

Nesting of the Northern Hawk Owl on Manitoulin Island in 1997

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Introduction

The Northern Hawk Owl (*Surnia ulula*) breeds in the Boreal Forest zone of Ontario (Weir 1987). Nesting of this species was confirmed on Manitoulin Island during 1997. This nesting followed a winter when the Northern Hawk Owl population in the surrounding countryside was at a very high level, with as many as 11 individuals seen on a particular day in February over an area of approximately ten square kilometres (Whitelaw 1998). Local farmers observed that the vole (*Microtus pennsylvanicus*) population was particularly high that winter.

At least two pairs successfully raised and fledged young during the nesting period. Behaviour of the birds during and after courtship, during the actual nesting period (including incubation and feeding young), and family life after fledging, have been observed and documented, and are described here. The actual nest at Site 1 was discovered and observed. The nest at Site 2 was not observed; however, behaviour of the adult birds and young was noted. The observed nest at Site 1 is only the sixth reported nesting in Ontario (Peck and James 1994).

Attempts to keep these breeding sites confidential were not com-

pletely successful. Site 1 had a number of visitors, some of whom contributed observations which are included in this report. Disturbance of the birds by visitors to the nest site was minimal, and young owls were successfully raised. Site 2 was kept completely confidential, and had no disturbance.

Site 1 was located along a sideroad at the fence line, at 45° 55' north latitude. This location is the second most southerly known nesting in the province for the Northern Hawk Owl. The most southerly was near Mer Bleue Bog (45° 23' north latitude), southeast of Ottawa (Smith 1970).

Observations at Site 1

The nest tree (Figure 1) was a dead White Birch (*Betula papyrifera*), which has since been blown down (October 1997). The nesting cavity appeared to be an old Northern Flicker (*Colaptes auratus*) hole which had been broken open. The opening faced northeasterly, and was at a height of approximately ten metres above ground level. The incubating adult bird (Figure 2) could be seen from the road, so the cavity was not deep.

Courtship by this pair was observed on 1 February. The nest



Figure 1: Nest site of Northern Hawk Owl; nest cavity in left fork of standing dead White Birch. Photo by *Charles J. Whitelaw*.



Figure 2: Adult Northern Hawk Owl incubating, 29 April 1997.
Photo by *George K. Peck*.



Figure 3: Young Northern Hawk Owls in nest cavity, early June 1997.

Photo by Sally James.

site was discovered on 29 March. The exact date on which incubation began was not determined. Young owls in the nest (Figure 3) were observed being fed over a period of several weeks during May and early June. The date when the young were fledged was 17 June. From the observations gathered, it became apparent that Northern Hawk Owls are attentive to their young. The male was observed bringing food to

the incubating female. The family stayed together for some time after the young were out of the nest.

The following sightings cover the period from courtship on 1 February until young of the year were observed hunting alone on 25 August. Observations during September, October and November failed to turn up any Northern Hawk Owls in the area.

February 1:

Pair seen perched together on a bare branch near the eventual nest site. They exhibited courtship behaviour at this time. It was noticed that one bird (thought to be the female) was larger than the other. This sighting occurred during a Friends of Misery Bay field outing which had been arranged specifically to observe owls on Barrie Island (Bailey 1997). Eleven different Northern Hawk Owls were seen on that day, as well as two Snowy Owls (*Nyctea scandiaca*), four Great Gray Owls (*Strix nebulosa*), one Boreal Owl (*Aegolius funereus*) in a hay shed, and one Northern Saw-whet Owl (*Aegolius acadicus*) in a barn in nearby Gordon Township.

March 29:

The pair was seen at the nest tree. One entered the hollow top of the stub, while the second bird flew from the nest cavity, which was approximately two metres below the top of the stub. This sighting by Floyd Cosby was the first suspected nesting activity.

April 8:

One adult bird incubating.

April 12:

One incubating adult was observed to come up through the hollow top of the stub above the nest cavity, and then fly off.

April 13:

Pair at the nest site; one incubating.

April 14 and 17:

One adult bird incubating.

April 23:

Female incubating (0900h). The male was perched in a poplar (*Populus* sp.) grove some 50 m from the nest tree. Shortly, the male brought a mouse (sp. ?) to the female on the nest. He stayed for about three minutes, then left carrying what appeared to be a regurgitated pellet in his bill.

April 29:

Female incubating. The male was perched in a single tree in an open field, several hundred metres away. After a short time, the male flew to the poplar grove near the nest tree, but did not approach closer.

May 3:

Pair seen together at nest tree.

May 16:

Female sitting on nest. The male flew in with a mouse, stayed for 30 seconds, then passed the mouse to the female. She began tearing at the mouse with her bill, ingested some, then fed small pieces to what was presumed to be very small young that could not be seen.

May 18:

Adult in nest cavity. The heads of three small young could be seen.

May 19:

The active nest of a pair of European Starlings (*Sturnus vulgaris*) was noted in a cavity above the cavity being used by the Northern Hawk Owls (Doreen Bailey, pers. comm.).

May 20:

Adult seen feeding young.

May 30:

Four young seen in nest cavity.

May 31:

One adult and four young seen in the nest cavity. It was noted at this time that one of the young birds was much smaller than the other three.

June 3:

Adult observed feeding four young (0900h). Four young seen in the nest cavity (1500h). It was noted that one of these young birds was in rather poor condition. Its appearance suggested that it had been attacked by one or more of its older siblings, although this was not observed (Cheryl Pearce, pers. comm.).

June 4:

Three young were observed in the nest cavity. The fourth young was heard calling from the long grass near the nest tree. One adult bird nearby showed considerable alarm.

June 5:

One young was found on the road near the nest tree. It was moved to a position over near the fence line. It is believed that this nestling, which was smaller than the others, had been ejected from the nest cavity by its larger siblings. It was not seen again after this date.

June 16:

Three large young in nest cavity.

June 17:

Three young fledged from the nest and were subsequently found in the poplar grove near the nest tree. They were calling and were being fed by the parent birds.

June 18:

Three young with one adult in the poplar grove near the nest tree. All three were able to fly and were perched in safe positions, well above the ground. One was slightly smaller than the other two. These young uttered a "hissing" note as they called for food. Two of the young were photographed at this time (Figure 4).



Figure 4: Juvenile Northern Hawk Owl on 18 June 1997, one day after fledging.

Photo by *Charles J. Whitelaw*.

June 30:

Three young with two adults were located approximately 1.5 km northeast of the nest tree. The family group appeared to be doing well.

August 25:

One juvenile seen alone, perched in a tree near the road at a location roughly 1 km south of the nest site. This individual appeared to be hunting on its own (Rodney Campbell, pers. comm.).

Observations at Site 2

Although only one adult was usually observed at a time, the Northern Hawk Owls at this location were seen regularly from late January through until June (Doreen Bailey, pers. comm.). On 10 June, four fledged young were seen along with one adult. The actual nest site was not found, although its approximate location is known. This site is at 45° 54' 30" north latitude, and is approximately 2 km southeast of Site 1.

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