

on 2 February, behaving as a mated pair. She took possession of nest 1 (about 80 m away from the nesting box); copulation was seen on 6 and 7 February, and incubation started on 15 February. This nest was also successful, and the two nestlings were attended by Orange, Pink-Green, and an unmarked helper.

Without marked individuals no cases of successive polyandry are likely to be detected. In all the other nests the available evidence suggests monogamy, though the pair bond seems to be weak in this species—a previous observation in 1969 supports the idea that some females may change mates when they renest. However, even in a favorable place such as the study area few female Bay-wings have both time and enough available nest sites to raise more than one brood in a season.

I am grateful to H. Friedmann for helpful comments on my work.—ROSENDO M. FRAGA, *Callao 1502, Buenos Aires, Argentina*. Accepted 21 May 71.

Postbreeding assemblies of Ring-necked Ducks in eastern Nova Scotia.—

Molting grounds Ring-necked Ducks (*Aythya collaris*) use in the northeast are poorly known. Mendall (The Ring-necked Duck in the northeast, Univ. Maine Studies, No. 73, 1958; pp. 147–148) cited only one area used regularly by appreciable numbers, the Musquash Island lagoon in the St. John River, New Brunswick. Mendall suggests that “most of the resident drakes of Maine may travel many hundreds of miles, perhaps even beyond the known limits of the breeding range” to molt, as habitat similar to Musquash Island is lacking in northern Maine and New Brunswick. Postbreeding flocks of Ring-necked Ducks were found regularly in two areas on Cape Breton Island, Nova Scotia, from 1960 to 1970. My notes for 1960 to 1965 and those of Simon Lunn, an ornithology student the Canadian Wildlife Service employed to band ducks there later, may help to clarify this little-studied phenomenon.

The major concentration was at McCormack (46° 09' N, 61° 16' W), near the northwest corner of Lake Ainslie. The flocks usually frequented the shallow bays beside the creek mouth, but were sometimes seen on a pond $\frac{3}{4}$ mile to the west. The lake water is fresh and fairly clear, with a sandy bottom. In summer the bays are filled with open beds of bulrush (*Scirpus acutus*), and near the shore the surface is partly covered with cow lilies (*Nuphar variegatum*). Other aquatic plants included military rush (*Juncus militaris*) and pondweeds (*Potamogeton natans* and *P. gramineus*). The boggy pond is largely surrounded by a sedge meadow, and the water is dark. The only emergent vegetation is sedges (*Carex* spp.) along the shores, and cow lily and bladderwort (*Utricularia vulgare*) are the most obvious aquatic plants. A narrow brook with barely detectable flow meanders through an alder swamp between the pond and the bay.

The second area comprises three ponds near the seashore between Judique and Port Hood (45° 54–57' N, 61° 30–31' W). Bulrush and narrow-leaved cattail (*Typha angustifolia*) border the north side of the middle pond, but the sparse emergent growth elsewhere is limited to the shorelines. Sago pondweed (*Potamogeton pectinatus*) grows abundantly in all three ponds except adjacent to the sea beach, where seepage of salt water through the gravel maintains more saline conditions.

Use of these areas by Ring-necked Ducks follows a pattern similar to that described by Mendall (op. cit.) as shown in Table 1. The flocks were always wary, and the noise of the outboard motor used in 1968–70 so disturbed them that complete counts were seldom possible. Males always predominated, but not all birds could be classified as to sex. Flightless birds were noted on a few visits, all between 30 July and 14 August, but most birds seen on all visits were able to fly.

Flocks of Ring-necked Ducks seen in these and other areas in late September and

TABLE 1
COUNTS OF RING-NECKED DUCKS

	At McCormack	At Judique ponds
Earliest	23 June 1960 (61 ♂ ♂)	27 June 1963 (12 ♂ ♂)
Peak counts	20 July 1965 (90+)	28 June 1961 (26 ♂ ♂)
	30 July 1962 (130)	4 August 1963 (24)
	14 August 1961 (90+)	14 August 1962 (28)
Latest	6 September 1968 (25 ♂ ♂)	8 September 1970 (21 ♂ ♂)

early October were presumably migrants. At that season flocks often occurred in areas where only females and broods had been seen in July and August.

I believe that the birds in these postbreeding flocks are mostly from nearby locales. My spring counts on six waterfowl breeding grounds within 25 miles of these molting areas in 1961–1963 averaged 44 pairs and 21 extra drakes, while the summer average was 27 broods, including those from renests. If all adults except the successful brood females joined postbreeding flocks by mid-July, these six breeding grounds could have supplied on average 65 drakes and 17 females each year, when the flocks averaged about 125 birds (100 at McCormack, 25 at Judique ponds). As these breeding grounds made up only a small fraction, albeit a productive one, of the potential Ring-necked Duck habitat in eastern Nova Scotia, only local birds may have been present in the flocks.

Although the McCormack bays are somewhat similar to the habitat of Musquash Island, the use of the bog pond upstream and of the barrier beach ponds at Judique indicates that molting Ring-necked Ducks may occupy widely different types of habitat, so long as seclusion and adequate food are assured.—ANTHONY J. ERSKINE, *Canadian Wildlife Service, Ottawa, Ontario, Canada*. Accepted 14 May 71.

Nest-entrance modification in the nuthatches.—The extremely interesting note by Kilham (Auk, 88: 175, 1971) on the wiping of the nest entrance with crushed insects by the White-breasted Nuthatch (*Sitta carolinensis*) provides another example of the nest-entrance modification by New World nuthatches. This behavior of the White-breasted Nuthatch is evidently rare (or overlooked?) for I have seen but a single other note on comparable behavior by this species in the literature. F. H. Allen (in Bent, U. S. Natl. Mus. Bull. 195: 3, 1948) records both sexes of a pair about birdhouse spending much time wiping the bill from side to side. A second American species, the Red-breasted Nuthatch (*S. canadensis*) regularly puts pitch about its nest entrance (Bent, op. cit., pp. 23–25), while in the other two American species (forming a superspecies) the nest is “caulked or weather-stripped”; more extensively by the Pygmy Nuthatch (*S. pygmaea*) than by the Brown-headed Nuthatch (*S. pusilla*) (Norris, Univ. California Publ. Zool., 56: 205, 1958). The White-breasted Nuthatch generally uses a preexisting cavity for its nest; the other species usually excavate their own nest cavity.

The function of the nest-entrance modification in the American species has been related to protection against enemies, competitors, and the weather. In the White-breasted Nuthatch the vesicant secretion of some of the insects used has been suggested as a repellent (Kilham, loc. cit.). In the Red-breasted Nuthatch the sticky pitch used as has been suggested may serve as a barrier to ants, and the