

U.S. Fish & Wildlife Service

# Pahranagat

*National Wildlife Refuge*





*The southern Paiute people believe that Kwi-nat'-sits, the red-tailed hawk, originated in a canyon near the southern boundary of Pahranaagat National Wildlife Refuge. He perched on the canyon walls, watching and protecting his domain. When the climate became drier and the water level lowered in the canyon, it left a white band across the bottom of Kwi-nat'-sits' tail feathers, just as it left a white mark on the canyon walls.*

## 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, Pahrnat National Wildlife Refuge contains several lakes and marshes, similar to those which once occurred throughout many parts of southern Nevada.

In the Paiute language, Pahrnat means "Valley of Shining Water;" an apt name for this wetland oasis straddling the Mojave and Great Basin Deserts. Pahrnat 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 Pahrnat Valley and designated 5,380 acres of lakes, marshes, wet meadows and desert uplands as Pahrnat 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.

Pahrnat NWR is one of more than 540 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.

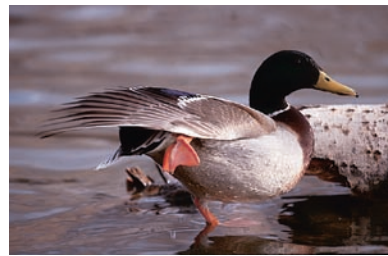
*Marsh wren*  
Photo: D. Menkel  
USFWS

## 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.

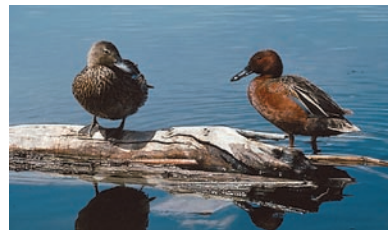
### Spring

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.



*Cinnamon teal*

Following spring rains, wildflowers paint the desert yellow, orange and red. Threatened desert tortoises emerge from their burrows to feed on these succulent plants. Other reptiles, including the Mojave rattlesnake, bask in the warm sun after their winter hibernation.

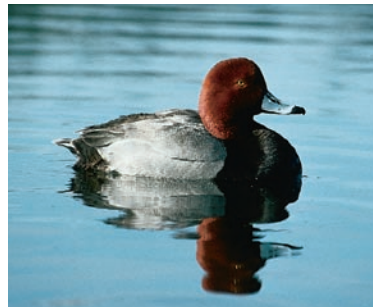
*Mojave rattlesnake*



## Seasons of the Refuge

### Summer

The first duck broods appear in March—redheads, mallards, and others. Herons, egrets and other 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



*Redhead*

lions, which also need food for their young. Young coyotes can be observed learning how to catch 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

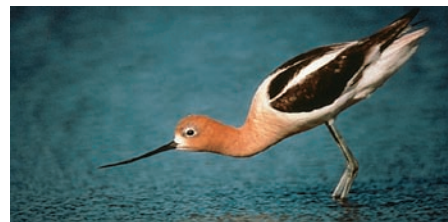
### Fall

Cottonwood and willow leaves turn brilliant yellow in autumn. Marsh plants begin to change color as well, creating a mosaic of yellows, tans, and reds. In a reversal of spring, large numbers of ducks, shorebirds and songbirds migrate south, stopping to rest and refuel. Lizards, snakes and tortoises become less active due to cooler temperatures. Mule deer begin breeding, and mature bucks with large antlers can be observed.



*Juvenile and adult bald eagles (above)*

*American avocet*



*Mule deer, buck*



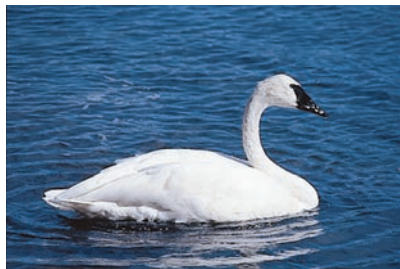
*Desert tortoise*



## Seasons of the Refuge

### Winter

In winter, tundra swans, Canada geese and a variety of ducks feed in lakes and marshes. Shovelers, pintails, redheads, canvasbacks, mallards, and teal can all be seen on Upper Pahranaagat 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.



*Tundra swan*

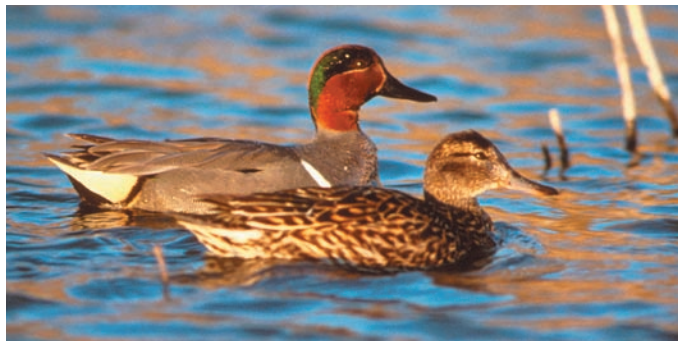
*Northern shoveler*



*Canada geese*



*Green-winged teal*



## Habitats of the Refuge

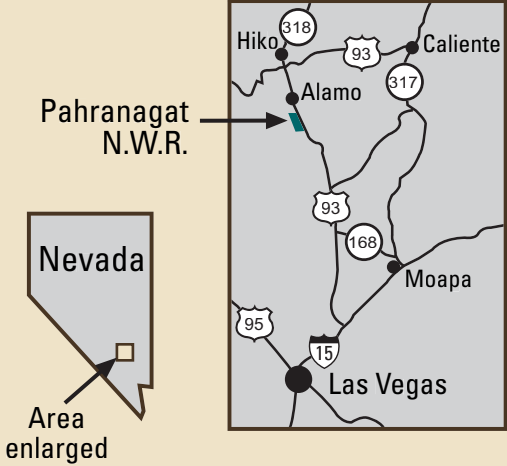
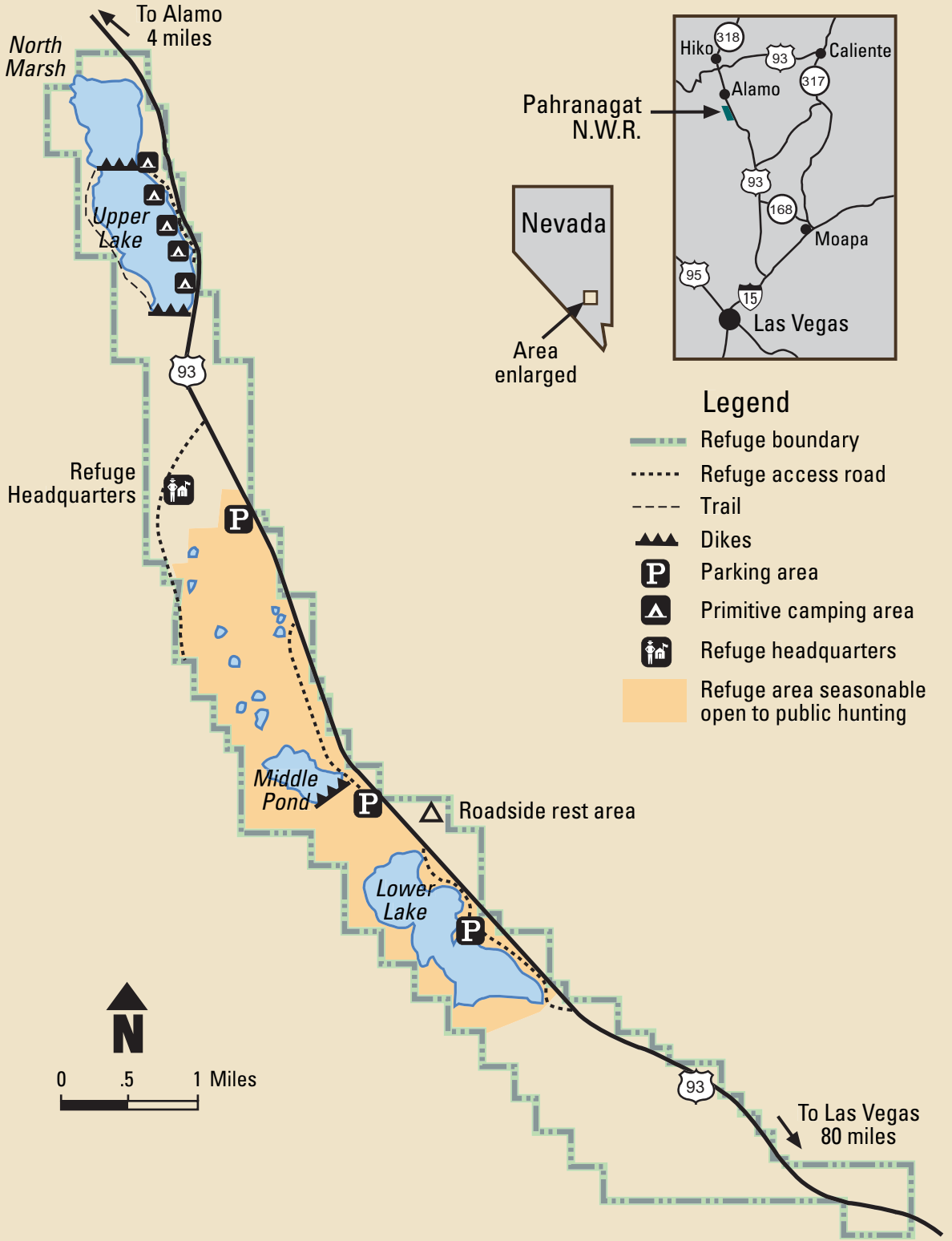
At Pahranaagat NWR, refuge staff maintain and restore habitats to provide food, water and shelter for wildlife. Five major habitat types are managed according to the needs of wildlife.

### 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 Pahranaagat 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 Pahranaagat 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 Pahranaagat 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.





**Legend**

- Refuge boundary
- Refuge access road
- Trail
- Dikes
- Parking area
- Primitive camping area
- Refuge headquarters
- Refuge area seasonable open to public hunting

## 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 yellow 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 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.

### Roadrunner



## Did You Know...

...that the 6-inch-long endangered southwestern willow flycatcher migrates more than 2,000 miles from summer breeding grounds at Pahranaagat 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 Pahranaagat 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 Pahranaagat Lake? The vegetation preserved in these samples, including 2,000-year-old pollen and seeds, revealed that the Pahranaagat Valley once supported conifers such as pinon pine, indicating that wetter and cooler climate cycles occurred.

### Southwestern willow flycatcher



## History of the Refuge

Pahranagat NWR has significant cultural importance to the Paiute people and has historically been utilized by native people for thousands of years. Numerous sites, including rock art and rock structures, are preserved to maintain their cultural value. Rock paintings (pictographs) and peckings (petroglyphs) are numerous on the refuge and are protected by federal law. One cultural site, listed in the National Register of Historic Places, is thought to have been a place where 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 Refuge. 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. Operation of ATVs (3 and 4-wheelers, dirt bikes, etc.) is prohibited on the refuge.

### Restrooms and Trash



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.

### 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 or refer to the Hunting/Fishing/Boating Regulation brochure 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. Check for seasonal boating restrictions.



## Regulations Protect Visitors and Wildlife

### Camping and Picnicking



Unimproved camping and picnic sites are available along the eastern shoreline of Upper Pahranaagat Lake (see map). All camping is restricted to these areas. Camping is limited to 7 consecutive days within a 30-day period, beginning on the day of arrival. Be considerate of other campers. Please keep noise to a minimum from sunset to sunrise. No generators are allowed to run in the campground. Restore your campsite to a clean and orderly condition when you leave.

### Firewood



To reduce the possibility of wildland fire, no open fires are allowed on the refuge. Cooking fires will only be allowed in BBQ grills, must be under control, attended to and completely extinguished after use.

### Hiking



Hiking is allowed on designated roads and trails which offer access to wetland, riparian and desert shrub habitats (see map).

### 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, attended to, and under control at all times. To minimize wildlife disturbance, pets are not allowed in the water. Pet food and waste attracts scavengers and must be picked up and disposed of by owners.

### 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/Plant Life



Disturbing, damaging, 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 Pahranaagat 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 System.*



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**For Refuge information  
1 800/344 WILD**

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

**Cover photo: Gary Kramer**