

NORTHEASTERN EXTENSION OF THE BREEDING RANGE OF THE ARCTIC LOON IN NORTHWESTERN ALASKA

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With the publication of the fourth edition of the AOU Check-list (AOU 1931), the Pacific Loon, *Gavia pacifica*, was submerged as a subspecies of the Arctic Loon, *Gavia arctica*. For the next 54 years little attention was given to distinction of the two in the field. In 1985, *G. arctica* and *G. pacifica* were again recognized as separate species with the publication of the sixth edition of the AOU Checklist (AOU 1983). Hence the recent upsurge of interest in *G. arctica*.

During the breeding season *G. a. viridigularis*, the eastern subspecies of the Arctic Loon, ranges in Siberia from the Lena River to the Chukotski Peninsula, north to Wrangel Island (Portenko 1972), and south to the Okhotsk coast and Sakhalin (Dement'ev and Gladkov 1951). Along the Siberian arctic coastal strip from the Chukotski Peninsula west to the Indigirka River *G. arctica* is replaced by *G. pacifica*, which ranges as far west as the mouth of the Yana River (Portenko 1972, Vaurie 1965). Arctic Loons are not known to breed on the Chukotski Peninsula east of Krest and Kolyuchin bays, where Pacific Loons nest commonly; Pacific Loons are replaced by Arctic Loons south and west of the Anadyr River basin. Arctic Loons nest on tundra lakes throughout the Anadyr River basin; Pacific Loons also breed in the lower part of this basin and are probably more common than Arctic Loons on the coast (Portenko 1972, Dement'ev and Gladkov 1951). For nesting, Arctic Loons select various sizes of tundra lakes according to the timing of the thaw, but they prefer large lakes (Portenko 1972). Pacific Loons may nest on ponds, large or small lakes, river banks, and lagoons (Vaurie 1965, Portenko 1972). Portenko (1972) stated "It has still to be ascertained whether the Arctic and Pacific loons build their nests alongside one another in small areas."

At least sixteen specimens of *G. a. viridigularis* have been collected in North America, all from Alaska. The first North American specimen, an alternate-plumaged male, was taken on St. George Island in the Pribilofs on 22 June 1873 (Preble and McAttee 1923). Subsequent alternate-plumaged males were taken at St. Michael on 24 August 1877 (Preble and McAttee 1923), at Nome on 20 August 1905 (Museum of Comparative Zoology, Harvard University), and at Savoonga, St. Lawrence Island, on 8 June 1953 (Bailey 1956). Arctic Loons have been observed several times in recent years near Nome and Wales, Seward Peninsula (Kessel 1989), and at Gambell, St. Lawrence Island (Dunn and Rose 1992). On 4 June 1992, J. L. Dunn (pers. comm.) recorded 28 alternate-plumaged adults flying northeast past Gambell, a record number for Alaska. A male taken on 13 May 1948 in Chatham Strait near Admiralty Island in southeast Alaska represents the only record for Alaska east of the Bering Sea coast (Bailey 1953).

Wales is the only locality where the Arctic Loon has been reported to nest in Alaska. Eleven adults and eight sets of eggs were collected there between 1923 and 1936 (Bailey 1948). An incubating bird was observed at Lopp Lagoon, Wales, on 10 July 1974 (Kessel 1989).

We observed at least three breeding pairs of Arctic Loons at Cape Krusenstern National Monument (67°08' N, 163°40' W), 260 km east-northeast of Wales in northwest Alaska between July and September 1991. Cape Krusenstern defines the northwest corner of Kotzebue Sound. Its 114 beach ridges fringe Krusenstern Lagoon and enclose numerous small brackish lakes and ponds. At Cape Krusenstern, the Arctic Loons were in the brackish lakes. We saw and photographed the first

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brood on July 27 (transparencies are on file with the Univ. of Alaska Museum at Fairbanks and identification was corroborated by Dan Gibson). The two downy chicks were one-fourth adult size and capable of diving, suggesting the eggs were laid in early to mid-June. This schedule is typical of coastal waterbirds in northwestern Alaska, where the late availability of habitat necessitates synchronous laying to ensure that young can fly by the end of the short growing season.

The latter two broods consisted of but one chick each. They were first observed during the last week of August and on 7 September, respectively; the last chick was very small and not yet diving and probably hatched from a replacement clutch. *Gavia a. arctica* of northern Europe and northwestern Asia frequently lays replacement clutches (Cramp and Simmons 1977).

We found *G. pacifica* and *G. arctica* within 0.5 km of each other on two separate lakes of 0.14 km² each, with their respective broods. The three families of *G. arctica* were found on small lakes covering from 0.04 to 0.14 km²; adults were also observed foraging in freshwater lakes adjacent to wet sedge meadows, up to 0.8 km inland. Pacific Loons nested on islands in lagoons as well as on small lakes.

We distinguished *G. arctica* from *G. pacifica* by its white flank patches, its white "chinstrap," its greater ratio of white to black in the stripes that adorn the side of the neck, and its uptilted bill. The neck of *G. arctica* appeared slimmer and longer than that of *G. pacifica*. The puffer, silver-white head and neck of *G. pacifica* appeared more rounded in profile, contrasting with the somewhat flat-topped gray head and crown of *G. arctica*. These characters have been discussed by McCaskie et al. (1990). We also noted that in *G. arctica* the dark plumage of the throat patch appeared to extend in a sharp V into the white breast, whereas in *G. pacifica* the line of demarcation seemed more even. The downy chicks of *G. arctica* were dark sooty, those of *G. pacifica*, drab gray-brown. On 17 August both the Arctic and Pacific Loon chicks were molting into their juvenile plumage. The Arctic Loons were acquiring a dark gray plumage on the neck and back that was paler than the down, a white face and neck, and white along the waterline.

The Pacific was the most abundant species of loon at Krusenstern Lagoon in 1991. During late August they congregated in flocks of up to 20 in the lower sloughs and lagoons and ranged far inland. We encountered single alternate-plumaged adults on the upper Kobuk River then. The Red-throated Loon (*G. stellata*) nests on the small lakes that fringe Krusenstern Lagoon. We observed Yellow-billed Loons (*G. adamsii*) throughout the breeding season, including one pair at Tullilik Lake, 2 km north of Krusenstern Lagoon and 2 km inland from the Chukchi coast. R. L. Bunn (pers. comm.) had seen two adult Yellow-billed Loons with two juveniles there on 23 August 1986. We observed the Common Loon near Krusenstern Lagoon infrequently, and did not find evidence of its breeding there.

LITERATURE CITED

- American Ornithologists' Union. 1931. Check-list of North American Birds, 4th ed. Am. Ornithol. Union, Lancaster, PA.
- American Ornithologists' Union. 1985. Thirty-fifth supplement to the American Ornithologists' Union Check-list of North American Birds. *Auk* 102:680-686.
- Bailey, A. M. 1948. Birds of arctic Alaska. *Denver Mus. Nat. Hist. Popular Ser.* 8.
- Bailey, A. M. 1953. The Green-throated Loon (*Gavia arctica viridigularis*) in southeastern Alaska. *Auk* 70:200.
- Bailey, A. M. 1956. The Bean Goose and other birds from St. Lawrence Island, Alaska. *Auk* 73:560.
- Cramp, S., and Simmons, K. E. L. (eds.). 1977. *The Birds of the Western Palearctic*, vol. 1. Oxford Univ. Press, Oxford, England.

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- Dement'ev, G. P., and Gladkov, N. A. (eds.). 1951. Birds of the Soviet Union, vol. 2. English translation, Israel Program for Scientific Translations, Jerusalem, 1969.
- Dunn, J. L., and Rose, B. J. 1992. A further note on Arctic Loon identification. *Birding* 24:106-107.
- Kessel, B. 1989. Birds of the Seward Peninsula, Alaska. Univ. of Alaska Press, Fairbanks.
- McCaskie, G., Dunn, J. L., Roberts, C., and Sibley, D. A. 1990. Notes on identifying Arctic and Pacific Loons in alternate plumage. *Birding* 22:70-73.
- Portenko, L. A. 1972. Ptitsy Chukotskogo poluostrova i ostrova Vrangelya [Birds of the Chukchi Peninsula and Wrangel Island]. Inst. Zool., Acad. Sci. USSR, Nauka Publ., Leningrad.
- Preble, E. A., and McAtee, W. L. 1923. Birds and mammals of the Pribilof Islands, Alaska. *N. Am. Fauna* 46.
- Vaurie, C. 1965. The Birds of the Palearctic Fauna, Non-Passeriformes. H. F. & G. Witherby, London.

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