

## Articles

### First Documented Nest Record of Pine Grosbeak in Ontario

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#### Introduction

The Pine Grosbeak (*Pinicola enucleator*) breeds throughout subarctic and subalpine regions of Scandinavia, Russia, Japan, United States and Canada. They winter within their breeding range and are irregularly found farther south, locally and usually in small groups. During the summer, they nest in open mixed woodlands and boreal forests in the north and throughout western mountain ranges in the U.S. and Canada (Adkisson 1999). Within Canada, this species is a permanent resident in all provinces and territories, and is seen more frequently during the winter months around feeders and orchards, where they can be approached easily. Godfrey (1986) indicated an extensive breeding range throughout the coniferous-forested areas of the country, with the exception of Prince Edward Island.

Although widespread and tame, there is little information on the nesting habits of the Pine Grosbeak, possibly due to its northern range and secretive nature in summer (Helleiner 1987). A review

of the British Columbia, Prairie and Maritime Nest Record Schemes reports yielded very few nest records. In Manitoba, the breeding range likely covers the northern third or half of the province, although there is some evidence to suggest occasional breeding in the southeast (Taylor 2003). In Churchill, there has been evidence of breeding since the early 1930s and several nests have been found in the ensuing decades (Jehl and Smith 1970; G.K. Peck, pers. comm.; J.M. Richards, pers. comm.). Historically, there are records of this species nesting in Quebec but there were no nests reported during the Quebec Breeding Bird Atlas (1984-1989). Confirmation of breeding during that atlas was obtained in only 5.9% of squares, on the basis of recently fledged young and adults carrying nesting material (Breton 1996).

In Ontario, Pine Grosbeaks were first found breeding in the mid 1930s, when adult birds were observed feeding young in the Temagami Forest Reserve, Nipissing District (Baillie 1960). In 1940, Hugh Funell reported a July

nest from the Temagami Forest Reserve, Nipissing District, and another nest was reported that year by Percy Ghent at Sundridge, Parry Sound District (Baillie 1960). Both nests were undocumented. Since that time, there have been several sightings of birds during the breeding season but breeding and nesting information remain scant (Baillie 1960, Speirs 1985). During the first Ontario Breeding Bird Atlas (OBBA), no nests were found, but fledged young being fed by adults were reported near the headwaters of the Black Duck River. Many other family groups were also noted in the area (Helleiner 1987).

The Pine Grosbeak has been accepted as a provincial breeding bird by the Ontario Bird Records Committee (OBRC), based on the collection of a female with an unshelled egg in the oviduct at Hawley Lake, Kenora District, in 1958 (Wormington and James 1984, James 1984). It is still considered an unconfirmed breeding species by the Ontario Nest Records Scheme (ONRS) due to the lack of documented evidence of nesting (Peck and James 1987). The purpose of this paper is to document the nest of a Pine Grosbeak found on 12 June 2003, north of the Swan River, Kenora District.

### **Nest Record**

From 9-19 June 2003, the authors surveyed land 25 km north of the Swan River on the coast of James Bay (17U 425558 5966359 – North

American Datum 1983; 53° 50' 25.47" N, 82° 7' 52.89" W) as volunteers for the second Ontario Breeding Bird Atlas. There were three major habitats in the area: coastal beach ridges and mudflats with minimal vegetation; extensive sedge meadows mixed with networks of small, shallow ponds; and narrow, treed, gravel beach ridges (Figure 1). Moving away from the coast, the treed ridges changed from willow thickets to mature coniferous woodlands composed mainly of White Spruce (*Picea glauca*) and Tamarack (*Larix laricina*), with a willow (*Salix* sp.) and Speckled Alder (*Alnus incana*) border. Ground cover increased on the ridges also, culminating in a thick lichen/moss bed.

On 12 June 2003, a female Pine Grosbeak was observed feeding on the ground near a small stream in an open, mature White Spruce forest on one of the inland beach ridges. The bird then flew to the edge of the forest, where it continued to feed on cranberries (*Vaccinium* sp.). We continued to observe her for several minutes until she eventually flew southeast out of sight, low to the ground, along an animal trail. She did not appear to make any vocalizations during foraging. We began a search of the area and a nest (ONRS #175427) was quickly located in the adjacent open, mixed woodland (Figure 2), less than 10 m from the small stream mentioned previously (Nest location: 17U 423462 5965303



**Figure 1: Aerial view of forested beach ridges and sedge meadows along James Bay coast north of the Swan River, Kenora District. Photo by Karl R. Konze.**

– North American Datum 1983; 53° 49' 50.21" N, 82° 9' 46.6"). The female was sitting on the nest and repositioned herself several times when we first arrived. The nest was checked using a mirror and contained three eggs. Initial photographic documentation of the nest habitat and nest site was taken before leaving the area. A brightly coloured adult male was also seen in this general vicinity. It did not appear to be associated with the female and was not seen again on any subsequent visits. The male was singing and feeding at the top of a 13 m White Spruce approximately 70 m from the nest site in an area near to where the nesting female had first been found.

On 13 June, we returned to the ONTARIO BIRDS APRIL 2004

site to obtain more detailed information. The nest was situated 236 cm high in a 600 cm White Spruce with a 7 cm diameter at breast height (DBH). It was a bulky, loosely constructed nest, positioned against the trunk and placed atop three horizontal branches. The female was easily visible from several vantage points and the nest was not particularly well hidden (Figure 3). It was constructed of primarily dead Tamarack twigs and was lined exclusively with dead, mostly round-stemmed, grasses. The nest had an outside depth of 85 mm, inside depth of 40 mm, an outside diameter of 120 mm and an inside diameter of 60 mm. It contained three long oval, richly coloured, light blue eggs, marked with black

and lilac blotches (Figure 4). The eggs were measured as accurately as possible with a small metric tape measure and were the following sizes: 26 x 18 mm, 27 x 19 mm, and 29 x 18 mm. The female was very tame and allowed extremely close approach during nest and egg measurements, and for photographic documentation. The nest and egg measurements are in the range stated in Adkisson (1999), except for the outside and inside diameters, that are smaller than other reported nests.

We returned to the site again on 17 June for our final visit. The female was incubating, and the nest still contained three eggs.

We continued observations for approximately 30 minutes. During that time, we observed a russet-coloured male Pine Grosbeak approach the nest and feed the female. This male stood on a branch above and to the side, and reached over to feed the female which



**Figure 2: Pine Grosbeak nest tree and surrounding habitat located in open woods with White Spruce, Tamarack, willow and alder on 13 June 2003. Photo by Mark K. Peck.**

remained on the nest during the exchange. Although approachable, this russet male was more wary than the female, but we were able to obtain video documentation of the feeding exchange. The male left after two minutes and was not seen again during our observations. On



**Figure 3:** Female Pine Grosbeak on nest on 13 June 2003. Photo by *Mark K. Peck*.



**Figure 4:** Nest and eggs of Pine Grosbeak on 13 June 2003. Photo by *Mark K. Peck*.

this visit, a second female was also briefly encountered foraging in an area slightly to the west of the nesting female, near the area where the bright red male was previously observed singing.

This nest was located within 300 metres of the first documented nest of Bohemian Waxwing (*Bombycilla garrulus*) in Ontario (Peck et al. 2004). Other birds found in the area, with confirmation of breeding, included Green-winged Teal (*Anas crecca*), American Robin (*Turdus migratorius*) and Rusty Blackbird (*Euphagus carolinus*). Also found nearby were Yellow-bellied Flycatcher (*Empidonax flaviventris*), Boreal Chickadee (*Poecile hudsonica*), Winter Wren (*Troglodytes troglodytes*), Swainson's Thrush (*Catharus ustulatus*), Cape May Warbler (*Dendroica tigrina*), Blackpoll Warbler (*D. striata*), Northern Waterthrush (*Seiurus noveboracensis*) and Fox Sparrow (*Passerella iliaca*).

### Discussion

Nests of Pine Grosbeak have been reported rarely in Canada, with the accepted explanation being the bird's secretive nature and the remoteness of its preferred habitat (Helleiner 1987, Breton 1996). While we certainly agree with the remoteness of the nest site location, we do question the secretive nature of the bird. Although both the male and the female were quiet in the vicinity of the nest, we did not find the birds reticent to approach in

our presence. Both birds flew directly to the nest while we were in view, and both appeared tame and very approachable. At one point, the female was even lifted off the nest with a mirror on a short stick so we could determine nest contents. In addition, the nest was in open woodland, was low to the ground, bulky and not well concealed. The female was easily visible on the nest and repositioned herself several times during each of our visits.

Pine Grosbeaks are considered highly territorial during the breeding season and are known to defend territories of about 400 m (Cramp and Perrins 1994), so we were surprised to see a second male singing in a nearby tree, and later a second female foraging in nearly the same location. The males were easily distinguished from one another by their plumage, since the male attending the female at the nest was a russet-coloured individual, possibly an immature bird. Pine Grosbeaks are not known to be semi-colonial, but we may have observed adjacent territories of two separate pairs. It is possible that they may nest in greater density in very suitable habitat with an abundance of favourite food resources, or they may have had smaller territories due to the beach ridge limitations and restricted forest size found in the area.

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