GENERAL NOTES

Blackpoll Warbler banded in Bermuda recovered in North Carolina. —During the fall of 1962 the writers banded a total of 352 migrant passerines on Bermuda in connection with a special study of the migration of the Blackpoll Warbler (Dendricca striata) (see Nisbet, Drury and Baird, Weight-loss during migration, Part I, Bird-Banding, 34 (3) 1963). One of these birds (104-54842), an immature Blackpoll Warbler, banded at St. David's Island on October 11, 1962 was shot by G. H. Abernethy at Pembroke, North Carolina during November, 1963. The exact date of recovery was not recorded. At the time of banding the bird was recorded as having an incompletely ossified skull with a weight of 13.8 gms, and a wing length of 72 mm. (chord).

Since the Blackpoll does not winter on Bermuda, this individual presumably completed its migration to the South American wintering grounds and returned north again to the breeding grounds prior to being shot on its second journey south.

The recovery of this bird is of especial interest for the following reason: it offers tangible proof that Blackpolls can complete their migration successfully following a landing on Bermuda, regardless of the circumstances which bring them there initially, and accordingly provides further evidence in support of the hypothesis of Nisbet *et al (ibid.)* that the Blackpoll migrates directly across the western north Atlantic from New England and the middle Atlantic states to South America in fall.—David B. Wingate, P. O. Box 437, Hamilton, Bermuda and James Baird, Massachusetts Audubon Society, Lincoln, Massachusetts.

Behavior of Hiding Young Killdeer.—On 8 August 1942 I chased four three-week-old killdeer (*Charadrius vociferus vociferus*) on an athletic field in order to read their band numbers. I had banded these birds three weeks before while they were still in the nest and was checking to learn the period of parental care. At this age the young birds are quite fleet of foot, although not yet able to fly. The grass on most of the large football and soccer fields was kept closely mown with the exception of a space about 8 x 10 feet under and immediately surrounding the soccer goals. Here the grass had been allowed to grow to a height of about one foot and was very thick. These young birds began to run toward the tall grass at the soccer goal as soon as I appeared at the edge of the field. Two of these birds dropped low in the short grass and "froze," each with one leg extended at a diagonal above it. Two others which were in the lead of the running birds went around the tall grass area to the side opposite me and came back into the tall grass near its center. These young were crouching and did not have their legs extended as did those in the open area when I reached down and lifted them up. I have found no reference in the literature to this type of behavior in the killdeer.—Walter P. Nickell, Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Birds and Insects Feed at Sapsucker Trees.-On June 25, 1949, in Wilderness Park, Emmet County, Michigan, I observed several species of birds and in-sects feeding at holes drilled in a paper birch (*Betula papyrifera*) by the yellow-bellied sapsucker (*Sphyrapicus varius*). The tree, about 10 inches in diameter at 12 feet above the ground, showed about 200 perforations arranged in vertical lines about one and one-half inches apart completely encircling the trunk. The holes in the vertical lines were about one inch apart, averaging about 11 per line. Colored motion pictures were taken with a 6-inch telephoto lens from a distance of 16 feet. During a half-hour period I observed and photographed, in the order of their appearance, the following species of birds and insects which were attracted to this tree: red admiral butterfly (Vanessa atalanta), male downy woodpecker (Dryobates pubescens), male hairy woodpecker (Dryobates villosus), female yellow-bellied sapsucker, female hairy woodpecker, female sapsucker again, male ruby-throated hummingbird (Archilocus colubris) and male sapsucker. Between visits of the birds, two red admirals, two angle wing butterflies (probably Polygonia interrogationalis), one painted lady (Vanessa cardui), two bald-faced hornets (Dolicovespula maculata), several green flies, and several smaller diptera fed at these perforations. The male and female sapsuckers occupied the borings the greatest portion of the time with the male staying longest of all. Evidently the sapsuckers were

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dominant at this feeding site as the other birds flew away without being attacked, at the appearance of either one of the sapsuckers. None of the birds were observed to devour any of the insects, but the butterflies flew away at the approach of any of the birds.

In mid-July 1959, while camping at Dolly Kopp State Park, New Hampshire, I observed two paper birch trees within about twenty feet of my trailer. I noted that they had many performations which are characteristic of the drilling of the common sapsucker. I watched from the darker interior of the trailer as various birds came to drink the sap which filled the perforations level with the bark surface. During about an hour of watching I observed six individuals of four species of birds probing and drinking. Both a male and a female of the downy woodpecker appeared together and spent several minutes on the two trees. A male and female ruby-throated hummingbird made four appearances. A black-throated green warbler (*Dendroica virens virens*) was seen three times. The female sapsucker was not seen but the male came in every few minutes, each time chasing away any interlopers at his feeding tree. With crest raised he uttered characteristic call notes which apparently were sufficient to cause any other species to move away until he had left the trees. Then the other birds came back, drinking nervously, apparently alert for his return. In addition to the birds, one red squirrel (*Tamiasciurus hudsonicus*) climbed the tree and fed by lapping.

Undoubtedly several other species of birds feed at sapsucker trees when they have an opportunity. Among these are the Baltimore oriole (*Ictervs galbula*) and the black and white warbler (*Mniotilta varia*).

Ruby-throated hummingbirds feeding at sapsucker trees were reported previously by Bolles (Auk, 8: 256-270, 1891), Kelham (Wils. Bull. 65 (3): 198, 1953), and Smith (Auk, 71 (3): 316, 1954). I have found no reference in the literature to sap drinking by the other species mentioned above.—Walter P. Nickell, Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Movement of Chickadee.—A foreign retrap of mine, a Black-capped Chickadee (*Parus atricapillus*), had been banded in Middleborough, Mass. on November 27th, 1962. I trapped it on December 11, 1963 and it has since returned on one occasion. The distance from point of banding to here is about 30 miles. No record as such, but it still is rather an unusual change of area for this species. The bird had repeated five times at the point of banding before leaving, so records show it has not become trap shy.—Kurt Robert Groote, 337 Fisher St., Walpole, Mass.

BIRDS AND ARBOVIRUSES

Last year (1964) the initial step in the investigation of migratory birds as potential disseminators of arboviruses was undertaken in March and April by a field and laboratory team from the Arbovirus Unit of the USPHS Communicable Disease Center in Atlanta, Georgia. With Walter P. Nickell of the Cranbrook Institute of Science as Consultant, the team, consisting of Rexford Lord, Herbert Maxfield, and Telford H. Work, set up operations in the Stann Creek Valley of British Honduras to net, band, bleed, feather mark, and release migrants.

This year the project was continued and amplified by the same team. Stann Creek Valley was revisited as was also the Delta National Wildlife Refuge, but birds were also marked in the vicinity of La Lima in the Republic of Honduras.

Colored feathers were attached to the backs of 2,500 birds. In March, 799 birds were marked with yellow feathers (211 Orchard Orioles, 107 Indigo Buntings, 100 Catbirds, 31 Rough-winged Swallows, 28 Painted Buntings, 14 Baltimore Orioles and 308 others of 37 species) in British Honduras. In the Republic of Honduras during March, 615 birds were marked with red feathers (283 Indigo Buntings, 180 Orchard Orioles, 42 Baltimore Orioles, 33 Rose-breasted Grosbeaks, 31 Painted Buntings and 46 others of 13 species). In April, the team moved to the Delta National Wildlife Refuge near Pilottown, Louisiana where 1,086 birds were marked with light blue feathers (138 Catbirds, 116 Orchard Orioles, 70 Summer Tanagers, 65 Red-eyed Vireos, 63 Wood Thrushes, 35 Scarlet Tanagers, 29 Ovenbirds, 27 Eastern Kingbirds, 26 Indigo Buntings, and 517 others of 35 species).