



Delaware State Tree

American Holly

Ilex opaca Aiton

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Gardeners By The Sea

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Adopted May 1, 1939, the American Holly (*Ilex opaca* Aiton) is regarded as one of Delaware's most important forest trees. In Delaware, the tree can reach a maximum of 60 feet in height and a trunk diameter of 20 inches.

The American Holly is considered one of the most popular trees in the world. Due to extensive cultivation of the American Holly by nurseryman and gardeners alike, there are currently over 1000 different cultivars, with more being patented every year. The American Holly is widely known as the hardiest broadleaf evergreen. Native specimens found throughout the Appalachian Mountains have been found to withstand temperatures of -10°F, while cultivated varieties have been naturalized in Ohio down to -20°F. It will grow in nearly all soils. Its native range extends from Massachusetts to Florida to Texas. American Hollies grow on mountain tops, in river valleys, on flood plains, and along coastlines. As we well know, American Holly dominates some of the maritime forests of the Atlantic coast and is associated with salt-intolerant species such as black cherry (*Prunus serotina*), eastern redcedar (*Juniperus virginiana*), and hackberry (*Celtis occidentalis*). One of the best developed coastal stands reported was at Sandy Hook in New Jersey, where 97 percent of the tree area of 74 acres was American Holly. The oldest holly was 144 years old.

American Holly is a medium-sized broadleaved evergreen tree growing on average 33-66 feet tall, and up to 98 feet tall. Typically, its trunk diameter reaches 20 inches, sometimes up to 40 inches. The bark is light gray, roughened by small warty lumps. The branchlets are stout, green at first and covered with rusty down, later smooth and brown. The winter buds are brown, short, obtuse or acute.

The leaves are alternate, 2-3 inches long and .79–1.57 inches wide, stiff, yellow green and dull matte to sub-shiny above and often pale yellow beneath; the edges are curved into several sharp, spike-like points, and a wedge-shaped base and acute apex; the midrib is prominent and depressed, the primary veins conspicuous; the petiole is short, stout, grooved, thickened at base, with a pair of minute stipules. The leaves remain on the branches for two to three years, finally falling in the spring when pushed off by growing buds.

The flowers are greenish white, small, borne in late spring in short pedunculate cymes in the axils of young leaves or scattered along the base of young branches. The calyx is small, four-lobed, imbricate in the bud, acute, margins ciliate, persistent. The corolla is white, with four petal-like lobes united at the base, obtuse, spreading, hypogynous, imbricate in bud. The flower stem is hairy with a minute bract at base. Like all Hollies, it is dioecious, with separate male and female plants; only female plants produce the characteristic red berries. One male can pollinate several females. A ratio of three female plants to one male

plant is required for ideal fruit production. The fruit is a small red drupe .236–.472 inches diameter containing four seeds that often persists in winter.

The flowers are pollinated by insects, including bees, wasps, ants, and night-flying moths. The berries are important survival food for birds, who will eat the berries after other food sources are exhausted. The tree also forms a thick canopy which offers protection for birds from predators and storms.



Throughout history, the appeal of bright red berries and lustrous evergreen leaves drove the popularity of the English Holly. From the Roman and Druid winter solstice traditions to the eventual European Christian traditions, the symbolism and colorful nature of the evergreen holly in the dead of winter was constant. When the European colonists landed in the New World, they brought their love of holly among their many traditions. Prior to their arrival, American Holly leaves had been used by Native Americans to make tea to treat cough, and berries had been used to make buttons. But Europeans brought demand for American Holly to a whole new level. They recognized American Holly as an obvious substitute for their English holly (*Ilex aquifolium*) holiday traditions, and decorative and landscape usage soon expanded.

The wood is very pale, tough, close-grained, takes a good polish and is ideal for absorbing dyes. It is used for much of the black and white inlaid lines in

musical instruments, piano keys and furniture. It is also used for knife handles, whip-handles, and engraving blocks.

The greatest damage to holly trees is not from insects or weather but the indiscriminate harvesting of foliage with berries for Christmas decorating. Before laws were passed in Maryland and Delaware to protect the holly, there was a "roadside" market for holly vandalized from trees that did not belong to harvesters. Trees were left mutilated and many died.

The champion American Holly is located in Arkansas and made its debut on the National Register of Champion Trees in 2018. It is the largest known tree of its species in the country as reported to American Forests. The trunk circumference is 182 inches, height is 64 feet and the crown spread is 63 feet.

According to the USDA, National Resources Conservation Service, the American Holly is designated as Exploitably Vulnerable in New York and Threatened in Pennsylvania. New York and Pennsylvania defines Threatened and Exploitably Vulnerable classifications as that of a plant species which may become endangered throughout most or all of their natural range if critical habitat is not maintained to prevent further decline, or if the species is greatly exploited by man.

References

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