

Update on the shorebird colour-marking program James Bay, Canada

In 1977, 13,536 shorebirds of 25 species were captured, bringing the total number of shorebirds captured in James Bay since the operation began to 30,263. Of the 13,536, 12,311 were captured at North Point and 1,225 at Longridge Point. Up to 31 January 1978, reports of 615 'bird days' of sightings had been received, involving 8 species of shorebirds. One 'bird day' was counted for each day a colour-marked bird was sighted in any locality. In some cases, it was not possible to distinguish whether repeated sightings in a given area may have represented the same individual or different birds; results suggested that stopover periods varied from a few days to several weeks.

Semipalmated Sandpipers were again the most numerous bird captured, comprising 11,075 of the total of 13,536 banded. Many birds (367) were captured from previous years' banding operations,

and comparison of the results at North Point and Longridge indicated that the same birds tended to return to preferred local areas on the coast from year to year. Twelve birds were captured that had been banded elsewhere, including 6 from the shorebird marking program being carried out in Surinam, South America, by Arie L. Spaans. At least 5 other records of South American birds were obtained through sightings of colour-banded individuals.

Up to 31 January 1978, 545 'bird days' of sightings of Semipalmated Sandpipers had been received. The distribution of sightings was generally similar to that observed in 1976, showing a wide dispersal of Semipalmated Sandpipers to the East Coast, ranging from the Gulf of St. Lawrence south to Georgia. Many reports came from the Upper Bay of Fundy, the coastline of Massachusetts including Cape Cod,

Table 1. Totals of shorebirds banded in James Bay, 1977 and previous years.

	1977					Total	Previous years	Grand total			
	NR	Adult		C	Total				NR	Juvenile	Total
		RT	RC								
Semipalmated Plover	111	16	1	—	128	141	38/1*	180	308	205	513
Killdeer	2	1	—	—	3	12	1	13	16	4	20
American Golden Plover	1	—	—	—	1	2	—	2	3	4	7
Black-bellied Plover	1	—	—	—	1	—	—	—	1	8	9
Ruddy Turnstone	60	—	3	1	64	49	1	50	114	141	255
Common Snipe	2	—	—	—	2	24	—	24	26	19	45
Whimbrel	1	—	—	—	1	—	—	—	1	—	1
Spotted Sandpiper	—	—	—	—	—	14	—	14	14	8	22
Solitary Sandpiper	5	—	—	—	5	4	4	8	13	3	16
Greater Yellowlegs	15	—	—	—	15	15	—	15	30	14	44
Lesser Yellowlegs	32	—	—	—	32	50	—	50	82	106	188
Red Knot	10	—	—	—	10	53	—	53	63	87	150
Pectoral Sandpiper	51	2	—	—	53	7	—	7	60	130	190
White-rumped Sandpiper	534	30	30	—	594	5	—	5	599	1,093	1,692
Baird's Sandpiper	—	—	—	—	—	—	—	—	—	1	1
Least Sandpiper	53	2	1	—	56	622	50	672	728	433	1,161
Dunlin	229	12	4	—	245	35	—	35	280	624	904
Short-billed Dowitcher	2	—	—	—	2	14	1	15	17	8	25
Stilt Sandpiper	—	—	—	—	—	2	—	2	2	1	3
Semipalmated Sandpiper	5,722	764	327	12	6,825	3,676	571/3*	4,250	11,075	13,634	24,709
Buff-breasted Sandpiper	—	—	—	—	—	4	—	4	4	2	6
Marbled Godwit	—	—	—	—	—	1	—	1	1	8	9
Hudsonian Godwit	13	—	1	—	14	2	—	2	16	10	26
Sanderling	67	1	—	—	68	2	—	2	70	144	214
Wilson's Phalarope	—	—	—	—	—	1	1	2	2	4	6
Northern Phalarope	2	—	—	—	2	9	—	9	11	36	47
	6,913	828	367	13	8,121	4,744	667/4*	5,415	13,536	16,727	30,263

NR: Newly ringed

RT: Retrap, same season, same place

RC: Recapture, previous year, same place

C: Control, bird banded elsewhere (other bander), >5 km away

*: Second number indicates records of movements between North Point and Longridge Point

and areas around Long Island, NY; significant numbers of sightings were also reported from the coasts of Maine and New Jersey. The large numbers of sightings around the Upper Bay of Fundy result partly from regular coverage by participants in the Canadian Wildlife Service Maritimes Shorebird Survey scheme: at St. Mary's Point, New Brunswick, colour-dyed birds were seen on most days when counts were made between mid-July and mid-September, with a maximum of 8 dyed birds seen together on 30 August 1977. Similar considerations apply to other areas which are covered regularly by birdwatchers (e.g. in Massachusetts). However, those shorebird counts obtained through the International Shorebird Survey scheme, organized jointly by the Canadian Wildlife Service and Manomet Bird Observatory, MA, as well as the Maritimes scheme, have demonstrated that these areas are indeed of particular importance for Semipalmated Sandpipers (Morrison, 1977a) and the large numbers of sightings reflect this fact.

There was again little evidence that birds passing through James Bay in the autumn used interior 'flyways' during their southward migration. Sightings of birds from the St. Lawrence valley and Great Lakes probably involved individuals which had broken their flight between James Bay and major stopover areas on the Atlantic seaboard.

Farther south, reports of James Bay birds came from Antigua, Venezuela, and Guyana, while on Bermuda, two birds were reported, one of which was considered to be present from 10-24 September 1977.

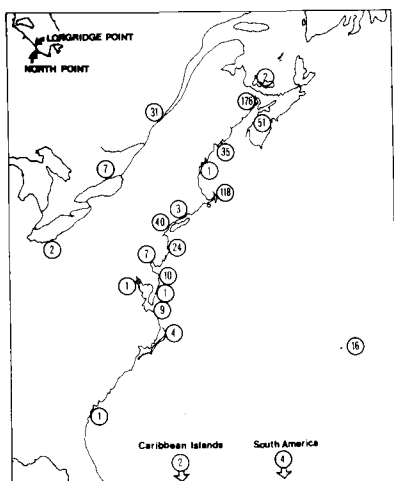


Figure 2. 'Bird days' of sightings of Semipalmated Sandpipers colour-marked in James Bay during July and August 1977: reports received to 31 January 1978.

The picture currently emerging from the banding, colour-marking, and measurement studies is that populations of Semipalmated Sandpipers from different parts of the Arctic breeding range differ in their routes, timing, and strategy of migration (Harrington and Morrison, in preparation). Birds passing through James Bay include many from central and western Arctic breeding areas. After dispersal to the East Coast, present evidence suggests that most birds make an overseas flight to South America or the Caribbean, rather than moving down the East Coast. This fact underlines the critical importance of East Coast estuaries as refueling stops for birds about to make a long trans-ocean flight.

Other species—Patterns of sightings of other species were generally similar in 1976 and 1977, and the Sanderling and Semipalmated Plover were again notable for the large number of reports received relative to the number of dyed birds released, presumably because both are conspicuous and occur in habitats where they are likely to be observed. Two Sanderling reports were of particular interest. The first was of a bird reported at New Haven, CT, on 31 July 1977, which (banding records indicate) would have been banded 2 or 5 days previously, at either Longridge Point or at North Point, respectively. The second bird, reported as being present on Brier Island, Nova Scotia, between 29 August and 4 September, was identified from its dye pattern and colour bands as being the only juvenile bird that had been banded at Longridge Point — two weeks earlier on 16 August 1977. Reports again indicated that Sanderlings dispersed from southern James Bay to the Middle Atlantic Seaboard. Forty bird days of sightings resulted from 253 marked Semipalmated Plovers — Massachusetts again having many sightings. Information from the colour-band arrangement of one Semipalmated Plover reported on Bonaire, Netherlands Antilles, from 29–31 August 1977, indicated that a minimum of 9 and a maximum of 18 days had elapsed since it had been banded in James Bay.

Notable again was the absence of reports of dyed White-rumped Sandpipers, despite the substantial number captured (599). This presumably reflects the relatively northerly and easterly passage of the species through eastern Canada, where few would likely to be seen. ◊

(Excerpted from a Contributor's Progress Report written by and with permission of R.I.G. Morrison of the Canadian Wildlife Service, Ottawa, Ontario, Canada.)