

NORTHERNMOST NEST RECORD OF THE FLAMMULATED OWL (*OTUS FLAMMEOLUS*) IN CANADA

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The Flammulated Owl (*Otus flammeolus*) is a small, insectivorous, secondary cavity nester that reaches the northern limit of its range in south-central British Columbia (Campbell et al. 1990). Concerns about the population status of these small owls prompted systematic surveys in the 1990s. In the region of the Cariboo-Chilcotin, observations by Michaela Waterhouse, Julie Steciw, Anna and Gina Roberts and other local biologists were completed in a provincial report (van Woudenberg 1999). Although hooting Flammulated Owls were detected on these spring surveys northwest of Williams Lake in the area of Riske Creek, no nests were found. The northernmost confirmed nests were in Barrier, just north of Kamloops, although a dead fledgling recovered near Williams Lake suggested successful breeding also occurred in the vicinity (van Woudenberg 1999).

Students and I have a long-term study on Northern Flickers (*Colaptes auratus*) near Riske Creek, BC (Aitken et al. 2002, Wiebe 2003). As part of the project, we monitor the reuse of flicker cavities in subsequent years and currently track reproduction of secondary cavity nesters in 578 cavities excavated by flickers. On 16 June 2005, a Flammulated Owl peeked from a tree cavity (Figure 1) that I had placed a ladder against in order to check nest contents. The cavity had been used by a flicker in 2003, but was unoccupied in 2004. After blocking the cavity entrance with my work gloves, I opened the hand-made cavity “door” previously sawed into the side of the snag in 2003. I gently lifted the incubating female to reveal three warm eggs and then replaced the female and the door, being careful not to flush her. The cavity was 3.44 m high in a completely dead trembling aspen (*Populus tremuloides*) tree. The nest site was located about 7 km south of the hamlet of Meldrum Creek, making it the northernmost



Figure 1. Flammulated Owl at nest cavity in dead trembling aspen near Meldrum Creek, BC. 19 June 2005 (Karen L. Wiebe). BC Photo 3204.

confirmed nest for the species in North America.

The nesting snag was in mixed forest habitat with Douglas-fir (*Pseudotsuga menziesii*), trembling aspen, white spruce (*Picea glauca*), and lodgepole pine (*Pinus contorta*), and was 15 m from a large, open grassland area used for grazing cattle. To minimize disturbance, we only checked the cavity again on 16 July when the female was brooding at least two chicks about one week old. When the nest was next checked on 8 August, the cavity was empty but had a dirty, dark bottom suggesting recent use. According to average incubation and fledgling periods (each 23 days; McCallum 1994), the chicks could have fledged by 8 August, but we were unable to confirm an actual number.

Although we have heard Flammulated Owls hooting near our study sites at Riske Creek from late May into June in previous years, this was the first nest we have found. Other studies in southern British Columbia and in Oregon have shown a preference for dead ponderosa pine (*Pinus ponderosa*; Bull et al. 1990, van Woudenberg 1999), but a study in Colorado reported that 50% of Flammulated Owl nests were in trembling aspen snags (van Woudenberg 1999). The clutch size of this nest was within the two to four average reported for the species in British Columbia

and elsewhere (Campbell et al. 1990; McCallum 1994).

Additional notes and a photograph (Figure 1) have been deposited at the Wildlife Data Centre in Victoria, BC.

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Literature Cited

- Aitken, K.E.H., K.L. Wiebe, and K. Martin.** 2002. Nest-site reuse patterns for a cavity-nesting bird community in interior British Columbia. *Auk* 119:391-402.
- Bull, E.L., A.L. Wright, and M.G. Henjum.** 1990. Nesting habitat of Flammulated Owls in Oregon. *Journal of Raptor Research* 24:52-55.
- Campbell, R.W., N.K. Dawe, I. McTaggart-Cowan, J.M. Cooper, G.W. Kaiser, and M.C.E. McNall.** 1990. The birds of British Columbia: Volume 2: nonpasserines (diurnal birds of prey through woodpeckers). Royal British Columbia Museum, Victoria, BC. 636 pp.
- McCallum, D.A.** 1994. Flammulated Owl (*Otus flammeolus*). In *The birds of North America*, No. 93 (A. Poole and F. Gill, eds.). Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, DC. 24 pp.
- van Woudenberg, A.** 1999. Status of the Flammulated Owl in British Columbia. British Columbia Ministry of Environment Wildlife Working Report No. WR-95, Victoria, BC.
- Wiebe, K.L.** 2003. Delayed timing as a strategy to avoid nest-site competition: testing a model using data from starlings and flickers. *Oikos* 100:291-298.

About the Author

In winter, Karen lives in Saskatoon where she is a professor at the University of Saskatchewan. In summer, she migrates to her native British Columbia to live in a tent near Riske Creek and feed off peanut butter sandwiches while studying the behaviour and ecology of flickers. Karen has published over 50 articles in scientific journals, mainly on the ecology of owls, kestrels, ptarmigan, and woodpeckers.