1998

The Christopher Memorial Arboretum, University of Rhode Island: botanical and historical walking tour

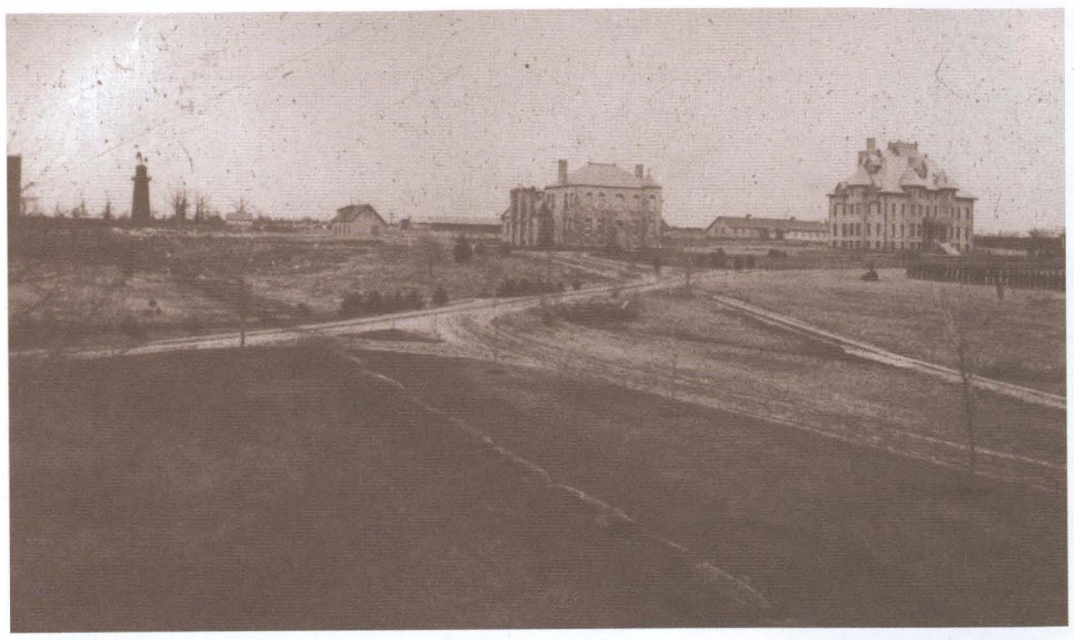
Susan C. Hammen-Winn
University of Rhode Island

THE CHRISTOPHER MEMORIAL ARBORETUM

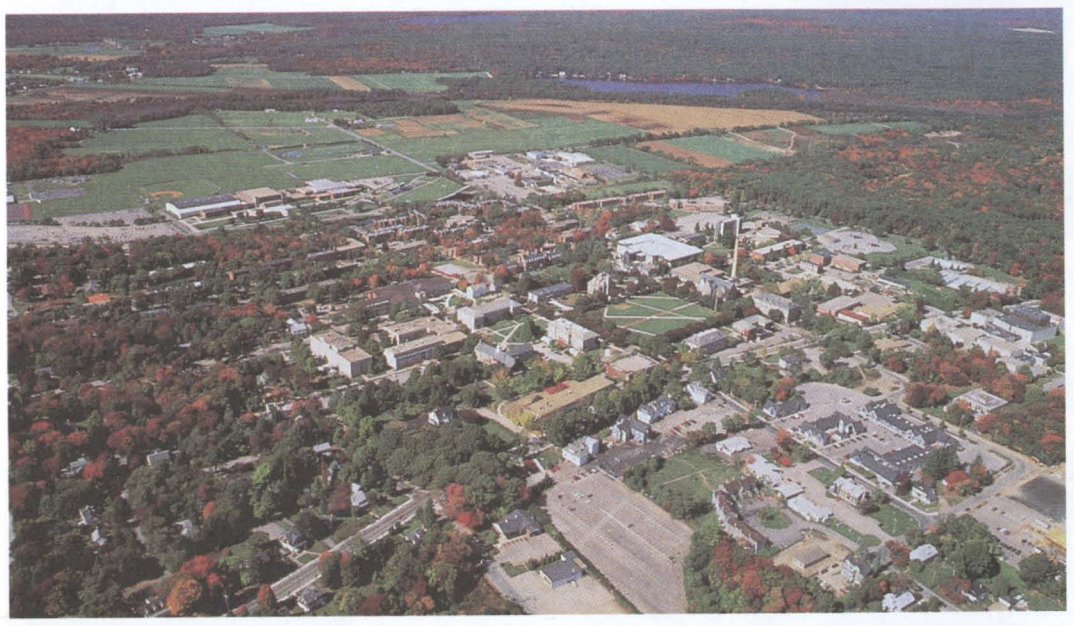
University of Rhode Island

Botanical and Historical Walking Tour

UNIVERSITY OF RHODE ISLAND FOUNDATION
SUSAN C. HAMMEN-WINN, PH.D.
DEPARTMENT OF BIOLOGICAL SCIENCES



Taft Hall *(center)* and Davis Hall *(right)* in the 1800s.



The Kingston campus today.

The University of Rhode Island campus has over 140 species and cultivars of deciduous and evergreen trees. URI occupies the site of a barren, rocky pasture that was a part of the Oliver Watson-Tefft farm, purchased in 1888. Today the campus is not only endowed with our lovely native shade trees, but also with many exotic and ornamental landscape plants. This self-guided tour identifies many botanically interesting and historically significant trees on the URI Kingston campus.

THE CHRISTOPHER MEMORIAL ARBORETUM

The campus-wide arboretum at URI, Kingston, is named in memory of Dr. Everett P. Christopher '26, a long-time faculty member and former associate dean of the College of Resource Development. Before his death in 1989, Dr. Christopher created two endowments in the URI Foundation. One was designated "for use as approved by the Executive Board" of the Foundation, while the second fund was earmarked for "the development or maintenance of the University's arboretum or for such other allied purposes as the Foundation trustees may determine."

The Foundation's Executive Board agreed to allocate income from both endowments to the arboretum and to related efforts designed to make the campus more habitable and attractive. The Foundation's Campus Beautification Committee works with the University in planning such projects.

Contributions and memorial endowments for campus beautification may be made through the URI Foundation Office, 21 Davis Hall, 10 Lippitt Road, Kingston, RI 02881-2011; telephone: 401-874-5836.

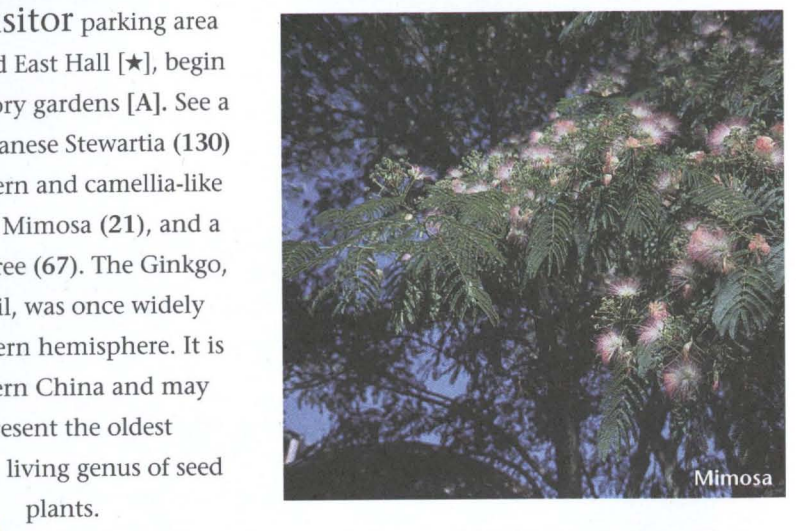
OTHER BOTANICAL FEATURES

- There are two dwarf conifer gardens: one near the Palmatier garden on the south side of Ranger Hall **[D4]**, the other outside the door of the greenhouses on the north end of campus **[D11]**. The latter contains a Weeping Atlas Cedar.
- The gardens just south of the greenhouses on the north side of campus have several interesting species of trees, among them the Larch and the Dawn Redwood, both conifers that shed their leaves; a Franklinia; and a Dove or Handkerchief Tree.
- Nearby, a Learning Landscape surrounds the Cooperative Extension Education Center **[D10]** and is a sustainable garden. The trees, shrubs, and perennials require less pesticides, water, fertilizer, and maintenance, and are noninvasive. The gardens include lawns planted with drought- and insect-resistant turf; vegetable and ornamental plantings which showcase disease- and insect-resistant varieties; an orchard featuring disease-resistant fruits; composting demonstrations; a water garden; a native plant area; a fragrance garden; and extensive low maintenance perennial beds. For an informational packet on the Learning Landscape, call the Gardening Hotline at 1-800-448-1011.

KINGSTON CAMPUS WALKING TOUR

Arriving at the visitor parking area located between Bliss and East Hall [★], begin the tour at the observatory gardens **[A]**. See a European Ash **(62)**, a Japanese Stewartia **(130)** with a colorful bark pattern and camellia-like blossoms in early July, a Mimosa **(21)**, and a Ginkgo or Maidenhair Tree **(67)**. The Ginkgo, often called a living fossil, was once widely distributed in the northern hemisphere. It is now native only to eastern China and may represent the oldest living genus of seed plants.

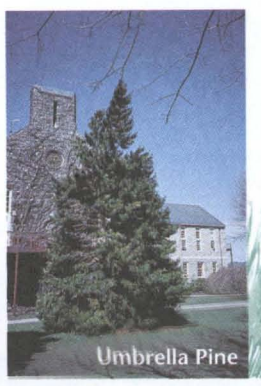
Proceed west onto the Quadrangle **[B]**, the center of campus. Turn south to continue on the former East Campus Avenue along the Quadrangle. The original campus included a double quadrangle designed in 1897 by landscape architects John Charles Olmstead and Frederick Law Olmstead Jr., sons of the designer of Central Park in New York City. Originally 65 elm trees were planted in 1899 by George E. Adams in double rows around each green to delineate the double quadrangle. Several of these original elms **(139)** remain today; the rest, having fallen victim to the Dutch Elm disease, have been replaced by Japanese zelkovas **(142)**, a member of the elm family. The URI Foundation's Campus Beautification Committee completed a duplication of the double rows of zelkovas in the spring of 1989. Many of these trees have been dedicated *in memoriam*.



Mimosa

Walking toward Green Hall, we see a Sugar Maple **(17)**, and a Paperbark Maple **(8)**, with its attractive, peeling, cinnamon-colored bark, and trifoliate, compound leaves. Nearby is a Weeping Higan Cherry **(115)** awash with bloom in late April. On the east side of Green Hall are two handsome Katsura trees **(38)**, two stately Blue spruces **(99)** and a Parasol or Umbrella Pine **(127)** named for its spoke-like whorl of glossy green needles. This Umbrella Pine was planted in 1955 at a convocation to commemorate the 10th birthday of the United Nations.

Blue Spruce



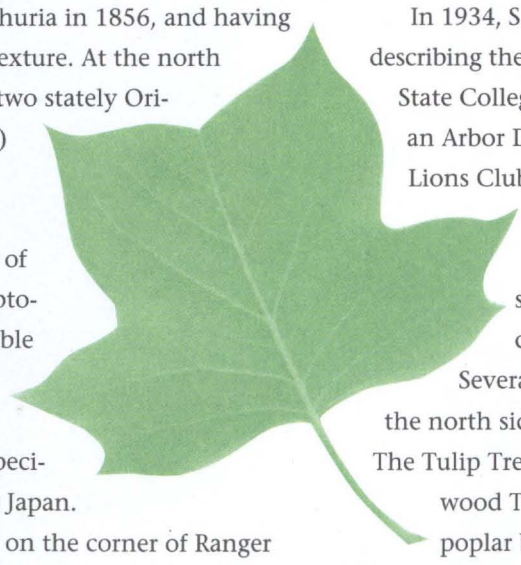
Umbrella Pine

As you pass through the opening in Independence Hall, notice the Amur maples **(7)** on either side—this species is native to Japan and China. Emerging on Upper College Road, you will see that many lindens planted in 1909 still line the road. Crimean Linden trees **(136)** were planted along the entire length of the road in 1990–91. In mid-summer the sweet fragrance of the linden blossoms permeates this area of campus. In Europe, the blossoms are frequently dried and used in making linden tea.

In 1919, the Alumni Association planted a grove of Red Oak trees **(122)** for the 22 undergraduates and one faculty member who were lost in World War I. These are on the lawn of the President's house **[D]** and across the road to the east in Alumni Grove. A plaque commemorating these men is located in the hemlock hedge near the gates on the west side of the road.

Between East Hall and Washburn Hall is the Atlas Cedar **(35)** with its blue-green evergreen needles. This is a true cedar, in the pine family or Pinaceae, unlike our native red and white cedars, members of the family Cupressaceae. The Atlas Cedar was introduced from the Atlas Mountains of Morocco and is a relative of the cedars of Lebanon used to construct Solomon's Temple.

The double quadrangle remained intact until 1912 when Ranger Hall was constructed. On the site of the southern quadrangle, no longer in existence, there were originally 22 elms lining the eastern walkway, 11 on each side. Several have been replaced by the Amur Corktree **(92)**, a species introduced from China and Manchuria in 1856, and having a cork-like bark texture. At the north end of Edwards, two stately Oriental spruces **(97)** guard the main entrance. At the southwest corner of Edwards is a Cryptomeria **(52)**, valuable for its timber as well as for being an ornamental specimen in its native Japan.



To the right, on the corner of Ranger Hall is the Palmatier Garden **[C]**, planted in tribute to a botany professor and his wife. It contains a Sorrel, Sourwood, or Lily-of-the-Valley Tree **(91)**, a relative of the Rhododendron and the Blueberry. Also note the graceful Cut-Leaf Japanese Red Maple **(10)** and Bristlecone Pine **(100)**, an ancient tree from the southwestern United States. The Bristlecone Pine is very slow-growing and is one of the longest-living species on earth. Some have been documented to survive 6,000 years or more.

In 1934, S.C. Damon published a paper describing the shade trees of Rhode Island State College. This paper was written for an Arbor Day program sponsored by the Lions Clubs of Rhode Island. Thirteen Tulip trees **(79)**, one for each club, were planted on the southern college boundary in celebration of that Arbor Day. Several of these may be seen along the north side of Campus Avenue today. The Tulip Tree, also known as the Whitewood Tree or Tulip Poplar, is not a poplar but a member of the magnolia family and has large yellow and orange tulip-shaped flowers in early June.

On the southeast corner of Fogarty Hall is the Youngken Medicinal Plant Garden **[E]** containing over 200 species of exotic and common medicinal plants used from ancient times to the present day. The garden is a valuable source of seeds used in the international seed exchange. Adjoining the garden is the medicinal greenhouse containing non-hardy plants used in medicines, spices, and cosmetics.

Continue toward Green Hall

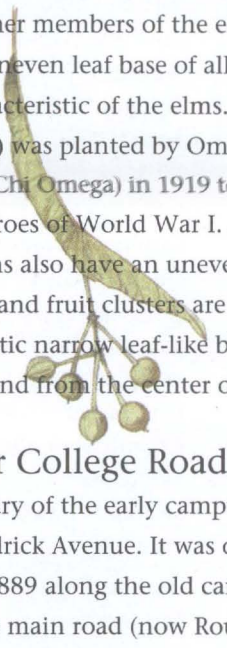
between the lindens which flank the walkway. The Dawn Redwood **(87)**, once known only from fossil records, was thought to be extinct until it was discovered growing in a remote valley in China in 1941. Guarding the south door of Green Hall are two magnificent Kobus magnolias **(82)**. These are covered with large, white, fragrant blossoms in April.

To the west of Green Hall, we have American Holly trees **(71)**, one with yellow and one with red berries, a Katsura **(38)**, a Hinoki Falsecypress **(41)**, and a Kwanzan Cherry **(114)**. Turning down Magnolia Row,

Star Magnolia

notice the Star Magnolia **(83)** in bloom in April. Also notice a White Fringetree **(44)**, and a Giant Arborvitae **(134)**. Old Ben Butler, a Civil War cannon captured by the Confederate Army at the Battle of Bull Run and brought on campus in 1892, stands guard at the southwest corner of the Quad. Across the road notice the Crimson King Maple **(13)**, a maroon-colored cultivar of the Norway Maple.

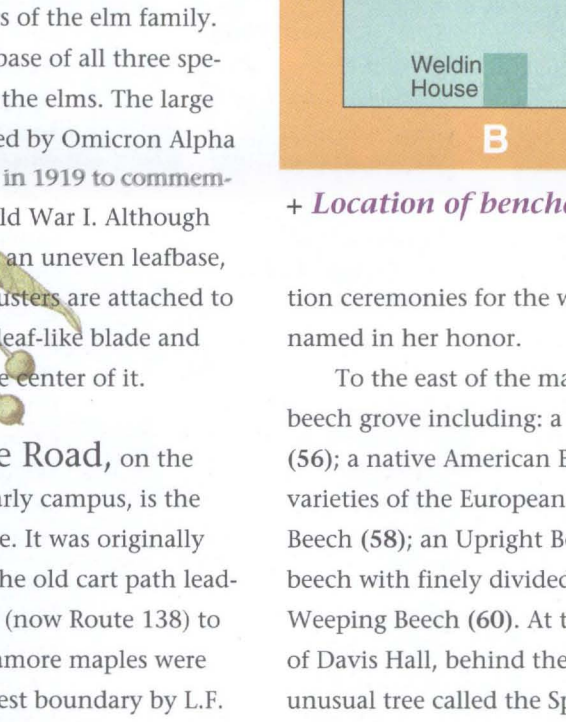
Continuing west, we come to an umbrella shaped Camperdown Elm **(140)**, clonal varieties of the Scotch Elm. Peek inside their pendulous branches and see a graft about five feet from the ground, as this tree will not reproduce true from seed. The Camperdown Elm does not resemble the vase-shaped American elms nearby, or the zelkovas, other members of the elm family. Notice the uneven leaf base of all three species—a characteristic of the elms. The large Linden **(137)** was planted by Omicron Alpha Alpha (later Chi Omega) in 1919 to commemorate the heroes of World War I. Although many lindens also have an uneven leafbase, their flower and fruit clusters are attached to a characteristic narrow leaf-like blade and seem to extend from the center of it.



Lower College Road,

on the west boundary of the early campus, is the former Hendrick Avenue. It was originally laid out in 1889 along the old cart path leading from the main road (now Route 138) to the Watson House. Sycamore maples were put in on this former west boundary by L.F. Kinney and students on Arbor Day in 1893. Norway maples **(12)** were added later along the pedestrian mall leading from the Memorial Union to the Library. A good way to distinguish the Norway Maple from other maples with similar leaves is to remove a leaf and examine it for a thick, white, sticky substance at the point of attachment to the branch.

On the west side of the mall are two rows of Crab Apple trees **[F]**. Eleanor Roosevelt reportedly planted the first flowering Crab Apple on the north side of the main door of Roosevelt Hall in 1938, during dedication ceremonies for the women's dormitory named in her honor.



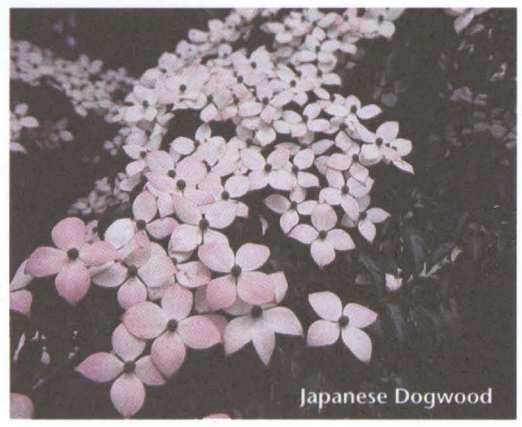
To the east of the mall is a magnificent beech grove including: a European Beech **(56)**; a native American Beech **(55)**; and four varieties of the European Beech—a Copper Beech **(58)**; an Upright Beech **(59)**; a stately beech with finely divided leaves **(57)**, and a Weeping Beech **(60)**. At the northeast corner of Davis Hall, behind the beeches, is an unusual tree called the Spindle Tree **(54)**. It is a relative of the winter creeper, a popular ground cover, and the winged euonymus, or burning bush, common to this area.

On the east, approaching the Library, is a Japanese Tree Lilac **(133)**, and on the south side of Taft Hall is the Cornelian Cherry **(48)**, a variety of dogwood which opens the arboreal flowering season each year with its yellow blossoms in late March.

Many of the trees planted to observe special occasions have disappeared as the campus expanded. The Library stands where the class of 1894 planted 26 trees, one for each member. This class, the first of Rhode Island State College, initiated the practice of planting trees. Some of the species planted were American Redbud, Buckeye, Catalpa, Swiss Stone Pine, Larch, and Kentucky Coffee Tree. Of these, only one remains—the Hackberry **(37)** located just north of Taft Hall. Although a brook once traversed the grove, the water has now been diverted. Many Swamp White oaks still grow along the former border, which ran across the lawn of the University Club, through the Observatory Gardens, across the Engineering Quadrangle where two magnificent cottonwoods still exist, and under the current Library.

Hackberry Bark

Moving toward the west side of Ballentine Hall, notice four Upright English oaks **(121)**. These oaks are a fastigiate or upright form of the massive, spreading oaks prevalent in the landscape of England. As you come out on the northwest corner of the Quadrangle, the trees framing the entrance to Ballentine Hall are Japanese Dogwood **(47)** awash in bloom from early June through midsummer. These blooms are in fact large white or pink-tinged bracts which surround the diminutive true flowers. They are similar to the floral structure observed in our native Dogwood **(46)**, seen at each corner of Ballentine Hall.



Japanese Dogwood

Proceed east to complete the circle of the walking tour. On your left you will see a Kwanzan Cherry **(114)**, a hardy ornamental showing double pink flowers in early May, two European Beech trees **(56)**, and a red Japanese Maple **(9)**.

Comments concerning this guide are welcomed by Dr. Susan Hammen-Winn (retired) of the URI Department of Biological Sciences, Kingston, RI 02881. Sincere thanks to David Bascom, Sue Gordon, Chris Nerone, and Bob Hindle for their valuable input.

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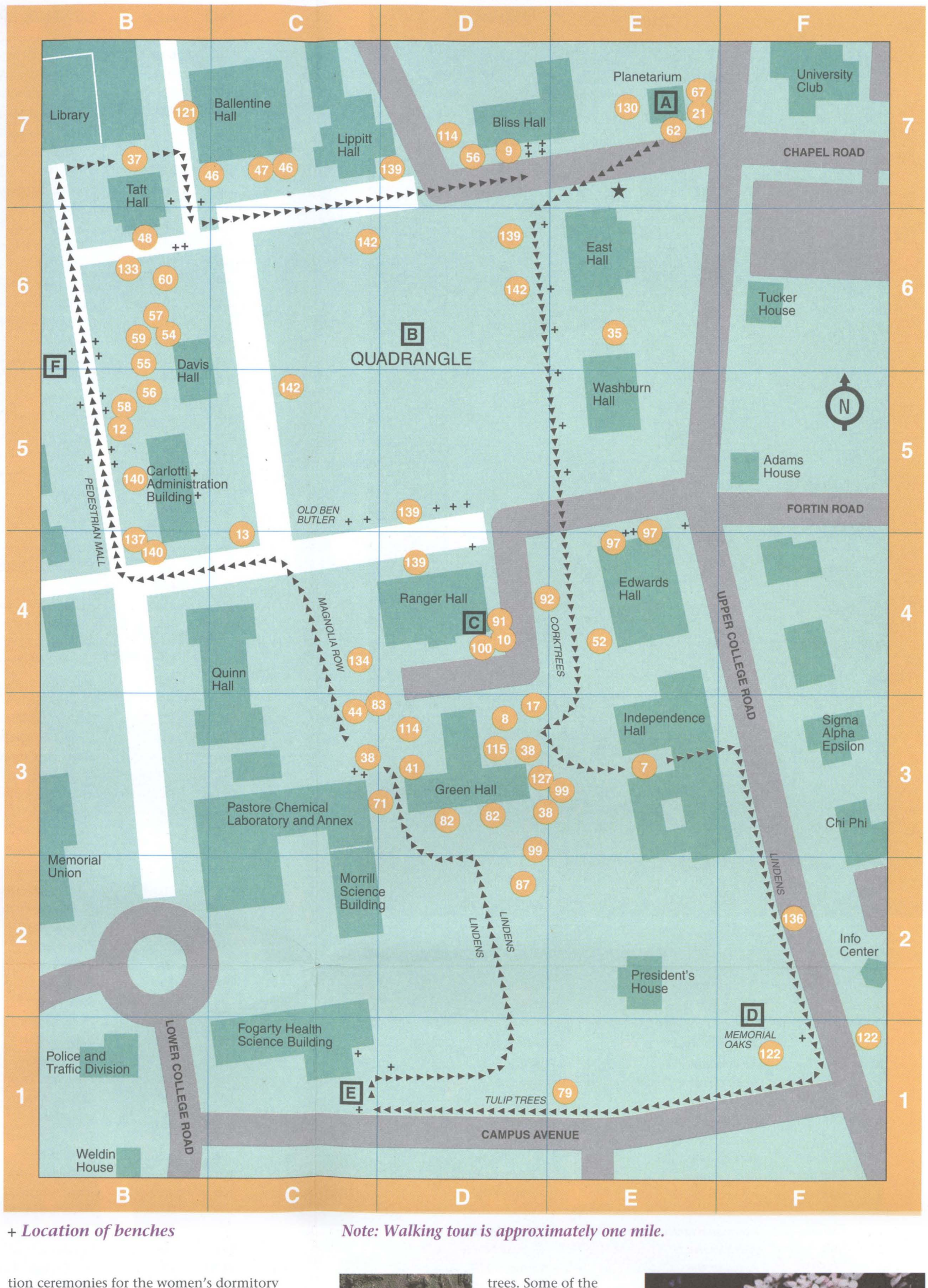
URI Foundation



+ Location of benches

Note: Walking tour is approximately one mile.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B
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FLAGG ROAD
GREENHOUSE ROAD
EAST ALUMNI AVENUE
BILLS ROAD
CHAPEL ROAD
FORTIN ROAD
BAIRD HILL ROAD
CAMPUS AVENUE
LOWER COLLEGE ROAD
UPPER COLLEGE ROAD
BRIAR LANE
WALKING TOUR AREA
QUADRANGLE
N
Resource Development Laboratory
Greenhouses
Biological Sciences Building
Chafee Social Science Center
DeWolf Lab
Tyler Hall
Cooperative Extension Education Center
Woodward Hall
Theta Delta Chi
Kelley Hall
Gilbreth Hall
Kirk Engineering Laboratory
Fine Arts Center
Rodman Hall
Crawford Hall
Wales Hall
Engineering Auditorium & Instrument Shop
Library
Ballentine Hall
Lippitt Hall
Bliss Hall
Planetarium
University Club
Taft Hall
East Hall
Tucker House
Roosevelt Hall
Human Resource Administration
Davis Hall
Washburn Hall
Adams House
Multicultural Student Center
Carlotti Administration Building
Ranger Hall
Edwards Hall
Quinn Hall
Research and Grant Accounting
Independence Hall
Sigma Alpha Epsilon
Memorial Union
Pastore Chemical Laboratory and Annex
Green Hall
Chi Phi
Morrill Science Building
President's House
Information Center
Fogarty Health Science Building
Police and Traffic Division
Weldin House

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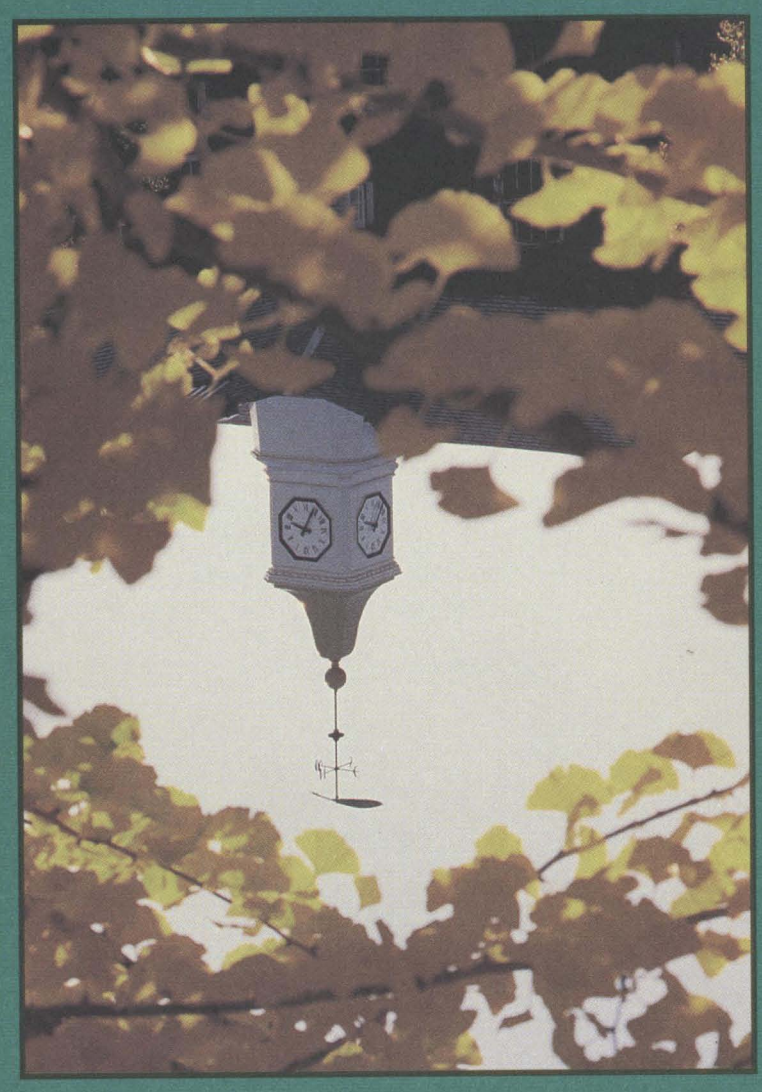

THE CHRISTOPHER MEMORIAL ARBORETUM

Botanical and Historical Walking Tour

University of Rhode Island

NO.	KEY	GENUS & SPECIES	COMMON NAME
1	C8	*Abies balsamea*	Balsam Fir
2	D7	*Abies concolor*	White Fir
3	E9	*Abies concolor 'Candicans'*	Blue Fir
4	A6, D8	*Abies fraseri*	Fraser Fir
5	A6	*Abies homolepsis*	Nikko Fir
6	D10	*Acer campestre*	Hedge Maple
7	E3	*Acer ginnala*	Amur Maple
8	C9, D3	*Acer griseum*	Paperbark Maple
9	B5, D7, E10	*Acer palmatum*	Japanese Maple
10	D4	*Acer palmatum dissectum 'Rubrum'*	Cut-Leaf Japanese Red Maple
11	E9	*Acer pensylvanicum*	Striped Maple
12	B5	*Acer platanoides*	Norway Maple
13	C4	*A. platanoides 'Crimson King'*	Crimson King Maple
14	A8	*Acer pseudoplatanus*	Sycamore Maple
15	C3, E12	*Acer rubrum*	Red Maple
16	E9	*Acer saccharinum*	Silver Maple
17	D3, F8	*Acer saccharum*	Sugar Maple
18	E9	*A. saccharum 'Temples Upright'*	Upright Sugar Maple
19	A7	*Aesculus hippocastanum*	Horse Chestnut
20	C5	*Aesculus* x *carnea*	Red Horse Chestnut
21	E7	*Albizia julibrissin*	Mimosa
22	E10	*Amelanchier* x *grandiflora*	Apple Serviceberry
23	E10, F8	*Betula nigra heritage*	Heritage River Birch
24	B8	*Betula papyrifera*	Paper Birch
25	E10	*Betula pendula (B. verrucosa)*	European White Birch
26	B9, F8	*Betula pendula 'Fastigiata'*	Upright European White Birch
27	E2	*Betula pendula 'Youngii'*	Young's Weeping Birch
28	E10	*Betula utilis* var. *jacquemontii*	'Himalayan' Birch
29	D9, E10	*Carpinus betulus 'Fastigiata'*	Upright European Hornbeam
30	D9	*Carpinus betulus 'Globosa'*	Globose European Hornbeam
31	E10	*Carpinus japonica*	Japanese Hornbeam
32	F12	*Carya glabra*	Pignut Hickory
33	C10	*Castanea mollissima*	Chinese Chestnut
34	E8	*Catalpa speciosa*	Northern Catalpa, Cigar Tree
35	E6	*Cedrus atlantica 'Glauca'*	Atlas Cedar
36	D11	*C. atlantica 'Glauca Pendula'*	Weeping Atlas Cedar
37	B7	*Celtis occidentalis*	Common Hackberry
38	A8, C3, D3	*Cercidiphyllum japonicum*	Katsura Tree
39	B8	*Cercis canadensis*	Eastern Redbud
40	G10	*Chamaecyparis nootkatensis 'Pendula'*	Weeping Alaskan Cedar
41	D3	*Chamaecyparis obtusa*	Hinoki Falsecypress
42	C5	*Chamaecyparis obtusa 'Crippsii'*	Cripps Golden Hinoki Cypress
43	B3, B4	*Chamaecyparis pisifera 'Plumosa'*	Plumosa Sawara Cypress
44	C3	*Chionanthus virginicus*	White Fringetree
45	E6	*Cladrastis lutea*	Yellowwood, Virgilia
46	C7, D8	*Cornus florida*	Flowering Dogwood
47	C7	*Cornus kousa*	Japanese Dogwood
48	B6, E4	*Cornus mas*	Cornelian Cherry
49	D11	*Cornus rutgan 'Stellar'*	Stellar Hybrid Dogwood
50	F7	*Crataegus laevigata*	English Hawthorn
51	C8	*Crataegus phaenopyrum*	Washington Hawthorn
52	E4, F5	*Cryptomeria japonica*	Japanese Cryptomeria
53	E9	*Davidia involucrata*	Dove Tree, Handkerchief Tree
54	B6, E6	*Euonymus europaeus*	Spindle Tree
55	B6	*Fagus grandifolia*	American Beech
56	B5, D7	*Fagus sylvatica*	European Beech
57	B6	*F. sylvatica 'Asplenifolia'*	European Beech (fern-like)
58	B5	*F. sylvatica 'Atropunicea Cuprea'*	Copper Beech
59	B6, B9	*F. sylvatica 'Fastigiata'*	Upright European Beech
60	B6, B9	*F. sylvatica 'Pendula'*	Weeping European Beech
61	D10, F12	*Fraxinus americana*	White Ash
62	E7	*Fraxinus excelsior*	European Ash
63	B10	*Fraxinus ornus*	Flowering Ash
64	F10	*Fraxinus oxycarpa*	Caucasian Ash
65	E2	*F. pennsylvanica 'Marshall Seedless'*	Green Ash
66	E10	*Franklinia alatamaha*	Franklinia
67	A8, D1, E7	*Ginkgo biloba*	Ginkgo, Maidenhair Tree
68	F5	*Gleditsia triacanthos* var. *inermis*	Thornless Honey Locust
69	F6	*Gymnocladus dioicus*	Kentucky Coffee Tree
70	E10	*Halesia monticola*	Mountain Silverbell
71	D3	*Ilex opaca*	American Holly
72	E9	*Juglans nigra*	Black Walnut
73	E10	*Juniperus chinensis 'Mountbatten'*	Mountbatten Chinese Juniper
74	B10	*Kalopanax pictus*	Castor Aralia
75	D4	*Koelreuteria paniculata*	Golden Rain Tree
76	E10	*Larix decidua*	European Larch
77	B9	*Larix decidua 'Pendula'*	Weeping Larch
78	D1, E9, E11	*Liquidambar styraciflua*	Sweet Gum
79	B3, B7–8, E1	*Liriodendron tulipifera*	Tulip Tree
80	D9	*Maackia amurensis*	Amur Maackia
81	D9	*Magnolia acuminata*	Cucumber Tree
82	D3	*Magnolia kobus*	Kobus Magnolia
83	C3, D9	*Magnolia stellata*	Star Magnolia
84	E10	*Magnolia virginiana glauca*	Sweet Bay Magnolia
85	F3	*Magnolia* x *soulangiana*	Saucer Magnolia
86	A5, D9	*Malus* spp.	Crab Apple
87	D2, E9	*Metasequoia glyptostroboides*	Dawn Redwood
88	A5	*Morus alba*	White Mulberry
89	C3	*Nyssa sylvatica*	Black Tupelo
90	E8	*Ostrya virginiana*	American Hop Hornbeam
91	D4	*Oxydendrum arboreum*	Sourwood, Sorrel Tree
92	D4	*Phellodendron amurense*	Amur Corktree
93	E10	*Picea glauca* var. *conica*	Alberta Spruce
94	A5	*Picea glauca*	White Spruce
95	F5	*Picea mariana*	Black Spruce
96	E9	*Picea omorika*	Serbian Spruce
97	E4	*Picea orientalis*	Oriental Spruce
98	D8	*Picea pungens*	Colorado Spruce
99	D3, E3	*Picea pungens 'Hoopsii'*	Hoopsii Blue Spruce
100	D4	*Pinus aristata*	Bristlecone Pine
101	C10	*Pinus cembra*	Swiss Stone Pine
102	D8	*Pinus densiflora 'Tanyosho'*	Tabletop Pine
103	D8	*Pinus koraiensis*	Korean Pine
104	F8	*Pinus nigra*	Austrian Pine
105	D11	*Pinus parviflora 'Glauca'*	Japanese White Pine
106	A10, D10	*Pinus strobus*	Eastern White Pine
107	B9	*P. strobus 'Fastigiata'*	Upright White Pine
108	A10	*Pinus sylvestris*	Scotch Pine
109	A10	*Pinus thunbergii*	Japanese Black Pine
110	E9	*Platanus* x *acerifolia*	London Plane Tree
111	D8	*Populus deltoides*	Eastern Cottonwood
112	F8	*Populus tremuloides*	Quaking Aspen
113	E10	*Prunus serrulata 'Amanagaha'*	Amanagaha Oriental Cherry
114	D3, D7, D8	*Prunus serrulata 'Kwanzan'*	Kwanzan Oriental Cherry
115	B5, D3	*Prunus subhirtella* var. *pendula*	Weeping Higan Cherry
116	E2	*Pseudotsuga menziesii*	Douglas Fir
117	E10	*Pyrus calleryana 'Chanticleer'*	Chanticleer Callery Pear
118	B2	*Quercus alba*	White Oak
119	C8, F7	*Quercus bicolor*	Swamp White Oak
120	B8, C2	*Quercus palustris*	Pin Oak
121	B7	*Quercus robur 'Fastigiata'*	Upright English Oak
122	F1	*Quercus rubra*	Red Oak
123	B3, E12	*Quercus velutina*	Black Oak
124	A7	*Salix babylonica*	Weeping Willow
125	D10	*Salix matsudana 'Tortuosa'*	Corkscrew Willow
126	F6	*Sassafras albidum*	Common Sassafras
127	A5, D3	*Sciadopitys verticillata*	Umbrella Pine
128	F7	*Sophora japonica*	Japanese Scholar Tree
129	D10	*Stewartia koreana*	Korean Stewartia
130	E7, E10	*Stewartia pseudo-camellia*	Japanese Stewartia
131	E10	*Styrax japonicum*	Japanese Snowbell
132	D8	*Styrax obassia*	Fragrant Snowbell
133	B6, E10	*Syringa reticulata*	Japanese Tree Lilac
134	C4	*Thuja plicata*	Giant Arborvitae
135	F3	*Tilia cordata*	Littleleaf Linden
136	E4, F2	*Tilia* x *euchlora*	Crimean Linden
137	B4	*Tilia* spp.	Linden
138	B4	*Tsuga canadensis 'Pendula'*	Weeping Hemlock
139	D4–7	*Ulmus americana*	American Elm
140	B4, B5	*Ulmus glabra 'Camperdownii'*	Camperdown Elm
141	F10	*Ulmus parviflora*	Chinese Elm
142	C5–6, D5–6	*Zelkova serrata*	Japanese Zelkova

Guide to some common genus names: *Abies* = Fir; *Acer* = Maple; *Betula* = Birch; *Cedrus* = Cedar; *Cornus* = Dogwood; *Fagus* = Beech; *Fraxinus* = Ash; *Picea* = Spruce; *Quercus* = Oak; *Ulmus* = Elm
var. = variety; spp. = species; x = hybrid produced by interbreeding two species