

U.S. Fish & Wildlife Service

Bond Swamp

*National Wildlife
Refuge*



A photograph of a cardinal flower in a swampy forest. The flower is a vibrant red, with a long, slender stem and several small, bell-shaped blossoms. It is surrounded by lush green foliage, including broad leaves and thin, vertical stems. The background is a dense, out-of-focus forest with various shades of green and brown, suggesting a natural, wetland environment. The lighting is soft and natural, highlighting the texture of the leaves and the bright color of the flower.

*Unmatched
anywhere in the
world, the National
Wildlife Refuge
System is an
extensive network
of lands and waters
protected and
managed especially
for wildlife and its
habitat. Over 500
Refuges stretch
across the United
States from above
the Arctic Circle
in Alaska to the
subtropical waters
of the Florida Keys
and beyond to the
Caribbean and
South Pacific.
The National
Wildlife Refuge
System is managed
by the U.S. Fish &
Wildlife Service.*

The cardinal flower is one of many flowers that blooms in Bond Swamp's extensive wetlands.
K. Chapman



This blue goose, designed by J.N. "Ding" Darling, is the symbol of the National Wildlife Refuge System.

Introduction

Bond Swamp National Wildlife Refuge is located along the Ocmulgee River in Bibb and Twiggs counties, Georgia, approximately six miles south of the city of Macon. The Refuge was established in 1989 to protect, maintain, and enhance the ecosystem of the Ocmulgee River floodplain. The Refuge currently consists of 6,500 acres situated along the fall line separating the piedmont from the coastal plains regions, and contains wetlands associated with the Ocmulgee River floodplain and some adjoining uplands.



Bottomland hardwood swamp

Bond Swamp contains a great diversity of habitat types ranging from mixed hardwood/pine ridges to bottomland hardwoods and swamp forests mixed with creeks, beaver swamps and oxbow lakes. The original land was purchased through cooperative efforts of the U.S. Fish and Wildlife Service and The Nature Conservancy. Additional land purchase and Refuge operations were made possible through a partnership among the U.S. Fish and Wildlife Service, the Georgia Department of Natural Resources, the Trust for Public Land and the Ocmulgee Heritage Greenway.



C. Shaw

Ocmulgee River

A River Runs Through It

The Ocmulgee River and its forests have been an important part of Macon's history and development. This region was important to Native Americans from Ice Age hunters to the Muscogee (Creeks) and Seminoles of historic times. Native Americans relied on the river and its surrounding forests for food, water, shelter and transportation for thousands of years before European settlers arrived in the area. When early European explorers and frontiersmen arrived, they traveled and traded along the river, and hunted and trapped in the forests along its banks. As European settlements in the area expanded, the forests were logged and mills operating along the river relied on it for both power and product transportation.



In recent years, the Macon area has experienced rapid development through residential and commercial expansion. To protect and manage the river corridor, concerned citizens along with local, state, and federal government agencies initiated the Ocmulgee Heritage Greenway effort. Bond Swamp National Wildlife Refuge is an important link in the

Ocmulgee Heritage Greenway, which is working to protect the Ocmulgee River and its rich resources. The proposed Greenway will create an integrated system of scenic, historic and recreational resources along the Ocmulgee River for the public's enjoyment. Bond Swamp National Wildlife Refuge fills a vital role along the Greenway by providing a place for the conservation and management of the fish, wildlife, and plants of the Ocmulgee River ecosystem.

Great blue heron



R. Idenden

Birds

Fish and Wildlife

Approximately 200 bird species are believed to occur on the Refuge. Many species of waterfowl, waterbirds, shorebirds, and neotropical songbirds pass through, over-winter or nest in Bond Swamp as they follow their seasonal migration routes. Numerous species of ducks and geese arrive in late fall and remain in the area until early spring. In fact, Bond Swamp and the wetlands surrounding it contain the highest concentrations of wintering waterfowl in middle Georgia.

The spring and fall are also busy times for neotropical migrant songbirds, such as Swainson's warbler, prothonotary warbler, yellowbill cuckoo and the wood

Prothonotary warbler



F. Eugene Hester



S. Maslowski



USFWS

*Top: Wood thrush
Bottom: Wood ducks*

thrush, as they complete their long migration flights between North and South America. In recent years, numbers of these migratory songbirds have declined. This decline may be due in part to the fact that some songbirds need large tracts of unbroken forest. The Refuge is important to migratory songbirds because it protects a large area of wetland forest unbroken by wide roads, buildings, or parking lots.

Bond Swamp is also home to a large number of year-round resident birds, such as wood ducks, woodpeckers and turkey. The shallow flooded swamp with abundant fish and waterfowl provide ideal habitat for another year-round resident of Bond Swamp, the federally protected bald eagle. The active eagle nest on the Refuge is one of forty-eight in the state of Georgia. In addition to Bond Swamp's year-round resident pair of eagles, during the winter months eagles may temporarily use Bond Swamp as they pass through the region.

Fish



US Army, Corps of Engineers

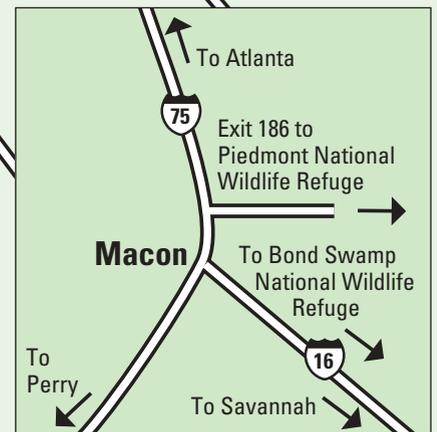
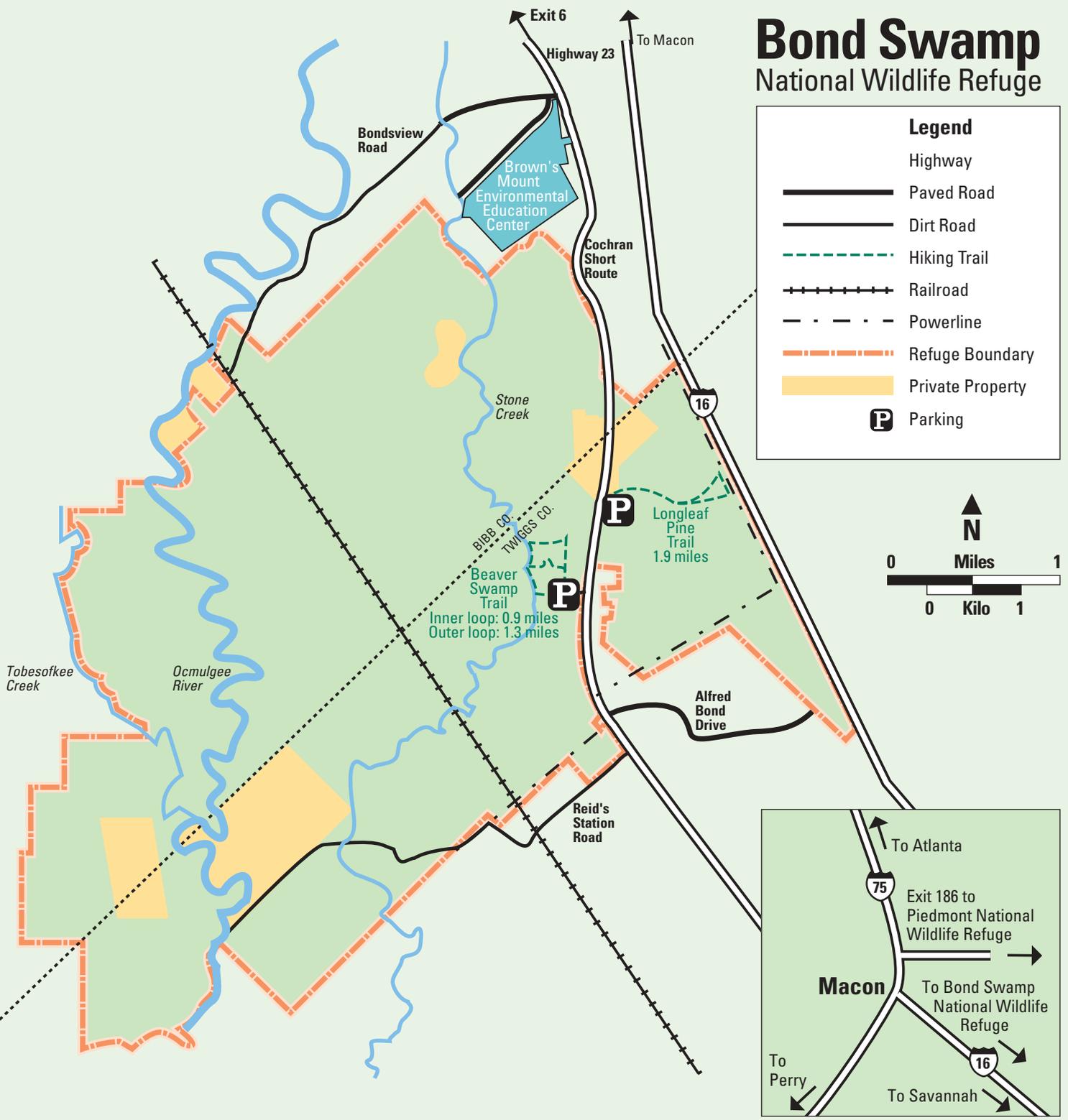
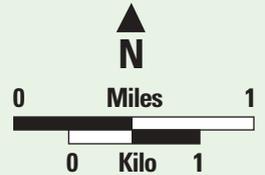
Largemouth bass

The frequent flooding that occurs along the Ocmulgee River and adjacent wetlands provides a rich habitat for numerous warm water fish species. The principal game fish in the river and its associated creeks and oxbow lakes are largemouth bass, white crappie, bluegill sunfish, red-eared sunfish, channel catfish and flathead catfish. The waters on and around the Refuge also provide habitat for several fish species which are of concern to federal agencies, including the striped bass, American and hickory shad, and the shortnose and Atlantic sturgeon. These fish are anadromous, meaning that they migrate annually from coastal saltwater marshes to inland freshwater streams to spawn in the spring. The floodplain along the river edge is important habitat for these

Bond Swamp National Wildlife Refuge

Legend

- Highway
- Paved Road
- Dirt Road
- Hiking Trail
- Railroad
- Powerline
- Refuge Boundary
- Private Property
- Parking



fish because it provides a safe place for young fish to mature before swimming back to the coast. One of these anadromous fish, the shortnose sturgeon, is listed by the federal government as an endangered species.

Another rare fish that occurs in the Ocmulgee River is the robust redhorse sucker. This fish lives in Georgia rivers and was once thought to have disappeared from the Ocmulgee entirely. However, it was rediscovered in the river near Bond Swamp in 1999.

USFWS



Robust redhorse sucker

Stone Creek



C. Shaw

Mammals

Bond Swamp supports one of the three black bear populations in Georgia, lying between the population in the Appalachian Mountains to the north and the Okefenokee Swamp to the south. A wide variety of other mammals also inhabit Bond Swamp, including white-tailed deer, bobcats, racoons, rabbits, beaver, mink, muskrat, otter and squirrels. All of these mammals are native, meaning they occur naturally in the area.

Beaver



Randy Lennon

The greatest threat to the health of the Refuge comes from a non-native mammal, the feral hog. Hogs were introduced to North America by European settlers and have escaped from farms or been released over the years. Feral hogs reproduce quickly in



Georgia Outdoor News

Feral hogs

Bond Swamp's rich bottomland hardwood forests and cause a wide variety of environmental damage, including soil erosion and change of natural waterflows

by their rooting and wallowing. They can spread disease, such as pseudorabies and brucellosis, to domestic pigs and potentially to humans. Feral hogs feed on rare and sensitive native plants, especially wildflowers, allowing non-native weedy species to invade. They compete with native wildlife, such as deer, turkey, squirrels and bear for acorns during the fall and winter. Feral hogs can also trample or eat the eggs of ground-nesting birds such as turkey and Kentucky warblers.

Reptiles and Amphibians

The combination of warm weather and wet areas at Bond Swamp provides ideal conditions for a variety of reptile and amphibian species. Although Bond Swamp is on the northern edge of the range for alligators, they are occasionally seen on the Refuge, especially on warm, sunny days. Alligators up to ten feet in length have been documented on the Refuge. Observe these animals only from a distance. Visitors should also be aware that there are several species of poisonous snakes on the Refuge, including cottonmouths, copperheads, and rattlesnakes.

Green treefrog



F. Eugene Hester



American alligator



R. Idenden

All animals on the Refuge, including poisonous snakes, are protected by federal regulations and should not be harmed. Other common reptiles and amphibians that might be encountered at Bond Swamp include the box turtle, eastern king snake, snapping turtle, green treefrog and southern fence lizard.



R. Idenden

Waterlilies

Visitor Opportunities

Bond Swamp National Wildlife Refuge is managed in coordination with Piedmont National Wildlife Refuge. Offices for both Refuges are located in the Piedmont Refuge Visitor Center which contains exhibits describing wildlife and habitats found at Bond Swamp. The Visitor Center is open Monday through Friday, 7:30 am – 5:00 pm, and weekends 9:00 am – 5:00 pm, except on federal holidays. Bond Swamp National Wildlife Refuge is open daily during daylight hours, although some access roads and portions of the Refuge may be closed during periods of flooding or deer and feral hog hunts.

Hiking

Two trails are currently open (see map). The 1.9 mile Longleaf Pine Trail passes through a mixed pine/hardwood upland forest. The Beaver Swamp Loop Trail (Inner Loop: 0.9 miles, Outer Loop: 1.3 miles) winds its way along Stone Creek through a bottomland hardwood forest.

Warning: Ticks and chiggers are present throughout the year and are especially bad in the summer and early fall. Use a strong repellent. Also, poisonous snakes are active in the spring and summer.

*Wildlife
Observation and
Photography*

Early mornings and later afternoons are the best times to observe and photograph most wildlife, although some reptiles, such as alligators and turtles, may be observed during the heat of the day sunning themselves. Spring bird migration occurs during late March, April and May, and fall migration peaks in September and October. The best way to see Bond Swamp and observe its wildlife will be by foot or canoe. The Refuge is developing a canoe trail, but it is not yet open to the public.

*Educational
canoe tour*



R. Shell

*Environmental
Education*

Educational programs are available to organized school, civic, professional and conservation groups. Advanced reservations are required for all programs and can be made by phoning the Refuge at 912/986 5441. Tours and hikes of Brown's Mount, which adjoins Bond Swamp National Wildlife Refuge (see map), are also available through a cooperative agreement between the Fish and Wildlife Service and the Macon Museum of Arts and Sciences. Call the Museum at 912/477 3232 for a schedule of events. For more information on Native Americans in the region, visit the Ocmulgee

National Monument in Macon, Georgia, which presents and interprets 10,000 years of human history along the Ocmulgee River. Call the National Monument at 912/752 8257 for further information.

Hunting

Some game species may be hunted with Refuge hunt permits. Currently only deer and feral hog hunting is allowed. Gun hunt permits are issued by quota drawing only. Archery hunting is by sign-in. Contact the Refuge for special seasons, regulations and permits.

Fishing

Bank fishing is allowed in designated areas from March 15 through October 15. No fishing from boats or canoes is allowed. Consult Refuge fishing regulations for locations of areas open for fishing.

Pets

Dogs on a leash under close supervision are permitted.

*Visitors with
Disabilities*

Access difficulty varies by area and activity. Consult the Refuge Manager for suggestions for visiting the Refuge safely.

Firearms

Firearms are permitted only during Refuge hunts in areas open to hunting.

*Camping and
Open Fires*

Camping and open fires are not permitted on the Refuge.

Litter

Take pride in your Refuge by taking your litter home.

Visiting the Refuge

Bond Swamp National Wildlife Refuge is located in middle Georgia, approximately six miles south of Macon. The Refuge may be visited by taking I-75 to I-16 East to Exit 6, Route 23/129 South. See map for parking areas located off of this road. The Bond Swamp Visitor Center is located at the Piedmont National Wildlife Refuge, which is located approximately 25 miles north of Macon. To reach the Piedmont Refuge Visitor Center, exit I-75 at Exit 186 in Forsyth and drive east along the Juliette road for 18 miles.

Equal opportunity to participate in and benefit from programs and activities of the U.S. Fish & Wildlife Service is available to all individuals regardless of physical or mental disability. For more information please contact the U.S. Department of the Interior, Office for Equal Opportunity, 1849 C Street, NW, Washington, DC 20240

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Round Oak, GA 31038
478/986 5441
478/986 9646 Fax
E-mail: FW4RWPiedmont@fws.gov
<http://piedmont.fws.gov/bondswamp.html>

U.S. Fish & Wildlife Service
1 800/344 WILD
<http://www.fws.gov>

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CELEBRATING A
CENTURY
of CONSERVATION

**Cover: Atamasco lilies bloom in the spring
at Bond Swamp National Wildlife Refuge.
Michael Lusk**