FIRST CONFIRMED BREEDING RECORDS AND OTHER INCIDENTAL SIGHTINGS OF NORTHERN HARRIERS IN LABRADOR

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The Northern Harrier (*Circus cyaneus*) is a globally distributed raptor of upland grasslands and fresh- and saltwater marshes (MacWhirter and Bildstein 1996). Populations in northeastern North America have declined precipitously over the past few decades (Kirk and Hyslop 1998). Through the early 1960s, Northern Harriers were recorded along the north shore of the Gulf of St. Lawrence near Natashquan (Todd 1963), but none were recorded as occurring in Labrador (Godfrey 1986). Recent range descriptions indicate that the northern extent of the breeding range falls south of the Labrador border (Macwhirter and Bildstein 1996) but, unlike most parts of its range, the Northern Harrier is extending its breeding range northeast into Labrador.

Herein, we describe the first known nest sites of Northern Harriers in Labrador and provide information on other recent sightings.

METHODS

Most sightings were recorded during surveys conducted as part of the Environmental Mitigation Program for the Department of National Defence and for the Lower Churchill River Labrador Hydro Project. Other incidental observations were made opportunistically by the authors. Surveys have included the majority of Labrador south of 57°N and most of northeastern Québec, although no sightings were recorded in the latter region. Both nesting records were recorded during brief helicopter stops at the airport in Churchill Falls, Labrador.

RESULTS

On 11 July 1998, a male Northern Harrier was seen flying over black spruce (*Picea mariana*) forest north of the airport runway at Churchill Falls, Labrador (53°34'N, 64°08'W). Shortly thereafter, a female Northern Harrier appeared and the male transferred prey to her in midair, and then flew away. The female flew low over an alder (Alnus spp.) thicket and dropped to an unseen point on the ground.

We searched the area until we flushed the female. The nest was located on the ground in a band of alders 25 m wide on the north side of the runway. The alder thicket ranged in height from 1–3 m and was bordered by black spruce forest 30–50 m to the north. The nest was 15 m from the open edge of the runway and separated by a 1-m wide, water-filled ditch. The nest was a shallow bowl of grass (*Carex* spp.) approximately 30 cm in outside diameter with base material consisting of fallen alder leaves. The nest was on gravel with some mosses and grasses growing nearby. It contained one young <2-d old and two white eggs.

The nest site was revisited on 18 August 1998. Since our initial visit, the area had been clearcut of alders and all brush had been removed. There was no sign of the Northern Harriers or the nest. However, a low helicopter flight over the same area flushed a buff-colored juvenile Northern Harrier from the edge of the spruce forest less than 30 m from the site of the nest. The 38-d period between the approximate hatch date and this observation appeared to have been sufficient time for the young harrier to fledge from the nest.

On 10 May 1999, an adult male was flushed on the north side of the airfield and on 21 May a female was observed on the south side, an area with some remaining alders. On 25 May, we found a nest at the base of a group of alders near small spruce trees that contained one white egg. The base of the nest was constructed of dead alder stems <1.5 cm in diameter and was lined with dry grasses. The nest dimensions were approximately 45 cm outside diameter, 20 cm inside diameter and 8 cm deep. Ground cover within 3 m of the nest was comprised mainly of mosses (Sphagnum spp.), Labrador tea (Ledum groenlandicum) and sheep laurel (Kalmia angustifolia). The site was damp and interspersed with small pools of standing water from spring flooding. A nest check on 6 June showed the nest contained a clutch of 5 eggs. On 10 July, five young were observed and, on 29 July, three young

were banded and two had already fledged. The three banded young fledged on 30 July. These fledging dates were consistent with those detailed by Harrison (1984).

Most observations of Northern Harriers in Labrador were made in the coastal marsh areas of Lake Melville, the lower Churchill River valley and the south Labrador coast. The northernmost observation was an adult near Snegamook Lake $(54^\circ35'N, 61^\circ20'W)$. Several sightings have been made of Northern Harriers in the Goose Bay area $(53^\circ20'N, 60^\circ20'W)$ in each summer from 1996–99. Other sightings include a female carrying food at Terrington Basin on 26 July 1998, a juvenile flying near Lac Brulé $(52^\circ20'N, 63^\circ50'W)$ on 18 August 1998 and a pair flying near the Churchill River at the outflow of the Elizabeth River $(53^\circ14'N, 63^\circ18'N)$ on 22 May 1999.

In the last decade, the Northern Harrier has expanded its breeding range on insular Newfoundland and is now a fairly common widespread breeder, especially on the Great Northern Peninsula. Regional increases in observations may be correlated with coinciding peaks in microtine populations (Hamerstrom 1979, Hamerstrom et al. 1985, Simmons et al. 1986). The species is now fairly common on the Labrador side of the Strait of Belle Isle where it is presumably breeding. Shrubland heath and alder thickets are common vegetation types in insular Newfoundland and Labrador and may represent a significant amount of suitable breeding habitat for Northern Harriers. Nest-site locations in Labrador have similar habitat to that used by Northern Harriers in other parts of their range (Hamerstrom 1969, Simmons and Smith 1985). Little information is available on the distribution and breeding range of Northern Harriers in northeastern Canada, specifically Labrador. If estimates in other northern regions by Potts (1998) are accurate, a significant proportion of the northeastern North American population may be unaccounted for due to lack of survey effort. Examination of potential suitable habitat in Labrador may reveal additional breeding localities.

RESUMEN.—*Circus cyaneus* es un ave poco común en el sur y centro de Labrador sin ningun registro previo de anidación. Detallamos observaciones recientes y la primera anidación exitosa de *Circus cyaneus* en Labrador.

[Traducción de César Márquez]

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