Roanoke River National Wildlife Refuge P. O. Box 430 114 W. Water Street Windsor, NC 27983 252/794 3808 http://roanokeriver.fws.gov email: RoanokeRiver@fws.gov

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

For more information contact: Refuge Manager

Monday-Friday Closed holidays 8:00 am-4:00 pm

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U.S. Fish & Wildlife Service

Roanoke River National Wildlife Refuge

The Roanoke River <u>National Wildlife</u> Refuge situated along the Roanoke River in northeastern North Carolina is part of a 100,000 acre protected area involving the U.S. Fish and Wildlife Service, North Carolina Wildlife Resources <u>Commission and The</u> Nature Conservancy. It is one of over 545 refuges that make up the U.S. Fish and Wildlife Refuge System,an extensive network of lands and waters protected and managed especially for wildlife and its habitat.



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

Introduction

Roanoke River National Wildlife Refuge, which consists of 20,978 acres, was established in August 1989 to protect and enhance forested wetlands with high waterfowl value. The extensive floodplain in the lower reaches of the Roanoke River is considered to be the largest intact, and least disturbed, bottomland forest ecosystem remaining in the Mid-Atlantic Region.



Jean Richter

Swamp

cover photo: Laurie Johnson Swainson's Warbler

River System Hydrology

Water is the driving force of bottomland hardwood communities. Annual floods over the centuries have overtopped the riverbanks, dropping the coarser, heavier suspended sediments from upriver to form the levees and ridges of the floodplain resulting in forested communities characterized by sugar berry, sycamore, green ash, beech, cottonwood, elm, sweetgum, loblolly pine, and mesic oak and hickory species. The finer, lighter sediments (silts and clays) gradually settle in the slack water areas ponded behind the levees supporting stands of bald cypress and water tupelo.



SFWS

Patterns of water flow within alluvial systems such as the Roanoke River are distinctly seasonal when unregulated. However, near the Virginia-North Carolina border, a series of three reservoirs established for hydroelectric power and flood control now regulate the flow of water, deviating from historical flow patterns. These are the John H. Kerr Reservoir, Lake Gaston and Roanoke Rapids Lake from upstream to downstream, respectively.



Green-backed heron

Mammals

Wildlife

The combination of hard and soft mast producing trees and the availability of cover provides habitat for white-tailed deer, gray squirrel and marsh rabbit on the floodplain of the Refuge. Likewise, a remnant population of black bear is found



along the lower River in one of the few remaining expanses of habitat for this species in the state. Furbearers present include raccoon, mink, nutria, muskrat, otter. fox. bobcat. beaver and opossum.

White-tailed deer

Birds

At least 219 birds including 88 breeding species have been identified on or near the Refuge. The Roanoke River floodplain is believed to support the highest density of nesting birds, especially songbirds, anywhere in North Carolina.

Exceptional birding is possible on the Refuge from March through June, the spring migration and nesting season. Some of the more notable species include cerulean and Swainson's warblers, Mississippi kite and our national symbol, the bald eagle can be frequently observed along the River's corridor.



The Refuge supports at least three active heron rookeries, including the largest inland rookerv in the state. The redshouldered hawk and barred owl are characteristic

Yellow-crowned night heron

Jean Richter

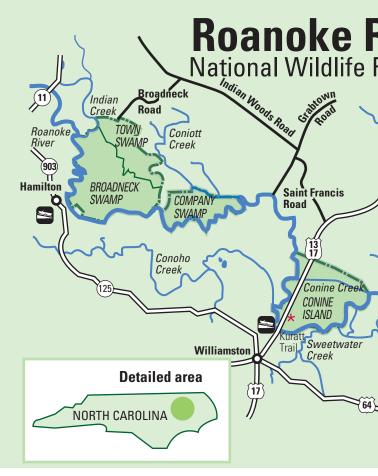
raptor species found in the wooded swamps and bottomland hardwoods.

The ancient river ridges and terraces provide excellent food and cover for feeding and nesting turkeys. Other game species that can be found sporadically in the Refuge are woodcock and bobwhite quail. Nesting wood ducks and hooded mergansers can be found regularly in and around the Refuge. During the



winter, frequently observed waterfowl species include pintail, wigeon, gadwall, greenwinged teal, mallard, black duck, bluewinged teal, ringnecked duck. shoveler, bufflehead, and Canada goose.

Jean Richter





Refuge Regulations

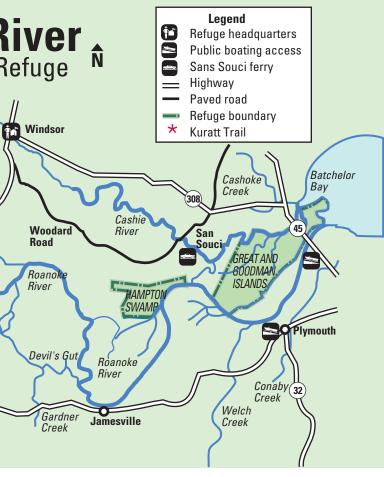
Primitive camping is allowed only in conjunction with Refuge hunts by permitted hunters.

No littering—help keep your Refuge clean!

Disturbing people, wildlife, plants and government property with vehicles, weapons, light and sound equipment or personal conduct is prohibited.

Firearms, weapons or fireworks are prohibited.

Hunting is by special permit only. Contact the Refuge office or North Carolina Wildlife Resources Commission for information.





Pets are prohibited. Retrieving dogs used during the Refuge waterfowl hunts must be under control at all times.

Special wildlife observation areas along Highway 13/17 are available seasonally. Contact the Refuge office for information.

The Refuge is open daily from sunrise to sunset; however, the Refuge is closed to the general public during permitted hunts for safety reasons. Contact the Refuge office for details.

Special fishing regulations apply. Contact the Refuge office for information. The Roanoke River and the associated Refuge floodplain wetlands are especially important to anadromous fish, marine species that



Herring

Reptiles and Amphibians





Green Tree Frog

ascend rivers to spawn. Anadromous fish include striped bass, blueback herring, alewife, hickory and American shad.

In addition to the anadromous species which frequent the River

during the spawning season, the Roanoke River and its tributaries provide excellent habitat for a diverse assemblage of resident fish species such as crappie, catfish, longnose gar, carp, shinners, largemouth bass, darters, bluegill, and white perch.

The variety of wetland habitats found on the Refuge support a unique diversity of reptiles. Snapping turtle, yellow-bellied turtle, Eastern mud turtle and the rare spotted turtle, along with the five-lined skink, newts, salamanders, toads and frogs can all be found.

Associated with the floodplain is a diversity of nonvenomous snakes ranging from the brown water to garter snake. However, three types of venomous snakes can be encountered. These include the Eastern cottonmouth or water moccasin, associated more with wetter sites, with the copperhead and rattlesnake normally associated with drier, upland sites.

Monitoring River Resources

Human manipulations of the River's floodplain during past logging efforts and altered flow regimes have created an imbalance within the



Water quality monitoring

River's ecosystem. The result of these alterations is that areas which historically flooded rarely flood now, and those which do flood do so for a longer period of time.

In cooperation with state, federal and private organizations, Refuge staff are researching the effect of asynchronous river flow patterns on fish, wildlife and plant resources. A video addressing the complex biological issues involved in managing the Roanoke River for the needs of people, fish, wildlife, plants and their habitats is available free of charge from the Refuge office. Educational instructors, community groups, local governments and individuals are all encouraged to view it.



John Ellis

Visitor Opportunities

Visitors to the Refuge may participate in a variety of activities including fishing, boating, hiking, photography, wildlife observation and hunting. The Refuge is most easily accessed by boat. Due to the intermittent swales and ridges found within the vast floodplain, limited access by vehicle is only available



Zebra Swallowtail



Kuralt kiosk

from Highway 17. See map for details.

Fishing is permitted in the Roanoke River proper and selected tributaries within the Refuge boundaries.

The Refuge hosts deer, waterfowl, small game and turkey hunts by permit only on selected Refuge lands. Additional information is available from the Refuge office.

Hikers, photographers and wildlife viewers are also invited to take in the sights and sounds. A self-guided nature trail is located off Highway 17 on the Charles Kuralt Trail. Here visitors can learn more about the bottomland hardwood forest communities and enjoy the natural surroundings. Everyone is reminded to be alert for venomous snakes and other hazards while enjoying your Refuge.



Bald cypress trees and knees

Wildlife Calendar Winter (December-February) Wintering waterfowl can



Bald eagle

be observed in forested wetlands and on the River. Bald eagles can also be observed in the River's corridor.

Spring (March-May)

Fishing is at its prime with striped bass, shad, and river herring making their spawning runs up the river. Wild turkeys can be heard gobbling. Neotropical migrants, resident songbirds and herons are nesting. Wood ducks and hooded mergansers can be seen in nesting habitat. Osprey chicks are hatching.

Summer (June-August)

Soaring Mississippi kites can be seen feeding overhead. Barred owl hoots can be heard echoing through



Rose Mallow



the bottomland hardwood forests. Fishing for bream and catfish is at a prime. Young herons can be seen flying the River's corridor.

Fall (September-November) Neotropical birds are migrating south. Whitetailed deer bucks are polishing their antlers, approaching rut. Fall colors dress the River's corridor.

Great egret

Backswamp