

Liberty Wildlife Rehabilitation Foundation



Liberty Wildlife

Education Program's Natural History



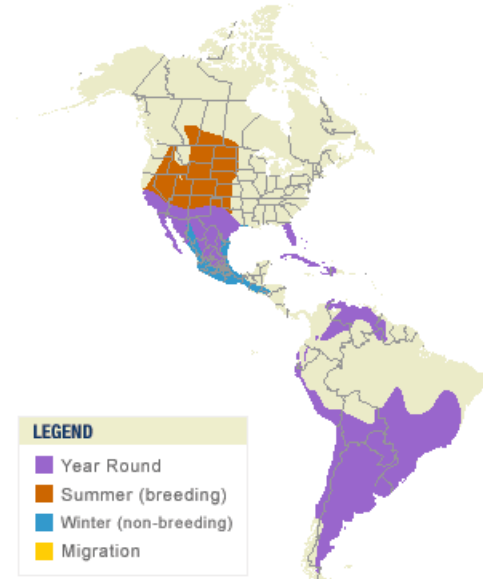
Burrowing Owl

Burrowing Owl (*Athene cunicularia*)

Range: The Burrowing Owl can be found in Western North America through Mexico, Central America and parts of South America. A separate subspecies can be found in Florida and the Caribbean Islands. During the breeding season, those in the west can be found in all states west of the Mississippi Valley in the United States and Southwestern Canada. They can be found permanently in the Southwestern states, Mexico and the drier parts of Central and South America. Those found in Canada and the northern parts of the U.S. migrate south during the winters.



Burrowing Owl
Athene cunicularia



Map by Cornell Lab of Ornithology
Range data by NatureServe

Habitat: The Burrowing Owl generally prefers dry open grasslands, agricultural and range lands and deserts where burrowing mammals like prairie dogs, ground squirrels and badgers can be found. They are often found on golf courses, airports, university campuses, pastures, cemeteries and prairie dog towns.

Description: A small ground-dwelling owl that can be seen during the day, the Burrowing Owl has sometimes been described as a small owl standing on stilts, referring to its relatively long legs. It has a round head with no ear tufts, white eyebrows and yellow eyes and small indistinct facial disk. Adults are dusty brown with white markings on the belly and a prominent white chin stripe. The young are brown on the head, back and wings with a white belly and chest. They molt into adult plumage during the first year. Females tend to be darker than the males. The wingspan measures 20 to 24 inches. The Burrowing Owl stands 7 to 10 inches tall. Typically this owl weighs between 4 to 7 ounces. Some research indicates that the male and female are about the same size (Cornell Lab of Ornithology) while others report that the male is slightly larger (University of Michigan Museum of Zoology, The Peregrine Fund). At the very least, it is safe to say that the Burrowing Owl differs from most birds of prey in that the female is not larger than the male and that the sexes are about the same size or the male may be larger of the two.

Hunting/Prey: Although the Burrowing Owls will hunt throughout the 24-hour day, they are most active at dawn and dusk - crepuscular. They tend to hunt insects during the day and small mammals during the night. They are quite versatile in their hunting techniques. They might walk, hop or fly to capture their food. They'll chase insects on the ground. They might catch large insects in the air or hover before swooping down to grab the prey in their talons. They



will also sit on a fence post or other perch and glide down to grab their prey. Like other owls their ears are located asymmetrically to assist them to locate food by sound. However, since they hunt when light is available, they depend less on sound than nocturnal owls. The owl's body and flight feathers are softer and less rigid than a hawk's to allow it to hunt its prey with little sound. Their prey consists of beetles, grasshoppers, mice, reptiles, amphibians, small birds, scorpions and cockroaches. These owls will change their diet based upon the availability of food with vertebrates being the most common winter food and arthropods the common summer food.

Breeding/Nesting: Burrowing Owls, as their name implies, live in burrows that typically have been abandoned by prairie dogs, ground squirrels, skunks or tortoises. They may also nest in naturally created burrows or man-made nest boxes placed in the ground. Under the right circumstances, they will dig their own burrow. (Cornell, The Owl Pages, University of Michigan, The Raptor Center) The burrows may be several yards long and may be lined with dry material or mammal dung. Typically there will be an adjacent burrow used by the male during incubation and the juveniles after emerging from the nest. The owls may live in colonies based upon the availability of abandoned burrows. Such a colony has existed at Scottsdale Community College for years.

Nesting begins in late March or April. Generally the female may lay 3-12 round white eggs a day apart, although 4-9 is more usual. Incubation is usually about 28 days by the female only. The male brings her food and feeds the babies while they remain in the nest. The male stands guard during this period. The young may appear at the opening of the nest in 14 days and leave in about 44 days.

Lifespan: Estimates of the life span for the Burrowing Owl range from 3 to 4 years to 7 to 11 years. In captivity, they have lived over 10 years. (The Owl Pages) The longest recorded life span: 9 years. (Snake River Birds of Prey National Conservation Area)

Threats: In many areas, the Burrowing Owl is listed as endangered or threatened or of special concern. The greatest threat to the Burrowing Owl is habitat loss or degradation caused primarily by land development and agriculture. The use of pesticides to eradicate prairie dogs also accounts for losses of the Burrowing Owls. Many deaths result from collisions with cars or barbed wire. Natural enemies include larger birds of prey, snakes, domestic cats and dogs, badgers, skunks, coyotes.

Other Burrowing Owl Facts:

- The Greek scientific name for the Burrowing Owl, *Athene cucularia*, translates to "wise little miner or burrower."
- The Burrowing Owl has also been called the Ground Owl, Prairie Dog Owl, Rattlesnake Owl, Howdy Owl, Cuckoo Owl, Tunnel Owl, Gopher Owl and Hill Owl.
- The Burrowing Owl has a wide range of calls, including hoots, clucks, rasps, screams and barks. The main call is a two syllable "who-who" given by the adult male. Adults give a short, low "chuck" sound as a warning of approaching predators. This sound is usually accompanied by bobbing of the head up and down. Typical sounds can be heard at the following Birds of North America website:
http://www.allaboutbirds.org/guide/Burrowing_Owl/sounds

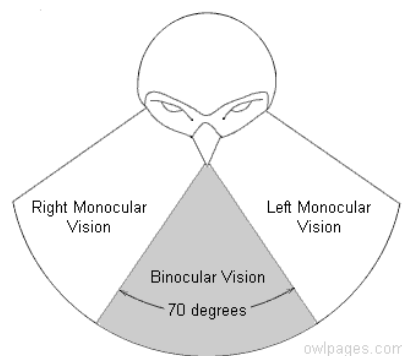


- As a safeguard against predators, the Burrowing Owl will post sentries. When they share abandoned burrows with prairie dogs, both species will post sentries. The Owl's warning call is a bark similar to the prairie dog's bark. Both species go on alert when they hear the warning.
- Juvenile Burrowing Owls when threatened in the burrow will make a rattlesnake like buzz sound. This sound is often successful in warding off mammal predators intend upon invading the burrow.
- Lining their burrows or the opening of their burrows with mammal dung provides both protection and food. Mammals investigating the burrow will leave it undisturbed smelling the cow or bison dung. The dung also attracts beetles providing the owl with a food source.



• [Owl](#) Nest Entrance Complete With Cow Dung

- Like all birds of prey, the Burrowing Owl's eyes are fixed in their sockets. This provides them with a field of binocular vision which assists in locating prey by sight, but provides limited to no peripheral vision. Because their eyes are fixed in their sockets, they cannot move them up or down or side to side. To compensate for this, the owls are able to move their heads 270° in order to see peripherally and behind them. This dexterity is accomplished by having 14 vertebrae in their necks compared to the human's 7 (The Owl Pages).



- The owl's feathers are softer than other birds of prey's. This allows them to fly soundlessly when they hunt in limited light.



- Like all birds of prey, the owl eats all of its prey including bones, feathers, skin, etc. It will then produce a pellet of undigested parts of its meal which it casts up several hours after eating prey. The owl does not have a crop like many other birds.
- The Burrowing Owl, like other birds of prey has a third eye lid called the nictitating membrane. It protects and cleans the eye.



Diego

Diego came to Liberty Wildlife on June 22, 2011 as a juvenile from a Kingman animal clinic. Liberty's medical staff discovered that he had experienced an injury to his head. Additionally, his behavior demonstrated that the injury had affected his natural instincts to survive in the wild. As a non-releasable, he was found to be compatible with Liberty's Education program. We are not sure if his behavior reflects his Latin name "wise little miner."



Frida

Education volunteer Linda Scott transported Frida from a facility in Casa Grande on August 5, 2012. Frida had suffered a head injury, particularly to her right eye. During her treatment, the eye collapsed and was subsequently surgically removed. Frida was unable to adjust to the loss of her eye and was determined to be non-releasable. With that determination, efforts were made to see if she could become part of the education team. She adapted well to being an educator.

Compiled by Max Bessler

Photos courtesy of Barb Del'Ve

Sources: Cornell Lab of Ornithology "Birds of North America On-Line," Cornell Lab of Ornithology "All About Birds," The Peregrine Fund, University of Michigan "Museum of Zoology," Center for Biological Diversity, Defenders of Wildlife, The Owl Pages, University of Minnesota Raptor Center, Canada Burrowing Owl Management Plan, Snake River Birds of Prey National Conservation Area, U.S. Fish & Wildlife Status Assessment for the Western Burrowing Owl.

