GENERAL NOTES

Notes on molting time of loons and grebes.—George Miksch Sutton (*Wils. Bull.*, 55, 1943: 145–149) has indicated that Loons probably do not undergo two complete molts per year. The extent of the prenuptial molt especially seems to be uncertain, and the time of the postnuptial molt may vary greatly, some individuals probably not acquiring their winter plumage until they have reached the wintering grounds. The same latitude in time seems to be true of the prenuptial molt.

On April 13, 1940, I observed 15 Common Loons (*Gavia immer*) on Guilford Lake, Columbiana County, Ohio. I was puzzled to see that two of them were still in winter plumage while the others were in breeding plumage. On April 20, 1940, I saw 14 Loons there, two still in winter plumage. On April 27 and 28, 1940, I saw 12; two, probably the same ones observed before, were in winter plumage. On April 11, 1941, I saw six loons at Guilford Lake, one still in winter plumage.

On October 20, 1941, I saw two Holboell's Grebes (*Colymbus grisegena holboelli*) at Jefferson Lake, Jefferson County, Ohio. Both were still in breeding plumage, with the reddish neck plainly visible. It would seem, therefore, that grebes might fall into the same category as loons in regard to variation in time of molting.—FOREST W. BUCHANAN, *Amsterdam, Ohio.*

Cooper's Hawk observed catching a bat.—On the evening of April 26, 1943, I. T. Bode and I sat on the porch of a cabin on Caney Mountain State Game Refuge, Ozark County, Missouri, watching the dusk descend. Two small brown bats (species unknown) were flitting over the creek in front of the cabin, when a Cooper's Hawk (*Accipiter cooperi*) burst through an opening in the trees and took after one of the bats. A short chase ensued, in which the bat twisted to the right and left with the hawk following every turn. As they passed 50 feet in front of us, the hawk tipped back on its fanned tail, reached an incredible distance forward with both feet, and gracefully picked the bat out of the air. With scarcely a flutter the bird recovered normal flying posture and went out of sight in the timber, carrying the prey. This incident occurred at about 8:00 P.M., E.S.T., by which hour it was becoming quite dark. The bats had been out for at least 30 minutes. We were surprised to see the Cooper's Hawk abroad so late.

Allen ("Bats," 1939: 280–292) summarizes the literature on the known raptorial enemies of bats, most of which are owls and falcons. Stager (*Condor*, 43, 1941: 137–139) reports an instance of several Duck Hawks preying regularly upon Mexican free-tailed bats around a cave in Texas. But I am unable to find any record of accipitrine hawks utilizing such prey.—A. STARKER LEOPOLD, *Missouri Conservation Commission, Jefferson City, Missouri.*

Evidence of polygamy among Marsh Hawks.—Marsh Hawks (*Circus hudsonius*) are common winter and summer dwellers in the Palouse country of southeastern Washington. As a matter of fact, they are one of the most numerous of the hawks in this region. While studying the nesting habits of the Hungarian Partridge during the spring of 1940, I kept under observation two Marsh Hawk nests in an 80-acre patch of sweet clover and weed stalks, left unplowed from the previous year, which was located approximately two miles northeast of Pullman, Washington (Sec. 33, T. 15 N., R. 45 E.)

The first nest was situated 75 feet from a patch of Canadian Thistle (*Cirsium arvense*). It contained six eggs on April 18, when it was discovered by a student who was helping me census the area for partridges. The student had almost stepped on the nest before the female flew. Both the male and the female defended the nest very vigorously, uttering excited cries as they dived repeatedly within a few feet of the observers.

The second nest was found May 2, 400 yards from the first nest, and 30 feet from a Canadian Thistle patch. It contained one egg. On May 7, when the female was flushed, it contained three eggs. The female at this nest had no tail feathers and was easily distinguished from the female of Nest 1. The very light-colored male that had so vigorously defended Nest 1 also defended Nest 2. It made no difference which one I approached first nor how often I walked from one nest to the other: he always attacked with the same vigor, diving repeatedly as I came near either nest. Each female, however, was concerned only when her own nest was approached.

Both nests were kept under observation until May 7, when some students shot the female of Nest 1. After this female had been killed, the male did not protest my trespassing on the area around Nest 1, but he continued to protect the remaining female and nest until May 11, when both he and the female were discovered dead, probably shot by students.

At no time was there observed another male Marsh Hawk in the vicinity that took any interest whatever in either nest.—CHARLES F. YOCOM, *Department of Zoology, State College of Washington, Pullman, Washington.*

Flight of a hunting Marsh Hawk.—At about 10:30 A.M. on December 27, 1943, I was driving northward towards Defiance (Defiance County, Ohio) when I saw an adult male Marsh Hawk (*Circus hudsonius*) rise from a field and begin flying in a line with my car. It continued for 2 1/10 miles in the direction I was going, thus enabling me to make the following observations on the correlation of speed and type of flight with kind of hunting territory covered.

The hawk's flight speed was: over plowed fields or fields of shocked corn, between 30 and 35 m.p.h.; over short-grass pastures, between 25 and 32 (usually about 27) m.p.h.; over wheat-stubble fields, between 20 and 25 m.p.h.; over weedy or fallow fields (where chances of obtaining food would presumably be best), between 12 and 18 m.p.h. The flight, over plowed fields, was straight, and over stubble fields somewhat zigzag; over weedy or fallow fields, the hawk zigzagged across a path about 75 feet wide. Because of this beating back and forth, the actual speed of flight over weedy or fallow fields would be greater than the 12 to 18 m.p.h. recorded by the speedometer of the car, which was following a straight course. The average speed for the 2 1/10-mile stretch was 23 m.p.h. The hawk was flying at heights between 5 and 30 (usually about 20) feet above the ground, except on one occasion, when it described a small circle and came to within 2 feet of the ground to look over something which had attracted it. At the end of the flight, the hawk made an unsuccessful pounce for prey, rose, and then flew off in a westerly direction.

The hawk's flight was north by west, the wind direction west by south (therefore from the bird's left, and at a 90° angle). Wind velocity was less than 5 m.p.h., air temperature, 35° F. Fog made visibility poor—objects at a distance of less than half a mile disappearing from my view. The ground was not frozen and was free of snow.—MILTON B. TRAUTMAN, *F. T. Stone Laboratory, Put-in-Bay, Ohio.*

Knot in Auglaize County, Ohio.—During the morning of September 10, 1943, a group of five Knots (*Calidris canutus rufus*) flew into the State Fish Farm from Lake St. Marys, Auglaize County, Ohio. Since their wariness prevented close observation, one was shot for identification. The skin is now in the Ohio State Museum at Columbus. My search through the literature has revealed only two other records for this species from the central portion of Ohio: Wheaton ("Birds of Ohio," 1882: 478) recorded it from the Licking Reservoir, Buckeye Lake, May 27, 1878; and Blincoe (*Auk*, 48, 1931: 596) noted it at the lake at Englewood dam, Montgomery County, August 17, 1927.—CLARENCE F. CLARK, *Ohio Division of Conservation and Natural Resources, St. Marys, Ohio.*