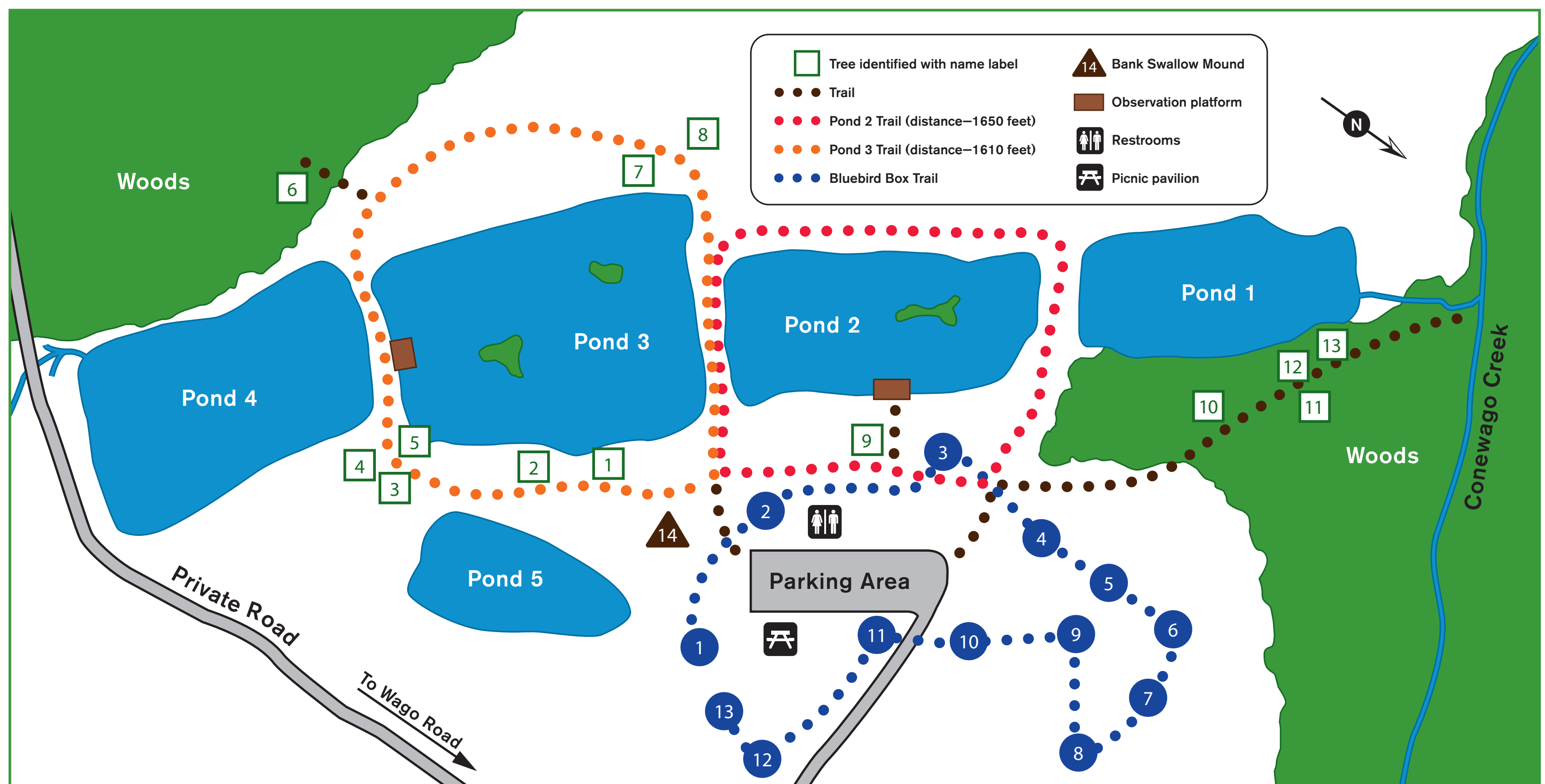


Brunner Island Wetlands Tree Identification

Brodie Wilkinson of Dillsburg, Pa., completed a Boy Scout Eagle project in 2007 at PPL's Brunner Island Environmental Preserve. As part of the project, he identified 14 trees and installed tree marker posts. He also provided a description of each of the trees.



Description of the trees

1. Sycamore (*Platanus occidentalis*): These large, massive trees are typically found on stream banks and flood plains and grow to a height of 70 to 125 feet or more. The leaves, light green on top and pale and woolly underneath, are usually 4 to 7 inches across and are generally wider than long. Sycamore trees are used for furniture, butcher blocks and flooring.

2. Silver maple (*Acer saccharinum*): Found in moist woods and on stream banks, the silver maple usually reaches a height of 50 to 60 feet and a diameter of 2.5 feet. Its leaves, about 5 inches wide, are opposite, simple and coarsely toothed with five deep lobes. They are bright green above, silvery-white beneath and green-yellow in autumn.

3. White ash (*Fraxinus americana*): A large tree with a massive trunk, the white ash has a dense, conical or rounded crown of foliage with whitish lower surfaces. Its maximum height is 80 feet, with a maximum diameter of 2 feet. This tree has beautiful purple flowers in the spring. Its leaves are dark green on top, and whitish and sometimes hairy underneath. In the fall, the leaves turn purple or yellow.

4. Black locust (*Robinia pseudoacacia*): The black locust is a medium-sized, spiny tree with a forking, often crooked and angled trunk. It has an irregular, open crown of upright branches. This tree reaches a height of 40 to 80 feet and a diameter of about 1 to 2 feet. Its leaves are usually hairy when young and droop and fold at night. The leaves are dark blue-green on top and pale with no hair underneath.

5. Pin oak (*Quercus palustris*): This tree has a straight trunk, spreading to horizontal branches, very slender pinlike twigs and a broadly conical crown. The pin oak usually reaches a height of 50 to 90 feet and a diameter of 1 to 2.5 feet. Its leaves grow to be about 3 to 5 inches long and 2 to 4 inches wide. The leaves are shiny dark green on top, and light green and slightly shiny with tufts of hairs in vein angles along the mid-vein underneath. The leaves turn either red or brown in the fall.

6. Beech tree (*Fagaceae*): The beech tree is usually a large tree and even a shrub. Its leaves are typically deciduous, but can be evergreen in warm climates. The flowers bloom in early spring before or at the same time as the leaves. The flowers are tiny and don't have any petals. The fruit, which is often edible, is either a nut with one seed or two to three nuts within a cup.

7. Yellow poplar (*Liriodendron tulipifera*): This is one of the tallest and most beautiful eastern hardwoods, with a long, straight trunk; a narrow crown that spreads with age; and large, showy flowers resembling tulips or lilies. The yellow poplar usually reaches a height of 80 to 120 feet and a diameter of 2 to 3 feet, but sometimes can grow much larger. Its hairless leaves are long and wide. The leaves are shiny dark green on top and paler underneath. The leaves turn yellow in autumn. The bark is dark gray, becoming thick and deeply furrowed.

8. Black cherry (*Prunus serotina*): An aromatic tree, the black cherry features a tall trunk; oblong crown; abundant small, white flowers; and small black cherries. Its maximum height is 80 feet and its maximum diameter is 2 feet. The leaves are 2 to 5 inches long and 1.25 to 2 inches wide. The bark is dark gray and smooth with horizontal lines, and becomes irregularly fissured and scaly. The flowers have five rounded white petals that mature in late spring. The fruit is a cherry that is slightly bitter and juicy with edible pulp.

9. Box elder (*Acer negundo*): A small to medium-sized tree, the box elder has a short trunk and a broad, rounded crown of light foliage. It usually reaches a height of 30 to 60 feet and a diameter of 2.5 feet. The leaves are 2 to 4 inches long and 1 to 1.5 inches wide. They are light green and mostly hairless on top, and paler and varying in hairiness beneath. They turn yellow or red in autumn. The bark is light gray-brown with many narrow ridges and fissures, becoming deeply furrowed. The flowers are small yellow-green calyx of five lobes or sepals.

10. Ailanthus (*Ailanthus altissima*): A hardy, introduced tree, it has a spreading, rounded, open crown of stout branches and coarse foliage. The ailanthus, also known as the tree of heaven, usually reaches a height of 50 to 80 feet and a diameter of 1 to 2 feet. The leaves are covered with fine hairs when young. The leaves are green on top and paler underneath. The bark is light brown and smooth, becoming rough and fissured. The flowers have yellow-green petals in terminally branched clusters. The fruit is red-green or red-brown, narrow, flat and winged, with one seed. The leaves mature in late summer and autumn.

11. Black walnut (*Juglans nigra*): It has an open, rounded crown of dark green, aromatic foliage. It usually reaches a height of 70 to 90 feet and a diameter of 2 to 4 feet. The leaves are either green or dark green, turning yellow in autumn. The bark is dark brown and deeply furrowed into scaly ridges. The flowers are small and green, and mature in early spring. The fruit is single or paired, and 1.5 to 2.5 inches in diameter. The fruit has a thick, green or brown husk with irregular ridges and a thick inner layer covering a sweet, edible seed.

12. Shagbark hickory (*Carya ovata*): It is a large tree with a tall trunk, narrow crown and distinctive rough, shaggy bark. It usually reaches a height of 70 to 100 feet and a diameter of 2.5 feet. The leaves are yellow-green on top and paler beneath with some hair when younger. The bark is light gray, separating into long, narrow, curved strips loosely attached at the middle. The flowers are tiny and green. The flowers mature before the leaves in early spring. The fruit is 1.25 to 2.5 inches long; nearly round; flattened at the tip; with a thick husk that becomes dark brown or black and splits to base.

13. Hackberry (*Celtis occidentalis*): A tree with a rounded crown of spreading or slightly drooping branches, it usually reaches a height of 50 to 90 feet and a diameter of 1.5 to 3 feet. The leaves are shiny green and smooth on top and paler and often hairy on the veins underneath. The leaves turn yellow in autumn. The bark is gray or light brown, and smooth with corky warts or ridges, becoming scaly. The fruit is orange-red to dark purple with one seed. The fruit is dry and sweet, and matures in autumn.

14. Bank Swallow Mound: PPL created this dirt mound as a nesting place for bank swallows which have previously nested in dirt mounds at Brunner Island construction areas. Bank swallows require a steep face dirt mound to build their round hole nests into the dirt. The steep face is needed so predators such as fox cannot reach into the nest and steal the eggs. The nesting area was created in the wetlands so visitors will be able to observe a bank swallow nesting area.