



A publication by:

## NORTHWEST WILDLIFE PRESERVATION SOCIETY

### Burrowing Owl

*Athene cunicularia*



The burrowing owl is a unique member of the owl family; they are different in appearance, nesting style and even their calls. These owls were once a more plentiful species during a simpler time when there was less agriculture in North America, however their numbers have decreased during this time. Currently, there has been a new effort to reintroduce these very unique owls back into parts of their former range, with the hope of one day reestablishing a self-sustaining population.

### Characteristics

Burrowing owls have often been known as the little owl on stilts, as their long legs add very noticeable height to their body. As the name indicates, burrowing owls are different compared to other members of owl family as they nest in abandoned burrows created by other animals. They are also active during the day which is a more unusual behaviour for an owl.

Adult burrowing owls can measure between 19-28cm in height, and weigh between 140-240 grams, and have a wingspan between 51-61 cm. Adults burrowing owls have rich sandy-brown heads and wings, with both containing a white spotting pattern. Their chest and abdomen are white with variable brown spotting or barring, but this feature can depend on the type of subspecies of burrowing owl. Juvenile owls are similar in appearance, but they lack most of the white spotting above and brown barring below. Juveniles also have a buff bar across their upper wings, and their breast can sometimes be sandy brown rather than white. Adults and juveniles will both have greyish legs, which are much longer than those of other owl species.

## Life Cycle

Male and female burrowing owls look for old and unused burrows to nest and lay eggs in. Unlike other owl species, burrowing owls are slightly tolerant of human presence, and can be found nesting near roads, farms, houses, and regularly maintained irrigation canals. The most common nesting material that they use is the dung of cows and horses. It's thought that the smell of the dung not only masks the smell of the owlets, but also provides a food source for them as insects are attracted to the smell of the dung. Once the female has laid her eggs, she will then start to incubate her brood while the male hunts for food and brings it to the female. Generally one clutch will average 7 eggs, however the clutch can sometimes be as large as 12. After approximately 30 days, the eggs will start to hatch.

Once the owlets have hatched, the female will stay with the hatchlings and the male will supply the main source of food for the nest. After around two weeks to a month, the owlets will slowly start to make their way out of the burrow and hang around its entrance.

By summer, the hatchlings will begin practicing to fly. At the start, the fledglings will fly small distances, getting practice and slowly getting stronger in flight. Once they get strong enough, the fledglings will often begin foraging for food with their parents.

By early autumn, the hatchlings will start to have their adult plumage coming in. Once this plumage comes in fully, they will leave the nest and never return.

## Habitat

Burrowing owls like to live in open areas with low ground cover, existing burrows for nesting, and a healthy amount of food in the area. They rely on the old burrows of other animals such as ground squirrels, badgers, and foxes. Since some farmers look at these animals as pests and will often kill them, they in turn are also hurting the burrowing owls since they rely on those animals to make their burrows.

In BC, burrowing owls could only be found in the southern regions of the BC. However once more modern agriculture practices started happening, their numbers started to decrease rapidly. By 1979, burrowing owls were extirpated from BC. In some of the other prairie provinces, there are fewer than 1,000 pairs remaining in Alberta and Saskatchewan. Occasionally when burrowing owls are wintering, they sometimes can be found in coastal British Columbia and in Ontario and Quebec during the spring period.

## Behaviour

Burrowing owls are active during the day, especially during the spring when they are gathering food for their broods and the weather is a bit cooler.

Burrowing owls are known for their chuckling/chattering like call. They will also bob their heads if they are excited, or stressed due to predators in the area.

When hunting, burrowing owls will generally wait on a perch and then swoop down on prey. If the opportunity presents itself, they will also fly up to catch insects in flight, and even run along the ground to chase prey on foot. Large insects and small rodents are the main prey items of burrowing owls. Some examples of prey items are the great basin pocket mouse, deer mouse, western harvest mouse, voles, frogs, toads, birds, crickets, beetles, scorpions and grasshoppers.

## Threats

Many different pesticides that are used in fields can greatly affect burrowing owls. One pesticide known as "Carbofuron" is used to kill grasshoppers in farmers' fields. Grasshoppers make up a large portion of the burrowing owls diet, and when

eaten, the insecticide then enters their body and accumulates over time, affecting how many offspring they can produce and the health of the owl.

Habitat loss and loss of possible nesting sites are another threat to the burrowing owls. With modern agriculture and the ever increasing size of many cities, these critical and important grasslands are being lost.

## What We Can Do To Help

- Support burrowing owls conservation projects.
- Don't hunt animals (ground squirrels, badgers, and foxes) that create burrows.
- Support initiatives to create or reclaim potential habitat sites for burrowing owls.

## Interesting Facts

- Male burrowing owls are lighter than their female counterparts due to their feathers becoming more "sun-bleached", as the males spend more time outside of the burrow.
- As a defense, burrowing owls will mimic sounds of a rattlesnake to hopefully scare away predators trying to enter their burrow.
- Burrowing owls can live for 9-10 years in the wild.

## Bibliography

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