The Whistling Swan in James Bay and the Southern Region of Hudson Bay¹

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ABSTRACT. The whistling swan bred and moulted in the vicinity of trading posts on the south shores of Hudson Bay during the early years of the fur trade. They were extirpated toward the end of the nineteenth century, but some are returning under conditions of protection. They may be seen regularly during migration in the spring and fall on the south shores of Hudson Bay and on the shores of James Bay. In recent years they have bred on Cape Churchill, and three broods have been seen near the Ontario coast of Hudson Bay. Breeding swans have also been observed in western Ungava. The species appears to be reoccupying its former range.

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RESUMÉ. Le cygne siffleur dans la région du sud de la baie de James et de la mer d'Hudson. Dans les premières années de la traite des fourrures, les cygnes siffleurs venaient encore se reproduire et muer au voisinage des postes de traite des rives méridionales de la mer d'Hudson. Ils ont été extirpés de la région vers la fin du dix-neuvième siècle, mais quelques-uns reviennent, maintenant qu'ils sont protégés. Au cours des migrations printanières et automnales, on les voit régulièrement sur les rives méridionales de la mer d'Hudson et sur les rives de la baie de James. Ces dernières années, ils se reproduisent au cap Churchill et l'on a vu trois nichées près de la rive ontarienne de la mer d'Hudson. On a aussi observé des cygnes siffleurs nichant dans l'Ungava occidental. L'espèce semble en train de réoccuper son ancienne aire.

РЕЗЮМЕ. Американский лебедь в южной части залива Джемса и в Гудзоновом заливе. В период начала торговли пушниной американский лебедь размножался и линял вблизи факторий, расположенных на южных берегах Гудзонова залива. К концу девятнадцатого века этот вид был истреблен, но после установления охранных мер отдельные особи стали возвращаться на прежние места. Теперь этих птиц можно видеть регулярно в период весенней и осенней миграции на южных берегах Гудзонова залива и по берегам залива Джемса. В последние годы они начали выводить птенцов на мысе Черчилля, а три стаи были замечены недалеко от лежащей в Онтарио части побережья Гудзонова залива. В период размножения лебедь наблюдался также в западной части Унгавы. Есть основания полагать, что данный вид возвращается в прежнюю область распространения.

During the colonization of North America by Europeans, the distribution of many species of birds changed radically. Destruction of essential range during and since that period precludes the return of some species, but others which disappeared because of over-exploitation have a chance under a regime of protection and management to regain their former status.

The whistling swan Olor columbianus, which breeds in the Arctic, seems to be one of the latter category.

During the early days of the fur trade in the Hudson Bay region, whistling swans were recorded as having been seen in the vicinity of trading posts. Isham recognized two species of swans — "great" and "small" — during his term of

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service at Churchill and York Factory (see Rich and Johnson 1949). Hearne (1795) who served at Fort Prince of Wales, Churchill and York Factory, wrote that of the two species of swan "the smaller sort are more frequent near the sea coast, but by no means plentiful, and are most frequently seen in pairs . . . both species usually breed on the islands which are in lakes". Later in his account he mentions that "in their moulting state they are not easily taken, as their large feet, with the assistance of their wings, enable them to run on the surface of the water as fast as an Indian canoe can be paddled, and therefore they are always obliged to be shot; for by diving and other manoeuvres they render it impossible to take them by hand." Clearly then, whistling swans bred and moulted near the Hudson Bay coast.

Andrew Graham, whose service on Hudson Bay extended from 1749 to 1774, was stationed at Churchill, York Factory and Fort Severn. He records that "they breed along the coast; lay four eggs each, and have their young charges ready for flight so that they may all journey in autumn to the southward. They are less than those seen in Britain; but their plumage, etc. are the same." (See Williams and Glover 1969). His observation that the breeding swans of the coast were smaller than the swans of Britain (presumably the mute swan *Cygnus olor*) supports the view that his birds were whistling swans.

Nearly 100 years later Bell (1882) reported that "the whistling swan breeds near Churchill and on the islands towards the eastern side of Hudson's Bay. Their skins constitute an article of trade, but only a small number of them are collected annually."

Toward the end of the nineteenth century the whistling swan must have disappeared as a breeding bird along the southwest and south coasts of Hudson Bay. Barnston (1860) makes no reference to breeding in the area, although he notes nesting at Norway House and Eastmain, which if it could be substantiated, was probably that of trumpeter swans *Olor buccinator*. Banko (1960) was of the opinion that the Eastmain record referred to trumpeter swans. It is unlikely that whistling swans would nest in the Eastmain area, since there is no tundra habitat available there. Migrants, however, were still abundant on the western shores of Hudson Bay, for Preble and Merriam (1902) report that great numbers visited that area in the spring and fall. They mention that the broad expanse of the Churchill River near its mouth was a favourite place of resort.

Turner (1885) notes that the whistling swan occasionally straggled over the James Bay and Labrador areas, though he provided no specific records. Todd (1963) summarizes the discoveries, by Murie in 1915 and Twomey in 1938, of whistling swans breeding on the Belcher Islands. Manning (1949) records the breeding and moulting of the species on Mansel Island.

Taverner and Sutton (1934) state that the whistling swan probably passed regularly through the Churchill area, though much more rarely than previously.

REPORTS BY PROVINCE

A waterfowl survey program involving the present writer and staff of the Ontario Ministry of Natural Resources (formerly Department of Lands and Forests) was started in 1956. It covered the Patricia portion of Ontario and Akimiski Island, Northwest Territories. H. C. Hanson of the Illinois Natural History Survey joined the survey for ten years between 1958 and 1969. The survey was extended into Manitoba during the years 1963-66 and 1968-69 in cooperation with E. F. Bossenmaier and staff of the Manitoba Department of Mines, Resources and Environmental Management. Spring and fall surveys in Ontario, Manitoba and Quebec were started in 1972 in cooperation with S. Curtis and staff of the Canadian Wildlife Service.

A statistical summary is presented in Table 1.

TABLE 1. Total numbers of whistling swans seen on the James Bay coasts of Ontario, Quebec and the Northwest Territories, and the Hudson Bay coasts of Ontario and Manitoba, by sector of coast and by month.

Sector of Coast	May	June	July	Sept.	Oct.
Northwest Territories					
Akimiski Island	5	—			—
Quebec					
Cape Louis XIV to Ontario- Quebec border	_	-	_	6	2
Ontario					
Ontario-Quebec border to Fort Albany	1	1		14	89
Fort Albany to Cape Henrietta Maria	37	23		3	8
Cape Henrietta Maria to mouth of Sutton River	2	42	15	7	144
Mouth of Sutton River to mouth of Winisk River	21	4		_	27
Mouth of Winisk River to Fort Severn		-	1	23	70
Fort Severn to mouth of Black Duck River	_	_	9	13	59
Manitoba					
Mouth of Black Duck River to Rupert Creek	37	_	2		
Rupert Creek to Churchill		_	39		
Churchill to Manitoba-NWT border	· <u> </u>		40		
Total swans seen	103	70	106	66	399

NOTE: Only one survey flight was made in August, when no swans were seen.

Ontario

In the course of 19 years of survey flights no swans were ever seen more than 20 km from the coast. Band recoveries and reports from residents, however, indicate that in spring and fall swans do cross the interior of northern Ontario.

In Fig. 1 and Fig. 2 are indicated the localities where swans were observed during the flights and from the ground along the coasts of James Bay and Hudson Bay (Ontario portion) respectively.

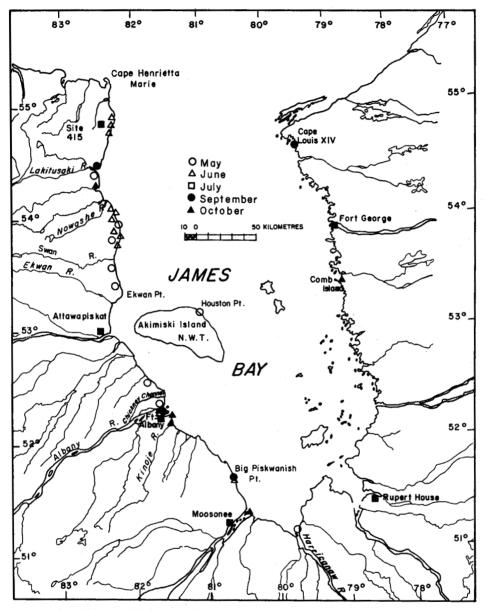


FIG. 1. Localities, coded by month, at which whistling swans were seen in James Bay.

No survey flights were carried out in April, but it is likely that swans do not reach James Bay in that month. The earliest record the present author has is that of four birds seen 55 km north of the Albany River mouth on 5 May 1972. These were in fact the only swans seen on survey flights on 4-5 May 1972 and 4 May 1973 which covered those parts of the James Bay coasts of Ontario inhabitable by waterfowl. Waters along the Hudson Bay coast are completely frozen at that time and were, therefore, not surveyed.

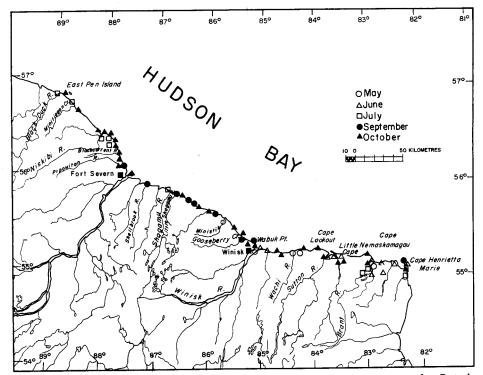


FIG. 2. Localities, coded by month, at which whistling swans were seen on the Ontario coast of Hudson Bay.

On the flights of 18-19 May 1972, 19-21 May 1973 and 23-26 May 1974, swans were well distributed along the James Bay coast and the vanguard had reached the south shore of Hudson Bay.

After the first week of June, and throughout July, all but one of the swans seen were on the Hudson Bay coast. The exception was a single bird seen at Pisquanish Point on 15 June 1965.

On 27 June 1964, two swans were located on a pond about 8 km east of the mouth of the Sutton River and within 1.5 km of the coast. One of these birds was sitting on an island and refused to move even when it was flown over at low altitude. Fog prevented a check of this location in the July flight of that year, but it is possible that the two swans were a nesting pair.

On 22 July 1973, on a small lake about 32 km east of the Sutton River ($55^{\circ}05'N$, $83^{\circ}15'W$), a brood consisting of two adults and two cygnets were seen and photographed. This appears to constitute the first breeding record for whistling swans in Ontario in modern times.

In 1974, Mr. M. Hunter, the chief of the Winisk band of Indians, reported a brood on the Kinusheo River about 25 km west of the place where the 1973 breeding record was taken; and on 26 July 1974, Dr. Paul Prevett and his party from the Ontario Ministry of Natural Resources found a brood of two adults and two cygnets about 16 km southeast of the mouth of the Niskibi River (55°22'N, 88°00'W).

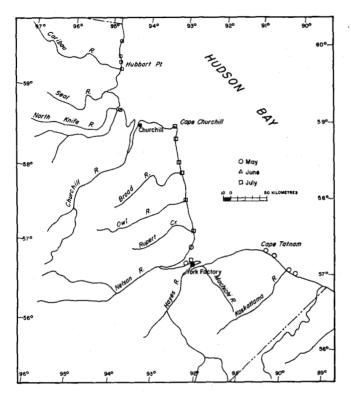


FIG. 3. Localities, coded by month, at which whistling swans were seen on the Manitoba coast of Hudson Bay.

Manitoba

The first definite recent breeding record for whistling swans in Manitoba was recorded by Mr. and Mrs. I. H. Smith on 5 August 1959, when they found an adult with one cygnet 48 km up the Churchill River from the mouth (see Jehl and Smith 1970).

On the first aerial waterfowl survey on 18 July 1962, a pair of swans with four cygnets were seen on a small lake about 16 km south of Cape Churchill. On 18 July 1965, a brood of two was again seen in the same general area. Additional observations of non-breeding swans seen in Manitoba are indicated in Fig. 3.

Pakulak and Littlefield (1969) reported 25 adult swans and eight nests on Cape Churchill in 1968. They measured the eggs in two nests and found that the clutch of one had been destroyed by an arctic fox *Alopex lagopus*. Six broods were later found, five of which contained three, and one with four cygnets. They pointed out that further studies will have to determine if this local population is decreasing, static or increasing. Their observations in 1968 suggest that there had been an increase since the first aerial survey in 1962.

Quebec

Todd (1963) has summarized the available data on whistling swans on the Quebec side of Hudson Bay. At the time he wrote there seemed to be no record substantiated by a specimen in this century. Since then, Heyland *et al.* (1970) recorded 24 broods and an additional 19 pairs without young from 1966 to 1968.

They concluded that the number of breeding swans in New Quebec is increasing. It is reasonable to expect that some birds of this population would move along the east coast of Hudson and James Bays on migration. It is not surprising then that on 19 September 1972, six swans were seen on a lake near the sea about 23 km south of Cape Louis XIV, and on 20 October 1973 there were two swans near Comb Island.

The protection afforded whistling swans in eastern North America since the ratification of the Migratory Bird Treaty seems to have made possible a steady increase in their numbers in the southern Hudson Bay region. It is evident that a reoccupation of breeding range from which this species was extirpated is now taking place.

ACKNOWLEDGEMENTS

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