THE FIELD IDENTIFICATION OF ARCTIC LOON

by Terence A. Walsh, Midland, Michigan

Winter-plumaged loons can provide the New England birder with some tricky identification problems. Viewing conditions are often less than ideal on a blustery winter's day, and even a close look at a solitary bird can be enigmatic unless the observer is keenly aware of specific differences and variability. In New England, the Common and Red-throated loons (Gavia immer and G. stellata) are familiar birds, and it is the Arctic Loon (G. arctica) that is searched for diligently. This article will attempt to clarify some of the problems associated with identifying this vagrant to our shores.

The subspecies that presumably occurs in Massachusetts is G. a. pacifica, although it can only be distinguished from the nominate Eurasian subspecies in breeding plumage by the purple gloss to the throat and the grayer nape. (Some authors consider pacifica to be a separate species.) My experience with Arctic Loon is predominantly with G. a. arctica in British coastal waters, but I have found little indication that there are any subspecific differences in winter dress, although the Eurasian form is a slightly larger bird by about 8 percent (Cramp and Simmons, 1977). The possibility that this subspecies could occur in New England cannot be ruled out, and a breeding-plumaged bird should be inspected closely.

I have attempted to give a critical summary below of the current literature on the field identification of Arctic Loon, stressing the features that are most reliable and least subjective.

Size. Although the average size of Arctic Loon falls between that of Red-throated and Common, size comparison is essential for this feature to become a primary identification tool. There is overlap between the three species, and solitary birds can be notoriously difficult to assess in terms of size, so that without direct comparisons, details of structure and plumage become critical.

Structure and general coloration. Familiarity with Common and Red-throated loon is obviously essential here. As a rule of thumb, Arctic Loons generally appear more contrasted black and white than the other two species, thus looking more clean-cut. Red-throated Loons usually appear the palest of the three at any range. The small head of this species, together with the slim, uptilted bill, accentuated by the habit of carrying it above horizontal, readily identify this loon. The adult Common Loon has a large, deep bill[1], a steep forehead

[1]Ed. note: It is well to remember that in this species, "birds of first year have smaller bill than adult." (See E. H. Forbush, Birds of Massachusetts, Part I, Mass. Dept. of Agriculture, 1925, page 17.)

with a typically flat crown, and a robust, thickset neck that combine to give the species a brutish look. The Common often, but not always, has the lower mandible rather more angled than the upper, to make the bill asymmetric in shape.

Arctic Loon is a more well-proportioned bird with a symmetrical dagger-shaped bill. The forehead is generally less steep than that of the Common and can appear sloping. The species has a smooth, rounded crown and a relatively thinner, more graceful neck. The characteristic angular shape of the Common Loon's head is lacking, while the thinner neck of the Arctic leads to its looking longer-necked than the sturdier Common. The difference in head structure of the two species is like the difference between Glaucous and Iceland gulls (Larus hyperboreus and L. glaucoides).

Head and neck pattern. Critical observation of the head and neck pattern of a loon will often clinch its specific identification without subjective estimations of bulk and proportion. The face and neck of a Red-throated appear strikingly pale, often silvery, due to the expanses of white around the eye and on the cheek and neck, the pale of the neck extending farther back than on the other species. The lores are often quite pale, making the eye appear prominent and staring.

In the Common Loon, there is almost always a pale area around the eye and on the lores, which is not present in Arctic Loons. Also the cheeks are dusky, and the dark of the hindneck extends forward around the lower neck to form a distinctive half-collar. The coloration of the crown and the hindneck is often shaded to give a patterned or blotched effect. However, the back of the head invariably appears darker than the mantle.

The head and neck pattern of Arctic Loon can appear quite distinctive. The demarcation between dark and light on the head and neck is relatively sharp and extends from the eye to the breast in a smooth curve, with no "semicollared" look as in the Common Loon. The forehead and lores appear very dark, with the crown and rear neck being paler and thus lighter than the mantle. There is a darker area that separates the pale foreneck and grayer hindneck, which can give the appearance of a stripe down the side of the neck. This apparently diagnostic feature and the other details are described well by Mullarney (1980).

Body plumage. Arctic Loons always appear darker than the other two species. Red-throated Loons have distinctive spangling all over the mantle (more prevalent in first-winter birds), whereas Commons appear somewhat mottled brown. First-winter Commons have pale feather edgings on the back to give a scaled appearance, often very pronounced in fresh plumage. Adult Arctic Loons have a uniformly dark mantle, although an occasional summer plumage feather or two is sometimes retained in the winter plumage (Palmer, 1962). First winter birds also

possess pale feather edgings on the upperparts but never appear as scaled or barred as the Common Loon.

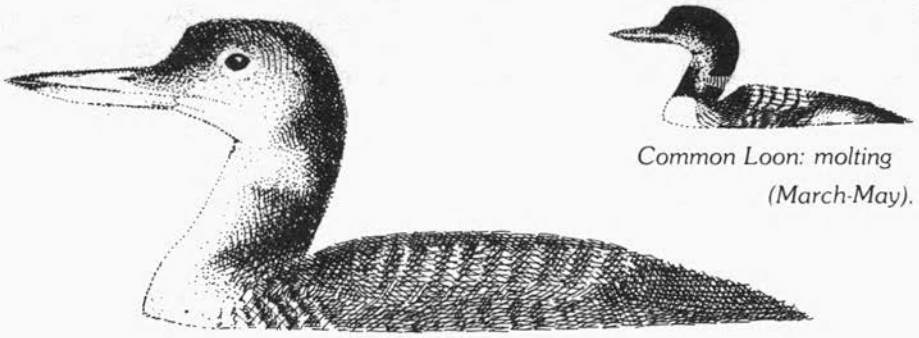
A feature that British birders have consistently used to pick out Arctic Loons at considerable distance is a white patch on the rear body due to an upward extension of white on the rear flanks (Dennis et al., 1978). This character is surprisingly good for the Eurasian subspecies at least, yet is not described in North American literature. Does the Pacific race exhibit this character as prominently? Limited pictorial evidence suggests that it might not;[2] compare the photographs in Armstrong (1980, p.16) and Farrand (1983, p.37) with those in Wallace (1978, p.75), Dennis et al. (1978, p.226), and Chandler (1981, p.64). Although the white flank patch is an excellent field character, it can be confused with the indistinct white blazes that appear on the sides of molting birds of both the other species, as in Red-throated Loons in October and November and in Common Loons in March and April. Be careful!

Flight and behavior. Several American and European field guides allude to the shallower wing beat of the Arctic Loon, as the wings are not raised as high as in the Red-throated. I think it is best to relegate such features to secondary identification points in New England. The white flank patch, if present, remains a good feature in flight. Jonsson (1976) mentions that the Arctic Loon uses a semisomersault technique to dive whereas the Common sinks straight down; however, this may depend on the prevailing sea conditions.

Pitfalls. The two biggest pitfalls in identifying Arctic Loon are probably (1) reliance on apparent size as the primary identification feature and (2) molting birds. Perhaps the simplest way to avoid the first problem is never to identify an Arctic Loon on overall size (or even bill size) alone. Back it up with critical observations of plumage. Loons molt their body plumage in September-November and again in February-April, prime time for misidentifications being perhaps March-April when Common Loons begin to acquire black feathers around the head, neck, and mantle, thus masking the typical winter plumage pattern and hinting at Arctic Loon plumage. It is wise to bear in mind what the emergent summer plumage of each species looks like. Even though your bird appears to have a black throat molting in, if it has spotted wing coverts or a hint of black and white striping on the lower neck, for example, it is a Common Loon! Furthermore,

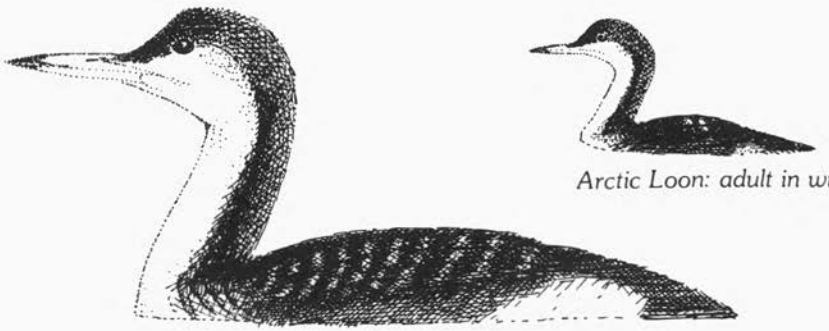
[2] Ed. note: None of the local experts consulted have ever observed the flank patch on G. a. pacifica. However, see J. T. Leverich, "Identification of Arctic Loons," BOEM 7: 186, October 1979, who points out that only one U.S. book has a picture depicting this white patch - Arnold Small's The Birds of California, and "it is (poorly) visible in the photograph." Bird Observer would welcome any information our readers can contribute about the presence of this characteristic in the North American subspecies.

FIGURES OF WINTER-PLUMAGED LOONS



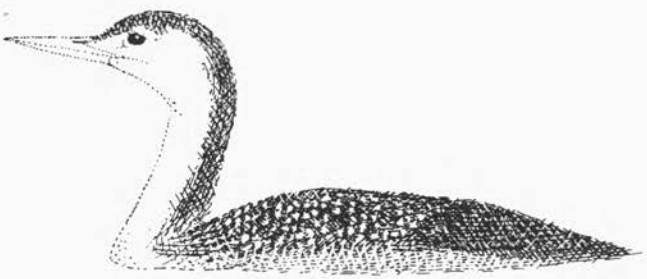
Common Loon: molting (March-May).

Common Loon: adult in winter plumage.



Arctic Loon: adult in winter.

Arctic Loon: first-winter bird.



Red-throated Loon: adult in winter plumage. TAW '84

if your bird is in primary molt in October-November, it is a Red-throated Loon as the other two species molt their primaries in February-April (Cramp and Simmons, 1977).

Summary. Arctic Loons in winter plumage are identifiable, even at considerable range, when appropriate field characters are noted. Confidence comes with either experience on the West Coast or diligent study of photographs in the literature (see references). The accompanying figures illustrate the winter plumage of all three species to show the features described in the text.

REFERENCES

Armstrong, R. H. (ed.) 1980. A Guide to the Birds of Alaska. Alaska Northwest Publishing Co., Anchorage.

Chandler, R. J. 1981. Influxes into Britain and Ireland of Red-neck Grebes and other waterbirds during 1978/79. British Birds 74: 55-81.

Cramp, S. and K.E.L. Simmons (eds.). 1977. Handbook of the Bird of Europe, the Middle East, and North Africa: the Birds of the Western Palearctic, Vol. 1. Oxford University Press.

Dennis, R. H., J. Fitzpatrick, and S. Jackson. 1978. Field Identification of Black-throated Diver. British Birds 71: 225-226.

Farrand, J. (ed.). 1983. The Audubon Society Master Guide to Birding, Vol. 1: 37. Alfred A. Knopf.

Jonsson, L. 1978. Birds of Sea and Coast. Penguin Nature Guide, Harmondsworth.

Mullarney, K., S. C. Madge and R. H. Appleby. 1980. Letter - Another Mystery Photograph: Great Northern or Black-throated Diver. British Birds 73: 419-422.

Palmer, R. S. (ed.). 1962. Handbook of North American Birds. Vol. 1. Loons through Flamingos. Yale University Press.

Wallace, D.I.M. 1978. Mystery Photographs. British Birds 71: 75-77.

TERENCE A. WALSH, a research biochemist by profession, has been a birdwatcher since childhood and has birding experience in the United States, South America, Britain, Europe, North Africa, and the Middle East. A native Britisher, Terry's expertise was much appreciated by New England birders when he was a resident here. Now working in Michigan, he sends greetings to Plum Island birders and wishes them to know that a recent visit home to England confirmed his view that "our" Buff-breasted Sandpiper (a western Arctic breeder) is much more readily seen "over there" in the Isles of Scilly than in New England. Terry has published papers in British Birds and in Sandgrouse and has promised BOEM another field identification paper in the future - on the subject of stints!

FURTHER NOTES ON THE FIELD IDENTIFICATION OF WINTER-PLUMAGED ARCTIC LOONS

In my article on "The Field Identification of Arctic Loon" [also printed in this issue of BOEM], I alluded to the possibility that the white flank patch that is often conspicuous in the winter plumage of the Eurasian subspecies of Arctic Loon, Gavia arctica arctica, is not present in the Pacific race, G. a. pacifica. I had a chance to confirm this on a recent trip to California where I saw eight winter-plumaged Arctic Loons. None of these birds exhibited the flank patch that I have invariably noted on birds seen in Britain. Therefore, it appears that the character is exclusive to the nominate race and should be a convenient method of separating the subspecies in winter plumage in the field (where the minor size difference will not be discernible). I should reiterate that both races could conceivably occur in Massachusetts, although pacifica is presumably more likely.

Further field observations also enable me to comment on the difference in diving techniques between Common and Arctic loons noted by Jonsson (1978). I watched Arctic Loons diving in smooth, open sea conditions and confirmed a distinctly different action from nearby Common Loons. The Arctics consistently stretched up their necks immediately prior to submerging as if putting in a special effort before "forcing" themselves underwater. Jonsson describes a semisomersault technique, but the Arctic Loons I observed did not lift their bodies out of the water (as cormorants often do when diving). They simply craned their necks up before diving. The Common Loons had the much more smooth and easy diving motion that is familiar to East Coast birders. They simply submerge their heads and slip underwater with little apparent effort. The diving motion of the Arctic Loon was surprisingly quite distinctive, even at long range, but I should again mention the cautionary note of my previous remarks that diving techniques often depend on the prevailing sea conditions and, perhaps, depth of dive.

Jonsson, L. 1978. Birds of Sea and Coast. Penguin Nature Guide, Harmondsworth.

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[Editor's Note: This material was received by BOEM just before press time, and we are pleased to be able to include it in the same issue as "The Field Identification of Arctic Loon" by the same author. The original article was given to us in June 1984 and scheduled for publication in a winter issue of BOEM.]