

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