

Occurrences of duck hybrids at James Bay.—Wing collections in 1973 and 1974 sampling approximately 95% of those ducks shot by hunters in the vicinity of the Moose River estuary (51° 20' N, 80° 30' W) provided information on the frequency of hybridization (Table 1). Although those ducks shot in the fall in James Bay may not be positively assigned to a specific breeding area, it is likely that a substantial number of Black Ducks (*Anas rubripes*), Mallards (*A. platyrhynchos*), and Pintails (*A. acuta*) nest in the Hudson-James Bay lowlands. Thus the rates of hybridization may apply generally to breeding populations in that region.

The frequency of occurrence of Mallard × Black Duck hybrids is of particular interest. Unfortunately, it is not entirely possible to distinguish all Mallard × Black Duck hybrids and thus determine accurately, based upon wing plumage criteria, the degree of hybridization in nature. The observed frequency of 2.6% exceeds significantly the hybridization frequencies reported by Johnsgard (1967, Amer. Midl. Naturalist 77: 53) in those states south and east of the Great Lakes during the period 1960–64. Nonetheless hybrids comprised 8.1% of the Blacks and Mallards banded on the Massachusetts coast during the winters of 1971–74 and 12.9% of the birds banded inland (Heusmann 1974, Wildl. Soc. Bull 2: 174).

Banding data suggest that Mallard and Black Ducks staging on the James Bay coast of Ontario winter in both the Mississippi and Atlantic Flyways where, in the late 1950's, Mallards outnumbered Blacks six to one (Johnsgard 1959, unpublished Ph.D. dissertation, Ithaca, New York, Cornell Univ.). Increased frequencies of occurrence of hybridization might reflect increasing Mallard and decreasing Black Duck populations in those regions from which the individuals that stage on James Bay are derived. In the absence of specific breeding data, the relatively high frequency of hybrid occurrence at James Bay suggests that Mallards, in addition to being adapted to survive in agricultural and heavily populated habitats, are also able to survive and breed in significant numbers in the Hudson and James Bay lowlands. Data collected by staff of the Ontario Ministry of Natural Resources in 1960 indicate that the frequency of occurrence of Mallard × Black hybrids in southwestern Ontario was about 2.1% (2185 wings examined) of the combined total. Thus the observed ratio at James Bay is consistent with ratios from southern Ontario and may only reflect declining Black Duck population rather than significant

TABLE 1
FREQUENCY OF OCCURRENCE OF WINGS OF MAJOR SPECIES, MOOSE RIVER,
JAMES BAY

	1973	1974	Total
Normal wings			
Black Duck	113	196	309
Mallard	378	797	1175
Pintail	378	826	1204
American Wigeon (<i>Anas americana</i>)	41	109	150
Hybrid wings			
Black Duck × Pintail	—	1	1
Mallard × Black Duck	7	22	29
Mallard × Pintail	—	1	1
American Wigeon × Pintail	2	1	3

differences in the operation of selective mechanisms related to pair formation for those birds breeding in northern Ontario.

On 1 October 1974 an apparent Pintail \times Black Duck hybrid (probably immature female) was shot by an unknown hunter approximately 8 miles north of Moosonee, Ontario (51° 20' N, 80° 30' W). The specimen was not kept but one wing was removed and preserved during routine data collection at the West River Waterfowl Check Station. The wing shows plumage characteristics intermediate between the two species. Whereas the under surface was almost indistinguishable from that of a normal Pintail, the upper surface vaguely resembled that of a Black Duck. The speculum was purple and poorly defined. The secondary coverts closely resembled those of an immature Black Duck. The remainder of the upper surface was uniform dark gray-brown. The measurements conformed to those of immature Pintail wings at the Royal Ontario Museum. Check Station staff reported that the bird appeared similar to a normal wild Pintail.

This is the first record of a wild-taken hybrid between these two species. A captive hybrid has been reported (Sibley 1957, *Condor* 59: 166). Although isolating mechanisms (e.g. distinct courtship displays), normally prevent the frequent formation of mixed pairs, hybridization among the Anatinae has been frequently reported for nearctic waterfowl (Sibley *ibid.*).

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An unusual foraging behavior of Tree Sparrows.—On 13 February 1975 I watched three Tree Sparrows (*Spizella arborea*) forage in an unusual manner. A large flock of Tree Sparrows, Dark-eyed Juncos (*Junco hyemalis*), and Black-capped Chickadees (*Parus atricapillus*) were feeding at a forest-field edge in Adair County, Missouri. Snow covered the ground, and air temperature was -8°C .

The Tree Sparrows perched on wild bergamot (*Monarda fistulosa*) stems and beat their wings rapidly in a manner unlike that used to maintain balance. The birds also appeared to bounce up and down by flexing their legs. After about 2 sec of this behavior the birds dropped to the snow under the plant where they rapidly ate the seeds they had dislodged. I shook some stems over clear snow and found the fallen seeds numbered about 10/ft². The dark *Monarda* seeds were highly visible against the snow despite their small size (dry weight = 0.0003 g). The seeds lie in calyces about 1 cm long clustered in a head where Tree Sparrows could not reach them without this special technique.—PETER GOLDMAN, *Division of Science, Northeast Missouri State University, Kirksville, Missouri 63501*. Accepted 17 Apr. 75.

Scissor-tailed Flycatcher breeding in southwestern Indiana.—On 2 July 1974 Theroff saw a single Scissor-tailed Flycatcher (*Muscivora forficata*) 5 miles south of Montgomery, Daviess County, in the southwestern part of Indiana. We made a further check of the area on 3 July 1974, and to our surprise found a pair of Scissor-tailed Flycatchers. Closer inspection revealed the pair actively foraging over mowed hay and soybean fields and returning consistently to a large isolated sycamore tree in a cornfield.