

MARSH PENNYWORT & DUCKWEED

GROUNDCOVER & AOUATIC PLANTS:

partridgeberry (Mitchella repens)

- Size: less than 2" high, with white, fragrant, tubular flowers in pairs.
- The small, rounded leaves are evergreen; the flowers are white and trumpet shaped, eventually turning into scarlet berries showing two small marks from the flowers.
- Also known as the pigeon plum or twinberry, the partridgeberry attracts a variety of birds and mammals, including the Bobwhite quail and the White-footed mouse.
- The partridgeberry has historically been used for medicinal purposes, including as a tea to reduce menstrual cramps and labor pains.

duckweed (Lemna valdiviana Phil.)

- Size: very small, less than 1".
- Often mistaken for algae, duckweed is actually an aquatic herb.
- Each plant consists of one or more fronds. The fronds look like little leaves, but are actually a combination of leaf and stem. A little rootlet dangles into the water from the underside of the frond.
- Duckweed is a flowering plant, but rarely does so, typically reproducing through budding from a parent plant. Eventually the new fronds grow their own roots and break off to become independent plants.
- Duckweed serves as a source of food for ducks, as the name implies, as well as other birds, fish and turtles.

marsh pennywort (Hydrocotyle umbellata or Hydrocotyle verticillata)

- Size: measuring 1/2 to 1 1/2" across.
- Occasionally mistaken for a small lilypad, the marsh pennywort is a creeping plant from which a thin stem lifts a rounded, scalloped leaf.
- Clusters of tiny, greenish-white flowers rise from leaf axils from April through September (umbellata, taller stems) or May through July (verticillata, shorter stems)
- The pennywort may grow in shallow ponds or low, moist depressions.

RESOURCES:

Manual of the Vascular Flora of Nags Head Woods, Outer Banks, North Carolina by Alexander Krings

USDA Plants Database: plants.usda.gov

Ladybird Johnson Wildflower Center: www.wildflower.org

University of Michigan - Dearborn, Native American Ethnobotany: herb.umd.umich.edu

Rutgers University, Duckweed: Environmental Star: www.rutgers.edu/about-rutgers/make-way-duckweed

PHOTOS:

marsh pennywort & duckweed, live oak, sassafras, partidgeberry, swamp bay and southern wax myrtle photos by: Leah Pederson, 2014

American holly: Robert H. Mohlenbrock, hosted by the USDA-NRCS PLANTS Database / USDA NRCS. 1995. Northeast wetland flora: Field office guide to plant species. Northeast National Technical Center, Chester.

loblolly: Doug Goldman, hosted by the USDA-NRCS PLANTS Database / USDA-NRCS-NPDT

American beautyberry: Robert H. Mohlenbrock, hosted by the USDA-NRCS PLANTS Database / USDA SCS. 1991. Southern wetland flora: Field office guide to plant species. South National Technical Center, Fort Worth.

flowering dogwood: Robert H. Mohlenbrock, hosted by the USDA-NRCS PLANTS Database / USDA NRCS. 1995. Northeast wetland flora: Field office guide to plant species. Northeast National Technical Center, Chester.

The Nature Conservancy

Nags Head Woods Preserve

- > www.nature.org/nhw
 - facebook.com/nagsheadwoods

North Carolina Chapter

f

- f facebook.com/TNCNC

PLANTS **OF NAGS HEAD WOODS PRESERVE**





CLOCKWISE FROM TOP: SOUTHERN WAX MYRTLE, AMERICAN HOLLY, LOBLOLLY PINE, AMERICAN BEAUTYBERRY, SWAMP BAY

#naturenc

(252) 441, 2525

() #nagsheadwoods

Plants of Nags Head Woods Preserve

Nags Head Woods Preserve has been described as a biological gem, with more than 550 plant species identified in its dunes, interdunal ponds, swamps, marshes, shoreline and deciduous forest. Maritime forests like Nags Head Woods provide conditions favorable for a variety of plants to thrive because of the protection from high winds, overwash, and salt spray. This forest is a transition zone between the more broad-leaf evergreen forests of the south and the temperate deciduous forests of the north. As you explore the Nags Head Woods, watch for the following flora that contribute generously to the longevity and beauty of this forest:



American holly (llex opaca)

- Size: Height is typically 15 to 30', with 100' potential, but may stay shrub-sized on coastal beaches. Diameter can be up to 2'.
- Dense, spiny foliage provides shelter and habitat for songbirds.
- Firm, red berries are consumed by White-tailed deer and 18 species of birds; maturing in autumn and remaining attached in winter
- Small (1/4" wide) white flowers in spring

live oak (Quercus virginiana)

- Size: Averaging 50', but with a potential height of 100'. Diameter can be up to 4'.
- With a trunk buttressed at the base, the live oak grows nearly horizontal, with long branches resulting in a very broad, dense crown.
- Dark-green, waxy, unlobed leaves fall just as new leaves emerge in the spring. The coordinated leaf loss means it is not actually a true evergreen.
- Excellent for erosion control in sandy soil and is resistant to salt spray
- Acorns: typically less than 1", and with an oblong shape; an important food source for White-tailed deer, squirrels, and a variety of birds

loblolly pine (Pinus taeda)

- Size: Standing 60 to 110' tall, with a trunk diameter of up to 2 to 3'.
- The loblolly is a fast-growing pine, a native of the southeastern U.S., and is often grown for pulpwood and lumber.
- Needles are fragrant, 5 to 10" long, and grow in bundles of three.
- Loblolly comes from the old British dialect, and the word is used to mean "a mud hole; a mire," a sense derived from an allusion to the consistency of porridge.
- Cones: 3 to 5" long, the loblolly cone opens at maturity, but remains attached to the tree. The seeds are a food source for some birds and small mammals.



swamp bay (Persea palustris)

- Size: Averaging 15 to 25' tall with a trunk diameter of 6 to 18".
- It grows best in coastal forests in swampy, wet sites.
- Swamp bay leaves are 3 to 6" long by 3/4 to 1 1/2" wide and are elliptical or lance-shared and leathery. The leaves are also fragrant and are frequently used for seasoning soups and meat.
- Light green flowers in the spring, and bitter, blue/black fruit that matures in the autumn and serves as a food source for various birds.
- The wood is prized for use in cabinetry due to its ability to take a shine, and the swamp bay is also a larval host for the Palamedes swallowtail butterfly.

southern wax myrtle (Morella cerifera)

- Size: Can grow to 40', but is generally 12' or less.
- It does well in sandy soil, tolerates brackish conditions and, while it needs significant moisture early on, eventually is drought resistant.
- A wispy, multi-trunked, perennial shrub, the wax myrtle has a gray to nearly white trunk, and pale-olive, fragrant foliage.
- The female wax myrtle produces pale blue berries in the winter. The berries serve as food for birds and, historically, were boiled down to produce fragrant candle wax.
- It serves as a larval host for the Banded hairstreak and Red-banded hairstreak butterflies.

DECIDUOUS TREES & SHRUBS:

American beautyberry (Callicarpa americana, aka mulberry)

- Size: typically 3 to 6' tall.
- It thrives in forests with hot, humid summers and moderate winters.
- Perennial shrub, the leaves are 3 to 6" long, elliptical-shaped with saw-toothed edges. The underside of the leaf may be covered with rust-colored or white woolly hairs.
- The roots, leaves, berries, bark and branches have all been used for assorted medicinal purposes in the past.

 With inconspicuous flowers of pink, or white in the spring, the beautyberry produces juicy berries that ripen in late August or September and remain on the branches long after the leaves have dropped. The berries are consumed by many species of birds including Bobwhite quails, Mockingbirds, Robins, Towhees, and Brown Thrashers as well as raccoons, Gray foxes, opossums, and White-tailed deer.

flowering dogwood (Cornus florida)

- Size: Grow 15 to 25' tall.
- Leaves are opposite pattern, simple, medium green in color with veins that follow the elliptic curve of the leaf. In autumn
- foliage turns red or purple.
- The flowers are predominantly white and appear between March and June, with or before the leaves.
- After a flower is pollinated, it forms a cluster of small yellow to red berrylike fruits.
- In autumn, the red fruit of the dogwood is a favorite for birds, which distribute the dogwood's seeds.
- Many birds, as well as the White-footed mouse, Gray fox, Gray squirrel, and White-tailed deer readily consume flowering dogwood seeds. Rabbits and deer also browse its leaves and sprouts.
- The flowering dogwood is a soil improver—its leaves decompose more quickly than most other species.

sassafras (Sassafras albidum)

- Size: The trees are 30 to 60' tall and spread from 2 to 26'.
- Young trees have greenish bark, while older trees have reddish brown bark that is rough and deeply ridged.
- Bright-green, mitten-shaped, oval, or three-lobed leaves turn to bright yellow and orange in the fall.
- This aromatic plant has been used for a wide range of medicinal and culinary purposes. It's wood is light but durable, and useful for boat construction.
- Sassafras berries grow on red stalks and ripen to dark blue in late summer, providing nourishment to birds, such as the quail, Kingbirds, Crested flycatchers, Mockingbirds, Pileated woodpeckers, Yellow-throated warblers and Phoebes, which, in turn, disperse the seeds. Rabbits and squirrels also eat the fruit, bark and wood.