

are of very rare occurrence, that he had never seen complete examples, and that it was possible that they occurred in Scandinavia and Finland. He states that they are not age nor sex characters. The subject would seem to need further clarification.

Of further interest is the pattern of new and old feathers among the remiges. Assuming that this pattern (nearly identical in each wing) represents the order of feather replacement in the molt, it may be pointed out that the pattern was such as to find no ready explanation in terms of the simple regular replacement order in *Accipiter gentilis* or the slightly more complex situation in *Falco rusticolus* and *peregrinus* with which the writer has personal acquaintance. A regular molt proceeding from a molt center does not seem adequate to explain the fact that primaries numbers 2, 5, 9, and 10 were new, numbers 1, 3, 4, and 6 somewhat intermediate, and 7 and 8 definitely older. The primary coverts (studied from Kodachrome transparencies) were approximately similar, with a few exceptions. In the secondaries, numbers 1, 2, 4, 5, and 8 were new and 3, 6, and 7 old, while the inner secondaries varied somewhat on each side. It is hoped that the future molts of the immature eagle will furnish information on both plumage and molt sequences.

In conclusion, it may be pointed out that whereas the Golden Eagle may still be a resident in the southern Appalachians, the winter eagles are in all probability mostly migrants from an unknown northern breeding area. In the fall of 1944, sixteen Golden Eagles were observed to pass Hawk Mountain (Pennsylvania) in one day, and Mr. Richard Pough saw seven flying along a ridge in western New Jersey in late October, 1944. It is not unreasonable to suppose that some of these may later be found in central Tennessee. The Highland Rim country is very steep, consisting of 'badlands' largely given over to pastureland (sheep, some cattle, and pigs), somewhat grown over with sparse cedar and some hardwoods. As a potential food supply, rabbits are very numerous (15 counted in a half-hour walk), and carrion (dead calves, sheep) is to be found. No doubt the steep hills furnish excellent obstructional air-currents for soaring flight, as well as some 'cover' for these large and conspicuous birds.—WALTER R. SPOFFORD, Nashville, Tennessee.

Purple Gallinule robs nest of Green Heron.—There is a pond on my property in Leon Co., Florida, where Eastern Green Herons (*Butorides v. virescens*) nest in button-bushes, over the water. A few pairs of Purple Gallinules (*Porphyryla martinica*) nest in the grass. On May 6, 1945, a friend and I were paddling quietly about in a boat when a Purple Gallinule flew towards a button-bush in which I knew there was a Little Green Heron's nest containing four eggs. This nest was placed unusually low—about 15 inches above the water on bent-over branches, and though well sheltered from above was exposed to view from either side.

When about 30 feet away, we saw that a fight, accompanied by wing blows, was taking place at the nest between the gallinule and the heron. It was over by the time we were within 20 feet. The heron was perched on a branch a few feet away while the gallinule stood on the nest, pecking at an egg. It presently hopped down onto a spatterdock leaf with the egg, cracked partly across the middle, hung on its lower mandible. It dropped the egg and proceeded to eat, or drink, the contents, which dripped from its bill when it raised its head to swallow.

Made uneasy by our nearness, the gallinule presently hooked up the egg again and walked off across the spatterdock leaves, stopping now and then to put the egg down and take another drink. It was like seeing a dainty lady turn cannibal.

Its mate joined it at one point, made a perfunctory peck at the egg and wandered off, apparently uninterested.

On May 8 there were still three eggs in the heron's nest. On May 12, I approached the heron's nest from another direction, between the shore and the button-bushes. While we were still about 30 yards away from it, one of the gallinules sneaked out of the shore grass just ahead of the boat and made off toward it. I located the gallinule's nest, which held five eggs, in the grass, and then followed the bird. When I arrived near the heron's nest, the gallinule was carrying one of the three remaining eggs down onto the same spatterdock leaf that had served as a dining table on May 6. As before, it had cracked the egg part way across the middle, and this time, since incubation was advanced, pulled the contents out in shreds and gulped them down. The heron was sitting quietly a few feet away.

In trying to get into position to take a moving picture I frightened the gallinule, which climbed into a bush whence it kept peering down at the nest. Upon my backing the boat away, it deliberately climbed down to the nest, took another egg, ate a little, and on my moving nearer, hooked it on its lower mandible, carried it to a point a few feet from its own nest and finished eating the contents. I got a brief moving picture of the bird walking with the egg hanging under its chin. I followed and placed the boat close to the gallinule's nest and between it and the bird, which had climbed a bush and sat preening itself within 20 feet of me, seemingly unconcerned at my position in relation to itself and its nest. Presently it made off through the tops of the bushes towards the heron's nest. I followed and was just in time to see it walk down a branch into the nest, carry the last egg down to its dining table and pull out and eat shreds of the embryo. As on previous occasions, the heron sat within a few feet, looking on, apparently cowed.

It seems strange that having tasted blood on May 6, the gallinule did not again molest the three remaining eggs until May 12, and I consider myself lucky to have been a witness on both occasions. I have often seen Purple Gallinules when they approached Red-winged Blackbirds' nests, furiously attacked by the owners, but as I had never seen a gallinule actually molesting a nest, I supposed that the Red-wings were merely objecting to the proximity of birds so much larger than themselves. Now, however, I suspect that the gallinules may, sometimes at least, give the Red-wings cause to fear for the safety of their eggs.

On May 14 I again visited the gallinule's nest. It was partly crushed and the eggs gone. For the sake of poetic justice I would like to be able to consider this as an act of vengeance on the part of the heron, but the evidence points to it being the work of a water snake.—H. L. BEADEL, Tallahassee, Florida.

A 16-year-old Marsh Hawk.—On July 1, 1928, in Harding Township, Lucas County, I banded a brood of four Marsh Hawks (*Circus cyaneus hudsonius*). On November 14, 1944, one of these, a male bearing band 656303, was shot by Mr. H. O. Thompson of Wallaceburg, Ontario, while it was attempting to catch a pheasant near that city. This was 16 years, four months and 14 days from the date of banding, and the hawk was probably two weeks old at that time. The hawk was mounted and given to one of the Wallaceburg schools. The band itself showed signs of wear on the inside but none on the outside. Previous to this record, my longest-lived Marsh Hawk was banded June 22, 1932, in Spencer Township, Lucas County, and shot December 14, 1937, at Walnut Ridge, Arkansas, by Ezra Moore, five years and five months later. This bird was number B-621403.—LOUIS W. CAMPBELL, 4531 Walker Ave., Toledo, Ohio.