

4-18-2018

Annotated Checklist of the Vascular Plant Species Observed at the Gordon Natural Area (West Chester University, PA) 1967-2018 - Version XIII

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Recommended Citation

Ritter, N. (2018). Annotated Checklist of the Vascular Plant Species Observed at the Gordon Natural Area (West Chester University, PA) 1967-2018 - Version XIII. Retrieved from https://digitalcommons.wcupa.edu/gna_bps_series/5

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Annotated Checklist of the Vascular Plant Species Observed at the Gordon Natural Area (West Chester University, PA) - Version XIII

Species Data

Species names follow the nomenclature in USDA PLANTS, with the exception of State-listed taxa (which follow the nomenclature of the Pennsylvania Natural Heritage Program). Species in red are non-native to the lower 48 States. Note: this likely will not be evident on copies printed in black and white. In this instance, refer to the 'Origin' field. Synonyms are those that appear in the various floristic studies at the GNA that were used in compiling the checklist.

Coefficient of Conservation

0 to 3: Plants with a high range of ecological tolerances/found in a variety of plant communities; **4 to 6:** Plants with an intermediate range of ecological tolerances/associated with a specific plant community; **7 to 8:** Plants with a poor range of ecological tolerances/associated with an advanced successional stage; **9 to 10:** Plants with a high degree of fidelity to a narrow range of pristine habitats

Origin (in the lower 48 States)

N: Native; **I:** Introduced; **N/I:** Native in some parts of the Lower 48 States and Introduced in other

Key to Trait Symbols:



Species is on the Pennsylvania DCNR list of invasive plants.



Species is said to be resistant or tolerant to deer.



Species with known alleopathic properties.



Spring ephemeral species



Is listed as an 'OBL' wetland plant in the Northeast Region of the U.S.



Seeds/spores are hydrophilic (recalcitrant): i.e., intolerant of dry storage.



Of specific value to native bees, bumblebees, honeybees, and/or predatory or parasitoid insects that prey upon pest insects.



'Wintergreen' species: Herbaceous species whose leaves emerge in late Fall and are present throughout the winter. Note: The largest portion of the data comes from a study of the 'wintergreen flora' of Ohio, hence, some species that are categorized as 'wintergreen' may possess a different phenology in Pennsylvania.



The species is said to be associated with mycorrhizae.

NM The species is said to be non-mycorrhizal.

Y/N The species is listed as both mycorrhizal and non-mycorrhizal.



Species is on the Pennsylvania DCNR invasive plant Watch List.



Ruderal species (species adapted to colonize disturbed land).



Species has been identified as not possessing alleopathic



State-listed species (Pennsylvania Natural Heritage Program)















Is listed as a 'FACW' wetland plant in the Northeast Region of the U.S.








































The species is said to be ant-dispersed and/or have seeds with elaiosomes.











Key to Growth Forms

F: Forb/Herb; **F/SS:** Forb/herb, Subshrub; **F/V:** Forb/herb, Vine; **G:** Graminoid; **G/S:** Graminoid/Shrub; **SS:** Subshrub; **SS/F:** Subshrub, Forb/herb; **SS/S:** Subshrub/Shrub; **S:** Shrub; **S/T:** Shrub, Tree; **S/V:** Shrub, Vine; **T:** Tree; **V:** Vine; **V/F:** Vine, Forb/herb; **V/SS:** Vine/Subshrub; **V/S:** Vine/Shrub

Species	Common Name	Coefficient of Conservation		Origin	'Traits'		Growth Form
Ferns & Fern Allies							
Aspleniaceae							
<i>Asplenium platyneuron</i>	Ebony Spleenwort	3	N				F
First Noted: 1984; Last Noted: 2007							
Dennstaedtiaceae							
<i>Dennstaedtia punctilobula</i>	Eastern Hayscented Fern	2	N	  			F
First Noted: 1984; Last Noted: 2017							
Dryopteridaceae							
<i>Athyrium filix-femina</i>	Common Ladyfern	3	N	 		Y/N	F
First Noted: 1984; Last Noted: 2017							
<i>Deparia acrostichoides</i>	Silver False Spleenwort	4	N				F
First Noted: 1984; Last Noted: 2017							
Synonyms: <i>Athyrium thelypteroides</i> (Michx.) Desv. <i>Diplazium acrostichoides</i> (Sw.) Butters							
<i>Dryopteris carthusiana</i>	Spinulose Woodfern	4	N		 	Y/N	F
First Noted: 2004; Last Noted: 2017							
<i>Dryopteris cristata</i>	Crested Woodfern	6	N				F
Only Noted In 2004							
<i>Dryopteris intermedia</i>	Intermediate Woodfern	4	N				F
First Noted: 1984; Last Noted: 2017							

Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Matteuccia struthiopteris</i> First Noted: 2004; Last Noted: 2017	Ostrich Fern	3	N					F		
<i>Onoclea sensibilis</i> First Noted: 1984; Last Noted: 2018	Sensitive Fern	1	N	 				F		
<i>Polystichum acrostichoides</i> First Noted: 1984; Last Noted: 2018	Christmas Fern	3	N					F		
Equisetaceae										
<i>Equisetum arvense</i> First Noted: 1984; Last Noted: 2017	Field Horsetail	1	N	  				Y/N	F	
Lycopodiaceae										
<i>Huperzia lucidula</i> First Noted: 1983; Last Noted: 1984	Shining Clubmoss	6	N						F/S	
<i>Lycopodium digitatum</i> First Noted: 1983; Last Noted: 1984	Fan Clubmoss Synonyms: <i>Diphasiastrum digitatum</i> (Dill. ex A. Braun) Holub <i>Lycopodium flabelliforme</i> (Fernald) Blanch.	5	N					F/S		
Ophioglossaceae										
<i>Botrychium dissectum</i> First Noted: 1984; Last Noted: 2007	Cutleaf Grapefern Synonyms: <i>Sceptridium dissectum</i> (Spreng.) Lyon	3	N						F	
<i>Botrychium virginianum</i> First Noted: 1984; Last Noted: 2017	Rattlesnake Fern Synonyms: <i>Botrypus virginianus</i> (L.) Holub	5	N					F		





















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form
Osmundaceae									
<i>Osmunda cinnamomea</i>	Cinnamon Fern	5	N	 			 	F	
First Noted: 1984; Last Noted: 2007									
<i>Osmunda claytoniana</i>	Interrupted Fern	5	N	 				F	
First Noted: 1984; Last Noted: 2016									
<i>Osmunda regalis</i>	Royal Fern	7	N	 			 Y/N	F	
Only Noted In 2007									
Pteridaceae									
<i>Adiantum pedatum</i>	Northern Maidenhair	6	N	 				F	
First Noted: 1984; Last Noted: 2017									
Thelypteridaceae									
<i>Phegopteris hexagonoptera</i>	Broad Beechfern	6	N					F	
First Noted: 1984; Last Noted: 2017									
<i>Thelypteris noveboracensis</i>	New York Fern	4	N	 			Y/N	F	
First Noted: 1984; Last Noted: 2017									
Synonyms: <i>Parathelypteris novaeboracensis</i> (L.) Ching									
<i>Thelypteris palustris</i>	Eastern Marsh Fern	5	N					F	
First Noted: 2004; Last Noted: 2017									

Species	Common Name	Coefficient of Conservation	Origin	'Traits'	Growth Form
Gymnosperms					
Cupressaceae					
<i>Juniperus virginiana</i>	Eastern Redcedar	2	N	 	 T
First Noted: 1984; Last Noted: 2018					
Pinaceae					
<i>Pinus strobus</i>	Eastern White Pine	7	N	 	 T
First Noted: 1984; Last Noted: 2018					
<i>Pinus sylvestris</i>	Scots Pine	0	I	 	Y/N T
Only Noted In 1978					
Taxaceae					
<i>Taxus cuspidata</i>	Japanese Yew	0	I	 	T
First Noted: 1984; Last Noted: 2004					


Species	Common Name	Coefficient of Conservation	Origin	Traits			Growth Form




















Flowering Plants














Aceraceae































<i>Acer negundo</i>	Boxelder	2	N	   	Y/N	T
First Noted: 1973; Last Noted: 2018						
<i>Acer palmatum</i>	Japanese Maple	0	I	 		S/T
First Noted: 2004; Last Noted: 2017						
<i>Acer platanoides</i>	Norway Maple	0	I	  	Y/N	T
First Noted: 1973; Last Noted: 2018						
<i>Acer pseudoplatanus</i>	Sycamore Maple	0	I	  	Y/N	T
First Noted: 2015; Last Noted: 2018						
<i>Acer rubrum</i>	Red Maple	1	N			 T
First Noted: 1973; Last Noted: 2018						
<i>Acer saccharinum</i>	Silver Maple	3	N	 		 T
First Noted: 1984; Last Noted: 2017						
<i>Acer saccharum</i>	Sugar Maple	5	N	 		 S/T
First Noted: 1973; Last Noted: 2016						






















Acoraceae















<i>Acorus calamus</i>	Calamus	1	I	  	Y/N	F
First Noted: 2004; Last Noted: 2007						





















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
Alismataceae										
<i>Sagittaria australis</i>	Longbeak Arrowhead	5	N							F
First Noted: 2007; Last Noted: 2017										
<i>Sagittaria latifolia</i>	Broadleaf Arrowhead	5	N							F
First Noted: 1984; Last Noted: 2017										
Anacardiaceae										
<i>Rhus glabra</i>	Smooth Sumac	3	N							S/T
Only Noted In 1984										
<i>Rhus typhina</i>	Staghorn Sumac	1	N						Y/N	S/T
Only Noted In 1984										
<i>Toxicodendron radicans</i>	Eastern Poison Ivy		N							SS/
First Noted: 1984; Last Noted: 2018										
Apiaceae										
<i>Aegopodium podagraria</i>	Bishop's Goutweed	0	I						Y/N	F
First Noted: 2007; Last Noted: 2018										
<i>Cicuta maculata</i>	Spotted Water Hemlock	5	N							F
First Noted: 1984; Last Noted: 2007										
<i>Conium maculatum</i>	Poison Hemlock	0	I							F
First Noted: 1984; Last Noted: 2017										
































Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
<i>Cryptotaenia canadensis</i> First Noted: 1984; Last Noted: 2017	Canadian Honewort	2	N		 		F		
<i>Daucus carota</i> First Noted: 1968; Last Noted: 2017	Queen Anne's Lace	0	I	  		Y/N	F		
<i>Osmorhiza claytonii</i> First Noted: 2007; Last Noted: 2017	Clayton's Sweetroot	4	N				F		
<i>Osmorhiza longistylis</i> First Noted: 1984; Last Noted: 2017	Longstyle Sweetroot	4	N				F		
<i>Pimpinella saxifraga</i> Only Noted In 1994	Solidstem Burnet Saxifrage	0	I			Y/N	F		
<i>Sanicula canadensis</i> First Noted: 1984; Last Noted: 2017	Canadian Blacksnakeroot	3	N				F		
<i>Sanicula odorata</i> First Noted: 2004; Last Noted: 2017	Clustered Blacksnakeroot	5	N				F		
<i>Sanicula trifoliata</i> Only Noted In 2007	Largefruit Blacksnakeroot	5	N				F		
<i>Zizia aptera</i> Only Noted In 1984	Meadow Zizia	7	N				F		





















Species	Common Name	Coefficient of Conservation		Origin		'Traits'				Growth Form		
Apocynaceae												
<i>Apocynum cannabinum</i>	Indianhemp	1	N								F	
First Noted: 1984; Last Noted: 2017												
<i>Vinca minor</i>	Common Periwinkle	0	I								V/F	
First Noted: 2007; Last Noted: 2016												
Aquifoliaceae												
<i>Ilex crenata</i>	Japanese Holly	0	I								S/T	
First Noted: 2007; Last Noted: 2018												
<i>Ilex opaca</i>	American Holly	5	N								S/T	
First Noted: 1984; Last Noted: 2018												
<i>Ilex verticillata</i>	Common Winterberry	4	N								S/T	
First Noted: 2004; Last Noted: 2017												
Araceae												
<i>Arisaema triphyllum</i>	Jack In The Pulpit		N								F	
First Noted: 1984; Last Noted: 2017												
<i>Symplocarpus foetidus</i>	Skunk Cabbage	3	N								F	
First Noted: 1984; Last Noted: 2018												
Araliaceae												
<i>Aralia elata</i>	Japanese Angelica Tree	0	I							Y/N	T	
First Noted: 1984; Last Noted: 2016												









Species	Common Name	Coefficient of Conservation		Origin		'Traits'	Growth Form	
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	5	N					F/S
First Noted: 1984; Last Noted: 2017								
<i>Aralia racemosa</i>	American Spikenard	6	N					F/S
First Noted: 1984; Last Noted: 2017								
<i>Hedera helix</i>	English Ivy	0	I			 		V
First Noted: 2008; Last Noted: 2018								
<i>Panax quinquefolius</i>	American Ginseng	7	N				 	F
First Noted: 1984; Last Noted: 2017								
<i>Panax trifolius</i>	Dwarf Ginseng	8	N					F
First Noted: 1984; Last Noted: 2017								
Aristolochiaceae								
<i>Aristolochia serpentaria</i>	Virginia Snakeroot	6	N					F
First Noted: 1984; Last Noted: 2017								
<i>Asarum canadense</i>	Canadian Wildginger	4	N				  	F
First Noted: 1984; Last Noted: 2017								
Asclepiadaceae								
<i>Asclepias exaltata</i>	Poke Milkweed	7	N					F
First Noted: 2004; Last Noted: 2007								
<i>Asclepias incarnata</i>	Swamp Milkweed	4	N			 	 	F
First Noted: 2007; Last Noted: 2016								





























Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
<i>Asclepias syriaca</i>	Common Milkweed	1	N					F	
First Noted: 1968; Last Noted: 2017									
<i>Asclepias tuberosa</i>	Butterfly Milkweed	6	N		 			F	
First Noted: 2004; Last Noted: 2007									
Asteraceae									
<i>Achillea millefolium</i>	Common Yarrow	0	I		 			Y/N	F
First Noted: 1984; Last Noted: 2017									
<i>Ageratina altissima</i>	White Snakeroot	3	N						F
First Noted: 1984; Last Noted: 2017									
<i>Ambrosia artemisiifolia</i>	Annual Ragweed	0	N						F
First Noted: 1967; Last Noted: 2017									
<i>Ambrosia trifida</i>	Great Ragweed	1	N						F/S
First Noted: 1984; Last Noted: 2017									
<i>Antennaria howellii</i>	Howell's Pussytoes	3	N						F
Only Noted In 2007									
Synonyms: <i>Antennaria neodioica</i> Greene ssp. <i>neodioica</i> (Greene) Bayer & Stebbins									
<i>Antennaria neglecta</i>	Field Pussytoes	2	N						F
First Noted: 1984; Last Noted: 2007									
<i>Antennaria parlinii</i>	Parlin's Pussytoes	3	N						F
Only Noted In 2007									

































Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Antennaria plantaginifolia</i>	Woman's Tobacco	3	N							F
First Noted: 1984; Last Noted: 2007										
<i>Anthemis cotula</i>	Stinking Chamomile	0	I							F
Only Noted In 2007										
<i>Arctium lappa</i>	Greater Burdock	0	I						Y/N	F
First Noted: 2007; Last Noted: 2017										
<i>Arctium minus</i>	Lesser Burdock	0	I							F
First Noted: 1984; Last Noted: 2017										
<i>Artemisia annua</i>	Sweet Sagewort	0	I							F
Only Noted In 2007										
<i>Artemisia vulgaris</i>	Common Wormwood	0	I							F/S
First Noted: 2004; Last Noted: 2017										
<i>Bidens bipinnata</i>	Spanish Needles	2	N							F
Only Noted In 2004										
<i>Bidens cernua</i>	Nodding Beggartick	4	N							F
Only Noted In 1984										
<i>Bidens connata</i>	Purplestem Beggarticks	3	N							F
Only Noted In 2007										
<i>Bidens frondosa</i>	Devil's Beggartick	1	N							F
First Noted: 1984; Last Noted: 2017										






















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Carduus nutans</i>	Nodding Plumeless Thistle	0	I							F
First Noted: 2007; Last Noted: 2017										
<i>Cichorium intybus</i>	Chicory	0	I							F
First Noted: 1984; Last Noted: 2017										
<i>Cirsium arvense</i>	Canada Thistle	0	I							F
First Noted: 1984; Last Noted: 2017										
<i>Cirsium discolor</i>	Field Thistle	2	N							F
First Noted: 1968; Last Noted: 2007										
<i>Cirsium pumilum</i>	Pasture Thistle	4	N							F
First Noted: 2004; Last Noted: 2007										
<i>Cirsium vulgare</i>	Bull Thistle	0	I						Y/N	F
First Noted: 2007; Last Noted: 2017										
<i>Conoclinium coelestinum</i>	Blue Mistflower	3	N							F
Only Noted In 1984										
<i>Conyza canadensis</i>	Canadian Horseweed	0	N							F
First Noted: 1984; Last Noted: 2007										
	Synonyms: <i>Erigeron canadensis</i> L.									
<i>Erechtites hieraciifolia</i>	American Burnweed	0	N							F
First Noted: 2004; Last Noted: 2017										
<i>Erigeron annuus</i>	Eastern Daisy Fleabane	0	N							F
First Noted: 1984; Last Noted: 2017										



























Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form
<i>Erigeron philadelphicus</i> First Noted: 1984; Last Noted: 2017	Philadelphia Fleabane	1	N	 				F
<i>Erigeron pulchellus</i> First Noted: 1984; Last Noted: 2017	Robin's Plantain	3	N			 		F
<i>Erigeron strigosus</i> First Noted: 1984; Last Noted: 2007	Prairie Fleabane	0	N					F
<i>Eupatorium perfoliatum</i> First Noted: 1984; Last Noted: 2017	Common Boneset	3	N					F
<i>Eupatorium serotinum</i> Only Noted In 2017	Lateflowering Thoroughwort	0	N					F
<i>Eurybia divaricata</i> First Noted: 1984; Last Noted: 2017	White Wood Aster Synonyms: <i>Aster divaricatus</i> L.	3	N					F
<i>Euthamia graminifolia</i> First Noted: 1984; Last Noted: 2017	Flat-top Goldentop	1	N					F
<i>Eutrochium fistulosum</i> First Noted: 1984; Last Noted: 2007	Trumpetweed Synonyms: <i>Eupatoriadelphus fistulosus</i> (Barratt) R.M. King & H. Rob. <i>Eupatorium fistulosum</i> Barratt	3	N					F
<i>Eutrochium purpureum</i> First Noted: 2004; Last Noted: 2017			N					F
<i>Galinsoga quadriradiata</i> First Noted: 1984; Last Noted: 2007	Shaggy Soldier Synonyms: <i>Galinsoga ciliata</i> (Raf.) S.F. Blake	0	I				 	F











Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Helianthus decapetalus</i>	Thinleaf Sunflower	3	N							F
First Noted: 1984; Last Noted: 2007										
<i>Hieracium xflagellare</i>		0	I							F
Only Noted In 2007										
<i>Hieracium caespitosum</i>	Meadow Hawkweed	0	N							F
First Noted: 1984; Last Noted: 2007										
Synonyms: <i>Hieracium pratense</i> Tausch										
<i>Hieracium gronovii</i>	Queendevil	5	N							F
Only Noted In 1984										
<i>Hieracium paniculatum</i>	Allegheny Hawkweed	5	N							F
Only Noted In 1984										
<i>Hieracium piloselloides</i>	Tall Hawkweed	0	I							F
Only Noted In 2007										
<i>Lactuca biennis</i>	Tall Blue Lettuce	1	N							F
First Noted: 1984; Last Noted: 2017										
<i>Lactuca canadensis</i>	Canada Lettuce	1	N							F
First Noted: 1984; Last Noted: 2017										
<i>Lactuca serriola</i>	Prickly Lettuce	0	I							F
First Noted: 1984; Last Noted: 2007										
<i>Lapsana communis</i>	Common Nipplewort	0	I							F
Only Noted In 2017										
























Species	Common Name	Coefficient of Conservation		Origin		'Traits'				Growth Form
<i>Leucanthemum vulgare</i>	Oxeye Daisy	0	I					Y/N	F	
First Noted: 1984; Last Noted: 2007	Synonyms: <i>Chrysanthemum leucanthemum</i> L.									
<i>Matricaria discoidea</i>	Disc Mayweed	0	I						F	
Only Noted In 2017										
<i>Packera aurea</i>	Golden Ragwort	5	N			 			F	
First Noted: 1984; Last Noted: 2017										
<i>Prenanthes altissima</i>	Tall Rattlesnakeroot	4	N						F	
First Noted: 1984; Last Noted: 2017										
<i>Pseudognaphalium obtusifolium</i>	Rabbit-tobacco		N			 			F	
Only Noted In 1984	Synonyms: <i>Gnaphalium obtusifolium</i> L.									
<i>Rudbeckia hirta</i>	Blackeyed Susan	0	N						F	
First Noted: 1984; Last Noted: 2007										
<i>Rudbeckia laciniata</i>	Cutleaf Coneflower	5	N			 			F/S	
First Noted: 1984; Last Noted: 2007										
<i>Senecio vulgaris</i>	Old-man-in-the-spring	0	I					Y/N	F	
First Noted: 2007; Last Noted: 2017										
<i>Solidago altissima</i>	Canada Goldenrod	1	N						F	
First Noted: 1984; Last Noted: 19681969										
<i>Solidago bicolor</i>	White Goldenrod	6	N						F	
Only Noted In 1984										

















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Solidago caesia</i>	Wreath Goldenrod	5	N						F	
First Noted: 1984; Last Noted: 2017										
<i>Solidago canadensis</i>	Canada Goldenrod	1	N						Y/N	F
First Noted: 1984; Last Noted: 2017										
<i>Solidago flexicaulis</i>	Zigzag Goldenrod	6	N							F
First Noted: 1984; Last Noted: 2017										
<i>Solidago gigantea</i>	Giant Goldenrod	4	N							F
First Noted: 1984; Last Noted: 2017										
<i>Solidago juncea</i>	Early Goldenrod	3	N							F
First Noted: 1984; Last Noted: 2007										
<i>Solidago nemoralis</i>	Gray Goldenrod	4	N							F
First Noted: 1984; Last Noted: 2007										
<i>Solidago patula</i>	Roundleaf Goldenrod	6	N							F
First Noted: 1984; Last Noted: 2017										
<i>Solidago rugosa</i>	Wrinkleleaf Goldenrod	3	N							F
First Noted: 1984; Last Noted: 2017										
<i>Sonchus asper</i>	Spiny Sowthistle	0	I						Y/N	F
First Noted: 1984; Last Noted: 2007										
<i>Sonchus oleraceus</i>	Common Sowthistle	0	I							F
Only Noted In 2007										

















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form		
<i>Symphyotrichum cordifolium</i>	Common Blue Wood Aster	4	N						F		
First Noted: 1983; Last Noted: 2007	Synonyms: <i>Aster cordifolius</i> L.										
<i>Symphyotrichum lanceolatum</i>	White Panicle Aster	2	N						F		
First Noted: 1984; Last Noted: 2007											
<i>Symphyotrichum lateriflorum</i>	Calico Aster	2	N						F		
First Noted: 1984; Last Noted: 2017	Synonyms: <i>Aster lateriflorus</i> (L.) Britton										
<i>Symphyotrichum novae-angliae</i>	New England Aster	2	N						F		
First Noted: 1983; Last Noted: 2017	Synonyms: <i>Aster novae-angliae</i> L.										
<i>Symphyotrichum pilosum</i>	Hairy White Oldfield Aster	2	N						F		
First Noted: 1984; Last Noted: 2017	Synonyms: <i>Aster pilosus</i> Willd. var. <i>demotus</i>										
<i>Symphyotrichum puniceum</i>	Purplestem Aster	3	N						F/S		
First Noted: 1984; Last Noted: 2007	Synonyms: <i>Aster puniceus</i> L.										
<i>Taraxacum officinale</i>	Common Dandelion	0	I							F	
First Noted: 1984; Last Noted: 2018											
<i>Vernonia noveboracensis</i>	New York Ironweed	3	N								F
First Noted: 1984; Last Noted: 2017											
Balsaminaceae											
<i>Impatiens capensis</i>	Jewelweed	2	N							F	
First Noted: 1984; Last Noted: 2017											





















Species	Common Name	Coefficient of Conservation	Origin	'Traits'		Growth Form	
Berberidaceae							
<i>Berberis thunbergii</i>	Japanese Barberry	0	I	  			S
First Noted: 1973; Last Noted: 2018							
<i>Caulophyllum thalictroides</i>	Blue Cohosh	5	N	 		 	F
First Noted: 1984; Last Noted: 2017							
<i>Podophyllum peltatum</i>	Mayapple	5	N			 	F
First Noted: 1984; Last Noted: 2018							
Betulaceae							
<i>Alnus serrulata</i>	Hazel Alder	4	N	 			S/T
First Noted: 1984; Last Noted: 2017							
	Synonyms: <i>Alnus incana</i> var. <i>serrulata</i>						
<i>Betula populifolia</i>	Gray Birch	2	N	 			T
First Noted: 2007; Last Noted: 2018							
<i>Carpinus caroliniana</i>	American Hornbeam	5	N	 			S/T
First Noted: 1973; Last Noted: 2017							
<i>Corylus americana</i>	American Hazelnut	5	N	 			S
First Noted: 1973; Last Noted: 1984							
<i>Ostrya virginiana</i>	Hophornbeam	6	N	 			S/T
First Noted: 2007; Last Noted: 2016							













Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
Boraginaceae									
<i>Cynoglossum virginianum</i>	Wild Comfrey	7	N						F
First Noted: 2007; Last Noted: 2017									
<i>Hackelia virginiana</i>	Beggarslice	2	N						F
First Noted: 1984; Last Noted: 2018									
<i>Myosotis scorpioides</i>	True Forget-me-not	0	I			 		Y/N	F
Only Noted In 2017									
Brassicaceae									
<i>Alliaria petiolata</i>	Garlic Mustard	0	I			  		NM	F
First Noted: 1984; Last Noted: 2018									
<i>Arabis thaliana</i>	Mouseear Cress	0	I						Y/N F
Only Noted In 2000									
<i>Arabis canadensis</i>	Sicklepod	5	N						F
Only Noted In 1984									
<i>Arabis lyrata</i>	Lyrate Rockcress	8	N						F
First Noted: 2007; Last Noted: 2017									
<i>Barbarea vulgaris</i>	Garden Yellowrocket	0	I						NM F
First Noted: 1984; Last Noted: 2017									
<i>Brassica rapa</i>	Field Mustard	0	I			 			NM F
First Noted: 1984; Last Noted: 2008									
Synonyms: <i>Brassica campestris</i> L.									

























Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form		
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	0	I						Y/N	F	
First Noted: 1976; Last Noted: 2017											
<i>Cardamine bulbosa</i>	Bulbous Bittercress	6	N							F	
First Noted: 1984; Last Noted: 2017											
<i>Cardamine concatenata</i>	Cutleaf Toothwort	5	N							NM	F
First Noted: 1984; Last Noted: 2017											
Synonyms: <i>Dentaria concatenata</i> Michx. <i>Dentaria laciniata</i> Muhl. ex Willd.											
<i>Cardamine hirsuta</i>	Hairy Bittercress	0	I						Y/N	F	
First Noted: 2004; Last Noted: 2017											
<i>Cardamine impatiens</i>	Narrowleaf Bittercress	0	I						NM	F	
First Noted: 2004; Last Noted: 2018											
<i>Cardamine pensylvanica</i>	Pennsylvania Bittercress	5	N							F	
First Noted: 1984; Last Noted: 2017											
<i>Erysimum cheiranthoides</i>	Wormseed Wallflower	0	I						NM	F	
Only Noted In 1984											
<i>Hesperis matronalis</i>	Dames Rocket	0	I						Y/N	F	
First Noted: 2004; Last Noted: 2017											
<i>Lepidium campestre</i>	Field Pepperweed	0	I							F	
First Noted: 1984; Last Noted: 2017											
<i>Lepidium densiflorum</i>	Common Pepperweed	0	N/I							F	
Only Noted In 2007											














Species	Common Name	Coefficient of Conservation		Origin		'Traits'	Growth Form	
		0	I					
<i>Nasturtium officinale</i>	Watercress	0	I			 	NM	F
First Noted: 1984; Last Noted: 2018								
<i>Sisymbrium officinale</i>	Hedgemustard	0	I				Y/N	F
Only Noted In 1984								
<i>Thlaspi alliaceum</i>	Roadside Pennycress	0	I					F
First Noted: 2017; Last Noted: 2018								
<i>Thlaspi arvense</i>	Field Pennycress	0	I				NM	F
First Noted: 2007; Last Noted: 2017								
<i>Thlaspi perfoliatum</i>	Claspleaf Pennycress	0	I				Y/N	F
Only Noted In 2017								
Buxaceae								
<i>Pachysandra terminalis</i>	Japanese Pachysandra	0	I	  				F/S
First Noted: 2007; Last Noted: 2018								
Callitrichaceae								
<i>Callitriche heterophylla</i>	Twoheaded Water-starwort	5	N			 		F
Only Noted In 2007								
<i>Callitriche palustris</i>	Vernal Water-starwort	7	N				Y/N	F
First Noted: 1984; Last Noted: 2017								











Species	Common Name	Coefficient of Conservation		Origin	'Traits'		Growth Form		
Campanulaceae									
<i>Campanula aparinoides</i>	Marsh Bellflower	6	N				F		
Only Noted In 2017									
<i>Lobelia inflata</i>	Indian-tobacco	0	N				F		
First Noted: 1984; Last Noted: 2007									
<i>Lobelia siphilitica</i>	Great Blue Lobelia	5	N				F		
First Noted: 1984; Last Noted: 2017									
<i>Triodanis perfoliata</i>	Clasping Venus' Looking-glass	0	N				F		
Only Noted In 1984									
Cannabaceae									
<i>Humulus japonicus</i>	Japanese Hop	0	I				V/F		
First Noted: 1984; Last Noted: 2017									
Caprifoliaceae									
<i>Lonicera japonica</i>	Japanese Honeysuckle	0	I					V	
First Noted: 1973; Last Noted: 2018									
<i>Lonicera maackii</i>	Amur Honeysuckle	0	I						S
First Noted: 1984; Last Noted: 2018									
<i>Lonicera morrowii</i>	Morrow's Honeysuckle	0	I					S	
First Noted: 1973; Last Noted: 2007									











Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
<i>Lonicera sempervirens</i> Only Noted In 2007	Trumpet Honeysuckle	5	N						V
<i>Lonicera standishii</i> Only Noted In 1978	Standish's Honeysuckle	0	I						S
<i>Sambucus nigra ssp. canadensis</i> First Noted: 1973; Last Noted: 2017	American Black Elderberry Synonyms: <i>Sambucus canadensis</i> L.	3	N						S/T
<i>Viburnum acerifolium</i> First Noted: 1973; Last Noted: 2017	Mapleleaf Viburnum	5	N						SS/
<i>Viburnum dentatum</i> First Noted: 1973; Last Noted: 2017	Southern Arrowwood	3	N						S/T
<i>Viburnum dilatatum</i> First Noted: 2004; Last Noted: 2017	Linden Arrowwood	0	I						S
<i>Viburnum opulus</i> First Noted: 2004; Last Noted: 2007	European Cranberrybush	0	I					Y/N	S/T
<i>Viburnum plicatum</i> First Noted: 2007; Last Noted: 2017	Japanese Snowball	0	I						S
<i>Viburnum prunifolium</i> First Noted: 1973; Last Noted: 2017	Blackhaw	2	N						S/T
<i>Viburnum sieboldii</i> Only Noted In 2007	Siebold's Arrowwood	0	I						S/T












Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
Caryophyllaceae										
<i>Arenaria serpyllifolia</i>	Thymeleaf Sandwort	1	I					NM	F	
Only Noted In 2007										
<i>Cerastium fontanum</i>	Common Mouse-ear Chickweed	0	I					Y/N	F	
First Noted: 1984; Last Noted: 2017										
Synonyms: <i>Cerastium holosteoides</i> auct. non Fr.										
<i>Cerastium glomeratum</i>	Sticky Chickweed	0	I					NM	F	
First Noted: 2007; Last Noted: 2017										
<i>Cerastium nutans</i>	Nodding Chickweed	5	N						F	
Only Noted In 1984										
<i>Dianthus armeria</i>	Deptford Pink	0	I						F	
First Noted: 1984; Last Noted: 2007										
<i>Paronychia canadensis</i>	Smooth Forked Nailwort	6	N						F	
Only Noted In 1984										
<i>Silene antirrhina</i>	Sleepy Silene	1	N						F	
Only Noted In 2017										
<i>Silene latifolia</i>	Bladder Campion	0	I					Y/N	F	
First Noted: 1984; Last Noted: 2017										
Synonyms: <i>Silene alba</i> Mill.										
<i>Silene stellata</i>	Widowsfrill	6	N						F	
First Noted: 1984; Last Noted: 2007										



















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Stellaria longifolia</i>	Longleaf Starwort	4	N						F	
First Noted: 1984; Last Noted: 2017										
<i>Stellaria media</i>	Common Chickweed	0	I					Y/N	F	
First Noted: 1984; Last Noted: 2017										
Celastraceae										
<i>Celastrus orbiculatus</i>	Oriental Bittersweet	0	I							V
First Noted: 1984; Last Noted: 2017										
<i>Euonymus alatus</i>	Burningbush	0	I							S
First Noted: 2004; Last Noted: 2018										
	Synonyms: <i>Euonymus alata</i> (Thunb.) Siebold, orth. var.									
<i>Euonymus fortunei</i>	Winter Creeper	0	I							V/S
First Noted: 2004; Last Noted: 2018										
Chenopodiaceae										
<i>Atriplex patula</i>	Spear Saltbush	0	I						F	
Only Noted In 2017										
<i>Chenopodium album</i>	Lambsquarters	0	I					Y/N	F	
First Noted: 1984; Last Noted: 2016										
Clusiaceae										
<i>Hypericum perforatum</i>	Common St. Johnswort	0	I						Y/N	F
First Noted: 1984; Last Noted: 2009										

























Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Hypericum punctatum</i>	Spotted St. Johnswort	2	N							F
First Noted: 1984; Last Noted: 2017										
Commelinaceae										
<i>Commelina communis</i>	Asiatic Dayflower	0	I						Y/N	F
First Noted: 1984; Last Noted: 2017										
Convolvulaceae										
<i>Calystegia sepium</i>	Hedge False Bindweed	0	N/I							V/F
First Noted: 1984; Last Noted: 2017										
Cornaceae										
<i>Cornus alternifolia</i>	Alternatleaf Dogwood	5	N							S/T
First Noted: 1973; Last Noted: 2017										
<i>Cornus amomum</i>	Silky Dogwood	3	N							S
First Noted: 1984; Last Noted: 2017										
<i>Cornus florida</i>	Flowering Dogwood	5	N							S/T
First Noted: 1973; Last Noted: 2017										
Crassulaceae										
<i>Penthorum sedoides</i>	Ditch Stonecrop	3	N							F
First Noted: 1984; Last Noted: 2007										
<i>Sedum ternatum</i>	Woodland Stonecrop	7	N							F
First Noted: 1984; Last Noted: 2018										


















Species	Common Name	Coefficient of Conservation		Origin		'Traits'	Growth Form	
Cucurbitaceae								
<i>Echinocystis lobata</i>	Wild Cucumber	2	N					V/F
Only Noted In 1984								
<i>Sicyos angulatus</i>	Oneseed Bur Cucumber	2	N					V/F
First Noted: 1984; Last Noted: 2017								
Cuscutaceae								
<i>Cuscuta gronovii</i>	Scaldweed	3	N					V/F
First Noted: 1984; Last Noted: 2017								
Cyperaceae								
<i>Carex aggregata</i>	Glomerate Sedge	3	N					G
First Noted: 2007; Last Noted: 2017								
<i>Carex albicans</i>	Whitetinge Sedge	3	N					G
First Noted: 2007; Last Noted: 2017								
<i>Carex amphibola</i>	Eastern Narrowleaf Sedge	7	N				NM	G
First Noted: 2004; Last Noted: 2017								
<i>Carex annectens</i>	Yellowfruit Sedge	4	N					G
Only Noted In 2007								
<i>Carex blanda</i>	Eastern Woodland Sedge	2	N		 			G
First Noted: 2007; Last Noted: 2017								











Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form
<i>Carex bromoides</i> Only Noted In 2007	Brome-like Sedge	7	N					G
<i>Carex caroliniana</i> Only Noted In 2007	Carolina Sedge	5	N					G
<i>Carex cephalophora</i> First Noted: 2007; Last Noted: 2017	Oval-leaf Sedge	3	N				Y/N	G
<i>Carex conjuncta</i> Only Noted In 2007	Soft Fox Sedge	4	N					G
<i>Carex davisii</i> First Noted: 2007; Last Noted: 2017	Davis' Sedge	7	N					G
<i>Carex debilis</i> Only Noted In 2007	White Edge Sedge	6	N					G
<i>Carex digitalis</i> First Noted: 2004; Last Noted: 2017	Slender Woodland Sedge	4	N					G
<i>Carex frankii</i> Only Noted In 2007	Frank's Sedge	3	N					G
<i>Carex glaucoidea</i> Only Noted In 2007	Blue Sedge	3	N					G
<i>Carex gracilescens</i> First Noted: 2007; Last Noted: 2017	Slender Looseflower Sedge	4	N					G






















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form
<i>Carex gracillima</i> Only Noted In 2007	Graceful Sedge	5	N						G
<i>Carex hirsutella</i> Only Noted In 2007	Fuzzy Wuzzy Sedge	4	N						G
<i>Carex hirtifolia</i> First Noted: 2004; Last Noted: 2017	Pubescent Sedge	3	N						G
<i>Carex laevivaginata</i> Only Noted In 2007	Smoothsheath Sedge	4	N						G
<i>Carex laxiculmis</i> First Noted: 2004; Last Noted: 2017	Spreading Sedge	5	N						G
<i>Carex laxiflora</i> First Noted: 2004; Last Noted: 2007	Broad Looseflower Sedge	4	N						G
<i>Carex lurida</i> First Noted: 2004; Last Noted: 2017	Shallow Sedge	1	N						G
<i>Carex mesochorea</i> First Noted: 2007; Last Noted: 2017	Midland Sedge	4	N						G
<i>Carex normalis</i> First Noted: 2007; Last Noted: 2009	Greater Straw Sedge	3	N						G
<i>Carex pennsylvanica</i> First Noted: 2007; Last Noted: 2017	Pennsylvania Sedge	5	N						G


























Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form
<i>Carex prasina</i> First Noted: 2007; Last Noted: 2017	Drooping Sedge	7	N					G
<i>Carex radiata</i> First Noted: 2004; Last Noted: 2017	Eastern Star Sedge	2	N					G
<i>Carex rosea</i> First Noted: 2007; Last Noted: 2017	Rosy Sedge	3	N					G
<i>Carex scoparia</i> First Noted: 2007; Last Noted: 2016	Broom Sedge	2	N				Y/N	G
<i>Carex sparganioides</i> Only Noted In 2007	Bur-reed Sedge	3	N					G
<i>Carex spicata</i> Only Noted In 2004	Prickly Sedge	0	I				Y/N	G
<i>Carex stipata</i> First Noted: 2007; Last Noted: 2017	Awlfruit Sedge	2	N					G
<i>Carex striatula</i> First Noted: 2007; Last Noted: 2017	Lined Sedge	6	N					G
<i>Carex stricta</i> First Noted: 2004; Last Noted: 2017	Upright Sedge	5	N				Y/N	G
<i>Carex swanii</i> First Noted: 2004; Last Noted: 2017	Swan's Sedge	3	N					G







Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form
<i>Carex tribuloides</i> First Noted: 2004; Last Noted: 2007	Blunt Broom Sedge	2	N						G
<i>Carex vulpinoidea</i> First Noted: 2007; Last Noted: 2017	Fox Sedge	2	N					G	
<i>Cyperus esculentus</i> Only Noted In 2007	Yellow Nutsedge	0	N/I					NM	G
<i>Cyperus strigosus</i> Only Noted In 2007	Strawcolored Flatsedge	2	N					Y/N	G
<i>Eleocharis tenuis</i> First Noted: 2004; Last Noted: 2017	Slender Spikerush	2	N						G
<i>Scirpus cyperinus</i> First Noted: 2007; Last Noted: 2017	Woolgrass	4	N						G
<i>Scirpus georgianus</i> First Noted: 2004; Last Noted: 2007	Georgia Bulrush	3	N						G
<i>Scirpus pendulus</i> Only Noted In 2007	Rufous Bulrush	6	N						G
<i>Scirpus polyphyllus</i> Only Noted In 2007	Leafy Bulrush	4	N						G













Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
Dioscoreaceae									
<i>Dioscorea villosa</i>	Wild Yam	4	N						V/F
First Noted: 1984; Last Noted: 2017									
Elaeagnaceae									
<i>Elaeagnus angustifolia</i>	Russian Olive	0	I					Y/N	S/T
Only Noted In 1978									
<i>Elaeagnus umbellata</i>	Autumn Olive	0	I						S
First Noted: 1984; Last Noted: 2017									
Ericaceae									
<i>Lyonia ligustrina</i>	Maleberry	7	N						S
Only Noted In 1984									
<i>Rhododendron periclymenoides</i>	Pink Azalea	5	N						S
First Noted: 1984; Last Noted: 2018									
Euphorbiaceae									
<i>Acalypha rhomboidea</i>	Common Threeseed Mercury	0	N						F
First Noted: 1984; Last Noted: 2007									
<i>Acalypha virginica</i>	Virginia Threeseed Mercury	2	N						F
Only Noted In 2004									
<i>Chamaesyce maculata</i>	Spotted Sandmat	0	N						F
Only Noted In 2007									



















Species	Common Name	Coefficient of Conservation		Origin		'Traits'	Growth Form	
<i>Chamaesyce nutans</i>	Eyebane	1	N					F
First Noted: 1984; Last Noted: 2007		Synonyms: <i>Euphorbia nutans</i> Lag.						
Fabaceae								
<i>Albizia julibrissin</i>	Silktree	0	I					S/T
Only Noted In 2007								
<i>Amphicarpaea bracteata</i>	American Hogpeanut	4	N					V/F
First Noted: 1984; Last Noted: 2017								
<i>Cercis canadensis</i>	Eastern Redbud	7	N					S/T
First Noted: 1984; Last Noted: 2016								
<i>Chamaecrista nictitans</i>	Sensitive Partridge Pea	4	N					F/S
Only Noted In 1984		Synonyms: <i>Cassia nictitans</i> L.						
<i>Desmodium glutinosum</i>	Pointedleaf Ticktrefoil	5	N					F
First Noted: 1984; Last Noted: 2017								
<i>Desmodium nudiflorum</i>	Nakedflower Ticktrefoil	5	N					F
First Noted: 1984; Last Noted: 2017								
<i>Desmodium paniculatum</i>	Panicledleaf Ticktrefoil	3	N					F
First Noted: 1984; Last Noted: 2007								
<i>Desmodium perplexum</i>	Perplexed Ticktrefoil	3	N					F
First Noted: 1984; Last Noted: 2017								




















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form		
<i>Gleditsia triacanthos</i>	Honeylocust	0	N	  				Y/N	S/T	
First Noted: 2004; Last Noted: 2017										
<i>Lespedeza repens</i>	Creeping Lespedeza	4	N							F
Only Noted In 1984										
<i>Lespedeza violacea</i>	Violet Lespedeza	6	N							F
First Noted: 1984; Last Noted: 2007										
Synonyms: <i>Lespedeza intermedia</i> sensu Clewell										
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	0	I	 				Y/N		F
Only Noted In 2004										
<i>Medicago lupulina</i>	Black Medick	0	I	 						F
First Noted: 1984; Last Noted: 2007										
<i>Melilotus officinalis</i>	Sweetclover	0	I	 						F
First Noted: 1984; Last Noted: 2007										
<i>Robinia pseudoacacia</i>	Black Locust	0	N	  				Y/N		T
First Noted: 1984; Last Noted: 2017										
<i>Securigera varia</i>	Crownvetch	0	I	  				Y/N		F/V
First Noted: 1984; Last Noted: 2017										
Synonyms: <i>Coronilla varia</i> L.										
<i>Trifolium aureum</i>	Golden Clover	0	I							F
First Noted: 2004; Last Noted: 2007										
<i>Trifolium campestre</i>	Field Clover	0	I							F
Only Noted In 2007										





















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Trifolium hybridum</i>	Alsike Clover	0	I						Y/N	F
First Noted: 1984; Last Noted: 2007										
<i>Trifolium pratense</i>	Red Clover	0	I						Y/N	F
First Noted: 1984; Last Noted: 2007										
<i>Trifolium repens</i>	White Clover	0	I							F
First Noted: 1984; Last Noted: 2017										
<i>Vicia sativa</i>	Garden Vetch	0	I							V/F
First Noted: 2007; Last Noted: 2017										
<i>Vicia tetrasperma</i>	Lentil Vetch	0	I							V/F
Only Noted In 2007										
Fagaceae										
<i>Castanea dentata</i>	American Chestnut	5	N							T
First Noted: 1973; Last Noted: 2017										
<i>Castanea mollissima</i>	Chinese Chestnut		I							T
Only Noted In 1990										
<i>Fagus grandifolia</i>	American Beech	6	N							T
First Noted: 1973; Last Noted: 2018										
<i>Quercus acutissima</i>	Sawtooth Oak		I							T
Only Noted In 2012										























Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Quercus alba</i> First Noted: 1973; Last Noted: 2017	White Oak	4	N						T	
<i>Quercus bicolor</i> First Noted: 2013; Last Noted: 2016	Swamp White Oak	7	N						T	
<i>Quercus coccinea</i> First Noted: 1973; Last Noted: 2007	Scarlet Oak	4	N						T	
<i>Quercus palustris</i> First Noted: 1984; Last Noted: 2017	Pin Oak	3	N						T	
<i>Quercus rubra</i> First Noted: 1973; Last Noted: 2018	Northern Red Oak	4	N						T	
<i>Quercus velutina</i> First Noted: 1973; Last Noted: 2017	Black Oak	4	N						T	
Fumariaceae										
<i>Dicentra cucullaria</i> Only Noted In 2007	Dutchman's Breeches	7	N				   NM		F	
Gentianaceae										
<i>Obolaria virginica</i> First Noted: 1984; Last Noted: 2018	Virginia Pennywort	6	N						F	

















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
Geraniaceae									
<i>Geranium carolinianum</i>	Carolina Geranium	1	N						F
Only Noted In 2017									
<i>Geranium maculatum</i>	Spotted Geranium	4	N						F
First Noted: 1984; Last Noted: 2017									
Hamamelidaceae									
<i>Hamamelis virginiana</i>	American Witchhazel	6	N						S/T
First Noted: 1973; Last Noted: 2017									
Hydrangeaceae									
<i>Philadelphus</i>	Mock Orange		N/I						
Only Noted In 2007									
Hydrocharitaceae									
<i>Elodea canadensis</i>	Canadian Waterweed	5	N					NM	F
Only Noted In 1984									
Iridaceae									
<i>Sisyrinchium angustifolium</i>	Narrowleaf Blue-eyed Grass	3	N						F
First Noted: 1984; Last Noted: 2017									
Juglandaceae									
<i>Carya cordiformis</i>	Bitternut Hickory	3	N						T
First Noted: 1992; Last Noted: 2017									



























Species	Common Name	Coefficient of Conservation		Origin		'Traits'	Growth Form	
<i>Carya glabra</i> First Noted: 1984; Last Noted: 2017	Pignut Hickory	4	N	 				T
<i>Carya ovalis</i> Only Noted In 2007	Red Hickory	7	N					T
<i>Carya ovata</i> First Noted: 1984; Last Noted: 2018	Shagbark Hickory	5	N			 		T
<i>Carya tomentosa</i> First Noted: 1984; Last Noted: 2016	Mockernut Hickory Synonyms: <i>Carya alba</i> (L.) Nutt.	5	N					T
<i>Juglans nigra</i> First Noted: 1973; Last Noted: 2017	Black Walnut	2	N	  			Y/N	T
Juncaceae								
<i>Juncus effusus</i> First Noted: 2004; Last Noted: 2017	Common Rush	1	N	 		 		Y/N G
<i>Juncus secundus</i> Only Noted In 2007	Lopsided Rush	6	N					G
<i>Juncus tenuis</i> First Noted: 2004; Last Noted: 2016	Poverty Rush	1	N	 				Y/N G
<i>Luzula echinata</i> First Noted: 2007; Last Noted: 2017	Hedgehog Woodrush	3	N					G














Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
Lamiaceae										
<i>Agastache nepetoides</i>	Yellow Giant Hyssop	4	N							F/S
Only Noted In 1984										
<i>Clinopodium vulgare</i>	Wild Basil	1	N						Y/N	F
First Noted: 1984; Last Noted: 2007										
Synonyms: <i>Satureja vulgaris</i> (L.) Fritsch										
<i>Collinsonia canadensis</i>	Richweed	5	N							F
First Noted: 1984; Last Noted: 2017										
<i>Glechoma hederacea</i>	Ground Ivy	0	I						Y/N	F
First Noted: 1984; Last Noted: 2017										
<i>Hedeoma pulegioides</i>	American False Pennyroyal	2	N							F
Only Noted In 1984										
<i>Lamium amplexicaule</i>	Henbit Deadnettle	0	I							F
Only Noted In 1984										
<i>Lamium purpureum</i>	Purple Deadnettle	0	I							F
First Noted: 1984; Last Noted: 2017										
<i>Leonurus cardiaca</i>	Common Motherwort	0	I							F
Only Noted In 1984										
<i>Lycopus americanus</i>	American Water Horehound	4	N							F
Only Noted In 2007										













Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Lycopus uniflorus</i> First Noted: 1984; Last Noted: 2007	Northern Bugleweed	5	N							F
<i>Lycopus virginicus</i> First Noted: 2004; Last Noted: 2017	Virginia Water Horehound	3	N							F
<i>Mentha arvensis</i> Only Noted In 2007	Wild Mint	3	N						Y/N	F
<i>Mentha spicata</i> First Noted: 2004; Last Noted: 2017	Spearmint	0	I							F
<i>Perilla frutescens</i> First Noted: 2004; Last Noted: 2017	Beefsteakplant	0	I							F
<i>Prunella vulgaris</i> First Noted: 1984; Last Noted: 2017	Common Selfheal	0	N						Y/N	F
<i>Pycnanthemum tenuifolium</i> Only Noted In 1984	Narrowleaf Mountainmint	4	N							F
<i>Pycnanthemum virginianum</i> First Noted: 2004; Last Noted: 2017	Virginia Mountainmint	4	N							F
<i>Scutellaria elliptica</i> Only Noted In 1984	Hairy Skullcap	5	N							F
<i>Scutellaria integrifolia</i> Only Noted In 1984	Helmet Flower	5	N							F




















Species	Common Name	Coefficient of Conservation		Origin		'Traits'				Growth Form
<i>Scutellaria lateriflora</i> Only Noted In 1984	Blue Skullcap	4	N							F
<i>Teucrium canadense</i> First Noted: 1984; Last Noted: 2017	Canada Germander	1	N							F
<i>Trichostema dichotomum</i> Only Noted In 1984	Forked Bluecurls	4	N							F
Lauraceae										
<i>Lindera benzoin</i> First Noted: 1973; Last Noted: 2018	Northern Spicebush	2	N							S/T
<i>Sassafras albidum</i> First Noted: 1973; Last Noted: 2018	Sassafras	1	N							S/T
Lemnaceae										
<i>Lemna minor</i> First Noted: 1984; Last Noted: 2017	Common Duckweed	2	N							F
Liliaceae										
<i>Allium tricoccum</i> First Noted: 2007; Last Noted: 2018	Ramp	5	N							F
<i>Allium vineale</i> First Noted: 1984; Last Noted: 2018	Wild Garlic	0	I							F

















Species	Common Name	Coefficient of Conservation		Origin		'Traits'				Growth Form		
<i>Asparagus officinalis</i>	Garden Asparagus	0	I								F	
First Noted: 1984; Last Noted: 2007												
<i>Erythronium americanum</i>	Yellow Trout Lily	4	N									F
First Noted: 1984; Last Noted: 2018												
<i>Hemerocallis fulva</i>	Orange Daylily	0	I									F
First Noted: 1984; Last Noted: 2017												
<i>Hosta ventricosa</i>	Blue Plantain Lily	0	I									F
First Noted: 1984; Last Noted: 2017												
<i>Hypoxis hirsuta</i>	Common Goldstar	5	N									F
Only Noted In 1984												
<i>Lilium canadense</i>	Canada Lily	6	N									F
First Noted: 1984; Last Noted: 2017												
<i>Lilium lancifolium</i>	Tiger Lily	0	I									F
Only Noted In 2007												
<i>Liriope muscari</i>	Big Blue Lilyturf		I									F
Only Noted In 2017												
<i>Maianthemum racemosum</i>	Feathery False Lily Of The Valley	5	N									F
First Noted: 1984; Last Noted: 2017												
Synonyms: <i>Smilacina racemosa</i> (L.) Desf.												
<i>Medeola virginiana</i>	Indian Cucumber	5	N									F
First Noted: 1984; Last Noted: 2007												














Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form		
<i>Muscari botryoides</i>	Common Grape Hyacinth	0	I							F	
First Noted: 2007; Last Noted: 2017											
<i>Narcissus pseudonarcissus</i>	Daffodil	0	I							F	
First Noted: 2007; Last Noted: 2018											
<i>Ornithogalum umbellatum</i>	Sleepydick	0	I							F	
First Noted: 1984; Last Noted: 2017											
<i>Polygonatum biflorum</i>	Smooth Solomon's Seal	5	N							F	
First Noted: 1984; Last Noted: 2017											
<i>Polygonatum pubescens</i>	Hairy Solomon's Seal	5	N							F	
First Noted: 1984; Last Noted: 2017											
<i>Scilla siberica</i>	Siberian Squill	0	I							F	
Only Noted In 2008											
<i>Trillium cernuum</i>	Whip-poor-will Flower	7	N							F	
First Noted: 2007; Last Noted: 2017											
<i>Uvularia perfoliata</i>	Perfoliate Bellwort	6	N							F	
First Noted: 1984; Last Noted: 2017											
<i>Uvularia sessilifolia</i>	Sessileleaf Bellwort	6	N							F	
First Noted: 1984; Last Noted: 2017											
<i>Veratrum viride</i>	Green False Hellebore	6	N							F	
First Noted: 1984; Last Noted: 2017											























Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
Linaceae									
<i>Linum virginianum</i>	Woodland Flax	7	N						F
Only Noted In 1984									
Lythraceae									
<i>Lythrum salicaria</i>	Purple Loosestrife	0	I					Y/N	F/S
First Noted: 1984; Last Noted: 2017									
Magnoliaceae									
<i>Liriodendron tulipifera</i>	Tuliptree	2	N						T
First Noted: 1973; Last Noted: 2018									
<i>Magnolia acuminata</i>	Cucumber-tree	0	N						T
Only Noted In 2007									
<i>Magnolia tripetala</i>	Umbrella-tree	0	N						T
Only Noted In 2017									
Malvaceae									
<i>Abutilon theophrasti</i>	Velvetleaf	0	I						F
Only Noted In 1984									
<i>Hibiscus trionum</i>	Flower Of An Hour	0	I						F
First Noted: 1984; Last Noted: 2007									
<i>Malva moschata</i>	Musk Mallow	0	I						F
Only Noted In 1984									



























Species	Common Name	Coefficient of Conservation		Origin	'Traits'	Growth Form
		0	N			
<i>Sida spinosa</i>	Prickly Fanpetals	0	N			F/S
Only Noted In 1984						
Menispermaceae						
<i>Menispermum canadense</i>	Common Moonseed	4	N			V
Only Noted In 2007						
Molluginaceae						
<i>Mollugo verticillata</i>	Green Carpetweed	0	N			F
Only Noted In 1984						
Monotropaceae						
<i>Monotropa uniflora</i>	Indianpipe	4	N			 F
First Noted: 1984; Last Noted: 2017						
Moraceae						
<i>Maclura pomifera</i>	Osage Orange	0	N		  	S/T
First Noted: 2007; Last Noted: 2017						
<i>Morus alba</i>	White Mulberry	0	I		  	 S/T
First Noted: 1978; Last Noted: 2017						
<i>Morus rubra</i>	Red Mulberry	5	N		 	T
First Noted: 1973; Last Noted: 1984						





















Species	Common Name	Coefficient of Conservation		Origin	'Traits'			Growth Form	
Nyssaceae									
<i>Nyssa sylvatica</i>	Blackgum	4	N					NM	T
First Noted: 1973; Last Noted: 2017									
Oleaceae									
<i>Fraxinus americana</i>	White Ash	1	N						T
First Noted: 1973; Last Noted: 2018									
<i>Fraxinus pennsylvanica</i>	Green Ash	3	N					Y/N	T
First Noted: 1978; Last Noted: 2017									
<i>Ligustrum obtusifolium</i>	Border Privet	0	I						S
First Noted: 2004; Last Noted: 2017									
<i>Ligustrum vulgare</i>	European Privet	0	I					Y/N	S
First Noted: 1973; Last Noted: 1978									
Onagraceae									
<i>Circaea lutetiana</i>	Broadleaf Enchanter's	2	N						F
First Noted: 1984; Last Noted: 2017									
Synonyms: <i>Circaea canadensis</i> (L.) Hill									
<i>Epilobium coloratum</i>	Purpleleaf Willowherb	2	N						F
First Noted: 1984; Last Noted: 2017									
<i>Ludwigia alternifolia</i>	Seedbox	4	N						F
First Noted: 2004; Last Noted: 2007									





















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Ludwigia palustris</i>	Marsh Seedbox	3	N						F	
First Noted: 2007; Last Noted: 2017										
<i>Oenothera biennis</i>	Common Evening Primrose	1	N				 		F	
First Noted: 1984; Last Noted: 2017										
Orchidaceae										
<i>Epipactis helleborine</i>	Broadleaf Helleborine	0	I						F	
First Noted: 2007; Last Noted: 2017										
<i>Galearis spectabilis</i>	Showy Orchid	6	N						F	
First Noted: 1984; Last Noted: 2017										
<i>Platanthera flava var. herbiola</i>	Palegreen Orchid	7	N						F	
Only Noted In 2007										
<i>Platanthera lacera</i>	Green Fringed Orchid	4	N						F	
First Noted: 2007; Last Noted: 2009										
<i>Spiranthes cernua</i>	Nodding Lady's Tresses	6	N						F	
Only Noted In 1984										
<i>Spiranthes lacera var. gracilis</i>	Northern Slender Lady's Tresses	7	N						F	
Only Noted In 2004										
<i>Tipularia discolor</i>	Crippled Crane-fly	6	N						F	
First Noted: 2008; Last Noted: 2018										




















Species	Common Name	Coefficient of Conservation		Origin		'Traits'	Growth Form	
Orobanchaceae								
<i>Epifagus virginiana</i>	Beechdrops	6	N				NM	F
First Noted: 1984; Last Noted: 2018								
<i>Orobanche uniflora</i>	Oneflowered Broomrape	6	N					F
Only Noted In 2007								
Oxalidaceae								
<i>Oxalis dillenii</i>	Slender Yellow Woodsorrel	1	N					F
First Noted: 2004; Last Noted: 2017								
<i>Oxalis stricta</i>	Common Yellow Oxalis	1	N	 				F
First Noted: 1983; Last Noted: 2009								
Synonyms: <i>Oxalis europaea</i> Jord.								
<i>Oxalis violacea</i>	Violet Woodsorrel	4	N					F
First Noted: 2007; Last Noted: 2017								
Papaveraceae								
<i>Sanguinaria canadensis</i>	Bloodroot	3	N			   		F
First Noted: 1984; Last Noted: 2018								
Phytolaccaceae								
<i>Phytolacca americana</i>	American Pokeweed	0	N	  				F
First Noted: 1984; Last Noted: 2017								


















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form
Plantaginaceae								
<i>Plantago lanceolata</i>	Narrowleaf Plantain	0	I					F
First Noted: 1984; Last Noted: 2017								
<i>Plantago major</i>	Common Plantain	0	I		 			F
First Noted: 2007; Last Noted: 2017								
<i>Plantago rugelii</i>	Blackseed Plantain	0	N					F
First Noted: 1984; Last Noted: 2017								
Platanaceae								
<i>Platanus occidentalis</i>	American Sycamore	3	N		 			T
First Noted: 1984; Last Noted: 2018								
Poaceae								
<i>Agrostis altissima</i>	Tall Bentgrass		N					G
Only Noted In 2007								
<i>Agrostis gigantea</i>	Redtop	0	I					G
First Noted: 2004; Last Noted: 2007								
<i>Agrostis hyemalis</i>	Winter Bentgrass	0	N					G
Only Noted In 2000								
<i>Agrostis perennans</i>	Upland Bentgrass	2	N		 			G
First Noted: 2004; Last Noted: 2007								
Synonyms: <i>Agrostis altissima</i> (Walter) Tuck.								






















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form		
<i>Alopecurus pratensis</i>	Meadow Foxtail	0	I			 			G	
Only Noted In 2007										
<i>Andropogon gyrans</i>	Elliott's Bluestem	6	N						G	
Only Noted In 2007										
<i>Andropogon virginicus</i>	Broomsedge Bluestem	2	N			   			G	
Only Noted In 2007										
<i>Anthoxanthum odoratum</i>	Sweet Vernalgrass	0	I			 			Y/N	G
First Noted: 2004; Last Noted: 2017										
<i>Brachyelytrum erectum</i>	Bearded Shorthusk	5	N						G	
First Noted: 2004; Last Noted: 2017										
<i>Bromus inermis</i>	Smooth Brome	0	I			 			Y/N	G
Only Noted In 2007										
<i>Bromus racemosus</i>	Bald Brome	0	I						G	
First Noted: 2004; Last Noted: 2007										
	Synonyms: <i>Bromus commutatus</i> Schrad.									
<i>Bromus sterilis</i>	Poverty Brome	0	I			 			Y/N	G
Only Noted In 2007										
<i>Bromus tectorum</i>	Cheatgrass	0	I			 			Y/N	G
Only Noted In 2007										
<i>Calamagrostis perplexa</i>	Wood Reedgrass		N						G	
First Noted: 2007; Last Noted: 2011										
















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form
<i>Cinna arundinacea</i> First Noted: 2004; Last Noted: 2017	Sweet Woodreed	3	N			 		G	
<i>Dactylis glomerata</i> First Noted: 2004; Last Noted: 2017	Orchardgrass	0	I				Y/N	G	
<i>Danthonia spicata</i> Only Noted In 2007	Poverty Oatgrass	2	N					G	
<i>Dichanthelium acuminatum</i> First Noted: 2004; Last Noted: 2007	Tapered Rosette Grass Synonyms: <i>Panicum acuminatum</i> Sw.	5	N					G	
<i>Dichanthelium boscii</i> First Noted: 2007; Last Noted: 2017	Bosc's Panicgrass	5	N			 		G	
<i>Dichanthelium clandestinum</i> First Noted: 2004; Last Noted: 2017	Deertongue Synonyms: <i>Panicum clandestinum</i> L.	2	N			 		G	
<i>Dichanthelium dichotomum</i> First Noted: 2004; Last Noted: 2007	Cypress Panicgrass Synonyms: <i>Panicum dichotomum</i> L.	8	N					G	
<i>Dichanthelium latifolium</i> Only Noted In 2007	Broadleaf Rosette Grass	5	N					G	
<i>Digitaria ischaemum</i> Only Noted In 2007	Smooth Crabgrass	0	I					G	
<i>Digitaria sanguinalis</i> First Noted: 2004; Last Noted: 2007	Hairy Crabgrass	0	N					G	




















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
		0	I						
<i>Echinochloa crus-galli</i> Only Noted In 2007	Barnyardgrass	0	I					Y/N	G
<i>Eleusine indica</i> First Noted: 2007; Last Noted: 2017	Indian Goosegrass	0	I			 			G
<i>Elymus repens</i> Only Noted In 2007	Quackgrass Synonyms: <i>Elytrigia repens</i> (L.) Desv. ex Nevski	0	I			 			G
<i>Eragrostis minor</i> Only Noted In 2007	Little Lovegrass	0	I						G
<i>Eragrostis pectinacea</i> Only Noted In 2007	Tufted Lovegrass	0	N						G
<i>Eragrostis spectabilis</i> Only Noted In 2007	Purple Lovegrass	1	N			 			G
<i>Festuca rubra</i> Only Noted In 2007	Red Fescue	0	I			 		Y/N	G
<i>Festuca subverticillata</i> First Noted: 2004; Last Noted: 2017	Nodding Fescue Synonyms: <i>Festuca obtusa</i> Biehler	3	N						G
<i>Glyceria striata</i> First Noted: 2004; Last Noted: 2017	Fowl Mannagrass	3	N			 			G
<i>Holcus lanatus</i> First Noted: 2007; Last Noted: 2017	Common Velvetgrass	0	I			  			Y/N G













Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form
<i>Leersia oryzoides</i>	Rice Cutgrass	2	N				Y/N	G
First Noted: 2004; Last Noted: 2007								
<i>Leersia virginica</i>	Whitegrass	2	N					G
First Noted: 2004; Last Noted: 2017								
<i>Lolium perenne</i>	Perennial Ryegrass	0	I					 G
Only Noted In 2004								
<i>Microstegium vimineum</i>	Nepalese Browntop	0	I					 G
First Noted: 2004; Last Noted: 2017								
<i>Muhlenbergia schreberi</i>	Nimblewill	0	N					G
First Noted: 2004; Last Noted: 2017								
<i>Muhlenbergia tenuiflora</i>	Slimflower Muhly	5	N					G
Only Noted In 2007								
<i>Panicum anceps</i>	Beaked Panicgrass	4	N					G
First Noted: 2004; Last Noted: 2007								
<i>Panicum dichotomiflorum</i>	Fall Panicgrass	0	N					G
First Noted: 2007; Last Noted: 2017								
<i>Panicum philadelphicum</i>	Philadelphia Panicgrass	1	N					G
Only Noted In 2007								
<i>Paspalum laeve</i>	Field Paspalum	3	N					G
Only Noted In 2007								






















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form		
<i>Paspalum setaceum</i>	Thin Paspalum	3	N						G	
First Noted: 2004; Last Noted: 2007										
<i>Phalaris arundinacea</i>	Reed Canarygrass	0	N/I					Y/N	G	
First Noted: 2004; Last Noted: 2017										
<i>Phleum pratense</i>	Timothy	0	I					Y/N	G	
Only Noted In 2007										
<i>Phyllostachys bambusoides</i>	Japanese Timber Bamboo		I							
First Noted: 2008; Last Noted: 2017										
<i>Poa alsodes</i>	Grove Bluegrass	5	N						G	
First Noted: 2007; Last Noted: 2017										
<i>Poa annua</i>	Annual Bluegrass	0	I					Y/N	G	
First Noted: 2007; Last Noted: 2017										
<i>Poa autumnalis</i>	Autumn Bluegrass	7	N					Y/N	G	
First Noted: 2007; Last Noted: 2016										
<i>Poa compressa</i>	Canada Bluegrass	0	I					Y/N	G	
Only Noted In 2007										
<i>Poa pratensis</i>	Kentucky Bluegrass	0	I					Y/N	G	
First Noted: 2004; Last Noted: 2017										
<i>Poa sylvestris</i>	Woodland Bluegrass	4	N						G	
Only Noted In 2007										

















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
		0	I							
<i>Poa trivialis</i>	Rough Bluegrass	0	I						Y/N	G
First Noted: 2004; Last Noted: 2017										
<i>Puccinellia distans</i>	Weeping Alkaligrass	0	N/I						Y/N	G
Only Noted In 2017										
<i>Schedonorus arundinaceus</i>			I							G
First Noted: 2007; Last Noted: 2017										
	Synonyms: <i>Festuca elatior</i> L. ssp. <i>arundinacea</i> (Schreb.) Hack.									
<i>Schedonorus pratensis</i>	Meadow Fescue	0	I						Y/N	G
Only Noted In 2004										
	Synonyms: <i>Festuca elatior</i> L.									
<i>Schizachyrium scoparium</i>	Little Bluestem	3	N							G
Only Noted In 2007										
<i>Setaria faberi</i>	Japanese Bristlegrass	0	I							G
First Noted: 2000; Last Noted: 2017										
<i>Setaria parviflora</i>	Marsh Bristlegrass	3	N							G
Only Noted In 2004										
	Synonyms: <i>Setaria geniculata</i> (Wild.) P. Beauv.									
<i>Setaria pumila</i>	Yellow Foxtail	0	I							G
First Noted: 2004; Last Noted: 2017										
<i>Sorghastrum nutans</i>	Indiangrass	5	N							G
First Noted: 2004; Last Noted: 2016										
<i>Sphenopholis intermedia</i>	Slender Wedgescale	4	N							G
Only Noted In 2007										


















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form		
<i>Tridens flavus</i>	Purpletop Tridens	1	N						G	
First Noted: 2004; Last Noted: 2007										
Polygalaceae										
<i>Polygala sanguinea</i>	Purple Milkwort	5	N						F	
Only Noted In 1984										
<i>Polygala verticillata</i>	Whorled Milkwort	4	N						F	
Only Noted In 1984										
Polygonaceae										
<i>Polygonum arifolium</i>	Halberdleaf Tearthumb	5	N						V/F	
First Noted: 1984; Last Noted: 2017										
Synonyms: <i>Persicaria arifolia</i> (L.) Harolds.										
<i>Polygonum aviculare</i>	Prostrate Knotweed	0	I					Y/N	F	
First Noted: 1984; Last Noted: 2017										
<i>Polygonum cespitosum</i>	Oriental Lady's Thumb	0	I						F	
First Noted: 1984; Last Noted: 2017										
Synonyms: <i>Persicaria longiseta</i> (Bruijn) Kitag.										
<i>Polygonum hydropiper</i>	Marshpepper Knotweed	0	I					NM	F	
Only Noted In 2007										
Synonyms: <i>Persicaria hydropiper</i> (L.) Opiz										
<i>Polygonum lapathifolium</i>	Curlytop Knotweed	0	N					NM	F	
Only Noted In 1984										
<i>Polygonum pensylvanicum</i>	Pennsylvania Smartweed	1	N						F	
First Noted: 1984; Last Noted: 2007										






















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
<i>Polygonum perfoliatum</i> First Noted: 2004; Last Noted: 2017	Mile-a-minute Weed	0	I			  			F
	Synonyms: <i>Persicaria perfoliata</i> (L.) H. Gross								
<i>Polygonum persicaria</i> First Noted: 1974; Last Noted: 2017	Spotted Ladysthumb	0	I			 			F
	Synonyms: <i>Persicaria maculosa</i> Gray								
<i>Polygonum punctatum</i> First Noted: 1984; Last Noted: 2012	Dotted Smartweed	3	N			 			F
<i>Polygonum sagittatum</i> First Noted: 1984; Last Noted: 2017	Arrowleaf Tearthumb	4	N			 			V/F
<i>Polygonum scandens</i> First Noted: 2004; Last Noted: 2017	Climbing False Buckwheat	1	N						V/F
	Synonyms: <i>Fallopia scandens</i> (L.) Holub								
<i>Polygonum virginianum</i> First Noted: 1984; Last Noted: 2017	Jumpseed	2	N						F
<i>Rumex acetosella</i> First Noted: 1984; Last Noted: 2007	Common Sheep Sorrel	0	I			 		Y/N	F
<i>Rumex crispus</i> First Noted: 1984; Last Noted: 2017	Curly Dock	0	I			  		Y/N	F
<i>Rumex obtusifolius</i> First Noted: 1984; Last Noted: 2017	Bitter Dock	0	I			 		Y/N	F
















Species	Common Name	Coefficient of Conservation		Origin		'Traits'					Growth Form	
Portulacaceae												
<i>Claytonia virginica</i>	Virginia Springbeauty	3	N						NM	F		
First Noted: 1984; Last Noted: 2018												
Primulaceae												
<i>Anagallis arvensis</i>	Scarlet Pimpernel	0	I								F	
Only Noted In 2004												
<i>Lysimachia ciliata</i>	Fringed Loosestrife	3	N								F	
First Noted: 1984; Last Noted: 2017												
<i>Lysimachia nummularia</i>	Creeping Jenny	0	I						Y/N	F		
First Noted: 1984; Last Noted: 2017												
<i>Lysimachia quadrifolia</i>	Whorled Yellow Loosestrife	5	N								F	
First Noted: 1984; Last Noted: 2017												
Pyrolaceae												
<i>Chimaphila maculata</i>	Striped Prince's Pine	4	N								SS	
First Noted: 1984; Last Noted: 2018												
<i>Chimaphila umbellata</i>	Pipsissewa	8	N								SS	
Only Noted In 2013												
<i>Pyrola americana</i>	American Wintergreen	6	N								SS	
First Noted: 1984; Last Noted: 2007												
Synonyms: <i>Pyrola rotundifolia</i> auct. non L. p.p.												
















Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form				
<i>Pyrola elliptica</i>	Waxflower Shinleaf	6	N						SS			
First Noted: 1984; Last Noted: 2017												
Ranunculaceae												
<i>Actaea racemosa</i>	Black Baneberry	5	N						F			
First Noted: 1984; Last Noted: 2017												
Synonyms: <i>Cimicifuga racemosa</i> (L.) Nutt.												
<i>Anemone quinquefolia</i>	Wood Anemone	5	N						F			
First Noted: 1984; Last Noted: 2017												
<i>Anemone virginiana</i>	Tall Thimbleweed	4	N						F			
Only Noted In 1984												
<i>Hepatica nobilis var. obtusa</i>	Roundlobe Hepatica	5	N						F			
First Noted: 1984; Last Noted: 2017												
Synonyms: <i>Anemone americana</i> (DC.) H. Hara <i>Hepatica americana</i> (DC.) Ker Gawl.												
<i>Hydrastis canadensis</i>	Goldenseal	6	N						F			
Only Noted In 1984												
<i>Ranunculus abortivus</i>	Littleleaf Buttercup	1	N						F			
First Noted: 1984; Last Noted: 2017												
<i>Ranunculus bulbosus</i>	St. Anthony's Turnip	0	I						F			
First Noted: 1984; Last Noted: 2017												
<i>Ranunculus ficaria</i>	Lesser Celandine	0	I								Y/N	F
First Noted: 1984; Last Noted: 2018												




















Species	Common Name	Coefficient of Conservation		Origin	'Traits'				Growth Form
<i>Ranunculus hispidus</i> Only Noted In 1984	Bristly Buttercup	7	N						F
<i>Ranunculus recurvatus</i> First Noted: 1984; Last Noted: 2017	Blisterwort	3	N			 			F
<i>Ranunculus sceleratus</i> Only Noted In 1984	Cursed Buttercup	1	N			 		Y/N	F
<i>Thalictrum dioicum</i> Only Noted In 2017	Early Meadow-rue	6	N						F
<i>Thalictrum pubescens</i> First Noted: 1984; Last Noted: 2017	King Of The Meadow	3	N						F
<i>Thalictrum thalictroides</i> First Noted: 1984; Last Noted: 2017	Rue Anemone Synonyms: <i>Anemonella thalictroides</i> (L.) Spach.	6	N				 		F
Rhamnaceae									
<i>Ceanothus americanus</i> First Noted: 1978; Last Noted: 1984	New Jersey Tea	7	N						SS/
Rosaceae									
<i>Agrimonia gryposepala</i> First Noted: 1984; Last Noted: 2007	Tall Hairy Agrimony	4	N						F
<i>Agrimonia microcarpa</i> First Noted: 2007; Last Noted: 2009	Smallfruit Agrimony	8	N						F























Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form		
<i>Agrimonia parviflora</i>	Harvestlice	2	N						F	
First Noted: 1984; Last Noted: 2017										
<i>Agrimonia pubescens</i>	Soft Agrimony	4	N							F
First Noted: 1984; Last Noted: 2017										
<i>Crataegus crus-galli</i>	Cockspur Hawthorn	4	N							S/T
Only Noted In 2004										
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	9	N							S/T
First Noted: 2007; Last Noted: 2017										
<i>Duchesnea indica</i>	Indian Strawberry	0	I							F
First Noted: 1984; Last Noted: 2018										
<i>Fragaria virginiana</i>	Virginia Strawberry	2	N							F
First Noted: 1984; Last Noted: 2017										
<i>Geum canadense</i>	White Avens	1	N							F
First Noted: 1984; Last Noted: 2018										
<i>Malus pumila</i>	Paradise Apple	0	I						Y/N	T
First Noted: 2007; Last Noted: 2017										
<i>Photinia villosa</i>	Oriental Photinia	0	I							S/T
Only Noted In 2017										
<i>Potentilla canadensis</i>	Dwarf Cinquefoil	2	N							F
First Noted: 1984; Last Noted: 2017										
















Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Potentilla norvegica</i>	Norwegian Cinquefoil	0	N							F
Only Noted In 1984										
<i>Potentilla recta</i>	Sulphur Cinquefoil	0	I							F
First Noted: 1984; Last Noted: 2017										
<i>Potentilla simplex</i>	Common Cinquefoil	2	N							F
First Noted: 1984; Last Noted: 2017										
<i>Prunus avium</i>	Sweet Cherry	0	I						Y/N	T
First Noted: 1973; Last Noted: 2017										
<i>Prunus serotina</i>	Black Cherry	1	N							S/T
First Noted: 1973; Last Noted: 2018										
<i>Prunus subhirtella</i>	Winter-flowering Cherry	0	I							T
First Noted: 2004; Last Noted: 2017										
<i>Pyrus calleryana</i>	Callery Pear	0	I							T
Only Noted In 2007										
<i>Rhodotypos scandens</i>	Jetbead	0	I							S
First Noted: 2004; Last Noted: 2017										
<i>Rosa multiflora</i>	Multiflora Rose	0	I						Y/N	SS/
First Noted: 1984; Last Noted: 2017										
<i>Rubus allegheniensis</i>	Allegheny Blackberry	1	N							SS
First Noted: 1973; Last Noted: 2017										











Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
<i>Rubus flagellaris</i> First Noted: 2004; Last Noted: 2017	Northern Dewberry	1	N						SS
<i>Rubus occidentalis</i> First Noted: 1973; Last Noted: 2017	Black Raspberry	1	N						SS
<i>Rubus odoratus</i> First Noted: 2007; Last Noted: 2009	Purpleflowering Raspberry	8	N						SS
<i>Rubus phoenicolasius</i> First Noted: 1973; Last Noted: 2018	Wine Raspberry	0	I						SS
<i>Rubus recurvicaulis</i> Only Noted In 2009	Arching Dewberry		N						SS
Rubiaceae									
<i>Galium aparine</i> First Noted: 1984; Last Noted: 2017	Stickywilly	1	N						Y/N V/F
<i>Galium asprellum</i> First Noted: 1984; Last Noted: 2017	Rough Bedstraw	5	N						F
<i>Galium circaezans</i> First Noted: 1984; Last Noted: 2017	Licorice Bedstraw	5	N						F/S
<i>Galium lanceolatum</i> First Noted: 1984; Last Noted: 2017	Lanceleaf Wild Licorice	6	N						F














Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form		
<i>Galium mollugo</i>	False Baby's Breath	0	I					Y/N	F	
First Noted: 2007; Last Noted: 2017										
<i>Galium pilosum</i>	Hairy Bedstraw	5	N						F	
Only Noted In 2007										
<i>Galium tinctorium</i>	Stiff Marsh Bedstraw	4	N						F	
Only Noted In 2004										
<i>Galium triflorum</i>	Fragrant Bedstraw	3	N						F/V	
First Noted: 1984; Last Noted: 2018										
<i>Houstonia caerulea</i>	Azure Bluet	4	N						F	
Only Noted In 1984										
	Synonyms: <i>Hedyotis caerulea</i> (L.) Hook.									
<i>Mitchella repens</i>	Partridgeberry	5	N						F/S	
First Noted: 1984; Last Noted: 2017										
Salicaceae										
<i>Populus deltoides</i>	Eastern Cottonwood	4	N						T	
Only Noted In 2007										
<i>Populus grandidentata</i>	Bigtooth Aspen	3	N						T	
First Noted: 2007; Last Noted: 2017										
<i>Salix babylonica</i>	Weeping Willow		I						S/T	
First Noted: 1984; Last Noted: 2018										

Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form
<i>Salix nigra</i>	Black Willow	2	N					T	
First Noted: 1984; Last Noted: 2017									
Sapindaceae									
<i>Koelreuteria paniculata</i>	Goldenrain Tree	0	I					T	
First Noted: 2016; Last Noted: 2017									
Saxifragaceae									
<i>Chrysosplenium americanum</i>	American Golden Saxifrage	7	N					F	
Only Noted In 1984									
<i>Heuchera americana</i>	American Alumroot	3	N					F	
First Noted: 1984; Last Noted: 2007									
<i>Saxifraga virginensis</i>	Early Saxifrage	6	N					F	
First Noted: 1984; Last Noted: 2008									
Scrophulariaceae									
<i>Chelone glabra</i>	White Turtlehead	5	N					F	
First Noted: 1984; Last Noted: 2017									
<i>Linaria vulgaris</i>	Butter And Eggs	0	I					Y/N F	
First Noted: 1984; Last Noted: 2007									
<i>Mimulus ringens</i>	Allegheny Monkeyflower	5	N					F	
First Noted: 2004; Last Noted: 2017									








Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Paulownia tomentosa</i>	Princesstree	0	I						T	
First Noted: 1973; Last Noted: 2017										
<i>Penstemon digitalis</i>	Talus Slope Penstemon	0	N						F	
First Noted: 2007; Last Noted: 2016										
<i>Scrophularia marilandica</i>	Carpenter's Square	1	N						F/S	
First Noted: 1984; Last Noted: 2017										
<i>Verbascum blattaria</i>	Moth Mullein	0	I						F	
Only Noted In 2017										
<i>Verbascum thapsus</i>	Common Mullein	0	I						F	
First Noted: 1984; Last Noted: 2018										
<i>Veronica americana</i>	American Speedwell	5	N						F	
Only Noted In 1984										
<i>Veronica arvensis</i>	Corn Speedwell	0	I							F
First Noted: 1984; Last Noted: 2017										
<i>Veronica hederifolia</i>	Ivyleaf Speedwell	0	I						F	
First Noted: 1984; Last Noted: 2017										
<i>Veronica officinalis</i>	Common Gypsyweed	1	N						Y/N F	
First Noted: 2004; Last Noted: 2017										
<i>Veronica peregrina</i>	Neckweed	0	N							F
Only Noted In 2007										

Species	Common Name	Coefficient of Conservation		Origin		'Traits'			Growth Form	
<i>Veronica persica</i>	Birdeye Speedwell	0	I							F
First Noted: 2007; Last Noted: 2017										
<i>Veronica serpyllifolia</i>	Thymeleaf Speedwell	0								F
Only Noted In 2017										
<i>Veronicastrum virginicum</i>	Culver's Root	8	N							F
Only Noted In 1984										
Simaroubaceae										
<i>Ailanthus altissima</i>	Tree Of Heaven	0	I							Y/N T
First Noted: 1984; Last Noted: 2018										
Smilacaceae										
<i>Smilax glauca</i>	Cat Greenbrier	3	N							S/V
First Noted: 1984; Last Noted: 2017										
<i>Smilax herbacea</i>	Smooth Carrionflower	5	N							V/F
First Noted: 1984; Last Noted: 2017										
<i>Smilax pulverulenta</i>	Downy Carrionflower	5	N							V/F
First Noted: 2004; Last Noted: 2017										
<i>Smilax rotundifolia</i>	Roundleaf Greenbrier	3	N							S/V
First Noted: 1973; Last Noted: 2017										

Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
Solanaceae									
<i>Physalis heterophylla</i>	Clammy Groundcherry	2	N						F
First Noted: 1984; Last Noted: 2007									
<i>Physalis longifolia</i>	Longleaf Groundcherry	1	N						F
First Noted: 1984; Last Noted: 2007									
	Synonyms: <i>Physalis subglabrata</i> Mack. & Bush								
<i>Solanum carolinense</i>	Carolina Horsenettle	0	N						F/S
First Noted: 1984; Last Noted: 2012									
<i>Solanum dulcamara</i>	Climbing Nightshade	0	I					Y/N	F/S
First Noted: 2004; Last Noted: 2017									
<i>Solanum nigrum</i>	Black Nightshade	0	N					Y/N	F/S
First Noted: 1984; Last Noted: 2004									
Staphyleaceae									
<i>Staphylea trifolia</i>	American Bladdernut	5	N						S/T
First Noted: 1984; Last Noted: 2017									
Tiliaceae									
<i>Tilia americana</i>	American Basswood	7	N						T
First Noted: 1984; Last Noted: 2017									
Typhaceae									
<i>Typha latifolia</i>	Broadleaf Cattail	1	N					Y/N	F
First Noted: 2004; Last Noted: 2017									

Species	Common Name	Coefficient of Conservation		Origin		'Traits'		Growth Form	
Ulmaceae									
<i>Celtis occidentalis</i>	Common Hackberry	2	N						S/T
First Noted: 2004; Last Noted: 2007									
<i>Ulmus pumila</i>	Siberian Elm	0	I					Y/N	S/T
Only Noted In 1990									
<i>Ulmus rubra</i>	Slippery Elm	4	N						T
First Noted: 1973; Last Noted: 2017									
Urticaceae									
<i>Boehmeria cylindrica</i>	Smallspike False Nettle	3	N						F
First Noted: 1984; Last Noted: 2017									
<i>Laportea canadensis</i>	Canadian Woodnettle	4	N						F
First Noted: 1984; Last Noted: 2017									
<i>Pilea fontana</i>	Lesser Clearweed	8	N						F
Only Noted In 2007									
<i>Pilea pumila</i>	Canadian Clearweed	1	N						F
First Noted: 1984; Last Noted: 2011									
<i>Urtica dioica</i>	Stinging Nettle	0						Y/N	F
Only Noted In 2017									

Species	Common Name	Coefficient of Conservation	Origin	'Traits'				Growth Form	
Verbenaceae									
<i>Phryma leptostachya</i>	American Lopseed	8	N					F	
First Noted: 1984; Last Noted: 2017									
<i>Verbena hastata</i>	Swamp Verbena	4	N					F	
Only Noted In 2007									
<i>Verbena urticifolia</i>	White Vervain	2	N					F	
First Noted: 1984; Last Noted: 2017									
Violaceae									
<i>Viola cucullata</i>	Marsh Blue Violet	6	N					F	
Only Noted In 1984									
<i>Viola hirsutula</i>	Southern Woodland Violet	5	N					F	
Only Noted In 2017									
<i>Viola labradorica</i>	Alpine Violet	5	N					F	
First Noted: 1984; Last Noted: 2017									
	Synonyms: <i>Viola conspersa</i> Rchb.								
<i>Viola pubescens var. scabriuscula</i>	Downy Yellow Violet	6	N					F	
First Noted: 1984; Last Noted: 2017									
	Synonyms: <i>Viola pensylvanica</i> Michx.								
<i>Viola sororia</i>	Common Blue Violet	1	N						F
First Noted: 1984; Last Noted: 2017									

Species	Common Name	Coefficient of Conservation	Origin	'Traits'	Growth Form
Vitaceae					
<i>Ampelopsis brevipedunculata</i>	Amur Peppervine	0	I	 	V
First Noted: 2004; Last Noted: 2017					
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	1	N	  	V
First Noted: 1973; Last Noted: 2017					
<i>Vitis aestivalis</i>	Summer Grape	4	N		V
First Noted: 2004; Last Noted: 2017					
<i>Vitis labrusca</i>	Fox Grape	4	N		V
First Noted: 1984; Last Noted: 2017					
<i>Vitis vulpina</i>	Frost Grape	1	N		V
First Noted: 2004; Last Noted: 2017					

Summary Data:

The checklist contains 622 species in 340 Genera and 107 Families.

Of the 622 species, 433 are native to the Lower 48 States; 181 are introduced; 6 are species that are native in some states and introduced in others; and 2 are species whose 'origin' is not known (because they have only been identified to genus, and both native and introduced representatives of that genus are present in Pennsylvania).'

The Checklist was compiled from the following sources, augmented by observations from GNA Staff fieldwork from 2016 onwards, and from fieldwork by Contract Botanists Jack Holt and Janet Ebert in 2017:

Ebert, J. and J. Holt. 2010. Botanical Survey of East Bradford Township: Including Identification of Exceptional Natural Areas and Rare Plant Species Sites. Fieldwork Conducted 2009. Report Prepared June, 2010. 33 pp.

Ebert, J., J. Holt, G. Hertel, and C. Broadbent. 2004. Species list from the 2004 Forest Health Monitoring at the Gordon Natural Area. Unpublished data.

Ebert, J. and K. McMillin. 2012. Annual Vegetation Survey of the Overlease Plots, Gordon Natural Area, West Chester University of Pennsylvania. Unpublished data.

Holt, J. and J. Ebert. 2007. Plant survey of the Gordon Natural Area, south campus, West Chester University of Pennsylvania. Unpublished report 16 pp.

Holt, J. and J. Plyler. 1984. Checklist of the Flora of the Robert B. Gordon Natural Area. Unpublished.

Overlease, W. 1973. The structure of selected deciduous forest in southern Chester County, Pennsylvania. Proceedings of the Pennsylvania Academy of Sciences 47: 181-197.

Overlease, W. and E. Overlease. 2011. Long-term observations of plant succession on an abandoned cornfield in southern Chester County, Pennsylvania (1967-2000). *Bartonia* 65: 97-104.

Turner, G. D., R. J. van Meter, and G. D. Hertel. 2007. Changes in forest understory composition from 1970 to 2003 at the Gordon Natural Area, an urban preserve in Chester County, Pennsylvania. *Journal of the Pennsylvania Academy of Science* 81(1): 8-13.

Allelopathy Data Compiled From:

Burns, R. M. and B. H. Honkala (eds). 1990. *Silvics of North America: 2, Hardwoods*. Agricultural Handbook 654. U.S. Department of Agriculture, Forest

Service, Washington, D.C. 877 pp.

Cipollini, K. A. and W. N. Flint. 2013. Comparing allelopathic effects of root and leaf extracts of invasive *Alliaria petiolata*, *Lonicera maackii* and *Ranunculus ficaria* on germination of three native woodland plants. *Ohio Journal of Science* 112: 37–43.

Coder, K. D. 1999. Potential Allelopathy in Different Tree Species. Extension publication FOR99-003. University of Georgia, Daniel B. Warnell School of Forest Resources, Athens, GA. 1-5 pp.

Electric Power Research Institute (EPRI). 2000. Natural Growth Inhibitors (Allelopathy): A Literature Review. EPRI, Palo Alto, CA, and Empire State Electric Energy Research Co. EPRI Project Manager: J. Goodrich-Mahoney 141 pp.

Fujii, Y. and S. Hiradate (eds). 2007. Allelopathy: New Concepts & Methodology. Papers Presented at the Thrid World Congress on Allelopathy, held in Tsukuba, Japan 2002. Science Publishers, Enfield, NH. 382 pp.

Horsley, S. 1977. Allelopathic inhibition of black cherry by fern, grass, goldenrod, and aster. *Canadian Journal of Forest Research* 7(2): 205-215.

Kattge, J., S. Diaz, S. Lavorel, I. C. Prentice, P. Leadley, G. Boenisch, E. Garnier, M. Westoby, P. B. Reich, I. J. Wright, J. H. C. Cornelissen, C. Violle, S. P. Harrison, P. M. v. Bodegom, M. Reichstein, B. J. Enquist, N. A. Soudzilovskaia, D. D. Ackerly, M. Anand, O. Atkin, M. Bahn, T. R. Baker, D. Baldocchi, R. Bekker, C. Blanco, B. Blonder, W. J. Bond, R. Bradstock, D. E. Bunker, F. Casanoves, J. Cavender-Bares, J. Q. Chambers, F. S. Chapin, J. Chave, D. Coomes, W. K. Cornwell, J. M. Craine, B. H. Dobrin, L. Duarte, W. Durka, J. Elser, G. Esser, M. Estiarte, W. F. Fagan, J. Fang, F. Fernandez-Mendez, A. Fidelis, B. Finegan, O. Flores, H. Ford, D. Frank, G. T. Freschet, N. M. Fyllas, R. V. Gallagher, W. A. Green, A. G. Gutierrez, T. Hickler, S. Higgins, J. G. Hodgson, A. Jalili, S. Jansen, C. Joly, A. J. Kerkhoff, D. Kirkup, K. Kitajima, M. Kleyer, S. Klotz, J. M. H. Knops, K. Kramer, I. Kuehn, H. Kurokawa, D. Laughlin, T. D. Lee, M. Leishman, F. Lens, T. Lenz, S. L. Lewis, J. Lloyd, J. Llusia, F. Louault, S. Ma, M. D. Mahecha, P. Manning, T. Massad, B. Medlyn, J. Messier, A. T. Moles, S. C. Mueller, K. Nadrowski, S. Naeem, U. Niinemets, S. Noellert, A. Nueske, R. Ogaya, J. Oleksyn, V. G. Onipchenko, Y. Onoda, J. Ordonez, G. Overbeck, W. A. Ozinga, S. Patino, S. Paula, J. G. Pausas, J. Penuelas, O. L. Phillips, V. Pillar, H. Poorter, L. Poorter, P. Poschlod, A. Prinzing, R. Proulx, A. Rammig, S. Reinsch, B. Reu, L. Sack, B. Salgado-Negret, J. Sardans, S. Shiodera, B. Shipley, A. Siefert, E. Sosinski, J.-F. Soussana, E. Swaine, N. Swenson, K. Thompson, P. Thornton, M. Waldram, E. Weiher, M. White, S. White, S. J. Wright, B. Yguel, S. Zaehle, A. E. Zanne, C. Wirth. 2011. TRY - a global database of plant traits. *Global Change Biology*, 17:2905-2935. A query of the TRY Plant Trait Database for all species with 'chemical defence' capabilities (Trait #346). <https://www.try-db.org/TryWeb/Home.php>. Query conducted: 4/1/2017.

Pisula, N. L. and S. J. Meiners. 2010. Relative allelopathic potential of invasive plant species in a young disturbed woodland *The Journal of the Torrey Botanical Society* 137: 81-87.

USDA PLANTS. 2018. Query of the USDA PLANTS database for all species that had data in the 'Known Allelopath' field ('Has this plant species been shown to be allelopathic to at least one other species?'). https://plants.usda.gov/adv_search.html. Query conducted: 4/16/2018.

Ant-dispersal Data Compiled From:

- Baskin, C. C. and J. M. Baskin. 2001. *Seeds: Ecology, Biogeography, and Evolution of Dormancy and Germination*. Academic Press, San Diego, CA and London, England. 666 pp.
- Beattie, A. J. and N. Lyons. 1975. Seed dispersal in *Viola* (Violaceae): Adaptations and strategies. *American Journal of Botany* 62(7): 714-722.
- Beattie, A. J., D. C. Culver, and R. J. Pudlo. 1979. Interactions between ants and the diaspores of some common spring flowering herbs. *Castanea* 44: 177-186.
- Beattie, A. J. and D. C. Culver. 1981. The guild of myrmecochores in the herbaceous flora of West Virginia forests. *Ecology* 62(1): 107-115.
- Bierzychudek, P. 1982. Life histories and demography of shade-tolerant temperate forest herbs. *New Phytologist* 90: 757-776.
- Cain, M. L., H. Damman, and A. Muir. 1998. Dispersal and the Holocene migration of woodland herbs. *Ecological Monographs* 68(3): 325-347.
- Canner, J. E., R. R. Dunn, I. Giladi, and K. Gross. 2012. Redispersal of seeds by a keystone ant augments the spread of common wildflowers. *Acta Oecologica* 40: 31-39.
- Connell, K. 2015. Incorporating redispersal into myrmecochory: Addressing the uniqueness of microsites near ant nests in an eastern North American forest. Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville. University of Tennessee Honors Thesis Projects. http://trace.tennessee.edu/utk_chanhonoproj/1816, Knoxville, TN. 21 pp.
- Cullina, W. 2000. *The New England Wild Flower Society Guide to Growing and Propagating Wildflowers of the United States and Canada*. New England Wildflower Society; Houghton Mifflin, Framingham, MA; New York, NY. 322 pp.
- Cullina, W. 2008. *Native Ferns, Moss, and Grasses. From Emerald Carpet to Amber Wave: Serene and Sensuous Plants for the Garden*. New England Wildflower Society; Houghton Mifflin, Framingham, MA; New York, NY. 256 pp.
- Culver, D. C. and A. J. Beattie. 1978. Myrmecochory in *Viola*: Dynamics of seed-ant interactions in some West Virginia species. *Journal of Ecology* 66(1): 53-72.
- Culver, D. C. and A. J. Beattie. 1980. The fate of *Viola* seeds dispersed by ants. *American Journal of Botany* 67(5): 710-714.

- Ecoflora 2017. Query of the Ecoflora Database for all ant-dispersed species. Query conducted: 2/24/2017.
- Gaddy, L. L. 1986. Twelve new ant-dispersed species from the southern Appalachians. *Bulletin of the Torrey Botanical Club* 13(3): 247-251.
- Gunther, R. W. and J. Lanza. 1989. Variation in attractiveness of *Trillium* diaspores to a seed-dispersing ant. *American Midland Naturalist* 122(2): 321-328.
- Handel, S. N. 1976. Population Biology of Three Woodland *Carex* Species. Ph.D. Cornell University, Ithaca, NY. 166 pp.
- Handel, S. N. 1978a. Dispersal ecology of *Carex pedunculata* (Cyperaceae), a new North American myrmecochore. *American Journal of Botany* 63(8): 1071-1079
- Handel, S. N. 1978b. The competitive relationship of three woodland sedges and its bearing on the evolution of ant-dispersal of *Carex pedunculata*. *Evolution* 32(1): 151-163.
- Handel, S. N., S. B. Fisch, and G. E. Schatz. 1981. Ants disperse a majority of herbs in a mesic forest community in New York State. *Bulletin of the Torrey Botanical Club* 108(4): 430-437.
- Handel, S. N. and A. J. Beattie. 1990. Seed dispersal by ants. *Scientific American* 263(2): 76-83A.
- Hanzawa, F. M., A. J. Beattie, and D. C. Culver. 1988. Directed dispersal: Demographic analysis of an ant-seed mutualism. *The American Naturalist* 131(1): 1-13.
- Heithaus, E. R., P. A. Heithaus, and S. Y. Liu. 2005. Satiation in collection of myrmecochorous diaspores by colonies of *Aphaenogaster rudis* (Formicidae: Myrmicinae) in Central Ohio, USA. *Journal of Insect Behavior* 19(6): 827-846.
- Jolls, C. L. 2003. Populations of and threats to rare plants of the herb layer: More challenges and opportunities for conservation biologists. pp. 105-159. In: Gilliam, F. S. and M. R. Roberts (eds). *The Herbaceous Layer in Forests of Eastern North America*. Oxford University Press, New York, New York.
- Mayer, V., S. Ölzant, and R. C. Fischer. 2005. Myrmecochorous seed dispersal in temperate regions. pp. 173-196 In: Forget, P. M., J. E. Lambert, P. E. Hulme, and S. B. Vander Wall (eds). *Seed Fate: Predation, Dispersal and Seedling Establishment*. Cambridge, UK: Commonwealth Agricultural Bureau International.
- McLachlan, S. M. and D. R. Bazely. 2006. Recovery patterns of understory herbs and their use as indicators of deciduous forest regeneration. *Conservation Biology* 15(1): 98-100.
- Mitchell, C. E., M. G. Turner, and S. M. Pearson. 2002. Effects of historical land use and forest patch size on myrmecochores and ant communities.

Ecological Applications 12(5): 1364-1377.

Nordhagen, R. 1959. Remarks on some new or little known myrmecorous plants from North America and East Asia. Bulletin of the Research Council of Israel. Section D, Botany 7: 184-201.

Oberrath, R. 2000. Seed dispersal by ants and its consequences for the phenology of plants. Ph.D. Rheinisch Westfälische Technische Hochschule Aachen, Aachen, Germany 82 pp.

Oostermeijer, J. G. B. 1989. Myrmecochory in *Polygala vulgaris* L., *Luzula campestris* (L.) DC. and *Viola curtisii* Forster in a Dutch Dune Area. Oecologia 78 (3): 302-311.

Patton, M. T. 2014. "Redirecting" the Study of Mutualistic Benefits To Plants In Myrmecochory. University of Tennessee Honors Thesis Projects. 33 pp.

Pemberton, R. W. and D. W. Irving. 1990. Elaiosomes on weed seeds and the potential for myrmecochory in naturalized plants. Weed Science 38(6): 615-619.

Racke, D. 2010. Reestablishing Diversity in Our Hardwood Forests: A Transplant Study of Five Spring-Flowering Herbs. Masters Theses & Specialist Projects. Paper 195. Department of Biology. Western Kentucky University, Bowling Green, KY. <http://digitalcommons.wku.edu/theses/195>. 75 pp.

Robertson, C. 1897. Seed crests and myrmecophilous dissemination in certain plants. Botanical Gazette 23(4): 288-289.

Sorrells, J. and R. J. Warren. 2011. Ant-dispersed herb colonization lags behind forest re-establishment. The Journal of the Torrey Botanical Society 138(1): 77-84.

Thompson, J. N. 1981. Elaiosomes and fleshy fruits: Phenology and selection pressures for ant-dispersed seeds. The American Naturalist 117(1): 104-108.

Türke, M., E. Heinze, K. Andreas, S. M. Svendsen, M. M. Gossner, and W. W. Weisser. 2010. Seed consumption and dispersal of ant-dispersed plants by slugs. Oecologia 163(3): 681-693.

Weiss, F. E. 1908. The dispersal of fruits and seeds by ants. New Phytologist 7: 23-28.

Whigham, D. F. 2004. Ecology of woodland herbs in temperate deciduous forests. Annual Review of Ecology, Evolution, and Systematics 35: 583-621.

Uphof, J. C. T. 1942. Ecological relations of plants with ants and termites. Botanical Review 8(9): 563-598.

Zettler, J. A., T. P. Spira, and C. R. Allen. 2001. Ant–seed mutualisms: Can red imported fire ants sour the relationship? . *Biological Conservation* 101: 249–253.

Bee and Beneficial Insect Data Compiled From:

LBJWC 2016a. Lady Bird Johnson Wildflower Center Special Collections. Data were compiled from the following five species lists: 'Special Value to Native Bees, Special Value to Bumble Bees', 'Special Value to Honey Bees', 'Provides Nesting Materials/Structure for Native Bees', and 'Supports Conservation Biological Control'. Data were provided to the LBJWC by the Pollinator Program at The Xerces Society for Invertebrate Conservation. <https://www.wildflower.org/collections>. Date accessed: 3/11/16.

Coefficient of Conservation Data Compiled From:

BHWP-PSI. 2016. Plant Stewardship Index Database. <http://www.bhwp.org/psi/>. Date accessed: 6/16/16.

Deer Resistance Data Compiled From:

Augustine, D. J. 1997. Grazing patterns and impacts of white-tailed deer in a fragmented forest ecosystem. Masters. University of Minnesota, Saint Paul, MN. 169 pp.

Bowman's Hill Wildflower Preserve. 2002. Deer Tolerant/Resistant Native Plants. In, New Hope, PA. p 2. http://www.bhwp.org/cms/files/file_ID129316.pdf. Date accessed: 2/16/2016.

Bressette, J. W., H. Beck , and V. B. Beauchamp. 2012. Beyond the browse line: complex cascade effects mediated by white-tailed deer . *Oikos* 121: 1749–1760.

CCS&WCD. Undated. Recommended Plants from Cumberland County Soil & Water Conservation District. https://www1.maine.gov/dacf/php/pesticides/yardscaping/plants/swcdplants/deer_resistant_plants.pdf. Date Accessed: 3/9/16.

Clausen, R. R. 2011. 50 Beautiful Deer-Resistant Plants: The Prettiest Annuals, Perennials, Bulbs, and Shrubs that Deer Don't Eat. Timber Press, Portland, OR. 224 pp.

Deer Departed. 2016. Deer Resistant Trees, Shrubs, Roses, Palms, Ornamental Grass, Perennials, Annuals, Ferns, and Bulbs. Only species listed as 'Rarely Damaged' (the most deer-resistant category) were considered. <http://www.deer-departed.com/deer-resistant-plants.html>. Date accessed: 3/10/2016.

Drake, D., P. Nitzsche, and P. Perdomo. 2003. Landscape Plants Rated by Deer Resistance. Rutgers NJAES Cooperative Extension, New Brunswick, NJ. <https://njaes.rutgers.edu/deerresistance/>. [Date accessed: 1/2/2017]

Gilchrist, D. 2013. Deer Resistant/Tolerant Plants for Southeastern Pennsylvania (June 2013). Pennsylvania Department of Conservation and Natural Resources. http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_20028673.pdf. Date Accessed: 11/16/2015.

Heinrich, H. H. and S. Predl. 1993. Can we landscape to accommodate deer? The Tracy Estate Research Garden. Paper 17. *In*: King, M. M. (ed). Sixth Eastern Wildlife Damage Control Conference. Asheville, NC.

Hewitt, J. and Kuhn, N. 2012. Jim Hewitt's and Leslie Kuhn's Deer-resistant Native Plant List (8/26/2012). Mid-Michigan Stewardship Initiative. http://www.meridian.mi.us/vertical/sites/%7B1800D46E-0900-43BD-B3FA-10A5660870B1%7D/uploads/Deer_Resistant_Native_Plant_Garden_List.pdf. Date accessed: 5/7/16

LBJWC. 2016b. Lady Bird Johnson Wildflower Center. Deer Resistant Species. <https://www.wildflower.org/collections/collection.php?collection=deer>. Date accessed: 3/08/2016.

MD DNR 2016. Deer-Resistant Plants. Maryland Deer Damage Management Techniques. Maryland Department of Natural Resources. http://dnr2.maryland.gov/wildlife/Pages/hunt_trap/ddmtplants.aspx. Date accessed: 4/20/2016.

Wiles, L. 2011. Deer Resistant Flower Garden Plants and Some Choice Woody Plants. The Pennsylvania State University. <http://extension.psu.edu/plants/gardening/fact-sheets/general-gardening/deer-resistant-plants>, State College, PA. 2 pp. Date accessed: 2/16/2016.

Hydrophilic Seed Data Compiled From:

Cullina, W. 2000. The New England Wild Flower Society Guide to Growing and Propagating Wildflowers of the United States and Canada. New England Wildflower Society; Houghton Mifflin, Framingham, MA; New York, NY. 322 pp.

Georgia Native Plant Society. <http://gnps.org/conservation/propagation-germination-requirements-of-seeds/> Date accessed: 4/22/2016.

Genesis Nursery 2016. Recalcitrant versus Orthodox seeds; OR, they die as they dry! Revised: 1/7/2013. <http://www.genesisnurseryinc.com/guidelines/O%20recalcitrant.pdf> Date accessed: 4/22/2016.

NGA DB 2016. National Garden Association Database. <http://garden.org/plants/search/advanced.php>. Search criterion: All seed listed as hydrophilic. Date accessed: 4/24/2016.

Invasive Species Data Compiled From:

DCNR. Undated. Pennsylvania Department of Conservation and Natural Resources Invasive Plants List. http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_20026634.pdf. Date accessed: 6/14/2016.

Mycorrhizae Data Compiled From:

- Berch, S. M. and B. Kendrick. 1982. Vesicular-arbuscular mycorrhizae of Southern Ontario ferns and fern-allies. *Mycologia* 74(5): 769-776.
- Berliner, R. and J. G. Torrey. 1989. Studies on mycorrhizal associations in Harvard Forest, Massachusetts. *Canadian Journal of Botany* 67(8): 2245-2251.
- Brundett, M. C. and B. Kendrick. 1988. The mycorrhizal status, root anatomy, and phenology of plants in a sugar maple forest. *Canadian Journal of Botany* 66: 1153-1173.
- Burke, D. J. 2012. Shared mycorrhizal networks of forest herbs: Does the presence of conspecific and heterospecific adult plants affect seedling growth and nutrient acquisition? *Botany* 90: 1048–1057.
- Harley, J. L. and E. L. Harley. 1987. A check-list of mycorrhiza in the British flora. *The New Phytologist* 105(2): 1-102. [Data were incorporated only for the Ferns and Fern-Allies and the Gymnosperms].
- Muthukumar, T., K. Udaiyan, and P. Shanmughavel. 2004. Mycorrhiza in sedges-an overview. *Mycorrhiza* 14: 65–77.
- Rasmussen, H. N. and D. F. Whigham. 1998. Importance of woody debris in seed germination of *Tipularia discolor* (Orchidaceae). *American Journal of Botany* 85(6): 829–834.
- Wang, B. and Y.-L. Qiu. 2006. Phylogenetic distribution and evolution of mycorrhizas in land plants. *Mycorrhiza* 6: 299-363.
- Wood, D. L. and A. J. Bornstein. 2011. Notes on the biology of *Obolaria virginica* (Gentianaceae) in Southeast Missouri, and the effects of leaf Litter on emergence and flower production. *Castanea* 76(2): 157-163.

Ruderal Data Compiled From:

- Jakovljević, K. and S. Jovanović. 2004. Ruderal flora of Smederevska Palanka town - Ecological and phytogeographical characteristics. *Acta Herbológica* 13 (1): 1-14.
- Nilsson, C., G. Grelsson, M. Johansson, and U. Sperens. 1989. Patterns of plant species richness along riverbanks. *Ecology* 70(1): 77-84.
- Pavlović-Muratspahić, D., M. Stanković, and S. Branković. 2010. Taxonomical analysis of ruderal flora (*sensu stricto*) in area of the city of Kragujevac. *Kragujevac Journal of Science* 32: 101-108.

Biofotoquiz. 2017. A query of the Biofotoquiz database for all species categorized as 'ruderals.' URL: <http://www.biofotoquiz.ch> [Date accessed:

2/20/2017].

Spring Ephemeral Data Compiled From:

About.com. Undated. A List of Ephemerals Suitable for Gardens. <http://gardening.about.com/od/wildflowergardens/ss/Growing-Spring-Flowering-Ephemerals.htm#step3>. Date accessed: 1/3/2016.

Brewer, R. 1980. A half-century of changes in the herb layer of a climax deciduous forest in Michigan. *Journal of Ecology* 68: 823-832.

Brooklyn Botanic Garden - http://www.bbg.org/gardening/article/native_spring_ephemerals. Date accessed: 1/3/2016.

Keddy, P. and Drummond. 1996. Ecological properties for the evaluation, management, and restoration of temperate deciduous forest ecosystems. *Ecological Applications* 6(3): 748-762.

Lapointe, L. 2001. How phenology influences physiology in deciduous forest spring ephemerals. *Physiologia Plantarum* 113: 151-157.

McCarthy, B. C. 2003. The herbaceous layer of eastern old-growth deciduous forests. pp. 163-176. In: Gilliam, F. S. and M. R. Roberts (eds). *The Herbaceous Layer in Forests of Eastern North America*. Oxford University Press, New York, New York.

Schemske, D. W., M. F. Willson, M. N. Melampy, L. J. Miller, L. Verner, K. M. Schemske, and L. B. Best. 1978. Flowering ecology of some spring woodland herbs. *Ecology* 59(2): 351-366.

Thompson, J. M. 1980. Treefalls and colonization patterns of temperate forest herbs. *The American Midland Naturalist* 104(1): 176-184.

'Wintergreen Flora' Data Compiled From:

Beatley, J. C. 1956. The winter-green herbaceous flowering plants of Ohio. *The Ohio Journal of Science* 56(6): 349-377.

Bierzychudek, P. 1982. Life histories and demography of shade-tolerant temperate forest herbs. *New Phytologist* 90: 757-776.

Brewer, R. 1980. A half-century of changes in the herb layer of a climax deciduous forest in Michigan. *Journal of Ecology* 68: 823-832.

Neufeld, H. S. and D. R. Young. 2003. Ecophysiology of the herbaceous layer in temperate deciduous forests. pp. 38-90. In: Gilliam, F. S. and M. R. Roberts (eds). *The Herbaceous Layer in Forests of Eastern North America*. Oxford University Press, New York, NY.

Metadata:

This document was generated from the GNA Database. Database developed and data compiled by Nur Ritter, Stewardship Manager, Gordon Natural Area.

Recommended Citation: Ritter, N. 2018. Annotated checklist of the vascular plant species observed at the Gordon Natural Area (West Chester University, PA) 1967-2018. Version XIII. 82 pages. Database queried and document created: 4/18/2018.