

**Vertical migration in certain fringillids.**—For two summers, while employed as a ranger at Shenandoah National Park in northern Virginia, I have been able to observe birds from late June until early September. The Park embraces a stretch 75 miles long in the Blue Ridge Mountains, rising from approximately 600 feet in elevation in the Shenandoah Valley to 4049 feet at the highest point, Hawksbill Mountain. Some 200 species and subspecies of birds have been recorded in the Park (Alexander Wetmore, "The List of Birds of the Shenandoah National Park," Shenandoah Natural History Association, Bulletin 1, 26 pp., September, 1950, and Supplement, 2 pp., August, 1952.) The observations reported here were made mostly at Hughes River Gap, a point 3100 feet in elevation, on the ridge astride the Madison-Page county line and traversed by the well-traveled Skyline Drive.

Many birds occur at Hughes River Gap with some regularity. The Rose-breasted Grosbeak (*Pheucticus ludovicianus*), a summer resident from May 9 to October 2 (dates of residence are from Wetmore, *op. cit.*), is found chiefly above 3000 feet. The Red-eyed Towhee, (*Pipilo erythrophthalmus*), resident from March 27 to October 23, is common at the Gap. The Field Sparrow (*Spizella pusilla*) is common in summer and some winter at the lower levels. The Slate-colored Junco (*Junco hyemalis*) is a permanent resident, mostly above 2500 feet in summer although in winter it may descend to the valley. All of these species breed in the vicinity of the Gap.

Aside from certain altitudinal movements associated with the seasons, as mentioned above, a peculiar sort of movement was noticed among two species common at the Gap, the Indigo Bunting (*Passerina cyanea*) and the Eastern Goldfinch (*Spinus tristis*). The bunting is a common summer resident in the Park from May 9 to September 7, while the goldfinch is resident the year around, being common from late April to early November and irregular through the winter. At the Gap, Indigo Buntings were common in early summer; juveniles, well able to fly, were noted here on July 24. But the species was last seen at the Gap on August 2 both in 1952 and in 1953. The Indigo Buntings from the Gap seemed to retreat to deeper woods and bogs at lower levels. The goldfinch, however, was seen rarely at the Gap in the early summer (only on July 12, 23 and 31, 1953), but was observed, often in flocks of a dozen or so, almost daily throughout August in both years. On August 22, 1953, a goldfinch was singing lustily from a perch atop a white pine which had been similarly used by a bunting in late July. There seemed to be a peculiar reciprocal nature to the presence of these two species at the Gap. That they were mutually exclusive because of competition for food is difficult to believe. Perhaps the situation is traceable to the late breeding habits of the goldfinches.—RICHARD H. MANVILLE, *Department of Zoology, Michigan State College, East Lansing, Michigan, October 13, 1953.*

**An observation on Redhead parasitism.**—The semi-parasitic nesting habits of many ducks—and especially the Redhead (*Aythya americana*)—are well known (Friedmann, 1932. *Proc. U.S. Natl. Mus.*, 80:1-7). While normal Redhead nests may be found, the species is notorious for its "dump nests." Thus the nests of Canvas-backs (*Aythya valisineria*) and other species may be found containing 20 or more Redhead eggs. Low (1945. *Ecol. Monogr.*, 15:47) suggests that "dumping" occurs either before the Redheads have constructed their nests or after an early nesting failure.

Hochbaum (1944. "The Canvasback on a Prairie Marsh," p. 91) says: ". . . parasitic females probably drop their eggs in the nests of other species during the absences of the owner at this time" (during the egg-laying period). He also states (*op. cit.*:93) that "There is no evidence of severe friction between nesting hens, except in instances of



*Top left*—Redhead has pushed on to the nest and sits with closed eye while being pecked on the head by the Canvas-back. *Top right*—the Canvas-back and Redhead sit quietly on the nest side by side during a brief pause in their struggles. *Bottom left*—the Canvas-back pecking at the Redhead's head. *Bottom right*—Redhead leaves the nest, still being pecked by the owner.

parasitic intrusions . . ." The following observation provides an instance of a Redhead laying in a Canvas-back nest while the owner was present.

On May 25, 1952, the nest of a Canvas-back was found at Delta, Manitoba. This nest contained 8 eggs which subsequently hatched successfully on June 20. At the end of May, a blind was erected some distance from the nest and gradually moved closer. Although the duck was nervous at first, it soon became possible to watch her normal behavior on the nest from a distance of about 15 feet.

On the afternoon of June 18, the Canvas-back had been observed incubating normally for about 2 hours when suddenly a female Redhead appeared at the side of the nest and pushed her way on to it. The owner reacted immediately by pecking vigorously at the Redhead's head, but the latter merely eased herself further on to the eggs and did not attempt to retaliate. The two birds remained sitting side by side for a period of 4-5 minutes. The Redhead appeared rather sleepy or dazed and frequently closed her eyes. This may have been due partly to the rain of blows which the Canvas-back delivered at her head. After the birds had changed position once or twice while struggling, the Redhead rose from the eggs and moved off the nest, and the owner returned to normal incubation.

When the Canvas-back was flushed some time later, a fresh Redhead egg was found in the nest.

Although this is an isolated observation, the fact that successful egg-dumping was achieved while the owner remained on the nest suggests that this may be a normal technique adopted by Redheads.—D. F. MCKINNEY, *Severn Wildfowl Trust, Slimbridge, Gloucestershire, England, October 14, 1953.*

**Diurnal foraging by the Great Horned Owl.**—Diurnal foraging by the Great Horned Owl (*Bubo virginianus*) has been noted by various workers. Bent (1938. *U.S. Natl. Mus. Bull.*, 170:312), for example, reports observations made in the middle of the day of these owls soaring like large hawks. While doing field work in August, 1953, in the Riverside Mountains of California, a desert range bordering the west side of the Colorado River approximately 35 miles north of Blythe, Riverside County, I was impressed by the diurnal activity of the Great Horned Owl. On many occasions, while hiking up canyons of the east slope of the range in late afternoon, I observed owls that seemed to be foraging. I watched one individual with binoculars for a short time, and saw it perch on several commanding outcrops of rock on the steep walls of the canyon, staying approximately a minute at each vantage point. The time was more than an hour before sundown and the rims of the canyons were in sunlight, although the canyon in which the owl was noted was in deep shadow. Indirect evidence was obtained indicating that Great Horned Owls foraged in this area even in full daylight. In a large grotto, from which an owl had repeatedly been flushed, I discovered in weathered owl pellets the nearly complete skull of a chuckwalla (*Sauromalus obesus*), a large iguanid lizard active only during the hottest part of the day. To catch this chuckwalla the horned owl probably foraged in the sunlight. The following species also were taken from the owl pellets: pallid bat (*Antrozous pallidus*), pocket mouse (*Perognathus formosus*), kangaroo rat (*Dipodomys merriami*), wood rat (*Neotoma lepida*), and cottontail (*Sylvilagus audubonii*).

Evidence from trapping small mammals suggested a possible explanation for the diurnal activity of horned owls in this area. Rodent activity was low in the Riverside Mountains area when these observations were made and the rodents foraged mostly in early morning. Consequently the horned owls may have been unable to obtain sufficient food during their usual nocturnal hunting, and of necessity may have extended their foraging into the daylight hours.—TERRY A. VAUGHAN, *Museum of Natural History, University of Kansas, Lawrence, December 30, 1953.*

**American Bittern in Virgin Islands.**—One of the rewards of living on a small, isolated sea island is the thrill of discovering, now and again, a new inhabitant. On the morning of October 7, 1953, I flushed a tall, buff-colored bird in a partly overgrown cow pasture at Estate Anguilla, St. Croix, Virgin Islands. At first I thought it was a young night heron. Something about this bird, however, did not appear right so I collected it. It was an American Bittern (*Botaurus lentiginosus*). The only bittern ordinarily found in the Virgin Islands is the Least Bittern (*Ixobrychus exilis*), and this is very uncommon. The closest point from which American Bitterns have been previously recorded is the island of Puerto Rico, 80 miles to the northwest. This bird was prepared as a skin; it measured as follows: wing, 255 mm.; tail, 85 mm.; bill, 66 mm.; tarsus, 85 mm. The stomach was practically empty. The bird was very light, but appeared to be in sound condition. No ectoparasites were found.—GEORGE A. SEAMAN, *Wildlife Biologist, Christiansted, St. Croix, Virgin Islands, October 16, 1953.*