

## WELCOME

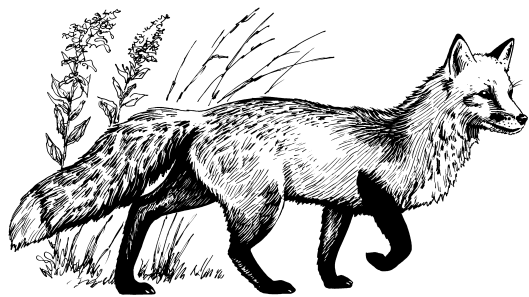
Great Swamp National Wildlife Refuge was established in 1960 to provide resting, nesting and feeding habitat for migratory birds.

To accomplish this objective, more than half of the 7,800 acre refuge is actively managed by the U.S. Fish & Wildlife Service. Refuge habitat management activities include mowing grasslands, cutting brushlands, and water level control, all of which benefit migratory birds and many other species of wildlife including threatened and endangered species.

Another goal of the refuge is to provide a place for visitors—like you—to view and appreciate wildlife. The Wildlife Tour Route offers a wide variety of habitats and many wildlife viewing opportunities.

The management practices that you will see along the Wildlife Tour Route help to provide wildlife with the best possible habitat. Many birds and other kinds of wildlife can be seen along the Wildlife Tour Route and every season offers a different viewing experience.

This guide will help you make the most of your visit. The four numbered signposts correspond to the numbered descriptions in this guide.



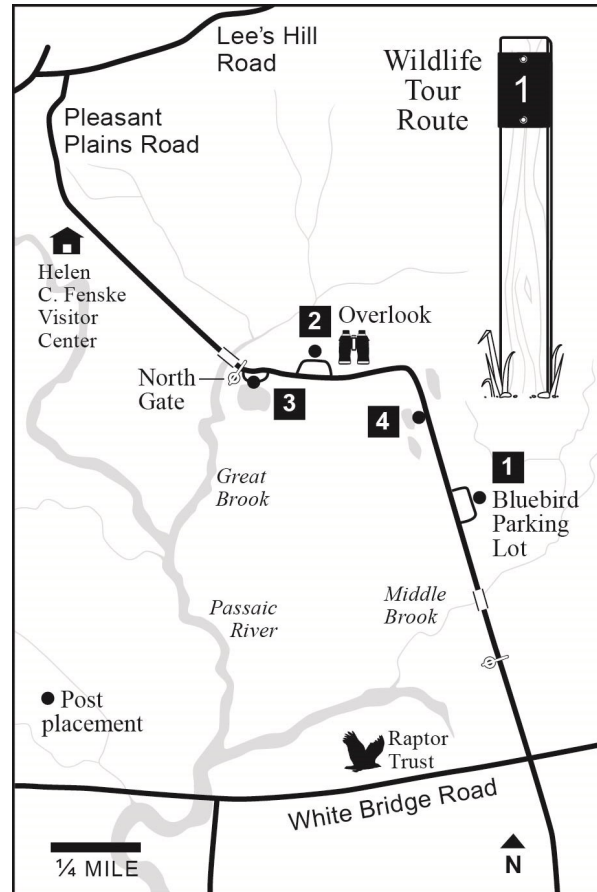
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Red Fox

## WILDLIFE TOUR ROUTE

### Wildlife Tour Route Pleasant Plains Road Great Swamp National Wildlife Refuge

Signs are numbered for each stop and shown on the map with a dot (•). They are mounted on wooden posts.



The Wildlife Tour Route is open seven days a week from sunrise to sunset for automobiles, bicycles, horseback riding, walking, and dogs (on leash).

## HABITAT MANAGEMENT IS IMPORTANT

A habitat is an animal's home—the place where it finds what it needs to survive, like food, water, shelter for safety, and a place to raise young. Different species have different habitat needs and a variety of habitats provides for a wider variety of wildlife.

Habitat management is important because when areas are left alone, natural succession occurs. For example, shrubs and small trees invade abandoned fields and over time these areas become forests. By using habitat management practices, natural succession can be interrupted and a particular kind of habitat can be maintained for the benefit of specific types of wildlife.

U.S. Fish & Wildlife Service staff and volunteers conduct regular surveys to monitor the status of wildlife and the results are used to adjust the habitat management programs.

### 1 Bluebird Parking Lot— Grassland Habitat, Managed by Mowing

Periodic mowing of fields is one example of habitat management. Mowing interrupts natural succession by preventing the growth of shrubs and trees. Grasslands are a good habitat for rodents, snakes, frogs and insects. Fields are used by hawks and owls for hunting, by American woodcock for courtship, and for nesting by songbirds like the Eastern bluebird.

Early morning and late afternoon are good times to look for white-tailed deer browsing at the edge of the woods. The deer herd on the refuge is managed through an annual deer hunt to control over-browsing of vegetation and related habitat degradation.

You may also see wild turkey, which were reintroduced to the refuge in the late 1980s and have flourished. You may even catch sight of a coyote or a red fox.



Eastern Bluebird

The small boxes on posts in the field are for Eastern bluebirds to nest and raise their young. These boxes provide a good substitute home for birds that typically nest in hollow tree cavities. The tube-like structures on the posts are predator guards to protect the nests from snakes and raccoons.

In 1976 only three nesting pairs of bluebirds were reported on the refuge. Today, with 136 nest boxes, the refuge supports one of the largest breeding populations of bluebirds in New Jersey. Volunteers monitor the nest boxes and record breeding statistics. The male bluebird is easy to identify with a sky-blue back, orange breast, and a white belly. Bluebirds may overwinter in our area as long as food is available such as insects, fruit, berries.

Tree swallows, with their characteristic swooping flight and metallic blue-green back and white belly, also use these nest boxes. Bluebirds and tree swallows consume large quantities of insects including mosquitoes.

## 2 Overlook—Marsh Habitat and Water Level Management

Water management is another example of habitat management. Ahead of you, marked by the large dead trees, is a 300-acre water impoundment area, the largest of five major impoundment areas on the refuge. Water levels are regulated in these areas to create optimum habitat for migrating waterfowl and other marsh and wading birds, especially ducks like mallards, wood ducks, and black ducks which “dabble” for submerged plants, seeds or invertebrates. Late afternoon is a good time to watch as ducks and marsh birds fly into the impoundment areas.

The dead trees in the impoundment area are used by cavity nesters like the wood duck and woodpeckers. Use the large spotting scopes to scan the dead trees for various species of birds.

The small pond in front of you is frequented by many species of birds.

Turtles can be seen basking on logs and frogs are often visible in the water. In warm weather the surface of this pond, as well as other water areas in the refuge, is covered by tiny green floating plants called duckweed, a valuable food source for waterfowl. Cattails, with their fuzzy brown seed heads, grow in the shallow pond edges, providing shelter and nesting sites for a wide variety of birds. Standing dead trees, called snags, are important for birds and mammals—as a food source, a hiding place, or to make nests in holes or crevices. Snags are also used as a look-out by raptors, including the bald eagle, to spot potential prey.



*Pileated Woodpecker*

## 3 Artificial pond—Diving Ducks and Other Pond Life

This large pond is one of the deepest ponds in the management area of the refuge. It is used by diving ducks, like hooded mergansers and ring-necked ducks, who dive under water for their food. In warm weather the pond surface is covered by the large leaves of spatterdock which provide food and cover for a variety of pond life.

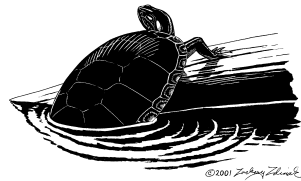


*Hooded Merganser*

## 4 Wood Duck Box—Habitat for Cavity Nesting Birds

The large box on the island in this artificial pond is for wood ducks—a species of duck that typically nests in tree cavities. In the 1930's there was concern over the declining wood duck population due to habitat loss. Nesting boxes have been very successful and today the brilliantly colored wood ducks are plentiful in the refuge. During the winter, volunteers clean the 200 nest boxes and collect survey data to determine nesting success rates. In the winter months, screech owls use these boxes for shelter. The metal cone is a predator guard which prevents raccoons and snakes from getting into the nest and destroying the eggs or ducklings.

These ponds along the Wildlife Tour Route are good places to spot painted turtles sunning themselves on logs in warm weather and to hear frogs calling in the spring and summer. In the winter, turtles hibernate in the soft mud, and frogs protect themselves by remaining at the bottom of the pond.



*Painted Turtle*

Thank you for visiting the Wildlife Tour Route.

We hope you have enjoyed this very brief introduction to some of the refuge management practices which benefit wildlife.

We encourage you to visit often, enjoy the refuge, and learn more about this and other refuges in the National Wildlife Refuge System.

For further information, visit the

Helen C. Fenske Visitor Center  
32 Pleasant Plains Road  
Harding Township, NJ  
973-425-9510

Hours: 10:00 am—4:00 pm daily  
[www.fws.gov/refuge/Great\\_Swamp](http://www.fws.gov/refuge/Great_Swamp)  
[www.friendsofgreatswamp.org](http://www.friendsofgreatswamp.org)



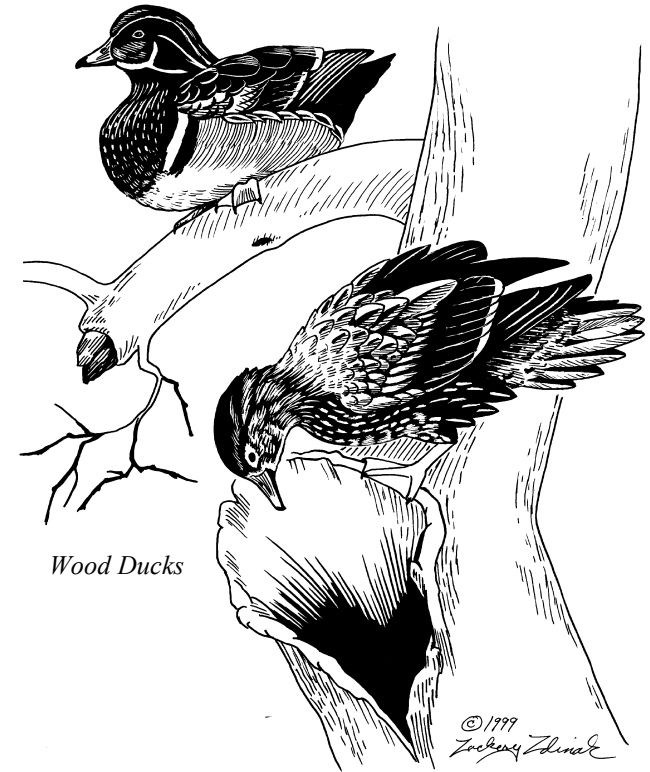
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Friends of Great Swamp National Wildlife Refuge  
Revised October 2019

GREAT SWAMP NATIONAL WILDLIFE REFUGE

# WILDLIFE TOUR ROUTE

Habitat Management at Work



*Wood Ducks*

Great Swamp National Wildlife Refuge  
Wildlife Tour Route  
Pleasant Plains Road, Harding Twp., N.J.