

## THE IDENTITY OF PENNANT'S "WAPACUTHU OWL" AND THE SUBSPECIFIC NAME OF THE POPULATION OF *Bubo virginianus* FROM WEST OF HUDSON BAY

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**ABSTRACT.**—The name *Strix wapacuthu* Gmelin, often used for the subspecies of *Bubo virginianus* west of Hudson Bay, cannot be associated with certainty with either *B. virginianus* or *Nyctea scandiaca*. The subspecific name for the population of *B. virginianus* from Mackenzie to central-eastern British Columbia and northern Ontario should be *B. v. subarcticus* Hoy.

Identidad del Buho Wapacuthu de Pennant, y el nombre dado a una población de *Bubo virginianus* del oeste de la Bahía de Hudson

**EXTRACTO.**—El nombre *Strix wapacuthu* Gmelin, usado frecuentemente para una subespecie de *Bubo virginianus* del oeste de la Bahía de Hudson, no puede ser asociado con certeza ni con el *Bubo virginianus* ni con el *Nyctea scandiaca*. El nombre para esa subespecie, desde Mackenzie hasta el oeste central de Colombia Británica, y el norte de Ontario debe de ser *Bubo virginianus subarcticus* Hoy.

[Traducción de Eudoxio Paredes-Ruiz]

Gmelin (1788:291) proposed the name *Strix wapacuthu* for a species separate from what are now *Nyctea scandiaca* (Snowy Owl) and *Bubo virginianus* (Great Horned Owl). Latham (1790) followed Gmelin (op. cit.). Swainson and Richardson (1832) likewise did not associate *Strix wapacuthu* with either *N. scandiaca* or *B. virginianus*. However, Swainson (in Swainson and Richardson 1832) described another taxon as *Strix (Bubo) arctica*, a name later used subspecifically for Great Horned Owls of much of western Canada (see Stone 1896). After Richmond (1902) showed that Swainson's name was preoccupied by *Bubo arcticus*, proposed by Forster (1817) for the Snowy Owl, and therefore unavailable for any Great Horned Owl, the name was replaced by *B. v. subarcticus* proposed by Hoy (1852).

The name *wapacuthu* was associated with *N. scandiaca* by Coues (1874), Brewster (1906), Oberholser (1908, 1917), Manning (1952), Snyder (1961), and Godfrey (1986). On the other hand, Sharpe (1875) synonymized *wapacuthu* with *B. virginianus*, and the name was subsequently used for the subspecies of *B. virginianus* west of Hudson Bay by others (Oberholser 1904, Ridgway 1914, Cory 1918, Peters 1940, American Ornithologists' Union [A.O.U.] 1944, 1957, Snyder 1957). Todd (1963:454) recommended that the name *wapacuthu* be discarded altogether

because it "cannot certainly be identified with any species." Authors (e.g., Manning 1952, Godfrey 1986) who reject *wapacuthu* as applicable to *B. virginianus* follow Richmond (1902), the A.O.U. (1910, 1931), and Taverner (1938) in their use of *B. virginianus subarcticus* as the name for the pale subspecies of the Great Horned Owl from west of the Hudson Bay region.

In recently published books on owls, Karalus and Eckert (1974) used *wapacuthu* as the name of a subspecies of *B. virginianus* distinct from *subarcticus*, whereas Johnsgard (1988) stated that it is "identical" to *subarcticus*, and Voous (1988) referred to the western Hudson Bay population as "(*subarcticus* or *wapacuthu*)." McGillivray (1989) also indicated uncertainty by using "*wapacuthu/subarcticus*." Karalus and Eckert's (1974) treatment is taxonomically unverified as well as conceptually faulty (the ranges of the two subspecies are shown to overlap). Johnsgard's synonymy is incorrect even if his concept is correct, because he did not use the earliest available name for the subspecies. Because of the continuing various applications of *wapacuthu* in spite of earlier brief discussions of its description, a review of its use and identification follows.

Gmelin (1788:291) cited the "Arctic Zoology" of Pennant (1785) as the basis for the description of

*Strix wapacuthu*. Pennant's (1785) description was based on manuscript notes supplied by Thomas Hutchins. Hutchins, employed at York Factory by the Hudson's Bay Company as surgeon and "Corresponding Secretary," copied a manuscript by (Williams 1969, 1978) or collaborated with (C.S. Houston, *in litt.*) Andrew Graham, an employee of the same company who worked mostly at Fort Severn. Hutchins (*in Allen* 1951:521) stated that "In persuasion of Mr. Graham's advice, I have described the plumage of the Birds, but as my knowledge of the variety of colours is very small, consequently the description must be very imperfect." In 1784 Hutchins convinced Pennant that he was the author of Graham's observations (Williams 1978); both Pennant (1785), who knew of Graham's work, and Latham (1785:43) credited Hutchins for information on birds from what is now northwestern Ontario and northeastern Manitoba.

Hutchins and Graham sent birds to the Royal Society in England (Forster 1772, Williams 1969) and to Latham (1821:xii), but those specimens are no longer extant (Williams 1978). The fate of the name *wapacuthu* must rest on its written description.

Pennant's (1785:231–232) description is under the section heading "without ears" in a review of Arctic owls and is "no. 119. Wapacuthu [owl]." The description is as follows: "With glossy black bill, and claws much incurvated: base of the bill beset with strong bristles: irides bright yellow: space between the eyes, cheeks, and throat, white: the ends of the feathers on the head black: scapulars, and all the coverts of the wings, white, elegantly barred with dusky reddish marks, pointing downwards: primaries, secondaries, and tail feathers, irregularly spotted and barred with pale red and black: back and coverts of the tail white, mixed with a few dusky spots: breast and belly dirty white, crossed with innumerable reddish lines: vent white: legs feathered to the toes which are covered with hairs. Weight five pounds: length two feet: extent four." Pennant (*op. cit.*) also gave descriptions of several other species of owls. Among these he included detailed descriptions of what are now *B. virginianus* (pp. 228–229) under the heading "with ears," and *N. scandiaca* (p. 233) under the heading "without ears."

Comments in the literature on Pennant's description of the Wapacuthu Owl are brief. Brewster (1906: 205) stated that *wapacuthu* referred to *N. scandiaca* because it was described as "earless." Ridgway (1914) acknowledged that *N. scandiaca* has rudimentary ear

tufts but associated the name *wapacuthu* with the Great Horned Owl, commenting that molting *B. virginianus* "are often destitute of obvious ear-tufts . . . or the ear-tufts may have been plucked before the specimen came into his [Pennant's] possession." Peters (1940) used the name *B. virginianus wapacuthu*; he believed that Pennant's description was a composite that included characteristics of both *B. virginianus* and *N. scandiaca*. Manning (1952) stated that "there is nothing in this [Pennant's] description which is not reconcilable [sic] with a Snowy Owl; while apart from there being no mention of horns or the fine vermiculation of a Horned Owl (its most obvious characteristics), there are several points which definitely separate it from any Horned Owl . . ." but did not provide additional details. If the ear-tufts had been plucked or were absent through molting (Ridgway 1914) the combination of plumage characters could suggest *B. virginianus*; if the bird was normally "earless" the Wapacuthu Owl can easily be associated with *N. scandiaca*.

Pennant (1785) further stated that the Wapacuthu Owl "makes a nest on the moss on the ground. The young are hatched in May, and fly in June, and are white for a long time after." Nesting on the ground is consistent with *N. scandiaca*; *B. virginianus* usually nests in trees, and only rarely on the ground (Bent 1938), cliffs (Peck and James 1983) and rock outcrops (Johnsgard 1988). The description of the young as white is consistent with both *B. virginianus* and *N. scandiaca* for about the first 10 days of the natal plumage (Godfrey, pers. comm.; Johnsgard 1988). Older *B. virginianus* are buffy with the developing flight feathers similar to those of the adults (Johnsgard *op. cit.*). Older *N. scandiaca* are chocolate brown with white specks (N.K. Johnson, *in litt.*), the facial disc is white, and the flight feathers are white with brown crossbars "and brown vermiculations in the form of speck-like marbling" (Mikkola 1983). Hutchins (*in Latham* 1787:49) stated that the eggs of the Wapacuthu are "from five to ten in number." This exceeds the normal clutch size of *B. virginianus* (only one nest containing five eggs is cited in Bent [1938]) but is within the range of *N. scandiaca* clutches (Portenko 1972).

The name "Wapacuthu" of Pennant's (1785) owl was from the Cree language, in which "wap" refers to white (C.S. Houston, *in litt.*). Swainson and Richardson (1832) and Brewster (1906) commented that "wapacuthu" meant "White Owl." Graham (*in Williams* 1969:xxxv, 106, 107) used the names

"Wawpekatheu, the Spotted Owl" and "Wapacathew Omissew, The Snowy-Owl." We agree with Glover (*in* Williams 1969:106) that Graham's "Wawpekatheu" appears to be a heavily spotted example of *N. scandiaca*. Graham's "Wapacathew Omissew," merely described as smaller than the "Wawpekatheu," probably also refers to *N. scandiaca* and was so identified by Glover (*in* Williams 1969:107).

We conclude that the description of the Wapacathu Owl as lacking ear-tufts, information on the nesting and clutch size, and the meaning of the Cree name indicate that Pennant's description was of *Nyctea scandiaca*. However, we agree with Todd (1963) that *wapacathu* cannot be identified with certainty. The name *Strix wapacathu* Gmelin, 1788 should be regarded as a nomen dubium (a name of doubtful application), and the subspecific name for the population of *Bubo virginianus* from Mackenzie to central-eastern British Columbia and northern Ontario (Godfrey 1986) should be *subarcticus* Hoy, 1852.

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The great horned owl (*Bubo virginianus*), also known as the tiger owl (originally derived from early naturalists' description as the "winged tiger" or "tiger of the air") or the hoot owl, is a large owl native to the Americas. It is an extremely adaptable bird with a vast range and is the most widely distributed true owl in the Americas. Its primary diet is rabbits and hares, rats and mice, and voles, although it freely hunts any animal it can overtake, including rodents and other small mammals, larger mammals, and birds. The populations of *Bubo virginianus* in the Rocky Mountains were revisited exhaustively for the last time by Oberholser in 1904, who resurrected the name *B. v. occidentalis*. With some minor modifications, this nomenclature has been maintained to this day. With the elimination of *occidentalis*, the name that resulted was a synonym of *subarcticus* (Stone 1897, Am. The identity of pennant's wapacuthu owl and the subspecific name of the population of *bubo-virginianus* from west of hudson bay canada. Volume 24, Page 80. Habitat use of the northern harrier in a coastal massachusetts shrubland with notes on population trends in southeastern new england USA.