

Range Extensions and Additional Notes on the Birds of Alaska's Arctic Slope.—The following observations were made at Umiat, Alaska (69° 25' N, 152° 08' W), during the spring and summer of 1964 and 1965, and provide additional data to the reports of Kessel and Cade (Biol. Papers Univ. Alaska, No. 2, 1958) for the Colville River and arctic slope; Bee (Univ. Kansas Publ., Museum Nat. Hist., Vol. 10, No. 5, 1958) for the arctic slope; and data given by Gabrielson and Lincoln (Birds of Alaska, The Stackpole Co., 1959). All specimens taken are in the collection of the Laboratory of Zoophysiology, University of Alaska, College, Alaska.

Anas carolinensis. Green-winged Teal. A pair of this teal was first seen on 31 May 1964 and on 26 May 1965. Several pairs were present from 28 May through 7 July 1965, and at least two pairs were seen frequently throughout the summer of 1964. On 13 July 1964 a female downy young, weighing 55.6 g, was collected. Gabrielson and Lincoln (*op. cit.*:162) list only two strays on the arctic coast and two records of birds in the Colville River area, while Bailey (Colorado Mus. Nat. Hist., Pop. Series No. 8:164-165, 1948) records several more from the arctic coast; none of these are breeding records.

Mareca americana. American Widgeon. Although this species has been seen during the summer on the arctic slope, the northernmost breeding record appears to be that of Irving (U.S. Nat. Mus. Bull., 217:38, 1960) for the Anaktuvuk Pass area, Brooks Range. At least two pairs were nesting at Umiat in 1964. One pair arrived on 27 May 1964, and on 11 July a downy young, about one week old (42.8 g), was collected. On 13 July 1964 a brood of three half-grown young was seen. This species was fairly numerous until at least the second week of September when observations terminated. A single pair was observed on 6 June 1965, but there was no evidence of nesting.

Spatula clypeata. Shoveler. Eight individuals were seen in the vicinity of Umiat on 28 May 1964. Several were seen during June 1964, and a brood of five downy young was seen on 4 July 1964. A pair was seen on 25 May 1965, and three males were present on 30 June 1965. This species was not seen after the first week of August. Gabrielson and Lincoln (*op. cit.*:174) do not list the Shoveler as nesting north of the Kotzebue Sound area, and neither Bee (*loc. cit.*) nor Kessel and Cade (*loc. cit.*) found this species on the arctic slope. Bailey (*op. cit.*:166) lists four strays taken near Barrow between 1935 and 1942. Irving (*op. cit.*, 1960:39), on the basis of a few sight records and limited specimens, designates it as a migrant through Anaktuvuk Pass and says, "I have no report that they nest north of the mountains [Brooks Range]."

Aythya americana. Redhead. A male was seen on 6 June 1964 in a pond near the airstrip terminal building. The only other record for the arctic slope appears to be a pair seen near Umiat as cited by Kessel and Cade (*op. cit.*:35). This species is known to be extending its range into Alaska, as is indicated by the report of Hansen (Condor, 62:136, 1960).

Circus cyaneus. Marsh Hawk. Kessel and Cade (*op. cit.*:41) saw a single bird on the Colville River in June 1952, but Gabrielson and Lincoln (*op. cit.*:274-275) did not find records of Marsh Hawks farther north. A female appeared at Umiat on 25 May 1964, and was later joined by a male. The pair was seen again on 25 June, 1 July, and 11 August 1964, but no record of nesting was obtained. A pair was seen daily from 24 May to 1 June 1965, and was present there on 18 and 19 June 1965.

Falco columbarius. Pigeon Hawk. There are few records of this forest-nesting bird for the treeless tundra north of the Brooks Range (Gabrielson and Lincoln, *op. cit.*:286-287). A large female-sized individual was seen flying over Seabee Creek, one mile north of Umiat on 3 June 1964. A male flew over Umiat on 1 August 1964, and alighted on a utility line behind camp. The bird remained on the line for about 10 minutes before it took off, made a pass at several flying Yellow Wagtails (*Motacilla flava*), and then headed south.

Charadrius vociferus. Killdeer. Although Gabrielson and Lincoln (*op. cit.*:326) list the species as a casual straggler in Alaska, it has been seen with increasing frequency in interior Alaska (Brina Kessel, personal communication). The Eskimos of Anaktuvuk Pass believe that Killdeers breed on the arctic slope (see Irving, *op. cit.*:61), and one specimen was taken at Barrow in June 1936 and another in June 1938 (Bailey, *op. cit.*:199). To add to these records, a Killdeer was seen on the airstrip at Umiat on 3 July 1964.

Actitis macularia. Spotted Sandpiper. Although not common on the arctic slope, Kessel and

Cade (*op. cit.*:51) recorded this species on the upper reaches of the Colville River, where it may breed, and Bee (*op. cit.*:187) saw one at Peter's Lake in early August. During the last week of July 1964, several were seen near Umiat, and a male still wearing considerable natal down was collected on 27 July.

Totanus flavipes. Lesser Yellowlegs. Although Lesser Yellowlegs breed on the Brooks Range at Anaktuvuk Pass (Irving, *op. cit.*:69), none appear to have been recorded for the arctic slope. During the first week of June 1964 they were fairly numerous at Umiat, their calls being heard intermittently throughout the day, but they were not seen or heard after about 8 June. They were also present from 26 May to 1 June 1965.

Erolia minutilla. Least Sandpiper. Observations of this sandpiper on the arctic slope are rare, and, save for two specimens reported by Kessel and Cade (*op. cit.*:53), there appear to be no other records. An adult male in breeding plumage and having little fat was collected on 31 July 1964, one mile north of Umiat, and a single bird was seen there on 30 May 1965.

Larus argentatus. Herring Gull. On 1 August 1964 an adult male, testis 20×8 mm, was collected on a gravel bar in the middle of the Colville River about five miles upstream from Umiat. This bird and another adult Herring Gull were vigorously defending a large nonflying young gull by a nest near the water's edge. Indications are that it was a young Herring Gull (although it was not collected for identification) rather than a young Glaucous Gull (*Larus hyperboreus*). The latter species breeds commonly along the river, and a pair had a nest, with two young, at the other end of the gravel bar. Herring Gulls are known to nest in interior Alaska, and Irving (*op. cit.*:80) reported this species, with young of the year, along the Koyukuk and Alatna rivers, some 200 miles south of Umiat. Evidence indicates that this is the first breeding record for the arctic slope.

Larus canus. Mew Gull. There are breeding records of this species in the Brooks Range and nonbreeding summer records along the coast of the Arctic Ocean. Kessel and Cade (*loc. cit.*) did not find it on the Colville River, but Bee (*op. cit.*:195-196) had a record of four birds on the arctic slope at Peter's Lake. Several individuals, adults and second-year birds, were seen on various occasions at the Umiat garbage dump during the third week of July 1964; an adult male, testis 7×3 mm, was collected on 15 July.

Sayornis saya. Say's Phoebe. Irving records this species nesting in the northern foothills of the Brooks Range, and Gabrielson (Gabrielson and Lincoln, *op. cit.*:578) reports "what appeared to be a nest" on the Colville River opposite the mouth of the Killik River. Kessel and Cade (*op. cit.*:62) did not find the species on the Colville River. Corroborating Gabrielson's observation, three pairs, two of which were feeding young, were seen 12 July 1964 on bluffs at the bend in the Killik River immediately above its confluence with the Colville River. However, no phoebes were found on the bluffs three miles below the Killik River nor on any similar bluffs down river along the Colville.

Contopus sordidulus. Western Wood Pewee. An adult male, testis 7×3 mm, having essentially no fat and thin pectoral muscles, was taken at Umiat on 3 June 1964. This specimen appears to be the second collected on the arctic slope. Gabrielson and Lincoln (*op. cit.*:586) give one specimen record of an adult taken at Point Barrow on 1 July 1898. An individual was seen at Umiat on 25 May 1965, but was not collected.

Iridoprocne bicolor. Tree Swallow. Gabrielson and Lincoln (*op. cit.*:596) record several stragglers north to the arctic coast, but there appear to be no reports of birds on the arctic slope. One was seen at Umiat near the buildings on 26 May 1964, and two on 28 May; but none was seen thereafter. A single individual was seen on 23 June 1965, flying over ponds by Umiat Mountain.

Perisoreus canadensis. Gray Jay. Neither Bee (*loc. cit.*) nor Kessel and Cade (*op. cit.*:62) found Gray Jays on the arctic slope. Gabrielson and Lincoln (*op. cit.*:609), however, report it as "casual" and give five records for the arctic slope, including "a pair" from the Colville River in August 1945. On 4 May 1964 five individuals were seen near Umiat; on 5 May one was seen five miles south of the Colville on the Anaktuvuk River and one four miles south of the Colville on the Chandler River; and on 5 May an adult female with follicles up to 6 mm was collected. Although this last bird had apparently laid eggs and had a brood patch, we assumed that the

nest had been lost. On 1 August 1964 two adults were seen near Umiat, and on 28 August another individual was heard. An adult male and an adult female were collected at Umiat on 1 June 1965. It is reasonable to believe that this species is not rare along the Colville River and probably breeds there.

Dendroica petechia. Yellow Warbler. Irving (*op. cit.*:110) records summer specimens at Anaktuvuk Pass as visitors, and Paul H. Baldwin (see, Kessel and Cade, *op. cit.*:68) saw an individual, termed a transient, at Umiat on 13 July 1953. An adult female collected 3 July 1964 had a brood patch, four follicle scars, and was taken while feeding young, thus establishing nesting on the arctic slope some 150 miles north of the presently accepted breeding range. Yellow Warblers were first seen at Umiat on 6 June 1964. Three nesting pairs were found within two miles of Umiat, and on 5 July five nestlings, about one week old, were banded at one of the nests. The species was absent from the area after the first week of August. In 1965 a single male was observed singing on 19 June, and two other males were seen on 4 July and 7 July 1965; but no nests were found.—GEORGE C. WEST, *Laboratory of Zoophysiology, University of Alaska, College, Alaska*; and CLAYTON M. WHITE, *Department of Zoology, University of Utah, Salt Lake City, Utah*. (*Publication No. 20 of the Laboratory of Zoophysiology. Supported in part by National Institutes of Health, Grant No. GM-10402.*) 7 October 1965.

Survival in the Wild of Hand-Reared Passerine Birds.—I have several times read or heard the assertion that it is inadvisable to release captive birds because they would be unable to fend for themselves in nature. In view of the elaborate inherent behavior patterns of birds, however, such assertions would appear to be based more on anthropomorphic thinking rather than on evidence.

From 1956 to 1964 I raised several species of passerine birds in our home near Ann Arbor, Michigan. Nearly all of the birds were taken from the nest and hand-reared until they reached independence. The birds were kept in an indoor aviary until they were able to fly, and would come to me to be fed. At this stage in their development, the birds were given access to a large outdoor flight cage.

Conditions arose on several occasions that made it desirable or necessary to release certain birds into the surrounding woods. Of the birds so released, two returns have been received as of September 1965.

I collected a nestling Cardinal (*Richmondia cardinalis*) on 10 September 1960 (a relatively late nesting date in southern Michigan). Later I decided that I would like to raise this bird's two nest-mates, so I returned to the nest on 13 September. On that date, however, the nest was empty. A search revealed that the two recently fledged young were perched in *Crataegus* bushes near the nest. The three birds (two males and one female) flourished during the fall and winter, but they proved to be very destructive by billings and biting the leaves and stems of potted plants, including the tough leaves of bowstring hemp (*Sansevieria*). By the first week of March (1961) the three young Cardinals had ruined about three fourths of all the plants in the aviary.

Consequently, on 12 March (when the outdoor temperature reached 48°F), I opened the aviary window to allow the birds the freedom of an outdoor flight cage (8 feet wide, 28 feet long, and varying from 7 to 9 feet in height). Some 10 minutes later I heard one of the Cardinals giving a screaming distress call. The female was on the back of one of the males, who was lying virtually prostrate on part of the framework along the outer wall of the cage. The female's position was similar to that described as "reverse mounting," but she pecked rapidly at the male's crest and his bill, at the same time uttering a rapid, double call-note. Intermittently, the female stopped pecking the male and sang the typical Cardinal song. The female remained on the male's back for approximately five minutes; the male gave the distress call each time the female resumed pecking. The female then dismounted, perched beside the male, and pecked at the feathers on his back and rump. Throughout, the male maintained the prostrate position. The female attacked the male several times, and between attacks twice flew off with a beak full of contour feathers. After the third attack, the male worked his way into a small opening between