GRAY WOLF PREDATION ON TRUMPETER SWAN EGGS

R. Wayne Campbell

The Trumpeter Swan (*Cygnus buccinator*) has extended its breeding range southward from interior Alaska over the past 28 years into British Columbia. It has become established as a regular nesting species throughout the interior boreal forest and Peace River regions of the province north of latitude 54° North (Campbell et al. 1990). As part of a colonial-nesting wetland bird monitoring program established by the Wildlife Data Centre in the southern Peace River region, 33 lakes and large sloughs and marshes have been surveyed annually since 2000. During this spring and summer fieldwork at least 13 pairs of Trumpeter Swans frequent the region between Hudson's Hope and Charlie Lake south through Chetwynd and Boundary Lake to Swan Lake and Tumbler Ridge. Breeding success has been low in the vicinity of Chetwynd each year although adults build nests and lay eggs. Six empty nests that have been observed were obviously predated (Figure 1).

While visiting Halfmoon Lake, north of Chetwynd, on 28 May 2004 I watched a lone gray wolf (Canis lupus) eat four Trumpeter Swan eggs in a nest that was situated on a small point of wetland jutting into the lake. The nest was about 300 m from the edge of a spruce woodland and easily accessed by the wolf by walking through shallow flooded vegetation. When I arrived the wolf had already reached the nest and was pawing at the mound of nesting material. One egg was held by the paw and gnawed at until it broke. Eggshells and contents were eaten over the few minutes I watched after which the animal walked to the edge of the forest and disappeared. I later checked the nest and found surprisingly little evidence of eggshells. The nest itself, although pulled apart, still remained relatively intact. The adult swans were not vocal and simply moved to the centre of the lake and remained swimming together. Two adult swans were last observed on the lake on 3 October 2004.



Figure 1. Suspected gray wolf predation on a Trumpeter Swan nest in 2002 at Halfmoon Lake, BC. 20 June (R. Wayne Campbell). B C Photo 3075.

In 2004, three Trumpeter Swan nests were found predated within a few kilometers of each other in the vicinity of Halfmoon Lake. This observation may help in interpreting the cause of nest failure in the region, especially where aerial surveys are not followed up by ground checks.

The diet of the gray wolf in British Columbia is extremely variable but the majority of prey include larger mammals such as moose, deer, bighorn sheep, elk, and caribou. It also eats a wide variety of smaller prey items, such as hares, mice, beavers, muskrats, voles, ground squirrels, marmots, grouse, and fishes as well as carrion and garbage.

There are no previously documented occurrences of gray wolf predation on Trumpeter Swan nests. However, on the Copper River Delta in Alaska, there is evidence of Dusky Canada Goose (*Branta canadensis occidentalis*) egg predation (Stephenson and Van Ballenberghe 1995). Also on the Copper River Delta, Trumpeter Swan nests have been predated by Brown Bear (*Ursus arctos middendorffi*) (Henson and Grant 1992).

Literature Cited

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