







This blue goose, designed by J.N. "Ding" Darling in the 1930s, has become a symbol of the National Wildlife Refuge System.

Introduction

Big Oaks National Wildlife Refuge consists of approximately 50,000 acres on the former Jefferson Proving Ground located in Jefferson, Ripley, and Jennings Counties in southeastern Indiana. The U.S. Fish and Wildlife Service has managed the wildlife resources of Jefferson Proving Ground since 1996, and Big Oaks was established as a refuge in June 2000. Big Oaks was established as an "overlay" refuge through a 25-year real estate permit from the U.S. Army. As an overlay refuge, the Army retains ownership and the U.S. Fish and Wildlife Service manages the property as a refuge. The Indiana Air National Guard operates the Jefferson Range, which is located near the center of the former proving ground, not designated as part of the refuge. Large safety buffer areas separate the range from public use areas of the refuge. Big Oaks is now one of over 540 refuges in the country that form the National Wildlife Refuge System, an extensive network of lands and waters protected and managed especially for wildlife and its habitat.

Big Oaks NWR is located in the Till Plains section of the Central Lowlands physiographic province (the Muscatatuck Flats and Canyon section of the Bluegrass Natural Region).



Little Otter Creek, Scott Flaherty, USFWS

The topography is dominated by flats and gently rolling hills as a result of glacial processes. The refuge name comes from the several stands of mature forest, which contain stately, old oaks. These are remnants of forest stands that existed at the beginning of the last century. These big oaks and the surrounding restored forest community are glimpses of what this ecosystem must have looked and felt like to the early settlers and the Native Americans.

Big Oaks contains a variety of different habitat types, which provide for a diversity of wildlife species. The refuge contains one of the largest contiguous forest blocks and grassland complexes in southeast Indiana. This landscape mosaic of grasslands, shrublands, forests, and wetlands provides opportunities for viewing a variety of wildlife species while visiting the refuge. Although there are presently no developed hiking trails, the refuge offers many recreational activities, including fishing, hunting, wildlife viewing, wildlife photography, refuge tours, environmental education, and hiking.



From Proving Ground to Refuge

In the 18th century, several Native American tribes inhabited the wilderness of southeastern Indiana. Farming and hunting/trapping were a way of life for these nations. They understood the importance of maintaining habitat in order to increase wild game available to them, and used fire as a tool to maintain habitat types, including grasslands, reminiscent of the ones found at Big Oaks today.

The land that is now Big Oaks NWR is a portion of the land acquired from the Native Americans as part of the Grouseland Purchase of 1811. When European-American settlers in the Indiana Territory first came to the Ohio River Valley in the early 1800s, they found a magnificent deciduous forest crossed by meandering streams.

Soon small communities emerged as the settlers cleared land for their farms and used the timber and native limestone to build homes, churches and schools. As the population expanded, roads, and bridges were developed, but the region remained rural. Families and neighbors worked hard and enjoyed the simple pleasures of life.

Marker denoting Morgan's trail, USFWS



John Hunt In July of 1863, the tranquility Morgan's Trail was disrupted as General John Hunt Morgan, with 2,000 Indiana Confederate cavalrymen, Indianapolis Ohio raided though southeastern Indiana, crossing what is now Big Oaks NWR. A simple stone monument salem marks the location West where three of his Virginia men were captured Kentucky by two Union officers that were home on leave.

Burkesville





Artillery firing (top) and shells (below), U.S. Army photos



General Campbell fires first round at Opening Day at Jefferson Proving Ground, May 10, 1941.U.S. Army photo

With the threat of war in Europe and in the Pacific, the U.S. Army saw an urgent need to increase the testing of additional weapons. On December 6. 1940, the U.S. Government announced its intention to acquire a large area in southeastern Indiana for the purpose of constructing a new ammunition testing facility. The Army ultimately acquired 55,264 acres of land. An area of this size centrally located in the middle of the munitions industry within the Midwest and populated relatively lightly was an ideal location for the testing facility, called a proving ground. Within five short months, four hundred families were relocated, the first of many test rounds had been fired, and the construction of the Jefferson Proving Ground was well underway.

Over the next 50 years, the installation ably served the munitions testing needs of the country during World War II and the Korean and Vietnam Wars. When the Cold War subsided, the proving ground was closed in 1995. From original wilderness to small farms, then to proving ground, the refuge now provides a diversity of habitat for abundant resident and migratory wildlife species.



Worm-eating Warbler, ©Ron Austing



Bat Roost Tree, USFWS

Habitat & Wildlife

Big Oaks provides food and shelter for a wide variety of plant and animal species. Over 200 species of birds, 46 species of mammals, 24 species of amphibians, and 17 species of reptiles are found on the refuge. Stream corridors and forested areas on Big Oaks provide excellent habitat for the federally-endangered Indiana bat, which uses the refuge for summer foraging, roosting, and rearing young.

The refuge also supports breeding populations of the river otter, which was reestablished here in 1996. Over 500 pairs of the state-endangered Henslow's sparrow are estimated to breed in the large grasslands of Big Oaks. The refuge has been designated as a "Globally Important Bird Area" because of its value to Henslow's sparrows and other migratory birds.



©Ron Austing

Cerulean

Warbler:





Federally protected bald eagles, golden eagles and osprey also use the refuge as a migratory stopover or wintering site.



River Otter; S. Crimmins, USFWS Volunteer

Wetland habitat areas (over 6,000 acres) are popular areas to view wild-life. These areas include the 165-acre Old Timbers Lake, an Army employee volunteer project constructed in the early 1970s. New beaver impoundments are naturally increasing the number and diversity of wetlands found on the refuge. Wetlands are attractive to a wide variety of wildlife, including river otters, beaver, wading birds, wood ducks, and other waterfowl. Several great blue heron nest colonies found on the refuge supports over 50 nests in the spring.

Large blocks of forested habitat can also be found at the refuge. Extensive forests are rare in Indiana and many species of wildlife that require them benefit from their conservation and management. Several wildlife species can be seen in these areas, including wild turkey, cerulean warblers, wood thrush, worm-eating warblers, and other neotropical migrant songbirds. Early successional habitat and shrublands are scattered throughout the refuge and provide habitat for many plant and animal species. Prairie warblers, yellow-breasted chats, and American woodcock make their home in these areas.



Bobcat, ©D. Kneir

The vast grasslands on the refuge provide high quality habitat for many species of grassland-dependent birds. A variety of songbirds use these areas, including one of the world's largest populations of Henslow's sparrows. Red-tailed hawks and northern harriers may be viewed foraging over the grasslands in search of food. White-tailed deer, bobwhite, fox squirrels, coyotes, cottontails, raccoons, and opossums are frequently observed along grasslands, woodland and road edges, and fields.

Managing Habitat for Wildlife

Habitat management activities at Big Oaks are designed to benefit populations of native wildlife species, especially the declining species of grassland, shrubland, and forest-dwelling birds and animals. Goals for the refuge include preserving, conserving, and restoring a natural diversity and abundance of wildlife species by protecting and managing large blocks of forest, grassland, and shrubland habitats. The varied habitat types found on Big Oaks contribute to the wide array of both resident and migratory species found on the refuge.





Prescribed Burn, USFWS

Prescribed burning is a major component of grassland habitat management at Big Oaks. Wildlife managers use fire as a tool to maintain healthy stands of native grasses and eliminate invasive species. Natural vegetation re-sprouts quickly in the open meadows after burning, creating excellent habitat and browse. Many species dependent on early successional grasslands, such as grassland migratory birds, deer, and bobwhite, benefit from areas maintained by fire.

Additional management activities on the refuge include controlling invasive plant species, monitoring wildlife populations within the refuge, and hunting deer to control population size. Refuge staff work with state, county, and private organizations on landscape related habitat issues. The refuge also works cooperatively with private landowners on habitat projects.



Northern Crawfish Frog, USFWS

Spring



Prairie Warbler, ©Ron Austing

Summer

Whitetail deer J. Jave, USFWS

Fall

Winter

Winter Roads, R. Harsin, USFWS Volunteer

Wildlife Calendar

Spring is a popular season on the refuge. Wildflowers are in full bloom and neotropical migrants fill the sky with song, with over 120 species of birds ending their journey here to breed. Bird field trips and spring bird counts are available along with fishing at Old Timbers Lake and the annual turkey hunting season. Also included is the annual youth turkey hunt.

Fishing on the refuge continues throughout the summer and fall. July also includes the annual North American Butterfly Survey.



Fall marks the beginning of deer season at Big Oaks with an archery and gun season. Also included is the annual Youth Deer Hunt and squirrel hunting season. Migrating birds may be observed making their way through the refuge on their way south.

The refuge is closed to public use from December 1 through mid-April. Guided tours can be scheduled by contacting the refuge office.



Please contact the refuge office for a complete schedule and times of events.



Hours



Oakdale Schoolhouse, U.S. Army



House Remnant, **USFWS**

Public Use Opportunities

Public use on the refuge is limited to posted hours and days. The refuge is open from mid-April to November from 7:00 a.m. to 4:30 p.m. on Monday and Friday and on the 2nd and 4th Saturday of each month. Refuge hours may vary during special hunts.

Access Permit

All visitors are required to attend a safety briefing, sign an acknowledgement of danger agreement, and obtain an annual or daily public access permit, or hunt permit for a fee before entering the refuge. Access fees are waived for those 15 yrs or under in age or holders of Migratory Bird Hunting and Conservation Stamps or passes from the Federal Recreational Lands Program. Visitors must check in and out at the refuge office and obtain an annual or daily access permit, or hunt permit for a fee before entering the refuge. When planning your visit, allow extra time for the safety briefing, permit purchase, and travel to the day use area.

Entrance Fees

apply.

Annual Permit	\$15.00
Daily Permit	\$ 3.00
Hunt Permit	

Educational/ Interpretative

Tours

Fishing



Boat Access



Hunting



Boats are permitted on the lake within a 25-boat limit. Only rowboats, paddleboats or boats powered by an electric trolling motor are allowed on the lake.

Guided tours are available for interested groups. Please call to schedule at

least two weeks before your visit.

Fishing is permitted at Old Timbers

headquarters. All state regulations

Lake during specific days and times. A fishing brochure is available at refuge

Hunting is permitted in designated areas during specific gun and archery hunts. A hunting brochure is available at refuge headquarters. Hunters must possess appropriate state licenses and a refuge hunt permit.

Collecting

Disturbing or collecting plants, animals or their parts is prohibited; however, edible mushrooms, berries, and deer antlers may be gathered for personal use during refuge public use days. A refuge permit is required.

Hiking/Wildlife Observation



Wildlife *Photography*



Photography is allowed in any area in which the visitor is authorized to enter.

Although no developed trails exist,

visitors may walk the gravel roads

or visit the day use area to observe



Columbine. Steve Miller, USFWS

Special Conditions

nature.

■ Firearms are permitted only during refuge hunting seasons and must be unloaded and cased or dismantled while in a vehicle.



- Vehicles and other modes of transportation are allowed only on designated roads. Off-road vehicles are not permitted.
- Searching for, removal, or possession of historical or military objects is prohibited. Unexploded ordnance and munitions are dangerous.

DO NOT TOUCH!



- Pets must be kept on a leash.
- Spotlighting wildlife, even without weapons, is prohibited.



■ Camping, fires, swimming, dumping, and littering are prohibited.



Friends Group

The Big Oaks Conservation Society is a non-profit support group that works closely with the refuge staff to educate visitors about wildlife and natural habitats and support refuge projects. You can help conserve wildlife and their habitat through membership!

Contact

Big Oaks Conservation Society, Inc. P.O. Box 935 Madison, IN 47250 http://www.bigoaks.org

Volunteering

If you would like to volunteer, we can use your help! Contact the refuge office for more information.



Monarch on Blazing Star Jason Lewis, USFWS

Area Information

For more information on lodging, restaurants, and area events, contact: Madison Chamber of Commerce 812-265-3135

Ripley County Chamber of Commerce 812-689-6654

Jennings County Chamber of Commerce 812-346-2339

Refuge Headquarters Location & Hours

The entrance to Big Oaks NWR is located on U.S. Highway 421, approximately five miles north of Madison, Indiana. The refuge office is in Building 125. Office hours are 8:00 a.m. to 4:30 p.m., Monday through Friday, excluding federal holidays.







