



Ken Witkowski/USFWS

*Spring beauties in bottomland hardwood forest*

### Important Information For Visitors

The refuge is open from dawn to dusk.

Observe wildlife from a safe and respectful distance. Binoculars, spotting scopes, and telephoto lenses allow you to view wildlife closely without disturbing them. Stay on maintained trails.

Please do not feed wildlife. Feeding wildlife trains animals to be unnaturally dependent on and less frightened of humans, concentrates animals in one area and may make them more susceptible to disease.

Please take memories and photographs. Do not gather or disturb any plants, flowers, insects, or wildlife.

The U.S. Fish and Wildlife Service protects archaeological sites from destruction during its own activities. It is against the law to damage archaeological sites or remove archaeological artifacts such as old bottles or arrowheads on the refuge.

Leashed dogs are allowed on the Liberty Loop Trail. To protect resting wildlife, pets are not otherwise allowed on the refuge.

Camping, jogging, horseback riding, bicycling, all terrain vehicles, dirt bikes and snowmobiles, and overnight parking are prohibited.

Wallkill River National Wildlife Refuge  
1547 County Route 565  
Sussex, New Jersey 07461-4013  
973/702 7266  
1 800/852 7899 TDD  
1 800/852/7897 voice  
[www.fws.gov/northeast/wallkillriver/](http://www.fws.gov/northeast/wallkillriver/)

Federal Relay Service  
for the deaf and hard-of-hearing  
1 800/877 8339

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

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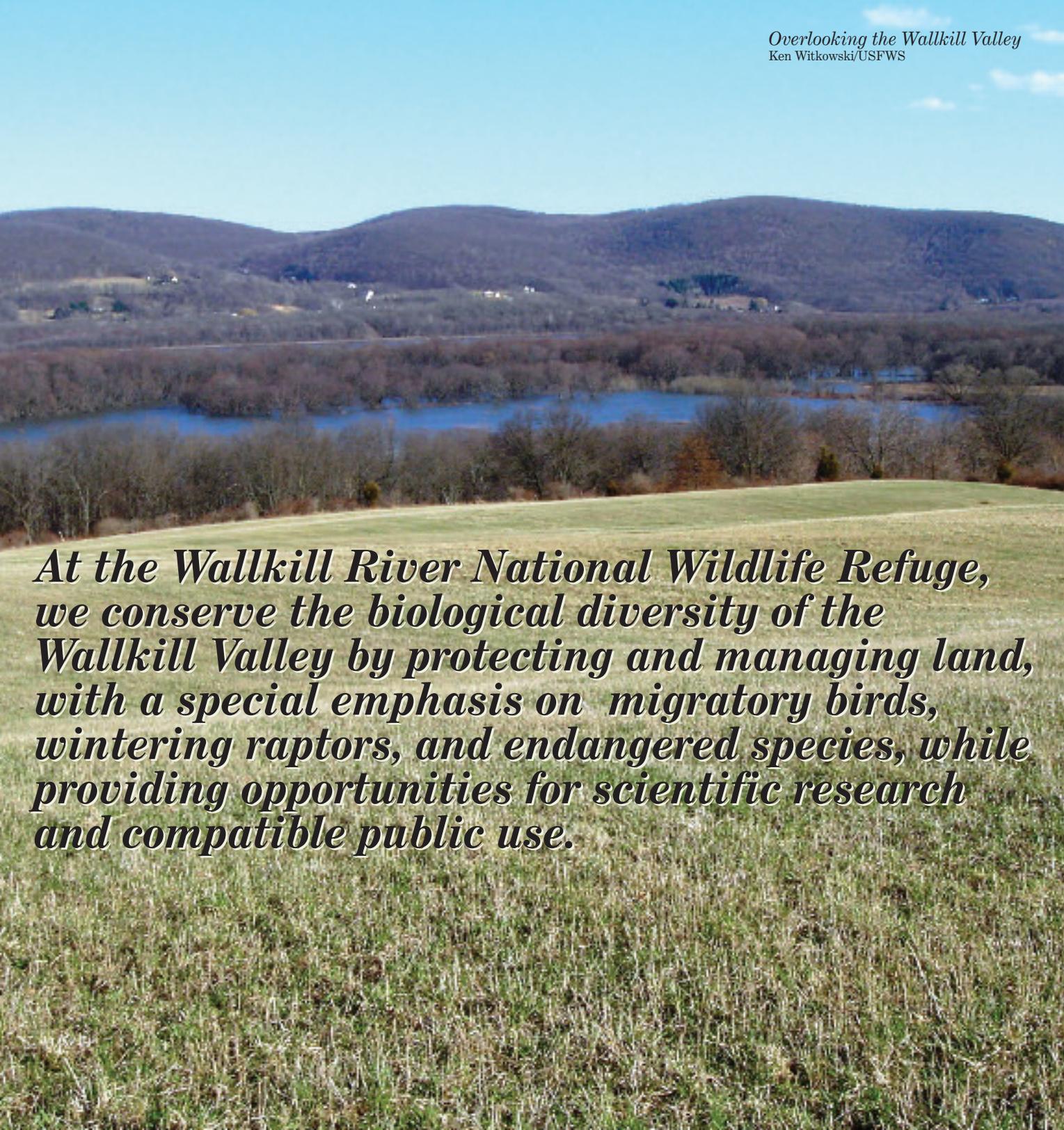


U.S. Fish & Wildlife Service

# Wallkill River National Wildlife Refuge



*Rose-breasted grosbeak*  
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*At the Wallkill River National Wildlife Refuge, we conserve the biological diversity of the Wallkill Valley by protecting and managing land, with a special emphasis on migratory birds, wintering raptors, and endangered species, while providing opportunities for scientific research and compatible public use.*

## Our Mission



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

Welcome to Wallkill River National Wildlife Refuge (NWR). Congress established the refuge in 1990 “to preserve and enhance refuge lands and waters in a manner that will conserve the natural diversity of fish, wildlife, plants, and their habitats for present and future generations and to provide opportunities for compatible scientific research, environmental education, and fish and wildlife-oriented recreation.” Congress also required the protection of aquatic habitats within the refuge, including the Wallkill River and Papakating Creek.

Wallkill River NWR is administered by the U.S. Fish and Wildlife Service as part of the National Wildlife Refuge System, whose mission is “to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

## Shaped by Nature and People

The Wallkill River begins in Sparta, New Jersey, flows north through Orange and Ulster Counties in New York, and merges with the Rondout Creek to flow into the Hudson River.

### Volunteers

Fran Stephenson/USFWS



Julie Reid/USFWS

*Wallkill River  
in winter*

The refuge is located along a ten-mile stretch of the Wallkill River, and lies in a rolling valley within the Appalachian Ridge and Valley physiographic province. The Wallkill Valley is bounded by the Kittatinny Ridge to the west and the Hudson Highlands to the east. This area is part of the Great Valley, which extends from Canada to the southeastern United States.

As the ice sheets retreated from the Wallkill Valley area, a glacial lake formed. The region’s major wetlands are former glacial lake bottoms, and the lake’s organic muck soils support extensive bottomland hardwood forests, wet meadows, and farm fields. The valley is underlain by limestone, with outcroppings sometimes appearing as “islands” along the river and in adjoining wetland complexes.

Occupation of the valley by Native Americans began as early as 10,000 B.C. The Wallkill River was first known by the Lenape people as “Twischsawkin,” meaning “the land where plums abound.” The Wallkill Valley was an important source of flint and chert for Native Americans, who used these stones for hunting and cutting tools.

Beginning in the 1600s, European settlers followed the Wallkill River south from settlements along the Hudson River. It is thought the river was named for Holland's Waal River. With the bottomlands along the Wallkill River flooding extensively, the area became known as "The Drowned Lands." As early as 1775, people tried to drain the river for farming. The effort did not succeed until 1835 when a large canal lowered the river's water table. Mill owners, however, sought to keep the lands flooded, beginning the battle known as the "Muskrat and Beaver" wars. The disputes ended in the farmers' favor in 1872. The fertile Wallkill Valley continues to sustain a variety of agriculture including fruits, vegetables and sod.

### **A Variety of Habitats**

Swamps and floodplain forests of red maple, river birch, American sycamore, green ash, buttonbush, silky dogwood, highbush blueberry, spicebush, skunk cabbage, marsh marigold, cardinal flower, and sensitive fern characterize much of the refuge.

A small Atlantic white cedar forest grows on the refuge. The mixed hardwood forests of the higher elevations include sugar maple, white oak, shagbark hickory, flowering dogwood, witch hazel, mayapple, and columbine.

Grasslands and scrub-shrub habitats are important refuge communities. The original native grasslands and extensive wetlands occurring alongside the river before it was

*Great egret hunting catfish*  
©Herb Houghton



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*Indigo bunting*

channelized are gone. Farmers have planted cool season grasses at the river's edge and in upland meadows for haying, and some native warm season grasses have been restored in these fields.

The third important habitat on the refuge is the river and its tributaries. The Papakating Creek, almost as big as the Wallkill, forms a wide wetland area west of refuge headquarters.

The refuge also manages 335 acres of former sod farm as waterfowl impoundments. By controlling the water levels in this area, the land can support large numbers of waterfowl and shorebirds.

**Bobolinks,  
Bog Turtles,  
Black Ducks,  
and More**

The Wallkill River bottomland is one of the few large areas of high quality waterfowl habitat remaining in northwestern New Jersey. As a major watershed and wetland area, the Wallkill River provides migratory and nesting habitat for Atlantic flyway black duck populations as well as wood duck, mallard, green-winged teal, common mergansers and Canada geese.

*Eastern bluebirds*



©Herb Houghton



*Impoundment*  
©Herb Houghton

More than 250 species of birds occur on the refuge, including 26 species of waterfowl, 22 species of raptors and 27 species of shorebirds. You may also find many species of marshbirds, wading birds, and songbirds. A chorus of red-winged blackbirds and the spectacular courtship display of the American woodcock are some of the earliest harbingers of spring.

In summer, the indigo bunting, bobolink, scarlet tanager, Baltimore oriole, grasshopper sparrow, field sparrow, cedar waxwing, chestnut-sided warbler and other songbirds bring color and melody to the refuge. Kestrels commonly nest on the refuge, and the barred owl's "who-cooks-for-you" call is often heard. The fall migration brings waterfowl, shorebirds, and other songbirds that had nested further north to the refuge. Raptors are plentiful during fall migration as well, when sharp-shinned hawks, Cooper's hawks, and



*Great blue heron rookery*  
Ken Witkowski/USFWS

broad-winged hawks fill the sky on clear September days. Short-eared owls, northern harriers, and rough-legged hawks are found primarily during the winter.

The diverse mammal population includes bats, beaver, muskrat, river otter, mink, red fox, gray fox, coyote, white-tailed deer, and black bear. While amphibian and reptile populations are generally declining due to habitat loss and degradation, the Wallkill River valley provides some of the best remaining habitat for salamanders, frogs, turtles and snakes in the northeast. Of special significance on the refuge are the bog turtle (a federally threatened species) and the Indiana bat (a federally endangered species), both protected by the Endangered Species Act.

The refuge supports 66 species identified in New Jersey as threatened, endangered or of special concern, and 14 species listed in New York.

The Wallkill River provides an excellent warmwater fishery for largemouth bass, pickerel, perch, sunfish, and bullheads. Some of the streams that enter the Wallkill River have native brook trout populations.

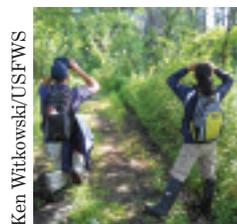
*Short-eared owl*



## Wildlife Management

Refuge management is focused on conserving, restoring, and enhancing the natural diversity of fish, wildlife, plants, and their habitats along the Wallkill River. Many of the historic wetland areas along the Wallkill River were drained in the past. Management activities include restoring some areas to their natural wetland condition, creating “potholes” which hold spring and fall floodwaters in areas where the original hydrology cannot be restored, managing some areas as moist soil units for waterfowl and wading birds, and controlling invasive plant species to improve habitat for wildlife.

*Birdwatching on the Timberdoodle Nature Trail*



Ken Witkowski/USFWS

Grassland and forest areas are important to raptors and songbirds and will be maintained and enhanced for nesting and migrating species. The refuge has an active grassland restoration and management program. A special use program provides opportunities for local farmers to harvest hay in late summer from the refuge.

## Enjoying the Refuge

The National Wildlife Refuge System Improvement Act of 1997 designated wildlife-dependent recreation as an important part of refuge management. If compatible, refuges are to offer opportunities for wildlife observation and photography, hunting and fishing, and environmental

*Management through cooperative farming*

Ken Witkowski/USFWS



education and interpretation. The refuge provides many opportunities for visitors to get closer to nature.

### Refuge Office

The refuge headquarters, typically open 8:00 am to 4:30 pm weekdays, is located in a renovated 150-year old farmhouse at 1547 County Route 565 in Vernon Township, New Jersey. Public restrooms are located at the parking lot and are open daily.

### Wildlife Observation

As of September 2012, there are five nature trails on the refuge with others currently in the planning stages. In winter, with proper snow conditions, cross country skiing and snowshoeing are permitted on these trails.

*Painted turtles*



The Wood Duck Nature Trail passes through wetlands and wet meadows for 1.6 miles on an abandoned railroad bed, ending at the Wallkill River. The first 0.6 mile is wheelchair accessible. The trail includes a wildlife photography blind, several benches, and interpretive signs that describe wildlife and habitat.

*Viceroy*



The 2.5-mile Liberty Loop Trail was created on a former sod farm. The trail hosts the Appalachian Trail for 1.5 miles. The trail loops around the refuge's impoundments, providing an excellent opportunity to observe waterfowl and shorebirds in the spring and fall and the short-eared owls in the winter.

The Dagmar Dale Nature Trail travels from refuge headquarters down to the Wallkill River and surrounding fields. This trail, which traverses hilly terrain, provides expansive views of the Wallkill Valley and the Kittatiny Mountains, and is an excellent place to observe forest songbirds, grassland birds and raptors.



*Red-tailed hawk*  
©Scott A. Vincent



*Volunteer river guides*  
Cheryl Bloomer

The Timberdoodle Trail follows an old railbed, beginning at Bassett's Bridge Road and traveling south for 2.3 miles. Timberdoodle is an old folklore name for the American woodcock, which can be observed performing its courtship display along the trail in early spring. This area provides excellent songbird nesting habitat for American redstart, northern waterthrush, wood thrush, veery, red-eyed vireo and numerous others.

The Winding Waters Trail follows an old farm road for 2.1 miles along the river and through restored fields, beginning at the Canoe Launch at Oil City Road. The area provides excellent stopover habitat for flocks of bobolink and waterfowl throughout the year, as well as hunting grounds for raptors.

Photography is allowed in any area open to the general public. A special use permit is required for access to other refuge lands. There can be a fee for the permit. Contact the refuge manager for additional information.

One of the best ways to see the Wallkill River refuge is by canoe or kayak. You will experience the great

diversity of habitats that make the refuge unique. Canoeing takes you through floodplain forests, wet meadows and by tall rock cliffs. Water levels in the river fluctuate seasonally. During spring, the wet meadows may be flooded, making the river channel difficult to follow. Conversely, by mid summer, the river may not be passable due to low water levels. Autumn rains generally raise the water level once again. Snags and fallen trees are not always removed, so be prepared to haul your canoe over beaver dams and downed trees. Please use caution when moving your canoe in or out of the river as steep, slippery banks and unstable slopes are common.

There are three access points to the Wallkill River on the refuge. Refer to the fold-out map for access locations.

### Fishing

Fishing access is provided at Bassett's Bridge and Oil City Road. Fishing is also allowed anywhere along the river that can be reached by boat. Please look for refuge boundary signs to ensure you are on refuge land. While all anglers must comply with New Jersey or New York fishing license requirements, no special refuge fishing permit is required.

### Fishing



Elizabeth Stevenson/USFWS



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*Chestnut-sided warbler*

### Wildlife Photography

### Canoeing/ Kayaking

## Hunting



Jim Holowienka  
*Youth hunters*

The refuge is open for some hunting seasons. Hunting is a wildlife management tool used to control some animal populations and is also a Congressionally mandated priority public use. Hunters must obtain a refuge permit for each hunting season, as well as all applicable state licenses and permits. Accommodations are available for handicapped hunters; inquire at the refuge office. Additional hunting opportunities may be made available in the future. A permanent, no-hunting area is located at the Liberty Loop Trail.

## Where to Find Food and Lodging

For information on lodging, restaurants and area events, contact:



Vernon Chamber of Commerce  
973/764 0764

## Waterfall, Dagmar-Dale Trail



Ken Witkowski/USFWS



Karyn Fontana

## Volunteer-led archery class

Sussex County Chamber of  
Commerce 973/579 1811

Warwick Valley (NY)  
Chamber of Commerce  
845/986 2720

New Jersey state parks and forests provide opportunities for camping. Contact the NJ Division of Parks and Forestry at 973/827 6200 or 609/984 0370 or at <http://www.state.nj.us/dep>.

## Volunteering

If you would like to volunteer, we can use your help! Trail maintenance requires a lot of time—volunteers are deeply appreciated. Other volunteers do construction work, public programs, or help us collect biological data. The refuge also maintains 4 RV hookups for those interested in volunteer Work-camping. Contact the refuge office for more information.



Michele Talmadge/USFWS

*Shawangunk Grasslands NWR*

**Visiting other refuges within our complex**

The staff at Wallkill River also administer two other non-staffed refuges. Shawangunk Grasslands NWR (located in Ulster County, NY) is a prime destination for bird watchers, providing exceptional habitat for grassland-dependent migratory birds and wintering raptors. Cherry Valley NWR (located in Monroe County, PA) provides native forest, wetland, and grassland habitats that support migratory birds and other trust species. For more information, visit the refuge web sites at: <http://fws.gov/northeast/shawangunk> and <http://www.fws.gov/cherryvalley>.

*Overlooking the Cherry Valley*



Marilyn Kitchell/USFWS



Ken Witkowski/USFWS

*Checking purple martin apartments*

*Spotted skimmer*



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*Northern harrier*  
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Wallkill River NWR is one of more than 555 refuges in the National Wildlife Refuge System administered by the U.S. Fish and Wildlife Service. The National Wildlife Refuge System is a network of lands and waters managed specifically for the protection of wildlife and wildlife habitat and represents the most comprehensive wildlife management program in the world. Units of the system stretch across the United States from northern Alaska to the Florida Keys and include small islands in the Caribbean and South Pacific. There are now over 50 million acres of marine monuments in the system as well. The character of the refuges is as diverse as the nation itself.

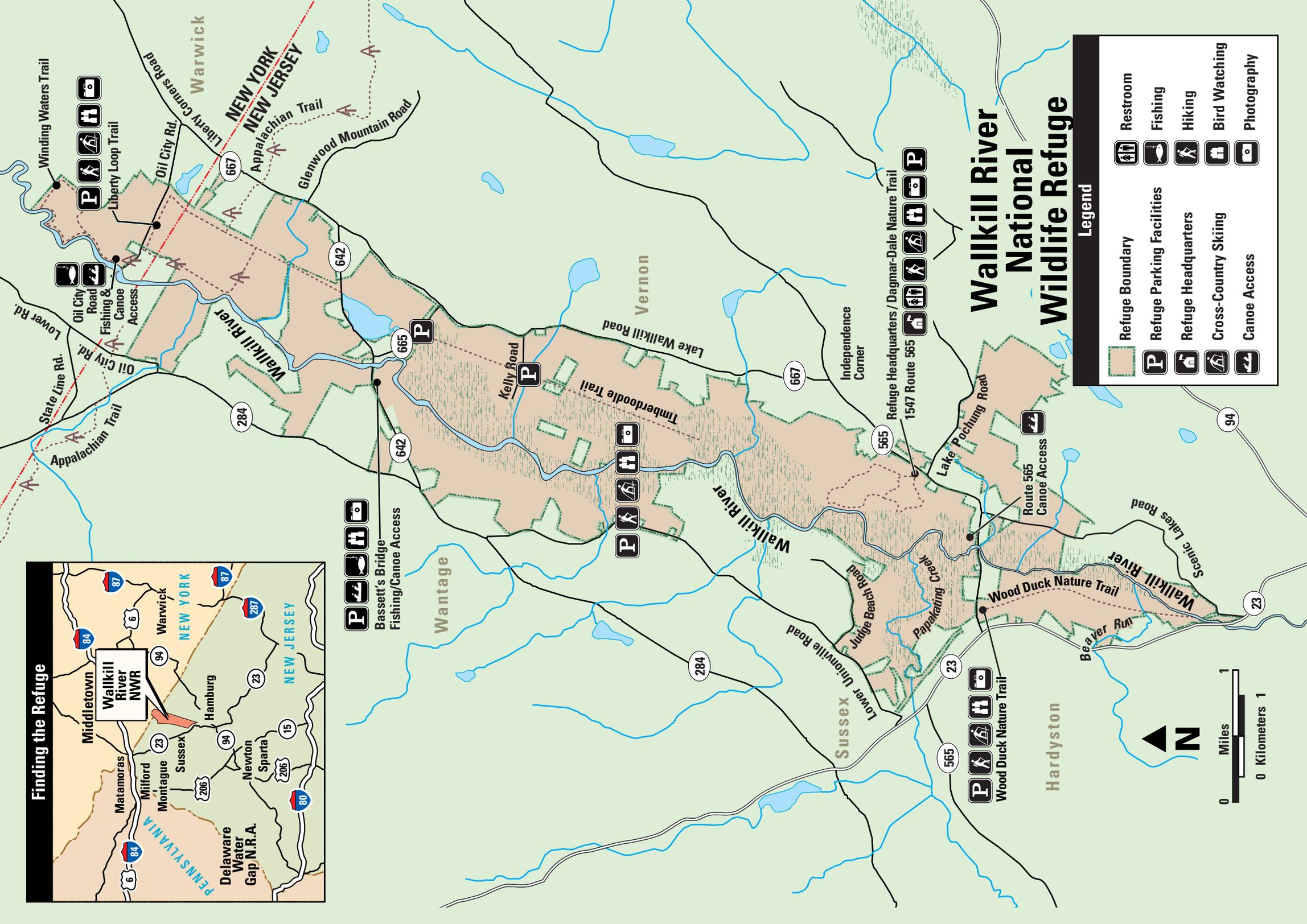
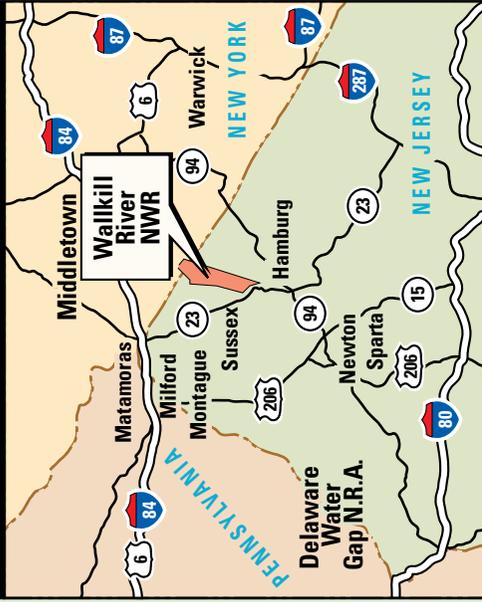
The Service also manages national fish hatcheries and provides federal leadership in habitat protection, fish and wildlife research, technical assistance and the conservation and protection of migratory birds, certain marine mammals and threatened and endangered species.

*White-tailed deer*



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### Finding the Refuge



# Walkill River National Wildlife Refuge

### Legend

Refuge Boundary	Restroom
Refuge Parking Facilities	Fishing
Refuge Headquarters	Hiking
Cross-Country Skiing	Bird Watching
Canoe Access	Photography

