

suggest, it is clearly advantageous for the younger birds to withdraw to areas where feeding is easier. I have seen a few eagles on winter visits to Cape Breton Island; 2 adults in December 1960, 1 adult and 1 subadult in January 1963, 2 adults in March 1964, and 3 adults in December 1965. Only 1 of the 9 birds was a subadult. All winter observations except that near Whycomagh, described above, were around open water, which agrees with other evidence that this species feeds chiefly upon fish.

In summary, in late winter when food was probably scarce, Bald Eagles were seen to drive Common Ravens and a Great Black-backed Gull from their food, while adult eagles also largely supplanted subadults. While Common Crows often attended feeding eagles, they made no attempt to feed until the eagles had finished, and they were generally ignored by the larger birds.—ANTHONY J. ERSKINE, *Canadian Wildlife Service, Sackville, New Brunswick, Canada.*

Nesting performance and pesticide residues in Alaskan and Yukon Peregrines in 1967.—During the Conference on the Biology of the Peregrine Falcon at the University of Wisconsin in 1965, it became clear that populations of this species (*Falco peregrinus*) had become greatly reduced in large areas of Europe and the United States. Several efforts to determine the status of breeding populations, reproductive success, and levels of organochlorine residues in Peregrines in northern Canada and Alaska have resulted. Cade *et al.* (*Condor*, 70: 170-178, 1968) and Enderson and Berger (*Condor*, 70: 149-153, 1968) found that this species appeared to be nesting normally in 1966 in those regions, but carrying high residue levels in their tissues.

In early July, early August, and late August 1967, we traveled the Yukon River in Alaska and the Yukon Territory and in mid-July and in mid-August, the Porcupine River. In most cases on the Yukon prospective breeding areas were examined a minimum of three times; on the Porcupine most were searched twice. Phenologically these visits corresponded approximately to the middle of the nestling period, soon after fledging, and after the young were strong on the wing.

On 262 miles of the Yukon River we saw 14 pairs definitely nesting and pairs possibly with nests at six other places, or a mean of 13 river miles per pair, remarkably close to a mean of 12 miles per pair found by Cade on the same stretch in 1951 (*Univ. California Publ. Zool.*, 63: 151-290, 1960). In a 172-mile section of the river where Cade *et al.* (*op. cit.*) found 17 pairs in 1966, we found 10 pairs definitely nesting, plus 5 pairs possibly with nests. As the 1966 survey was probably more exhaustive than ours, Peregrine density on the Yukon was apparently similar in both years.

On the Yukon and Porcupine Rivers we saw 32 downy young in 13 nests, or a mean of about 2.5 young per pair, identical to that reported by Cade (*loc. cit.*: 185) for 75 nests in the arctic prior to 1960, and similar to 2.6 for 13 pairs with viable eggs near hatching or downy young on the Mackenzie River drainage in 1966 (Enderson and Berger, *op. cit.*). In August 1967 we saw 14 fledged young at 10 sites on the Yukon River, where we were able to determine the outcome of the nesting attempt, or a mean of 1.4 young per occupied cliff. This value is between the corresponding figures of 1.0 and 1.8 fledged young per occupied cliff on the Yukon in 1951 and 1966 respectively (Cade, unpublished data). All these data suggest that Peregrines we saw in 1967 were reproducing normally.

Four adult female Peregrines were trapped at sites on the Yukon and Porcupine rivers in 1967 and a sample of fat removed from each by biopsy. These were analysed for organochlorine residues by the Wisconsin Alumni Research Foundation, Madison,

Wisconsin, using techniques described elsewhere (Enderson and Berger, *op. cit.*). Total pesticide residues in the four samples were 130, 717, 754, and 2435 ppm (fat basis) with a mean of 1009 ppm. The lowest value is less than half the lowest found in adult female fat from nine Peregrines in the Mackenzie River in 1966 (Enderson and Berger, *op. cit.*) and the highest, greater than any reported for this species, is four times greater than the top level in the Mackenzie samples. However, our lowest sample is similar to the lowest of four from Yukon River females in 1966 (Cade *et al.* unpublished data) and the highest, from a bird caring for three small young, is about 60 per cent greater than Cade's highest.—JAMES H. ENDERSON, *Department of Biology, Colorado College, Colorado Springs, Colorado 80903*, DAVID G. ROSENEAU, AND L. G. SWARTZ, *College of Biological Sciences and Renewable Resources, University of Alaska, College, Alaska 99735*.

A hybrid Eastern Bluebird × Mountain Bluebird.—On 28 June 1967 Robert W. Nero, W. Harvey Beck, and I collected a hybrid between the Eastern Bluebird (*Sialia sialis*) and the Mountain Bluebird (*S. currucoides*) at a nest box in southwestern Manitoba about 40 miles west of Brandon. Determination was made by Dr. Nero, and the specimen was deposited in the Manitoba Museum of Man and Nature in Winnipeg. The hybrid, a male, has red feathers, blue feathers, and blue feathers with red tips on both throat and breast, and is midway in general size between the Eastern and Mountain bluebird. Its measurements are as follows: culmen 11.8, tarsus 20.5, wing (chord) 104.3, tail 66.5 mm.

The hybrid's song, both in volume and clarity, was much more like that of *S. sialis*. The mountain species utters a softer, more slurry refrain. Sonograms prepared by R. M. Evans show that in pitch the hybrid's song was closer to that of *S. currucoides*. Averages of frequencies (cycles per second) were: hybrid 1,612, *S. currucoides* 1,643, *S. sialis* 1,952. Ridgway (Auk, 3: 282, 1886) notes two similarly colored specimens, one collected in Michigan, the other in Massachusetts. A. P. Gray (Bird hybrids/A check-list with bibliography, Farnham, England, Commonwealth Agr. Bur., 1958) reports the only other known case of turdid hybridism to have been between an apparently captive male Western Bluebird (*S. mexicana*) and a female *S. sialis*.

When I first saw the hybrid on 26 May he was mated to a female *S. currucoides*, which was incubating a clutch of seven eggs. He was aggressive in defense of the nest and shared in the feeding of the young and in keeping the nest clean. Six eggs hatched on 1 June, and on 17 June Dr. Nero took the six young to Winnipeg, cared for them, and then sent them to David C. Krieg in New York for further study.

On 29 May I saw the hybrid copulate with a female *S. sialis* at a nearby nest box. This female started incubating five eggs on 2 June and incubated them for 16 days before abandoning the nest. All the eggs proved infertile. She immediately mated with a normal Eastern male and raised a brood of five in a nearby nest. Thus the hybrid apparently was able to fertilize eggs of *S. currucoides* but not of *S. sialis*.—JOHN LANE, 1701 Lorne Avenue, Brandon, Manitoba, Canada.

Lack of association among duck broodmates during migration and wintering.—Male (Lensink, 1964: 19) and female ducks tend to return to the area where they last bred or were raised (Sowles, 1955). Band recovery data show a similar tendency for ducks to return to wintering areas (Stewart *et al.*, 1958; Martinson, 1966). Wintering British Columbia Mallard (*Anas platyrhynchos*) populations may