

Prepared by
The Buck Hill Conservation Foundation
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Our mission is:
*To preserve and protect land in and around
Buck Hill Falls, to promote the health of the
local forest and watershed, and to foster
appreciation of the area's natural beauty.*

Your membership helps us fulfill our mission.

Please visit us at: buckhillconservation.org



The Jenkins Woods Nature Trail

An Interpretive Guide
2nd Edition

The trails in this guide are open to Buck Hill Falls residents and their guests. Members of the general public are welcome to visit Jenkins Woods only by appointment and if accompanied by a guide. To arrange a visit, please call the Buck Hill Falls Co. Monday – Friday 570-595-7511



The Jenkins Woods Nature Trail



Jenkins Woods

Jenkins Woods is an old growth forest and a remnant of the original primeval forest that once covered the Poconos.

During the 19th and 20th centuries, periods of clear-cutting leveled the surrounding forests. Hemlocks were cut in large numbers for their bark, a source of tannins to tan deer skins into leather. Fortunately, Jenkins Woods was spared, at first due to its difficult accessibility and then with protection provided by the Buck Hill Falls community and The Buck Hill Conservation Foundation.

Jenkins Woods is now a living museum, a relic of what once covered much of our state: hemlock, white pines, oaks, maples, tulip trees and other species – some that exceed 300 years in age and tower 100 or more feet above crystal-clear streams and ancient thickets of rhododendron.



The Jenkins Woods Nature Trail




Getting Started

This guide contains information corresponding to 30 green and white numbered stops within Jenkins Woods.

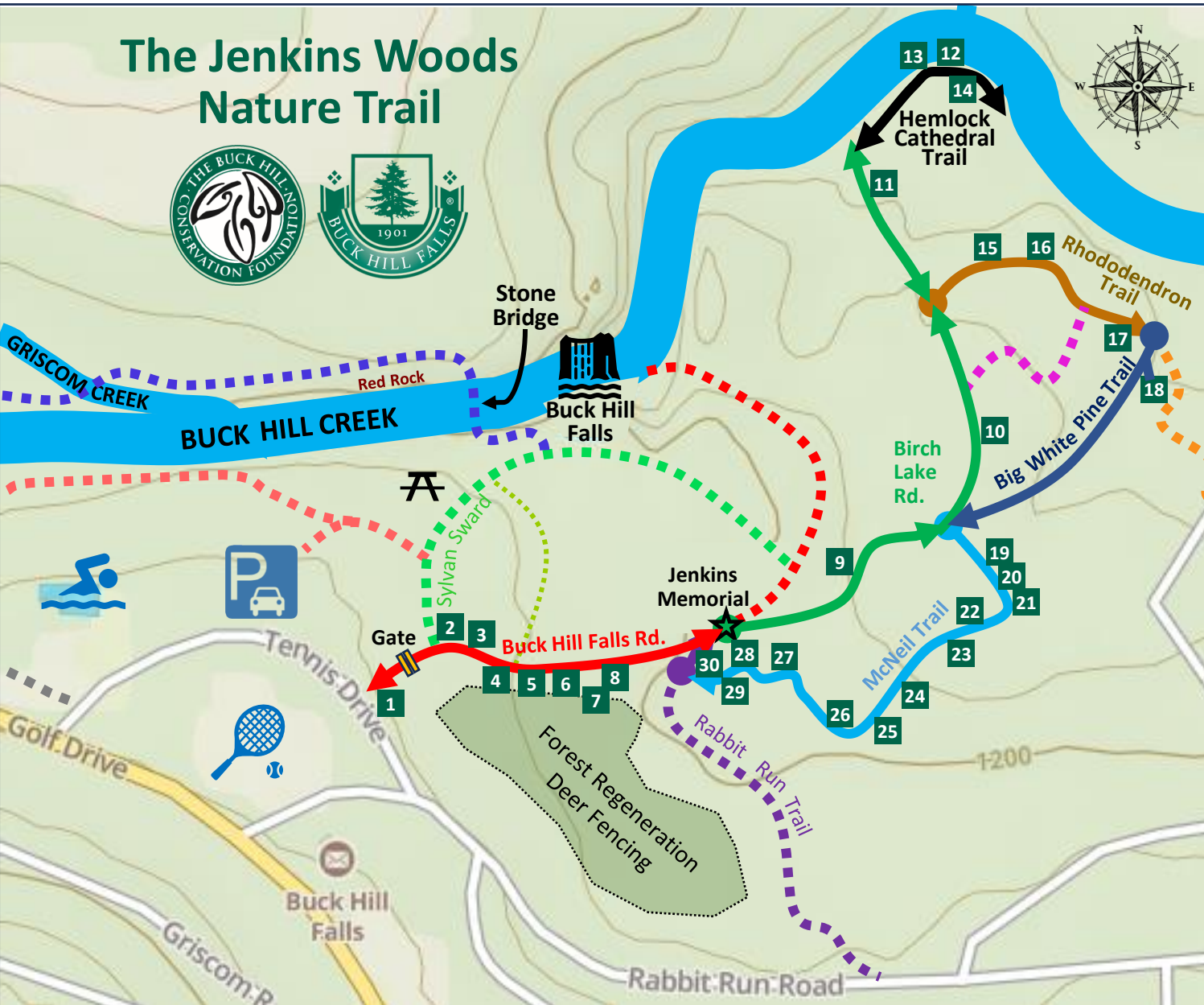
As shown in the centerfold map, the route begins at the main gate on Buck Hill Falls Rd. and brings the hiker into some of the most interesting parts of the forest, past the biggest trees of several species.

 *This symbol indicates directions to each stop.*

Including the back-and-forth walk to the Buck Hill pool parking lot, the distance is about 1½ miles and takes about 1½ hours to complete at a leisurely pace.

This guide is meant to inform the user of the various components in this natural community and, in doing so, to appreciate their beauty and the work The Buck Hill Conservation Foundation is doing to conserve this area (indicated by ) for future generations to enjoy.

The Jenkins Woods Nature Trail



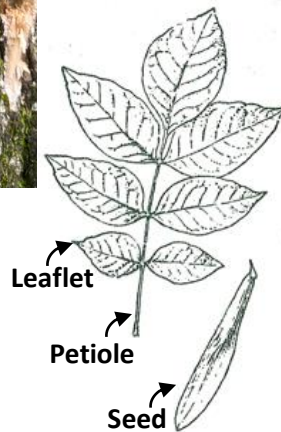
#	Stop Observation
1	White Ash
2	American Chestnut
3	Northern Red Oak
4	White Oak
5	Pignut Hickory
6	Hop Hornbeam
7	Forest Regeneration
8	Red Maple
9	Shadbush
10	Black Birch
11	Geology
12	Eastern Hemlock
13	Creek
14	Yellow Birch
15	Rhododendron
16	Chestnut Oak
17	Sassafras
18	Eastern White Pine
19	Black Tupelo
20	Basswood
21	Sugar Maple
22	Ferns
23	Nursery Log
24	Sapsucker Holes
25	Ash Borer
26	Witch Hazel
27	Wildflowers
28	Tulip Tree
29	Amphibians
30	American Beech

White Ash

Fraxinus americana



Compound Leaf - consists of several or many distinct parts (**leaflets**) joined to a single stem (**petiole**).




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The Jenkins Woods Nature Trail



White Ash

 Before you pass the Buck Hill Falls Rd. gate, look for the first stop on the trail on the right at the intersection with Tennis Drive.

The white ash tree, which supplies most of our nation's wooden baseball bats, is now endangered by the emerald ash borer, an Asian beetle that moved here from the Midwest.

Unlike most trees along our trail with simple leaves, ash has **compound leaves** composed of 5 to 11 (usually 7) **leaflets** along the **petiole**, or stem.

The bark forms an interesting pattern of diamond-shaped ridges and grooves. Notice the light tan patches caused by the emerald ash borer.



Looking up at this tree, you can see many dead branches caused by the borer. We have treated this tree, with hopes of trying to keep it alive.

American Chestnut

Castanea dentata



Stump sprout – a tree sprout that grows from a stump of a fallen tree, that will grow to be more like a branch than a full tree.




2

The Jenkins Woods Nature Trail




American Chestnut

 Proceed through the gate about 65 ft. to find our next small tree on the left side of the trail, just after the entrance to Sylvan Sward trail.

The American chestnut was the most common tree in PA and valued for both its wood and nuts. It now persists only as **stump sprouts** (like this one) due to a fungal bark disease, called chestnut blight, that destroyed 3 to 4 billion trees during the first half of the 20th century.

Chinese chestnut trees, which grow around our community, are resistant to the blight and breeding programs designed to bring this resistance into American chestnut are underway.

 This survivor is number 1 on our list of over 150 heritage trees in the Buck Hill watershed. Look for others, with a small numbered medallion, along our trail. A list with a map is in the appendix.

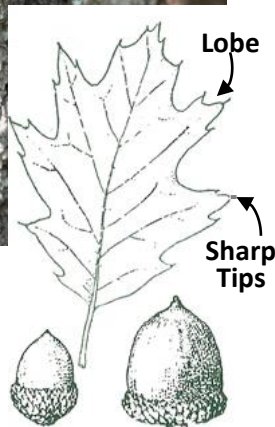
Northern Red Oak

Quercus rubra



Simple Leaf – has one undivided leaf blade on a single stem.

Lobes– projections of a leaf blade, with gaps between them.




3

The Jenkins Woods Nature Trail



Northern Red Oak

 About 50 ft. down Buck Hill Falls Rd., you'll find our next stop on the left.

This towering red oak is our 2nd heritage tree and is quite larger than our 1st, at over 85 feet tall and 2½ feet in diameter.

The official state tree of New Jersey, red oak (named for the color of its wood) is found farther north than our other oaks and is one of PA's most valuable lumber trees. The hard strong wood is often used for furniture and flooring.

Its **simple leaf** is recognized by its familiar sharply tipped **lobes** and "striped" trunk, with alternating dark furrows and smooth shiny ridges running vertically up the tree.

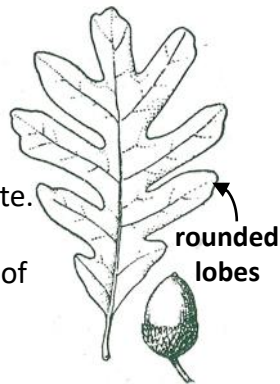
Red oak acorns take two years to mature and are eaten by deer, bear, and many other animals.

White Oak

Quercus alba



Tannic Acid – a weak acid with a bitter taste.
Deciduous - shedding leaves annually.
Marcescence – withering and persistence of leaves that normally are shed.



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The Jenkins Woods Nature Trail



White Oak

 *Our next stop is another 100 ft. on the right.*

This species can exceed 400 years in age (a few are said to be 600!) and the whitish wood is valuable for floors, furniture, and wine & whisky barrels.

The small acorns of the white oak ripen in one season, are low in **tannic acid**, and are an important wildlife food source sought by many birds and mammals.

White oak leaves have rounded lobes, as opposed to the sharp tips of red oak.

Oaks are one of the few **deciduous** trees that retain withered leaves throughout the winter (called **marcescence**). One possible advantage of marcescent leaves is that they may deter deer from feeding on their twigs and nutritious buds, as the dry leaves make them less palatable.

Pignut Hickory

Carya glabra



5

The Jenkins Woods Nature Trail



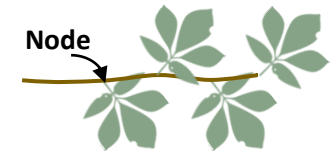
Pignut Hickory

 *Our next stop is another 100 ft. on the right.*

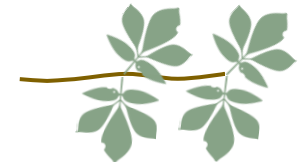
These trees, which can reach 90 feet tall, provide a heavy, hard, and strong wood with high shock resistance, and is principally used for tool handles.

It has **alternately** arranged compound leaves, typically with five lance-shaped leaflets.

Alternate leaf arrangement:
one leaf per **node** on twig,
and they alternate sides.



Opposite leaf arrangement:
two leaves per node on twig,
on opposite sides.



The nuts are pear shaped with a thin husk that partially splits when ripe. While they're too bitter for humans to enjoy, pigs like them and they're an important local food supply for squirrels and chipmunks.

Hop Hornbeam

Ostrya virginiana



Understory – a layer of vegetation, typically small trees and shrubs, below the forest canopy and above the ground cover.

Bract – a modified or specialized leaf.



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The Jenkins Woods Nature Trail



Hop Hornbeam

 *Our next stop is another 85 ft. on the right.*

This small **understory** tree can grow to 60 feet but is usually shorter, favoring dry rocky limestone slopes.

The simple, alternate leaves have sharp-toothed edges. They turn a dull yellow in autumn, with many remaining marcescent through winter.

The hard durable wood (sometimes called “iron wood”) is also used for tool handles, as well as fence posts and other items where strength is important.

Its fruit, resembling the hops used in brewing beer, is a cone-shaped cluster of papery **bracts**, each containing a small nutlet. It serves as a winter food for many wildlife species such as rabbits, squirrels, deer, pheasants, ruffed grouse, wild turkeys, and several songbirds.





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The Jenkins Woods Nature Trail



Forest Regeneration

 Walk to the sign on the deer fence behind the hop hornbeam tree for our next stop.

 Installed in 2014, this fence surrounds an 8-acre forest plot to keep out deer while allowing young tree saplings (including oak, hickory, tulip and beech) to reach maturity.

With the intense pressure of deer **browse** in the area, wildlife food trees have been unable to regenerate and produce the **mast** food resources needed by the woodland animals to help them survive the harsh winters.

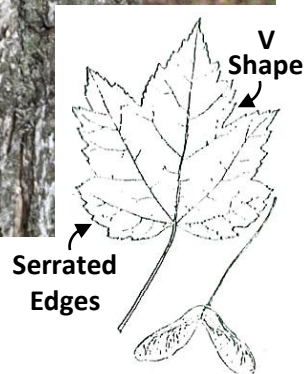
Notice how green the understory is on the other side of the fence. How many tree saplings can you find?

Browse – is a collective term for the leaves, twigs and buds of woody plants that deer and other animals like to eat; browse is also the verb describing this activity.

Mast – the fruit of trees and shrubs, such as acorns and other nuts.

Red Maple

Acer rubrum



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The Jenkins Woods Nature Trail



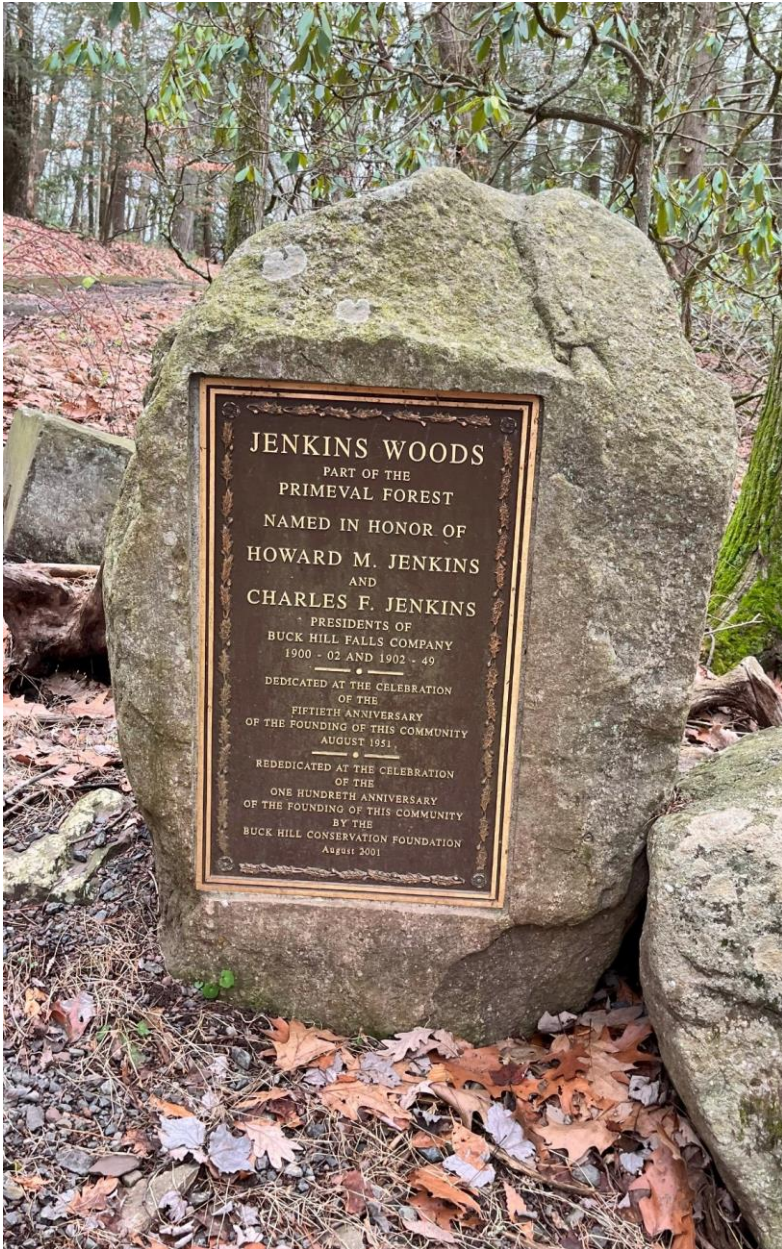
Red Maple

 *Head back to Buck Hill Falls Rd. and turn right to go about 100 ft. to our next tree on the right.*

Probably the most common tree in the Poconos, red (or swamp) maple also has one of the most extensive ranges of any eastern tree – from Canada to Florida.

While its name comes from its flaming fall foliage, it also describes its winter buds, spring flowers and seeds, and leaf stems. Its leaves are serrated along the edges with V-shaped valleys between the lobes.


Foresters and wildlife managers are troubled by red maple's recent tendency to displace oaks that are much more valuable to wildlife as food (acorns). There are several possible reasons for this: more prolific seed production, unpalatability to gypsy moth caterpillars, and their ability to outcompete oaks in the absence of forest fires.



The Jenkins Woods Nature Trail



Jenkins Memorial

 Proceed about 400 ft. down the hill on Buck Hill Falls Rd. to the large stone memorial.

This memorial stone honors the first presidents of the Buck Hill Falls Co., after whom these woods are named after.

Howard M. Jenkins, an author, journalist and newspaper publisher active in the Philadelphia Society of Friends, was the principal founder of the Buck Hill Falls community. In 1902, a year after opening of the original Buck Hill Inn, he died from a fall while crossing Buck Hill Creek above the upper falls.

His son Charles F. Jenkins, a president of Swarthmore College, then served as president of the Buck Hill Falls Co. for nearly half a century. A noted botanist and horticulturalist, he was instrumental in preserving the forest around us and in having the hemlock designated as our state tree.

Serviceberry

Amelanchier species




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The Jenkins Woods Nature Trail



Serviceberry

 *Bear right at the memorial stone and take Birch Lake Rd. down the hill for about 400 ft. to our next stop that is set in on the left.*

This tree is also called a shadbush because its abundant white apple-blossom-like flowers appear in the leafless woods in early spring, about the same time when shad fish are swimming upriver to spawn.

In the early summer, this tree bears juicy reddish-purple fruits that resemble small crabapples but are sweet and delicious. Black bears, squirrels, and many birds relish these berries.

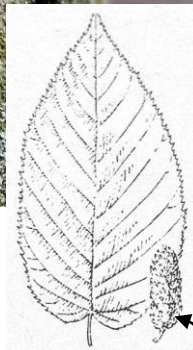
Note how this usually small smooth tree is reaching high for its share of sunlight in the forest canopy.

Black Birch

Betula lenta



Catkin – a compound bloom consisting of scaly bracts.




Catkin

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The Jenkins Woods Nature Trail



Black Birch

 Continue down Birch Lake Rd. for about 300 ft. to find our next tree on the right.

One of two birches common in this forest, this species has a bark that never becomes loose and papery, but rather cracks away from the trunk in thick plates.

The heavy, strong wood is used for furniture and boxes, and it makes excellent firewood.

Also called sweet birch, this is the species from which birch beer and the popular “oil of wintergreen” flavoring were once manufactured.

All birches produce tiny seeds (from conelike **catkins**) that serve as food for songbirds, such as ruffed grouse, especially in the winter. Deer and rabbits browse the twigs.




Gorge – a narrow valley with steep rocky walls.

Lithified – transformed into stone.

Strata – layers of rock or sediment characterized by certain properties or attributes that distinguish it from adjacent layers.



Geology

 *Keep going down Birch Lake Rd. for another 550 ft. and look for the **gorge** wall on the right as you approach Buck Hill Creek.*

The rocks exposed in Jenkins woods are sedimentary rocks, such as sandstone and shale, that are composed of fragments of other pre-existing rocks.

The pre-existing rocks were broken down by weathering and their debris was washed down by streams to the sea, where they were eventually deposited in layers on the sea bottom. This same process is going on today.

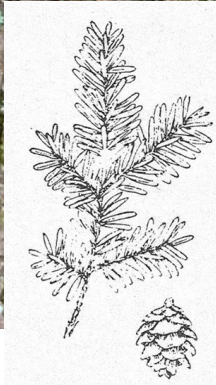
Over the course of millions of years, the sea bottom was elevated by shifts in the earth's crust and the layers of deposited material, now cemented and **lithified**, rose as the rocks you now can see. The layers of sediment are still clearly visible and are known as **strata**.

Eastern Hemlock

Tsuga canadensis



White secretion of woolly adelgid




Conifer – a tree that bears cones and needle-like or scale-like leaves that are typically evergreen.

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The Jenkins Woods Nature Trail



Eastern Hemlock

 Continue down the Birch Lake Rd. 100 ft. and make a right before you reach the creek down Hemlock Cathedral Trail. Our next stop is about 300 ft. on the left.

This area is named Hemlock Cathedral for the many old specimens found here.

Eastern hemlock, our official state tree, is a graceful northern **conifer** that can live more than 600 years and reach 150 feet in height. Several hemlocks here may be 350 to 450 years old and rise as high as 115 feet above the forest floor.



It is both ironic and tragic that these ancient hemlocks are endangered by a tiny, aphid-like insect from Asia called the woolly adelgid. We had introduced tiny adelgid-eating Asian ladybugs with some success and are now taking other measures, such as injections, to save the hemlocks of Jenkins Woods.



This area had once been dammed to serve as the first community swimming and boating area.



Rainbow Trout



Brook Trout



Black Stonefly Nymph



Knotweed


Riparian zone – the interface between land and the creek that provides an important habitat for a diversity of wildlife, helps maintain water quality and stabilizes the creek banks.

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The Jenkins Woods Nature Trail



Buck Hill Creek

 *Head down to the creek on the left and walk along the river stones and turn over a few!*

Our creek has been determined to be of “exceptional value” up to its confluence with Griscorn Creek, and “high quality” downstream, where you stand today.

These quality designations were determined, in part, by the quantity and diversity of aquatic insects living on the underside of the rocks in the stream, as many are sensitive to even the slightest level of pollution.

The insects are an important part of the ecosystem, as they consume algae and other plant life and then they become a food source for fish, particularly trout.



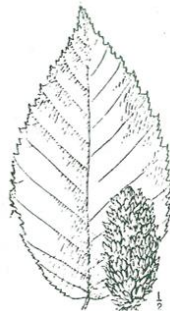
You may notice a few knotweed sprouts that we’ve been battling for years. Thickets will displace streamside vegetation, increasing bank erosion and lowering the quality of the **riparian zone** habitat for fish and wildlife.

Yellow Birch

Betula alleghaniensis



Nursery log – a fallen tree which, as it decays, helps the growth of seedlings by providing water, nutrients and disease protection.




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The Jenkins Woods Nature Trail



Yellow Birch

 Head back to Hemlock Cathedral Trail and make a left for about 30 ft. to find a pair of trees slightly off the trail to the right.

This more northern cousin to black birch (Stop 10) is an abundant tree in the cool, moist forests in our area.

Often recognized by its shiny yellowish-bronze bark that forms loose, papery curls on younger trees, this older pair has become reddish-brown with small ragged edge plates.

Yellow birch produces even-grained wood valued by furniture makers and leaves that turn a brilliant gold in the fall.

Notice how one of the trees is standing on two legs, showing that it had started growing atop a “nursery log” that had decomposed long ago (Stop 23).

Cortinarius Corrugatus



Hemlock Varnish Shelf



Amanita



Viscid Violet Cort



Brittlelegs




Ghost Plant



The Jenkins Woods Nature Trail



Mushrooms

 *It's time now to turn around and retrace your steps back to Birch Lake Rd. and go up the hill past the gorge you saw at Stop 11. Look for an arrow pointing left to enter Rhododendron Trail.*

As you head back, see if you can find some of the mushrooms that thrive in the woods, especially during moist summer months. They play an important role in the forest ecosystem, as they break down dead matter and return nutrients to the soil.

According to the PA Dept. of Agriculture, there are over 200,000 wild mushroom species in this region, of which about 200 are edible and only 25 worth eating. So, unless you've been trained, you should pick yours in the grocery store!

Along the way, you might also come across a ghost plant that appears to be a mushroom, but it's actually a flower that lives off underground brittlelegill mushroom networks.

Rhododendron

Rhododendron maximum



Evergreen – a plant which has foliage that remains green and functional through more than one growing season.



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The Jenkins Woods Nature Trail



Rhododendron

 *Make a left off Birch Lake Rd. at the arrow to enter Rhododendron Trail and go about 150 ft.*

You are about to descend into a tunnel of great, or rosebay, rhododendron.

This broad-leaf **evergreen** shrub, many of which are over 100 years old, produces clusters of beautiful white flowers in early July (a month after its upland relative, mountain laurel).

Dense growths of rhododendron in wetlands and along streams are called “hells” because they’re impossible to travel through, providing a perfect refuge for black bears, snowshoe hares, ruffed grouse, and other wildlife.

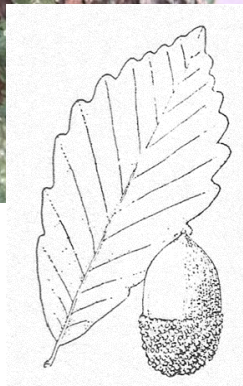
When it is very cold, or during summer droughts, rhododendron’s leaves curl up and gather to conserve moisture.

Chestnut Oak

Quercus montana



Germinate – begin to grow and put out shoots after a period of dormancy.




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The Jenkins Woods Nature Trail



Chestnut Oak

 *As you emerge from the rhododendron tunnel, you'll find a unique 4-trunk tree on the left.*

The chestnut oak derives its name from its leaf's similarity to that of the American chestnut (Stop 2).

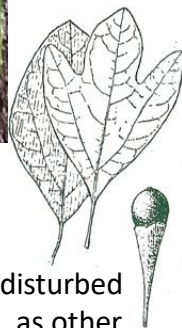
It possesses the roughest, thickest bark of any local tree and only produces colorful acorns every 4-7 years.

The acorns can **germinate** as soon as they hit the ground in the fall and, as they contain less tannic acid than those of red oak, are less bitter.

Gray squirrels either eat these acorns as soon as they find them or wisely scrape them to prevent germination before burying them for the winter.

Sassafras

Sassafras albidum



Climax species – plants that will remain essentially unchanged for as long as the site remains undisturbed.


Pioneer species – plants that grow quickly in disturbed sunny environments but have short life spans, as other plants eventually outcompete them for sunlight.

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The Jenkins Woods Nature Trail



Sassafras

 *Keep left to proceed down Rhododendron Trail for about 300 ft. to our next stop on the right.*

Most of the trees in Jenkins Woods are **climax species** that characterize an undisturbed forest for many years - but here is a rare **pioneer species** in this forest.

Sassafras are short-lived, sun-loving trees that pioneer clearings but then fail to produce viable seedlings in the shade of the newly regenerating forest. Climax trees such as beech, maple, and hemlock replace pioneers by forming a self-perpetuating forest – a process called plant succession.

With uniquely variable foliage – “mittens” with 1, 2 or 3 fingers – this tree probably began growing here after a big tree fell and created a gap in the forest’s canopy.

The aromatic root of sassafras was once the source of root beer and medicinal tea.

Eastern White Pine

Pinus strobus




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The Jenkins Woods Nature Trail



Eastern White Pine

 Take Rhododendron Trail about 35 ft. to the end and turn right at the arrow onto Big White Pine Trail. Go about another 35 ft. to find our next stop just off the trail to the left.

This enormous heritage tree is over 130 feet tall and is nearly 4 feet in diameter – so go ahead, give it a hug!

Many majestic pines like this once grew throughout the northeast but were cut by the early settlers for ships, masts, and cabins. A few approached 200 feet in height.

You can distinguish it from other pines by its group of 5 needles per cluster.

Many birds and rodents feed on the seed and soft needles, while the inner bark is a porcupine's preferred winter food, and deer browse on its twigs.


White Tail Deer



The Jenkins Woods Nature Trail



Wildlife - Mammals

 Head up Big Pine trail for about 500 ft., through another rhododendron tunnel, to the end where it intersects with Birch Lake Rd. and the McNeil Trail.

Along the way, keep your eye out for any mammal movement in the Rabbit Run gorge on the left.

Of all the mammals in the woods, you're most likely to find white tail deer, whose numbers have increased without many natural predators.

Most of the rest of the mammals here are nocturnal, but a careful observer may detect signs of black bear, red fox, gray fox, coyote, bobcat, porcupine, red-backed vole, short-tailed shrew, and even the rare fisher, when their footprints are left in mud or snow.

An online guide to animal tracking can be found here: <https://naturetracking.com/>

ANIMAL TRACKS

F= Front foot H= Hind foot T= Tail drag may be present

Walkers		Track Pattern												
F		3"		4.5"		2.5"		2.25"		1.5-5"		2"		1.75"
H		3.5"		4.5"		2.25"		2"		1.5-5"		2"		1.75"
	Deer		Elk		Coyote		Red Fox		Domestic Dog		Bobcat		House Cat	
Pacers		Track Pattern												
							or							
F		2.5"		2"		1.25"		1.75"		3.75"		3"		1.5"
H		4"		2"		2"		2.75"		8"		6"		2.5"
	Raccoon		Striped Skunk		Opossum(T)		Porcupine(T)		Black Bear		Beaver (T)		Muskrat (T)	
Gallopers		Track Pattern				Track Pattern								
F		1/4"		1/2"		1.5"		1"		3"		1"		1.25"
H		1/2"		1"		2.5"		3.5"		4.5"		1"		1.5"
	Mouse (T)		Chipmunk		Gray Squirrel		Rabbit		Otter (T)		Weasel		Mink	

Source: [PA DCNR - Bureau of State Parks](https://www.padcnr.com/)



The Jenkins Woods Nature Trail



Wildlife - Birds



American Crow. 20 in. Caw (Fish Crow says car); all year.



Killdeer. 10 in. Two breast bands; kill-dee; open country; Mar.-Oct.



Red-eyed Vireo. 6 in. No wing-bars; sings all day amid branches; May-Oct.



Great Horned Owl. 22 in. Hoo, hoo-hoo, hoo, hoo; deep woods; all year.



Wood Pewee. 6 in. Wing bars; pee-a-wee; dry woods; May-Sept.



Black-capped Chickadee. 5 in. Mixed flocks; frequent feeders; all year.



Scarlet Tanager. 7 in. Male scarlet; black; like hoarse Robin; May-Sept.



Black-throated Blue Warbler. 5 in. Little white spot on wing; May-Sept.



Ruffed Grouse. 18 in. Drums with wings; woods and brush; game; all year.



Veery. 7 in. Tawny; downward vee-ur vee-ur, veeer, veeer; moist woods; May-Oct.



Belted Kingfisher. 12 in. "Rattles"; by water; nests in burrow; all year.



Towhee. 8 in. Drink your tea; scratches in dry leaves; brush; Apr.-Oct.



Downy Woodpecker. 7 in. Only male has red; nests in tree holes; all year.




Wood Thrush. 8 in. Brown above, head rusty; beautiful song; May-Oct.



Ruby-throated Hummingbird. 3 1/2 in. Sugar water attracts them; May-Sept.



Slate-colored Junco, Snowbird. 6 in. Breeds this altitude; winters.

 At the intersection with Birch Lake Rd., follow the left arrow down the McNeil Trail.

If you walk silently to our next stop, you might notice birds by their voices.

Breeding species that migrate south in the fall include the scarlet tanager, ruby-throated hummingbird, wood thrush, blue-headed vireo, wood pewee, and various species of colorful warblers.

Permanent residents, like downy, hairy, and pileated woodpeckers, wild turkey, barred and great horned owls, raven, black-capped chickadee, Carolina wren, and white-breasted nuthatch, are joined in winter by Canadian visitors – such as the slate-colored junco.

More than 125 species have been documented in this area by Frank May for The Buck Hill Conservation Foundation.

Black Tupelo

Nyssa sylvatica



Stamen – the male reproductive part of a flower, consisting of a long slender stalk and the pollen-producing anther.

Pistil – the female reproductive part of a flower, that receives pollen to produce seeds in an ovary.




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The Jenkins Woods Nature Trail



Black Tupelo

 *Head down the McNeil Trail for about 240 ft. to our next stop on the left.*

Also called sourgum, this slow-growing tree is more common in swamps and its flowers are the source of a popular honey.

Black tupelo has female and male flowers on separate trees, but either of these trees can have a few “perfect” flowers, with both **stamens** that produce pollen and **pistils** to receive it.

The black tupelo’s small, dark, berry-like fruits are eaten by thrushes, tanagers, waxwings, and bears, and its shiny simple leaves are the first to turn fiery red in late summer.

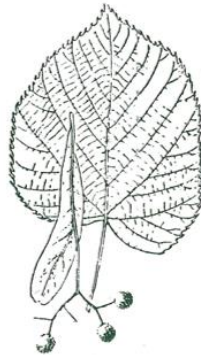
The bark on old trees, such as this one, is thick and fissured into quadrangular blocks forming an “alligator bark”.

Basswood

Tilia americana



Hardwood trees – typically are deciduous, produce flowers, and are slow growing.
Northern hardwood forest - is dominated by sugar maple, growing with beech, basswood, yellow birch and white ash.




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The Jenkins Woods Nature Trail



Basswood

 *Cross a small stream to our next tree about 40 ft. on the left, that is leaning over the trail and supported by a neighboring maple.*

A characteristic member of the **northern hardwood forest** of New England, the basswood (or linden) tree has large, simple, asymmetrical, heart-shaped leaves with saw-toothed edges.

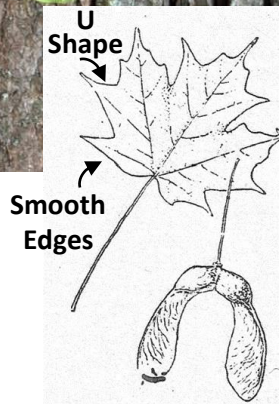
It's a relatively soft hardwood that is valued by carvers and is used for venetian blinds. It was used by Native Americans for facemasks and its inner bark fibers was used for making rope.

Like black tupelo, basswood produces flowers that yield a popular honey.

Its small nut-like seeds are suspended like parachutes from helicopter-like blades that spin through the air away from the parent tree.

Sugar Maple

Acer saccharum




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The Jenkins Woods Nature Trail



Sugar Maple

 You'll find our next tree just 20 ft. ahead on the right.

Famous for both its sweet sap used to make syrup and its brilliant fall foliage, sugar maple is a dominant member of the northern hardwood forest.

However, acid rain is interfering with its ability to survive past the seedling stage by decreasing calcium and magnesium in the soils of New England. While the sedimentary rocks in our area have some ability to neutralize acid rain, the abundant deer population consumes most sugar maple seedlings. Birds and rodents enjoy its seeds.

While the leaves may appear like red maple (Stop 8), its leaves have green stems and smooth edges with rounded U-shaped valleys between the lobes.

Ferns




Sori (*SORE-eye*) – brownish or yellowish clusters of spore-producing structures usually located on the lower surface of fern fronds – as shown above on right.

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The Jenkins Woods Nature Trail



Ferns

 Follow the trail another 80 ft. to cross another small stream before making a right turn before a larger stream, then go 50 ft. to our next stop.

Ferns (and mushrooms) reproduce via microscopic spores instead of seeds. Ferns release their spores from visible **sori** found on the underside their leaves, called fronds.

Although most of the 25-30 fern species in the area wither away before winter, there are a few evergreen species that pop through the snow - such as the lacy spinulose wood fern that may be found growing here in the moist, shaded soil.



In the warmer months, you'll also find hay-scented fern that smells like hay, especially when it withers away in Fall. As it can form dense colonies in the understory (deer generally don't eat it), it can shade out tree seedlings and hamper forest regeneration if left unchecked.

Nursery Log




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The Jenkins Woods Nature Trail



Nursery Log

 Continue walking along the stream for about 65 ft. until you find the large dead log that fell over the stream many years ago.

The saplings growing on top of and extracting nutrients from the dead log are yellow birch. This is the typical method to germinate in the forest for this species; hemlock and black birch may do so as well.

As we saw at Stop 14, the dead log will eventually decompose, leaving these trees standing in mid-air on the stilt-like roots that once hugged the log.

Sapsucker Holes




Sapsucker image from the Freshwater and Marine Image Bank at the University of Washington

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The Jenkins Woods Nature Trail



Sapsucker Holes

 Continuing along the trail for another 130 ft. you will find our next stop on the left. Walk around the tree to inspect its bark.

This large tulip tree (the subject of Stop 28) is pitted with horizontal rows of holes drilled by our most migratory woodpecker – the yellow-bellied sapsucker. While you can find their rows of holes on many trees, they particularly like the sweet sap of maple and birch trees.

After pecking these “wells,” the sapsucker not only drinks the sap but eats any insects that are attracted to the sweet fluid.

Other birds, such as hummingbirds and warblers, which are incapable of drilling into trees, also visit the wells for food.

Sapsuckers nest in tree cavities while in the Poconos but migrate to the southern states in the fall.




Larvae – the active immature form of insects, especially those that differ greatly from the adult.

Insect photo: Howard Russell, Michigan State University, Bugwood.org
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Emerald Ash Borer

 *In another 165 ft., you'll find a dead tree on the left with a section of bark removed.*

Here is another white ash tree, like the one we first saw at Stop 1, but this set of twins was destroyed by the emerald ash borer. A portion of the bark has been cut away to reveal its damage.

The females lay eggs in bark crevices and **larvae** feed underneath the bark, creating zig-zag galleries until it emerges as an adult in 1-2 years. This feeding cuts off the flow of water and nutrients to the upper canopy of the tree.

A native of Asia, it has killed millions of ash trees since it was discovered in 2002. Woodpeckers are the only native predators that feed extensively on the borer. Unfortunately, insecticides are not very effective on trees already severely infested.

Witch Hazel

Hamamelis virginiana




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The Jenkins Woods Nature Trail



Witch Hazel

 Ascend the hill for about 75 ft. to where the trail turns right. Follow the arrow down the hill for about 50 ft. to our next stop on the right.

This is an unusually tall example of a multi-stemmed shrub that typically sprawls out horizontally about 10 feet above the forest floor.

Its yellow, spidery flowers of October and November are among the final blossoms of the year. Not until the following fall do they mature into nut-like capsules that split open and eject seeds several feet into the woods.

Witch hazel sap is used to make a lotion that relieves minor skin irritation. Forked witch hazel branches were used for divining rods, that were believed to help locate ground water by dipping downward.

Wildflowers

Water Forget-me-not and Nipplewort




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The Jenkins Woods Nature Trail



Wildflowers

 Continue following the trail for about 200 ft. around the bend to the left until you emerge into an open wetland area. While the trail has boards you can walk on over the wetter spots, the trail before and between the boards could be marshy, so tread lightly.

Look for blue forget-me-nots and other wildflowers in this wet open area during the warmer months.

Other species such as Canada mayflower and partridge berry can also be found in Jenkins Woods, but the diversity of woodland wildflowers here is much less than in the lower, more fertile floodplain of the Delaware River where the numbers of deer are lower.

Tulip Tree

Liriodendron tulipifera




28

The Jenkins Woods Nature Trail



Tulip Tree

 *Towards the end of the board walk, you'll find a towering tree standing over 125 ft. tall.*

The tallest deciduous tree of the eastern hardwoods, a tulip tree may approach 200 feet in height and 8 to 10 feet in diameter in fertile coves of the southern Appalachians. Though it's also called yellow poplar, it's a magnolia and not a poplar (as aspens and cottonwoods are).

It grows rapidly (see if you can find them growing in the reforestation area) and is an important timber and shade tree.

Its large, yellowish-orange, tulip-like flowers of late spring ripen into upright clusters of seeds eaten by squirrels, rabbits, and birds such as cardinals.

The tree's simple, large, rectangular leaf, with 2 lobes on top and 2 to 4 lobes on the sides, turns gold in October.

Red-spotted Newt



Wood Frog




Seepages have ground water emerging over a large area, with no well-defined origin, as opposed to springs that usually emerge from a well-defined point.

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The Jenkins Woods Nature Trail



Amphibians

 Follow the trail the left for about 50 ft. to find our next stop near a small stream.

The small streams, springs, and **seepages** in Jenkins Woods are inhabited by many species of salamanders, including:

- the brown-gray northern dusky salamander and its smaller yellowish-brown relative, the mountain dusky salamander
- the slender yellowish two-lined salamander
- the large colorful northern red salamander
- the very large pinkish spring salamander
- the red backed salamander
- the slimy salamander.

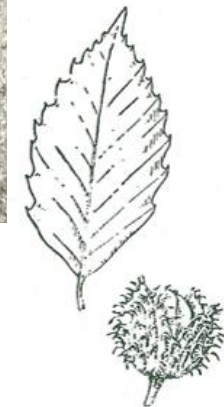
In addition, red-spotted newts (also called red efts), wood frogs, spring peepers, and American toads can be found in the moist forest in the warmer months.

An online guide to the many reptiles and amphibians of PA can be found here:

<https://www.paherps.com/>

American Beech

Fagus grandifolia



Root-suckers – sprouts that emerge from the roots of a tree, often caused by stress, that can compete with the tree for nutrients.

Forest stand – an area that contains trees that have a common set of characteristics.

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The Jenkins Woods Nature Trail



American Beech

 *Our last stop is just 20 ft. on the right.*

One of the most shade-tolerant of deciduous trees, the beech also have marcescent leaves that hang on through winter. Every few years, its abundant crop of small triangular nuts is devoured by bears, rodents, deer, turkeys, grouse, blue jays, and songbirds.

While healthy beech are recognized by their smooth silvery-gray bark, many (like this one) suffer from a bark disease that deforms the tree. In distress, the tree sprouts numerous **root-suckers** (called beech-brush) that crowd out the forest floor, drastically slowing natural **stand** regeneration and reducing the overall diversity of tree species. To make matters worse for this species, a new leaf disease has been detected that causes them to prematurely wither and fall.



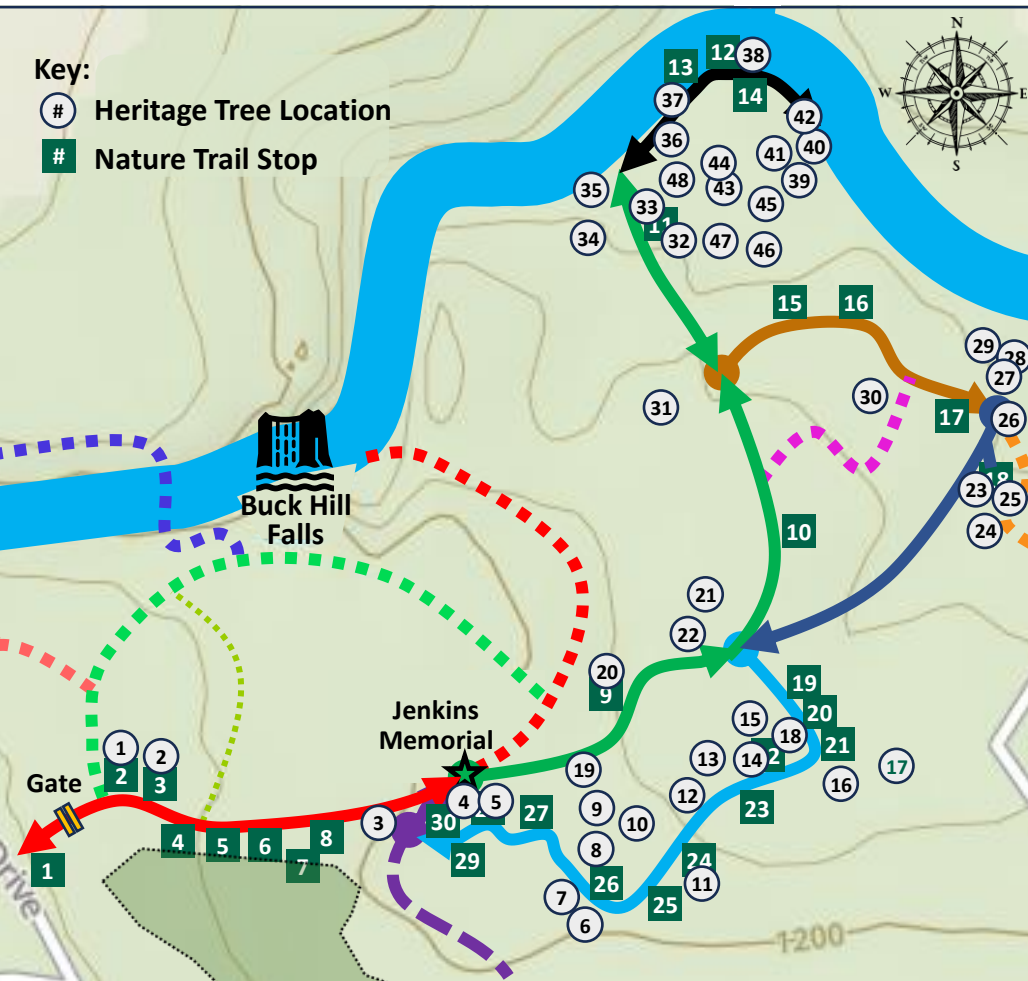
The Foundation's Dynamic Forest Restoration program is currently addressing beech-brush, and we'll test methods to protect healthier beech from leaf disease.



Appendix – Heritage Trees

with approximate locations

#	Type	D"	H'	Notes
1	Chestnut	2.3	15	stop 2
2	Red Oak	28.0	84	stop 3
3	Red Oak	30.7	108	
4	Hemlock	37.0	130	
5	Tulip Tree	29.8	125	stop 28
6	Hemlock	27.8	112	
7	Hemlock	35.5	108	dead ☹️
8	Hemlock	34.6	105	dead ☹️
9	Tulip Tree	30.4	106	
10	Red Oak	31.5	>100	
11	Tulip Tree	33.1	114	stop 24
12	Tulip Tree	30.5	110	
13	White Pine	36.1	106	
14	White Pine	32.5	108	
15	Tulip Tree	31.5	103	
16	Tulip Tree	35.0	118	
17	Tulip Tree	37.5	102	
18	Tulip Tree	27.5	123	hollow
19	Red Oak	33.0	96	
20	Serviceberry	10.5	60	stop 9
21	White Pine	33.0	101	
22	White Pine	28.9	101	
23	White Pine	45.6	134	stop 18
24	White Pine	33.0	125	



#	Type	D"	H'	Notes
25	Hemlock	34.8	106	
26	Chestnut Oak	25.5	88	
27	Tulip Tree	25.6	116	
28	White Pine	43.5	127	
29	Hemlock	28.8	120	
30	Hemlock	30.2	93	
31	White Pine	30.5	90	
32	Hemlock	29.0	105	
33	White Pine	39.3	109	
34	White Pine	42.2	130	
35	Hemlock	29.8	107	
36	Hemlock	34.5	108	
37	Hemlock	34.2	103	dead ☹️
38	Hemlock	30.5	103	stop 12
39	Hemlock	29.7	115	
40	White Pine	34.5	117	
41	Hemlock	36.4	110	
42	Hemlock	32.5	90	
43	Tulip Tree	29.5	101	
44	Tulip Tree	36.0	105	
45	Red Oak	35.6	88	
46	Hemlock	30.5	114	
47	White Pine	32.4	116	
48	White Pine	40.3	118	

A **heritage tree** has been designated by our community to have “exceptional historical, cultural, and/or aesthetic value because of its age, size, character, species, or an association with a special person or event.”

There are currently more than 150 heritage trees, with the first 48 located along our trail. Can you find them all?

Tree Diameter (D, inches) and Height (H, feet) shown in tables were measured in 2020.