

GENERAL NOTES

Spring molt of the Harris Sparrow.—Accounts of the prenuptial molt of the Harris Sparrow (*Zonotrichia querula*) by Swenk and Stevens (1929. *Wilson Bull.*, 41:129-177) and Roberts (1932. "The Birds of Minnesota," 2:711) indicate that this molt is limited to the head and neck. My observations, made in Kansas in 1954, show this molt to be more extensive than described.

My problem was two-fold: (1) to ascertain the extent and sequence of the molt and (2) to correlate this molt with changes in weight of body and weight of gonads. Study material consisted of 48 freshly-collected birds and 175 study skins in the University of Kansas Museum of Natural History. The 48 birds that I collected, with assistance from William Thornberry and Norman L. Ford, were prepared as flat skins. Flat skins are especially useful for studies of molt because the papillae of new feathers are evident on the inside of the skin.

In Kansas, the prenuptial molt of the Harris Sparrow begins in the second week in March. Eight specimens taken in January (4), February (1), and early March (3) show no molt. This agrees with the information given by Swenk and Stevens (*op. cit.*: 163). In March, all specimens collected after the 12th were molting. The lateral feathers of the ventral tract, in the region of the lower breast, are the first to be replaced and molt proceeds medially as well as anteriorly and posteriorly. Replacement in the capital tract is complete but only scattered feathers of the rump and belly are molted.

The marginal and lesser coverts ordinarily are molted in spring, but replacement of greater coverts and underwing coverts at this time is incomplete. Other wing feathers appear not to be molted.

In the tail, molt in spring is consistent and is confined to the two central feathers. I found no obvious correlation between the time of molt on the tail and body. Some birds retain worn central feathers in the tail into early April, but other birds lose these feathers early in the molt.

Molt is last evident in the capital tract. The pale-edged black feathers of the crown and the brown feathers of the post-auricular spot are replaced with glossy black feathers. With the completion of the molt in late April or early May, all birds, regardless of sex or age, are in similar breeding plumage.

Total weights, along with estimates of the amount of fat, were taken from the fresh specimens. Of 38 specimens, mostly molting, collected prior to April 28, all were "moderate fat" to "fat" according to the McCabe fat scale (1943. *Auk*, 60:550-558). The weights were as follows: 19 males averaged 38.8 gm. (36.8-41.7 gm.); 19 females averaged 33.7 gm. (31.4-36.3 gm.). A female taken on May 11, in fresh nuptial plumage, was "very fat" and weighed 37.8 gm. These data seem to indicate that the Harris Sparrow does not store large amounts of fat for migratory flights until the prenuptial molt is nearly complete.

The gonads of these birds were weighed to the nearest one-tenth milligram on a torsion balance. As expected, the weight of the gonads increased as the season progressed, but the increase seemed not to be closely correlated with molt in individual birds. The average weight of the largest testis for 11 males collected between March 26 and April 16 was 3.4 mg.; two males taken on April 22 averaged 6.5 mg. Weight of the ovary increased notably in the second week in April. Ovaries of four females taken between March 28 and April 2 weighed from 7.0 to 8.0 mg. Ovaries of ten

females taken from April 8 to 23 averaged 15.1 mg. (12.0–19.0 mg.). The ovary of the female taken on May 11 weighed 35.0 mg.

In summary, spring molt of the Harris Sparrow in Kansas begins in the second week in March and is completed by late April or early May. Replacement of feathers on the head and throat is complete. At the level of the shoulders, replacement is heavy but incomplete. At the level of the rump and belly, only scattered feathers are replaced. Some wing coverts seem to be molted regularly while others are molted only sporadically. The two central tail feathers are molted consistently in spring.—GLEN E. WOOLFENDEN, *Museum of Natural History, University of Kansas, Lawrence, Kansas, January 30, 1955.*

Notes on behavior of the Wild Turkey.—The note, "Swimming by Wild Turkey poults," by Leo M. Martin and Thomas Z. Atkeson (1954. *Wilson Bull.* 66:271) brings to mind an observation of my own. On June 9, 1951, I encountered a pair of adult Turkeys (*Meleagris gallapavo*) with at least six fledglings perhaps three or four days out of the eggs. The group scattered and one of the young birds walked slowly along a large, flat dead tree extending out into a pond. Upon reaching the small outer end the bird walked off into the water without the slightest hesitation and swam leisurely some 30 yards or more to the far shore. The poult was cold and exhausted when I picked it up without difficulty a few moments later. One parent disappeared. The other remained in plain sight near at hand but showed a minimum amount of agitation. I found one cold, addled egg a few feet distant from the spot where I picked up the fledgling. A. C. Bent (1932. *U.S. Nat. Mus. Bull.* 162:339) quotes Audubon as describing young Wild Turkeys, unable to make the flight across a river, as falling in and swimming to shore. I am informed that a number of different adults, injured, have been seen swimming here.

Not mentioned by Bent is the posture in running, which is somewhat like that of the Ring-necked Pheasant (*Phasianus colchicus*). On June 4, 1949, by pure happenstance I observed an adult running almost noiselessly through the underbrush at a speed faster than that of any human. The bird carried its head and neck outstretched forwards in such a manner as to form a single plane with the back. The region in question, in the eastern United States and further north than the Potomac River, has had rigid control now for going on towards a century. Some interbreeding with domestic turkeys was permitted years ago but I am inclined to believe the dominant strain is that of the Wild Turkey, *M. g. silvestris*.—WENDELL TABER, 3 Mercer Circle, Cambridge, Massachusetts, January 27, 1955.

Cardinal exploits Loggerhead Shrike's artificial food source.—A young Loggerhead Shrike (*Lanius ludovicianus*), barely able to fly, was brought to me on June 24, 1954. I raised this bird and freed it on September 12, 1954, in my yard, which adjoins an orchard on the outskirts of Norman, Oklahoma. With supplementary feeding, the bird established itself and has remained in this vicinity ever since. It comes once or several times a day to the electric wire just outside a kitchen window, squealing and fluttering its wings to be fed. Foodstuff, such as raw meat or cheddar cheese, tossed to the bird, usually is caught in mid-air and carried away to be eaten. The bird hangs part of its food on twigs; and I have seen meat impaled on three or four barbs of the fence.

When the shrike is hungry, a call or a rap on the windowpane will bring it up; at