

THE JUVENAL PLUMAGE OF KITTLITZ'S MURRELET

Pierre Devillers

On 16 August 1969 Harold Beecher found a presumed juvenile Marbled Murrelet (*Brachyramphus marmoratum*) alive, but in a weakened condition, on the beach at La Jolla, San Diego County, California. Attempts to revive the bird failed and it died the next day. The specimen was donated to the San Diego Natural History Museum (SDNHM No. 37215) and the occurrence was reported in Audubon Field Notes (McCaskie, 1970) as there are very few records of the Marbled Murrelet in southern California. In reexamining the specimen in comparison with juvenile Marbled Murrelets, several points of difference were noted - grayish cast, short bill, whitish tips to secondaries, and whitish rectrices. These points are characteristic of Kittlitz's Murrelet (*Brachyramphus brevirostre*). As there appears to be no description of juvenile *brevirostre* - except for the brief characterization of Kozlova (1957) - the following notes are presented. Capitalized names of colors follow Ridgway (1912).

DESCRIPTION

HEAD AND UPPERTARTS: Forehead, crown, back, and rump - uniform gray (Deep Mouse Gray, tending toward Mouse Gray on upper back, and toward Dark Mouse Gray on back). Feathers at base of bill tinged brown (Chaetura Drab to Fuscous). Upper tail coverts - gray, with a brown (Chaetura Drab) tinge, spotted white. Nape - crossed by broad collar of gray and white in vague bars. Supercilia - which extend back to the nape, white, finely mottled with gray (Mouse Gray). Auriculars - mottled or barred, but more saturated than the surrounding areas, producing the appearance of a cheek patch. Lores - mottled with gray and white, even more saturated than auriculars, passing to solid browner feathering around bill. Black crescentic mark in front of eye.

UNDERPARTS: Lower cheeks, chin, throat, breast, and flanks - white, finely barred and spotted with gray (Mouse Gray); fine spotting on chin; barring more definite and denser on throat and very dense on breast; sides marked with coarser and slightly browner bars; posterior flanks almost devoid of barring.

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Belly and undertail coverts — pure white.

TAIL: Rectrices — brown with varying amounts of white; outer rectrix white with two brown (Chaetura Drab) bands at tip, separated by a white subterminal bar; proximal band broadened on next rectrix; white subterminal bar becoming reduced on next rectrices, diminishing to white spots on sides; central rectrices dark with very small spots on either side.

WINGS: Lesser and medium coverts — browner than back (toward Fuscous). Greater coverts — a little grayer than lesser and medium coverts, and with narrow whitish edges. Axillaries — dark brown (Fuscous). Underwing coverts — brown, paler than axillaries. Secondaries — same shade as greater coverts but with pure white tips; inner vane paler than outer vane, and with a narrower white tip. The tips form a conspicuous white bar on the closed wing. Primaries — dark brown (Fuscous).

SOFT PARTS: Bill — black. Feet (in dried skin) — horn colored with black webs.

MEASUREMENTS: Wing — 122.0mm. Tarsus — 15.6mm. Bill — culmen from tip to beginning of feathering — 8.9mm; from tip to distal end of nostril — 7.2mm; lower mandible from gonys to tip — 4.2mm; thickness of upper mandible at distal end of nostril — 2.9mm; thickness of lower mandible at gonys — 1.5mm.

DISCUSSION

The plumage pattern of the *B. brevirostre* specimen is very similar, in general, to that of seven juvenile *B. marmoratum* in the SDNHM collection taken between 6 July and 27 August, five of which still show egg-teeth. There are, however, a number of characters in which Marbled Murrelets differ. The bill is considerably longer, with culmen ranging from 12.3 to 15.8 mm, as opposed to 8.9 mm in the *brevirostre* specimen. The color of the upperparts and of the barring on the underparts is brown instead of gray (a little warmer than Fuscous). The pattern of barring on the underparts is similar, but appears coarser and more extensive on the hind flanks, and less dense on the breast. The auriculars, loreal area, and supercilium are solid

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brown without white except for a few spots on the auriculars in some specimens. The light collar on the nape is always interrupted in the middle, and is sometimes very reduced. There is no crescentic mark in front of the eye. The tail is solidly brown-black instead of barred with white. The wing coverts and secondaries are solidly brown without white edgings.

This immature differs from adult specimens of *B. brevirostre* in winter plumage by having a much thinner bill, barring or vermiculation on the face, nape, and underparts, and having dark barring in the tail (predominately white in adults). White in the tail and on the secondaries are key characters in which adult Kittlitz's Murrelets differ from adult Marbled Murrelets (Ridgway, 1919; Dement'ev, 1951). Whiter face and nape, shorter bill, and grayness of plumage are supporting characters. Thus there is no doubt as to the identity of the SDNHM specimen.

REMARKS

This appears to constitute the first record for California, and indeed the first record of Kittlitz's Murrelet on the west coast of America, south of Alaska. The species breeds in extreme northeastern Siberia and in Alaska (Kozlova, 1957) and the North American center of abundance is around Glacier Bay near Juneau, in southeastern Alaska (Bent, 1919). Long distance migration is recorded for the Asian coast, with migrants and wintering birds occurring as far as Kamtchatka and the Kuril Islands (Kozlova, 1957). It is not known whether or to what extent American populations also migrate to Asia. Published evidence concerning their status in Alaska during the non-breeding season is contradictory (Dement'ev, 1951; Kozlova, 1957; Gabrielson and Lincoln, 1959).

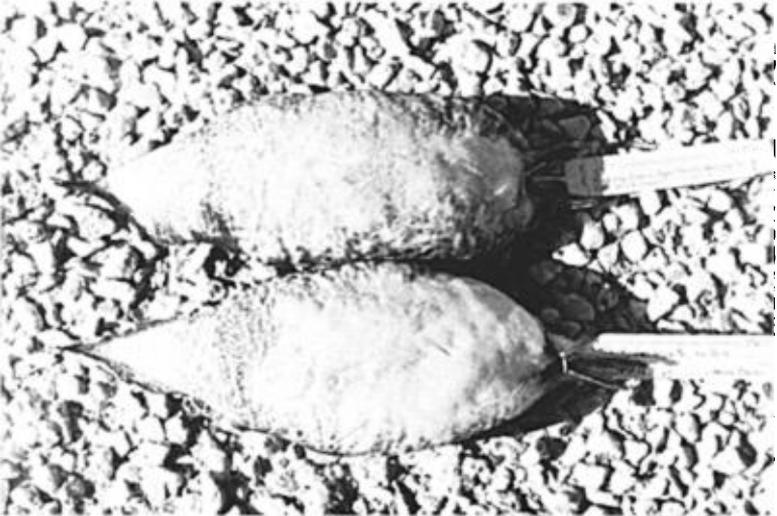
In any case the mid-August date seems amazingly early for a juvenile to be at such a distance from its breeding grounds, and the possibility of assisted passage immediately comes to mind. Such a possibility can never be disproved, but the obvious inquiries were made to the Scripps Institution of Oceanography, the Coast Guard, and the U. S. Navy, all with negative results. At best, the plausibility of a natural occurrence could be assessed if data were available on breeding biology, parental care, post breeding movements, and dates of arrival on remote wintering grounds. Unfortunately such is not the case (Dement'ev, 1951; Kozlova, 1957), and further speculation on the record is unwarranted in the context of this paper.

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SUMMARY

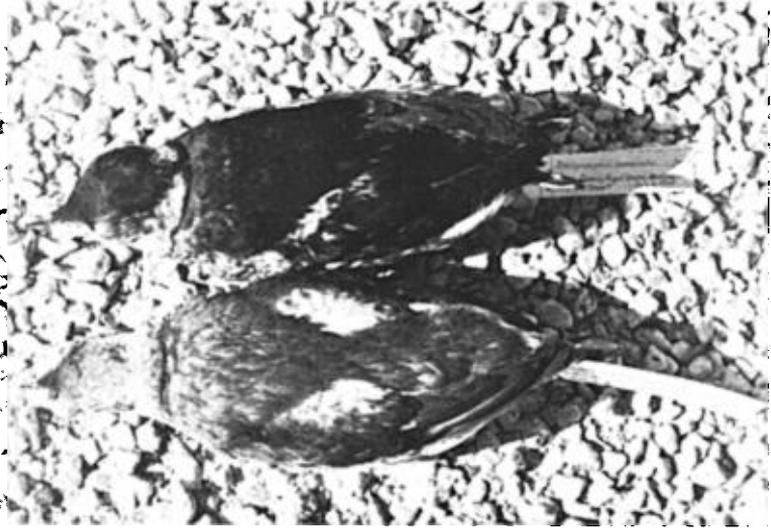
The juvenal plumage of Kittlitz's Murrelet (*Brachyramphus brevirostre*) is described from a specimen in the San Diego Natural History Museum, taken near San Diego on 16 August 1969. The specimen differs from winter adults in having barred nape, underparts and tail, and a thinner bill. From the very similar juvenile Marbled Murrelet (*B. marmoratum*) this bird differs chiefly in the presence of white in the tail and secondaries, whiter face and nape, grayer plumage, and shorter bill. The significance of the record, assisted passage or natural occurrence, is briefly considered but not assessed.



Ventral view of juvenal male Marbled Murrelet (*Brachyramphus marmoratum*) (upper specimen) taken at Puget Sound, Washington on 6 July 1940, and juvenal male Kittlitz's Murrelet (*Brachyramphus brevirostre*) (lower specimen) captured near San Diego, California on 16 August 1969.

Photo by Pierre Devillers

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Dorsal and lateral views of juvenal male Marbled Murrelet (*Brachyramphus marmoratum*) (upper specimen in both photos) taken at Puget Sound, Washington on 6 July 1940, and juvenal male Kittlitz's Murrelet (*Brachyramphus brevirostre*) (lower specimen in both photos) captured near San Diego, California on 16 August 1969. Note the whiter face and nape, grayer plumage, and shorter bill of the Kittlitz's Murrelet. *Photos by Pierre Devillers*



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