NORTHERN HAWK OWL IRRUPTIONS IN SASKATCHEWAN: 1990-91 AND 1991-92

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The Northern Hawk Owl, along with several other boreal forest owls, is known for its periodic winter invasions of areas far to the south of its normal range.^{2,3,4,17,18,19} Two such irruptions occurred in Saskatchewan during the winters of 1990-91 and 1991-92 and are reported here. Information from four sources was used: 1) Saskatchewan bird-watchers, particularly those reporting for American Birds; 2) personal observations; 3) Saskatchewan Christmas Bird Counts (CBC's); and 4) responses resulting from two information requests published in the Farm, Light and Power newspaper which reaches every farm in Saskatchewan. A few sightings that were obviously not Northern Hawk Owls, and owls that were seen at the same location by different people, omitted.

Numbers and Distribution number and distribution of hawk owl sightings in both winters were not the same (Figures 1 and 2). There were 43 sightings in 1990-91 and 85 in 1991-92. This is supported by the CBC data which recorded five birds in 1990 and 32 in 1991.8,9 For comparison, the average number of Northern Hawk Owls seen on Saskatchewan CBC's in the preceding 10 years from 1980 to 1989 was 1.4, ranging from none to three. 1,6,7,10,11,12,13,14,15,16 The number of owls seen in 1991-92 appears to be without precedent in Saskatchewan. For example, Alan Smith

and I saw six in one day east of Hudson Bay. Muriel Carlson and others saw 13 in two days in the Squaw Rapids-Candle Lake area. While it is not possible to give an exact count of how many birds were involved in both winters, it is likely that the irruptions involved hundreds, if not thousands, of Northern Hawk Owls.

More birds — 11 — were seen south of 51°N in 1990-91 than in 1991-92 — 4. In addition, the centre of owl abundance in 1990-91 was in the Saskatoon-Prince Albert-Melfort area (Figure 1), while in 1991-92 it was much broader, covering the Prince Albert-Nipawin-Melfort-Hudson Bay area (Figure 2).

Behaviour and Food Habits Sightings in 1990-91 were from 6 October to 22 March, ranging from three in October to a peak of 14 in January to six in March. In 1991-92, the earliest date was in October and the latest on 8 March; monthly distributions went from 2 in October, to 43 in December, to 4 in March.

Northern Hawk Owls are known for their boldness. Many people commented on this to me. One person was even able to pet an owl! Many of the owls reported were seen in association with farmyards, presumably because of the relative abundance of prey. The length of time that an owl stayed in an area varied up to several weeks.

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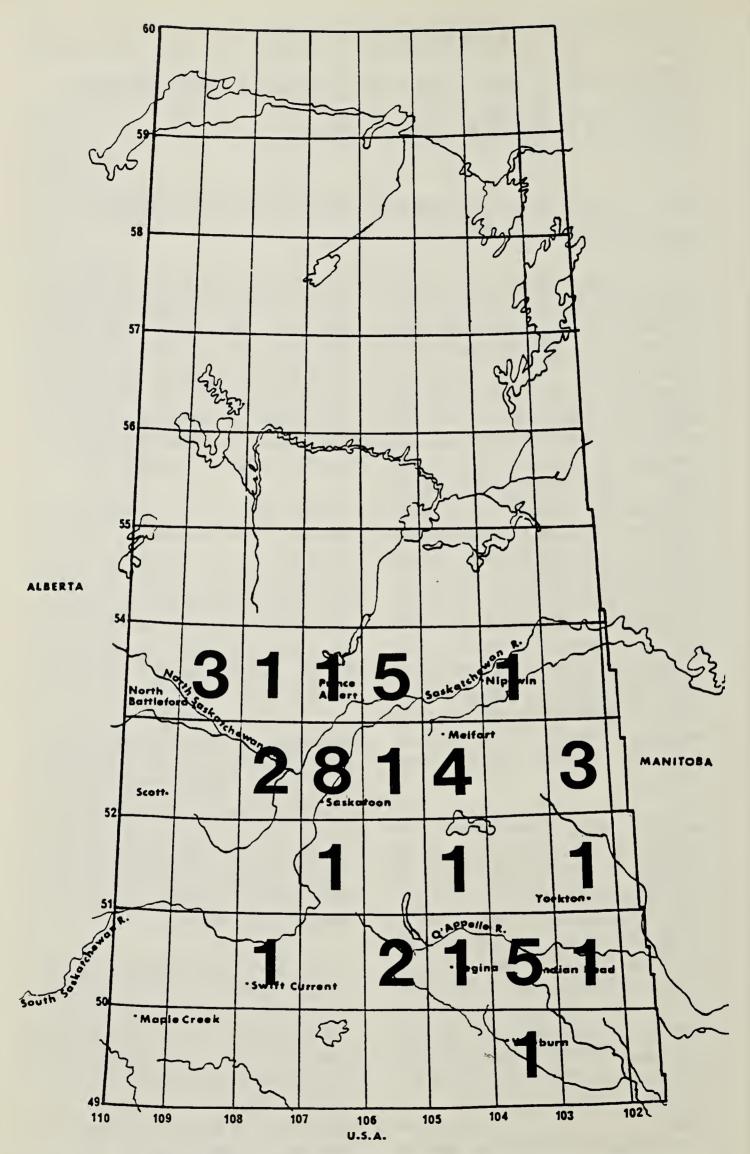


Figure 1. Number of Northern Hawk Owl sightings per degree square during the winter of 1990-91.

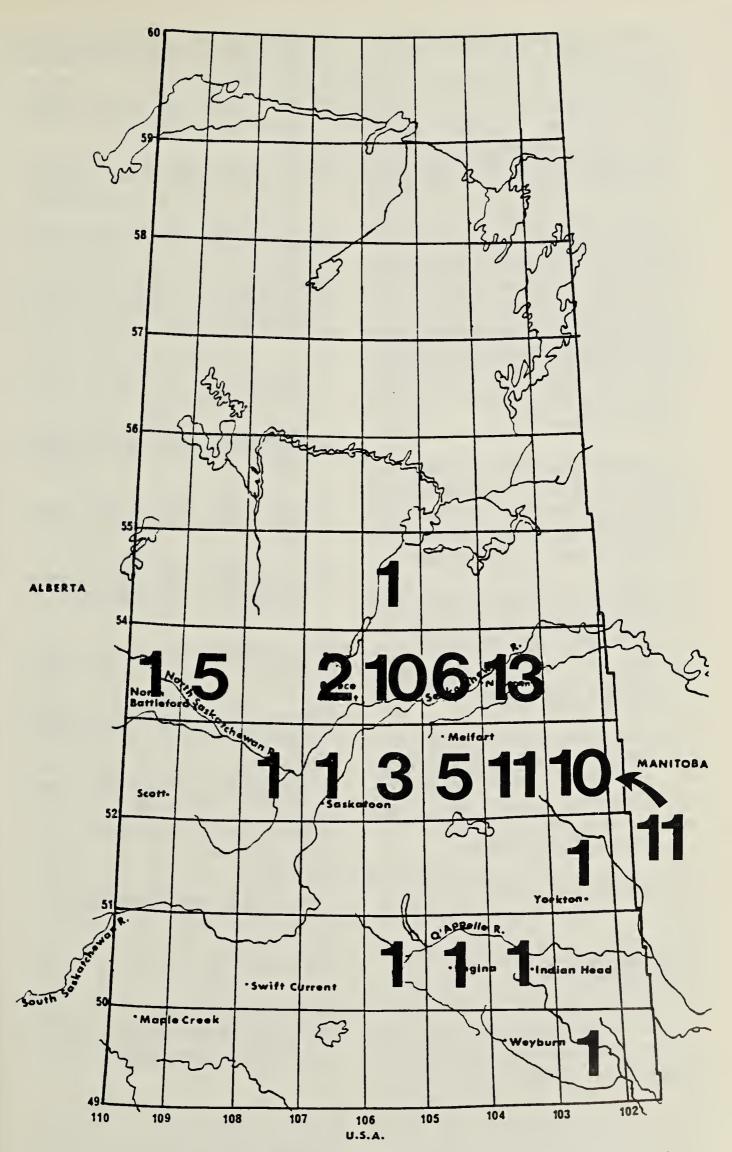


Figure 2. Number of Northern Hawk Owl sightings per degree square during the winter of 1991-92.

Hawk owls eat a variety of small mammals and birds. 2,3,4,17,18,19 Two instances of owls eating Red Squirrels were reported to me, as were three instances of owls catching mice or voles. Hawk owls were also seen chasing birds at feeders and eating House Sparrows, blackbirds, a Hairy Woodpecker, a Pileated Woodpecker, and a Sharp-tailed Grouse. In the case of the grouse, the owl hit a window while pursuing its prey but it was not injured. There was also one reported case of an owl feeding on meat that had been put out for other birds. Another owl fed on a dead blackbird that had been placed out for it.

I thank Patsy and Jim Duncan for improving an earlier draft of this report, and the numerous people who contributed their sightings of Northern Hawk Owls in Saskatchewan.

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ERRATA

The photographs from the 1993 Annual General Meeting of Nature Saskatchewan (*Blue Jay* 51: 231236) should all have been credited to Jurachi Asai, not Pat Adams.