

Recognizable Forms

Subspecies of the Great Horned Owl

by
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Introduction

The Great Horned Owl (*Bubo virginianus*) is found throughout most of Ontario, north almost to Hudson Bay (James 1991). Its deep bass hooting, **Whoo, hoo-hoo, whooo, whooo** is a familiar night sound.

During the day, it often roosts in a secluded, thick evergreen and most of the time would go undetected but for the keen eyesight of its tormentor, the American Crow (*Corvus brachyrhynchos*). A flock of crows, cawing loudly, often betrays the presence of a roosting Great Horned Owl.

Getting a good look at resident birds in southern Ontario is generally difficult because they are usually wary of humans. However, the northern forms of the Great Horned Owl which wander to southern Ontario in winter, are often less wary and more easily observed. Speirs (1985) noted that the periodic movements of northern Great Horned Owls into southern Ontario are associated with population fluctuations in the Snowshoe Hare (*Lepus americanus*). However, some (particularly young) may move south every winter (Houston 1978).

In this note, I discuss the occurrence and identification of the recognizable forms of the Great Horned Owl in Ontario. In addition, this is the first time that a description and photograph appear in the birding

literature of the distinctive northern Ontario subspecies *B. v. scalariventris* (Snyder 1961). See Figure 1.

Taxonomy

Geographical variation is pronounced in the Great Horned Owl. Here I follow the treatment of James (1991) who lists four subspecies (races) in Ontario: the rufous nominate race *B. v. virginianus* of southern Ontario; the grayish race *B. v. scalariventris* of most of northern Ontario; the whitish race *B. v. subarcticus* of extreme Western Ontario; and the blackish Labrador race *B. v. heterocnemis* which wanders to Ontario in winter.

James (1991) follows Snyder (1961) in treating *B. v. scalariventris* as a valid subspecies, distinct from *B. v. subarcticus*. In April 1993, I examined the large series of *scalariventris* in the Royal Ontario Museum. I believe that *scalariventris* would be widely accepted as a valid subspecies today if Snyder (1961) had published his description in the more widely available *Auk*, and perhaps if the American Ornithologists' Union had updated the 1957 list of subspecies (now urgently in need of revision).

In the Fifth Edition of the American Ornithologists' Union Check-list (1957), *B. v. subarcticus* is listed as *B. v. wapacuthu*. However, the original description of *wapacuthu* is confusing and cannot with

certainly be associated with either the Great Horned Owl or the Snowy Owl (*Nyctea scandiaca*) so the name *wapacuthu* is invalid and should be discarded "into the waste bin of synonyms" (Manning 1952, Todd 1963, Browning and Banks 1990, Dickerman (1991a). Most authors now use *subarcticus* instead of *wapacuthu*.

In addition, Godfrey (1966, 1986) noted that the large series of pale Great Horned Owls in the Canadian Museum of Nature from the southern parts of the prairie provinces referred to *B. v. occidentalis* in the A.O.U. Check-list (1957) "is not separable from *subarcticus* from farther north". Dickerman (1991b) also concluded that *occidentalis* was not a valid subspecies and that it should become synonymous with *subarcticus*.

See the comments on subspecies on page 310 in Godfrey (1986) and pages 48, 91 and 92 in James (1991).

Plumages

The sexes of the Great Horned Owl are similar in appearance, except that females on the average are larger than males. First year birds and adults are also similar in colouration. "The downy young moult directly into the colors of the adults" (Taverner 1942).

"Nominate" Great Horned Owl (*B. v. virginianus*)

The widespread nominate subspecies is the breeding form in southern Ontario (James 1991). It is usually a permanent resident being less prone to wandering than the northern forms.

It is distinguished from the other Ontario subspecies by its "medium

dark coloration with distinctive amount of redness in the plumage" (Godfrey 1986). As well, the black-rimmed facial discs are usually a clear rusty colour (Taverner 1942). For a typical example of this southern race, see John Crosby's illustration on Plate 42 in *The Birds of Canada* (Godfrey 1986).

"Snyder's" Great Horned Owl (*B. v. scalariventris*)

L.L. Snyder (1961) of the Royal Ontario Museum described the population of pale Great Horned Owls breeding in most of northern Ontario (except the extreme western parts) as distinct from *B. v. subarcticus*, and named it *B. v. scalariventris*. See Figure 1. Taverner (1942) was aware of this form, stating that it was "too dark for *subarcticus*, too white for any other race ... with little or no red of *virginianus*". He regarded it as an intergrade population of *subarcticus* x *heterocnemis*. However, the large and uniform series of *scalariventris* in the Royal Ontario Museum from across 800 kilometres of northern Ontario strongly supports its recognition as a valid subspecies (Snyder 1961). Consequently, James (1991) also accepted *scalariventris* as a valid race.

Snyder's race breeds in northern Ontario from near the Manitoba border eastward to the Quebec border (and probably beyond), south to approximately Thunder Bay, Sault Ste. Marie and North Bay, where it intergrades with nominate *virginianus* (Snyder 1961, James 1991). In winter it wanders to southern Ontario. Most reports of pale (gray) Great Horned Owls in southern Ontario are referable to *scalariventris*.

Classic individuals of *scalariventris* are easily distinguished from nominate *virginianus* by their distinctive gray colouration and general absence of rufous in the plumage. The facial discs are usually a pale gray, sometimes with a tinge of rufous. From the much more whitish *subarcticus*, Snyder's race is distinguished by its darker colouration and "broader, more regular and darker bars ventrally". In broad terms, *scalariventris* is "more coldly grey with bolder bars below" (Snyder 1961). See Figure 1.

"Arctic" Great Horned Owl

(*B. v. subarcticus*)

The Arctic race breeds east of the Rocky Mountains, across the boreal forest and prairies to northern Ontario (Godfrey 1986). However, Snyder (1961) considered most of the northern Ontario population to be distinct from *subarcticus* and designated it as a separate subspecies, *scalariventris*. (See Figure 1 and previous account of this race.) James (1991) stated that *subarcticus* breeds along the western fringe of the province where it intergrades with *scalariventris*. The Arctic race wanders elsewhere in the province, especially in winter; for example, Taverner (1942) listed specimens from Algonquin Park and Toronto, but it is much rarer in southern Ontario than Snyder's race.

Classic examples of *subarcticus* are much more extensively white than *scalariventris*, "with more vague and sparse dark markings below" (Snyder 1961). The facial discs are "white to light ashy, rarely with a tinge of rufous" (Taverner 1942). Illustrations of the Arctic race appear

on page 239 of the *National Geographic Guide* (Scott 1987), on Plate 32 in *Birds of Canada* (Taverner 1937), and on page 173 of *A Field Guide to the Birds* (Peterson 1980). Also see Figure 1.

Occasionally a very whitish Great Horned Owl (almost as white as a dark Snowy Owl) is sighted. These typical birds are probably safely called *subarcticus*. However, keep in mind that most pale (gray) birds seen in southern Ontario are referable to Snyder's race, *scalariventris*.

"Labrador" Great Horned Owl

(*B. v. heterocnemis*)

The dark Labrador race breeds in Newfoundland and Labrador south to central Quebec (Godfrey 1986). In winter *heterocnemis* wanders to southern Ontario (James 1991). Taverner (1942) listed specimens from Ottawa, Peterborough County, Peel Region, Toronto and St. Thomas.

I saw a "Labrador" Great Horned Owl at Aylmer, Quebec, near Ottawa one winter when I was a teenager. It was tame (unlike most of the local birds) and allowed me to observe it closely. I identified it from the description in the subspecies section of the old Peterson's Field Guide (Peterson 1947) which is still a useful reference on subspecies!

The Labrador race differs from the nominate race by its much darker (sootier) colouration and heavier barring below. On classic individuals, "the barring often obliterates the white markings, giving a black-breasted appearance" (Peterson 1947). In addition, the facial discs are usually a dark brownish-gray instead of a clear rusty as in the nominate race.



Figure 1: Three subspecies of the Great Horned Owl: (left to right) *Bubo virginianus virginianus*, *B. v. scalariventris*, and *B. v. subarcticus*. Photo by Ross James (Royal Ontario Museum).

An illustration by Roger Tory Peterson of a "Labrador" Great Horned Owl can be found on Plate 18 in *The Birds of Newfoundland* (Peterson and Burleigh 1951). The same illustration, but not labelled as the Labrador race, is found on Plate 21 of the more widely available *Birds of Nova Scotia* (Tufts 1986).

Summary

Four well-marked forms of the Great Horned Owl are found in Ontario. Although intergrades occur, typical individuals of these forms are distinctive and recognizable in the field. One form, the "Snyder's" race *B. v. scalariventris*, is described here in the birding literature for the first time. This gray race accounts for most of the reports of "Arctic" Great Horned Owls in southern Ontario.

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