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ADDITIONAL NOTES ON THE DOVEKIE SPECIMEN FROM MANITOBA

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Introduction

The Dovekie (*Alle alle*), or Little Auk, is a high-arctic species that breeds in large numbers on Greenland, Svalbard (Spitzbergen), Franz Josef Land and Novaya Zemlya, with small numbers nesting on Iceland and Baffin Island.²⁰ Some nesting colonies, particularly in northwestern Greenland, are comprised of millions of individuals.²⁰ Small numbers of Dovekies also occur in the Bering Sea and adjacent waters and breeding is suspected at several sites.⁵ Although nothing is known of the seasonal movements of Dovekies in the Bering Sea, in the Atlantic Ocean, Dovekies winter offshore in low-arctic waters from Newfoundland to northern Norway and occur regularly off Nova Scotia and in the Gulf of Maine, northern Scotland and the North Sea.^{20, 31} From time to time, driven by food shortages caused in some years by severe storms, thousands of Dovekies move south of the normal winter range, in the western Atlantic Ocean, as far as Cuba and Madeira.¹³ During some of these movements many individuals are blown on to shore, resulting in "wrecks" of dead and weakened birds inland and along

the Atlantic coast of North America.^{7, 10, 18, 27, 28, 29, 34}

Seventeen Dovekies are known to have reached inland as far as the Great Lakes and surrounding region of North America.^{6, 12, 23, 24} One of these was collected north and west of the Great Lakes, along the eastern shore of Lake Winnipeg, in central Manitoba.^{1, 11, 16, 22} Additional details pertaining to this specimen are presented in this paper and the circumstances surrounding the occurrence of a Dovekie in Manitoba are examined.

The Dovekie

A Dovekie swimming weakly near the shore of Lake Winnipeg at Warren Landing (53°41'N, 97°52'W), 37 km southwest of Norway House, was collected by Constable James MacDonald on 7 November 1944. The specimen was sent to Gerald W. Malahar, acting supervisor of the Manitoba Department of Natural Resources, who forwarded it to Lawrence T.S. Norris-Elye, curator at the former Manitoba Provincial Museum.^{16, 22} The dried, unsexed specimen

was eventually deposited in the collection of the (now) Manitoba Museum (number 2303, original number 1219). The bird had been partially eaten by insects or another scavenger; the sternum and ribs on the left side, the left scapula and some vertebrae were exposed, but the plumage was otherwise in good condition (Fig. 1). The white throat sullied with sooty brown and the browner and slightly worn flight feathers (primaries, secondaries and wing coverts) revealed that the bird was in its first winter (Basic I) plumage. By contrast, older birds have even-aged, black feathers on the back and wings.⁴ The white spots above the eyes, typical of Dovekies of all ages, were perceptible only

as a tiny speck of white feathers above the right eye, as the eyelids of both eyes were shriveled and sunken. Descriptions and illustrations of plumages of nearly fledged nestlings and first-winter birds state or suggest that these spots are smaller than those of older birds.^{4, 10, 21}

This is the only record of the Dovekie for Manitoba. This specimen and two collected in Minnesota¹² and two from Wisconsin²⁴ are the westernmost inland records of the Dovekie in North America, although these localities and those of some of the other specimens taken in the eastern Great Lakes are almost equidistant from the nearest

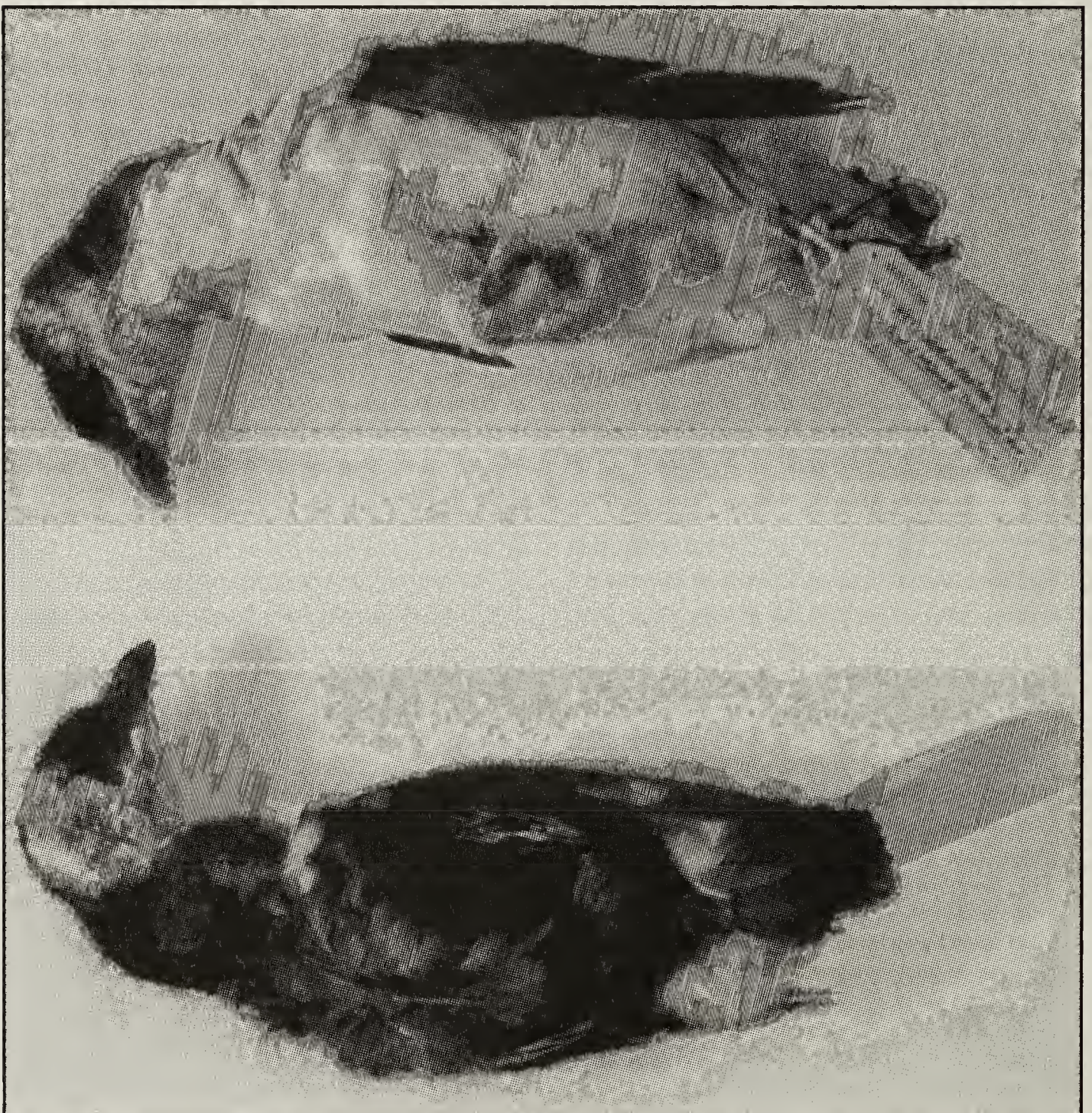


Figure 1. Dovekie (MM 2303) collected on 7 November 1944 near the shore of Lake Winnipeg, Warren Landing, Manitoba. Upper photograph, ventral view; lower, dorsal view.

marine waters, Hudson Bay and the Atlantic Ocean, respectively. But as discussed later, distance to the nearest marine habitat may be inconsequential when the origins of vagrants are considered. One record from South Dakota more than 100 years ago cannot be confirmed.³³ Dovekies have not been recorded off Churchill, in Hudson Bay, but offshore seabird surveys have not been conducted there. Other auks, however, such as Thick-billed Murres (*Uria lomvia*) and Common Murres (*U. aalge*), and, more frequently, Black Guillemots (*Cephus grylle*), have been recorded in Hudson Bay.¹⁵ Single specimens of the Black Guillemot have been collected inland near Churchill and in southern Manitoba¹⁹ and Ancient Murrelets (*Synthliboramphus antiquus*), inhabitants of the Pacific Ocean, have also been taken, one in Winnipeg and one on the southern basin of Lake Winnipeg.²⁶

Origin

We assume that this is a genuine vagrant and not an escapee or an individual whose passage was assisted in any way by humans. Rationale for this assumption has been presented for other auks found far out of range.¹⁷ As well, a Dovekie so far inland in North America is not without precedence. Spanning the years 1881 to 1998, at least 16 other individuals have been recorded, many also in November, on and beyond the Great Lakes (Carter and Sealy, unpublished review).

Two subspecies of the Dovekie are recognized on the basis of size. During the breeding season the nominate subspecies *alle* occurs on Baffin Island, Greenland, Iceland, and Svalbard²⁰, whereas the larger *polaris* occurs only in the western Russian Arctic, at Franz Josef Land and Novaya Zemlya.⁸ ³⁰ Although measurements of individuals from these populations overlap^{5, 30}, a recent multivariate analysis of external measurements of a large sample of Dovekies, consisting of museum specimens and individuals breeding on Svalbard and Franz Josef Land, confirmed the morphological

distinctness of the populations, with *alle* averaging smaller than *polaris* in all dimensions.³⁰ The Dovekie from Manitoba is referable to *alle* as its measurements (flattened wing, 114.5 mm; exposed culmen, 13.2 mm; tarsus diagonal, 20.9 mm) are at the lower end of the range for this subspecies.^{5, 30, 32}

The Manitoba specimen most likely originated from populations in the Atlantic Ocean, which number in the tens of millions, but the possibility remains that this bird originated from the small Bering Sea population. The Dovekie specimens from the Bering Sea have been referred to *alle*⁵, but overlap in measurements between populations of the two subspecies made subspecific identification problematic. The Pacific population numbers only in the hundreds, despite the fact that its presence has been recognized only since the 1960s.⁵ ¹⁰ Nevertheless, vagrants of other species of auks, some also with small breeding populations distributed in the north Pacific Ocean, have been recorded in the interior across North America, the Atlantic Ocean and in Europe.^{14, 17, 25, 26}

Vagrancy and route of travel

Gale-force southeasterly winds in the late fall and winter have been linked with some of the large wrecks of Dovekies in eastern North America.^{4, 7, 9, 10} Dovekies apparently withstand most storms at sea, but evidence suggests that in some years prolonged gales drive their primary food, planktonic crustaceans², to depths greater than Dovekies can reach. Weakened by such storm-induced food shortages or perhaps forced to make longer flights in search of food, Dovekies are prone to being blown inshore and inland.^{4, 7, 9, 10, 31} Complicating the picture, however, is the finding that not all large incursions have been linked exclusively with the conditions brought about by severe storms.³⁴

The available information suggests that the Dovekie recorded in Manitoba in early November 1944 was one such unexplained

occurrence. The weather in east-central Manitoba during five days prior to discovery of the bird was not characterized by unseasonably strong winds or precipitation (Environment Canada, Atmospheric Environment Service). Similarly, no direct link to severe weather conditions at the time and place of inland recovery was associated with a Dovekie shot in late October 1993 near Ottawa, Ontario.⁶ None of the other records of Dovekies recorded on or in the vicinity of the Great Lakes was from 1944 nor were any Dovekies reported during the years of the most celebrated wrecks on the Atlantic coast of North America, in November 1891 and November and December 1932.¹⁸ As well, none was recorded during the years that the other 12 smaller flights or wrecks occurred on the eastern seaboard since the mid-1800s.^{7,9}

Many interesting questions remain. First, was the Dovekie blown off course during migration or did it make a navigational error and end up in the interior of Manitoba instead of the waters off northern Newfoundland? Most migratory movements of Dovekies from the massive colonies in northwestern Greenland to the Labrador Sea and eastern Newfoundland waters continue through November and into December (W.A. Montevecchi, pers. comm.). Dovekies from other populations in the eastern Atlantic Ocean, however, winter off southwestern and southeastern Greenland, with birds banded on Svalbard and recovered off southwestern Greenland between November and January.^{3,31}

Second, did the Dovekie fly, possibly assisted by wind, westward along the Gulf of St. Lawrence, through the Great Lakes, to Lake Winnipeg, or did it arrive directly from the high arctic, possibly via Hudson Bay, or overland from the Bering Sea or adjacent waters? A synthesis of the other Dovekie records around the Great Lakes in relation to weather records and the major and minor wrecks over the past 150 years may help shed light on this subject.

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