pteridophyte is on the rare list in South Carolina and Arizona (McMillan 2005, USDA, ARS 2010). It is also known from Berkeley, Charleston, Darlington, Richland and Williamsburg counties. The reports from Williamsburg have not been verified (McMillan 2005). It ranges south to south Florida and west to east Texas. It is disjunct in northeast North Carolina and in the southwestern United States. It also occurs in the tropic of Central and South America, Africa and Asia (Weakley 2010).

Pteris vittata Linnaeus (PTERIDACEAE)—**Beaufort County:** Growing on mortar of brick pillars with *Asplenium platyneuron* and *Arenaria lanuginosa* at ruins of Old Sheldon Church,

Old Sheldon Church Rd. south of Yemassee S.C. 32° 37' 07" N., 80° 46' 50" W., 30 October 2004, DCP 1198 with FCS and JLLR.

Significance: This is the second reported county occurrence for this calciphilic Chinese fern (Weakley 2010). Townsend and Sorrow (19990 report it for Charleston County only.

Pyracantha fortuneana (Maximowicz) Li (ROSACEAE)—Beaufort County: Abundantly naturalized in disturbed areas from nearby plantings around Food Lion Parking Lot, Laurel Bay Rd., Laurel Bay area, 32° 27' 11.7" N., 80° 46' 16.2" W., 26 July 2006, DCP 4870.

Significance: This is the second reported county occurrence for South Carolina, the first recent record from the state and the first record from the coastal plain for this Chinese ornamental shrub (Weakley 2010). Nesom (2010) reported it from a 1988 collection in Oconee County. Nesom also reports it as naturalized in Alabama, Texas and California. Wunderlin and Hansen (2008) report it from one county in Florida. Nesom (2010) suggests that the specimen from Florida identified as P. fortuneana maybe misidentified P. koidzumii (Hayata) Rehder as the online image more closely resemble that species and P. koidzumii is more frequently cultivated in Florida. USDA, ARS (2010) reports it for Hawaii as well.

Pyracantha koidzumii (Hayata) Rehder (ROSACEAE)—**Beaufort County:** Abundantly naturalized in a localized area. In association with *Juniperus virginiana* var. *silicicola, Quercus virginiana, Sideroxylon tenax, Celtis laevigata, Ilex vomitoria, Morella cerifera, Cenchrus sp., etc.* along the road to the Sands (a beach-like area created in part from channel dredge spoil and phosphate mining spoil) Town of Port Royal, 32° 22' 26" N., 80° 41' 22" W., 17 October 2005, *DCP 3966*.

Significance: This is the first report from the coastal plain and the second reported county in the state for this Taiwanese ornamental shrub (Weakley 2010). It was previously known from a 1970 collection from Spartanburg County (Townsend and Sorrow 1999, Nesom 2010)

Quercus austrina Small (FAGACEAE)—Beaufort County: In association with Polygala polygama var. polygama, Lechea villosa, Gaura angustifolia, Eupatorium album, Euphorbia pubentissima, Vaccinium elliottii, Vaccinium tenellum, Hieracium gronovii, etc. on north side of May River Rd. (Hwy 46) just west of intersection with Buckwalter Parkway, Town of Bluffton, 32° 14′ 03" N., 80° 54′ 10" W., 16 June 2004, DCP 260 with FJDR; Mature tree growing in residential yard at southeast intersection of Bible Camp Rd. and Hwy 21, St. Helena Island. 32° 24' 00" N., 80° 33' 21" W., 23 June 2004, DCP 282; In association with Asclepias tuberosa ssp. tuberosa, Pinus palustris, Rudbeckia sp., Strophostyles sp., Pteridium aquilinum var. pseudocaudatum, Symplocos tinctoria, Persea borbonia, Castanea alnifolia, Sassafras albidum, Dichanthelium sp., Zanthoxylum clava-herculis, etc.. Fire-suppressed pine flatwoods remnant, Sam's Pt. Rd. between Oyster Factory Rd. and Wallace Rd., Lady's Island, 32° 25' 37" N., 80° 38' 34" W., 30 June 2004, DCP 315; One mature tree in church lawn. Associates in adjacent woodland remnant include Tilia americana, Juglans nigra, Morus rubra, Aralia spinosa, Morus rubra, Juniperus silicicola, Quercus hemisphaerica, Carya glabra, Magnolia grandiflora, Pinus glabra, Smilax pumila, Prunus caroliniana, Melia azederach, etc., Praise Assembly of God, Shell Point Community, Hwy 802, Town of Port Royal. 32° 22' 55" N., 80° 43' 51" W., 1 June

2005, *DCP 2094;* Two mature trees observed growing at Pinckney Island National Wildlife Refuge, 32° 16' 32.0" N., 80° 45' 26.1" W., 19 July 2006, *DCP 4817* with *CPD*. *Significance:* This hardwood tree is on the SC rare list (McMillan 2005). It is also known from Aiken, Barnwell, Berkeley, Charleston, Darlington, Hampton, Richland and Williamsburg counties (McMillan 2005). Though Weakley (2010) gives the habitat as "river bluffs, mesic hammocks, dry hammocks, natural levees of brownwater rivers, over mafic rocks in the Piedmont of North Carolina, on shell or calcareous sediments on the coastal plain of South Carolina", most of the above cited specimens were collected from xeric uplands surrounded by pine flatwoods. It ranges from south central North Carolina south to Florida and west to Mississippi. It is uncommon throughout its range (Weakley 2010).

Reynoutria japonica Houttuyn (POLYGONACEAE)—**Beaufort County:** Abundantly naturalized over and around former dumpsite (filled in depression wetland) behind Food Lion Shopping Center at junction of Pine Grove Rd and Shanklin Rd., Laurel Bay area, 32° 27' 09.8" N., 80° 46' 12.0" W., 8 August 2006, *DCP 4876*.

Significance: This is the first report of this Japanese herbaceous perennial from the southern outer coastal plain of South Carolina (Weakley 2010). It was not reported closer than Lexington, Richland, Georgetown and Williamsburg counties (Townsend and Sorrow 1999).

Rhapidophyllum hystrix (Pursh) H. A. Wendland and Drude ex Drude (ARECACEAE)— **Beaufort County:** Growing with Fraxinus sp., Carya sp., Ulmus rubra, Morus rubra, Quercus michauxii, Berchemia scandens, Hexastylis arifolia var. arifolia, Decumaria barbara, Polystichum acrostichoides, Fagus grandifolia var. caroliniana and other calcicoles. Predevelopment survey for Buckwalter Park, west side of Buckwalter Pkwy., Bluffton, S.C. 32° 15' 06" N., 80° 54' 17" W., 31 October 2004, DCP 1290 with FCS; In association with Nyssa biflora, Vaccinium elliottii, and Quercus laurifolia in floodplain of channelized tributary of Rosedhu Creek. Pre-development survey for Buckwalter Park, west side of Buckwalter Rd., Bluffton S.C. 32° 15' 08" N., 80° 54' 13" W., 1 November 2004, DCP 1360 with FCS; In association with Vaccinium elliottii, Quercus laurifolia, Acer rubrum, Sabal minor, Nyssa biflora, etc. in the floodplain of a channelized tributary of Rosedhu Creek. Predevelopment survey for Buckwalter Park, west side of Buckwalter Rd., Bluffton S.C. 32° 15' 09" N., 80° 54' 21" W., 1 November 2004, DCP 1363 with FCS; In association with Arundinaria gigantea, Nyssa biflora, Acer rubrum, Magnolia grandiflora, Morella cerifera, Persea palustris, and Ilex opaca var. opaca in floodplain of channelized tributary of Rosedhu Creek, predevelopment survey for Buckwalter Park, west side of Buckwalter Pkwy., Bluffton S.C. 32° 15' 04" N., 80° 54' 32" W., 1 November 2004, DCP 1365 with FCS; In association with Carex joorii, Magnolia virginiana, Cornus stricta, Chasmanthium laxum, Sabal minor, Lyonia lucida, , Nyssa biflora, Acer rubrum, Morella cerifera, Persea palustris, and Ulmus rubra in floodplain of channelized tributary of Rosedhu Creek. Predevelopment survey for Buckwalter Park, west side of Buckwalter Pkwy., Bluffton S.C. 32° 15' 01" N., 80° 54' 31" W., 1 November 2004, DCP 1366 with FCS; In association with Sabal minor, Acer rubrum var. rubrum, Persea palustris, Quercus laurifolia, etc. in floodplain of channelized tributary of Rosedhu Creek, predevelopment survey for Buckwalter Park, west side of Buckwalter Pkwy., Bluffton, 32° 14' 55" N., 80° 54' 25" W., 1 November 2004, DCP 1371 with FCS; One large plant seen growing beside intermittent stream/

wetland complex in association with *Woodwardia areolata, Persea palustris, Ilex cassine, Lyonia lucida, Osmunda cinnamomea, Scutellaria integrifolia,* etc. Colleton Nature Preserve, Spring Island 32° 18' 12" N., 80° 49' 34" W., 26 February 2005, *DCP 3770;* Growing with *Listera australis, Hexastylis arifolia, Sabal minor, Liquidambar styraciflua, Woodwardia areolata, Ilex opaca,* etc. on edge of trail at Live Oak Rd. Spring Island 32° 20' 41" N., 80° 49' 28" W., 5 March 2005, *DCP 3759;* 6 naturally-growing plants growing on terrace above blackwater stream draining "Betsy's Pond" with *Sassafras albidum, Carpinus caroliniana, Aralia spinosa, Prunus caroliniana, Ilex vomitoria, Chasmanthium sessiliflorum, Elephantopus* sp., etc. at residence of Jennifer Smith, #5 Old Boathouse Lane, Spring Island, 32° 20' 02" N., 80° 49' 03" W., 9 August 2005, *DCP 3604*.

Significance: This palm is on the SC rare list (McMillan 2005). Within South Carolina, it is known only from Beaufort County (McMillan 2005). It ranges south to peninsular Florida and west to Mississippi. It is rare in Georgia (Weakley 2010).

Rhexia cubensis Grisebach (MELASTOMATACEAE)—Beaufort County: In association with Dichanthelium spp., Scleria triglomerata, Heterotheca mariana, Aletris farinosa, Erigeron vernus, Buchnera floridana, etc. Ditch along Bay Pines Rd. Laurel Bay area. 32° 27' 21" N., 80° 46' 34" W., 8 June 2005, DCP 2118; Growing with Richardia brasiliensis, Quercus hemisphaerica, Pityopsis sps., Trichostema dichotoma, Chamaecrista sps., at base of hedge between horse paddock and edge of dirt road, Stillwell Rd., Midway Farms Subdivision., Pritchardville area, 32° 14' 15" N., 80° 58' 15" W., 15 July 2005, DCP 3360 with JLLR. Significance: This herbaceous perennial is on the SC rare list (McMillan 2005). These are the first reports from Beaufort County. Previously it was known from Jasper, Hampton, Barnwell, Sumter, Williamsburg and Georgetown counties (Townsend and Sorrow 1999). It ranges from southeastern North Carolina south to south Florida and west to southwest Mississippi. It also occurs in the West Indies. It is rare in Georgia and North Carolina as well (Weakley 2010). USDA, ARS (2010) reports it for Louisiana as well.

Rhynchosia minima (Linnaeus) Augustin de Candolle (FABACEAE)—**Beaufort County:** In association with Sabal palmetto, Juniperus virginiana var. silicicola, Eustachys petraea, Sideroxylon tenax, Quercus hemisphaerica, Ilex vomitoria, Eremochloa ophiuroides, Cynodon dactylon, etc., Native American shell deposits along main road across from "Ibis Pond", Pinckney Island National Wildlife Refuge between Bluffton and Hilton Head, 32° 14' 30.8" N., 80° 46' 36.3" W., 7 November 2007, DCP 5222 with GW.

Significance: This is the first report of this diminutive legume for South Carolina. It is a northeastern range extension of over 70 kilometers from the closest known population in McIntosh County, Georgia (Liu, Peet and Weakley 2006, Weakley 2010). Some consider the New World distribution to be the result of introduction (Weakley 2010). USDA, NRCS (2010) and Wunderlin and Hansen (2010) considers it native.

Rhynchospora careyana Fernald (CYPERACEAE)—**Beaufort County:** In association with Panicum hemitomon, Diospyros virginiana, Pinus serotina, Nyssa biflora, Saccharum baldwinii, Woodwardia virginica, Serenoa repens, Lyonia lucida, etc. Fire suppressed depression wetland

in nature preserve. Area labeled as 'the Pocosin', Newhall Preserve, Palmetto Bay Rd. Hilton Head, S.C. 32° 09' 50" N., 80° 46' 15" W., 26 November 2005, *DCP 4045*. *Significance:* This depression wetland sedge is on the SC rare list (McMillan 2005). It is reported from Allendale, Bamberg, Barnwell, Berkeley, Charleston Clarendon, Colleton, Dorchester, Florence, Georgetown, Hampton, Jasper, Orangeburg and Richland counties. (McMillan 2005, McMillan 2007). It is a coastal plain endemic found from New Jersey and Delaware south to southern Florida and west to Louisiana. In South Carolina it is occasional throughout the coastal plain. In the outer coastal plain it is typically and nearly always present in flatwoods ponds, clay-based Carolina bays and limesinks (McMillan 2007).

Ricinus communis Linnaeus (EUPHORBIACEAE)—**Beaufort County:** Naturalized at former nursery site that is being developed into a residential development, Lot #4 Willow Run subdivision, off of Baynard Rd, Shell Point area, 21 May 2006, *DCP 4536*. **Significance:** This is the third report of this Old world tropical for South Carolina and the first for the maritime strand. It was previously reported for Newberry and Lee counties.

Rosa bracteata J. C. Wendland (ROSACEAE)—**Beaufort County:** Naturalized on abandoned homesite with *Pinus taeda, Callicarpa americana, Andropogon tenuispatheus, Morus rubra, Lycoris radiata, Prunus caroliniana, Ilex vomitoria, etc.*, pre-development survey for Calhoun Promenade between May River Dr. (Hwy 46) and Mellichamp Rd. on Bluffton Rd. (Hwy 46) Bluffton, 32° 14′ 19" N., 80° 51′ 38.5" W., 13 November 2004, *DCP 1406 with AFH*. **Significance:** This is the first report for this introduce climbing rose from the outer coastal plain (Weakley 2010). It has previously not been reported closer than Richland County.

Sacciolepis indica (Linnaeus) Chase (POACEAE)—Beaufort County: Growing on ditch bank on west side of Bluffton Rd. (Hwy 46) at powerline crossing in association with Lycopus sp., Micranthemum umbrosum, Persea palustris, Serenoa repens, Juncus spp., Hydrolea quadrivalvis, Cynoctonum mitreola, Festuca subverticillata, Kyllinga sp., etc. in Bluffton, 32° 15' 18.9" N., 80° 51' 15.3" W., 23 May 2006, DCP 4559; Top of ditch bank adjacent to fire-suppressed Pinus palustris/ Serenoa repens/ Ilex glabra flatwoods at Environments office complex, Bay Pines Rd. in the vicinity of 32° 27' 31" N., 80° 46' 11" W., 9 October 2007, DCP 5194.

Significance: This is the third reported county occurrence for this Indian grass for South Carolina (Weakley 2010). Townsend and Sorrow (1999) report it for Jasper and Edgefield counties only.

Sageretia minutiflora (Michaux) C. Mohr (RHAMNACEAE)—Beaufort County: In association with Galactia elliottii, Descurainia pinnata var. pinnata, Quercus hemisphaerica, Juniperus silicicola Morella cerifera, Serenoa repens, Persea borbonia, Osmanthus americanus, Ilex vomitoria, Verbesina virginica, etc. on Native American shell deposit. Butch's Island Boat Landing on Hwy 21 between St. Helena Island and Harbor Island, 32° 24' 32" N., 80° 28' 06" W., 2 January 2005, DCP 1605 with TMS; Many short stems (<1m) along the property line between Green Shell Ring Park and 27 Amelia Circle. (Population extends 15 meters in depth and 60 meters in length) In association with Ligustrum lucidum, Melia azederach, Juniperus

virginiana var. silicicola, Salvia lyrata, Verbascum thapsus, Cornus asperifolia, Ilex vomitoria, Quercus virginiana, Quercus hemisphaerica, etc., Hilton Head Island, 32° 13' 22" N., 80° 45' 32" W., 9 January 2007, DCP 5089.

Significance: This scandent calciphilic shrub is on the rare list in South Carolina and Georgia (McMillan 2005, USDA, ARS 2010). It is also known from Charleston, Colleton and Jasper counties (McMillan, 2005) Townsend and Sorrow (1999) do not include Jasper County. It ranges from southeast North Carolina south to Florida and west to Mississippi (Weakley 2010).

Sagittaria chapmanii (J.G. Smith) C. Mohr (ALISMATACEAE)—Beaufort County: In association with Liquidambar styraciflua, Gonolobus sp., Triadica sebifera, Ilex opaca, Berchemia scandens, Elephantopus carolinianus, Morus rubra, Cirsium nuttallii, Diospyros virginiana, Morella cerifera, Acer drummondii, etc. in hardwood swamp adjacent to tidal freshwater creek, Sugar Hill Boat Landing Off of River Rd. and Combahee River, Near Big Estate Community. 32° 39' 58" N., 80° 45' 19" W., 4 July 2005, DCP 3248; Growing in moist depressions under first set of powerlines west of Hwy 278 between Hwy 46 and Burnt Church Rd., Bluffton area, In association with Proserpinaca pectinata, Juncus sp., Rhynchospora sp., Eleocharis sp., Canna flaccida, Galactia elliottii, Woodwardia virginica, Lachnanthes caroliniana, Carex verrucosa, Echinochloa sp., etc., 32° 13' 56" N., 80° 52' 02" W., 19 July 2006, DCP 4842.

Significance: This wetland plant is on the SC rare list (McMillan 2005). This is the first report for Beaufort County. First reported for the state by Nelson and Kelly (1997), it was previously known from Charleston, Hampton and Clarendon counties only (Townsend and Sorrow 1999, McMillan 2005). It ranges from southeast North Carolina south to south Florida and west to Louisiana and Arkansas (Weakley 2010).

Sagittaria subulata (Linnaeus) Buchenau (ALISMATACEAE)—Beaufort County: Right bank of the Combahee River, South of the Colleton County Boat Landing. 32° 41' 39" N., 80° 48' 35" W., 24 July 2005, DCP 3451 with TMS; In association with Utricularia gibba, Rhynchospora macrostachya, Proserpinaca palustris, Persicaria hydropiperoides var. hydropiperoides, Carya cordiformis, Fimbristylis autumnalis, Cyperus sp., Rhynchospora microcephala, Rhynchospora glomerata var. glomerata, Crotalaria spectabilis, etc. depression wetland under powerlines on the west side of Hwy 280, South of Isabelle Blvd., Burton Area, 32° 24' 30" N., 80° 44' 05" W., 25 July 2005, DCP 3489; In association with Planera aquatica, Acer sp., Cornus foemina, Fraxinus sp., Taxodium distichum, Nyssa biflora, etc. on the right bank of the Combahee River upstream from the Colleton Co. Public Boat Landing, In the vicinity of 32° 41' 49.8" N., 80° 48' 45.6" W., 29 May 2006, DCP 4615 with TMS; Submerged plants growing on shoreline of wildlife pond with Eleocharis acicularis, Eleocharis engelmannii, etc. at Pinckney Island National Wildlife Refuge, 32° 14' 32.9" N., 80° 46' 09.7" W., 19 July 2006, DCP 4808 with CPD.

Significance: This wetland plant is on the rare list in South Carolina, Connecticut, Massachusetts and Rhode Island. This is the first report for Beaufort County. It was previously known from Berkeley, Charleston, Georgetown and Horry counties. The reports from Georgetown are questionable (McMillan 2005). Townsend and Sorrow (1999) include

Lexington, Barnwell as well. It ranges from Massachusetts and New York south to northern peninsular Florida and Alabama (Weakley 2010).

Salvia coccinea P.J. Buchoz ex Etlinger (LAMIACEAE)—**Beaufort County:** Population dominates an area 25m x 9m. Species appeared spontaneously after 1996, after thinning of canopy and ground disturbance. The property had previously been unoccupied since the mid 1960's. Population has expanded annually. Growing in association with *Diospyros virginiana*, Carya illinoinensis, Pinus taeda, Celtis laevigata, Rubus trivialis, Juncus biflorus, Zanthoxylum clava-herculis, etc., 48 Sherman Dr., Coosaw Island, 32° 28' 41" N., 80° 34' 58" W., 1 June 2006, DCP 4634.

Significance: This is the second county report for this herbaceous perennial which was introduced from farther south and west (Weakley 2010). Townsend and Sorrow report it for Charleston County only. Weakley reports that it was probably introduced from farther south.

Salvinia minima Baker (SALVINIACEAE)—**Beaufort County:** In association with *Clinopodium brownei, Hydrocotyle sp., Murdannia sp., Onoclea sensibilis, Boehmeria cylindrica, Alternanthera philoxeroides, etc.* In pond on the road to the tabby ruins, Spring Island 32° 19' 52" N., 80° 48' 60" W., 9 August 2005, *DCP 3609*.

Significance: This is the second report for the outer coastal plain and the third reported county occurrence for this aquatic fern. It is previously known from Calhoun County (Townsend and Sorrow 1999) and Jasper County (Townsend and Sorrow 1999). Weakley (2010) suggests that it is probably introduced from farther south. Nauman (1993) considered it native. He reported it from a continuous range in Florida, coastal Alabama and coastal Georgia adjacent to the South Carolina line. Jacono, Davern and Center (2001) presented evidence that it was exotic. It was cultivated in greenhouses and gardens since the 1800's (Jacono, Davern and Center 2001) but was not included in the southeastern floras until (Small (1933) reported it as an "introduced and naturalized in Florida". It was first collected in Georgia in 1935, Louisiana in 1980, Alabama in 1982, Texas in 1992, and Mississippi in 1999 (Haynes and Jacono 2000, Jacono, Davern and Center 2001). Jacono, Davern and Center (2001) note that in areas where the introduced Salvinia weevil (*Cyrtobaguous salviniae*) has become established *S. minima* does not reach nuisance levels. Several years prior to this collection, many of the ponds on Spring Island were landscaped to appear "natural" with material provided by Florida based companies. It is possible that this population is the result of intentional or accidental introduction during this process.

Scleranthus annuus Linnaeus (CARYOPHYLLACEAE)—Beaufort County: In association with Lactuca canadensis, Cyperus rotundus, Sporobolus virginicus, Carex longii, Dichanthelium oligosanthes var. oligosanthes, etc. in Polk Park and Battery Saxton Park on the south side of Boundary St. Town of Beaufort, 32° 26′ 29" N., 80° 41′ 46" W., 1 June 2004, DCP 169 with FJDR; Growing in association with Trifolium carolinianum, Soliva sessilis, Scleranthus annuus, Plantago virginica, Cynodon dactylon, etc. Dry sparse sandy lawn of the Sam's Pt./ Coosaw Island Community Center, intersection of Coosaw River Dr. and Sam's Pt. Rd. Coosaw Island, 32° 28′ 52" N., 80° 35′ 08" W., 25 March 2006, DCP 4435.

Significance: This is the first report for this Eurasian weed from the maritime strand counties of South Carolina (Weakley 2010). Townsend and Sorrow report it no closer than Barnwell and Orangeburg counties.

Scleria ciliata Michaux var. glabra (Chapman) Fairey (CYPERACEAE)—Beaufort County: Depression wetland at the southwest corner of Gibbet Rd. and Hwy 170. Bluffton, 32° 15' 19" N.,80° 58' 03" W., 12 May 2004, DCP 90 with FJDR; In association with Rubus sp., Liquidambar styraciflua, Solidago sp., Eremochloa ophiuroides, etc. in recently timbered vacant housing lot in Royal Pines subdivision adjacent to degraded Pinus palustris flatwoods, Lady's Island,32° 27' 48" N., 80° 38' 06" W., 17 June 2005, DCP 2208.

Significance: This is the third reported county occurrence for this native nutrush (Weakley 2010). Townsend and Sorrow (1999) report it for Charleston and Georgetown counties only.

Scleria reticularis Michaux (CYPERACEAE)—Beaufort County: In association with Ludwigia microcarpa, Ludwigia glandulosa, Sida rhombifolia, Hypericum gymnanthum, Rhexia nashii, Phyla nodiflora, Rhynchospora colorata, etc. in ditch on north side of Laurel Bay Rd. (Hwy 116), Laurel Bay Area, 32° 27' 19" N., 80° 44' 27" W., 19 July 2005, DCP 3825.

Significance: This wetland sedge is on the SC rare list (McMillan 2005). This is the first report for Beaufort County. It was previously known from Barnwell, Berkeley and Sumter counties only (McMillan 2005). The distribution in Townsend and Sorrow (1999) is inaccurate as it does not distinguish it from the far more abundant Scleria muhlenbergii Steudel (Weakley 2005, McMillan 2010). S. reticularis 'sensu stricto' is rare in Georgia and the Carolinas. In our area, it is restricted to limesink ponds and clay-based Carolina bays of the coastal plain. It ranges from Massachusetts south to Florida, west to Texas and north to Indiana, Michigan and Wisconsin (Weakley 2010).

Scoparia dulcis Linnaeus (PLANTAGINACEAE)—**Beaufort County:** In association with Cornus florida, Carya glabra, Carya tomentosa, Pinus taeda, Hamamelis virginiana, Quercus alba, Persea pubescens, Callicarpa americana, Ilex glabra, etc. in narrow strip of remnant natural vegetation between Bristol Bay Rd. and community vegetable garden, Sun City Hilton Head (a gated residential community, Greater Bluffton Area 32° 16' 46.8" N., 80° 58'17.0" W., 10 June 2006, DCP 4669 with MO.

Significance: This is the second reported county occurrence for this native herbaceous perennial. Townsend and Sorrow (1999) report it for Colleton County only.

Scutellaria mellichampii Small (LAMIACEAE)—Beaufort County: In association with Liatris sp., Euphorbia pubentissima, Tephrosia florida, Tephrosia hispidula, Fleischmannia incarnata, Rhynchosia difformis, etc. on top of bluff, right bank of Verdier Cove, Across from the end of Bridge St. Town of Bluffton. 32° 14′ 03" N., 80° 52′ 18" W., 16 June 2004, DCP 251 with FJDR; Right bank of Huger Cove at Bridge St., Town of Bluffton 32° 13′ 59" N., 80° 51′ 53" W., 30 June 2004, DCP 316; In association with Ipomoea macrorhiza, Tridens flavus, Carya glabra, Hamamelis virginiana, Saccharum sp., Ruellia carolinensis, Ceanothus americanus var. intermedius, Dioscorea sp, Erythrina herbacea, Vaccinium arboreum, etc. on the northeast corner of Davis Rd. and Hwy 170, Greater Bluffton area, 32° 16′ 28.5" N., 80° 56′ 54.6" W,

October 2004, *DCP 1176* with *JLLR and ADR;* Growing at Pinckney Island National Wildlife Refuge, 32° 15' 24.0" N., 80° 45' 26.1" W., 19 July 2006, *DCP 4813* with *CPD;* Growing at Pinckney Island National Wildlife Refuge, 32° 15' 24.0" N., 80° 46' 19.1" W., 19 July 2006, *DCP 4820* with *CPD*.

Significance: This herbaceous perennial is listed as rare in South Carolina and Georgia (McMillan 2005, Weakley 2010). These are the first reports for Beaufort County. It was previously reported for Jasper, Allendale and Bamberg counties (Townsend and Sorrow 1999, McMillan 2005). It also occurs as a disjunct in central Alabama (Weakley 2010).

Senecio vulgaris Linnaeus (ASTERACEAE)—Beaufort County: In association with *Phyla nodiflora, Oenothera sp., Medicago polymorpha, Plantago lanceolata, Digitaria sp., Descurainia pinnata* var. *pinnata, etc.* in closely-mown lawn between Huddle House and Hwy. 21 on Lady's Island. Soil is sandy with limestone crusher run, 32° 25' 02.3" N., 80° 39' 27.1" W., 10 January 2006, *DCP 4302*.

Significance: This is the first report of this Eurasian ruderal annual from the maritime strand and southern outer coastal plain counties (Weakley 2010). It mainly grows farther inland. Darlington is the previous most coastward occurrence (Townsend and Sorrow 1999).

Sideroxylon lanuginosum Michaux ssp. lanuginosum (SAPOTACEAE)—Beaufort County: Lone multi-trunked tree in mowed field near top of sandy ridge, in association with *Trifolium carolinianum*, *Paspalum notatum*, *Quercus virginiana*, *Wahlenbergia marginata*, *Aira elegans*, and *Hordeum pusillum*, across Pinckney Landing Road from abandoned silo, Bray's Island Plantation, Sheldon, S.C. 32° 33' 59" N., 80° 49' 09" W., 25 April 2005, *DCP 1758* with *JLLR*. *Significance:* This small tree is on the SC rare list (McMillan 2005). This is the first report for Beaufort County. It was previously reported for Aiken, Hampton and Jasper counties (McMillan 2005). Townsend and Sorrow (1999) exclude Jasper but include Aiken County. It ranges south to west central Florida and west to Louisiana (Weakley 2010). Weakley (2010) shows South Carolina distribution as questionable.

Sisymbrium irio Linnaeus (BRASSICACEAE)—**Beaufort County:** In association with *Urtica urens, Avena sativa, Eleusine indica, etc.* inside paddock at Shalimar Stables, Broad River Blvd. area. 32° 24′ 56.6″ N., 80° 45′ 52.2″ W., 15 May 2006. , *DCP 4500*.

Significance: Townsend and Sorrow (1999) do not record this taxon for South Carolina. Weakley (2007) states that it was "collected around wool-combing mills in South Carolina but that there appears to be no evidence that they are established in our area." The only other previously documented population of this species in the southeastern United States is located in Dade County, Florida (Wunderlin and Hansen, 2007, USDA, NRCS 2007). This taxon is mainly distributed in the northeastern and southwestern states. The next closest populations occur in Texas and Pennsylvania (USDA, NRCS 2007). This collection confirms a second county record for this Eurasian taxon in South Carolina and third county record for this population in the southeastern United States. The Beaufort County population lies more than 125 km. southwest from the closest population near Jamestown, Berkeley County, South Carolina (Liu, Peet and Weakley, 2006, McMillan (pers. comm. 2007). This population was most likely introduced with horses or feed. The wool-combing mills are now closed and no longer serve as a source of

introduction McMillan (pers. comm. 2007). However, livestock-raising will continually serve as a source of introduction for the foreseeable future. This taxon should be searched for elsewhere in South Carolina.

Solanum carolinense Linnaeus var. *floridanum* (Shuttleworth ex Dunal) Chapman (SOLANACEAE)—**Beaufort County:** Growing in association with *Quercus hemisphaerica*, *Persea montana* var. *lobata*, *Prunus caroliniana*, *etc.* in recently cleared area along railroad tracks northwest of 2809 Smilax Avenue, Town of Port Royal., 32° 23' 12" N., 80° 42' 06" W., 20 November 2006, *DCP 5049*.

Significance: Although the typical variety of this species is common throughout the Southeast, *S. carolinense* var. *floridanum* has not previously been reported from this state (Townsend and Sorrow 1999, Weakley 2010) This collection represents the first documentation of this taxon for South Carolina and range extension of northeastward of over 275 kilometers from the closest previously documented population in Lowndes County, Georgia. (Liu, Peet and Weakley 2006) No plant materials have been introduced to the site of this population in several decades. This taxon should be sought elsewhere in Georgia and South Carolina.

Solidago austrina Small (ASTERACEAE)—**Beaufort County:** In association with *Pityopsis graminifolia* var. *graminifolia*, *Solidago leavenworthii*, *Liatris* sp., *Desmodium* sp., *Lespedeza angustifolia*, *Eupatorium hyssopifolium*, etc. on sandy roadside adjacent to fire-suppressed *Pinus elliottii* flatwoods at the corner of Coosaw River Dr. and Sherman Dr., 32 ° 26' 43" N., 80 ° 34' 45" W., 2 October 2005, *DCP 3879*.

Significance: This herbaceous perennial is on the SC rare list (McMillan 2005). This is the first report for the outer coastal plain of South Carolina. It was previously known from Aiken, Edgefield and York counties (McMillan, 2010). This taxon is not distinguished in Townsend and Sorrow (1999) but was apparently submerged in S. gracillima Torrey & A. Gray. S. gracillima is reported for Aiken and Darlington counties only (Weakley 2010). Due to taxonomic revision of this section the range of the species is unclear.

Symphyotrichum elliottii (Torrey & A. Gray) Nesom (ASTERACEAE)—Beaufort County: RDP 2917; About 20 stems, in association with Ulmus parvifolia, Ambrosia artemisiifolia, Andropogon virginicus, Rubus trivialis, Centrosema virginiana, Paspalum notatum, Sassafras albidum, Acalypha gracilens, Rumex hastatulus, etc., upper rim of retention pond, William Dr., Lady's Island, 32° 25' 01.1" N., 80° 39' 03.6"W., 28 November 2006, DCP 5072.

Significance: This herbaceous wetland perennial is on the SC rare list (McMillan 2005). This is the first report for Beaufort County. McMillan (2005) reported good documentation for Berkeley, Charleston and Jasper counties and unverified reports from Richland County. Townsend and Sorrow (1999) report it for Pickens, Greenville, Jasper, Colleton, Dorchester, Charleston, Williamsburg and Georgetown counties. It occurs mainly in swamps and marshes in the outer coastal plain. It ranges from southeast Virginia south to south Florida and west Louisiana. It is rare in Georgia and Virginia. (Weakley 2010)

Talinum paniculatum (Jacquin) Gaertner (PORTULACACEAE)—**Beaufort County:** Abundantly naturalized in residential garden and adjacent *Pinus taeda* woodlands, 48 Sherman

Dr., Coosaw Island, 32° 28' 42" N., 80° 34' 58" W., 31 July 2005, *DCP 3548*; In association with *Sassafras albidum, Smilax auriculata, Euphorbia cyathophora, Prunus caroliniana, Tillandsia usneoides, Quercus virginiana, Quercus hemisphaerica, etc.* in xeric, sandy vacant residential lot adjacent to 1603 Greenlawn Dr., City of Beaufort, 32° 26' 37" N., 80° 41' 25" W., 2 October 2005, *DCP 3898. Significance:* This is the first report of this Caribbean shortlived perennial naturalizing in the southern maritime strand counties and the sixth reported county for the state. It was previously reported no closer than Georgetown and Orangeburg counties.

Tamarix parviflora Augustin de Candolle (TAMARICACEAE)—**Beaufort County:** Lone tree on beach. With *Fimbristylis castanea, Uniola paniculata, Eustachys petraea, Cyperus sp., Triplasis purpurea, Cyperus flavescens, Iva imbricata, etc.,* Pritchard Island, 12 August 2006, *DCP 4898 with HB and JLLR.*

Significance: This is the first report for this northeastern Mediterranean halophytic shrub for South Carolina (Townsend and Sorrow 1999, Liu, Peet and Weakley 2006, USDA, NRCS 2010, Weakley 2010). The closest previously documented populations of this species are more than 450 kilometers to the southwest in Franklin County, Florida, more than 450 kilometers to the northwest in Carter County, Tennessee and more than 250 kilometers to the northeast in Brunswick Co, North Carolina (Liu, Peet and Weakley 2010). Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) listed *T. gallica* Linnaeus as they only species of *Tamarix* in our flora. USDA, NRCS (2010) cites Radford, Ahles and Bell (1968) for the occurrence of *T. gallica* in the state. (Liu, Peet and Weakley cite USDA, ARS (2010) for the same. Weakley (2010) states about *T. gallica* "Most reports of this taxon from the Southeast represent misidentifications or a very broad interpretation of the species." Seven species of *Tamarix* have naturalized on the southeastern coast. Identification of *Tamarix* to the species level is tedious. However careful examination of specimens is required to determine the true distribution of the different *Tamarix* in South Carolina instead of passing on old, possibly inaccurate information.

Thalia dealbata Fraser ex Roscoe (MARANTACEAE)—Beaufort County: RDP 2917; Dominant in depression wetland surrounded by fire-suppressed Pinus taeda/Pinus elliottii woodland, in association with Saururus cernuus, Typha latifolia, Triadica sebifera, Juncus sp., Morella cerifera, Acer rubrum var. trilobum, Diospyros virginiana, etc. South of Sherman Dr., Coosaw Island. In the vicinity of 32° 28' 33" N., 80° 35' 02" W., 18 July 2005, DCP 3387; In association with Hypericum mutilum, Diospyros virginiana, Woodwardia virginica, Saururus cernuus, Boehmeria cylindrica, Apios americana, Limnobium spongia, Wolffiella gladiata, etc. in depression wetland at the corner of Grober Hill Rd. and Cleveland Rd., Burton area, 32° 23' 45" N., 80° 45' 01" W., 10 August 2005, DCP 3619 with JLLR.

Significance: This robust wetland perennial is on the rare list in South Carolina and Illinois (McMillan 2005, USDA, NRCS 2010). It is also known from Charleston, Colleton, Hampton, Horry, Jasper and Marion counties (McMillan 2005). It ranges from south to Georgia, west to Texas and Oklahoma and north in the Mississippi Embayment to western Kentucky, southern Illinois and southeastern Missouri (Weakley 2010).

Thelypteris hispidula (Decaisne) C.F. Reed var. *versicolor* (R. St. John) Lellinger (THELYPTERIDACEAE)—**Beaufort County:** Growing abundantly under mobile home at the Daniel Brown Estate (family compound / heirs' property) Vinewood Lane, Wallace Plantation Community, St. Helena Island, 32° 22' 49" N., 80° 35' 26" W., 3 July 2005, *DCP 3221 with SJ. Significance:* This is the third reported county for this fern. It was previously known from Berkeley and Orangeburg counties only (Townsend and Sorrow, 1999) Weakley (2010) indicate that it is possibly adventive from farther south.

Thelypteris ovata R. P. St. John var. *ovata* (THELYPTERIDACEAE)—**Beaufort County:** In association with *Rhexia nashii, Ardisia crenata, Salix nigra, Vaccinium fuscatum, Vaccinium elliottii,* etc. along tributary stream of Heyward Cove between Church St. and Bruin Rd., Town of Bluffton 32° 14′ 11″ N., 80° 51′ 29″ W., 30 June 2004, *DCP 325*.

Significance: This calciphilic fern is on the SC rare list (McMillan 2005). This is the first report for Beaufort County. It was previously reported from Berkeley, Florence and Orangeburg counties, but the reports from Florence County have not been verified (Townsend and Sorrow 1999, McMillan 2005). It ranges from south to south Florida and west to south Alabama. It also occurs in the Bahamas. It may be adventive in South Carolina (Weakley 2010).

Tridens chapmanii (Small) Chase (POACEAE)—Beaufort County: In association with Erythrina herbacea, Symplocos tinctoria, Cercis canadensis, Carya alba, Ilex vomitoria, Vaccinium arboreum, Dioscorea sp., Sporobolus clandestinus, Rudbeckia sp., Tridens flavus, Helianthus atrorubens, Melanthera nivea, Solidago odora, Nyssa biflora, Quercus virginiana, Quercus nigra, Aesculus pavia, Lespedeza hirta var. hirta, etc. on roadside adjacent to wooded buffer of golf course. East side of Callawassie Dr. between South Chechessee Creek Rd, and Tucker Point Rd. Okatie area, 32° 21' 31.8" N., 80° 51' 48.3" W., 21 October 2008, DCP 5254. Significance: This bunch grass in on the SC rare list (McMillan 2005). This is the first report for Beaufort County. It was previously known from Charleston, Hampton and Clarendon counties (Townsend and Sorrow 1999, McMillan 2005). It ranges from New Jersey south to Florida and west to Texas and Oklahoma (Weakley 2010).

Trifolium nigrescens Viviani (FABACEAE)—**Beaufort County:** Growing in shrub border in front of office complex, Shanklin Road Commercial Center. North side of Shanklin Rd., just west of the railroad tracks, Laurel Bay area, 32° 27' 57" N., 80° 44' 24" W., 28 April 2007, *DCP* 5125.

Significance: This is the first report of this introduced clover in South Carolina (Townsend and Sorrow 1999, Weakley 2010). It is known from Tennessee and Florida (Weakley 2010) and possibly Georgia (USDA, ARS 2010).

Trifolium vesiculosum Savi (FABACEAE)—**Beaufort County:** Closely-mown roadside with *Paspalum notatum, Trifolium arvense, Lepidium virginicum, Helenium amarum, Diodia virginica, etc.* on east side of Hwy 170, 1.5 km north of Hwy 278, 32° 18' 15" N., 80° 56' 06" W., 17 June 2006, *DCP 2188 with JLLR*.

Significance: This is the first report for this Old World forage legume from the outer coastal plain and the second report from the coastal plain (Weakley 2010). It was known from six

counties lying wholly within the piedmont as well as Lexington County (Townsend and Sorrow 1999). I have since collected it from Charleston County *DCP 4444*.

Ulmus americana Linnaeus var. americana (ULMACEAE)—Beaufort County: Growing in association with Mikania cordifolia, Ulmus alata, Festuca subverticillata, Poa autumnalis, Modiola caroliniana, Rumex verticillatus, Quercus velutina, Celtis laevigata, Verbesina occidentalis, Sabal minor, Melanthera nivea, etc. at Steel Bridge boat landing on the Combahee River at Hwy. 17, 32° 39' 10" N.,80° 41' 06" W., 7 May 2005, DCP 1804; In association with Liriodendron tulipifera, Quercus michauxii, Ostrya virginiana, Morus rubra, Triadica sebifera, Bignonia capreolata, Morus alba, Ligustrum sinense, Magnolia grandiflora, Liquidambar styraciflua, Celtis laevigata, Aralia spinosa, Quercus nigra, Verbesina occidentalis, etc. behind Beaufort Co. Recycling Center (garbage drop-off site) corner of Grober Hill Rd. and Castle Rock Rd., Burton area, 2° 23' 51" N., 80° 44' 54" W., 8 June 2005, DCP 2119.

Ulmus americana Linnaeus var. *floridana* (Chapman) Little (ULMACEAE)—**Beaufort**County: Mature tree. In association with *Ulmus americana* var. *floridana, Cornus asperifolia, Pinus elliottii, Arundinaria sp., Acer rubrum* var. *trilobum, Sabal minor, Liquidambar styraciflua, etc.* in seepage area on the north side of Hwy. 46 (May River Rd.) near intersection with Palmetto Bluff Rd. Near Bluffton, 32° 14' 22" N., 80° 54' 12" W., 28 November 2005, *DCP 1592;* Sapling. In association with *Cornus asperifolia, Pinus elliottii, Arundinaria sp., Acer rubrum* var. *trilobum, Sabal minor, Liquidambar styraciflua, etc.* seepage area on the north side of Hwy. 46 (May River Rd.) near intersection with Palmetto Bluff Rd., near Bluffton, 32° 14' 22" N., 80° 54' 12" W., 28 November 2005, *DCP 1594*.

Significance: These collections establish that both varieties of this deciduous tree occur in South Carolina and in particularly in Beaufort County. Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) do not distinguish infraspecific taxa. The species is reported for most counties in South Carolina but not Beaufort (Townsend and Sorrow 1999).

Verbena halei Small (VERBENACEAE)—**Beaufort County:** Growing on road shoulder with *Wahlenbergia marginata, Richardia brasiliensis, Lespedeza cuneata, Coreopsis lanceolata, Paspalum notatum, Hydrocotyle bonariensis, Gamochaeta sp., etc.* on northeast side of Hwy 278, across from Club Car and Golden Corral, Greater Bluffton area, 32° 14' 58.9" N., 80° 50' 13.2" W., 31 May 2006, *DCP 4630*.

Significance: This is the first report of this western American perennial from the outer coastal plain (Weakley 2010). It was previously known from Aiken, Sumter and Fairfield counties only (Townsend and Sorrow 1999).

Veronica peregrina Linnaeus var. xalapensis (Kunth) Pennell (PLANTAGINACEAE)—
Beaufort County: Growing in bare patches in lawn in front of Grayco Building Center, Hwy 21, Lady's Island, 32° 27' 52.4" N., 80° 38' 46.8" W., 24 March 2006, DCP 4432.

Veronica peregrina Linnaeus var. peregrina (PLANTAGINACEAE)—Beaufort County:
Growing with Eremochloa ophiuroides, Stachys floridana, Cerastium tomentosum, Geranium carolinianum, Taraxacum officinale, Plantago virginica, etc. in drainage swale between athletic complex and shopping center, north side of Dr. Mellichamp Dr., Town of Bluffton, 32° 14' 24" N.,80° 51' 41" W., 13 March 2005, DCP 1696.

Significance: These collections establish that both varieties of this ruderal annual occur in South Carolina and particularly Beaufort County (Weakley 2010). Radford, Ahles and Bell (1968) and Townsend and Sorrow (1999) do not distinguish infraspecific taxa. The species is reported for every county in the state. *V. peregrina* var. *xalapensis* is believed to have been introduced into the southeast on ballast.

Veronica hederifolia Linnaeus (PLANTAGINACEAE)—**Beaufort County:** Very localized along edge of brick path in wooded residential garden, 48 Sherman Dr. Coosaw Island 32° 28′ 42″ N., 80° 34′ 58″ W., 3 May 2009, *DCP 5270*.

Significance: This is the first report for this European lawn weed from the maritime strand counties (Weakley 2010). It has not been documented closer than Orangeburg County (Townsend and Sorrow 1999).

Viola arvensis Murray (VIOLACEAE)—**Beaufort County:** Growing along railroad tracks at Castle Hall Rd. with *Oenothera sp., Geranium carolinianum, Conyza bonariensis, Hypochaeris brasiliensis, Lepidium virginicum* var. *virginicum, Vicia sp., Medicago sp., Plantago sp., Triodanis biflora, Mecardonia acuminata* var. *acuminata, etc.*, Town of Yemassee, 32° 41' 14" N.,80° 50' 50" W., 9 May 2005, *DCP 1816*.

Significance: This is the first report for this Eurasian caulescent violet from the southern maritime strand counties (Weakley 2010). Townsend and Sorrow (1999) report it no closer than Orangeburg and Georgetown counties.

Viola sagittata Aiton (VIOLACEAE)—**Beaufort County:** Growing with *Pinus elliottii, Morella cerifera, Pityopsis sp., Andropogon sp., Ilex vomitoria, Schizachyrium sp., Solidago sp., Sabal palmetto, Panicum virgatum var. virgatum, etc. Severely degraded former pine savanna, formerly used as pastureland, southwest of the intersection of Coosaw River Dr. and Sherman Dr. Coosaw Island, Lady's Island, 32° 28' 38" N., 80° 34' 47" W., 26 March 2006, <i>DCP 4438*. *Significance:* This is the first report for this native acaulescent violet from the southern maritime strand counties (Weakley 2010). Townsend and Sorrow (1999) report it no closer than Orangeburg and Georgetown counties.

Vitis cinerea (Engelmann) Millard var. baileyana (Munson) Comeaux (VITACEAE)—Beaufort County: In association with Vitis aestivalis var. aestivalis, Desmodium lineatum, Dichanthelium acuminatum var. acuminatum, Lechea mucronata, Desmodium paniculatum, Paspalum setaceum var. setaceum, Cyperus echinatus, etc. at Mossy Oaks Fire station and Mossy Oaks City Park, Mossy Oaks Rd., Town of Beaufort, 32° 24′ 04″ N., 80° 41′ 36″ W., 12 June 2004, DCP 198 with FJDR, Growing in association with Melica mutica, Vitis vulpina, Vitis rotundifolia, Dichanthelium sp., Ilex vomitoria, Morus rubra, Quercus virginiana, Salvia lyrata, etc. Short's Landing, Lady's Island, 32° 25′ 16.7″ N., 80° 38′ 11.7″ W., 13 May 2006, DCP 4492.

Significance: This is the first report of this native grape from the maritime strand or the southern coastal plain counties (Weakley 2010). It was not known closer than Saluda, Richland, Darlington and Marion counties (Townsend and Sorrow 1999).

Vulpia myuros (Linnaeus) K. C. Gmelin (POACEAE)—**Beaufort County:** In back lawn of U .S. C. B. auditorium at the northwest corner of New St. and Washington St., Town of Beaufort, 32° 26' 14" N., 80° 40' 08" W., 17 May 2007, *DCP 5146 with JLLR*.

Significance: This is the first report of this Eurasian annual grass from the southern maritime strand counties of South Carolina (Weakley 2010). It has not been reported closer than Barnwell, Orangeburg and Georgetown counties.

Wisteria floribunda (Willdenow) Augustin de Candolle (FABACEAE)—Beaufort County: Persistent and spreading from former homesite. In association with Wisteria sinensis, Platanus occidentalis, Cedrus deodara, Rhododendrons sp. (indica type azaleas), Magnolia grandiflora, Quercus nigra, Baccharis halimifolia, Vicia sativa ssp. nigra, etc. at northeast corner of Spanish Wells Rd. and Hwy. 278, Hilton Head Island, 32° 12' 56.1" N., 80° 44' 50.6" W., 20 March 2006, DCP 4385.

Significance: This is the third reported county for this invasive Asian vine and the first from the outer coastal plain (Weakley 2010). It is previously known from Aiken and Greenville counties only (Townsend and Sorrow 1999).

Xyris brevifolia Michaux (XYRIDACEAE)—**Beaufort County:** Growing on banks of retention pond in degraded pineland in Beaufort Industrial Village, South side of Burton Hill Road, Burton Area, 32° 26′ 00.0" N., 80° 43′ 15.2" W., 3 January 2006, *DCP 4212*.

Significance: This wetland monocot is on the SC rare list (McMillan 2005). It is also reported from Aiken, Berkeley, Horry, and Williamsburg counties. The reports from Berkeley and Williamsburg counties have not been verified (McMillan 2005). It ranges from southeast North Carolina south to south Florida and west to south Alabama. It also occurs in the West Indies and South America (Weakley 2010).

Yucca filamentosa Linnaeus (AGAVACEAE)—Beaufort County: Growing in upland area adjacent to depression wetland in association with very dense *Pinus taeda, Quercus nigra, Morella cerifera, etc.* on the south side of Coosaw River Dr., west of the intersection with Friendship Dr. Coosaw Island, 32° 28' 55" N., 80° 35' 11" W., 28 June 2005, *DCP 2261.*Yucca flaccida Haworth (AGAVACEAE)—Beaufort County: Growing with Andropogon tenuispatheus, Richardia brasiliensis, Cyperus croceus, Dichanthelium scoparium, Lechea sp, Andropogon virginicus var. decipiens, Trichostema dichotomum, Saccharum brevibarbe var. brevibarbe and Lechea mucronata on highway right-of-way. Pre-development survey for Buckwalter Park, west side of Buckwalter Pkwy., Town of Bluffton, 32° 15' 06" N.,80° 54' 07" W., 31 October 2004, *DCP 1228 with FCS and TK*.

Significance: These collections clarify that both of these showy monocots occur in South Carolina and in Beaufort County. Townsend and Sorrow (1999) do not recognize *Y. filamentosa* but apparently include both under *Y. filamentosa* (sensu lato). It is reported for most counties of the state including Beaufort (Townsend and Sorrow 1999).

Zea mays Linnaeus ssp. **mays** (POACEAE)—**Beaufort County:** Over 30 plants volunteering from piles of discarded leaves behind Lady's Island Shopping Center, Hwy 21, Lady's Island, 32° 24' 55" N., 80° 39' 23" W., 31 May 2006, *DCP 4632*.

Significance: Though cultivated throughout the state for its edible grains, this is only the third county report and the first from the maritime strand for this agricultural crop. It has previously been documented from Orangeburg and Chesterfield counties only (Townsend and Sorrow 1999).

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