TIPS FOR YOUR VISIT

Grounds open dawn to dusk every day of the year. A suggested donation is encouraged.

Mountain Top Arboretum is a public garden, which differs from a public park. Following Arboretum rules will help us maintain the plant collections and natural areas so that all may enjoy this very special place.

- Please smell and touch the plants. Do not pull, climb or damage them.
- Please walk on the grass and paths, not in the garden beds.
- Stay on the trails in the wilder areas.
- Carry In/Carry Out. Please take your trash with you.
- No food, picnicking, barbecuing, smoking (e-cigarettes included), sports activities, swimming or use of drones.
- Allow others to enjoy nature's sounds. Please use headphones.
- Dogs are not permitted in the West Meadow or the Woodland Walk.
- Dogs are permitted on-leash on Maude Adams Road and the East Meadow, and off-leash on Spruce Glen trails.
- Do not feed or approach animals.
- Please only park in designated areas and respect our neighbors' privacy.
- Pushing strollers and wheelchairs is difficult on most of the paths due to the soft surfaces.
- Restrooms are located in the Education Center.
- Bird watching, painting, drawing and photography are encouraged!



Native Tree Trail





JOIN Us! Your membership ensures that the Arboretum advances its mission to promote horticulture, education and environmental stewardship in the Northern Catskills.

Join online at mtarboretum.org/support

Mountain Top Arboretum

Elevation 2400 feet 4 Maude Adams Road, Tannersville, NY 518-589-3903 | mtarboretum.org

NATIVE TREE TRAIL



Mountain Top Arboretum

NATIVE TREE TRAIL AT MOUNTAIN TOP ARBORETUM

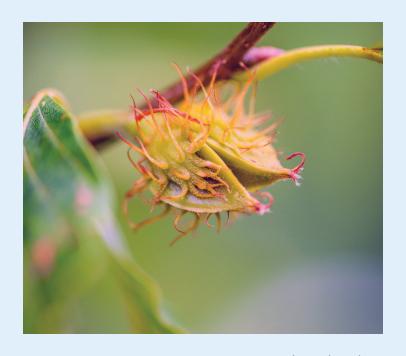


Our Native Tree Trail winds through the Arboretum's diverse plantings and natural habitats to highlight many different tree species native to the Catskills.



How to use the native tree map and guide

- The Trail begins at the Education Center's Sassafras tree (SA) and ends in Spruce Glen at the Spruce Nursery (SN); however it's easy to pick up anywhere along the Trail.
- Teach tree's common name initials are noted on this brochure's map and on a blue medallion at the tree.
- **¬** Scientific names are *italicized*.
- "EC" denotes a tree species used in the timber frame Education Center. (A key to the timber frame trees is available in the Education Center.)
- Learn more about our native trees at mtarboretum.org/native-trees





Deepening your experience with the trees you visit

- Look at the tree both from far away and very close up. Can you see the top of the tree? What is the overall shape of the tree?
- Touch the bark. Is it smooth or rough? How does it compare to bark on nearby trees? Is there evidence of insects? Moss or lichen?
- Standing close to the tree, look straight up at its canopy. How do the branches emerge from the trunk? How are the branches reaching toward the sun?
- Texamine a leaf or needle in detail. Is the tree in flower or fruit? If it's winter, what do the buds look like?
- **▼** Consider: Is this tree like others nearby or does it stand alone as a solitary species?

American Beech: trunks and canopy (upper right); and fruit (lower left)

What do we mean by Native? We like to use the definition of "native" that Rick Darke and Doug Tallamy use in their book *The Living Landscape*— "a plant or animal that has evolved in a given place over a period of time sufficient to develop complex and essential relationships with the physical environment and other organisms in a given ecological community." In determining the area of the Catskills, we employ the "Blue Line," a boundary line established by New York State in 1904 to create Catskill Park. This is obviously an arbitrary line, but nonetheless helps us focus on trees that naturally occur in this region.

Written by Alexandra Prince • Drawings by Thorneater • Photography by Rob Cardillo • Map and brochure design by Toelke Associates Mapping by Catskill Forest Association • Thank you to Michael Kudish for reviewing tree descriptions.

AMERICAN BASSWOOD (AB)

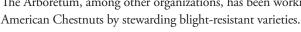
Tilia americana — EC

The fragrant yellow pendulous flowers of American Basswood, or American Linden, are a favorite of honeybees and the product, sold as linden honey, is in turn a favorite of many humans. In the Catskills, Basswoods are sparsely distributed through rich moist forests. Its large heart-shaped leaves greatly distinguish this tree from its neighbors.

AMERICAN CHESTNUT (AC)

Castanea dentata

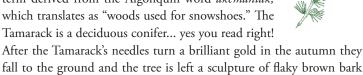
A century ago the country's population of American Chestnut was devastated by a blight fungus, and the decline of this magnificent tree remains one of the greatest ecological disasters in forest history. In this stand there are four American Chestnuts. Each one was planted to demonstrate this now rare species that once dominated Eastern forests. Notice the shining silver-gray bark and the long beautiful toothed leaves. The Arboretum, among other organizations, has been working to revive

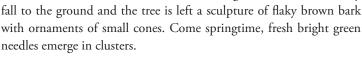


AMERICAN LARCH (AL)

Larix laricina

The indigenous name for this tree is Tamarack, a term derived from the Algonquin word akemantak, which translates as "woods used for snowshoes." The Tamarack is a deciduous conifer... yes you read right!





BIGTOOTH ASPEN (BA)

Populus grandidentata — EC

A bright orange-yellow oval leaf with a toothed edge makes quite an impression on the autumn forest floor. This is the leaf of the Bigtooth Aspen, which can be distinguished from its kin the Quaking Aspen by the size of its "teeth" or the grooves along the edge of its leaf. As you might imagine, the teeth are bigger on the Bigtooth Aspen. Its bark is also more deeply furrowed with a distinct orange color visible on the

bark of older trees. This Aspen occurs sparsely in Catskill forests.



BLACK BIRCH (BB)

Betula lenta — EC

Black Birch is also known as Sweet Birch for its sweet sap and the pleasant wintergreen-like taste of its inner bark and twigs. Like many trees, its bark changes sub-



stantially over time and shifts from a deep dark red in its youth to charcoal gray with loose scaly plates as it matures. Some may mistake the bark for a cherry, but if you're looking at the tree in the winter and see weeping catkins (the male flowering structures) then you're looking at a birch.

BLACK CHERRY (BC)

Prunus serotina — EC

Also known as Wild Cherry, Mountain Black Cherry and Rum Cherry, the Black Cherry tree is the largest of our native cherry species and a member of the rose family. Black Cherry bark starts out reddish-brown and smooth and later matures into dark gray-brown scales. In the spring the Black Cherry displays beautiful drooping white flower



clusters. Later in the summer the fruit ripens from dark red to purple-black—a favorite of the birds.

AMERICAN BEECH (BE)

Fagus grandifolia — EC

The American Beech's bark remains smooth and gray throughout its long life. Beech trees reproduce sexually as well as through suckering, a process whereby new trees sprout from the roots of existing trees. For this reason, it is likely that this stand of American Beech and all the smaller beeches surrounding you



are directly related. In the winter, Beech can often be identified as the only deciduous trees with brown leaves still rustling in the wind.

BALSAM FIR (BF)

Abies balsamea — EC

Most know the Balsam Fir as a Christmas tree prized for its aromatic value and ability to hold its needles long after being cut. In the Catskills they are most often found at heights above 3,000ft where they are able to endure high winds and frigid temperatures. If you are ever wondering whether you are looking



at a Fir or a Spruce, take a look at the needles. While the needles of a Spruce are four-sided, you'll notice the Fir has flat needles. There is also the wonderful smell of the Balsam Fir's resin to aid you.

BEBB'S WILLOW (BW)

Salix bebbiana

This soggy area of the East Meadow is a fitting location for Bebb's Willow, a smaller fast-growing tree (sometimes shrub) that prefers wet soils. Like other willows, Bebb's Willow is an important early source of pollen in the springtime for bees. Different willow species can be difficult to identify and they often will



hybridize, but if you compare these leaves to the Pussy Willow along the boardwalk ahead, you'll notice Bebb's Willow leaves have sunken veins and the twigs and leaf undersides are hairy. Pussy Willow leaves and twigs are smooth.



BW Spring House PB 111 EAST B WP) EADOW Boardwalk YB RP (WC DS) Œ **WP** AB East Meadow Loop Trails • 0.4mi **PRIVATE** BF BE LAND PB To Hidden Marsh • 0.6 mi Hemlock Trail BC EN Emerald Bog Boardwalk Sprince Trail **Trail Loop** YB To Deer Red Maple Trail Mtn Inn Boardwalk **Trails** n Trails

MOUNTAIN TOP **ARBORETUM**

Elevation 2400 feet 4 Maude Adams Road, Tannersville, NY 518-589-3903 | mtaborteum.org

Native '	Tree	Trail
Species Key		

	Native Tree Trail
	Species Key
AB	American Basswood
AC	American Chestnut
AL	American Larch
BA	Bigtooth Aspen
BB	Black Birch
BC	Black Cherry
BE	American Beech
BF	Balsam Fir
BW	Bebb's Willow
DS	Downy Serviceberry
EH	Eastern Hemlock
EL	European Larch
GB	Gray Birch
GH	Gray's Hawthorn
НН	Eastern Hophornbeam
MW	Musclewood
PB	Paper Birch
PD	Pagoda Dogwood
PP	Pitch Pine
PW	American Pussy Willow
QA	Quaking Aspen
RC	Eastern Red Cedar
RM	Red Maple
RO	Northern Red Oak
RP	Red Pine
RS	Red Spruce
SA	Sassafras
SM	Striped Maple
SN	Spruce Nursery
SU	Sugar Maple
WA	White Ash
WC	Northern White Cedar

White Oak

Yellow Birch

Eastern White Pine

WP

YB

DOWNY SERVICEBERRY (DS)

Amelanchier arborea

This small tree produces some of the earliest Spring flowers with wavy drooping milky-white soft petals that boldly contrast with the lingering browns of the early spring forest. You will notice the trunk has distinct vertical stripes or breaks in the bark. The berries mature in June, hence their other common name Juneberry. Another common name is Shadbush, an ode to the tree's flowering period which overlaps with the time when shad fish are running.



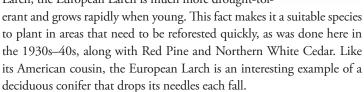
Tsuga canadensis — EC

The Eastern Hemlock is a slow-growing evergreen beauty that takes centuries to mature. Hemlock groves form thick canopies that block most light from reaching the forest floor. When their branches hang over creeks, they create shady conditions that lower and stabilize the temperature of the water. This effect creates the ideal environment for many aquatic organisms including our native brook trout.



Larix decidua — EC

Why is European Larch on a native tree trail in the Catskills? As its name implies, the European Larch is indeed from Europe. Compared to the American Larch, the European Larch is much more drought-tol-



GRAY BIRCH (GB)

Betula populifolia

The waxy diamond-shaped leaves of the Gray Birch shimmer in the wind much like Quaking Aspen. One way to distinguish a Gray Birch from other Birches, such as the Paper Birch, is to see if the bark will peel off. Gray Birch's bark does not peel easily. The male catkins most often appear singularly as compared to other native Birches which usually bear catkins in clusters of two or three.

GRAY'S HAWTHORN (GH)

Crataegus flabellata

A member of the rose family, Gray's Hawthorn is also referred to as Fanleaf Hawthorn for its fan-shaped or triangular leaves. Its berries are edible and make tasty pies and desserts. Its flowers give off a distinctly pungent and rotting smell, which is only attractive if you happen to be a midge or small fly, Hawthorn's main pollinator. Notice the prominent thorns of this Hawthorn.



Ostrya virginiana — EC

Another member of the birch family is the Hophornbeam which produces papery seed-bearing pods that closely resemble the hops used in brewing beer. It's also known as Ironwood for its very strong wood. Its bark is distinct for its flaky or shaggy appearance and peels in long vertical strips. Hophornbeam is a slow-growing understory tree that reaches heights up to 40ft.

Musclewood owes its common name to the sinewy and muscular look of its trunk. Also called Blue Beech, American Hornbeam and Ironwood, Musclewood is in the birch family and has similar leaves and catkins.

This is an understory tree, meaning it grows below the canopy of the dominant tree species here such as Ash, Maple and Beech. Musclewood likes to have its "feet wet" and can often be found in areas of the forest with moist soil or near creeks, as you see here.



Betula papyrifera — EC

The "paper" of the Paper Birch refers to the way the bark peels away from the trunk in sheets. It is also known as Canoe Birch for its use among east-

ern Indigenous peoples in canoe building. The Paper Birch is closely related to the Yellow Birch, and distinguishing the two can sometimes be difficult as both tree's bark exhibits peeling. Generally though, Paper Birch bark is bright white and the underside is pinkish whereas the Yellow Birch's bark is more of a yellow-bronze color and peels in thinner strips.

PAGODA DOGWOOD (PD)

Cornus alternifolia

This hardy native dogwood gets its name from the tiered nature of the branches which lends the tree a silhouette that resembles a pagoda. It does not grow very tall, only reaching heights up to 25ft, and is sparsely distributed in the forest understory. The Pagoda Dogwood produces small but lovely creamy white flowers that give off a delightful fragrance.













Carpinus caroliniana — EC





PITCH PINE (PP)

Pinus rigida

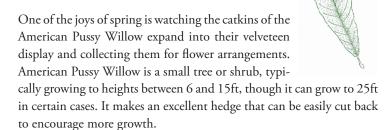
Pitch pines grow gnarly and twisted on exposed, windswept sites with shallow soils, like bedrock ledges and burned-over ridges. Needles appear in bundles of three and can grow right out of the trunk, as can the prickle-



armed cones which persist on the tree for several years. Pitch pine is well adapted to fire—some of its cones will only open and release seeds after contact with fire. Unlike most conifers, Pitch Pine can resprout from the base if its top is killed by fire.

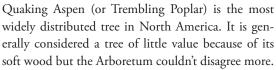
AMERICAN PUSSY WILLOW (PW)

Salix discolor



QUAKING ASPEN (QA)

Populus tremuloides





This aspen offers an aural and visual dimension to the forest unlike any other tree with the fluttering or "quaking" of its lovely rounded toothedged leaves. In autumn it holds its bright yellow fall color longer than any of the other trees.

EASTERN RED CEDAR (RC)

Juniperus virginiana

Despite its common name, the Eastern Red Cedar is not actually a cedar but a member of the Juniper genus. The foliage and small gray-blue berry-like cones of this tree are wonderfully fragrant. It is generally referred to



as a pioneer species because it is often one of the first trees-along with Gray Birch, Trembling Aspen and White Pine-to grow on disturbed sites such as abandoned farmlands.

RED MAPLE (RM)

Acer rubrum — EC



Red Maples bloom early in the Spring, lending the forest canopy a soft red glow. Later, red-winged samaras, which hold the tree's seeds, spin down to the forest floor in the wind. In the Fall, the flaming

foliage of orange and red to yellow is dazzling. The bark changes dramatically over time from smooth gray in the tree's youth to scaly and ridged gray-brown on older trees, or even shaggy, like the specimen on the Red Maple Trail in Spruce Glen.

NORTHERN RED OAK (RO)

Quercus rubra — EC

The Catskill Mountains are not home to many oak species compared to the surrounding lowlands, but if you do spot an oak it is likely our native Northern Red Oak. In some years oaks produce a great quantity of acorns. Such years of abundance are known as "mast" years. This excess production allows for a better chance that more acorns will sprout and grow successfully. Oaks are vitally important to all manner of wildlife and support more species of butterflies than any other genus.

RED PINE (RP)

Pinus resinosa — EC

Unlike the White Pine, the needles of the Red Pine appear in bundles of two and stand more stiffly from the twig. Red Pine bark starts out as orange-red and becomes reddish-brown with scaly diamond-shaped plates when it matures. These Red Pine trees were planted in the 1930s-40s as part of the effort, led by the Civilian Conservation Corps, to reforest abandoned farmland.



Picea rubens — EC

The presence of Red Spruce on the Mountain Top greatly distinguishes this area from the nearby Hudson Valley. The cooler temperatures and higher elevations here are in fact much more consistent with the Adirondacks and northern Appalachians. If you



compare Spruce needles to Fir or Hemlock needles, you will notice they are four-sided (vs. Fir or Hemlock needles which are flat) and roll easily between your fingers.

SASSAFRAS (SA)

Sassafras albidum

The leaves of the sassafras tree exhibit various shapes depending on the number of lobes they have. Those with two lobes are often compared to mittens. Regardless of the shape, sassafras leaves turn a variety of beautiful and brilliant colors in the fall ranging from yellow to purple to red. In the springtime, sassafras flowers emerge as little sunbursts of yellow.





STRIPED MAPLE (SM)

Acer pensylvanicum — EC

An understory tree favorite at the Arboretum is the Striped Maple named for the light vertical lines running down its trunk. It is also known as Goosefoot Maple for the shape of its leaves or Moosewood



because its bark, twigs and buds are enjoyed by moose. The bark remains smooth throughout the tree's life but the color shifts from bright to dark green or to the rarer reddish-brown as the tree matures. The swelling crimson bud of the Striped Maple is a beautiful sight in the early Spring, and cascading yellow-green flowers emerge in May and June.

SPRUCE NURSERY (SN)

Picea rubens

At the end of our trail we arrive at one of our smallest specimens, a young Red Spruce (Picea rubens). We call the area here a "Spruce Nursery" for the proliferation of young Spruce (and some Hemlock) growing



under the canopy of their "parent" trees. Like other climax tree species, Red Spruce are very shade tolerant. They mature slowly and it will be several decades before this young tree assumes a position among the forest canopy. Once it does, it can live a very long life, up to and even surpassing four centuries if it remains undisturbed. This area of the Spruce Nursery overlooks an extension of the Emerald Bog, one of the oldest carbon-dated bogs in the Catskills. Follow the trail ahead and turn left to reach the Hidden Marsh or right to head back to Maude Adams Road and the Education Center.

SUGAR MAPLE (SU)

Acer saccharum — EC

The sweetest of all maples is the Sugar Maple, naturally. Its sap contains more sugar than any other kind of tree sap, making it the most conducive to boiling down into syrup. As young trees, Sugar Maples have smooth bark but as they age their bark becomes gnarlier and more varied. In the early spring, Sugar Maples bloom with a cascade of light greenish-yellow flowers, and in the fall they are cherished for their bright red and orange foliage.



Fraxinus americana — EC

The White Ash stands out in our forests because of its beautiful compound leaves that have small leaflets attached to a middle vein-like structure called a rachis. The bark of White Ash is distinctively grooved



in diamond-shape patterns. In partnership with Cornell University, the Arboretum has been experimenting with protecting its White Ash by inoculating trees against the Emerald Ash Borer, an invasive beetle whose larvae feed on the inner bark. Different colored tape tied around Ash trees in the Woodland Walk indicate the year each tree was treated, while blue-taped Ash leading to the East Meadow designate control trees that are not inoculated.

NORTHERN WHITE CEDAR (WC)

Thuja occidentalis — EC

You may know this tree by its other common name American Arborvitae. Arborvitae means "tree of life" and is so named for the tree's diverse medicinal uses. Northern White Cedar is identifiable by its evergreen foliage, which is flat, scaly and almost fernlike in shape. You can also identify this tree by its tiny brown tulip-shaped cones.

WHITE OAK (WO)

Quercus alba

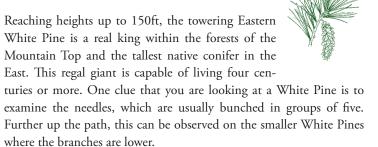
This White Oak was planted in 1993 as a single acorn by Pete and Bonnie Ahrens, the founders of the Arboretum. In reading the detailed records the Ahrens kept, we learn that the acorn was sourced



from Minnesota. White Oaks do not naturally occur on the Mountain Top, but are quite common at lower elevations of the Catskills. Note the rounded lobes of the White Oak leaf, compared to the pointed lobes of the next tree along the Trail, the Northern Red Oak.

EASTERN WHITE PINE (WP)

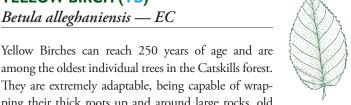
Pinus strobus — EC



YELLOW BIRCH (YB)

Betula alleghaniensis — EC

among the oldest individual trees in the Catskills forest. They are extremely adaptable, being capable of wrapping their thick roots up and around large rocks, old stumps and the steep edges of streams. Like its relative the Paper Birch, you'll notice the Yellow Birch has peeling bark. However Yellow Birch bark color is more golden-yellow or bronze, and it peels in thinner strips.





Eastern Hemlock and Red Maple seedlings