and pooled to give an average correlation for each year (Snedecor, Statistical methods, Ames, Iowa State Univ. Press, 1956). As shown in Table 1, the correlations between order of laying and hatching time were significant ($P \leqslant 0.01$) and positive each year, indicating that the first eggs laid were first to hatch. Comparisons of average correlations among years show a close similarity and demonstrate that 80 per cent of the variation observed in hatching sequence is due to the position of eggs in the clutch.

Thanks are due to H. Albert Hochbaum and Peter Ward, Delta Waterfowl Research Station, Delta, Manitoba, for making facilities at the station available. This research was financed by Virginia Polytechnic Institute, the North American Wildlife Foundation, and the Wildlife Management Institute.—HAROLD H. PRINCE, P. B. SIEGEL, and GEORGE W. CORNWELL, *Virginia Polytechnic Institute, Blacksburg, Virginia 24061. Present address of first author: Department of Fisheries and Wildlife, Michigan State University, East Lansing, Michigan 48823. Present address of third author: School of Forestry, University of Florida, Gainesville, Florida 32601.*

Starlings bred in captivity.—During the spring of 1967 the author succeeded in breeding a single pair of captive Starlings (*Sturnus vulgaris*). The birds were captured as adults during the winter of 1965–66 among some 100 Starlings used for antifertility studies by the Department of Conservation at Cornell University, Ithaca, New York. Following their use in a bait-acceptance trial, about 50 birds were placed in outdoor flight cages where they remained for more than a year. On 5 May 1967 an adult male and an adult female were removed from this group cage and placed in an aviary cage 8 feet long, 6 feet wide, and 6 feet high, sheltered by a partial roof and containing an empty wooden nesting box and several perches. A quail breeder ration and water were provided ad libitum, and nesting materials of straw, assorted green vegetation, and pine needles were also added.

At the time the pair were separated out from the main cage, their bills resembled those of wild Starlings in breeding condition as reported by Wydoski (Auk, 81: 542, 1964), except that they were a creamy-yellow instead of bright yellow. This fading of bill color, which I have noted in all other Starlings in captivity, may reflect some dietary deficiency.

Between 5 and 13 May the birds built in the nest box a 6-inch nest almost entirely of pine needles, except for a few pieces of green vegetation at the very bottom. They used none of the straw, and whether both members of the pair took part in nest-building is unknown.

Periodic examination of the nest showed that little or no material was added to the nest after 13 May. On the morning of 24 May, the nest cup contained a single egg, and on 27 May the last of a clutch of four eggs was laid. Subsequent observations at almost daily intervals showed incubation ensuing normally. On the morning of 7 June three young had hatched, and the fourth hatched shortly thereafter on the same day. When the box lid was raised, the nestlings stretched out their necks, gaped, and cheeped faintly.

Commencing on 31 May, a high-protein mash was placed in the cage as a source of high energy nestling food, but though the adults ate this mixture (by weight, 20% cereal, 20% tripe, 20% cod, 15% beef lungs, 10% cottage cheese, 10% cooked eggs, 5% beef liver), they did not feed the nestlings. By 8 June all four young had died. Their weights all fell within the range Kessel (Amer. Midl. Naturalist, 58: 298, 1957) reports for Starlings weighed within one day of hatching.

Previous attempts by the author to breed freshly captured Starlings have failed. Of three such pairings, none tried to build a nest. Apparently acclimatization for an

unknown period is necessary before pairs are capable of undergoing the physiological changes associated with normal breeding.

Discussions with others involved in keeping Starlings in captivity indicate that isolated breeding incidents have occurred elsewhere, specifically at the University of California, Davis (R. J. Planck, pers. comm.). Again, the situation was one of prolonged captivity in large enclosures. To my knowledge the events reported here represent one of the few deliberate attempts to breed the species in North America. As Starlings are frequent targets of avian control efforts, research on a captive breeding population would be advantageous, as in trying to assess the effects of antifertility chemicals on reproduction.—ROBERT L. MILLER, *Department of Conservation, Cornell University, Ithaca, New York 14850. Present address: State Conservation Department, Wildlife Research Laboratory, Delmar, New York 12054.*

Goslings descend from aerial nest, attacked by Bald Eagle.—On 30 April 1960, while engaged in a nesting survey of Canada Geese (*Branta canadensis*), Michael Stephen and I watched six goslings descend from an aerial nest and a subsequent attack on them by an adult Bald Eagle (*Haliaetus leucocephalus*). The incidents occurred at midday near the mouth of the Flathead River, Flathead County, Montana. Fluctuating water levels have created islands where the river enters Flathead Lake and killed mature cottonwood trees on their perimeters. In winter and spring low lake levels leave many of these normally flooded areas dry.

While we searched one of these areas a goose, later identified as the male, circled us, honking excitedly. We suspected a nest was nearby and began searching for telltale tufts of down or feathers high in several trees with broken tops. We soon located the nest, with the female on it, about 50 feet from the ground in the top of a broken-off tree. As we approached the female flew from the nest. We immediately heard the calls of the young and could see their heads moving above the edge of the broken tree trunk. Within seconds a gosling climbed from the nest and fell to the sand at the base of the tree. It got to its feet at once and started for the water, about 80 yards distant, where both parents had landed and were calling loudly. The first gosling was followed in rapid succession by four others, two leaving the nest simultaneously, all landing safely in the sand. The sixth hesitated for perhaps 30 seconds before jumping. It struck a small limb protruding from a brush pile near the base of the tree, and at first seemed dead. But it was only stunned, and after 2 to 3 minutes it somewhat unsteadily followed the others which had joined the parents and had swum some 30 to 40 yards out from the shore.

Just as the sixth gosling recovered from its fall, the calls of the parents became more alarmed. Our attention had been on the stunned gosling for a minute or more and we had failed to see the approach of a mature Bald Eagle. We looked up and saw the eagle just as it dived on the goslings. The parents had taken positions, each with its wings partially extended, on each side of the five closely grouped young and were honking excitedly. The eagle dived again. As it approached, the parents raised up from the water, honking and striking at it with their wings. The eagle again pulled out of the dive to avoid the beating wings of the adult geese. Five times it dove on the geese. Each time it was repulsed in the same manner. After the last attack the eagle flew south about ½ mile and landed in a dead tree. The entire encounter, from first attack until the eagle flew away, lasted perhaps 4 to 6 minutes. By this time the sixth gosling had reached the water and shortly joined the family. The eagle did not attack the geese again and when we left a half hour later it was