

BENEFITS OF TREES

Trees give our campus the feel of a woodland, a landscape where we can feel comfortable and think clearly. Trees produce beautiful flowers in the spring, comfortable shade in the summer, and vibrant foliage in the fall. They provide food and shelter to many species including butterflies, hawks, chipmunks, bees, songbirds and fungi. Campus trees bring to mind forests in our regional mountains and across our continent. At the global scale, forests have been absorbing and storing about 1/5 of our annual carbon emissions a significant ecosystem service that mitigates global climate change.

HOW TO LEARN FROM TREES

Use this brochure and map to guide you along the route. The tree walk includes two options a complete loop or an optional "ease-of-access" shortcut that avoids stairs.

At each tree, spend time observing the entire canopy, trunk, and ground beneath. Study the leaves, their shapes, sizes and textures. Look for flowers or cones and notice their intricate structures. You may see fruit, on the branches or the ground, in the form of a nut, husk, berry or seed-pod. Find buds at the end of twigs, tightly closed in winter, or bursting into leaves or flowers in the spring. Feel the texture of the bark and twigs and notice characteristic patterns, textures and scents. Listen for the sounds of insects. birds, or squirrels, and watch their behaviors.

The most memorable information about trees will come through focused observation, from the trees themselves. This brochure also includes several interesting facts about each tree. For a complete resource, written and organized by professional naturalists, carry a field guide such as Peterson's Guide to Eastern Trees.

The campus tree walk was planned by the SUNY New Paltz Tree Committee during 2018–2019. The route and map were initially designed by student members on the committee, Ryan Usai (Biology) and William Reilly (Geography). Funds for the project have been provided by the Office of Campus Sustainability.

TREE COMMITTEE MEMBERS (2018–2019)

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THE OFFICE OF CAMPUS SUSTAINABILITY

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HOW TO IDENTIFY TREES

Trees are organized into five categories based on contrasting leaf types:

NEEDLE-LIKE SCALE-LIKE



OPPOSITE,



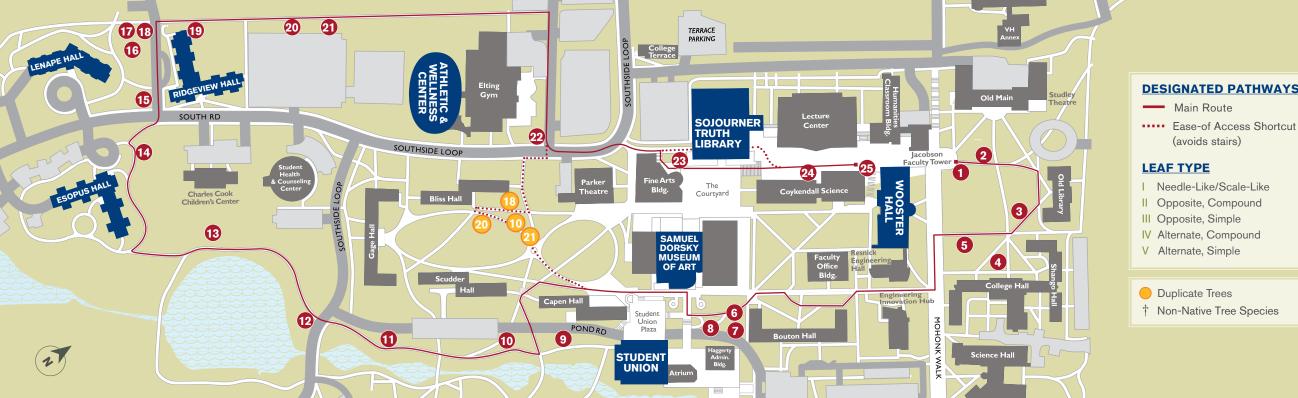


OPPOSITE, SIMPLE

III



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- **1 Red Maple** Acer rubrum (III): Large range across much of N. America. Best known for its brilliant deep scarlet foliage in autumn.
- **2 Sugar Maple** Acer saccharum (III): Primary maple syrup tree in the U.S. and Canada.
- **3 Tulip Tree** *Liriodendron tulipifera* (V): Large leaves that resemble the shape of a tulip flower.
- **4 Silver Maple** Acer saccharinum (III): Large buds are a springtime food source for squirrels. Bark eaten by beaver and deer.
- **5** Norway Maple[†] Acer platanoides (III): Introduced in the 1700s as a shade tree. Leaf petiole produces a milky fluid when broken.
- 6 Sour Gum Nyssa sylvatica (V): Cultivated as an ornamental, used as shade tree. Hard, cross-grained wood useful for woodworking.
- 7 Eastern Hemlock Tsuga canadensis (I): Grows well in shade, very long lived. Threatened by the woolly adelgid, a non-native sap-sucking insect.

- 8 Grey Birch Betula populifolia (V): Smooth, grevish-white bark. Often with multiple trunks.
- **9 Basswood** *Tilia americana* (V): Name comes from the inner fibrous bark, known as bast. used by Native Americans for cordage. Favorite nectar source for bees.
- **10 Sycamore** *Platanus* occidentalis (V): Distinctive mottled bark flakes off leaving irregular greenish white, gray and brown spots underneath.
- **11 American Beech** Fagus grandifolia (V): Smooth grey bark, resembling skin of an elephant. The nuts provide food for many animals.
- 12 Red Oak Quercus rubra (V): Fast growing, important for timber production in North America.
- **13 Black Walnut** Juglans nigra (IV): Rich dark brown colored wood. Bark used to create wood stains.
- **14 Shagbark Hickory** Carva ovata (IV): Distinctive shaggy, peeling bark. Edible, sweet-tasting nut. Wood used for smoking meat and making axe handles.

- **15 American Elm** Ulmus americana (V): Rare in the wild due to Dutch elm disease. Mature trees have trunks that divide into large limbs near base.
- **16 White Oak** Quercus alba (V): Name from the color of the finished wood. Wood commonly used in the construction of wine barrels.
- **17 Eastern Redcedar** Juniperus virginiana (I): Bark is reddish-brown, fibrous, and peels off in narrow strips. Needles flat and scale-like.
- **18 Sweet Cherry** *Prunus avium* (I): Bark is reddish-brown, fibrous, and peels off in narrow strips. Needles flat and scale-like.
- **19 Atlantic White-cedar** Chamaecyparis thyoides (I): Grows in forested wetlands. Wood is resistant to decay and is often used in the construction of houses.
- 20 White Pine Pinus strobus (I): Needles in bundles of five. The Tree of Peace for the Haudenosaunee Nation.

DESIGNATED PATHWAYS

- (avoids stairs)
- I Needle-Like/Scale-Like
- II Opposite, Compound
- IV Alternate, Compound
- V Alternate, Simple

Duplicate Trees † Non-Native Tree Species

- 21 Pin Oak Quercus palustris (V): Deeply lobed leaves. Common landscaping tree.
- 22 Chestnut Oak Quercus prinus (V): Grows in shallow, rocky soils. Broad, wavy-edged, leaves.
- **23 Paper Birch** Betula papyrifera (V): Also known as "white birch." Thin, white bark peels in paper-like layer. Winter food source for moose and deer.
- **24 Dawn Redwood**[†] *Metasequoia glyptostroboides* (I): Unusual deciduous needle tree. A "living fossil," related to species dominant on earth ~ 50 million years ago.
- **25 Witch-Hazel**[†] *Hamamelis virginiana* (V): Small tree or shrub. Name means "pliable" or "bendable." Flowers late in the year. Medicinal uses.

For instructions about an audio and text-based phone guide to this walk, and for an on-line interactive map of all the trees on campus, visit: www.newpaltz.edu/treemap