

Habitats for Wildlife

Open Water

During high water years Malheur Lake is transformed from a large marsh to a huge lake. The thousands of acres of open water attracts white pelicans, terns, grebes and gulls to feed on fish. Common loons, osprey and waterfowl stop at the lake during their migrations.

Marshes

Ponds, sloughs and marshes in the Blitzen Valley and at the Double O Ranch attract nesting trumpeter swans, Canada geese, ducks and greater sandhill cranes. Colonial nesting species, such as white-faced ibis, great, snow and cattle egrets, black-crowned night-herons and Franklin's gulls, build over-water nests in emergent vegetation around the edges of Malheur Lake and in deeper ponds in the Blitzen Valley.

Irrigated Meadows and Grain Fields

The Double O Ranch and Blitzen Valley have been intensively developed. Ponds, canals, dikes and water control structures manipulate the water to create wildlife habitat.

In August, after the flood-irrigated meadows are drained, some are grazed, hayed or burned. Periodically removing the vegetation stimulates new growth that creates nesting cover for the following years. Burning also recycles nutrients tied up in standing vegetation, reduces brush, increases abundance of grasses and opens up densely vegetated marshes. Haying and grazing also create open feeding areas in the meadows.

Sandhill cranes and Canada geese like to feed in these areas and mule deer frequently can be seen joining them in the evenings. The meadows and marshes north of the P Ranch are important greater sandhill crane nesting areas.

Riparian Areas

Riparian areas are scattered throughout the refuge. They are identified by the great variety of grasses, shrubs and trees that are present next to streams, ponds or other areas of open water. These areas are among the most important for wildlife because they provide food, shelter from weather and predators, and water all in one place. The value of such an area to the wildlife in a desert environment can not be underestimated. Look for these riparian communities and their abundant wildlife north of the P Ranch along the stream, next to refuge headquarters, Benson Pond and Knox Pond.

Uplands

Due to the location of the refuge in the high desert most of the upland vegetation consists of antelope bitterbrush, sagebrush, Western juniper and at the higher elevations quaking aspen and mountain mahogany. These plant communities have adapted to the extremes in temperature, poor soil conditions and dryness of the region. They provide forage for grazing animals (deer and antelope), nesting sites for birds (sage grouse and quail), and they minimize wind erosion.

Take Pride in Malheur National Wildlife Refuge

Refuge status is not failsafe protection. Wildlife and their habitats will always be vulnerable to careless public use and abuse. Too often it seems that because these natural resources belong to everyone, they are seen as the responsibility of no one. Refuge managers cannot do their jobs without support from everyone who is committed to the future of wildlife, their habitats and the valuable recreational opportunities they provide.

How You Can Help

Observe rules and report any destructive activity you see. Rules have been made for your protection and for the benefit of the natural resources.

Take your trash home with you.

Look for opportunities to communicate the good stewardship message to others.



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U.S. Fish and Wildlife Service

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Malheur National Wildlife Refuge Oregon

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Official Business



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Malheur - An Island of Life in the Desert

Since prehistoric time, the Malheur-Harney Lakes Basin has been a major nesting and migration stop-over area for migratory birds. The extensive marshes, wet meadows and riparian areas, surrounded by hundreds of square miles of desert, attracted tremendous numbers of birds. Early naturalists marveled at the abundance and diversity of nesting and migrating species.

A growing population of pioneer settlers in the late 1800s enjoyed unrestricted hunting of the birds. Then, at the turn of the century, plume hunters came to Malheur Lake to kill swans, egrets, herons and grebes for feathers for the millinery trade. The great egret population was exterminated and other species' populations were greatly diminished.

In 1908, President Theodore Roosevelt protected Malheur, Harney and Mud Lakes as a migratory bird



sanctuary to halt the slaughter. The drainage and reclamation of the Blitzen Valley posed an equally serious threat to nesting birds by reducing the water supply to Malheur Lake. In 1935 the Blitzen Valley and the P Ranch were added to the Malheur National Wildlife Refuge.

Some wildlife populations are reestablishing at Malheur. The colonial birds populations have recovered from the impacts of plume hunters. A nesting population of trumpeter swans has been reestablished.

Today the Malheur National Wildlife Refuge consists of 185,000 acres that include Malheur, Harney and Mud Lakes, numerous ponds in the Blitzen Valley, alkali flats, rimrocks and sagebrush-covered hills.

P Ranch - Remnant of an Empire

The P Ranch, once headquarters of the Peter French cattle empire, is a remnant of the era when powerful cattle barons gained control of Western range lands. French arrived in the Blitzen Valley in 1872 with a herd of cattle and six Mexican vaqueros. During the next 25 years, he rapidly expanded his holdings and cattle operation until he controlled nearly 200,000 acres, ran 45,000 head of cattle and had built a dozen ranches. He was a progressive rancher who combined the Texas tradition of running large herds of half-wild cattle on the open range with English methods of stock farming. In 1897 Peter French was murdered by a competitor. His famous residence, the "White House," burned in 1948.

The Long Barn, beef wheel and several willow and stockade fences, all built in the 1880s, are the only structures remaining from the French era. You can walk through the Long Barn to observe French's innovative construction techniques. The Harney County Historical Society Museum in Burns has many displays and photographs showing the history of the area.



Mountain Snow - The Lifeblood of Malheur

The Silvies and Blitzen Rivers bring water to Malheur Lake from the surrounding mountains. Water, in this desert environment, is the critical factor that determines how much wildlife the refuge can support.

In drought years, such as during the early 1930s, all the water was diverted from the rivers for irrigation. As a result no water reached Malheur Lake. It was possible to drive a car across the dry lakebed then.

In contrast, three years of heavy snowpacks in the early 1980s flooded the Malheur-Harney Lakes Basin. Harney, Mud and Malheur Lakes expanded into one large inland sea covering an estimated 180,000 acres. The effects of this high water were dramatic. Emergent vegetation was drowned and new islands were created by the rising water. Marsh wrens and diving ducks lost their nesting areas, but white-faced ibis, great egret and doublecrested cormorant numbers soared. White pelicans nested on islands in Malheur Lake for the first time in 25 years.

Evaporation is the only way water can escape the Malheur-Harney Basin. A series of dry years will be necessary to reduce the water level naturally.



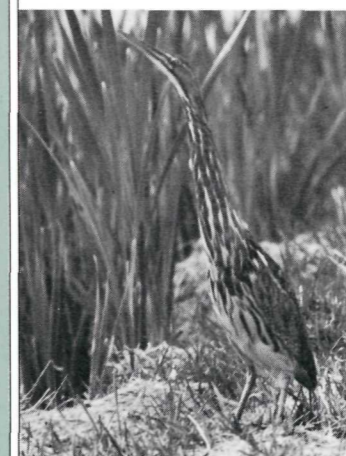
Discovering Wildlife Throughout the Year

Spring

A distinct sequence of seasonal events characterizes wildlife activity at Malheur. The year begins in February when thawing ice heralds the start of the northward waterfowl migration. Northern pintails arrive first, followed by large flocks of snow geese, white-fronted geese, lesser sandhill cranes, tundra swans and Canada geese. These birds can be best observed on the privately-owned flooded meadows along State Highway 205 near Burns.

Spring waterfowl migration peaks in late March. Most shorebirds arrive in April and songbird numbers peak in mid-May. Refuge headquarters, the P Ranch and Page Springs are considered some of the best areas in Oregon to observe the songbird migration.

Great horned owls and golden eagles begin nesting in late February. Canada geese and greater sandhill cranes follow in April. Nesting activity for ducks, including gadwall, cinnamon teal, redhead and ruddy duck species, peaks in May and June. Nesting colonies of great blue herons, double-crested cormorants, black-crowned night herons, great, snowy and cattle egrets, white pelicans, white-faced ibis, and black and Forster's terns are established on Malheur Lake or in the Blitzen Valley. Nesting shorebirds include killdeer, avocet, willet, long-billed curlew, Wilson's phalarope and common snipe.



playas. The peak of the fall songbird migration occurs in August.



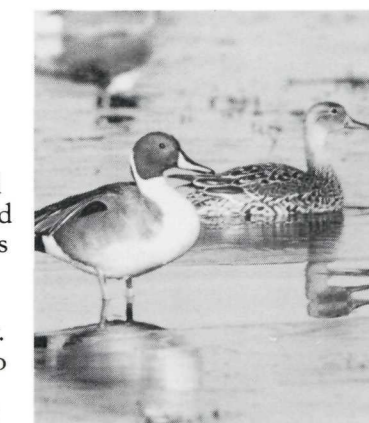
Fall

One of the greatest wildlife attractions during September and October is the gathering of mallards, Canada geese and greater sandhill cranes to feed in the Blitzen Valley grain fields. Greater sandhill cranes "stage" here before migrating to California's Central Valley for the winter. One hour before sunset is an excellent time to view these birds.

The fall waterfowl migration peaks in October when snow geese, tundra swans and canvasbacks arrive. From the refuge headquarters migrating waterfowl can be seen flying through the area. Cold weather in mid-November signals a major waterfowl exodus.

Winter

Rough-legged hawks arrive in October and remain in the Blitzen Valley through the winter where they feed on meadow voles. Bald eagles prey upon flocks of waterfowl in the Blitzen Valley during December and January. They are most likely to be seen around the P Ranch. During cold spells mallards, Canada geese and trumpeter swans congregate on the remaining open water.



Experience Malheur National Wildlife Refuge

How to Get to Malheur

Malheur National Wildlife Refuge is located in the high desert country of southeastern Oregon. The refuge headquarters is on the south shore of Malheur Lake, 40 miles south of Burns. From Burns, drive east on State Highway 78 for two miles, then south on State Highway 205 for 25 miles, then east on the county road to Princeton for nine miles. The last six miles of road to the refuge headquarters are gravel surfaced.

The refuge headquarters also may be reached from the east by leaving State Highway 78 at Princeton and driving west on the gravel-surfaced county road for 15 miles.

Double O, Buena Vista and P Ranch Stations are maintenance facilities and do not have public services.

Be Prepared

Malheur is a remote, arid land of marshes, sagebrush desert and rimrock situated at 4,100 feet elevation. Freezing temperatures are common from September through May and drought periods typically last one to three months. The average annual precipitation is nine inches.

You should be prepared to experience temperature extremes and to travel long distances over gravel roads. Make sure your vehicle is in good condition and your gas tank is full. Carry drinking water and mosquito repellent if you visit the refuge in the summer.

Enjoy Your Visit

Wildlife Observation and Photography — A total of 300 species of birds and 58 species of mammals have been observed on the refuge. Bird and mammal lists are available at refuge headquarters.

Public Access — Motorized vehicles are permitted only on the roads shown on the map.

To minimize disturbance during the nesting season, March 1 through August 1, hiking is limited to roads open to motorized vehicles and to stream and canal banks in the public fishing area. During the remainder of the year, hiking is permitted everywhere on the refuge except in the Harney and Stinking Lake Research Natural Areas and residential areas.

The refuge does not have any marked or developed trails, so you may encounter wet areas, prickly vegetation and rough ground. You should carry water during the summer and mosquito repellent especially from May through August.

Auto Tour — The map highlights five points on the refuge that offer exceptional opportunities to view wildlife and their refuge habitats. Visit one, several, or all of the "Wildlife Experience Points" to see the best of Malheur.

Fishing and Hunting — Ask for the fishing and hunting brochure.

Boating — Boats with electric motors are permitted on Krumbo Reservoir during the fishing season. Boats without motors are permitted on the north half of Malheur Lake during the waterfowl hunting season. All other refuge waters are closed to boating.

Pets — Pets on leash or under close supervision are permitted on the refuge.

Fires — are not permitted.

Swimming — is not permitted.

Camping and Overnight Accommodations — Camping is not permitted on the refuge. Camping is available at Page Springs Campground (BLM) and Camper Corral (privately owned) near Frenchglen, at Fish Lake Campground (BLM) on Steens Mountain approximately 18 miles southeast of Frenchglen, and at U.S. Forest Service campgrounds on the Malheur National Forest north and west of Burns. Overnight accommodations are available at the Frenchglen Hotel, the Malheur Field Station and motels in Burns and Hines.

Gasoline and Food — Gasoline, supermarkets and restaurants are available in Burns and Hines. Groceries and gasoline also are available at general stores in Princeton, Crane, Lawen and Frenchglen, and groceries only at Diamond. See map for locations.

Weapons — Firearms that are dismantled, unloaded and cased, or mounted in a vehicle gun rack may be transported through the refuge on public roads.

Collection — Collecting any items of antiquity, including Indian artifacts is prohibited.

Environmental Education — The refuge offers space and guidance to teachers and educational groups to conduct outdoor classroom activities. Malheur Field Station, located six miles west of refuge headquarters, offers a program of field-oriented natural science courses for college credit during the summer. The Field Station also provides dormitory and classroom space, meals and other services for groups visiting southeastern Oregon.

Wildlife Viewing Tips

Stay in Your Car — Your car is an excellent observation and photographic blind. Please stay in your car to avoid scaring wildlife away. The next visitors appreciate this.

Move Slowly — Quick movements and loud noises will scare away most wildlife.

Use Binoculars — Binoculars and spotting scopes allow you to sneak up on wildlife without leaving your car.

Learn About Wildlife and When to Look — Study this leaflet and other wildlife guides to know what animals to expect in different habitats. Check bird identification books to know when the various species of birds migrate to the valley.

Join Guided Tours — Check with wildlife organizations like the Audubon Society for scheduled trips. Also, check with local colleges for wildlife field courses. Refuge and Malheur Field Station staff may also know of special upcoming programs.

For More Information

Malheur National Wildlife Refuge
PO Box 245
Princeton, OR 97721
Telephone (503) 493-2323

Frenchglen Hotel/State Historical Wayside
Frenchglen Hotel
Frenchglen, OR 97736
Telephone (503) 493-2825

Malheur Field Station
Box 260-E
Princeton, OR 97721
Telephone (503) 493-2629

Campgrounds

Page Spring Campground - Fish Lake Campground - Steens Mountain

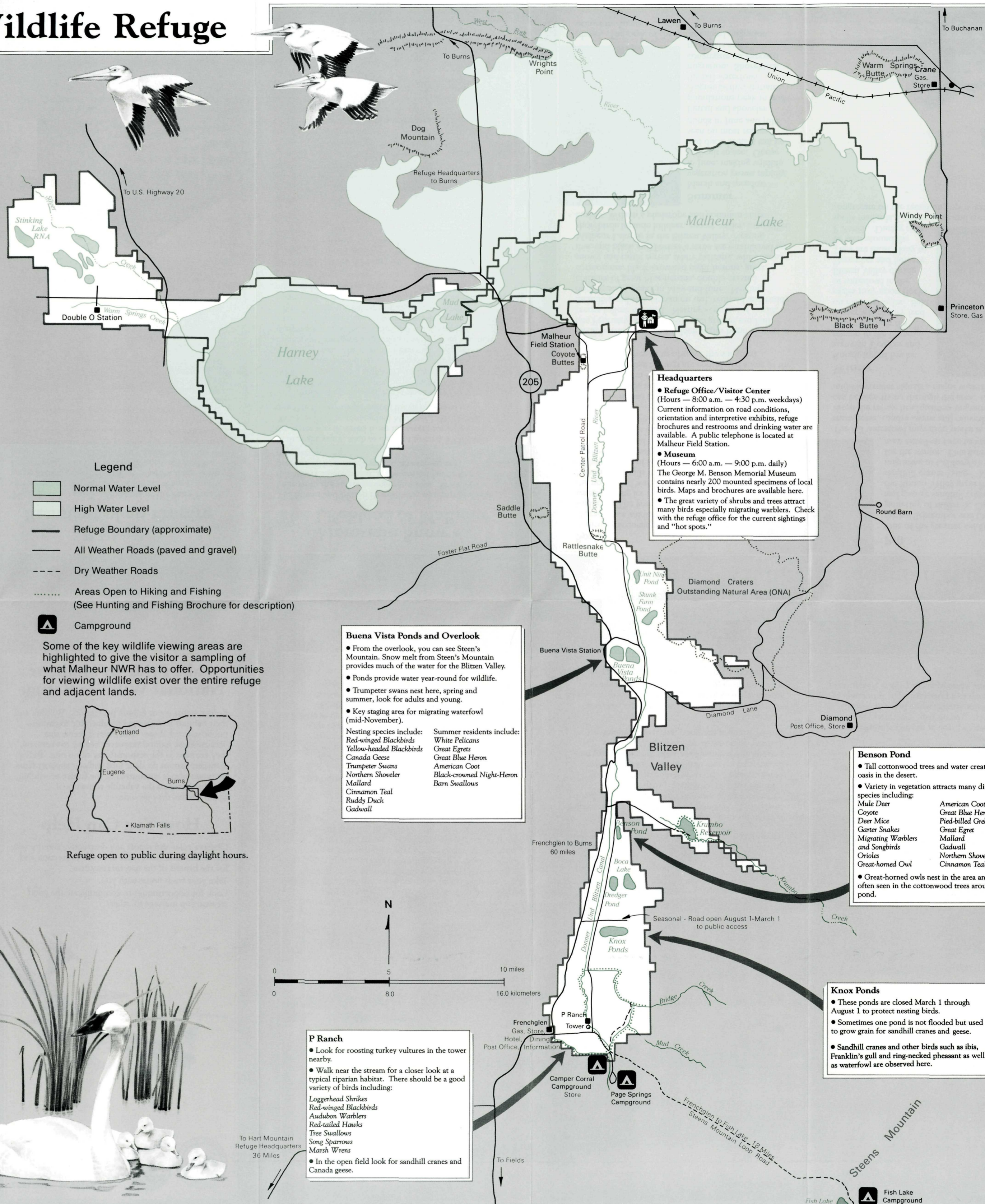
U.S. Bureau of Land Management
74 S. Alvord
Burns, OR 97720
Telephone (503) 573-5241

Camper Corral (privately owned; fee)
Frenchglen, OR 97736
Telephone (503) 493-2415

U.S. Forest Service Campgrounds
HC 74, Box 12870
Hines, OR 97738
Telephone (503) 573-7292

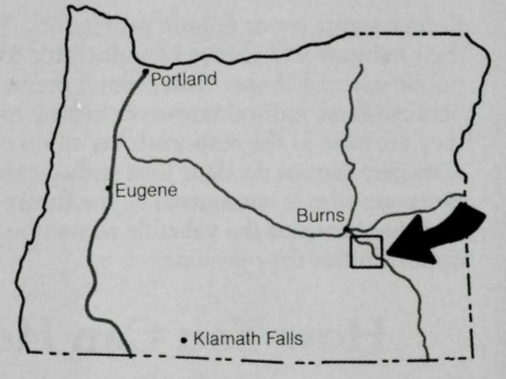
Recreation and Visitor Services in Harney County

Harney County Chamber of Commerce
18 West D Street
Burns, OR 97720
Telephone (503) 573-2636



- Legend**
- Normal Water Level
 - High Water Level
 - Refuge Boundary (approximate)
 - All Weather Roads (paved and gravel)
 - Dry Weather Roads
 - Areas Open to Hiking and Fishing (See Hunting and Fishing Brochure for description)
 - Campground

Some of the key wildlife viewing areas are highlighted to give the visitor a sampling of what Malheur NWR has to offer. Opportunities for viewing wildlife exist over the entire refuge and adjacent lands.



Refuge open to public during daylight hours.

Buena Vista Ponds and Overlook

- From the overlook, you can see Steen's Mountain. Snow melt from Steen's Mountain provides much of the water for the Blitzen Valley.
- Ponds provide water year-round for wildlife.
- Trumpeter swans nest here, spring and summer, look for adults and young.
- Key staging area for migrating waterfowl (mid-November).

<p>Nesting species include: Red-winged Blackbirds Yellow-headed Blackbirds Canada Geese Trumpeter Swans Northern Shoveler Mallard Cinnamon Teal Ruddy Duck Gadwall</p>	<p>Summer residents include: White Pelicans Great Egrets Great Blue Heron American Coot Black-crowned Night-Heron Barn Swallows</p>
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Benson Pond

- Tall cottonwood trees and water create a cool oasis in the desert.
- Variety in vegetation attracts many different species including:

Mule Deer	American Coot
Coyote	Great Blue Heron
Deer Mice	Pied-billed Grebe
Garter Snakes	Great Egret
Migrating Warblers	Mallard
and Songbirds	Gadwall
Orioles	Northern Shoveler
Great-horned Owl	Cinnamon Teal

- Great-horned owls nest in the area and are often seen in the cottonwood trees around the pond.

Knox Ponds

- These ponds are closed March 1 through August 1 to protect nesting birds.
- Sometimes one pond is not flooded but used to grow grain for sandhill cranes and geese.
- Sandhill cranes and other birds such as ibis, Franklin's gull and ring-necked pheasant as well as waterfowl are observed here.

P Ranch

- Look for roosting turkey vultures in the tower nearby.
- Walk near the stream for a closer look at a typical riparian habitat. There should be a good variety of birds including:

Loggerhead Shrikes
Red-winged Blackbirds
Audubon Warblers
Red-tailed Hawks
Tree Swallows
Song Sparrows
Marsh Wrens

- In the open field look for sandhill cranes and Canada geese.

