

TREES

of Princeton University

AN ARBOREAL TOUR OF THE CAMPUS





1. American sycamore (*Platanus occidentalis*)
Maclean House



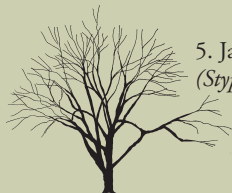
2. American elm (*Ulmus americana*)
Stanhope Hall



3. London plane tree (*Platanus x acerifolia*)
Blair Arch



4. American basswood (*Tilia americana*)
Joline/Blair Courtyard



5. Japanese pagoda tree
(*Styphnolobium japonicum*) Foulke North



6. Kentucky coffee tree
(*Gymnocladus dioica*) 1901 Hall



7. Cedar of Lebanon (*Cedrus libani*)
Cuyler Hall Courtyard

8. Dawn redwood (*Metasequoia
glyptostroboides*) Prospect House



9. English yew (*Taxus baccata*)
Prospect House

An arboreal tour of the campus

The Princeton University campus might be viewed as a vast arboretum—a carefully planned garden that, with its mix of exotic imports and native species, would never be duplicated in nature. 🌿 The verdant place we know today did not exist throughout Princeton’s history. Until 1766 the “college yard,” as the campus was called, had changed little from the cleared land donated by Nathaniel FitzRandolph more than a decade earlier. 🌿 Those who passed along the King’s Highway (later called Nassau Street), looked across a bare lot at the imposing form of Nassau Hall, one of the largest stone buildings in the Colonies, and perhaps noted with pleasure the simple elegance of the President’s House (now Maclean House). Still, Nassau Hall and the President’s House sat upon a treeless hill. Matters eventually improved, beginning with the planting of the so-called “Stamp Act sycamores.”

No. 1



American sycamore

PLATANUS OCCIDENTALIS

✿ Any tree tour should start on the front lawn of Maclean House, where you will find a weathered pair of sycamores ordered by the trustees in 1765. According to legend, they were planted to commemorate the repeal of the Stamp Act in 1766. ✿ These trees, the oldest on campus, are barely past adolescence—for the sycamore, or “buttonwood” (so named because of its button-like seed balls), may live up to 600 years. Native to lowland areas in the East, the sycamore is the most massive of our native trees, and Native Americans favored its trunk for dugout canoes. ✿ Perhaps the trustees, preoccupied with the details of running a college, were just too busy to give much thought to landscaping. In any event, the Stamp Act sycamores may have been the only trees planted on campus until the dawn of the 19th century.



American elm

ULMUS AMERICANA

✿ The once-doomed American elm, with its arching branches and urn-shaped structure, still survives in large numbers on the University campus. Many of the elms are a local cultivated variety called “Princeton” by the late horticulturist William Flemer. These majestic trees stand in allées along Washington Road, Elm Drive, and McCosh Walk and are scattered throughout the campus courtyards. They are still battling the Dutch elm disease fungus, which, left uncontrolled, will block the water flow in the xylem vessels of the trunk and branches. Only one-third of the elms inventoried in 1964 are still standing on campus. The oldest specimen of American elm, one that is well over 200 years old, spreads its branches over the front entrance to the campus behind Stanhope Hall.

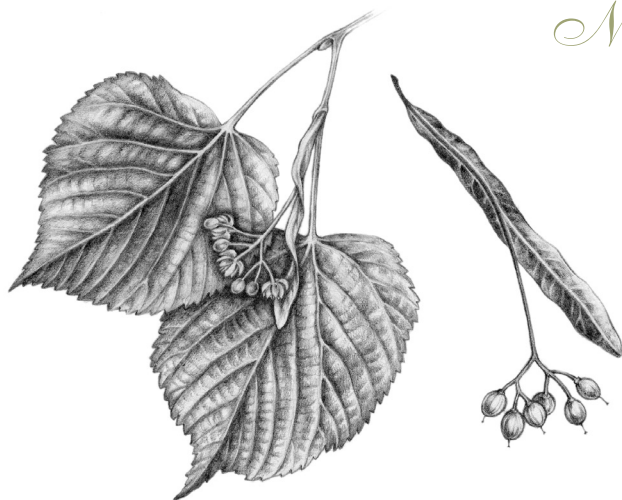
No. 3



London plane tree

PLATANUS X ACERIFOLIA

✿ In the courtyard north of Blair Hall stands the largest London plane tree in the area. In the 18th century, horticulturists crossed the American sycamore (one seed ball per stalk) with the Oriental plane tree (three balls per stalk) to produce the London plane tree (two balls per stalk). As the name implies, the tree is often planted in cities. Like the sycamore, it can be identified by its mottled bark and large, fuzzy leaves.



American basswood

TILIA AMERICANA

✿ The softest of American forest woods, this smooth-grained tree with abundant foliage provides dense shade to the inner archway between Blair and Joline halls. Its close European relative, the linden, has long been sought for its unique wood and sinewy inner bark, which was used by Native Americans as cordage. The fragrant flowers and oily nuts are borne on leaf-like bracts dangling alongside large, dark green leaves. Perfume oils extracted from the flowers and cooking oil extracted from the nuts have made this a very desirable tree throughout history. ✿ The age of this particular seven-story giant is unknown, but it was already a stately shade tree when the courtyard enclosed it at the beginning of the 19th century. Still, this specimen is a youngster compared to some lindens in Central Europe, which are more than 900 years old.

No. 5



Japanese pagoda tree

STYPHNOLOBIUM JAPONICUM

✿ This large, flowering ornamental tree, planted around the middle of the 20th century, stands near Foulke Hall on the former site of the Princeton rail station (which served students and townsfolk traveling to Princeton Junction). The tree is native to China, Japan, and Korea and is characterized by compound dark green leaves and tan bark. Many students enjoy its filtered shade but miss the yellowish pea-like summer blossoms that for centuries were used to make a yellow dye. The trees were often planted around Buddhist temples—hence the name pagoda tree. On campus the fleshy, and sometimes slippery, seedpods fall to the walks below, covering the flagstone throughout the winter months.

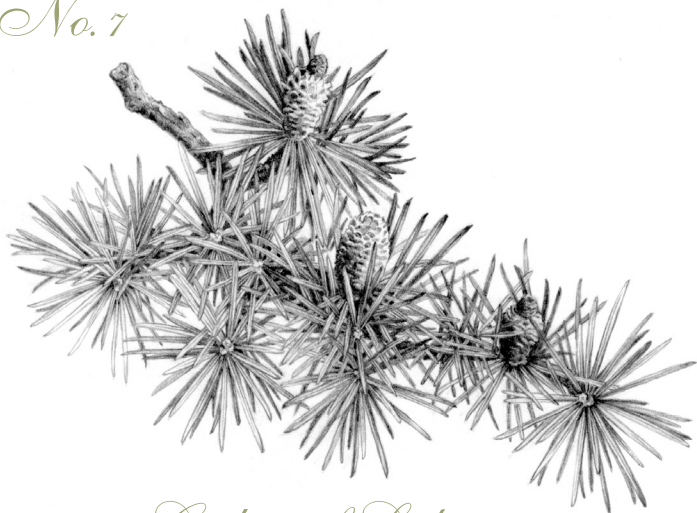


Kentucky coffee tree

GYMNOCLADUS DIOICUS

☛ One passes this inconspicuous southern native on the west side of 1901 Hall on the way to the Dinky Station. ☛ The beans from its large brown seedpods were roasted and used as a coffee substitute by early Kentucky settlers. Naturally caffeine-free, the beverage never gained popularity. Another reason for lack of commercial success may be the toxic nature of the inner pod pulp. As a member of a larger family of leguminous trees—trees that have beanpods—the Kentucky coffee tree has large compound leaves and grows in colonies in its native woodland habitat.

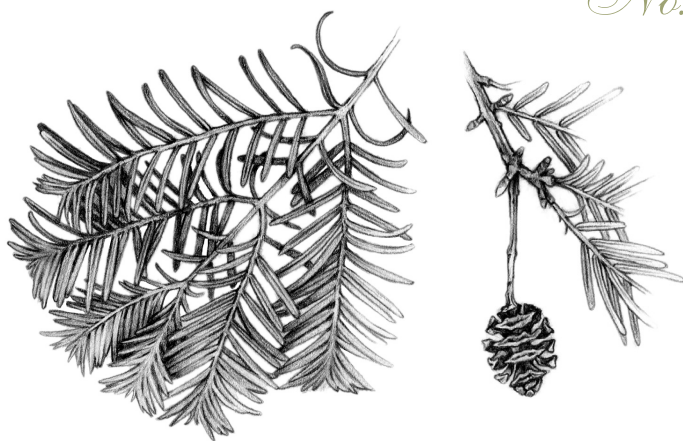
No. 7



Cedar of Lebanon

CEDRUS LIBANI

✿ This is the cedar of the Bible, and vast stands of such cedars once grew in the Near East before lumbering reduced their numbers. They may live 2,500 years and are unusual in their tortuous, twisting limbs, the lowest ones forced to the ground below. This cedar stands in a prominent location in Cuyler Courtyard and is a mere 60-plus years old.



Dawn redwood

METASEQUOIA GLYPTOSTROBOIDES

✿ To the left of the Prospect Garden driveway is a dawn redwood that towers over the rhododendrons. When planted in 1948, it was only six feet high, and its trunk was the size of a man's arm. More than 60 years later, it measures 115 feet in height and 13 feet in circumference.

✿ Before the dawn redwood was discovered in 1942, growing halfway up the Yangtse River, this species had been known only from fossil specimens and was thought to be extinct. ✿ The Prospect dawn redwood was nurtured from seeds made available to colleges and universities by the Arnold Arboretum in Cambridge, Massachusetts, when a special expedition brought the seeds back from China after World War II. The species is unusual in its needle-like leaves, which, unlike the evergreen's, turn a rusty red before falling from the tree. In the fall, the leaves and bark share a similar hue.



English yew

TAXUS BACCATA

✿ At Prospect House, one can see exotic tree species, some dating to the construction of the house in 1849 or even earlier. These species include a giant sequoia, a Spanish fir, a tigertail spruce, and a Himalayan pine, some of which have identifying plaques. ✿ Along the west side of the house stands an English yew, an evergreen long regarded as a “tree of life,” and sometimes planted in cemeteries in Europe. ✿ Yews have reportedly lived as long as 1,500 years. Like the holly, they are either male or female, and only the latter produce berries. The bark, leaves, and berries of the yew are poisonous, and ancient writers warned against sleeping under yew trees.

No. 10



Tulip poplar

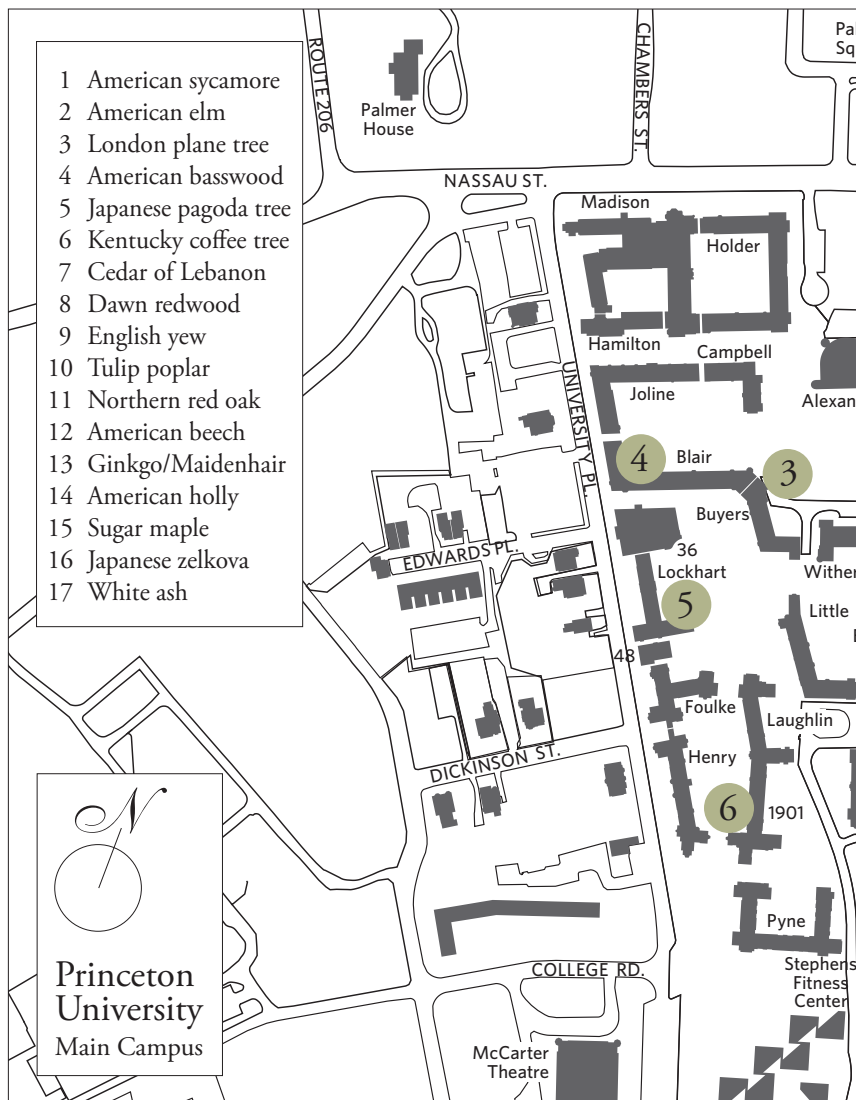
LIRIODENDRON TULIPIFERA

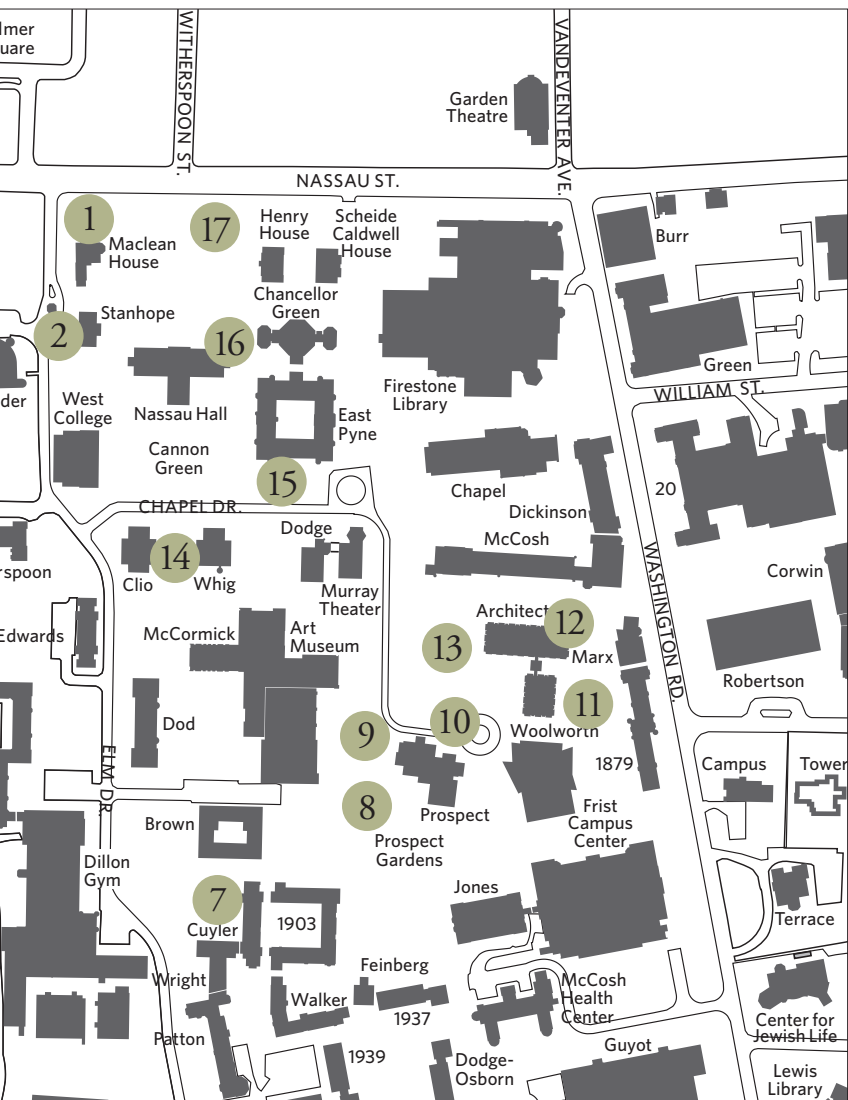
✿ The tulip poplar is best known for its showy greenish yellow flowers with orange centers. The flowers are borne high on the tree, and hence often go unnoticed until they fall to the ground. The giant 130-foot specimen on the front lawn of Prospect House—one of the tallest trees on the Princeton campus—is more than 160 years old and predates the house. The circumference is just over 16 feet.

- 1 American sycamore
- 2 American elm
- 3 London plane tree
- 4 American basswood
- 5 Japanese pagoda tree
- 6 Kentucky coffee tree
- 7 Cedar of Lebanon
- 8 Dawn redwood
- 9 English yew
- 10 Tulip poplar
- 11 Northern red oak
- 12 American beech
- 13 Ginkgo/Maidenhair
- 14 American holly
- 15 Sugar maple
- 16 Japanese zelkova
- 17 White ash

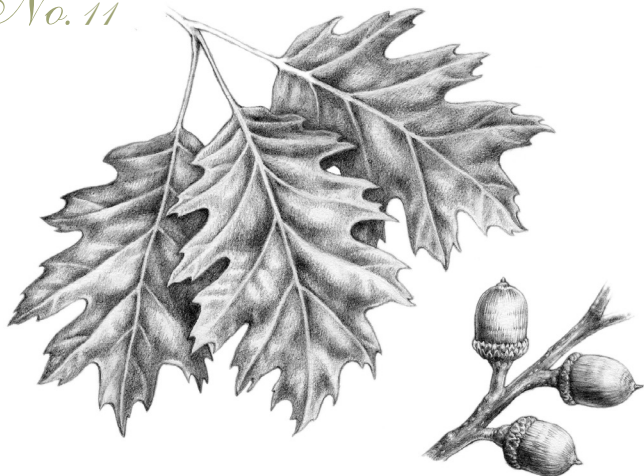


Princeton
University
Main Campus





No. 11



Northern red oak

QUERCUS BOREALIS

✿ The northern red oak on the west side of 1879 Hall is the largest of its kind on campus and is close to two centuries old. The northern red oak grows straight and tall and can live up to 500 years. The New Jersey state tree, it is a relative of the black and scarlet oaks, distinguished by the jagged tips of its large-lobed leaves.



American beech

FAGUS GRANDIFOLIA

✿ American beech trees were planted along McCosh Walk in 1964 when Dutch elm disease was destroying the existing American elms. Nineteenth-century beech trees still stand as the climax trees in the woodlands at the southern end of campus. They are best known for their massive gray trunks and edible beechnuts, which are gathered by the campus squirrel population. ✿ Some of the first pages of European literature were inscribed by lovestruck boys inside the outline of a heart on the smooth gray bark. And German brewmasters insist that the best aging processes for beer include beech chips. ✿ A very fine specimen beech stands in the Class of '70 Plaza at Marx Hall.

No. 13



Ginkgo or Maidenhair tree

GINKGO BILOBA

✿ This species, brought to the United States from Eastern China in the 1780s, is sometimes called the maidenhair tree, but it is most commonly known as the ginkgo. One of the oldest trees known to man, it has been growing on Earth for more than 150 million years, and was native to North America at one time. ✿ Two of these ancient trees stand along McCosh Walk adjacent to the Prospect House fence. Another budded variety of the ginkgo biloba species grows on the lawn in front of Little Hall, just south of Edwards Hall. This variety is called “Princeton Upright.”



American holly

ILEX OPACA

✿ Holly sprigs have been used to decorate American households from colonial times. Their naturally thorny and waxy green leaves act as a deterrent to those who wish to observe the trees too closely. The glossy, nonedible, red berries highlight these evergreens during the late fall and winter months. Hollies are especially noticeable after heavy rain or when covered with snow. ✿ Holly species have been used by landscape architects as hedges and to flank doorways and patios because they encourage one to stay “on the beaten path.” ✿ This native New Jersey evergreen has been known to live more than 300 years, and the specimens on campus continue to age gracefully. The best representatives of the species stand sentry between Whig and Clio halls.



Sugar maple

ACER SACCHARUM

🌿 On the south lawn of East Pyne Hall stands a grand sugar maple. Typically found in the mountainous regions of the Northeast, this tall forest species is tapped for its sugary sap, and its tight-grained wood is used for furniture. 🌿 The “Green Mountain” variety was most recently planted around the Princeton Stadium, and in 1990 it was planted along Goheen Walk in front of Schultz Laboratory. It provides roads and walkways with dense summer shade and lustrous golden-orange autumn foliage. Sugar maples are best differentiated from the Emerald Queen Norway maples lining the walk to the west by their sharply pointed vegetative buds.



Japanese zelkova

ZELKOVA SERRATA

✿ This species was once considered a suitable replacement for the doomed American elm. That it is a member of the elm family is obvious when viewing the large specimen on the northeast corner of Nassau Hall. Its vase-shaped form and slightly ascending branches make this species an excellent choice for street trees and walk areas. Many Asian plants were introduced into North America in the late 18th century and planted on university campuses to test their hardiness in this climate. These plants may have existed here prior to the advance of the glaciers that reduced native plant species. ✿ China's central mountain ranges stopped the advancing glaciers, saving many native plants; the most recent estimates are around 80,000 species in China, compared to North America's 30,000.

No. 17



White ash

FRAXINUS AMERICANA

✿ A few giant white ash trees still remain on Cannon Green and east of FitzRandolph Gate. These are among the tallest deciduous trees on campus and may well date from the 1825 replanting of the front lawn of Nassau Hall. At some point following 1800, the three parallel walks leading to the entrance of Nassau Hall were planted with Lombardy poplars, a stiff and spindly import. The poplars did not last long, however, and in the spring of 1825 the lawn was replanted with native species: elms, ashes, maples, and tulip poplars—in the random fashion of the Romantic School of landscape architecture. ✿ The huge white ashes lining Cannon Green were probably planted when Joseph Henry laid out the quadrangle in 1836. Notable for their six-foot-diameter trunks and diamond-shaped bark, they are still among the most stately trees on campus.

Conclusion

Other campus trees of interest include espaliered magnolias on the south wall of Pyne Hall; Chinese wingnut trees northwest of Baker Rink; hardy rubber trees east of MacMillan Building (pull the leaves apart and see the latex spread); a 50-plus-year-old bristlecone pine in Brown courtyard; Japanese stewartia (with its camellia-like flower) east of Green Hall; willow oak, black willow, white pine, hophornbeam, and downy shadblow in the Engineering Quadrangle courtyard; a large stand of dawn redwood at the southern end of Broadmead; and, down along Lake Carnegie, many yellow willow, pond cypress, and the largest cork tree in the state of New Jersey, south of Hibben Apartments. 🌿 In 1964, the University commissioned a survey to count its many trees. The survey recorded 1,917 trees on the central campus, representing 140 species, but because many had reached a state of tottering old age or advanced disease, it was recommended the University make a major replanting effort. 🌿 In 1966–70, some 200 trees were planted according to the plan. Around this time, a group of anonymous alumni set up a special landscape fund to help perpetuate the verdancy of Princeton's campus. Since 1990, the fund has helped pay for the installation and care of over 2,500 evergreen and deciduous trees on Princeton University soil. 🌿 Like the architecture it complements, Princeton's landscaping is eclectic—a seemingly casual mix of imported and native trees, hardwoods, and evergreens that, taken together, invariably make a strong impression. The trees are a living link between past and future: The two sycamores standing on the Maclean House lawn were vigorous saplings when Washington's troops scattered British regiments at the Battle of Princeton. 🌿 They may still be standing centuries from now.

Other Trees of Note on the Princeton University Campus

DECIDUOUS SPECIES:

Aesculus hippocastanum (American horse chestnut). Patton Hall.

Betula nigra (Heritage clump birch). Architecture School.

Castanea mollissima (Chinese chestnut). Buyers Hall.

Cercidiphyllum japonicum (Katsura tree). Chapel, Witherspoon Hall.

Cladrastis kentukea (American yellowwood). Firestone Plaza.

Cornus kousa (Japanese dogwood). Murray-Dodge Hall Courtyard.

Class of 1969.

Eucommia ulmoides (Hardy rubber tree). MacMillan Building.

Fagus sylvatica (European beech). Architecture School.

Fraxinus pennsylvanica (Green ash). Holder Courtyard.

Kalopanax pictus (Castor aralia). East Pyne Hall, Circle.

Koelreuteria paniculata (Golden rain tree). 1903 Hall Courtyard.

Liquidambar styraciflua (Sweet gum). Cuyler Hall.

Magnolia acuminata (Cucumber magnolia). West College.

Nyssa sylvatica (Tupelo or black gum). Madison Hall, 1915 Hall.

Quercus acutissima (Sawtooth oak). Dodge Hall along McCosh Walk.

Quercus bicolor (White oak). Dod Hall.

Quercus coccinea (Scarlet oak). University Store and Elm Drive.

Quercus phellos (Southern willow oak). Whitman College.

Taxodium ascendens (Pond cypress). Hibben Apartments, lakeside.

Ulmus parvifolia (Chinese elm). Peyton Hall parking lot.

Ulmus procera (English elm). 1879 Hall.

EVERGREEN SPECIES:

Cedrus deodara (Kashmir cedar). Chancellor Green.

Cryptomeria japonica (Japanese cedar). Weaver Track and Field.

Larix kaemferi (Golden larch) Butler Memorial Courtyard.

Magnolia grandiflora (Southern magnolia). Pyne Hall.

Sequoiadendron giganteum (Giant redwood). Prospect House.

Picea omorika (Serbian spruce). Prospect House.

Picea orientalis (Oriental spruce). Prospect House.

Picea polita (Tigertail spruce). Prospect House.

Pinus strobus (White pine). Jones Hall.

Tsuga canadensis (Eastern hemlock). Prospect House.

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In the Nation's Service and in the Service of All Nations

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10. Tulip poplar (*Liriodendron tulipifera*)
Prospect House



11. Northern red oak (*Quercus borealis*)
Marx-1879 Hall



12. American beech (*Fagus grandifolia*)
McCosh Walk

13. Maidenhair tree (*Ginkgo biloba*)
McCosh Walk



14. American holly (*Ilex opaca*)
Clio Hall

15. Sugar maple (*Acer saccharum*)
East Pyne



16. Japanese zelkova (*Zelkova serrata*)
Nassau Hall

17. White ash (*Fraxinus americana*)
FitzRandolph Gate



