First Record of the Asiatic Marbled Murrelet in Ontario

by
Bruce M. Di Labio

By 11 October 1993, mustering enthusiasm for my weekly trip to the Moses-Saunders Power Dam at Cornwall, Ontario (Figure 1) was becoming a laborious task. The fall season had been particularly uneventful and I didn't expect this excursion to be much different. To my surprise, however, this trip would soon offer one of those rare birding moments that are indelibly etched upon the memory.

Chris Traynor and I planned to bird the New York side of the St. Lawrence River between Ogdensburg and the Moses-Saunders Power Dam. We crossed at Prescott, Ontario and worked our way along Highway 37 to the dam. We arrived at the observation deck of the dam at 1030 h. The weather was unsettled and strong winds from the west made the headpond waters choppy and difficult to view. Our initial scanning of the headpond netted a number of waterbirds including 1 Red-throated Loon (*Gavia stellata*), 4 Common Loons (*Gavia immer*), and 8 Red-necked Grebes (*Podiceps grisegena*). However, what soon caught my attention was a small, loon-like bird in the middle of the headpond. On observing it dive and resurface, I realized it was a small alcid. Determining its identification, though, was extremely difficult due to the distance and changing light conditions. After about an hour of observation, we attempted to view the bird from the Canadian side of the power dam, hoping this location would offer a better vantage point. This required going back through Customs into Cornwall and searching the headpond from the dyke. What seemed like a good idea at the time turned out to be a mistake; we couldn't find it at all.

With precious time running out we raced back to the American side of the dam. To our relief, I located the bird within seconds, but we remained puzzled as to its identification. By 1530 h we realized that the only way it could be identified was from a boat. I telephoned Lee Harper who lived upriver from the power dam and owned a boat. He agreed to meet us at the marina close by. With weather conditions improving, we headed for the power dam and quickly found the alcid. We then knew without hesitation that it was not an east coast alcid. As we moved closer, it became apparent that it was a Marbled Murrelet (*Brachyramphus marmoratus*)! The bird being skittish, we photographed it immediately (Figure 2). A full province and statewide bird alert was called.

The following day, in the teeming rain, numerous birders checked the headpond but were unable to locate the bird. A week's

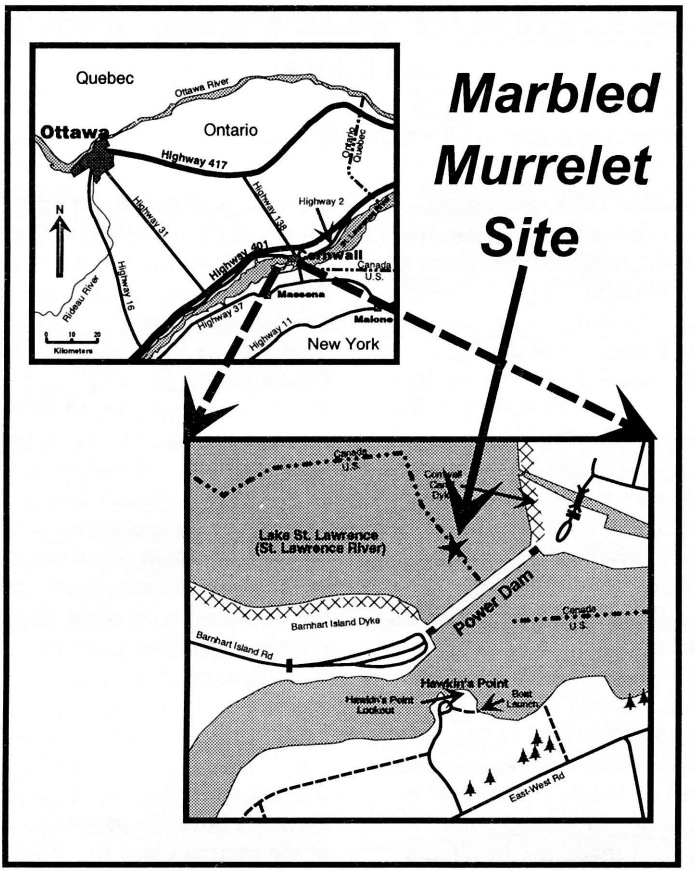

Figure 1: Location of Moses-Saunders Power Dam, Cornwall, Ontario.

worth of searching by birders proved fruitless as well. It was not until 15 October, that I was able to make another trip to the dam and, at 1400 h, located the murrelet again, in approximately the same location.

During the observation period, the murrelet appeared to be in good condition, frequently diving and surfacing with small fish. It was last observed on 30 October. Though we never observed it in flight, during preening sessions it would exercise its wings by sitting on the water, flapping and exposing all of its primaries and secondaries. Eventually, over 300 birders observed the Marbled Murrelet at the Moses-Saunders Power Dam.

Description and Identification

The bird was a small, dove-sized diving bird with a short, dark, pointed bill and two-toned plumage - dark above and light below (Figures 2 and 3). The thick neck

and stubby, barely noticeable tail gave it a compact appearance. The bird was also relatively large-headed. Two other features stood out: a distinct white broken eye-ring or arcs that gave the bird a large-eyed appearance, and an upheld bill like that of a Red-throated Loon.

The top of the head, the nape, and the back were primarily dark brownish-grey. This colour was uniform except for two indistinct pale smudges on either side of the nape (posterior to, and in line with, the cheeks), and white on the scapulars that created two roughly horizontal bars on the back. The dark brownish-grey also extended forward as a "spur" from the shoulders towards the breast. The sides and flanks were primarily dark grey mottled with white, becoming lighter towards the breast and undertail coverts. The chin, throat, anterior sides of the neck, most of the breast, and undertail coverts were white. Under close observation on 11 October, when first discovered, subtle mottling was visible on the throat, neck, and breast but, by 30 October, when the bird was last observed, it was apparent the bird was molting and its plumage was a more clearly defined and uniform brownish-grey above and white below.

The dark brownish-grey on the head extended down to a distinct line that extended from the lores to just below the eye and then down the posterior sides of the neck. Just above the gape, the line between the dark brownish-grey and white blended and appeared dusky. Distinct white eye-arcs encircled each eye unevenly, extending as a tiny "tear" at the posterior edge. Sibley (1993) also provides a description and field sketches of this bird.

The bird was clearly an auklet or murrelet based on its small size, compact shape, slender bill, two-toned plumage, and diving habits. The narrow, pointed bill and the white scapular lines eliminated all species except Marbled and Kittlitz's (*Brachyramphus brevirostris*) Murrelets in basic (winter) plumage. The less extensive white on the head and the relatively longer bill clearly identified this bird as a basic-plumaged Marbled Murrelet (cf. Harrison 1983, Scott 1987, Peterson 1990).

The two subspecies (races) of Marbled Murrelet - the nominate North American race, *B.m. marmoratus*, and the east Asian race, *B.m. perdix* or "Long-billed" Murrelet - differ in overall size, bill length, and several plumage characters. The Asian race averages 5 percent larger in wing, tarsus, and tail measurements, and has a 25 percent longer bill on average (Sealy et al. 1982); these features were not useful for a subspecific identification of the Cornwall bird. However, it was possible to identify the race of the Cornwall Marbled Murrelet on the basis of plumage characters. I checked numerous field guides, but it was *A Field Guide to the Birds of Japan* (Sonobe 1982) that pointed me to the Asiatic subspecies.

The presence of distinct white

Figure 2: Asiatic Marbled Murrelet at Cornwall, Ontario, on 11 October 1993. Photo by *Lee Harper*.

eye-arcs and the associated large-eyed appearance of the Cornwall bird are unique to the Asian race, *perdix* (Harrison 1983, Sealy et al. 1991). Basic-plumaged *perdix* also lacks the nearly complete white collar that extends almost around the neck of *marmoratus* individuals. The Cornwall bird had only two indistinct pale smudges on either side of the nape. The nominate race shows a more substantial black margin below the eye as well; this is noticeably different from the thin black line that curves just under the eye in the Cornwall murrelet and in other *perdix* individuals.

Sibley (1993) suggested some other distinctions between the two subspecies in basic plumage. He found a clear difference in loral pattern in two specimens in the collection of the California Academy of Sciences - "*perdix* being entirely dark above the gape, while *marmoratus* shows a broad pale stripe above the gape" (page 276), but found that the Cornwall bird approached the *marmoratus* specimen in this character and, therefore, he suggested further study of this feature. We examined several specimens in the Canadian Museum of Nature and found that the lores of basic-plumaged

marmoratus varied from white to dark brown. Consequently, this trait is not consistently useful for subspecific identification. The black "spur" extending forward from the shoulder area is longer and thinner on the *B.m. marmoratus* in Sibley's sketch. However, this does not appear to be a consistent difference, as shown in the photograph in Farrand (1983), for example.

In summary, the pattern of dark brown and white on the face, neck, and scapulars enabled identification of the Cornwall bird as a basic-plumaged Marbled Murrelet. Finer details of neck pattern, the presence of prominent white eye-arcs, and the thinner black line below the eye distinguished this bird as the Asian race - *B.m. perdix*.

Distribution and Extralimital Records of the Asiatic Marbled Murrelet

The first confirmed record of *perdix* for Canada occurred nearby, just north of the St. Lawrence River near Montreal (See Table 1). The Cornwall bird though, is the first record of a Marbled Murrelet, of either race, in Ontario (Bain 1994) and New York State (Andrle 1995),

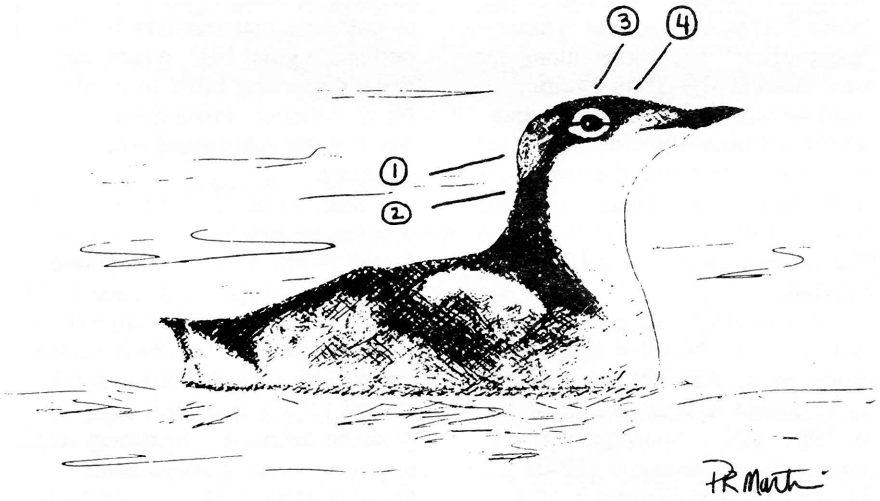

Figure 3: Asiatic Marbled Murrelet. Note: (1) white smudges on back of head; (2) no neck collar; (3) prominent white eye arcs (broken eye-ring) - large-eyed appearance; (4) thin black border on lower white eye arc. Drawing by *Paul Martin.*

and the second confirmed record of the Asiatic race in Canada (Table 1 in Sealy et al. 1991). Since the Cornwall discovery, an Asiatic Marbled Murrelet was found at Mullet Key, Florida, on 4 December 1993, a second bird on Cedar Key, Florida, from 16 - 29 March 1994 (Stevenson and Anderson 1994), a third bird at Huntington Beach State Beach Park, South Carolina, on 19 November 1994 (Davis 1995), a fourth off St. Petersburg, Florida, on 28 November 1994 (Wamer and Pranty 1995), and a fifth thought to be the same individual as the South Carolina bird at Jordan Lake, North Carolina, from 9 - 11 December 1994 (Davis 1995).

The Marbled Murrelet nests along both temperate coasts of the North Pacific Ocean - the Asiatic "Long-billed" subspecies along the west coast of the North Pacific, from eastern Russia to Korea and northern China; the North American race along the east coast from the northern Bering Sea south to California (Sealy et al. 1982). The nesting ranges probably do not overlap.

Interestingly, all confirmed records of the Marbled Murrelet in inland North America are of the more distant Asiatic race (Sealy et al. 1982, 1991). Subsequent to these papers, Dinsmore (1993) reported on the occurrence of a Marbled Murrelet in Iowa on 12 December 1991. This may have been an individual of the North American race. Dinsmore (1993) described the white extending "posteriorly around the midneck, forming an almost complete white collar" - characteristic of *B.m. marmoratus* (unlike the two pale patches on the nape typical of *perdix*). In addition, there was no mention of distinct white eye-arcs, which stood out on the Cornwall bird. Nevertheless, the author suggested the Iowa bird was of the Asiatic race based solely on the apparently long bill. Sealy et al. (1991) summarized all extralimital records of Marbled Murrelets in North America (see Table 1). The Cornwall record fits into the pattern of late summer and autumn occurrences of the other *perdix* North American inland records. This timing coincides with the premolt or postmolt dispersal of these birds from their breeding grounds, leading Sealy et al. (1991) to postulate that westerly storms, or perhaps regular high winds, carry these dispersing birds to northern North America. From there, they move south into inland North America.

Sealy et al. (1991) also found that the occurrence of *perdix* in inland North America coincided with the irregular occurrence of El Niño - southern oscillation events in the South Pacific. These events create high pressure in the south-central Pacific that push low pressure air north which may result in strong weather movements across eastern Asia and into North America (Philander 1983). El Niño winds were also felt during 1992-1993 in the South Pacific; the occurrence of the Cornwall Murrelet may have been associated with the resulting weather patterns.

Table 1:
North American records of vagrant Marbled Murrelet, and the attributable races. Updated from Sealy et al. 1991.

	DATE	LOCATION	AGE/SEX	PLUMAGE
1. *B.m. perdix*	11 Nov. '79	Montreal, PQ	AHY* male	nearly complete basic plumage
2. "	9 Aug. '81	Mono Lake, CA	AHY male	complete alternate plumage
3. "	1 Dec. '81	Lake Lemon, IN	AHY unsexed	basic plumage (body molt incomplete)
4. "	22 Aug. '82	Aspen, CO	AHY male	alternate plumage (probably yearling)
5. "	17 Sept. '82	Middleboro, MA	AHY female	mostly alternate plumage, light body/early wing molt
6. "	29 Jul. '83	Mono Lake, CA	AHY unsexed	alternate plumage
7. "	2 Aug. '83	Mono Lake, CA	AHY male	alternate plumage (no molt)
8. "	6 Aug. '83	Mono Lake, CA	AHY unsexed	alternate plumage
9. "	27 Aug. '83	Denali Nat. Pk. AK	AHY unsexed	alternate plumage
10. "	27 Dec '86	Honeymoon Is., FL	AHY female	basic plumage, almost complete
11. "	11-30 Oct. '93	St. Lawrence R. Cornwall (ON/NY)	AHY unsexed	basic plumage, limited body molt
12. "	4 Dec. '93	Mullet Key, FL	unknown	unknown
13. "	16-28 Mar. '94	Cedar Key, FL	unknown	unknown
14. "	19 Nov. '94	Huntington Beach State Park, SC	unknown	unknown
15. "	28 Nov. '94	off St. Petersburg, FL	unknown	unknown
16. "	9-11 Dec. '94	Jordan Lake, NC	unknown	unknown
17. Probably *B.m. perdix*	2 Dec. '84	Long Beach, IN	unknown	presumably basic plumage
18. "	15 Jul. '89	Little Codroy R., NF	AHY unsexed	alternate plumage
19. "	22 Oct. '89	Cypress Lake, SK	unknown	unknown
20. probably *B.m. marmoratus* (see text)	12 Dec. '91	Marion Co. IA	unknown	basic plumage

*AHY = after hatch year

Recent work on the taxonomy of Marbled and Kittlitz's Murrelets (Friesen et al. 1994; V. Friesen, unpublished data) examined mitochondrial DNA, and revealed that the North American Marbled Murrelet is more closely related to the Kittlitz's Murrelet than to the Asiatic Marbled Murrelet. Some authorities have thus recognzed the Asiatic race as a distinct species (e.g. Bourne 1994). Therefore, if you are fortunate enough to discover a "Marbled-type" Murrelet inland, be sure to take careful notes. It may well be a new species!

Acknowledgements

I sincerely thank Paul R. Martin for his invaluable contributions to the manuscript and his artwork; Lee Harper for the use of his boat on such short notice; Ross Harris, Liz Stevenson, and Cendrine Huemer who reviewed the manuscript; Norm Crookshank for preparing the map; Spencer Sealy for reviewing the Murrelet slides; Michel Gosselin for his research on murrelet papers; and Laurie Di Labio for typing the manuscript. The assistance of the New York Power Authority, and Dan Parker in particular by opening up the observation deck of the Robert Moses Power Dam to allow us access on the weekends is appreciated greatly.

Literature cited

Andrle, R.F. 1995. Report of the New York State Avian Records Committee 1993. Kingbird 45: 71-78.

Bain, M. 1994. Ontario Bird Records Committee report for 1993. Ontario Birds 12: 41-58.

Bourne, W.R.P. 1994. The Long-billed Murrelet *Brachyramphus (marmoratus) perdix*. Sea Swallow 43: 80.

Davis, R. 1995. South Atlantic Coast Region. National Audubon Society Field Notes 49: 135-139.

Dinsmore, S.J. 1993. First record of a Marbled Murrelet for Iowa. Iowa Bird Notes 63: 1-2.

Farrand, J., Jr. 1983. The Audubon Society Master Guide to Birding. Vol. 2. Alfred A. Knopf, New York.

Friesen, V.L., J.F. Piatt, and A.J. Baker. 1994. Molecular evidence for a "new" species of alcid, the Long-billed Murrelet. Journal für Ornithologie 135: 30 (abstract of presented paper).

Harrison, P. 1983. Seabirds: An identification guide. Houghton Mifflin, Boston.

Peterson, R.T. 1990. A Field Guide to Western Birds. Third Edition. Houghton Mifflin, Boston.

Philander, S.G.H. 1983. El Niño southern oscillation phenomena. Nature 302: 295-301.

Scott, S.L. (editor). 1987. Field Guide to the Birds of North America. Second Edition. National Geographic Society, Washington, D.C.

Sealy, S.G., H.R. Carter, and D. Alison. 1982. Occurrence of the Asiatic Marbled Murrelet [*Brachyramphus marmoratus perdix* (Pallas)] in North America. Auk 99: 778-781.

Sealy, S.G., H.R. Carter, W.D. Shuford, K.D. Powers, and C.A. Chase III. 1991. Long-distance vagrancy of the Asiatic Marbled Murrelet in North America, 1979-1989. Western Birds 22: 145-155.

Sibley, D. 1993. An Asiatic Marbled Murrelet in Ontario. Birders Journal 2: 276-277.

Sonobe, K. 1982. A Field Guide to the Birds of Japan. Wild Bird Society of Japan, Tokyo.

Stevenson, H.M., and B.H. Anderson. 1994. The Birdlife of Florida. University Press of Florida, Gainesville.

Wamer, W. and B. Pranty. 1995. Florida Region. National Audubon Society Field Notes 49: 37-40.

Bruce M. Di Labio, 44 Helmsdale Drive, Kanata, Ontario K2K 2S3.