



Is the Northern Saw-whet Owl (*Aegolius acadicus*) Nomadic?

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Expanded Abstract.—The first recorded nesting of a Northern Saw-whet Owl (*Aegolius acadicus*) in the Snake River Birds of Prey Area in southwestern Idaho occurred in a nest box in 1986. Occupancy of nest boxes by Northern Saw-whet Owls varied considerably (0 to 8 nests per year) over the next 10 years. Numbers of rodents fluctuated during this same period, and the number of nesting Saw-whets was positively correlated with an index of rodent abundance. In contrast, the number of nesting Western Screech-owls (*Otus kennicottii*) in the boxes was not significantly correlated with the rodent index. Moreover, numbers of nesting Saw-whets and Screech-owls were significantly positively correlated, indicating that the presence of Screech-owls in the boxes did not have a negative influence on the number of nesting Saw-whets each year.

Only one of the 46 breeding adult Saw-whets (a female) captured between 1987 and 1995 was recaptured in the study area in a subsequent year, and none of the 120 nestlings produced in the boxes has been re-encountered. A breeding male captured in April 1990 was found freshly dead in southern British Columbia in January 1993, approximately 900 km NNW of the study area. Data from the Bird Banding Laboratory are insufficient to evaluate breeding-site fidelity in Saw-whets because few researchers are banding Saw-whets at nests and because the records scheme is not designed for reporting captures of birds banded as breeders. Data from other studies of Saw-whets indicate that breeding-site fidelity is uncommon, and that patterns of nest-box occupancy vary geographically. Evidence from adult Saw-whets captured during fall migration suggests that birds tend to use the same migratory pathways from year to year. However, the data also are consistent with the hypothesis that if Saw-whets are nomadic, then the displacement of breeding areas is latitudinal rather than longitudinal.

Northern Saw-whet Owls exhibit most of the characteristics associated with nomadism in birds (i.e., high fecundity and use of scarce nest sites). I suggest that in some parts of their range, Saw-whets are nomadic, settling to breed in areas of high food availability (and, presumably, adequate nest-site availability) that they encounter during the winter. Among owls, nomadism is best documented in Boreal [Tengmalm's] Owls (*Aegolius funereus*) that feed on voles that undergo population cycles. Unlike Boreal Owls, Northern Saw-whet Owls feed mainly on *Peromyscus*, whose numbers are not known to vary in a predictable fashion. My conclusions are tentative because the amount of suitable data on nesting Saw-whets is pitifully small. An obvious need exists for studies of Northern Saw-whet Owls in which all adults and nestlings are banded each year and in which an index of food abundance is available.

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