

THE RYAN PINETUM

THE RYAN PINETUM
IS DEDICATED IN HONOR OF
NANCY P. AND RICHARD J. RYAN
FOR THEIR CONTINUING GENEROSITY
IN BEAUTIFYING THIS SPECIAL PLACE

APRIL 24, 1993

"TIME AND AGAIN WE'VE SOWN THE SEED...
AND TIME AND AGAIN OTHERS WILL GIVE..."

THIS PINETUM WAS ESTABLISHED
BY MEMBERS OF
THE CAMPUS CLUB IN 1988



H AVERFORD COLLEGE
A R B O R E T U M
A S S O C I A T I O N



WELCOME to The Ryan Pinetum

The area's largest and finest collection of mature conifers is one of our 216-acre Arboretum's special features. This guide explains the nature and history of the collection and highlights 23 trees that call the Ryan Pinetum home.

What Is a Pinetum?

A pinetum (pronounced py-NEE-dem) is a scientific collection of living conifers.

What Is a Conifer?

Conifers are gymnosperms. They are cone-bearing seed plants with vascular tissue. All living conifers are woody plants and most are trees. Conifers have needle-like or scale-like leaves that are typically (but not always) evergreen. Conifers are all in the scientific order Pinales. Examples include cedars, cypresses, firs, junipers, larches, pines, redwoods, spruces, and yews.

Tree Families

Botanists have classified conifers into seven families—five of which are represented in the Ryan Pinetum.

- Cephalotaxaceae: Plum yew (*Cephalotaxus*)
- Cupressaceae: Falsecypress (*Chamaecyparis*), Juniper (*Juniperus*), Arborvitae (*Thuja*), and Leyland cypress (*x Cupressocyparis*)
- Pinaceae: Fir (*Abies*), Cedar (*Cedrus*), Larch (*Larix*), Spruce (*Picea*), Pine (*Pinus*), Golden-larch (*Pseudolarix*), Douglas fir (*Pseudotsuga*) and Hemlock (*Tsuga*)
- Taxodiaceae: Japanese cedar (*Cryptomeria*), China-fir (*Cunninghamia*), Giant sequoia (*Sequoiadendron*), and Baldcypress (*Taxodium*)
- Taxaceae: Yew (*Taxus*)

Two other families flourish primarily in the southern hemisphere.

Touring the Ryan Pinetum

In the Ryan Pinetum, more than 300 trees are labeled with the common, scientific, and family names of each, as well as native habitat and identification codes. As you enter the Pinetum, numbered markers on posts will lead you to 15 areas of specific interest. The Pinetum is also home to most of Haverford's State Champion trees (see below), indicated by gold labels. Both the selected conifers with numbered posts and the State Champions are indicated on your map; descriptions follow in the brochure. The State Champions are listed in the approximate order you will encounter them as you follow the numbered tree tour.

State Champions

The Haverford College Arboretum boasts nine State Champions, eight of which may be found in or near the Ryan Pinetum. Champion trees are determined by a point system based on three measurements. One point is given for each inch of the tree's circumference measured at a height of 4½ feet, one point is given for each foot of the tree's height, and a quarter point is given for each foot of crown spread. The largest known measured specimen of its genus and species becomes State Champion. See a current list of champions and other large trees in Pennsylvania at pabigtrees.com.

PINE

Japanese white pine,
Pinus parviflora

FIR

Shensi fir, *Abies chensiensis*
Farges fir, *Abies fargesii*

SPRUCE

Sakhalin spruce, *Picea glehnii*
Sitka spruce, *Picea sitchensis*
Black spruce, *Picea mariana*
Siberian spruce, *Picea obovata*

FALSECYPRESS

Hinoki falsecypress,
Chamaecyparis obtusa

OAK

Willow oak, *Quercus phellos*

NOTE:
State Champions are
marked by gold-colored
labels in this guide and
on the trees.

THE RYAN PINETUM

at Haverford College



- | | |
|-----------------------------|---------------------------|
| 1. ATLAS CEDAR ▲ | 9. AMERICAN ARBORVITAE ▲ |
| 2. DAWN REDWOOD ▲ | 10. JAPANESE WHITE PINE ▲ |
| 3. JAPANESE CEDAR ▲ | 11. LOBLOLLY PINE ▲ |
| 4. CHINA-FIR ▲ | 12. ORIENTAL SPRUCE ▲ |
| 5. JAPANESE UMBRELLA PINE ▲ | 13. CAROLINA HEMLOCK ▲ |
| 6. BALDCYPRESS ▲ | 14. DOUGLAS FIR ▲ |
| 7. JAPANESE LARCH ▲ | 15. WHITE FIR ▲ |
| 8. HINOKI FALSECYPRESS ▲ | |

SELECT CONIFERS OF THE RYAN PINETUM



#1

ATLAS CEDAR ▲

CEDRUS ATLANTICA
PINE FAMILY, PINACEAE

Straggly when young, this tree matures into a picturesque and grand silhouette up to 60 feet tall and 40 feet wide. The 3-inch long cones are egg-shaped and sit upright on branches. Native to North Africa, it is a tree for large properties.



Summer/Winter

#2

DAWN REDWOOD ▲

METASEQUOIA GLYPTOSTROBOIDES
CYPRESS FAMILY, CUPRESSACEAE

This fast-growing, deciduous conifer was known only by fossil records before being discovered growing in China in 1941. It is handsome both as a single specimen and in groupings as you see here. The needles turn bronze in the fall, then drop off, only to emerge in new clusters of bright green the next spring. The shape stays pyramidal, and the bark becomes dark and fissured with age.



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#3

JAPANESE CEDAR ▲

CRYPTOMERIA JAPONICA
BALDCYPRESS FAMILY, TAXODIACEAE

The dense pyramidal form of the Japanese cedar can reach 80 feet tall but only 25 feet wide. Its fragrant wood is used in Japan for construction and furniture. The many cultivars available are superior to the straight species, which tends to retain dead foliage.





#4

CHINA-FIR ▲

CUNNINGHAMIA LANCEOLATA
'CHANSON'S GIFT'
CYPRESS FAMILY, CUPRESSACEAE

Despite its common name, the China-fir is related to the yew, not the fir. It has large, flat needles, pendulous branches, and cones that form at the branch tips. This cultivar is more compact and pyramidal in shape than the straight species.



Summer/Winter

#6

BALDCYPRESS ▲

TAXODIUM DISTICHUM
CYPRESS FAMILY, CUPRESSACEAE

This native tree is one of only a few deciduous conifers, shedding its needles each fall after they turn from green to bronze. The tall and pyramidal-shaped tree grows well in wet locations, where it can develop protuberances or “knees” around the tree base. The Baldcypress’ small, round cones are about one inch in diameter.



#5

JAPANESE UMBRELLA PINE ▲

SCIADOPITYS VERTICILLATA
PINE FAMILY, PINACEAE

The Japanese Umbrella pine forms a dark green, very dense pyramid and, unlike many conifers, retains its lower branches. Look directly at the end of a branch to see how the needles are arranged in whorls and resemble the spokes of an umbrella. A slow grower, the tree can reach 20–30 feet.



Summer/Winter

#7

JAPANESE LARCH ▲

LARIX KAEMPFERI
PINE FAMILY, PINACEAE

This native of Japan is considered the most beautiful and fastest growing of the larches. The pyramidal shape with slender, pendulous branchlets appears quite open when the needles turn golden and drop off in the fall. The three-quarter-inch cones have distinctive curled edges.





#8

HINOKI FALSECYPRESS ▲

CHAMAECYPARIS OBTUSA
CYPRESS FAMILY, CUPRESSACEAE

Native to Japan, this evergreen conifer grows to 50–75 feet tall with a pyramidal shape. The crushed foliage is aromatic and reddish brown bark will peel on mature trees.



See the State Champion specimen at the entrance to Barclay Hall that faces Duck Pond.



#10 | STATE CHAMPION

JAPANESE WHITE PINE ▲

PINUS PARVIFLORA
PINE FAMILY, PINACEAE

55' TALL, 72' SPREAD, AND A 98" CIRCUMFERENCE FOR 171 POINTS

A conical tree that will grow to 50–70 feet tall in its native habitat, it is usually seen in the 20–40 feet range in cultivation. Needles (to three inches long) in bundles of five are an attractive green, with each needle having an interior white stripe. Oval, reddish-brown cones to four inches long.

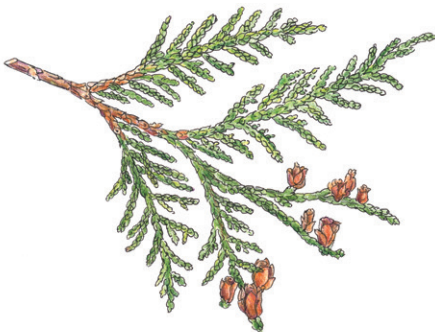


#9

AMERICAN ARBORVITAE ▲

THUJA OCCIDENTALIS
CYPRESS FAMILY, CUPRESSACEAE

This native evergreen is very common in the landscape because it is tough, grows in almost any soil, and is an excellent choice for foundation planting, groupings, and hedges. The scale-like foliage is rich green in summer, and yellowish green in winter. The tree is pyramidal in shape, growing to about 40 feet tall and 15 feet wide. Oval cones grow up to one-half inch in diameter.



#11

LOBLOLLY PINE ▲

PINUS TAEDA
PINE FAMILY, PINACEAE

A fast-growing southern pine, whatever this tree lacks in beauty, it makes up for in its value as a timber source and its ability to grow in wet and poor soils. The long needles grow in clusters of three, and the large cones have sharp spines on the tips. In its native habitat, the tree will grow up to 120 feet tall. This far north, however, our specimen is one of the largest in Pennsylvania.





#12

ORIENTAL SPRUCE ▲

PICEA ORIENTALIS
PINE FAMILY, PINACEAE

Spruces grow in the cooler regions of the northern hemisphere and can be identified by their dense, symmetrical form; pendulous branches and cones; and the woody peg at the base of each needle. The Oriental spruce has very short, dark green needles and takes on a compact and narrow shape of more than 60 feet tall.



#13

CAROLINA HEMLOCK ▲

TSUGA CAROLINIANA
PINE FAMILY, PINACEAE

This hemlock, native to Virginia and further south, is not as well known as our Eastern hemlock, *Tsuga canadensis*, but it will tolerate a wider range of growing conditions and pests. Its needles are darker and it grows more slowly, with a more compact silhouette.



#14

DOUGLAS FIR ▲

PSEUDOTSUGA MENZIESII
PINE FAMILY, PINACEAE

This tall, airy tree is native to the west coast where it can reach 300 feet tall. In our area, a height of 80 feet is more typical. The three inch cones have distinctive three-pronged bracts. The fir is named for the Scottish botanist David Douglas who introduced the seeds into cultivation in 1827, and for the naturalist Archibald Menzies who discovered the tree in 1793. The flat needles grow from one to one and one-half inches long.

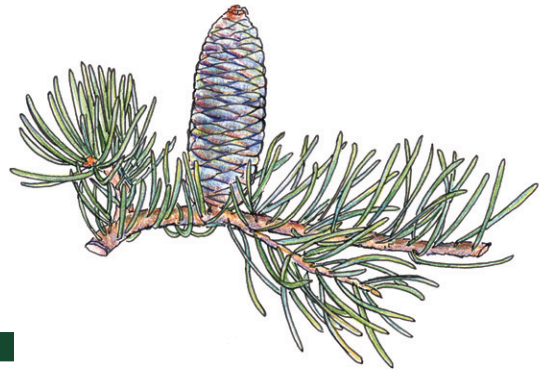


#15

WHITE FIR ▲

ABIES CONCOLOR
PINE FAMILY, PINACEAE

This is one of the few firs that thrive in our area, reaching 50 feet tall and 20 feet wide, because of its tolerance for heat and drought. In its native range of Colorado to Mexico, the tree can reach 160 feet tall. The flat and bluish needles curving upward along the branch make it easy to identify. The three- to four-inch long cones disintegrate on the tree and therefore are rarely seen.



STATE CHAMPIONS OF THE RYAN PINETUM



STATE CHAMPION

SHENSI FIR ▲

ABIES CHENSIENSIS

PINE FAMILY, PINACEAE

78' TALL, 78.5' SPREAD, AND A 115" CIRCUMFERENCE FOR 210 POINTS.

Native to China, this beauty is rarely seen in collections. It tends to have a straight trunk and short, massive primary branching. Preferring cold, moist forests, the Shensi fir can grow to more than 120 feet in its natural habitat.



STATE CHAMPION

SIBERIAN SPRUCE ▲

PICEA OBOVATA

PINE FAMILY, PINACEAE

60.5' TALL, 33' SPREAD, AND A 55" CIRCUMFERENCE FOR 124 POINTS.

This cold-hardy spruce inhabits areas from Russia to the Pacific coast. It is a medium-sized evergreen tree with a conical crown and drooping branchlets. The leaves subtending a bud are distinctively angled out at a greater angle, a characteristic shared by only two or three other spruce.



STATE CHAMPION

SITKA SPRUCE ▲

PICEA SITCHENSIS

PINE FAMILY, PINACEAE

46' TALL, 51' SPREAD, AND A 70" CIRCUMFERENCE FOR 129 POINTS

The Sitka spruce is a large, coniferous, evergreen tree growing to almost 328 feet tall. It is by far the largest species of spruce and the fifth-largest conifer in the world.



STATE CHAMPION

BLACK SPRUCE ▲

PICEA MARIANA

PINE FAMILY, PINACEAE

39' TALL, 39' SPREAD, AND A CIRCUMFERENCE OF 72" FOR 120 POINTS

Native to North America, the black spruce is a slow-growing, small, upright evergreen conifer in the pine family. It normally measures at 20–50 feet.





STATE CHAMPION

SAKHALIN SPRUCE ▲

PICEA GLEHNII
 PINE FAMILY, PINACEAE
 48' TALL, 44' SPREAD, AND 79" CIRCUMFERENCE FOR 138 POINTS.

The crown of the mature tree is pyramidal to conical, presenting long, narrow branches which spread short and horizontally. It can grow to more than 100 feet tall. The flaky, chocolate brown bark distinguishes it from all other species of spruce.



STATE CHAMPION

FARGES FIR ▲

ABIES FARGESII
 PINE FAMILY, PINACEAE
 65' TALL, 33' SPREAD, AND A CIRCUMFERENCE OF 58" FOR A TOTAL OF 131 POINTS.

Contrary to its name, this evergreen conifer is actually a member of the Pinaceae family. Native to central China, it will grow up to 130 feet in its natural habitat. Leaves are spirally arranged, crowded in several overlapping ranks of unequal length.



Summer/Winter



STATE CHAMPION

WILLOW OAK ●

QUERCUS PHELLOS
 FAGACEAE QUERCUS
 94' TALL, 129' SPREAD, AND A 210" CIRCUMFERENCE FOR A TOTAL OF 336 POINTS

Located on Featherbed Rd, near entrance to Pinetum

A medium to large deciduous oak tree of the red oak group, this tree is noted for its oak shape, willow-like leaves and relatively fast growth rate. Native to the southeastern U.S., it typically grows 40–75 feet tall with an oval to rounded crown. Its acorns can be an important source of food for wildlife.

History of the Ryan Pinetum

The Campus Club, the precursor to the Haverford College Arboretum Association, was established in 1901 by Haverford College alumni and faculty to preserve the beauty of the College's maturing campus. Beginning in 1928, members embarked on "a comprehensive planting of trees" and spent the next two decades transplanting hundreds of young conifers to an 18-acre site near the southwestern boundary of the College. The trees were arranged as a scientific collection, grouped by family and genus. Over the years, the trees have matured, and many more have been added. In the late 1980s, volunteers Nancy and Dick Ryan led a team to inventory and label the trees. In 1993, the collection was officially dedicated as the Ryan Pinetum.

OUR MISSION

The mission of the Haverford College Arboretum is to steward the College's historic tree collection while fostering a connection between our 216-acre campus and those who work, visit, study, and reside here. Maintaining the health, diversity, and history of the tree collection honors William Carvill's original 1834 landscape design, while our educational programming ensures continued engagement with this unique and treasured asset.

Join Us

Find out about upcoming events, support our renewal efforts, and become a member of the Arboretum at haverford.edu/arboretum or **(610) 896-1101**. Volunteers are always appreciated. Email us at arbor@haverford.edu for more information.



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