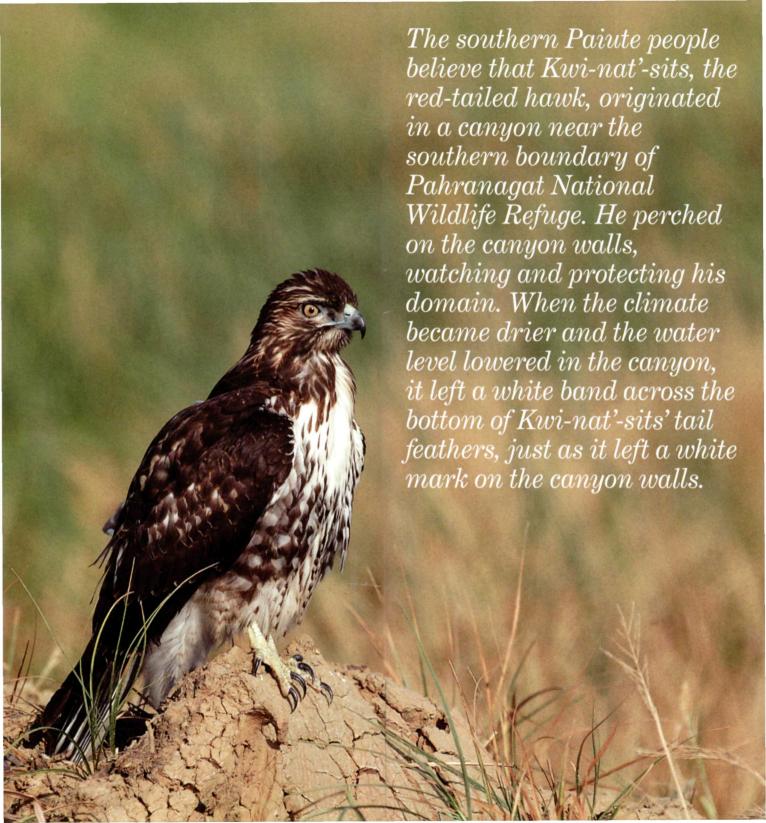
U.S. Fish & Wildlife Service

# Pahranagat National Wildlife Refuge





### Introduction

The Paiutes' oral history and the geologic record indicate that thousands of years ago Nevada was much cooler and wetter than it is today. Many valleys contained lakes which dried up as the climate warmed, leaving white mineral deposits on valley and canyon walls. Today, Pahranagat National Wildlife Refuge contains several lakes and marshes, similar to those which once occurred throughout many parts of southern Nevada.

In the Paiute language, Pahranagat means "Valley of Shining Water," an apt name for this wetland oasis straddling the Mojave and Great Basin Deserts. Pahranagat NWR is a paradise for many species of wildlife and plants. Here you can watch as hundreds of ducks and geese alight on the lakes after a long journey north or south, thrill at the sight of a soaring bald eagle, photograph the desert in bloom after rain, or be fascinated by a blazing sunset.

In 1963, the U.S. Fish and Wildlife Service recognized the value of the Pahranagat Valley and designated 5,380 acres of lakes, marshes, wet meadows and desert uplands as Pahranagat National Wildlife Refuge. Located on the Pacific Flyway, the refuge is an essential stopover for waterfowl and songbirds as they migrate south in the fall and back north in early spring.

Pahranagat NWR is one of more than 500 refuges in the National Wildlife Refuge System, a network of lands set aside specifically for wildlife. Managed by the U.S. Fish and Wildlife Service, the System is a living heritage, conserving wildlife and habitat for people today and generations to come.

Marsh wren
Photo: D. Menke/USFWS

### Seasons of the Refuge

Each season of the year has its own unique beauty and wildlife activity. We invite you to visit the refuge at different times of year to experience its full variety of wildlife.

#### Spring

Migrating birds arrive during the spring, to fuel up for longer journeys north, or to begin nesting. Greater



sandhill cranes feed in grasslands and wet meadows in February and March. Geese and ducks begin to arrive in March and shorebirds, such as Wilson's phalaropes, stop over in April and May. Early morning

Mallard

visits to cottonwood and willow groves yield views of chorusing songbirds, including numerous yellow



warblers. Following spring rains, wildflowers paint the desert yellow, orange and red. Threatened desert tortoises emerge from their burrows to feed on these succulent plants.

Cinnamon teal

Other reptiles, including the Mojave rattlesnake, bask in the warm sun after their winter hibernation.

Mojave rattlesnake



### Seasons of the Refuge

#### Summer

The first duck broods appear in May - redheads, mallards, and others. Herons, egrets and other

Redhead

wading birds stalk the shorelines and marshes for food. Endangered southwestern willow flycatchers nest in large willows or cottonwoods. Young rabbits and mule deer fawns venture out of cover. These animals are hunted by resident carnivores such as golden eagles, coyotes

and mountain lions, which also need food for their young. Young coyotes can be observed learning how to eatch mice and voles, and adult red-tailed hawks are frequently seen carrying food to young still in the nest.

Yellow-headed blackbird



Coyote



### Seasons of the Refuge

#### Fall

Cottonwood and willow leaves turn brilliant yellow in autumn. Marsh

plants begin to change

color as well, creating a

mosaic of vellows, tans,

and reds. In a reversal of

spring, large numbers of

songbirds migrate south.

temperatures. Mule deer

mature bucks with large

antlers can be observed.

stopping to rest and refuel.

ducks, shorebirds and

Lizards, snakes and

active due to cooler

begin breeding, and

tortoises become less



Juvenile and adult Bald eagles (above)

American avocet (right)



Mule deer, buck



Desert tortoise



### **Seasons of the Refuge**

#### Winter

In winter, tundra swans, Canada geese and a variety of ducks feed in lakes and marshes. Shovelers.

p c m a P E o f f L r

Tundra swan

pintails, redheads, canvasbacks, mallards, and teal can all be seen on Upper Pahranagat Lake. Bald eagles and osprey arrive to hunt for ducks and fish. Large numbers of raptors, particularly the northern harrier,

can be seen near marsh and meadow habitats searching for food.

 $Northern \\ shoveler$ 



Canada geese



Green-winged teal



### **Habitats of the Refuge**

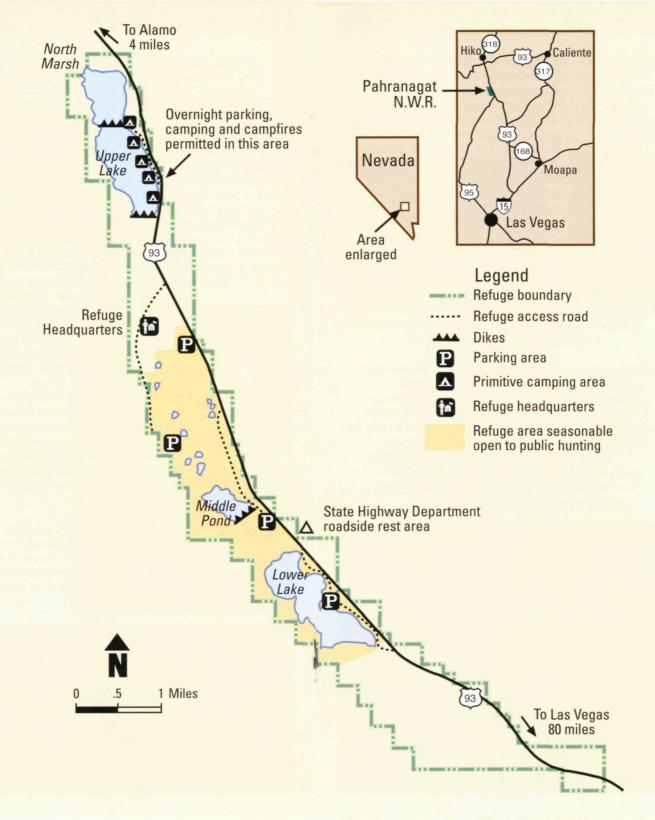
At Pahranagat NWR, refuge staff maintain and restore habitats to provide food, water and shelter for wildlife. Five major habitat types are managed according to the needs of wildlife.

#### Lakes and Wetlands

Large thermal springs provide water for lakes and wetlands, a rare and precious habitat in southern Nevada. Water is stored in Upper Pahranagat Lake and released as needed to nurture habitats in the central and southern portions of the refuge. Refuge staff use a network of ditches and water control structures to create various depths of water. Upper Pahranagat Lake and the North Marsh Lake, which have the deepest water, attract diving ducks such as redheads and ruddy ducks. The shallower Headquarters Ponds, Middle Marsh and Lower Pahranagat Lake are preferred by dabbling mallards, pintails and teal as well as wading herons and egrets. Northern harriers, marsh wrens, yellow-headed blackbirds, muskrats, and even the occasional bald eagle or peregrine falcon, also benefit from marsh habitats.

Seasonal draining of marshes exposes mudflats, a prime feeding area for shorebirds. Prescribed burning adds nutrients to the soil and stimulates new growth of marsh plants.





### **Habitats of the Refuge**

#### **Riparian Habitat**

Cottonwood and willow trees line the refuge's lake shores and springs. Riparian habitats (a word that refers to moisture-dependent vegetation that grows along watercourses) are among the most endangered habitats in the Southwest. Riparian habitat provides feeding and nesting areas for birds that migrate here from the tropics, such as the vellow warbler, Bullock's oriole, and endangered Southwestern willow flycatcher. On the refuge, riparian areas are irrigated to sustain vegetation and promote sapling growth. Nonnative tamarisk (salt cedar) trees, which add toxic salts to soils and use large quantities of valuable ground water, are removed, as are Russian olive trees.



Snowy egret

#### Meadows

Moist meadows are home to many rodent species. These small mammals provide food for raptors and coyotes. Refuge staff irrigate meadows to provide green forage for sandhill cranes, waterfowl and wading birds. Meadows and other grasslands are sometimes burned or mowed to remove old plants and stimulate new growth.

### **Desert Uplands**

Since the refuge straddles both the Great Basin and Mojave deserts, a diversity of upland plants grows here, including sagebrush, saltbush, creosote and yucca. They provide shelter and food for reptiles and

Roadrunner



small mammals, which are hunted by coyotes, raptors and roadrunners. Gambel's quail, black-throated sparrows, and Brewer's sparrows nest here. Mule deer forage in desert washes.

### Did You Know...

...that the 6-inch-long endangered southwestern willow flycatcher migrates more than 2,000 miles from summer breeding grounds at Pahranagat NWR to wintering areas in Central America?

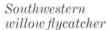


Sandhill cranes

...a large portion of the Lower Colorado River population of greater sandhill cranes (the least abundant type of sandhill crane, and a declining population) uses Pahranagat NWR

as one of only two known staging areas for their migration?

...that scientists learned about local climate changes by studying core samples from Lower Pahranagat Lake? The vegetation preserved in these samples, including 2,000-year-old pollen and seeds, revealed that the Pahranagat Valley once supported conifers such as pinon pine, indicating that wetter and cooler climate cycles occurred.





### **History of the Refuge**

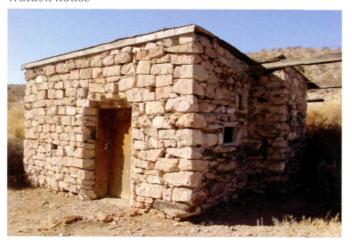
Pahranagat NWR has significant cultural importance to the Paiute



people sought knowledge and power, conducted ceremonies, and communicated with spiritual beings.

The Pahranagat Valley is also rich in pioneer history. The first settlers were interested in ranching and farming. The natural springs provided an abundance of water with which to raise crops and provide grazing. One historical building on the refuge, the Walden house, is said to be the original pioneer dwelling of this area. The structure is made of stone, originally constructed around 1864.

Walden house



### **Regulations Protect Visitors and Wildlife**

#### **Refuge Access**



Three main public access roads are located on the east side of Upper Pahranagat Lake, Middle Marsh and Lower Pahranagat Lake. Another public access road is located west of the refuge headquarters which interconnects to the Desert National Wildlife Range. Visitors are asked to use existing parking facilities.

All motorized vehicles are restricted to designated roads only, must be properly licensed and street legal as required by state law. ATVs (3 and 4-wheelers, dirt bikes, etc.) are prohibited on the refuge.

Non-flush toilets are provided at the

Upper Pahranagat Lake campground

area. Use the dumpsters provided or

take your trash home. Littering is

strictly prohibited.

#### Restrooms and Trash





#### Accessibility



A hunting/observation platform is located within the Middle Marsh area and a fishing/observation pier is located at the Upper Pahranagat Lake. Please contact the refuge for access limitations and suggestions to use the areas safely.

### **Hunting/Fishing**





Hunting and fishing are permitted on designated areas subject to all applicable state, federal and refuge regulations. Please contact the refuge for more information.

#### Water Use





No swimming is allowed. Only non-motorized boats or boats with electric motors are permitted on the Refuge, and only on Upper Pahranagat Lake, Middle Marsh and Lower Lake. The use of boats, rubber rafts or other flotation devices is not permitted on the North Marsh at any time. Boat launching facilities on the refuge are unimproved and accommodate only small craft. Watercraft must be in compliance with all applicable state and federal rules.

### **Regulations Protect Visitors and Wildlife**

### Camping and **Picnicking**





Unimproved camping and picnic sites are available along the eastern shoreline of Upper Pahranagat Lake (see map). All camping is restricted to these areas. Camping is limited to 14 consecutive days, within a 30-day period, beginning upon the day of arrival. Be considerate to other campers. Please keep noise to a minimum from 10:00 p.m. to 7:00 a.m. Restore your campsite to a clean and orderly condition when you leave.

#### Firewood



Firewood cutting or collecting is prohibited. Please bring your own firewood or use a stove. It is unlawful to build campfires outside of existing fire rings or to develop new rings. Fires must be attended by adults at all times.

#### Hiking and Horseback Riding





Year round hiking and horseback riding are allowed only on designated roads and trails which offer access to wetland, riparian and desert shrub habitats (see map). In order to protect native plants, only certified weed-free feed may be brought onto the refuge.

#### Wildlife Viewing and Photography





As an oasis of water and trees in the desert, the refuge offers excellent wildlife viewing, particularly of birds. Photographic opportunities abound: not only wildlife, but desert sunsets, scenic mountains and spring wildflowers. Wildlife lists are available at refuge headquarters.

### **Regulations Protect Visitors and Wildlife**

### Wildlife Viewing and Photography







Beaver-tail cactus

### Tips:

- Study wildlife books for the Mojave and Great Basin Deserts to learn which animals to expect. Bring field guides to help identify various species and to learn which habitats they prefer. Binoculars or spotting scopes will help you observe wildlife without disturbing them.
- Plan your visit according to the season and time of day. Mornings and early evenings are best for viewing most wildlife. Watch for wildlife where two habitat types meet. Animals are attracted to the many types of food and shelter in these "edge" habitats. Move quietly or remain motionless and maintain a respectful distance from wildlife.

### Pets



Pets must be leashed and attended at all times except when used in association with a legal hunt in designated areas. Contact the refuge for more information.

### **Artifacts**



Artifacts, including arrowheads, grinding stones and rock art, etc. are protected under Federal law. Disturbance of cultural resources of any kind is strictly prohibited.

#### **Animal and Plant** Life



Collecting or attempting to collect plants, animals or other natural objects is prohibited.

### **Firearms**



Carrying, possessing or discharging firearms or other weapons is prohibited. This includes carrying, possessing or discharging fireworks and explosives. Please contact the refuge for special regulations regarding firearms during hunting seasons.

### **Signs Protect Visitors and Resources**

Millions of people visit National Wildlife Refuges every year. Signs help guide use while protecting the refuge's natural resources. Please respect the following signs:





### **Safety Tips**

#### **Be Prepared**

Plan your trip carefully. The desert is an unpredictable environment where conditions can be extreme! Don't travel or hike alone. Leave your travel plans. Cellular coverage is limited. Carry a first-aid kit.

Protect yourself from the sun. Wear a hat, light-colored clothing and use sunscreen. Protect yourself from heat exhaustion by avoiding extreme midday heat.

### **Carry Water**

Water is not available on the Pahranagat NWR. Always bring and drink plenty of water—don't ration it! Summer temperatures may reach over 100° F. A person requires at least one gallon of water per day under these conditions.

## Watch Out For Wildlife

Please maintain a respectful distance from wildlife. Be alert for rattlesnakes. Watch where you step and never put your hands or feet where you cannot see them, such as into a crevice or dense brush.

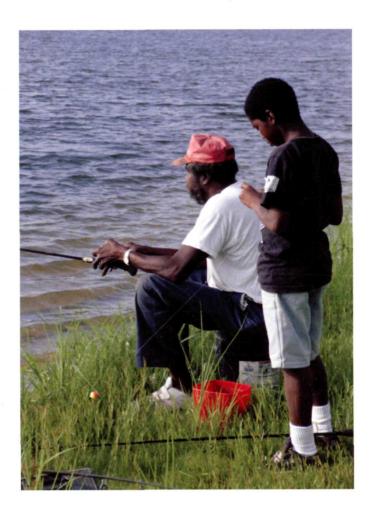
### **Regulations Protect Visitors and Wildlife**

### Volunteer Opportunities

Volunteers are valuable to the management of our Nation's fish, wildlife and habitats. You can enjoy a productive and rewarding experience as a volunteer with the U.S. Fish and Wildlife Service. Contact the refuge for information on volunteer opportunities.



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



**U.S. Fish & Wildlife Service** 

Refuge Manager. Pahranagat NWR P.O. Box 510 Alamo, NV 89001 (775) 725-3417

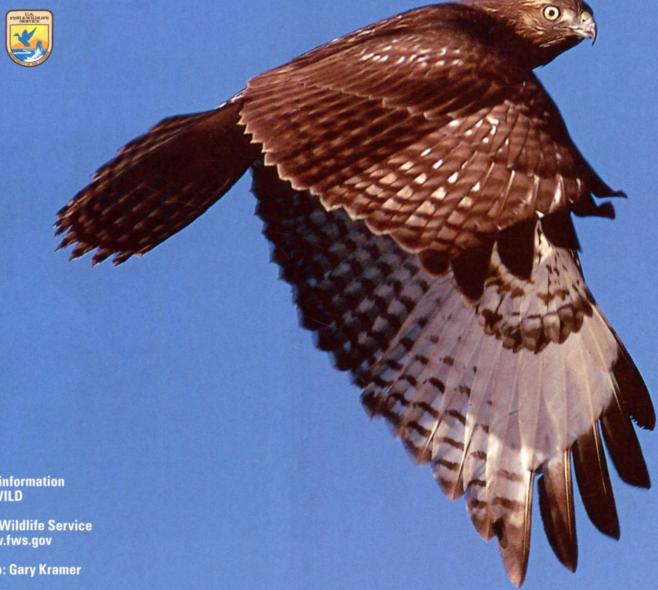
Project Leader, **Desert NWR Complex** 4701 North Torrey Pines Las Vegas, NV 89130-2301 (702) 515-5450

## **Pahranagat** National Wildlife Refuge

http://desertcomplex.fws.gov/pahranagat

September 2009





For Refuge information 1 800/344 WILD

U.S. Fish & Wildlife Service http://www.fws.gov

**Cover photo: Gary Kramer**