

U.S. Fish & Wildlife Service

# Sheldon

*National Wildlife  
Refuge*

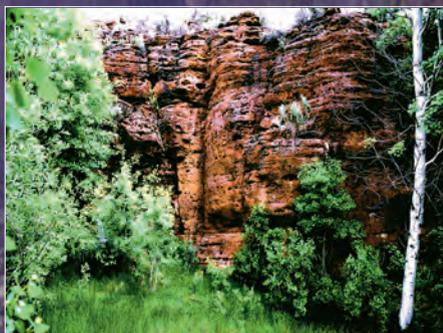


*Discover the  
treasures that  
lay hidden in  
this vast and  
rugged landscape,  
while experiencing  
wildness and  
solitude that  
stretch as far as  
the eye can see.*

*Virgin Valley, one of many beautiful vistas at  
Sheldon National Wildlife Refuge. ©Linda Dufurrena*



Sheldon National Wildlife Refuge protects over 900 square miles of wildlife habitat in the northwestern corner of Nevada that can easily be accessed from Highway 140. It is home to large herds of pronghorn antelope, scattered bands of bighorn sheep and a rich assortment of other wildlife.



©Linda Dufurrena

The landscape is vast, rugged and punctuated with scenic treasures. Narrow gorges and lush springs lay hidden among the rimrock tablelands and rolling hills of sagebrush and mountain mahogany.

This is the heart of the high desert. Elevations on the Refuge range from 4,100 to 7,200 feet, while annual precipitation rarely amounts to more than a dozen inches. It is a harsh environment where a wide variety of wildlife manages to thrive.

Although established for the protection of wildlife and habitat, the Refuge encompasses many other features of interest. The remains of old homesteads and ranches intrigue visitors, fire opals draw miners and rock collectors to Virgin Valley, and geothermal warm springs piped into a pool at Virgin Valley Campground create a refreshing oasis.

### Features of Interest

*Inset: Meadow south of Badger Campground*

Background photo: D.B. Marshall/USFWS

Over 270 wildlife species are found in the varied landscape of Sheldon Refuge. This diversity is an indicator of the health of the environment. Each species is important because it fills a niche in this complex and fragile natural system.

### Mammals



©Jim Witham

*Pygmy rabbit*

While many mammals stay on the Refuge year-round, others such as pronghorn, mule deer, and bats migrate to surrounding areas or further each year. Many hibernate or move about the Refuge as the seasons change. The pygmy rabbit, American pika, Greater sage-grouse and their habitats are being studied because of population declines in recent years.

### Snakes



R. Blackery/USFWS

*Western rattlesnake*

A small number of lizard and snake species are attracted to the numerous rocky outcroppings, bluffs and canyons. The western rattlesnake is the only venomous reptile of which visitors should be aware.

### Fish



*Lahontan cutthroat trout*

Only two species of native fish (chubs) swim in Refuge waters. The sport fish found on the Refuge, including the Lahontan cutthroat trout, were introduced in fairly recent years.

### Birds to Butterflies



*Above: Fritillary butterfly;*

*Right: Mountain Bluebird*



Various brightly colored butterfly species can be seen on the Refuge in the spring and summer.

Most of the birds on the Refuge use it for summer residence or a stop along their spring and fall migrations.

## Distinguished Species



Through the history of the Refuge, a few species have been distinguished due to their cultural and biological significance.

### Pronghorn

Around the turn of the 20<sup>th</sup> century, pronghorn (antelope) populations were dwindling in North America. Conservation efforts, such as the establishment of refuges, have helped them rebound. Large numbers of pronghorn gather at Sheldon Refuge in late summer and fall to water and feed on greenery. This encompasses restoration from all impacts, not just overgrazing. Nonetheless, since the establishment of the Refuge grazing has hindered restoration efforts. Pronghorn rely on keen eyesight and remarkable speed for safety.

### Greater Sage-grouse

Greater sage-grouse prefer habitat with gentle hills and valleys where openings of low sage intersperse big sagebrush patches. In the spring, they gather on traditional mating grounds (called leks) and perform elaborate courtship dances. Males strut and thump their unique air sacks to impress prospective mates.



### California Bighorn Sheep



## Managing Habitat

Refuges do more than just preserve open space. Habitat on the Sheldon Refuge is being restored and managed for the greatest benefit of the wildlife that call this wild area home.

### Juniper Expansion

For several reasons western juniper is slowly taking over sagebrush habitats throughout the Great Basin, including portions of Sheldon Refuge. Even though juniper is a native tree, cutting down juniper where it historically did not grow helps restore habitat needed by sage-grouse, pronghorn, and other sagebrush dependent wildlife.

### Fire



Fire is an important management tool used to revitalize Refuge habitat. While burned areas may look devastated immediately after a fire, grasses and flowering plants quickly recover as the habitat is reborn, leading to improved biological diversity.

### Horses, Burros and Livestock



Bruce Wiseman/  
USFWS

Historically, horses, burros, sheep and cattle grazed on Refuge lands. Removal of horses and livestock was an important step toward restoration of habitats for fish and wildlife throughout the Refuge. Plants grow slowly in the harsh desert environment and it will be decades before habitats resemble what existed before overgrazing occurred.

### Wilderness

While not formally designated as wilderness, most of the Refuge is managed as Proposed Wilderness and must be managed to both conserve wildlife as the Refuge purpose and protect wilderness character. Habitat management within wilderness is more restrained, but necessary to control invasive species and restore important areas.

Background photo: Ron Lange/USFWS

## Wildlife Observation

Viewing wildlife in its native environment is a richly rewarding activity. Here are some tips that will help you see and enjoy Refuge wildlife.

### From Your Car

Your car makes an excellent observation blind. Many types of wildlife can be approached more closely in a car than on foot.

### Hike a Remote Area

Because road access is very limited on the Refuge, hiking into more remote areas may provide excellent opportunities to view animals, take in the beautiful scenery and experience the solitude and wildness of the Refuge. Hike quietly to improve your odds of wildlife encounters.

Binoculars or spotting scopes are very important for viewing wildlife across the great expanses of Refuge habitat.

### Best Times of Day

Wildlife are most active and easiest to spot in the early mornings and late evenings, especially in the heat of the summer.

### Pronghorn

Pronghorn are commonly seen in large numbers near Swan Lake in the late summer and fall. During spring and early summer, they disperse throughout the Refuge in small bands. During winter, look for them on remote tabletops where the wind prevents snow from accumulating in great depths.

During spring and early summer, they migrate to fawning areas not only on various parts of the Refuge, but also to other places across the region, including Hart Mountain National Antelope Refuge.



Get a Closer View



### Bighorns



R. Blacker/USFWS

With binoculars you may catch occasional glimpses of bighorn sheep along the rocky, steep cliffs above Thousand Creek, IXL Ranch, and in the westernmost portion of the Refuge.

### Greater sage-grouse



Gary Kramer/USFWS

Grouse have excellent camouflage, which makes them challenging to see. Watch for them along the road from Catnip Reservoir to Last Chance Ranch where they may flush when approached by humans.

To avoid disturbance during their mating season, you must have a Refuge special use permit and follow special rules when viewing or photographing sage-grouse on their mating grounds (leks) from March 1 until June 1.

### Waterfowl

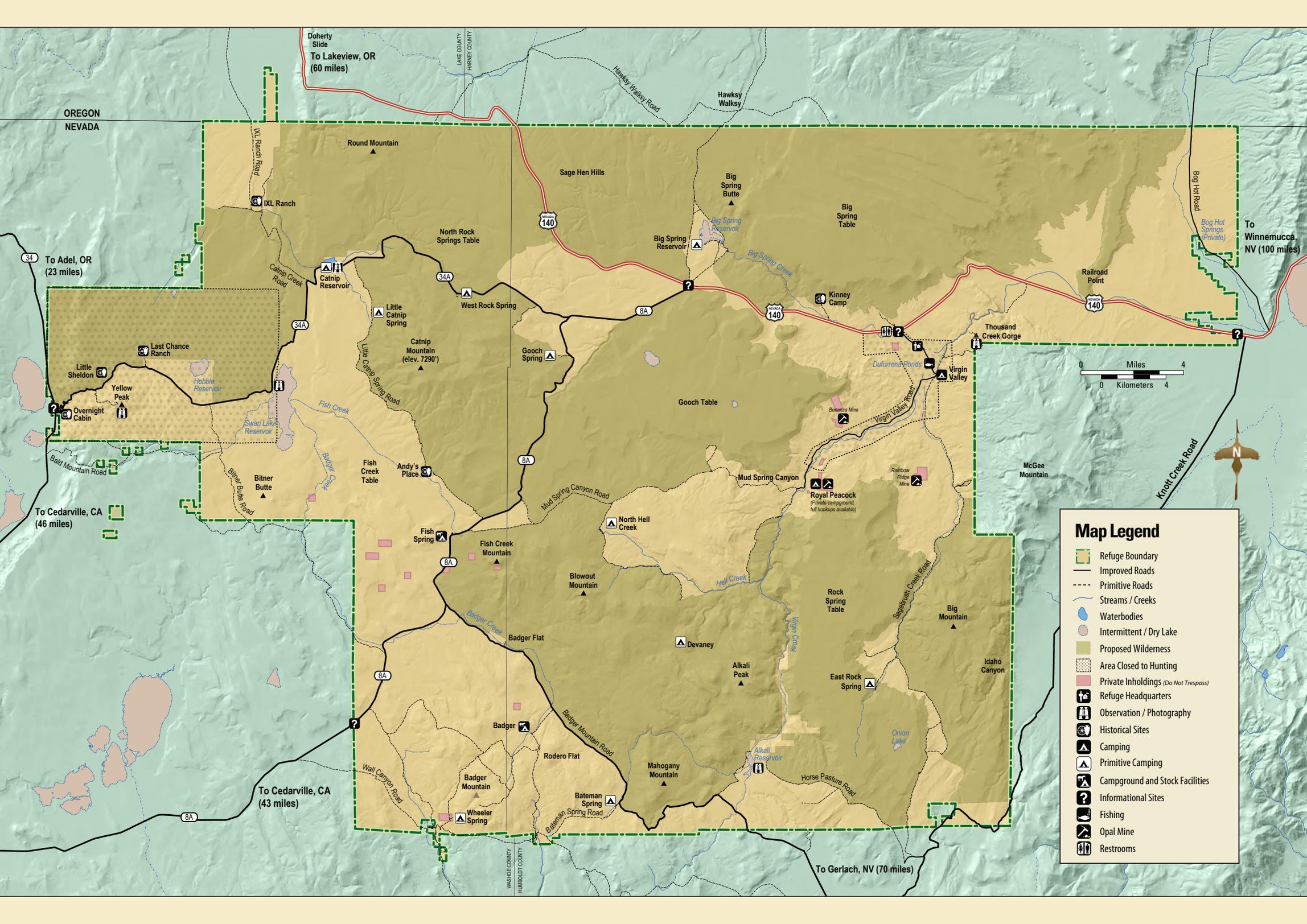


Dufurrena Ponds host a wide variety of water birds that are easily viewed from car or on foot. Catnip Reservoir is a popular destination for Canada geese.

Mule deer seek the protection of the juniper and mountain mahogany patches in the higher elevations of the Refuge. Look for them in the early morning and late evening near Badger Mountain, Catnip Reservoir or Little Sheldon.

### Mule Deer





OREGON  
NEVADA

Doherty Slide  
To Lakeview, OR  
(60 miles)

To Adel, OR  
(23 miles)

To Winnemucca,  
NV (100 miles)

To Cedarville, CA  
(46 miles)

To Cedarville, CA  
(43 miles)

To Gerlach, NV (70 miles)



### Map Legend

- Refuge Boundary
- Improved Roads
- Primitive Roads
- Streams / Creeks
- Waterbodies
- Intermittent / Dry Lake
- Proposed Wilderness
- Area Closed to Hunting
- Private Inholdings (Do Not Trespass)
- Refuge Headquarters
- Observation / Photography
- Historical Sites
- Camping
- Primitive Camping
- Campground and Stock Facilities
- Informational Sites
- Fishing
- Opal Mine
- Restrooms

## Echoes of the Distant Past

As you gaze around the arid and rugged landscape of Sheldon Refuge, it is difficult to imagine Native Americans living a life of relative comfort here. But ten thousand years ago, lakes, marshes, creeks and large springs were abundant, providing ideal sites for villages.



The *Agai Panina Ticutta* band from Summit Lake, the *Kidutokado* band from Surprise Valley, and the *Tsoso'odo tuviwarai* band from Oregon all used the area.

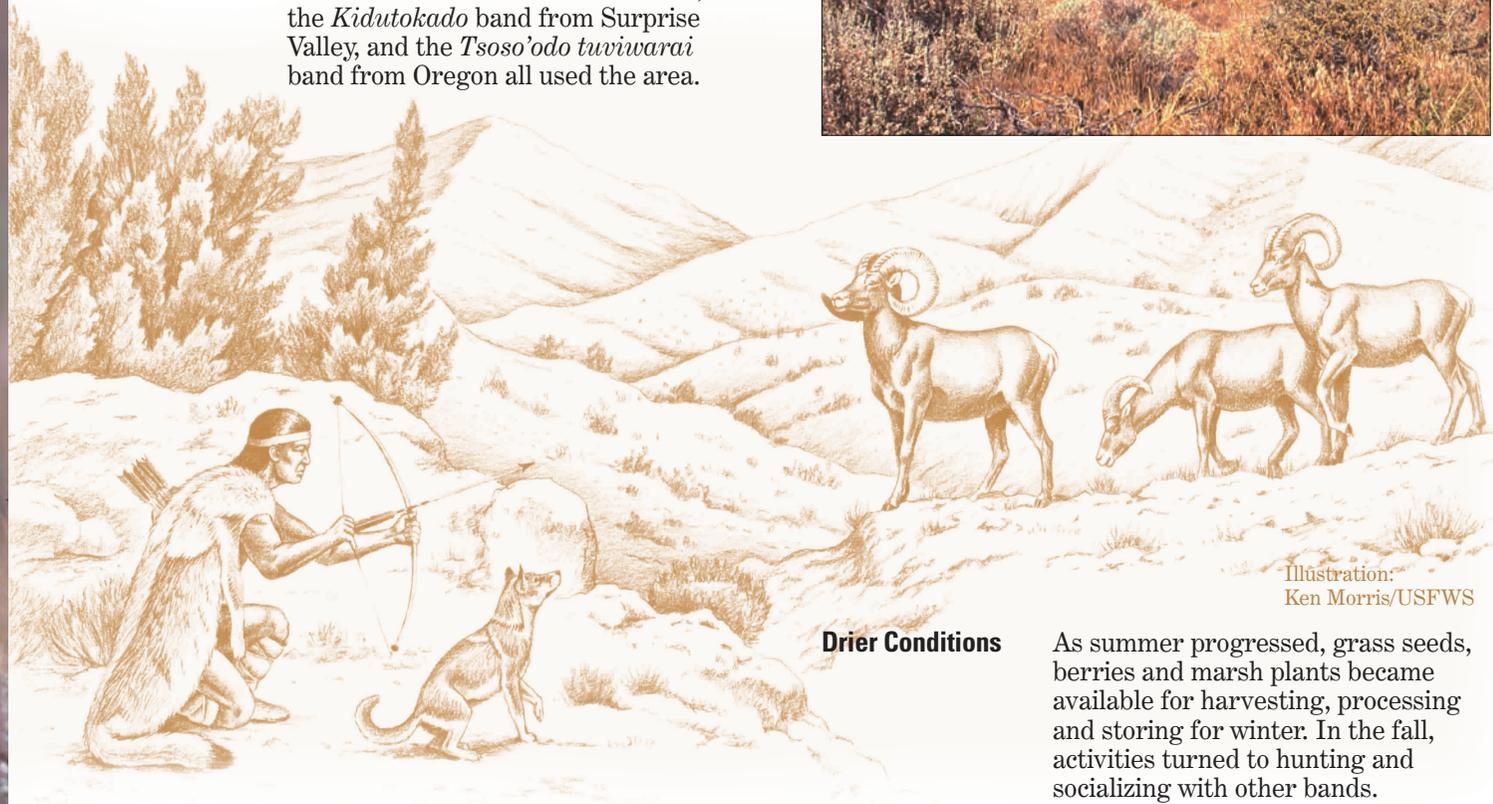


Illustration:  
Ken Morris/USFWS

### Food Sources

Pronghorn antelope and bighorn sheep were available during all seasons. Pronghorn would have been especially abundant in the winter. Ducks and geese were hunted during their spring and fall migrations. Eggs from sage-grouse and nesting waterfowl were collected in spring and early summer.

### Drier Conditions

As summer progressed, grass seeds, berries and marsh plants became available for harvesting, processing and storing for winter. In the fall, activities turned to hunting and socializing with other bands.

Over time, drier conditions prevailed. Lakes and marshes shrank and most eventually disappeared. Springs and creeks continued to be important seasonal campsites, but winter villages were relocated to large valleys to the west. Hunters traveled into the area to harvest large game animals, but collected plant resources elsewhere.

## Echoes of the Recent Past

### Cowboys and Sheepmen

In the 1870s, a whirlwind of men, women, and their livestock swept into the dry sagebrush country of southeastern Oregon and northern Nevada. Cowboys and sheepmen drove their herds from horizon to horizon, displacing the Indians. Ranches and line camps sprouted beside creeks and springs. With luck and hard work, a home could be had on the range.

### The End of an Era

But the whirlwind soon turned to mostly dust. The Great Depression, drought and the evolving economy blew away most of the settlers' little empires as well as some of the big ones too. Gone are the cattle barons, homesteaders and lonesome cowboys, but the places where they lived remain, providing a testament to the struggle and romance of life on the range.

### Kinney Camp



*Where the air is so pure,  
the zephyrs so free,  
the breezes so balmy and light,  
I would not exchange my home  
on the range  
For all the cities so bright.*

Brewster Higley 1873



V. Ruppert/USFWS



### Last Chance Ranch

When the disastrous winter of 1880 put many ranchers out of business, a businessman named George Hapgood began acquiring property in the area, eventually founding Last Chance Ranch. The ranch house later became headquarters for Sheldon National Wildlife Refuge and home to the first resident refuge manager, Ernest Greenwalt. His son, Lynn, who spent the first years of his life on Sheldon Refuge, became director of the Fish and Wildlife Service in the 1970s.

### Historic Buildings

Near the turn of the century, stonemasons from Cedarville created enduring structures of sandstone blocks and basalt cobbles at Kinney Camp, Thousand Creek Ranch and Gooch Camp. The unique pink sandstone, quarried near Dufurrena, gives these historic buildings an uncommon warmth and character.



R. Kuehner/USFWS

## Building the Refuge

Sheldon National Wildlife Refuge was established in 1931 when the Audubon Society and Boone & Crockett Club purchased over 34,000 acres of the Last Chance Ranch. Later, they designated the land a National Antelope Refuge. In 1936, over 540,000 adjacent acres were set aside as the Charles Sheldon Antelope Range. The two areas were then combined into one National Wildlife Refuge.

### Civilian Conservation Corps

Two years after Sheldon Refuge was established, President Franklin D. Roosevelt conducted a bold and wildly successful experiment to curb

Depression-era unemployment. The Civilian Conservation Corps (CCC) was born and enrolled over three million young men during its nine years in operation. Over one thousand of these men

served at Camp Sheldon between 1936 and 1942.

The remote location of the Refuge required workers to come from as far away as Georgia and Texas. These young men, many of whom had never experienced life in the desert, graded roads, erected fences and telephone lines, built cabins, dug ponds and essentially created the infrastructure that still serves the Refuge today.



Fastening bolts in "Portal" structure 1936.

Dragging 20-ton boulders for the "Portal" pictured in background of this page.



### CCC Sites



Color picture as it appears today and inset of construction of the Overnight Cabin in August 1937.

Evidence of CCC handiwork can still be seen all over the refuge. At the west entrance (Road 34A), huge boulders weighing 20 tons were transported over a mile to form the "Portal." The Overnight Cabin near the Portal, Hobbles Springs Dam, the Badger Overnight

Cabin and Swan Lake Road are a few examples of sturdy CCC craftsmanship.

Building a refuge built character in young men. The effect of the Refuge's beautiful and wild landscape on the enrollees is summed-up most profoundly in the report of a biological aide who led a crew into the back country to manage rodents and catalog wildlife:

*"The presence of deer, antelope, sage hen and other forms of wildlife which appear along the route of our work causes momentary distractions among the boys which might be referred to as serious were it not for the fact that this situation offers a wonderful opportunity to plead the cause of conservation as well as education in the habits of these animals and birds."*

J.A. Allen, August 1936

CHARLES S  
ANTELOPE  
U.S. DEPT. OF AGR  
BUREAU OF BIOLOGICAL

## Refuge Recreation

*Wildlife-dependent recreation is a priority at national wildlife refuges.*

All public use recreational activities on Sheldon National Wildlife Refuge are regulated to protect wildlife, this differs from regulations on other public lands. While managed to protect wildlife and maintain the rugged, remote, and undeveloped character of the Refuge, a wide variety of opportunities are available for visitors to experience and explore.

As a visitor, it is your responsibility to understand and follow the rules and regulations to protect wildlife and to ensure your own safety.

### Be safe-be prepared-be responsible!

Unless an activity is specifically allowed by federal regulation, refuge sign or publication, it is prohibited!



**Wildlife observation and photography** are the most popular recreational activities on the refuge. Refer to the Wildlife Observation section of this brochure for more information.



**Pets** must be leashed or confined, except dogs used for bird hunting. Hunting dogs must be kept under the immediate control of their handlers at all times.



**Camping** is permitted year-round only in designated campgrounds for up to 14 days or with a backcountry permit. Virgin Valley Campground (open year-round) provides firerings, tables, pit toilets, drinking water, a warm springs pool, and a rustic shower house. Camping areas at Catnip Reservoir, Big Spring Reservoir, West Rock Spring, Fish Spring, and Badger have only firerings and pit toilets. Other primitive camping areas have only firerings. Refer to the Refuge map for campground locations (see inset).



*Arrowleaf balsamroot*  
Ron Lange/USFWS

**Backcountry camping** is a great way to experience some of the more remote parts of the Refuge. A self-issued permit explaining additional rules and regulations is required before you depart. Permits are free and available online ([www.fws.gov/refuge/Sheldon](http://www.fws.gov/refuge/Sheldon)).



**Campfires** are permitted only in designated firerings where provided. The use of campfires may be further restricted during periods of increased fire danger – check for campfire restrictions posted at the Refuge Headquarters or at the campground. Bring your own firewood because collecting firewood within the Refuge is prohibited.



**Boats** may be used on Big Spring Reservoir, Catnip Reservoir and Dufurrena Ponds. Only electric motors are allowed.



**Fishing** is allowed only in Dufurrena Ponds, Catnip Reservoir, Big Spring Reservoir, and McGee Pond.



Cutthroat may be caught during a limited season at Catnip Reservoir. The Dufurrena Ponds have bass, crappie, and several other species of warm water fish. Big Spring Reservoir is often dry, but stocked with trout when conditions allow. Check current Nevada state regulations for seasons, limits and other requirements.



**Hunting** for some big game, waterfowl, and upland bird species is permitted in accordance with state and federal regulations. All hunting is strictly prohibited in Virgin Valley and the western portion of the Refuge as posted (see map insert for reference). Waterfowl hunting is also prohibited at Catnip and Big Spring reservoirs. We allow the use of portable temporary ground blinds constructed of synthetic material. Blinds must not be constructed earlier than 1 week prior to the opening day of the hunting season for which you have a permit, must be tagged with your name and permit number, and must be removed within 24 hours of harvesting an animal or at the end of the hunting season. Consult all current federal ([www.fws.gov/refuges/hunting](http://www.fws.gov/refuges/hunting)) and state regulations ([www.ndow.org](http://www.ndow.org)) prior to hunting on the Refuge.

#### All other wildlife is protected.



**Firearms** and their possession within the Refuge is allowed in accordance with Nevada state law. The discharge of any firearm and the possession or use of weapons other than firearms, except as allowed for purposes of legal hunting, is prohibited.



**Collecting**, removing, disturbing, digging, or cutting resources such as artifacts, arrowheads, petroglyphs, trees and other plants is strictly prohibited. Observe and enjoy refuge resources in place.

An example of Hodson's opal



Virgin Valley ©Linda Dufferrena

**Rock hounding** and rock collecting are allowed by hand from the surface only. You may remove up to seven pounds of rock per day for personal use.

## Getting Around

The Refuge is easily accessible by Nevada Highway 140 (paved) and Virgin Valley Road, County Road 8A and 34A (improved gravel). Nevada Highway 140 is the only road through the Refuge that is maintained year-round. Improved gravel roads are not maintained in winter and all other roads are not maintained.



**Vehicles** (both motorized and nonmotorized) are allowed ONLY on designated Open Routes (see map). Roads are open as indicated by road signs, Refuge maps, or other information subject to weather and road conditions and for resource/habitat protection.

**NOTE:** Don't assume that because a road is marked open you will be able to drive through! Most roads within the Refuge are not maintained or improved and even small amounts of precipitation can make roads muddy. During winter and spring, most roads in the Refuge are impassable due to snow or wet conditions.



Vehicle use on any road not marked with the Open Route sign, and vehicle use off-road, is prohibited. You may pull off the road one vehicle length, subject to seasonal fire danger restrictions. Highway 140 is paved and Virgin Valley Road and County Roads 8A and 34A are improved gravel roads easily traveled by passenger vehicles. Other roads in the Refuge are not maintained and use of four-wheel drive vehicles with high clearance is strongly recommended.

**Getting Around**  
*continued*

Before venturing off the primary road through the Refuge be well informed and well equipped for backcountry travel! Always carry a shovel, axe, or Pulaski, spare tire, tire chains, first aid kit, emergency food, and at least one extra gallon of water in your vehicle.

Speed on the Refuge is 25 m.p.h. unless otherwise posted — for the safety of you and the wildlife.



**Hiking and Horseback Riding** are allowed throughout most of Sheldon National Wildlife Refuge. While there are no designated routes or trails, most primitive dirt roads provide easy routes.



R. Kuehner/USFWS

Camping with stock is allowed at designated campgrounds or by backcountry permit, but stock facilities are provided only at Badger and Fish Spring campgrounds. Refer to the Refuge map and

Camping section of this brochure for more information. To avoid introducing weeds, only pelletized feed or certified weed free hay is allowed.

**Remember...  
Be Safe!**

The Refuge covers a rugged and remote expanse of the Great Basin high desert. Emergency services, roadside assistance, cell phone coverage and extra supplies are not readily available.

The high desert is a beautiful and harsh environment where conditions can be extreme. Please take the time to be well prepared before visiting.

During the summer, plenty of drinking water, sun screen, insect repellent and first aid supplies should be kept on hand.

Nighttime temperatures can dip below freezing any time of year, so pack accordingly.



Gasoline is available in Fields, Oregon (45 miles from east boundary) and Adel, Oregon (23 miles from west boundary). Lakeview, Oregon (60 miles from boundary on Highway 140), Cedarville, California (46 miles from west boundary) and Winnemucca Nevada (100 miles from east boundary) are the nearest full-service communities with groceries, overnight lodging, auto repair, medical care, retail stores, and tourist information.



Please do your part by packing out what you pack in! Garbage collection, trash cans, and septic dumping facilities are not provided on the Refuge. Discarding trash or leaving items on the Refuge are prohibited.

Sheldon Refuge is one of over 560 refuges in the National Wildlife Refuge System, administered by the U.S. Fish and Wildlife Service as part of 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.

**Sheldon National Wildlife Refuge**  
P.O. Box 111  
Lakeview, Oregon 97630

**Refuge Headquarters 775/941 0199**  
**Lakeview Office 541/947 3315**  
**Fax: 541/947 4414**  
**Web: <http://www.fws.gov/refuge/Sheldon/>**

**Oregon Relay Service**  
**TTY 1 800/735 2929**  
**ASCI 1 800/735 0644**  
**SP 1 800/735 3896**

**Report Wildlife Crimes**  
**844/FWS/TIPS**  
**844/397/8477**

**National Wildlife Refuge**  
**Information: 1 800/344 WILD**

**<http://www.fws.gov>**

**Visitors with disabilities may**  
**be reasonably accommodated**  
**upon request, and/or receive an**  
**alternative format publication.**

**October 2016**



*Cover photo:*  
*Male Greater sage-grouse*  
©Gary Kramer

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