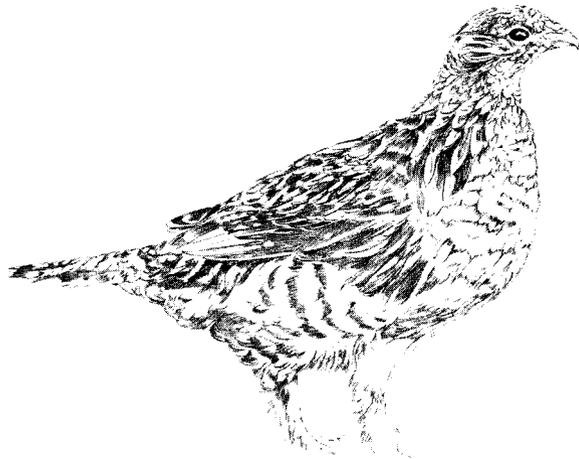


## 9 Atlantic White-Cedar

The story of New England's swamps begins about 10,000 to 15,000 years ago during the last Ice Age. When the glacier began to retreat, debris built up around large chunks of ice. Eventually these pieces of ice melted leaving depressions in the landscape. Depressions that were deep enough to intersect the water table became ponds or swamps. The first plants to take hold after the Ice Age were northern plants, but in time, the climate warmed and southern plants like Atlantic white-cedar began to grow. Even after the climate turned cooler again, pockets of white-cedar survived in swampy areas.

## 10 Skunk Cabbage

Look for a large green plant with wide leaves that resemble rhubarb. Before hunting, the Indians crushed the leaves and stalks of this plant and rubbed them all over their bodies to disguise the human scent from animal prey.



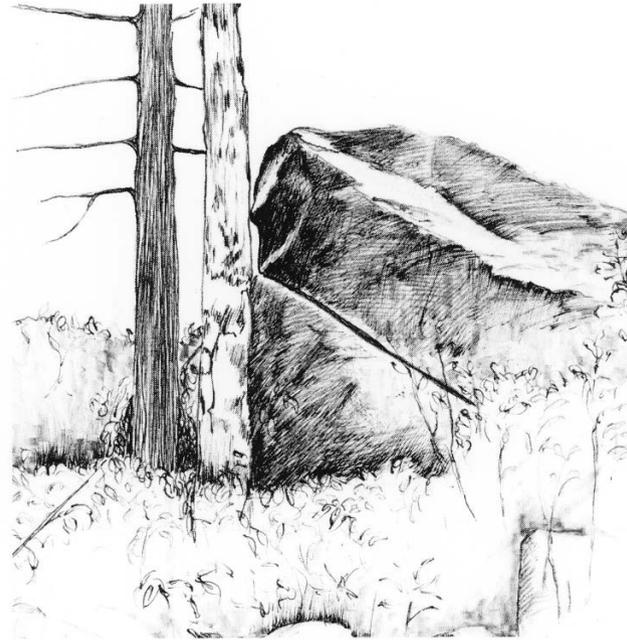
Ruffed grouse

## 11 Wildlife

Another change has taken place. Dry, rocky soil has replaced the damp sphagnum moss, and the cedars have given way to mountain laurel and hemlock trees. Many different animals thrive in this kind of forest. Deer, rabbits, squirrels, chipmunks, foxes, snakes, and a variety of birds are common inhabitants. Ruffed grouse, which are brown chicken-like-birds may be seen occasionally. During the day you might see them as they walk along the woods roads pecking for gravel. Check the ground for tracks.

## 12 Glacial Erratics

Approximately ten thousand years ago, a glacier covered this part of North America. As the great sheet of ice moved forward, it scraped the earth's surface and picked up all sorts of debris, including boulders like these. Eventually the ice melted and the glaciers retreated leaving behind these huge rocks. Called "glacial erratics," they are found throughout New England.



Glacial erratic

## 13 Cinnamon Fern

Ferns thrive in the cedar swamp's rich, moist soil. You can recognize the cinnamon fern, the swamp's most common species, by its circular cluster of fronds and cinnamon-colored wooly stalk.

## 14 Historic Uses of White-Cedar

When European settlers arrived in New England in the 1600's they found Atlantic white-cedar scattered along streambanks and in swamps. The settlers prized the wood because it is light-weight, watertight, and decay-resistant. It was suitable for use as shingles, rafters, joists, floor boards, fence posts, and organ pipes. The colonists began by logging the mature trees, some of which were three or four feet thick. Within a few generations, they had cut even the smallest trees, until the swamps appeared, in the words of one 18th-century traveler, "quite destitute of cedars." Over time, however, seedlings became established and if they were undisturbed by fire and logging, they grew into trees like the ones you see here today.

## 15 Sweet Pepperbush

Called sweet pepperbush, this shrub blooms in late summer and fills the woods with its fragrance. The dried seed-heads resemble peppercorns. Because this plant's natural habitat is near wetlands, it is considered a reliable "wetland indicator."

## 16 Value of Wetlands

Wetlands cover approximately 6 percent of the land area of Massachusetts. For hundreds of years wetlands were considered wasteland that needed to be "reclaimed." We are now recognizing the value of wetlands for watershed protection, water supply, flood control, wildlife habitat, aesthetics, and recreation. In an effort to lessen the damage and expense that floods cause each year, the U.S. Army Corps of Engineers advocates acquisition of large wetlands as an effective and economical approach to flood control. These areas act like huge natural sponges, absorbing large amounts of water and releasing it slowly, at a rate rivers and streams can handle.

*This is the end of the Cedar Swamp Trail. Walk up the hill and straight through the field until you reach the dirt road. The middle road will take you back to Wallum Lake.*

*We hope you have enjoyed your walk. You are welcome to take this guide home for future reference, but if you are finished with it, please return it to the box for others to enjoy. Thank you.*

Douglas State Forest: 508-476-7872

♻️ Illustrations by Bryant Stewart. Reprinted 2006

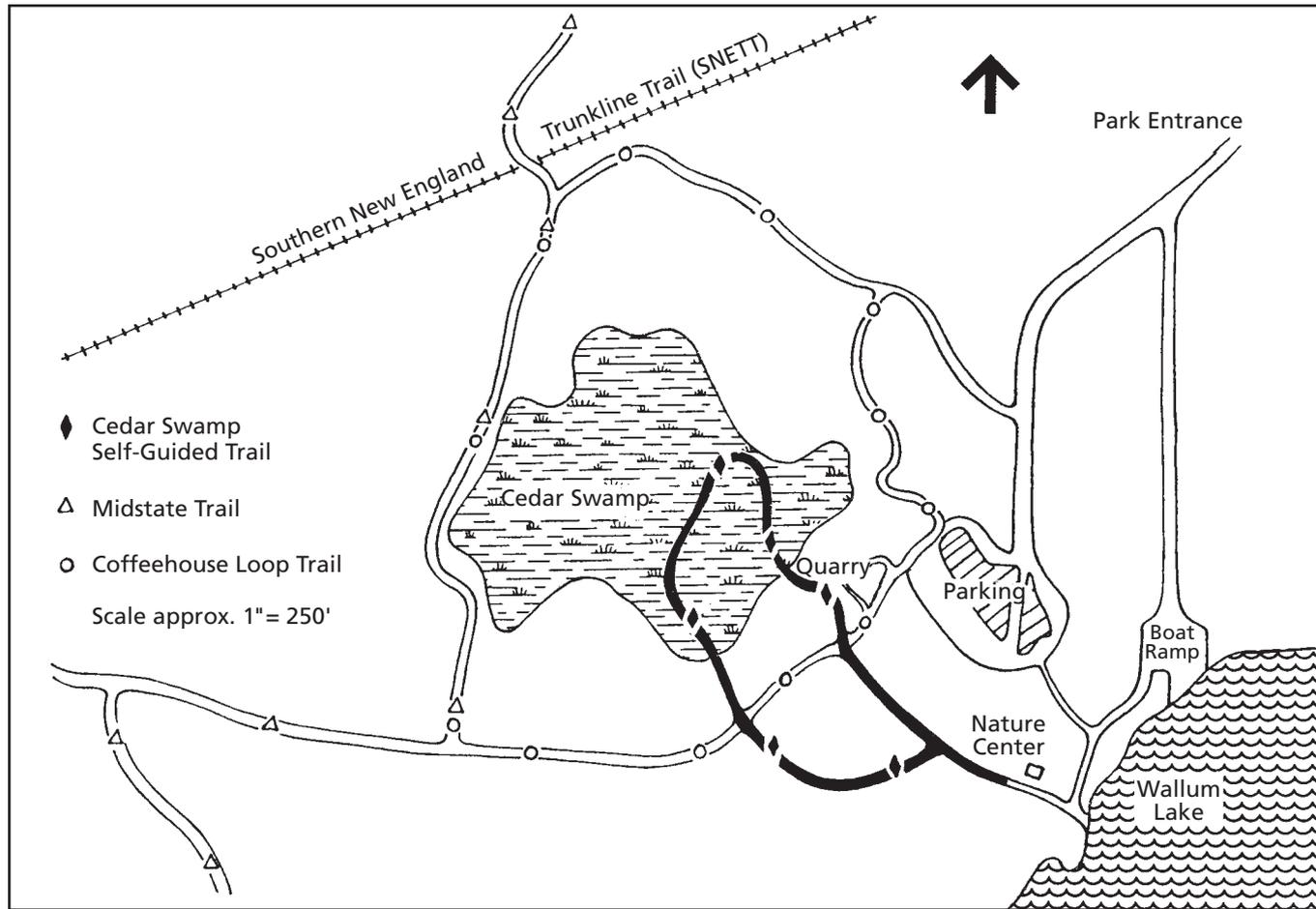


Nature Center

# Douglas State Forest

## Cedar Swamp Self-Guided Trail





## CEDAR SWAMP TRAIL

The Cedar Swamp Trail begins a few feet from the Nature Center and takes you into the cool and mysterious world of an Atlantic white-cedar swamp. A series of red diamond-shaped blazes mark the half-mile long trail, and numbered posts correspond to the text in the brochure. Please protect this fragile ecosystem by staying on the trail boardwalk.

### 1 American Chestnut Sprouts

The American chestnut was once the most common tree in the New England forest, but in 1904 the chestnut blight broke out in New York state and within 30 years, it affected every stand of chestnut in the East. The chestnut's strong sprouting capacity coupled with the inability of the blight to destroy the roots has kept the species alive. Although there are many chestnut sprouts in the woods, mature trees are rare. As the sprouts reach maturity (from 15-20 feet tall), cracks develop in the bark. The blight enters through these openings, and soon the trees are dead.

### 2 Quarry

Between 1893 and 1906, this rocky area was worked as a granite quarry. Men used hand tools to drill holes in the rock, then "wedges" and "shims" to split the blocks of stone apart. The huge granite blocks were transported by rail to Boston where they were used in the construction of dry docks and building foundations. The quarry was abandoned when it ran out of high quality granite. If you wander around the site, you will find stones with holes and ridges, a sure sign quarrymen once worked here.

### 3 Gypsy Moths

These dead trees are victims of the gypsy moth, New England's most destructive insect pest. Each summer, hordes of gypsy moth caterpillars strip the leaves off trees. Most healthy trees can withstand this for a year or two, but if the caterpillars return year after year, the trees weaken and die.

A French scientist imported the first gypsy moths into the United States in 1869 in an attempt to interbreed the moths with silk worms. The experiment was a failure. A few moths escaped and became established on local vegetation. By 1890, the problem had grown so serious that the Massachusetts Legislature appropriated \$25,000 to exterminate the gypsy moth.

Although funding continued in following years, it was too late to eradicate or contain the gypsy moth. The insect is well adapted to travel. Larvae hatch from eggs in the spring. Light in weight and with long hairs that increase their surface area, the young insects spin and hang on silken threads. When the wind blows, the threads break and the larvae are carried aloft.

### 4 Transition

This area marks the end of the mixed hardwood forest and the beginning of the swamp habitat where Atlantic white-cedar and hemlock trees predominate. The thick growth of these evergreens allows little light to reach the forest floor keeping out all but the most shade-loving vegetation.

### 5 Sphagnum Moss

The green, spongy carpet at your feet is known as sphagnum or "peat" moss. This type of moss can hold up to 20 times its weight in water. Indian mothers packed their babies' pants with the dried moss, creating a makeshift diaper.



American chestnut



Atlantic white-cedar

### 6 Animal Homes

Even after a tree dies, it remains a vital part of the forest community. The small holes and insect "trails" on this tree are evidence that it has served as a shelter and source of food for insects. The larger holes farther up on the tree are the work of woodpeckers or other insect-loving birds in search of a meal.

### 7 Nature's Fury

The trunks of the Atlantic-white cedar trees were bent over by heavy wet snow that blanketed the Douglas area in December of 1996. Unfortunately, the storm struck before the swamp was frozen. The cedar's shallow root system was left unprotected and the weight of the snow on the tree tops forced the roots from the ground. You will see evidence of this damage throughout the swamp.

### 8 Sensory Stop

Take a moment to stop and listen to the sounds of the forest. You may hear or see deer, moles, or other mammals that inhabit the swamp. Feel the cool freshness of the moist air.