

CONFIRMED WINTER RESIDENCY OF COMMON GOLDENEYE AND COMMON MERGANSER IN THE NORTHWEST TERRITORIES.

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On 12 December 1990 one male Common Goldeneye was at Jackfish Lake in Yellowknife (62°28'N, 114°22'W; Fig. 1), Northwest Territories (NWT), where effluents from a diesel power plant maintain two patches (ca. 100 m²) of open water throughout the winter. The bird remained on this lake, which I visited every two to three days, until 23 February 1991.

Thus it spent more than two winter months at Yellowknife.

I went to the Tartan Rapids of the Yellowknife River, 15 km northeast of Jackfish Lake, on 3 March 1991 to look for the goldeneye. This ice-free area includes the rapids (ca. 30 x 100 m), and a large pool below the rapids that is often more than 300 m

Table 1. SOME RECENT WINTER SIGHTINGS OF WATERBIRDS IN ICE-FREE, INLAND FRESHWATER, N.W.T.

Source	Species and Number	Location (Figure 1), Date and Comment
R. Bromley (pers. comm.)	Common Merganser, 1 at least.	Yellowknife River, below "Con Hydro" (62° 42'N 114° 20'W), where open water occurs year-round, one winter month in the 1960s.
W. Carpenter (pers. obs.)	Unident. diving ducks, a few.	Cameron River (62° 50'N, 114° 10'W), February 1972.
Scotter et al. (1985)	American Dipper, 2.	Wild Mint Springs (ca. 61° 30'N, 126° 30' N), Nahanni National Park Reserve, 25 February 1977. Suspected to be year-round residents.
	Mallard, 2.	Same location, date and comment.
K. Poole (pers. obs.)	Common Merganser, 1.	Yellowknife River, below Tartan Rapids (62° 41'N, 114° 15'W), ca. 10 March 1984 or 1985.
J. Sirois (pers. obs.)	Mallard, 1.	Yellowknife River, Tartan Rapids, 26 January 1987.
Sirois (1991)	Black Guillemot, 1.	Cameron River (62° 27'N, 114° 22'W), 26 November 1988.
	Red-necked Grebe, 1.	Offshore, Great Slave Lake (61° 55'N, 114° 20'W) where water had not frozen yet, 15 December 1988.
G. Stenhouse (pers. obs.)	Mallard, 20.	Walker Creek Lake (65° 20'N, 128° 30'W), January 1988, where springs keep water open year-round.
D. Dubé (pers. obs.)	Unident. ducks, 6.	Camsel River (65° 35'N, 117°45'N), 17 January 1989.
J.Sirois (pers.obs.)	Lesser Scaup, 1.	Jackfish Lake in Yellowknife, 12-16 December 1990.



Figure 1. Southwestern Northwest Territories: rivers and other sites with ice-free water throughout the winter (Source: F.M. Conly, Environment Canada, Yellowknife).

long. One male Common Merganser was there.

I returned to the Tartan Rapids eight times through 18 April. During each visit, the merganser was either loafing, sleeping, diving, or preening its feathers. On a subsequent visit, on 20 April, three more Common Mergansers, presumably newly arrived spring migrants, were there.

Thus a Common Merganser spent at least seven late-winter weeks at the Tartan Rapids during March and April 1991.

To my knowledge, these are the first confirmed records of winter residency for these species in the NWT. However, these are not the first winter sightings of waterbirds in NWT freshwaters (Table 1). Other ducks,



Tartan Rapids of the Yellowknife River, March 1991

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as well as some gulls and auks, are known or suspected to winter in polynyas and other ice-free marine waters.^{1,4,9}

As far as I know, no duck has been reported during the winter in NWT lakes or rivers since April 1991 but it is possible that some have wintered there again as ice-free habitat is available at several sites. Open water occurs in more than 30 rivers or lakes during the winter (Fig. 1) and often at numerous sites along the same river.

I suspect that waterbirds winter regularly in NWT, particularly in the Mackenzie Mountains (Fig. 1), where fast-moving rivers and springs provide reliable ice-free water year-round. This is suggested by the numerous winter records of ducks in the Yukon (P. Sinclair, unpubl. data) where habitat is similar to that of the Mackenzie Mountains and Common Merganser and Common Goldeneye are confirmed winter residents.¹³

Confirmation of wintering by Common Goldeneye and Common Merganser in southwestern NWT is not surprising in light of the numerous winter sightings and confirmed and suspected winter residency records of these two species in Saskatchewan and Alberta.^{6,7,8,10,15} I suspect that waterbirds will winter more frequently in NWT freshwaters in the future. Climate-warming trends in western NWT have shown the greatest overall increase (1.7°C) in Canada in the last century.⁵ This should lengthen the ice-free season, as documented elsewhere, and result in larger amounts of ice-free water where it already occurs.¹¹

1990 was the warmest year on record worldwide, and southern Canada and most of the U.S. were among the areas where this was most pronounced.² Whether this favoured the winter residency of these two ducks at Yellowknife is unclear. Locally, the 1990-1991 winter was not unusually warm: November and

December 1990 were colder than normal (mean daily T°C: -20.6 and -29.1, respectively); January, February and April 1991 were slightly warmer (-26.9, -23.8, and -4.8, respectively); and temperatures were normal in March 1991 (Environment Canada, unpub. data).

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Some of the harshest deserts of the world are home to unique ensembles of insects, lizards and flowering plants. In the Namib of southwestern Africa, beetles use leg tips expanded into oarlike sand-shoes to swim down through the shifting dunes in search of dried vegetable matter. Others, the swiftest runners of the insect world, race over the baking hot surface on bizarre stilt legs. *E.O. Wilson, The diversity of life. W.W. Norton and Company, New York.*