

DeSoto National Wildlife Refuge lies on the wide plain formed by prehistoric flooding and shifting of the Missouri River. Each spring and fall since the end of the last ice age, spectacular flights of ducks and geese have marked the changing seasons along this traditional waterfowl flyway.

Vast changes have taken place in the Missouri River Valley since settlement in the early 1800s. Land clearing, drainage projects, river channelization, and flood control measures during the past 150 years have transformed the Missouri River floodplain from diverse wildlife habitat to farmland.

DeSoto National Wildlife Refuge is part of a network of refuges devoted to preserving and restoring increasingly scarce habitat for migratory waterfowl and other wildlife. The "Blue Goose" symbol represents the National Wildlife Refuge System, a collection of over 560 refuges protected and managed for wildlife, habitat, and people.





2015-2016 Federal Duck Stamp, Jennifer Miller

The funding for the National Wildlife Refuge System was established in 1934 through the passage of the *Migratory Bird Hunting Stamp Act*, which requires waterfowl hunters to purchase an annual migratory bird "duck stamp." Funds collected from the sale of these stamps are used to purchase valuable lands for the continuing benefit of wildlife, habitat, and people.

DeSoto: A Stopover for Waterfowl DeSoto National Wildlife Refuge's primary purpose is to serve as a stop-over for migrating ducks and geese. During typical years, large concentrations of waterfowl and other migratory birds utilize the refuge as a resting and feeding area during their fall and spring migrations between the northern nesting grounds and the southern wintering areas. Peak populations of 50,000 or more ducks, mostly mallards, are common on the refuge during the fall migration. Late October through early December are the months of peak waterfowl use. with smaller concentrations of ducks and geese returning in March and early April.



 $\underset{\rm USFWS}{Bald\ Eagle}$

Bald eagles follow the waterfowl into the area, with many wintering here until March. Peak numbers of bald eagles usually occur in late November and December, and again in early March. As many as 280 have been seen here at one time. Bald eagles are often seen perched in cottonwoods along DeSoto Lake when waterfowl are present. Good viewing opportunities are available from the DeSoto visitor center.











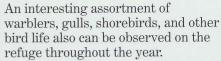
Photos Above:
Eastern
Bluebird
Dave Menke, USFWS

Two Fawns USFWS

Cottontail
E. Smith, USFWS

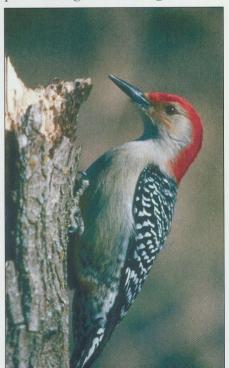
Pheasant in Snow J. Jave, USFWS

Wood Duck
Dave Menke, USFWS



In the summer, white-tailed deer and their fawns can be seen browsing in early morning and evening hours alongside refuge roads. Cottontails, raccoons, coyotes, opossums, and fox squirrels are also frequently observed along refuge roads and in fields. Backwater areas of DeSoto Lake and wetlands on the refuge provide habitat for beaver, muskrat, and mink.

Woods, fields of native prairie grasses, and brush along refuge roads attract a variety of songbirds and other wildlife, such as turkeys, pheasants, and bobwhite quail. Redheaded woodpeckers abound along the woodland edge. In summer, wood ducks, perhaps the most beautiful of American waterfowl, are present in ponds throughout the refuge.



Red-bellied Woodpecker Dave Menke, USFWS





Monarch Butterfly USFWS

Refuge management efforts are aimed at mimicking natural wildlife habitats that have largely disappeared along the Missouri River.

Prairie landscapes once dominated the Midwest, but now less than one percent remains. Refuge staff actively restore grasslands which provide important nesting habitat and winter shelter for wildlife.



Hen Wood Duck in Box B. Angus, USFWS

Wildlife managers use fire and mowing as management tools to maintain healthy stands of native grasses.

Additional activities on the refuge include applying forestry management techniques, moist soil management, water level manipulation, and riverine restoration.

Grasslands at DeSoto, usfws



Following the Missouri River **The Early Explorers**

Lewis and Clark's Corps of Discovery traveled through the area in 1804 and 1806. William Clark's journal entry, dated August 3, 1804, records the meeting with Indians at "councilbluff." Afterwards, the Corps traveled five miles upstream and set up camp along the river loop now called DeSoto Bend. Clark's journal notes an abundance of wildlife in the area. including the expedition's second observation of a badger and "great numbers of wild geese." The badger was probably the first zoological specimen preserved by Lewis and sent back to President Jefferson.

The seven-mile-long lake that is the heart of the refuge was once a hazardous bend in the Missouri River. The DeSoto Bend got its name from the nearby river town of DeSoto.

In 1960, the refuge's bend was cut off by the U.S. Army Corps of Engineers. This was one of many channelization projects that shortened the river by 72 miles in order to improve navigation on the Missouri River.

The Steamboat Bertrand Museum Collection

The refuge's visitor center is home to an archeological collection containing over 250,000 artifacts excavated from the buried wreck of the Steamboat *Bertrand*.

TYYY

The "Big Muddy"

By the mid-1800s, the Missouri River had become an artery for trade that opened the West. Steamboats carried supplies to the early fur trading posts, frontier settlements, and mining towns. But, the turbulent, snag-strewn "Big Muddy" took its toll on the early stern and side-wheelers. During the 19th and early 20th centuries, more than 400 steamboats sank or were stranded between St. Louis, Missouri, and Ft. Benton, Montana.

Loss and Discovery When the *Bertrand* sank on April 1, 1865, the Missouri River quickly covered the boat in mud. In 1968, the sternwheeler and its cargo were discovered on the refuge and unearthed the following year:

Hull of the Steamboat Bertrand Exposed in 1969, USFWS



The cargo contained all manner of goods needed for the new Montana Territory gold mines, logging camps, farms, and households. Aside from tools and equipment, even food items and clothing were recovered from the boat.

The *Bertrand's* cargo was remarkably well preserved and is a unique time capsule for researchers and visitors interested in America's 19th century material culture. The artifacts are on display in the visitor center.

Visitors may also view the excavation site where the Bertrand's hull still lies buried.

Artifiacts on Exhibit in the Visitor Center USFWS Refuge Hours, Fees and Regulations

The refuge is open ½-hour before sunrise until ½-hour after sunset. Remaining on the refuge beyond ½-hour after sunset is prohibited.

Federal Fee Area A valid entry permit is required to enter the refuge or travel on roads in the refuge.

Auto touring, biking, and wildlife observation are permitted. Vehicles are allowed on public roads and designated parking areas only.

Please see the refuge regulations brochure for specific fees and rules that apply to visitor activities at DeSoto.

Visitor Opportunities

DeSoto National Wildlife Refuge offers public programs and opportunities that promote wildlife dependent recreation including hunting, fishing, wildlife observation, wildlife photography, environmental education, and interpretation.

Visitor Center 8:30 a.m. - 4:30 p.m. daily, except most federal holidays. Auditorium for films and special programs.

> Natural and cultural interpretive exhibits including the Steamboat Bertrand Museum Collection.

Environmental education and interpretive programs.

Open seasonally. Walk along 11/4 miles of trails through grasslands, wetland, and floodplain forest habitats. About \(\frac{1}{4}\)-mile is paved with minor elevation changes.

Twelve miles of paved & gravel roads traverse the refuge along DeSoto Lake, the Missouri River, native grasslands, floodplain forests, wetlands, sandbar, and riverine habitats.



Meander and Green Heron Nature Trails



Vildlife Drive



Some sections of the tour road are closed during the fall and spring migrations.

Rertrand Discovery Site



Walk a 1/4-mile loop trail and view the site where the hull of the 178-foot Steamboat Bertrand lies buried. Displays describe its excavation and preservation. A 1/8 mile spur connects this loop to the cottonwood and grassland trails.

Cottonwood and Grassland Trails Walk along 1½ miles of trails through grasslands and floodplain forest habitats.

Fishing

Fishing and boating permitted on DeSoto Lake April 15-October 14. Ice fishing is permitted January 2 through the end of February.

Fish you are likely to catch include white bass, bluegill, black crappie, largemouth bass, and channel catfish. State and federal regulations apply. Fisherman should refer to the refuge regulations brochure.

Hunting



Hunting opportunities are allowed in the refuge by special hunting permit only. Deer and wild turkey hunts are available annually. Refer to the refuge website or call (712) 388-4800 for detailed information.

Mushroom Gathering

Mushroom gathering for personal consumption is allowed in open areas April 15 – October 14.



Environmental Education, USFWS

Spring-Summer

Green Heron

Trail. USFWS

Fall

Public Use Calendar

Refuge Hours: 1/2-hour before sunrise until 1/2-hour after sunset.

Visitor Center:

Daily 8:30 a.m. - 4:30 p.m.

April 15 - October 14

See refuge map; all tour roads, entrances and trails are open.

■ Fishing

■ Auto Touring

■ Wildlife Observation

■ Photography

■ Boating

■ Environmental Education

■ Nature Trails

■ Visitor Center

■ Mushroom gathering for personal consumption is allowed in open areas.

October 15 - December

See refuge map; foot access permitted only on developed roads and trails in open areas.

Visitor Center: Closed Thanksgiving and Christmas Day.

One-half of the refuge tour road is closed during the migration periods to minimize disturbance to waterfowl and other birds.

■ Great opportunity for viewing migrating waterfowl!

■ Visitor center, nature trails, and auto touring

■ Special hunting season access as designated.

■ Environmental education

DeSoto Visitor Center: USFWS





DeSoto Lake, USFWS

Winter



Snow Geese and Visitor Center J. Olmsted, USFWS

January-February

See refuge map; foot access permitted only on developed roads and trails in open areas.

Visitor Center

Closed New Year's Day.

■ Ice Fishing January-February, (when conditions permit).

■ Visitor center, nature trails, and auto touring

■ Special hunting season access as designated.

■ Environmental education

Early Spring



Cardinal USFWS

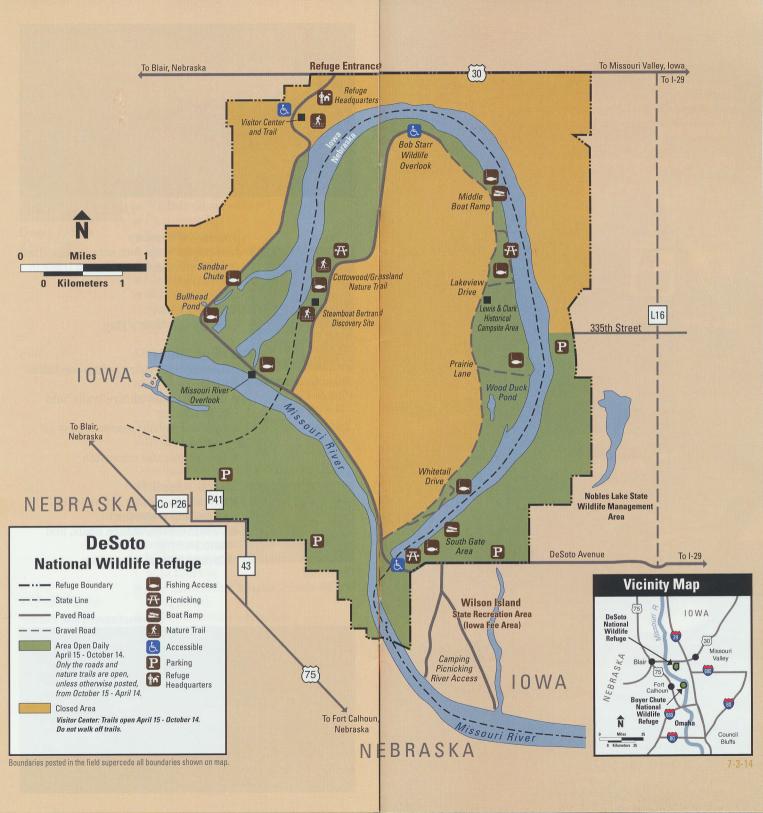
March 1-April 14

■ Great opportunity for viewing migrating waterfowl!

■ Visitor center, nature trails, and auto touring Environmental education

Blue-winged Teal, USFWS





DeSoto National Wildlife Refuge 1434 316th Lane Missouri Valley, IA 51555

Phone: 712/388-4800

People with hearing disabilities may contact the refuge via the Federal Information Relay System at 1 800/877 8339

http://www.fws.gov/refuge/desoto

U.S. Fish & Wildlife Service 1 800/344 WILD www.fws.gov





May 2018

