HUNTERDON COUNTY
DEPARTMENT OF PARKS & RECREATION

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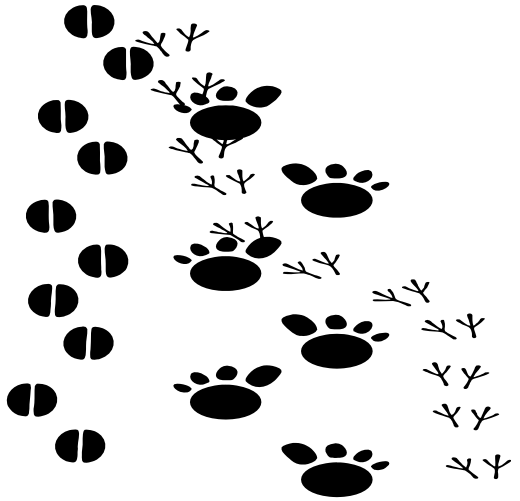
Thurs. 8:00 AM to 6:30 PM

The Hunterdon County Department of Parks and Recreation is dedicated to preserving open space and natural resources, providing safe parks and facilities, and offering educational and recreational opportunities, all contributing to an enhanced quality of life for present and future generations.

(rev: 09/2010)

Hunterdon County Arboretum

Self-Guided



Nature Trail

Introduction

The Hunterdon County Arboretum, once host to a thriving nursery business, is now 73 acres of interesting and diverse plant life. The widely varied habitats are home to many species of wildlife.

This self-guided trail winds through most of the Arboretum. You will encounter field, pond, wetland, evergreen forest, and deciduous forest habitats. Numbered trail markers correspond with the numbered descriptions within this guide. The trail begins at the entrance to the gardens behind the office.

This guide was created in1998 by Emily Amon,
Hunterdon County Chief Park Naturalist,
and updated in 2010 by Laura Kroon, Park Naturalist.

Feel free to keep this or return it for someone else to use.

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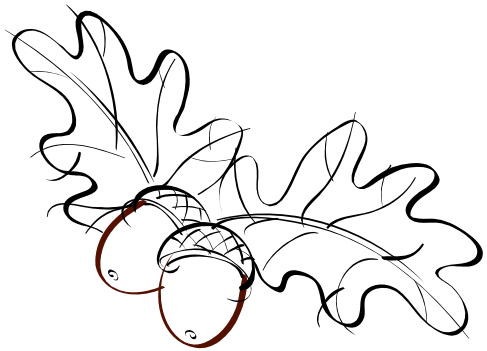
This self-guided nature trail was developed as a means of helping people become more aware of the natural features of the environment around them. It is our hope that anyone who walks the trail might learn or discover something new along the way.

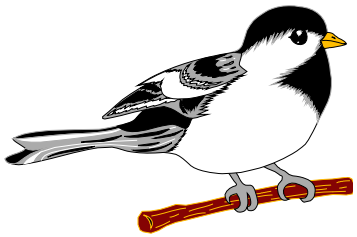
1. The start of this trail will take you into the formal garden area. As you can see, the garden is surrounded by an eight-foot fence. This is to protect the special plants in this area from deer. After continuous damage to this area, the Park System erected the fence in 1997. Please be sure to close the door behind you.

2. The katsura trees planted to the right of the trail near the gazebo have heart-shaped leaves with a distinctive "cotton candy" aroma in the autumn. These Asian trees are very hardy in the cold and can withstand extremely low temperatures.

3. The gazebo you see in our garden is over 100 years old. It was built in 1893. It is the oldest original two-story gazebo in New Jersey. It was moved to the Arboretum in 1978 from the Deats estate, which was located near the Lipton Tea Factory in Readington Township. The Deats' farm was the first home in the area to have a telephone. John Deats was known for the Deats plow, which was patented in 1829.

4. Surrounding the gazebo are crabapple trees. In the fall the fruits are eaten by wildlife, but any remaining may still be visible in winter. Crabapples are related to apple trees, but crabapple species have fruit less than two inches in diameter. Some people use crabapples to make jam. Another good source of wildlife food nearby are the acorns found in the fall in the picnic area under the big oak trees (to the north). You are more likely to find acorns in the garden than anywhere else in the Arboretum, because they are eaten by deer outside of the fenced-in area.





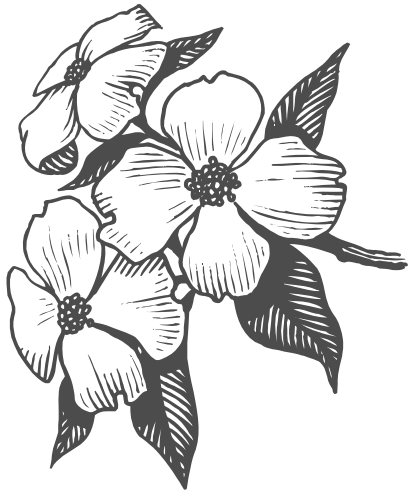
19. Along this section of the trail there are numerous pits in the ground. These are remnants of the former nursery. You'll notice that all around the Arboretum some of the trees stand in rows. The pits indicate that someone bought the plant that was growing here and it was dug up and removed.

20. Once again the habitat on this trail has changed. In this section there is an evergreen forest. Notice the soft, mossy ground. This forest is quiet because there are no leaves to crunch beneath your feet. Listen and look in this area for chickadees, who sing their name, "chick-a-dee-dee-dee," and nuthatches, who have a song consisting of low, nasal notes all on one pitch, "yank, yank."

Go left onto the outer loop trail

21. On the right side of the trail look at the big sycamore trees. Their mottled bark, becoming almost white towards the top of the tree, makes them easy to identify. You also may find their huge leaves on the ground, even into winter. Sycamore trees are commonly found along streams. From here you cannot see the stream that these trees are next to; you'll have to wait until stop #23.

22. Look (or take a short walk) down the Dogwood Trail to see dogwood trees, which are beautiful in every season. In fall and winter, the dogwood has clusters of red berries, which are eaten by numerous species of birds, as well as squirrels. In spring, the pink or white flowers appear. The "flowers" are four petal-like bracts (actually expanded bud scales). The true flower is the small inconspicuous flat-topped cluster in the middle of the bud scales. The leaves have "persistent venation": when the veins are broken and pulled apart, you will see a thin string remaining.

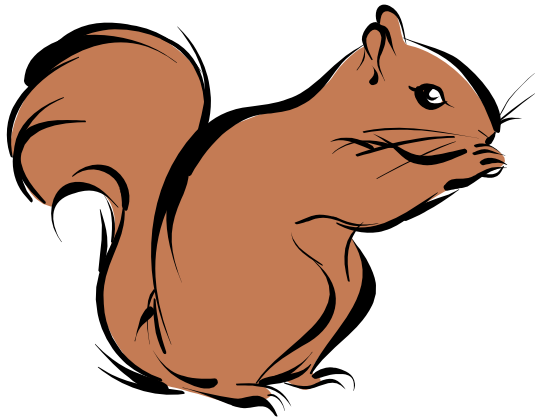


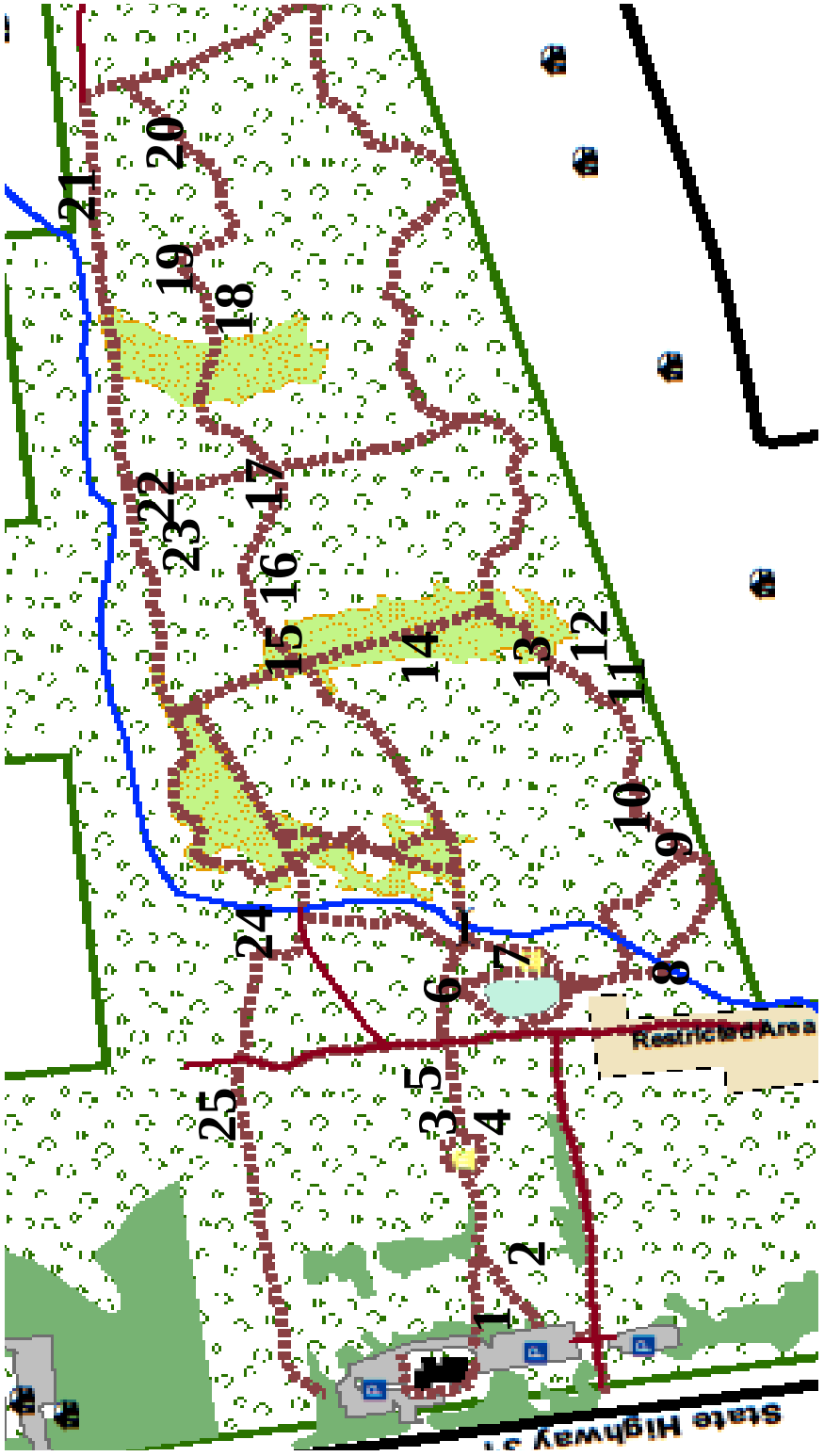
23. Remember the sycamores? This is the stream along which they grow. This is an unnamed tributary of the South Branch of the Raritan River. Streams are focal points for wildlife activity. They provide water and homes for a variety of animals, including many species of insects. Most of these insects live in the stream as larvae or nymphs (young insects). They leave the stream when they become adults, and may become food for animals such as birds, bats, and dragonflies. The type of insects that live in streams can also be a clue to the amount of pollution in the water, as many species cannot tolerate a lot of contaminants.

Stay to the right to follow the Self Guided Nature Trail.

24. Welcome to "gall corner." Look closely at the leaves and twigs here and you will find many that have galls. Galls are small round growths that are generally caused by insects. An adult insect, such as the gall wasp, lays an egg inside the twig or leaf and as the insect grows, it commandeers the plant's defense to build a home for itself. The larvae often over-winter inside the gall, and in spring eat their way out of the gall and change into flying adults.

25. This area is great habitat for squirrels. The right side of the trail has oak trees (providing acorns) and the left has white pine (and yummy pine cones). Look up in the trees for squirrel nests, which are big nests made from leaves or pine needles. Squirrels also might nest in holes. Look on the ground for bits of food the squirrels didn't finish, such as pieces of acorns (evidence of gray squirrels) or chewed-up pine cones (evidence of red squirrels). Flying squirrels are also common, but are rarely seen because they are nocturnal. These animals chew a distinctive circle in hickory nuts.



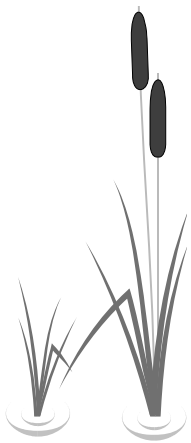


8. A Boy Scout helped the Arboretum staff build the boardwalk for his Eagle project. It was completed in 1988. It is named after the late Vincent Abraitys, a local naturalist and former county freeholder. It meanders through a wetland area which is home to many plants that can only survive in this type of habitat. Wetland plants like willows are often used to prevent erosion or restore stream banks.

9. As you reach the fork in the boardwalk, you will see a large tree ahead of you with a great deal of turkey tail fungus growing above head-level. This is a type of shelf fungus, which means that it grows parallel to the ground. If you see a fallen log with turkey tail on it, you can tell if the fungus started growing before or after the log fell over by the orientation of the fungus.

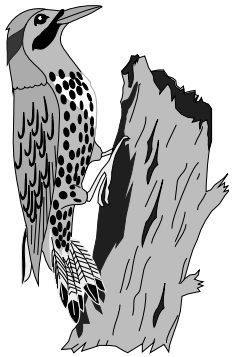
Turn right at the fork in the Boardwalk

10. Along this area of the boardwalk look around for skunk cabbage, a plant that thrives in wet areas. This plant gets its name from its foul odor. It blooms in early spring, and is able to come up early because it produces heat. Skunk cabbage has been recorded to be 27 degrees warmer than the outside air. The odor, warmth, and reddish color of the plant help attract carrion flies, which pollinate the flowers. The purple spikes visible in winter are the flowers, and the plant grows large green leaves in summer.



11. Near the end of the boardwalk look right to see the cattails. Cattails are another characteristic plant of freshwater marshy areas. The name comes from the shape of the plant; it looks like a cat's tail rising out of the marsh. Historically, people had many uses for cattails. The downy seeds (which actually come from the brown tops) were used for stuffing in quilts and pillows. The leaves were woven into mats and seats. The seed heads were used as torches. The young shoots were eaten like asparagus and the immature flower spikes were boiled and eaten like corn on the cob. The root was made into flour. At the Arboretum the cattails are used by animals for food and cover.

12. On the right of the trail here you will see several rotting logs, containing several types of fungus. This turkey tail is covered with algae. Did this fungus grow before or after the tree fell down? Other types of shelf fungus were used by artists during World War II as canvases for paintings, earning the fungus the name "artist's conch." They used the larger fungus with smooth, hard undersides because it was hard to obtain regular art supplies. You may also see puff balls. The dust that comes out of them is the spores, which is their method of reproducing. The mushrooms that you see on the surface of the log are only the part of the organism that helps it reproduce—the rest lies within the dead log, breaking down the wood and slowly turning it into dirt.



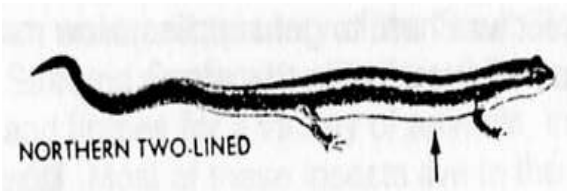
13. This tree is an excellent example of how valuable dead trees are to wildlife. The holes are from woodpeckers, searching for insects. The larger, oblong holes were made by a pileated woodpecker, the largest woodpecker in Hunterdon County. Other species of woodpeckers you could find here include: red-bellied, downy, and hairy woodpeckers, northern flicker (pictured here), and yellow-bellied sapsucker.

*** Turn left down the Memorial Trail ***

14. On either side of the Memorial Trail you will see milkweed plants in the field. They are named for the milky sap, or latex, that is produced when the leaves are broken. This is toxic to many animals, but the monarch butterfly lays its eggs on this plant, and the caterpillars ingest the toxin and use it for their own defense. After flowering, the plant produces large seed pods, which contain hundreds of brown seeds with white parachutes to aid in seed dispersal. These seed pods are still visible well into the winter.

*** Turn right on the Two-line Trail ***

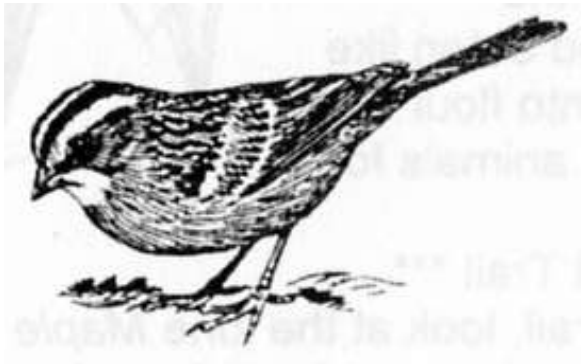
15. Turn up the Two-line Trail, named for the Northern Two-lined Salamander. These salamanders are known to wander into woodlands in warm wet weather, and can more commonly be found along brooks hiding under objects such as rocks or logs. They are yellow and have 2 dark lines from their eye down the sides of their body to their tail which border a broad light mid-dorsal stripe. The belly is usually yellow.



16. Look at the massive grape vines in this area. Grape vines don't climb the same way as poison ivy vines. Grape vines use tendrils, long slender curly extensions, to cling to the tree and help them grow higher. Poison ivy climbs in a different way, clinging to the trunk of the tree and extending its branches out as it grows. Also, a cut grape vine can produce a large amount of potable water in a survival situation—but please don't try it here!

17. On the left side of the trail notice the trees with thick bark. Give them a squeeze. These are Amur cork trees from eastern Asia and were once used to produce corks. The trees are soft and squishy just like a cork.

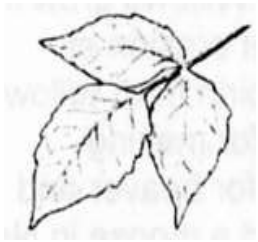
18. In this open area of the trail, multiflora rose bushes have taken over. They are a non-native invasive plant that replaces native plants by growing more aggressively than them. In the fall and winter the rosehips that grow on these shrubs are eaten by birds, although they are not as nutritious the fruit of native plants. In winter, often this area is filled with white-throated sparrows. Listen for their distinctive call, "Oh Sam peabody, peabody, peabody."



5. Before you leave the enclosed area, take a quick detour to your left to visit the compost display near the picnic area. Here you can see various techniques of turning kitchen and yard waste into productive soil. This is beneficial for keeping waste out of landfills, as well as producing a rich, organic fertilizer to use on garden or house plants.

*** Please remember to close the garden gate ***

6. Right before you reach the pond, look in the big oak on your right. You'll see a hairy vine clinging to the tree. DON'T TOUCH!! That's poison ivy.



If you are sensitive to it, you can get the itchy red rash at any time of year. Although poison ivy is poisonous to people, birds love to eat the white berries in fall and winter. It is one of the first plants to change color in the fall, turning a beautiful crimson red. The three leaves associated with poison ivy are actually three leaflets, or sections of the same leaf.

7. The pond attracts many types of wildlife. Frogs are abundant in spring. Deer tracks can sometimes be spotted in the mud or snow along the edge. There are numerous holes along the trail, probably from groundhogs. A bat house was put up on a tree by the pond (directly above the sign). There are also two in the garden area. Did you notice them? We want to encourage bats to live in this area to help keep the mosquito population low. Since the winter of 2006-07, many bats have become affected by white-nose syndrome, a disease that causes bats to use up their winter fat storage early and come out of hibernation when it is still too cold for the insects they eat. Because scientists are still learning about this disease that causes drops in populations, it is important to have homes for bats and monitor their numbers. Ask in the office for information to help you make a bat house for your home or school.

Enter the boardwalk via the second entrance