During the rearing of the original brood the banded female was accompanied by her mate whenever observed. He assisted in driving off other ducks that ventured too close to the young. When she possessed the new brood he deserted her, but remained with the three young even when they were flushed from the pond. He was comparatively slow in progressing into eclipse plumage but was flightless for only about two weeks. The female, on the other hand, was flightless for an abnormally long time, possibly as long as two months, for she was unable to fly on July 18 and her primaries still were sheathed on September 7.

With regard to brood capture, an interesting case was reported to me by Professor G. A. Swanson, who observed it on his farm near Ithaca, New York, during the summer of 1954. Two pairs of Mallards nested on the farm, the first bringing off a brood of six late in June, and the other a brood of three a few days later. Both were apparently renestings following unsuccessful first attempts. Several times during their first two weeks, the two broods of ducklings were observed on the same pond, and the size difference could readily be ascertained. Sometimes the two ducks fed near each other and the ducklings intermingled, and on a number of occasions when the broods were separated there were five ducklings with one and four with the other. The fourth one clearly had been transferred from its original parent to the second, since the size difference was still noticeable. Still later, the division was six and three again, but one brood consisting of three younger and three older ducklings, indicating that there had been still another transfer. At no time, however, was any fighting noticed between the two females.—

STUART S. Peters, Department of Conservation, Cornell University, Ithaca, New York, March 1, 1957.

Observations on Mexican birds.—Field trips made to various parts of Mexico over a period of years have disclosed information concerning various birds which it is thought may be of general interest.

Antiurus maculicaudatus. Pit-Sweet.—This bird, called "Spotted-tailed Nighthawk" by Cory (1918) in the "Catalogue of the Birds of the Americas," was listed under the genus Caprimulgus by Friedmann, Griscom and Moore (1950. Pac. Coast Avif. no. 29) and called "Spot-tailed Whip-poor-will." However, it has habits so different from typical members of Caprimulgus that it would seem to be best to retain the older classification. The use of a common name suggesting the call of the bird not only follows the usual custom for birds of the group but gives a shorter and simpler name. The Pit-Sweet is quite common on the savannahs of the coastal plain in the region of the Veracruz-Tabasco border, and has been heard calling over a wide area from the last week in March to the second week in May during visits in different years. On one visit to the region in June no birds were heard. (I have not been in the area in the fall.) During the day the birds hide in the dense woods. The plain between the mountains and the Gulf of Mexico in southern Veracruz, Tabasco, and Chiapas is marked with a multiplicity of low ridges over much of its area. Supposedly the great amount of rainfall has washed away most of the plant food on these ridges. At any rate they support a growth of low grasses, but only very scattered small shrubs and an occasional clump of dwarf palms. About half way down the slopes a dense growth of trees begins and the trees become larger and taller at the bottom, where there is frequently a small creek or swamp. The birds come out in the evening (about 7:00 p.m.), and fly back and forth over the grassy areas. They fly low over the grass (mostly from two to 10 feet above the ground) calling as they go. At times they alight on a small patch of bare gravel between clumps of grass and at times they perch for a short time on a twig of one of the small shrubs which are scattered over the grassland. They perch upright on these small branches and sometimes continue to call. A single call is given and, after a short pause, is repeated after the fashion of the "peent" call of the Booming Nighthawk (Chordeiles minor). The pitch of the call is even higher than that of the Nighthawk and reaches a maximum frequency of about 7000 cycles per second. The call may be represented as "Pit-Sweet"; it requires about one second of time and is repeated after a pause of slightly over a second. Occasionally there is a momentary speed-up and three calls are given in rapid succession. The quality is almost insect-like and the volume rather thin. At times the bird makes a "display" noise with the wings by beating them three or four times quickly and forcefully, causing a low-pitched "flut-flut-flut" sound as it pursues another of its kind low over the grass.

Sayornis saya. Say's Phoebe.—Although this species is frequently reported rather far south in the plateau region of Mexico in winter, it is seldom encountered in the summer months. On June 29, 1952, Richard Herbert and I found a pair of these birds feeding young in a nest on the wall of a very narrow, slit-like gorge on an arid hillside about 90 miles (via the Pan American Highway) northwest of the city of Oaxaca.

Empidonax mexicanus. Pileated Flycatcher.—Although this bird (usually listed as Aechmolophus mexicanus) has a longer and more pointed crest than other members of the genus Empidonax its appearance in the field suggests one of the browner members of that group, and field students always attempt to look it up in that genus when they first encounter it. (The crest is more often than not decumbant and seldom raised more than half way; hence they do not notice it.) Consequently, it would seem to be helpful to recognize the bird as belonging to that genus. The nest resembles that of the Acadian Flycatcher (E. virescens) and the song suggests the Buff-breasted Flycatcher's (E. fulvifrons) though better developed and stronger. The song starts with a chatter but quickly goes into a trill which becomes louder and faster, and then bursts into a sharply accented "ReeChoo." The "Ree" is pitched about the fourth A above middle C. The whole song may be represented as, "Ra re ee-e-e-e-e-e-ReeChoo"; it requires about one and a quarter seconds. Encountered most frequently in semi-arid woods at from 4000 to 5000 feet elevation, the bird seems to be most common from western Puebla to central Oaxaca.

Cissilopha beecheii. Beechey's Jay.—Although sometimes confused with the San Blas Jay (C. san-blasiana) this species is quite distinct in the field. It lacks the small frontal crest of the San Blas Jay, is larger, and has a conspicuous yellow iris (that of the San Blas Jay is pale yellow or brown); also the voices are quite different. The velvet-like feathers along the sides of the cap stand up somewhat so that the fore part

of the crown appears sunken; this gives the bird a "raised eyebrows" look. The call is a rather soft "jaay," which is so nasal and burry that it is probably better represented as "Jerrr" or "Jurrr," according to the pitch, which varies with different individuals from about the first F above middle C up to the first A above it. The sound is almost like that of a fly buzzing under a piece of paper. A single call may be given, or a slow series, or as many as 10 may be given in a space of five seconds.

Cissilopha yucatanica. Yucatán Jay.—In the field this species appears like the Beechey's Jay except that it does not have the yellow iris. Instead of having a frontal crest as in the San Blas Jay, all the feathers of the head seem to be very slightly elongated. When the bird is excited it sometimes erects these feathers and the whole head appears to be somewhat fuzzy. This species makes a loud, harsh clatter or rattle that is suggestive of the call of a Great-tailed Grackle (Cassidix mexicanus). There is also a rather loud, sharp, "Pip"; and a series of clear, high-pitched, titmouse-like notes. This last mentioned song may be represented as, "Chea-chea-chea-chea"; this requires one second of time and the "chea" note is pitched about the fourth G above middle C. (The last part slurs down about one tone but this is scarcely noticed since the call is so fast.) This song might be confused with the clear "che" song of the Petén Vireo (Vireo semiflavus) but it is given only at random whereas the vireo usually repeats his song a number of times. It might also be confused with the song of the Orange Oriole (Icterus auratus), but that bird places a short preliminary phrase ahead of its series of "che" notes. The loud "chea" song of the Yucatán Jay may be preceded by a fairly loud call, "Eyah," of a somewhat nasal quality. This requires from one fourth to a third of a second and is pitched about an octave lower than the "chea."

Vireo semiflavus. Petén Vireo.-While field studies do suggest that this bird is a member of the Mangrove Vireo complex (pallens "artenkreis"), it does not seem likely that any field student would take seriously the suggestion made by some taxonomists that it is a race of the White-eyed Vireo (V. griseus). In the field, the eyes of breeding adults seem to be quite dark, and have a beady appearance somewhat like those of the Hutton's Vireo (V. huttoni). The song consists of a series of identical notes. In one case there is a clear "che" repeated eight times in two seconds; the pitch is about the fourth G above middle C. Other songs are similar but of a somewhat nasal quality. There is a series of "weo" notes and a series of "chu" notes, both given at the rate of eight in two seconds. (The song may however continue for more than two seconds.) There is also a much faster song which is just a rattle of some 20 "chu" notes in two seconds. (The bird vibrates his tail as he does the rattle). The call used as a warning or alarm note is a slightly nasal, vibratory, "Queeee," which lasts about one second. In the Yucatan Peninsula this species is common in rather open areas of second growth woods, and in the region of low scrub both inland and along the coast. This is quite different from the habitat selected by the Mangrove Vireo (V. ochraceous), which seems to be confined entirely to the mangrove swamps along the Pacific Coast. The Mangrove Vireo, however, shows close relationship in the form of his song, which is also a series of "che" notes. Aside from the indistinct wing bars and the incomplete yellow eye ring, the Petén Vireo looks very much like the Golden Vireo (V. hypochryseus) in the field, and it happens that the song of the Golden Vireo is also a series of "che" notes.

Icterus spurius. Orchard Oriole.—Except for a small colony on the banks of the Rio Grande in extreme northeastern Tamaulipas, this species (in Mexico) is confined during the breeding season to high tableland from Coahuila southward. The colonies are small and isolated and usually situated in irrigated areas. The adult males are quite dark. Orchard Orioles nest during June and seem to return to the same area each year. Two

adult males were observed feeding young in different nests located about 20 miles south of Zamora, Michoacan, on June 19, 1953. The species was first observed in the area in June, 1941, and the colony was still present in the summer of 1956. The song of the Mexican birds is of the same quality and style as that of Texan population. The form of the song of this species is so variable from individual to individual that it is not possible to make fine points of distinction on the phrasing. The form of the song of Fuertes' Oriole (I. fuertesi) varies in the same way and this makes it extremely difficult to compare the songs of the two species. It may be noted that Fuertes' Oriole is a bird of the eastern lowlands (during the breeding season) where the nearest individuals are 200 miles or more away from any known breeding Orchard Orioles; and, as has been pointed out by the Grabers (1954. Condor, 56:274-281), the lightest Orchard Oriole male is darker than the darkest of the Fuertes Orioles (there are no intergrades). The Fuertes Oriole seems to be quite common locally at the extreme northern limit of its range, in southern Tamaulipas. Nesting begins in Tamaulipas about the middle of May; a pair was observed with young out of nest in southern Veracruz (La Piedra) on June 29, 1952, which would seem to indicate that they nest no earlier in the south.—L. IRBY Davis, Box 988, Harlingen, Texas, January 10, 1957.

Notes on the Red Crossbill in Minnesota.—The country-wide invasion of Red Crossbills (Loxia curvirostra) in the fall, winter and spring of 1950-51 (Tordoff, 1952. Condor, 54:200, and others) was but poorly recorded in Minnesota. Two sight records were published (Oman, 1951. Audubon Field Notes, 5:139, and Flaherty, 1952. Flicker, 24:25), and four specimens were preserved. The identification of these specimens and the re-identification of the 23 other Minnesota specimens of the Red Crossbill in the University of Minnesota Museum of Natural History collection reveal the need for several changes in the taxonomic appraisal of this species as presented by Roberts (1936. "The Birds of Minnesota"). An additional 11 Minnesota specimens from the collection of H. F. Kendall of Virginia, Minnesota, were examined. Sheridan S. Flaherty (loc. cit.), of Morris, Minnesota, kindly loaned photographs of the Red Crossbills that visited his feeding station between March 23 and May 31, 1951. One or more birds were seen daily during that period, with nine seen on the latter date. They were believed to be preparing to nest, although this seems improbable since Morris is situated in the prairie region of central western Minnesota. The subspecific identity of the birds could not be determined.

The material studied confirms Griscom's statements (1937. Proc. Boston Soc. Nat. Hist., 41:5) that the races minor and sitkensis (of the American Ornithologists' Union Check-list, 1931) occur in Minnesota, and allows us to add the race benti to the state checklist. Apparently Griscom did not include in his monographic revision the Minnesota specimens recorded in this study.

These specimens are identified as follows:

Loxia curvirostra sitkensis.—Five females measure: wing, 77:3-82.0 mm.; culmen, 13.3-14.3; two males measure: wing, 83.0 and 83.5; culmen, 14.2 and 14.7. Also the culmen (rhinotheca in situ) of one male skeleton measures ca. 14.8 mm. Dates represented are July and August, 1922 (five specimens); May, 1923 (one); and January, 1951 (two).

Griscom (op. cit.:124) lists specimens of this form from Illinois taken in April and June, 1923, but apparently he did not recognize these as indicative of an extensive flight year. There are four specimens of sitkensis in the Louis Agassiz Fuertes Collection at Cornell University taken at Ithaca, New York, in January, 1923.