

U.S. Fish & Wildlife Service

# Big Lake

*National Wildlife  
Refuge*



*Big Lake National Wildlife Refuge is one of over 500 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service. The mission of the National Wildlife Refuge System is to administer a national network of lands for the conservation, management, and where appropriate, the restoration of fish, wildlife, and plant resources and their habitats with the United States for the benefit of present and future generations of Americans.*



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

## **The National Wildlife Refuge System**

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 and for people to enjoy.

This unique system encompasses over 92 million acres of lands and waters from north of the Arctic Circle in Alaska to the subtropical waters of the Florida Keys and beyond to the Caribbean and South Pacific. The lands managed as the Big Lake National Wildlife Refuge are a part of this system.

### **Introduction**

Big Lake National Wildlife Refuge was established in August, 1915 through an Executive Order as a reserve and breeding grounds for native birds by President Woodrow

Wilson.

Located outside of Manila, Arkansas this refuge has long been recognized as an important link in the Mississippi migration corridor:



Changes in management practices, flood control efforts, and continued development have made areas such as Big Lake National Wildlife Refuge even more important to wildlife.

Refuge management efforts focus on maintaining this remnant of the upper Mississippi Delta and providing quality habitat for the migratory bird species found here.

### **History**

This northern tier of the Mississippi Delta Region in Northeast Arkansas and Southeast Missouri is extremely

*All photos:  
U.S Fish and  
Wildlife Service*



rich in archeological history. This area was once covered with a spruce forest prior to the Ice Age. This habitat gave way to a oak/hickory environment which was inhabited by Paleo Indians and many now extinct animals including the mastodon, llama, tapir and sloth.

The earliest documented human occupation of the Big Lake area was in the 700's by the horticultural-based Woodland Indians. During the 9th and 10th centuries a more advanced society occupied the area. Archeological findings revealed that this society built fenced villages and rectangular log houses. They also developed new farming techniques and implemented a sophisticated political system. The Big Lake area was occupied by Native American farmsteads up until the 14th century

and then remained unoccupied until the early 19th century.



The New Madrid earthquake of 1811-12 changed the Big Lake area

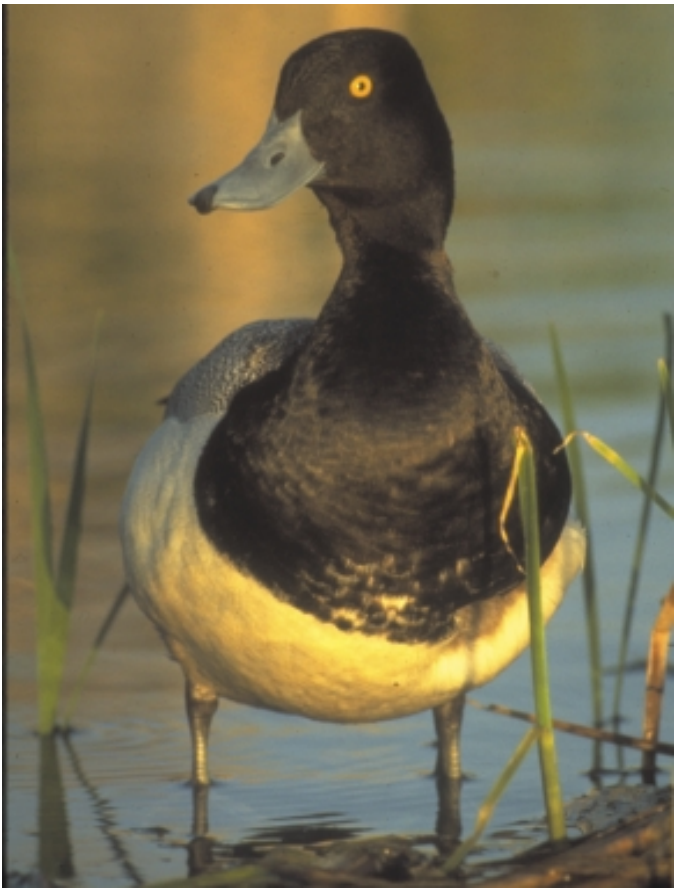
from a free-flowing river system to its present lake/swamp environment. In the late 1800's loggers rapidly cleared the timber from the area due to a demand for hardwood railroad ties. The rich bottomland soil was quickly identified by industrious farmers and the area was converted to cotton-producing farmland.

### **Managing the Habitat**

The Little River Drainage District in southern Missouri is the primary water source for the 11,038 acre Big Lake National Wildlife Refuge. The watershed consists of approximately 2,500 square miles of agricultural land which is all funneled into the refuge by way of several large drainage ditches. Since the Flood Control Act of 1935, Big Lake had been used as a sump for flood waters. Silt and trash associated with the floods led to the deterioration of the Big Lake System. To alleviate this problem the Corps of Engineers



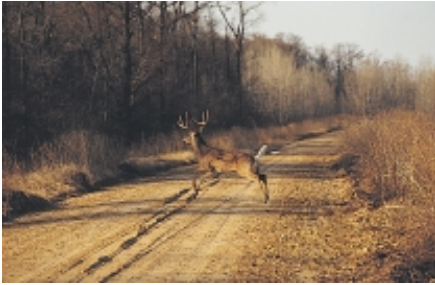
constructed a by-pass ditch to divert some of the floodwaters around the refuge. Since the completion of the project, there has been a noticeable improvement in water quality and an increase in natural aquatic vegetation.



Big Lake National Wildlife Refuge consists primarily of wooded swamps and open water. Big Lake is a shallow lake with an average depth of three feet. The swamp areas are characterized by stands of black willow, buttonbush, and towering bald cypress trees. Tree species on higher ground include cottonwood, green ash, hackberry, red maple, sycamore, river birch, and a variety of oaks. Open water areas are populated with a variety of aquatic plants. Aquatic plants such as Sago pondweed and American pondweed are a valuable waterfowl food source.

Since the Big Lake system is so unique, approximately 5,000 acres of the refuge has been set aside as a National Natural Landmark.

Approximately 2,100 acres of the Natural Area has been included in the Wilderness Preservation System. The Big Lake Wilderness Area is one of 11 areas in Arkansas and is the only wilderness area in eastern Arkansas.



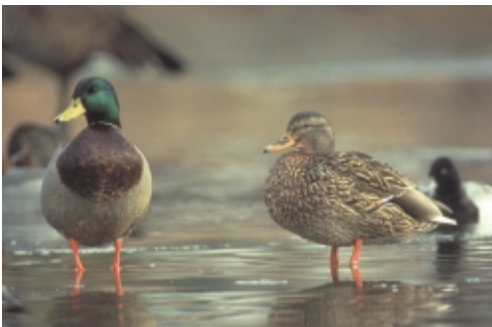
### **Refuge Residents**

Big Lake National Wildlife Refuge is home to a variety of wildlife species including songbirds,

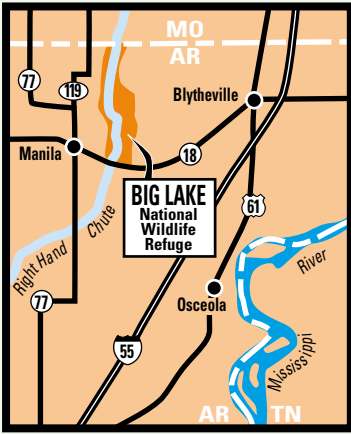
waterfowl, shorebirds, mammals, reptiles and amphibians. Over 225 different species of birds have been observed on the refuge and recorded by visiting ornithologists since 1915.

The refuge provides habitat for a variety of wintering waterfowl species including mallards, gadwalls, wigeon, green-winged teal, wood ducks (which also nest on the refuge), ringnecks, and canvasbacks. Waterfowl traveling the Mississippi Flyway begin arriving in late September eventually reaching 70,000 anywhere from December to January. An increase in aquatic vegetation has resulted in an increase in the number of diving ducks, especially canvasbacks.

Canada geese also use the refuge during the fall and winter and can be observed in the Baker Island field at the south end of the refuge.

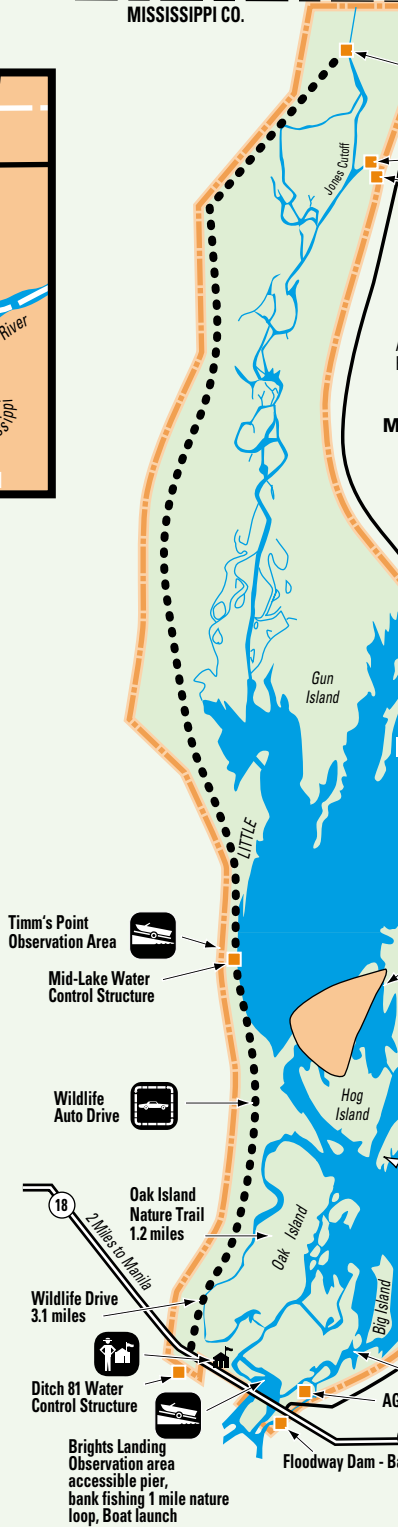


Approximately 2,500 wood ducks are produced each year in natural tree cavities and artificial nesting boxes scattered throughout the refuge.



0 Miles 10

DUNKLIN CO.  
MISSISSIPPI CO.



Timm's Point  
Observation Area



Mid-Lake Water  
Control Structure

Wildlife  
Auto Drive



Oak Island  
Nature Trail  
1.2 miles

Wildlife Drive  
3.1 miles

Ditch 81 Water  
Control Structure



Brights Landing  
Observation area  
accessible pier,  
bank fishing 1 mile nature  
loop, Boat launch

Floodway Dam - B



# MISSOURI

# ARKANSAS



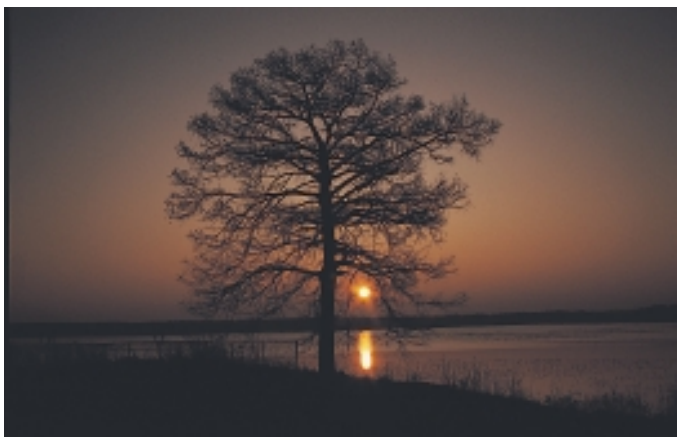
# Big Lake

National Wildlife Refuge

### LEGEND

- Refuge Headquarters
- Boat Access
- Wildlife Auto Drive ●●●●
- Water Control Structure
- Refuge Boundary
- Gravel Roads
- Eagle Sanctuary (seasonally closed)

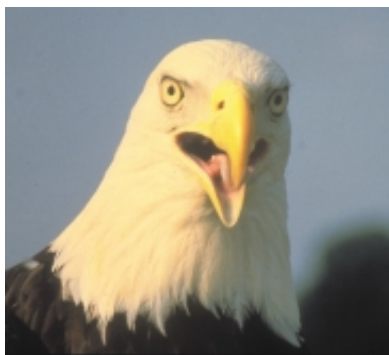




Hooded mergansers also nest in these cavities, but not as much as the wood duck.

Bald eagles and osprey also nest on the refuge. Osprey have nested successfully since 1984 and a pair of bald eagles since 1993.

Since Big Lake National Wildlife Refuge contains a significant amount of wetlands, it is not surprising that the most numerous resident wildlife



species are beavers, muskrat and raccoon. White-tailed deer are frequently observed feeding along the bypass ditch on the levee road. Sightings of squirrel and rabbits are common and bobcats are seen on occasion. A newcomer to the refuge is the nine-banded armadillo, which was first

documented on the refuge in 1998, and seen with increasing regularity.

Refuge waters abound with fish, aquatic reptiles, aquatic insects and crustaceans. Largemouth bass, crappie, sunfish, catfish, buffalo, and carp are the most common fish species. The red-eared turtle is commonly seen sunning on logs

around the lake, but the Alligator snapping turtle spends most of its life on the lake floor and is rarely seen. A variety of snakes inhabit the waters and swamps of the refuge. The eastern cottonmouth is the only common poisonous snake found in the area, and it is uncommon.

### **Enjoy Your Visit**

The refuge headquarters is located 2.5 miles east of Manila on Highway 18 and 15 miles west of Blytheville. The refuge is open year-round for daylight use only. Occasionally portions of the refuge may be closed due to flooding. Persons planning a visit to Big Lake National Wildlife Refuge should contact the headquarters for the latest conditions.





### **Access**

Access to the refuge is somewhat limited due to topography, but there is both vehicle, foot and boat access available. The only refuge road open to the public is on the western edge and is open to vehicle traffic as far as Timm's Point Observation Area. There are two boat ramps on the refuge, one at Timm's Point and the other on off Highway 18, near the headquarters. Foot trails provide bank fishing access, and wildlife observation opportunities at Bright's Landing and Fish Trap Chute, off the wildlife drive.

### **Hunting**

The refuge is open to small game and archery deer hunting. Check the current refuge hunt brochure for additional information.

### **Fishing**

Big Lake National Wildlife Refuge provides a variety of fishing opportunities throughout the year. These include an accessible pier, bank fishing and boat access. Portions of the refuge are closed during the winter months. Check the current refuge fishing brochure for additional information.

### **Wildlife Observation/Photography**

There are many opportunities to observe and photograph wildlife on the refuge. Migratory waterfowl peak during the late fall and early winter, but wood ducks are year-round residents. Eagles and osprey nest from early February through April. Eagles can be seen feeding their young in May and June and osprey in June and July. Concentrations of ducks, geese, and white-tailed deer can be observed from the Bright's Landing fishing pier during the winter months.





### **Environmental Education**

Environmental education is an important program on the refuge. Groups are welcomed and arrangements can be made by contacting the refuge office in advance.



### **Fires**

Fires are prohibited.



### **Firearms**

Firearms and archery equipment are permitted only during refuge hunting season. See refuge hunt brochure for more information.



### **Collecting**

Surface collecting or digging for archeological, historical or Native American artifacts is prohibited. Picking plants and removing animals (outside of hunting seasons) is not permitted.



### **Camping**

Camping and overnight parking is not permitted.



### **Pets**

Pets on a leash are permitted.

### **For Additional Information Contact**

Refuge Manager  
Big Lake National Wildlife Refuge  
P.O. Box 67  
Manila, AR 72442





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