

ABOUT THE COVER: NORTHERN SAW-WHET OWL

The smallest owl in the east, the Northern Saw-whet Owl (*Aegolius acadicus*) is a charming, tame, little bird, which wins the hearts of all who encounter it. Shy and retiring, its natural history is poorly known. These tiny owls rely heavily on cryptic behavior for protection, but when found they can often be closely approached. Tape recordings or mimics of its call sometimes can produce close encounters; they are aggressive and fearless when defending their territories. Most reports attribute their name to their uncommon "contact call," variously reported as *Screee-awe*, *SWEEE-awwww*, or *skreight-aw*, which presumably resembles the sound of a file sharpening a saw blade, as suggested by Audubon. A simpler and more convincing explanation presumes that saw-whet is a mispronunciation of the french word *chouette* (as pronounced by French Canadians), which is widely used in Canada to describe any small owl. Its name is as enigmatic as the bird itself.

The Northern Saw-whet Owl is "earless" and round-headed, with blotchy streaks of brown in the front. Its small size and lack of feather tuft "ears" separates it from all eastern owls except the Boreal Owl, from which it can be distinguished by its black bill and short white stripes, rather than spots, on its forehead. Its facial disk is browner than in the Boreal Owl and lacks the black edging. Immature birds are chocolate-brown with ocher bellies. They lack the ventral striping of adults, and have a pronounced white "V" above the bill. The sexes are similar in appearance, but females average larger than males.

Saw-whet owls are widely distributed in North America, from southeastern Alaska across southern Canada through Nova Scotia. They breed across much of the northern United States except for the Great Plains, and in the western mountains locally into Mexico. In the east they breed locally in the Appalachians south through West Virginia. In Massachusetts they breed on Cape Cod, Martha's Vineyard, and Nantucket, which is the southern limit on the Atlantic Coast for regular breeding, and more than a dozen scattered localities inland. There is a partial, diffuse migration south, with owls wintering across the midwest and erratically to Tennessee and Virginia in the east. At times their movements can be described as irruptive. Individuals may use the same roost sites all winter, and accumulations of 100 pellets or more, and significant accumulations of "whitewash" are reported.

In Massachusetts saw-whets are considered rare spring migrants, but during the breeding season of April through June as many as twenty-five owls have been reported calling in West Newbury, and fall migration counts, which peak in October, included thirty-nine owls in one survey. There is substantial variation from year to year in numbers of both breeding pairs and migrants.

Northern Saw-whet Owls are probably monogamous and usually produce a single brood. Their preferred habitat includes dense coniferous forest, which in

Massachusetts often consists of white or pitch pines, cedar swamps, bogs, and cedar and tamarack thickets. They have a wide variety of calls and whistles, but the most familiar is their territorial song—the incessantly whistled *Toot-toot-toot-toot*, about two notes per second, heard most frequently in winter and early spring. Courtship displays include circling flights by males, complex bobbings and shufflings, and courtship feeding by the male.

The nest is usually an abandoned woodpecker hole, but the birds occasionally nest in natural cavities or nest boxes. The nest is usually without lining except for scattered feathers. A nesting bird will usually pop into view in the nest hole if the nest tree is tapped. The usual clutch is five or six oval to nearly round white eggs. Both birds incubate and brood, but the female apparently does most of these duties. Incubation lasts about four weeks, and the young birds fledge in four to five weeks. Incubation begins with the first egg; thus, hatching is asynchronous, producing a brood in which the young may be of very different sizes. This may have evolved as a reproductive strategy that facilitates raising large numbers of young in years of high food supply and reducing the brood size by starvation in lean years.

Saw-whets are largely nocturnal foragers, with most activity in the early evening and before dawn, although they have been reported foraging on cloudy days. They have the usual owl adaptation of serrated first primary wing feathers, which disrupt smooth air flow and thus reduce vortex noise. These silent predators also possess very differently shaped ears that allow them to pinpoint the location of prey by sound. Their chief prey items are mice, voles, and shrews, but they occasionally take bats, frogs, birds, and insects. They may hunt over a territory of nearly half a square mile. They eject pellets of fur or feathers and bone, usually one per prey item.

Northern Saw-whet Owls have a long history of showing up in unexpected places, such as people's houses, walking or flying into tents, or landing on people's hats or shoulders. These and other rather bizarre behaviors only add to their reputation as irresistibly charming little owls.

W.E. Davis, Jr.

ABOUT THE COVER ARTIST

Julie Zickefoose is a freelance artist, writer, and naturalist who is devoted to the study, conservation, and appreciation of birds. She worked as a field biologist for The Nature Conservancy for six years before turning to art as a full-time career. Julie's drawings have been published in *The New Yorker*, and she has painted, drawn, and written for *Bird Watcher's Digest*, *American Birds*, *Bird Observer*, *Ladybug Magazine*, and numerous publications of the U.S. Fish and Wildlife Service. Exhibitions include one-woman shows at Harvard University's Museum of Comparative Zoology, the Cornell Laboratory of