

Morley Nelson Snake River Birds of Prey



National Conservation Area

Northern Saw-whet Owl (*Aegolius acadicus*)

Description/Size

Wing span: 18-22 inches
Length: 7 – 8.5 inches
Weight: 2.5 – 4 ounces
(females slightly larger than males)

Similar Species

Habitat/Range



Food/Diet

One of the smallest northern owls, northern saw-whet owls have large, round heads without ear tufts. Their facial disk is round, and white above, below and between yellow/golden eyes; laterally light buff with feathers edged with dark brown produce a streaked effect. Tuft of black bristle-like feathers between eyes and at base of bill. Saw-whet upper-parts are brown streaked with white on crown and nape, with white spots on the back, wings, and tail. Underparts white, broadly striped with brown. Short legs are heavily feathered to the talons; white to buff. Wings rounded and tail short. Bill, cere, eye-ring and talons black; soles of feet yellow. Juveniles lack the white markings except on wings and tail and have unmarked brown breast and buff belly. Facial disk blackish brown with conspicuous Y-shaped white marking between and above eyes which initially are dull olive in nestlings turning bright yellow by fledging. Two subspecies are recognized: *A. a. acadicus* (USA, south and west Canada, south Alaska) and *A. a. brooksi* (Queen Charlotte Islands, British Columbia).

Boreal Owl - much larger, with a white facial disk edged in black; crown spotted, not streaked, with white. Juvenile are dark brown with inconspicuous pale streaking on the belly. Northern Pygmy-Owl - smaller with a relatively smaller head, longer tail and inconspicuous facial disk. Unspotted Saw-whet Owl – found in Central America; may represent another subspecies of the northern saw-whet owl.

Northern saw-whet owls prefer to live in coniferous forests, but can also be found in deciduous woodlands, especially riparian zones. They range from coastal Alaska, through southern Canada, the Great Lakes states, New England, western United States, and the central highlands of Mexico. It is common in open ponderosa pine forests and often breeds in riparian woodland in shrub-steppe environments, foraging there in sagebrush and antelope bitterbrush brush habitats. In Idaho, it avoids dense Douglas fir and prefers riparian and savanna habitats. It is restricted to higher elevations of mountain areas in the southern U.S. and Mexico. Large numbers move south in autumn, at least in eastern North America. Southern limits of this migration are uncertain and likely vary year to year. Some birds in western mountains and Appalachians move into lowland areas in winter. The subspecies *A. a. brooksi* is non migratory; restricted to the Queen Charlotte Islands, British Columbia.

This owl relies mostly on small rodents (mice, voles, shrews, lemmings, and juveniles of pocket gophers, chipmunks, squirrels) but will eat small birds while they migrate at night and some insects such as beetles and grasshoppers. Saw-whets hunt almost entirely at night, starting within a half-hour after sunset and ending about a half-hour before sunrise. Hunts from perches on low branches, shrubs, or fence posts, usually in forest openings and other habitat edges. These owls detect prey with excellent hearing and by low-light vision. Larger prey items usually consumed as two meals. Food not eaten immediately is often stored on branches. Prey frozen in this situation is thawed before eating by placing it in an incubation position. Males often bring an excess of food to the nest, especially during egg laying; as many as 24 surplus prey items can be found around the incubating female at this time.

Voice

This owl has about nine different vocalizations. The main vocalization sounds like a mill saw being sharpened - a short series of loud, sharp, squeaking calls (e.g., *ksew-ksew-ksew*) given by both sexes; hence the common name for this species.

Behavior

Flies low to the ground with rapid wingbeats and great maneuverability, often in a woodpecker-like bounding flight, swooping up to perches. Many saw-whets move south in winter, with significant concentrations in spring and fall around the Great Lakes. Migrate throughout the night, most in the four hours before sunrise. On average females migrate earlier in the season than males. Saw-whets roost during the day in thick vegetation; next to the trunk of a small tree, in a dense shrubby thicket, or, more typically, near the end of one of the lower branches of a large tree, especially where overhung by another branch. Regularly mobbed by small songbirds such as chickadees and nuthatches.

Reproduction/Nesting

Clutch size: 4 to 7 eggs
Eggs: Oval to ovate, smooth with little or no gloss, 1.2 x 1 inches.
Incubation: 27-29 days
Fledge: 4-5 weeks
Disperse: 6 to 8 weeks

Northern saw-whets are cavity nesters, using natural tree cavities, existing woodpecker nest cavities and also man-made nest boxes. Eggs are laid directly on wood chips or other debris in the cavity and they do not reuse the nest due to prey remains. Clutches abandoned due to disturbance during or shortly after egg laying are almost always replaced; the female usually moves to another cavity nearby and lays another clutch. Saw-whet owls are normally monogamous, but there is no known instance of pair bond lasting more than one season. Polygamy can occur when prey is abundant. Females are likely sequentially polyandrous at times, leaving their first male to raise the first brood while mating with a second male to raise a second brood. Nesting duties are strictly divided; males provide most of the food for the female and young while females incubate the eggs and brood the young. Most birds probably begin breeding when one year old, but there are no data from wild populations.



Life Span

Longest recorded – 8 years 3 months.

Conservation Status

Not on the U.S. Endangered or Threatened Species List. However it is protected by the Migratory Bird Treaty Act. Idaho Fish & Game lists the northern saw-whet owl as a protected non game species for which it is illegal to collect, harm or otherwise remove from its natural habitat. Destruction of habitat, particularly nesting snags, represents the greatest threat to this species. Although northern saw-whet owls breed in almost every type of forest in their range, they seem to favor mature and old growth stands for breeding. Logging has undoubtedly reduced the amount of suitable breeding habitat, particularly through loss of nesting snags. Young, regenerating forests are often too thick and lack the edge habitat and open understory favored for foraging. This owl will readily nest in man-made nest boxes, which could mitigate the loss of nesting snags in areas which have been selectively logged or even clear-cut in small blocks. Retention of woodlots in rural and residential areas would be beneficial to migrating and wintering birds. No data is currently available on the affects of pesticides and other contaminants on this species. Shooting and trapping don't appear to be major problems.

Viewing in the NCA

The northern saw-whet owl is seen in the NCA from February through May.

Interesting Facts

Spanish name:

Lechucita cabazona,
Tecolotito cabazon

Sources

- The scientific name comes from the Greek word *aigolos*, meaning a nocturnal bird of prey, and *academicus*, Latinized name for Acadia, a French colony of southeastern Canada (now Nova Scotia) where the first owl was taken for scientific collection.
- Other names: Acadian owl, sparrow owl, Queen Charlotte owl, Kirkland's Owl, Saw-filer; Whetsaw.
- The asymmetrical ear openings are easily seen on the skull of these birds. The right ear is higher on the head than the left, and each ear opening is a different shape.

Bird Banding Lab - www.pwrc.usgs.gov/bbl/homepage/long3120.cfm

Birds of North America Online - <http://bna.birds.cornell.edu/bna/species/042>

Carolina Raptor Center - www.carolinaraptorcenter.org/nsw_owl.php

Idaho Fish&Game - <http://fishandgame.idaho.gov/wildlife/nongame/birds/birdspecies.cfm>

National Audubon Society - The Sibley Guide to Birds

Owling.com - www.owling.com/Northern_Saw-whet.htm

Owlpages.com - <http://owlpages.com/owls.php?genus=Aegolius&species=academicus>

The Peregrine Fund - www.peregrinefund.org/Explore_Raptors/owls/nsawwhet.html

US Fish and Wildlife Service - http://ecos.fws.gov/tess_public/pub/listedAnimals.jsp
and www.fws.gov/migratorybirds/regulationspolicies/mbta/mbtintro.html

Illustrations - courtesy of Alberta Sustainable Resource Development

Map - The Peregrine Fund

Photography: adult - Larry Ridenhour, BLM

young - Barb Forderhase, BLM



Northern Saw-whet Owl
(*Aegolius acadicus*)



Adult



Immature



Photos: Know Your Owls, Axia CD ROM