

Woodcock Creek Nature Center Pennsylvania Common Tree Walk



Thank you for visiting the Woodcock Creek Nature Center Common Tree Walk.

This walk was developed to showcase the diversity that exists in our native Pennsylvania forests. In following this brochure throughout the Nature Center grounds, you can see and learn about over 20 different species of trees and shrubs.

Each tree is numbered and corresponds to the numbers located on the map on the back of this brochure. The characteristics of each tree are then described in detail. There are also some general and fun facts listed about some of our trees. For instance, did you know that if you fell down and cut yourself on the trail, you could use the inner bark of the elm tree to alleviate the pain and ward off infection?

This is just one of the amazing things you will learn on your hike through the ever-changing landscape here within the grounds.

So relax and take a leisurely walk through our grounds. Be sure to stop into the Nature Center and see our interactive displays and nature craft projects! If you have more questions when you are done, call your local Service Forester (814) 763-2545 or the Crawford Conservation District (814) 763-5269.

1. American elm: *Ulmus americana*

Leaves: Alternate, simple, 5-7" long; usually smaller than those of Slippery elm, rough on both sides or soft hairy below; margin double serrate. The base of the leaf is lopsided and uneven.

Bark: Light in color, coarse with diamond shaped deep fissures running vertically along the tree.

Twigs: Stouter, grayish, and rather rough. Bud scales brown to almost black, rusty-haired.

Fruit: 3/4' long samara with a wing surrounding the seed, wing margin not hairy and slightly notched at the tip.

General: A large spreading crown made this tree a popular favorite for use as a street tree. Unfortunately, they are highly susceptible to Dutch elm disease which was introduced in the 1930's. There are still some large specimens to be seen, though.

2. Red maple: *Acer rubrum*

Leaves: Opposite, simple, with 3 shallow lobes, coarsely toothed, light green above, pale green to whitish beneath, turning brilliant red or orange in autumn.

Bark: Smooth and light gray on young trunks and branches, older trunks darker, shaggy and roughened with long, irregular peeling flakes. The bark is highly variable from tree to tree and can make identification by bark difficult.

Fruit: Winged samara usually less than 1 inch long, spreading at a narrow angle, red to brown, maturing in May or June. Most often referred to as 'helicopters'.

General: Also known as soft maple because its wood is not as hard as sugar maple. Deer and rabbits heavily browse young trees. The wood is used to make box veneer, interior finish, flooring, kitchenware, clothes hangers, and clothespins. Sap may also be drawn from red maple, though in smaller quantities and with lower sugar content than sugar maple.

3. Eastern Hemlock: *Tsuga canadensis*

Leaves: Evergreen needles occur singly, appearing 2-ranked on twigs, flattened, about 1/2" long, dark green and glossy above, light green with 2 white lines below.

Bark: Flaky on young trees, gray brown to red brown, thick and roughly grooved when older.

Fruit: Cones 3/4" long, egg-shaped, hanging singly from the tips of twigs. Under each scale are 2 small, winged seeds.

General: This is an important tree for construction timber and as a source of tannic acid for tanning leather. Found in cool, moist woods throughout the commonwealth, Eastern Hemlock is the official state tree of Pennsylvania.

4. White Oak: *Quercus alba*

Leaves: Alternate, simple, 4-6 inches long having 5-9 rounded lobes (usually 7); bright green above and paler green below. The leaf surfaces are smooth or glaucous. They turn brownish purple in autumn and often remain on the twig until spring.

Bark: Thick, light gray or whitish, broken into long, thick plates or scaly blocks; fire resistant.

Twigs: Moderately stout, at first bright green, later reddish and finally ashy gray.

Fruit: Acorn; ½ inch to 1 inch long, bowl shaped cap enclosing ¼ of the nut length; maturing in one season vs. two growing seasons for red oaks. The kernel of the nut is relatively sweet.

General: White oak is a long lived species (500-600 years). The pores in the wood of white oak are water tight and the wood was often used for making barrels. Because the acorns of the white oak are so sweet, it is a highly prized food source for wildlife. More than 180 species of birds and mammals consume white acorns.

5. Norway Spruce: *Picea abies*

Leaves: Evergreen needles occur singly, spirally arranged on twigs, sharp-pointed, four-sided, usually 3/4" long and dark green.

Bark: Relatively thin, reddish brown, and scaly. Becoming gray-brown but seldom furrowed on old trees.

Twigs: Bright, golden-brown. Buds egg-shaped, darker than twigs.

Fruit: A cylindrical cone, 4"-7" long, light brown; scales with finely toothed margin, broader than long.

General: A European species that has become a valuable naturalized member of our forests, and extensively planted as an ornamental. It is a large tree with a dense conical crown. The secondary branches on older trees tend to droop downwards.

6. Black cherry: *Prunus serotina*

Leaves: 2-5 inches long, usually with one or smaller glands at the base; margins with short in-curved teeth that distinguishes it from other cherries; the white and fragrant flowers bloom in May or June. The leaves are usually the

Length of the human finger.

Bark: Smooth, light gray with dark spots, when a tree is young. Older trees have blackish-purplish bark with large flakes. Has the look of 'burnt corn flakes'.

Twigs: New growth is greenish or bronze colored and the twigs are slender, stiff, and smooth. As winter closes in the twigs look red or dark brown. Has buds that are smooth, shiny, sharp-pointed, and reddish brown tinged with green.

Fruit: A prickly cherry turning purple-brown when close to ripening. Cherries from the tree are mouth-puckering sour. The fruit with sugar added it makes an excellent jelly. Abundant seed crops every third or fourth year. After falling, the seeds remain viable in the leaf litter for up to two years.

General: Many game birds, songbirds, mammals, including black bear eat the fruit and seeds. A valuable tree for the lumber and veneer industries. It is fast growing and likes open, sunny areas. The leaves and twigs, when crushed, give off an irritating and unpleasant smell.

7. American Hop-hornbeam: *Ostrya virginiana*

Leaves: 3- inches long, dark, dull, yellow-green above, paler beneath, thin in texture but remarkably firm and tough. Sharply doubly serrate, with larger teeth at the ends of major veins. Turning dull yellow in autumn.

Bark: Thin, grayish brown, with numberless fine, flaky, plate-like little scales, often with a discernible twist.

Twigs: Tough, slender, switch-like, at first light green becoming by midsummer smooth shiny, and light orange; dull dark brown after the first winter.

Fruit: Often very small nuts appearing as if enclosed in papery bags.

General: The hop hornbeam melts into the summer greenery in a way that makes it difficult to pick out and identify. Not that it lacks for distinctive features, it has two hop-like scales around the nut that make it look as though the fruit were enclosed in little papery bags, and the bark which somewhat resembles that of the Birches, but is more scurfy than papery. The wood is one of the hardest known, which explains why it sometimes carries the name of 'ironwood'.

8. Red pine: *Pinus resinosa*

Leaves: Needles are in bundles of two, 4-7 inches in length and are flexible. Red pine can be distinguished from other 2-needle pines by bending the needles into a loop. If the needle snaps it is not red pine, but one of the other 2-needle pines.

Bark: Thick and reddish, flaky; fire resistant; can be distinguished from Scots pine in that it keeps its dull gray-reddish color all the way to the top of the tree. Scots pine bark turns bright orange at the top.

Fruit: Seed cones are egg-shaped, 2 inches long and ripen in the autumn of their second season.

General: Prefers sandy, well-drained soils. This tree is often found in a plantation setting in Pennsylvania. It was a very popular tree for the CCC crews to reclaim abandoned farm and strip mined areas. It requires fire to establish itself.

9. Bitternut Hickory: *Carya cordiformis*

Leaves: Alternate, pinnately compound, with 7-9 slender leaflets. Leaflets are finely toothed, bright green above and paler underneath with fuzzy veins. Foliage is fragrant when crushed.

Bark: Thin, gray and smooth gradually separating into shallow interlacing ridges that are always tight, not shaggy.

Fruit: Nut enclosed in a husk; dropped in Sept.-Oct.; ¾ to 1 inch in length. Nut is smooth with a thin shell and a small VERY bitter kernel.

General: The wood of all the hickories is heavy, hard, and strong and used principally for tool handles. Hickory is a valuable fuel wood and is used to give a smoked flavor to meats. The nuts are much relished by man and wildlife. The fuel value of hickory is higher than that of any other American wood except locust. A cord of hickory wood is almost the equivalent in thermal units of a ton of anthracite coal.

10. Black locust: *Robinia pseudoacacia*

Leaves: Alternate, pinnately compound, 10-14 inches long, 7-21 leaflets. Leaflets are dull green above, paler green below, leaf margins are entire (smooth).

Bark: Thick, deeply furrowed into rounded, interlacing scaly ridges.

Twigs: Moderately stout, rigid, zigzag, usually armed with two spines at each bas or node.

Fruit: Legume (bean), matures in late autumn, pods are smooth, dark brown and flattened, 3-5 inches long.

General: A fast growing tree often planted for fence posts and erosion control. Wood is very dense and extremely hard. Nitrogen fixing bacteria occurring in the roots act to enrich the soil.

11. Cucumber Magnolia: *Magnolia acuminata*

Leaves: Alternate, simple, 4-12 inches long, smooth above, downy beneath; margins smooth or sometimes wavy. One of the largest leaves found in the forest.

Bark: Gray-brown to brown, developing long, narrow furrows and loose scaly ridges.

Twigs: Reddish brown, shiny, with peppery smell and taste. Buds covered with greenish white silky hairs; end buds 1/2-3/4 inches long. Leaf scars horseshoe shaped.

Fruit: When young, like a small green cucumber. When mature in autumn, 3-4" long, a cluster of small red pods, containing two scarlet seeds; often remains attached all winter. The flowers are large, greenish yellow, and appear from April to June.

General: Magnolia wood is used mainly for interior finish, furniture and containers. Nearly all species of mammal and songbirds seek out this highly prized fruit. The fruit has a high fat content and can sustain many species throughout the winter.

12. Sugar Maple: *Acer saccharum*

Leaves: Opposite, simple, 5 lobed with a few large teeth. Leaves are 4-5" wide, bright green above, pale green below. Leaves turn bright yellow, orange or red in autumn.

Bark: Gray brown, smooth on young trunks, older trunks fissured with long, irregular flakes.

Twigs: Reddish-brown to light brown. Buds brown and sharp pointed.

Fruit: Horseshoe-shaped samara with wings almost parallel, maturing in autumn sometimes persisting into winter.

General: Also called hard maple for its hard wood, this important timber tree is found on moist wooded slopes throughout Pennsylvania, typically reaching 60-80' high. Sugar maple is used for furniture, musical instruments and flooring and the sap is tapped for maple syrup production. Sugar maple is an excellent ornamental tree for large open areas.

13. Northern Red Oak: *Quercus rubra*

Leaves: Alternate, simple, 4-9 inches long, to 6 inches wide, with 7-11 bristle-tipped lobes. The sinuses between the lobes extend halfway to the mid-rib. Smooth, dull green above, paler with small tufts of reddish-brown hair in vein-axils beneath.

Bark: Smooth and greenish-brown or gray, maturing to dark gray or nearly black and is divided into rounded ridges and large, wide plates.

Twigs: Greenish brown to reddish brown, smooth when mature. Buds pointed, light brown, smooth.

Fruit: An acorn, $\frac{3}{4}$ " to 1 $\frac{1}{4}$ " long; the cup shallow, saucer shaped, covering 1/4 of the nut, cup-scales reddish-brown, narrow, tight, and sometimes fuzzy on the edges. The acorns need two growing-seasons to ripen and the kernel is bitter.

General: Deer, bear, and many other mammals and birds eat the acorns. It is often planted as a shade tree. The hard strong wood is used for furniture, flooring, millwork, railroad ties and veneer. The "red oak group" includes all oaks with bristle-tipped leaves and acorns ripening over two seasons. The red oaks can often 'hybridize' with others in the red oak group.

14. Black walnut: *Juglans nigra*

Leaves: Alternate, pinnately compound, 12-18 inches long, having 13-23 smaller leaflets. The terminal or end leaflet is often absent. Leaf stems are often fuzzy and the foliage is fragrant when crushed.

Bark: Thick, dark brown, deep furrows with intersecting, vertical ridges.

Twigs: Stout, brownish and hairy. The pith of the twigs is chambered and cream colored.

Fruit: A large nut 2-3 inches long with a smooth, non-sticky, green husk. Very aromatic, irregular grooved shell enclosing a sweet, edible kernel.

General: Black walnut wood is the most valuable of the Pennsylvania hardwoods. The nut is highly prized by humans and wildlife. The husk of the walnut can stain hands and clothes. The walnut tree is allelopathic. The roots produce a chemical substance (juglone) that inhibits other plants from growing near the tree.

15. Pin Oak: *Quercus palustris*

Leaves: Alternate, simple, 4-6 inches long, to 4 inches wide, with narrow, bristle-tipped lobes. The sinuses between the lobes are deep (over half-way to the midrib) and rounded at the base. The leaf surfaces are smooth, shining above and paler below with tufts of hairs in the veins.

Bark: Light gray-brown, smooth for many years, old trunks with shallow fissures and narrow flat ridges.

Twigs: Dark brown-red, shiny, slender, often thorn-like side shoots give this species its popular name. Buds smooth, reddish brown. Lower branches grow at a descending angle, middle branches are horizontal, the upper ascending.

Fruit: An acorn, round about 1/2 inch in diameter, light brown, often striped with dark lines. Acorn-cup thin, saucer-shaped, enclosing about 1/3 of the nut; cup scales tight, with a dark margin, ripens in two seasons.

General: Usually grows about 60 feet tall. Are often planted as a street tree because of its beauty and its ability to withstand poorer growing sites. The tree can often have many persistent dead branches that can devalue the tree for lumber purposes. The acorns are valuable wildlife food for wetland birds and mammals. The wood is not as valuable as other oaks because in drying, it tends to warp and split.

16. White pine: *Pinus strobus*

Leaves: It is the only tree pine in Pennsylvania that exhibits needles in bundles of five. Needles are 2-5 inches long, pale blue-green, flexible and soft.

Bark: Thin, smooth a greenish on young trees; becoming thick, dark gray, and deeply fissured into scaly ridges. Trees with wounds or branch scars often exude white pitch.

Fruit: Cones are 4-6 inches long at maturity and produce numerous seeds. White pine cones ripen in the autumn of their second year.

General: White pine was once one of the dominant components of the pre-settler forests in Pennsylvania. The wood is strong, light and easily worked or sawn. At one time the best trunks of the white pine were reserved for the masts of the Royal Navy sailing ships.

17. Flowering dogwood: *Cornus florida*

Leaves: Opposite leaf arrangement. Leaves are often clustered at the ends of the twig. Elliptical, 2 ½ -4 inches long, bright green above, pale green below. Foliage turns wine-colored red in autumn.

Bark: Often separating into small blocky scales resembling alligator-hide pattern.

Fruit: Drupe ripening in October, bright scarlet in clusters of 3-6; flesh is bitter.

Twig: The bud of the flowering dogwood is very distinctive and looks like a upright onion

General: A small tree (often < 20 feet) the dogwood is one of the first trees to flower in the spring. Its white flowers are a promise that spring is about to return. The fruit is eaten by many species of bird. The inner bark can be used to treat digestive disorders or to create a scarlet dye.

18. American sycamore: *Platanus occidentalis*

Leaves: Alternate, simple, 4-8 inches long, slightly wider. Somewhat lobed leaf with shallow lobes and barely toothed. Leaf is bright green above, paler green below with the leaf stem completely enclosing the bud.

Bark: Thin but forming thick plates on the lower trunk. Bark plates are often variable in color; ranging from pale white, green, tan, to darker brown all on the same tree.

Twigs: Moderately slender with a distinct zigzag pattern of growth.

General: Sycamore is a common tree along the stream banks of Pennsylvania. It is very fast growing and its spreading shallow root system keeps stream bank soil stabilized and in place. It is very susceptible to fire damage and often suffers damage from ice flows.

19. White Ash: *Fraxinus americana*

Leaves: A pinnately compound leaf about 10 inches long, with 5-9 leaflets (each 3-5 inches long), silvery beneath. Margins are entire or with a few rounded teeth toward the tip. Opposite leaf arrangement.

Bark: Gray-brown, evenly furrowed into diamond shaped areas separated by narrow interlacing ridges, slightly scaly on very old trees.

Twigs: Stout, usually smooth, gray-brown with a few pale lenticels and a white, waxy coating, which is called a bloom. Buds rusty to dark brown, blunt with adjoining leaf scars half-circular and notched at the top. Opposite branching arrangement.

Fruit: A winged seed, called a samara, usually 1-2 inches long and 1/4 inch wide, shaped like a canoe paddle with a rounded tip and hanging in clusters which remain attached for several months after ripening in autumn.

General: A large tree, often up to 80 ft. or more usually with a long straight trunk commonly found on rich soils. The wood is used for sporting goods (especially baseball bats), handles, and frames of tennis racquets, swing seats, hockey sticks, agricultural tools, and furniture. The juice from the leaf has been reported to relieve mosquito bite itching.

20. Black willow: *Salix nigra*

Leaves: Alternate, simple, 3-6 inches long; leaves 4-5 times as long as wide. Finely serrate, often curved at the tips, lustrous green above and paler green below.

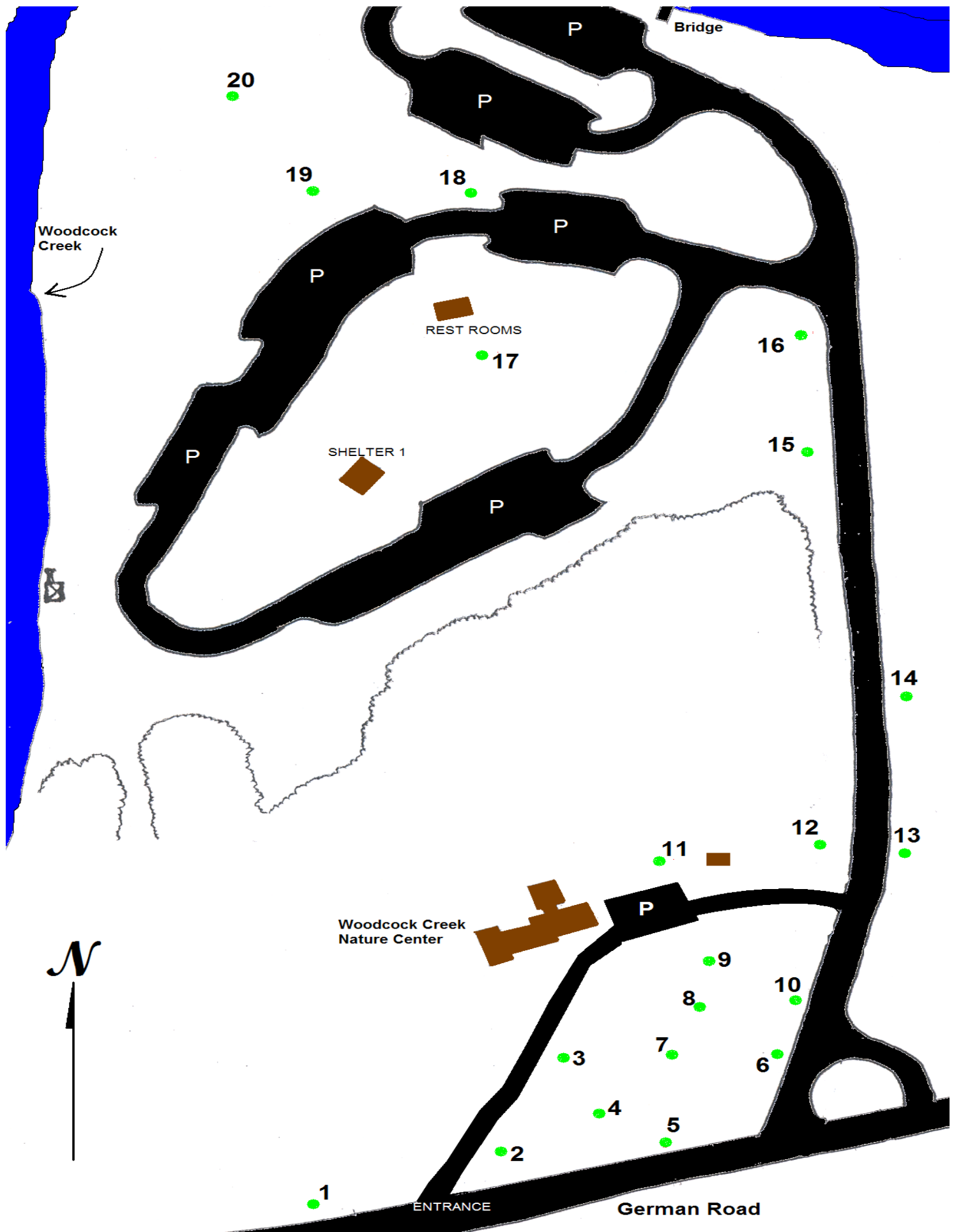
Bark: Thick, brown, nearly black on older trunks; deeply divided into flat-topped, connecting ridges.

Fruit: Capsule ripening in June containing many minute seeds with long, silky, white hairs. Seeds disseminate in June and germinate shortly thereafter.

General: This Black willow is currently the second largest in the state of Pennsylvania. It measures 323 inches in circumference, is 67 feet tall, and has an average of 76 feet of crown spread. It is truly an amazing tree.



PLEASE HELP US KEEP THE PARK CLEAN...PUT LITTER IN ITS PLACE



NOTES from your Hike: