
NOTES AND LETTERS

NORTHERN SIGHTING OF A BURROWING OWL IN ALBERTA

Since the 1990s, western burrowing owls (*Athene cunicularia*) have experienced a severe decline in Canada, with a corresponding northern range contraction.¹ Despite their small size (150 g) and seemingly inefficient flight style, they are known to be capable of long-distance migration to Mexico and Texas.² Some are also long-distance breeding dispersers, moving large distances between breeding seasons^{3,4} (Holroyd and Trefry unpubl.).

Historically, the northern limit of the burrowing owl range was likely linked to the dynamic range conditions created by the interactive roles of bison grazing and fire in maintaining the prairie conditions

they prefer. In Alberta, the northern range of burrowing owls extended to Wainwright. In the 1990s, we were shown a burrowing owl nest site at CFB Wainwright in an open prairie area of aspen parkland, but it could not be determined whether the birds nested successfully. The two Alberta breeding bird atlases showed the current northern extent of the burrowing owls at about 52° N, near Hanna.⁵ As with all species, vagrants are occasionally reported. Paul Goossen (pers. comm.) observed a burrowing owl on 21 April 1995, during the Snow Goose Festival east of Beaverhill Lake, Alberta, at 53.368 N, 112.483 W, but it was not seen again. This is at about the same latitude as the Wainwright sighting. Here we document



Figure 1. Burrowing owl near Bonanza, Alberta, in May 2002.

Andrew Gregg

an unusual vagrant burrowing owl sighting recently reported to us far north of the known range.

Andrew Gregg, an amateur birder and gas field operator in the Peace River area of Alberta, first noted an unbanded burrowing owl in late May 2002 at one of the gas plants he monitors. During weekly visits, he repeatedly observed the owl and photographed it perched at the opening of an abandoned pipe lying on the ground, covered by gravel in the immediate area with sparse clumps of vegetation, mainly dandelion (Fig. 1). During the day, he witnessed it using horizontal pipes about 1 m above ground as hunting perches. It departed the area in August. A burrowing owl, presumably the same one, returned to the same site in May 2003 but left earlier than in the previous year and was not seen again.

In April 2011, we heard about the unusual sighting and visited Andrew at the burrowing owl site (55.924° N, 119.816° W), 1.2 km north of the Bonanza store and near the British Columbia border, NE of Grande Prairie. The owl's roost was a 20-m pipe with a 3-cm urethane coating and a 10-cm diameter entrance, open at both ends. Vegetation debris (seed husks, litter) clogged one entrance. The pipe was lying in a graveled gas plant site with sparse vegetation, mostly dandelions, with two small buildings connected by large pipes. The gas plant location is in a large field, typically seeded into wheat or canola, but Andrew thought it was fallow in the first year that the owl appeared. The nearest trees and a major gravel road were 600 m from the plant. The site was very similar to wintering sites we have seen in south Texas, where the owls commonly use gas installations with pipes and small culverts as roosts, surrounded by fallow cotton fields.²

This sighting is unusual for several reasons. First, it is about 600 km NW of the current known breeding range of burrowing owls.⁴ Burrowing owl reintroductions have been taking place 600 km due south in the Kamloops region of British Columbia, but the owl described here is unlikely to have been a captive-released bird or one of their offspring, as they were all color banded (Dawn Brodie pers. comm.). Although 600 km seems like a long-distance movement, we now know from satellite telemetry of burrowing owls that they can move 350 km per night (G. Holroyd and H. Trefry unpubl.). Secondly, unlike many vagrant sightings, this owl returned in the next year, indicating that there was something it found attractive about the site. Although a pair or a breeding attempt was not documented, Andrew's site visits were brief, so we cannot completely discount the possibility of a nesting attempt. At the very least, the sighting represents an example of good documentation of an unusual vagrant and illustrates the dispersal potential of this small owl.

We thank Peter Dolen for making us aware of Andrew's sighting and Andrew Gregg for providing details and photographs of the sighting as well as accompanying us to the site.

1. Wiggins D (2006) COSEWIC Assessment and Update Status Report on the Burrowing Owl *Athene cunicularia* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa, ON.
2. Holroyd GH, Trefry HE, Duxbury JM (2010) Winter destinations and habitats of Canadian Burrowing Owls. *Journal of Raptor Research* 44:294-299.
3. Duxbury JM (2004) Stable isotope analysis and the investigation of the migrations and dispersal of peregrine falcons (*Falco peregrinus*) and burrowing owls (*Athene cunicularia hypugaea*). PhD thesis, University of Alberta, Edmonton, AB.