

Comparison of Black-capped and Boreal Chickadee Flights

	1961	1962	1963	1964	1965
Black-capped	Heavy	No	Good	No-Light	Good
Boreal	Heavy	No+	No+	No+	Good
	1966	1967	1968	1969	1970
Black-capped	No (146)	No (76)	V. Good (1300)	Good (920)	No-Light (279)
Boreal	No (0)	No (0)	No (0)	Heavy (25)	No+ (0)
	1971	1972	1973	1974	1975
Black-capped	V. Heavy (4472)	No (111)	Good (921)	No (193)	Good (800+)
Boreal	Moderate (12)	No (0)	No+ (0)	No (0)	Good (6)

+: Few scattered birds reported south of breeding areas

(): Numbers of birds banded at MBO from 15 September to 15 November, 1975

New Light on Arctic Loons?

One would think that the plumages of endemic American birds are so thoroughly known that all markings useful for field identification have been noted. Yet, in the April, 1974, issue of The Auk, Anthony and Judith McIntyre describe a relatively conspicuous field mark that will aid experienced birders in resolving the thorny problem of distinguishing winter-plumaged Arctic and Common Loons.

Let's first look qualitatively at wintertime field marks attributed to both species.

	<u>Arctic</u>	<u>Common</u>
Bill size	short	long
Bill shape	thin, straight	stout, straight
Top of head)	lighter than back) dark gray
Back of neck)		
Back	gray) large
Size	small	

Unfortunately, all of these features are either essentially subjective or grade continuously from one species to the other. If you were to see simultaneously two loons: A having a straight bill half the size of B, an overall size two-thirds of B, and a topside lighter gray than B, you could conclude that A was an Arctic Loon and B a Common. In New England waters, however, such a fortuitous situation may never occur, and any suspect Arctic Loon will have to be judged in isolation. Is there a discrimination that does not depend upon direct comparison?

The McIntyres conclude that over 90 percent of the Common Loons in winter plumage appear to have a complete eye-ring, whereas the Arctics never do. The crucial areas are above the eye and between the eye and the bill. This difference is very well illustrated in Robbins' et al. Birds of North America and Pough's Audubon Water Bird Guide.

Therefore, if our hypothetical subject A had all of the markings attributed to it and no whitening above or in front of its eye, the case for Arctic Loon would be stronger. However, since no specimen has yet been collected in Massachusetts, a diagnostic photograph would be needed to remove this species from the state's hypothetical list. New field mark or not, the winter-plumaged Arctic Loon remains an extremely difficult species to identify in areas outside its normal range.

Leif J. Robinson