

## **Co-existing with Burrowing Owls – Easier than you may think!**

*Submitted by Leanne Thompson for SK PCAP*

Burrowing Owls are small birds of prey that look like short, plump owls on stilts. While many species of owl are large, solitary birds that live in trees and hunt at night, the Burrowing Owl is a small bird (less than half a pound and 9 inches tall) that lives in open prairie grasslands, where it nests underground in abandoned burrows and searches for prey both during the day and at night.

Burrowing Owls prefer to nest in open grassland areas comprised of short vegetation (grazing or mowing is good!) which also offer an abundance of burrows. Native vegetation is not required - rather the vegetation structure (height) and soil type appear to be more important in the selection of habitat. Burrowing Owls do not dig their own burrows but inhabit abandoned badger, gopher or prairie dog burrows or the occasional fox den. Active burrows can be identified by the presence of droppings at the entrance and/or prey pellets. In addition to the nesting area in short vegetation, adjacent areas with taller vegetation which support a population of small mammals (mice, voles, insects and other prey) are also required for hunting and foraging and may include riparian areas, ungrazed areas or roadside ditches.

In Saskatchewan, the majority of owls nest on privately owned land. Landowner interest and cooperation are vital to Burrowing Owl research and conservation. In addition to protecting over 61,000 hectares of grassland habitat, about 430 Operation Burrowing Owl landowners help to monitor the owl population by annually reporting whether or not they have nesting owls and, if so, how many pairs are present. Most importantly, landowners maintain and enhance Burrowing Owl nesting habitat.

According to the recovery strategy document published by Environment Canada, over the past three decades, the population of Burrowing Owls have declined from over 3000 pairs to fewer than 800. Burrowing Owls are designated “at risk” in all four western Canadian provinces and as such are protected under provincial wildlife acts from capture, harassment, trade, killing, or nest disturbance.

No single factor has been identified as the cause for this decline in population - rather cumulative impacts from several factors seem to be at the root of the problem. Potential threats for Burrowing Owls include loss and fragmentation of native and non-native grassland habitats, decreased prey, increased predation, inclement weather, vehicle mortalities, environmental contaminants, and loss of burrowing mammals in parts of the owls' range. While landowners do not have control over several of these factors, there are steps that can be taken to improve and conserve habitat for Burrowing Owls:

- Maintain and conserve contiguous blocks of native grassland and pasture of at least one quarter section in size;
- Practice good grazing management to achieve a variety of vegetation heights;
- Learn to recognize Burrowing Owl nests and avoid disturbing them with haying equipment or other vehicles during the nesting and rearing periods (May through June);
- Reduce livestock use at nesting areas during the nesting and rearing periods and avoid placing salt blocks or mineral in these areas to reduce the risk of trampling or accidental collapse of burrows;
- Till fields early to remove potential nest burrows in cropland before the owls arrive to encourage them to use more suitable grassland areas;

- Use direct or zero-till seeding during the critical nesting period (May through June) to improve the chances of Burrowing Owl survival;
- Avoid planting trees or shrubs in areas where they normally do not occur. Trees and shrubs provide perches for predators of the Burrowing Owl and can decrease nesting success;
- Avoid control of burrowing animals where possible – especially on native grasslands. Burrowing Owls depend on abandoned burrows for nesting sites;
- Encourage prey populations by limiting pesticide use and choosing the lowest toxicity products to non-target organisms especially near (within 600m) known nesting habitat;
- If you observe Burrowing Owls on your land, join Operation Burrowing Owl or another prairie conservation program.

For more information on Burrowing Owls or on Operation Burrowing Owl (which just happens to be turning 25 this year!) in Saskatchewan, visit the Nature Saskatchewan website, [www.naturesk.ca](http://www.naturesk.ca).

Picture notes: Burrowing Owl burrow – note the presence of owl droppings on either side of the burrow. (photo credit: L Thompson)