Northern Saw-whet Owl

Aegolius acadicus

The Northern Saw-whet Owl is Maryland’s smallest owl. Although often considered rare, it is relatively common and widespread across southern Canada (Godfrey 1986) and much of the United States (Clark et al. 1987). In the East, breeding has been recorded as far south as the mountains of North Carolina (Simpson and Range 1974). There are breeding records from Pennsylvania (Brauning 1992), New Jersey (Stiles 1978), West Virginia (Hall 1983), and Virginia (atlas data). Northern populations are highly migratory, and wintering birds move into the Piedmont and Coastal Plain of Maryland in late October and early November (D. Brinker, unpub. data).

A juvenile bird captured near Cumberland in Allegany County in 1903 (Eifrig 1904) provided the first evidence of possible breeding in Maryland. Hampe and Kolb (1947) wrote only that this owl was supposed to breed in Maryland. Stewart and Robbins (1958) mentioned summer records at Cranesville, Finzel, and Wolf swamps in Garrett County but had no other breeding evidence. Since 1958 there have been other summer records, but as of 1991 no nest had been located in Maryland.

The breeding biology of the Northern Saw-whet Owl is not well known. It uses a variety of habitats, primarily mixed forests, bogs, shrub swamps, and riparian woods (Bent 1938; Cannings 1987; Swengel and Swengel 1987). It is a cavity nester, primarily using natural holes in trees or abandoned cavities of larger woodpeckers (Levine 1988a). In the Pine Barrens of New Jersey, nests are often found in abandoned Northern Flicker and other large woodpecker cavities in dead pitch pines in beaver ponds (J. Stasz, pers. comm.). It also uses artificial structures, such as nest boxes erected for Wood Ducks (Follen and Haug 1981) and American Kestrels (E. Jacobs, pers. comm.) and cavities in utility poles (L. MacIvor, pers. comm.). Cannings (1987) erected nest boxes for Northern Saw-whet Owls in British Columbia with considerable success.

Northern Saw-whet Owls begin courtship and territorial calling early, generally during late February or early March (Bent 1938). In Maryland, calling birds have been heard in Finzel Swamp as early as late February (J. McKearnan, pers. comm.). In Wisconsin, they are incubating by early April and typically fledge young by the first of June (E. Jacobs, pers. comm.). Maryland birds are probably on a similar or even earlier schedule. In a sample of 25 clutches from the Atlantic Coastal Plain, the average clutch size was 5.0, with a range of 1 to 7 (Murray 1976). Egg dates from New York and New England range from as early as 19 March to 3 July, peaking in mid-April (Bent 1938). Their principal food is mice, but they also eat some birds and young squirrels.

There were three records of Northern Saw-whet Owls during the Atlas period. The two Garrett County records were along the Casselman River, where one was heard calling repeatedly during the spring of 1985, and from Wolf Swamp, where another calling bird was heard. A single bird was also heard calling in June 1987 in Green Ridge State Forest, Allegany County.

Determining the breeding status of the Northern Saw-whet Owl during the Atlas period was complicated by the early safe date of 5 May, chosen to ensure that calling birds did not include tardy migrants. Migrant Northern Saw-whet Owls are now believed to leave Maryland by early April (M. Hoffman and D. Brinker, pers. obs.). This timing is supported by evidence that migrants depart New Jersey by mid-April (Holroyd and Woods 1975) and central New York by late April (Slack and Slack 1975). Because most calling by Maryland breeding birds probably occurred before 5 May, only late breeders would have been encountered after that date.

Judging from recent observations, an earlier safe date would have resulted in more records. Calling and probably breeding Northern Saw-whet Owls have occurred in Garrett County at Finzel Swamp in 1990 (J. McKearnan, pers. obs.), at Cranesville Swamp from 1987 through 1991 (D. Brinker, J. McKearnan, D. Walbeck, and K. Dodge, pers. obs.), at Wolf Swamp in 1986 (D. Brinker and J. McKearnan, pers. obs.), near Meadow Mountain in 1990 (Ringer 1990b), and near Cherry Creek in 1989 and 1990 (R. Teets, pers. obs.). A juvenile bird was found on the ground in a yard in Frederick, Frederick County, on 15 July 1986. The uninjured bird was hand-reared, banded, and released when it was capable of caring for itself, but its origin was never discovered. George Durner (pers. obs.) found a road-killed juvenile near Frostburg, Allegany County, in 1990, and D. Williams (pers. obs.) found a dead female near Battle Creek Cypress Swamp in Calvert County in May 1981. Additional records might have been generated with tape playbacks. Experiments during April and May 1991 with tape
Playback in Garrett County resulted in the discovery of nine locations where frequent calling over a five-week period suggested breeding (K. Dodge and D. Brinker, unpub. data).

Although this is a nocturnal species and is not well sampled by the BBS, data from 1966 through 1989 for 27 routes show an indication of an increase in the continental population. There are too few data to estimate a trend for the Eastern Region.

Breeding by the Northern Saw-whet Owl in Maryland was not confirmed until after the close of the Atlas period. On 24 April 1993, Brinker and Dodge (1993) found a nest with 4 eggs in the Maryland portion of Cranesville Swamp. Additional fieldwork is clearly needed to define its habitat requirements and status in Maryland.

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