

Why should not unsold remainders be held at the original price for future buyers five, ten, or more years hence? Even if sold at a reduction the publishers will be ahead more than by destroying the remainders. As the matter thus appears to us the proposal to destroy the remainders is wholly in the interest of the purchaser. This is difficult for us to understand when, as we believe, the work is purchased by scientists for its usefulness rather than as an investment. Surely science would be better served by the holding and subsequent distribution of the unsold work.

There may be a question here of the relation of the original selling price to the cost of production, which, however can only be considered with certain facts in hand. If at the completion of the work the publishers have not sold enough copies to pay for the publication, they do not add any to their income by destroying the remainders. If they have paid out on the copies sold and still have remainders which are to be destroyed, then it would seem that the subscribers take the loss. Perhaps after all we must realize that most publication, even of a scientific nature, is a commercial proposition, and is not to be judged by ideal ethical standards.

GENERAL NOTES

Conducted by M. H. Swenk

Breeding of the Florida Gallinule in Lake County, Ohio.—To my knowledge this is the first record of the Florida Gallinule breeding in this country. In late June, 1928, I discovered that a pair had remained, and judged from their actions and "talk" that they had a nest concealed somewhere along a certain point of marsh vegetation that extended into a swamp pond. Without a boat it was useless to search for the nest, but by keeping watch eventually I saw two of the young, and at the present writing (July 22) they can occasionally be seen along the edge of the water. They are in their first summer plumage.—E. A. DOOLITTLE, *Painesville, Ohio.*

The European Starling in Calhoun County, Michigan.—Late in December, 1927, the European Starling (*Sturnus vulgaris*) was first observed near Battle Creek. There was a flock of about forty-five, and these birds spent the rest of the winter in the vicinity. They fed on scattered grain found around the barn yards.

The birds were still present this summer (1928). Two nests, the first observed in the vicinity, were found. Both were in telephone poles along the roadside. Of these two nests, the eggs were destroyed in one while a brood of four was reared in the other. Nearly every orchard immediately in this vicinity had a pair of Starlings present, probably nesting.

The birds were identified by their brownish-black color, yellow bill and their noisy character. The eggs were blue.—LAWRENCE WALKINSHAW, *Battle Creek, Mich.*

The Pollination of Scarlet Sage Flowers by Hummingbirds.—The writer has been interested in the pollination of *Salvias* and other "hummingbird flowers" for quite a number of years. He does not happen to have the exact

dates that he has noted hummingbirds here at Ames, but as long ago as 1905 he observed the Ruby-throated Hummingbird (*Archilochus colubris*) upon the common Scarlet Sage, and frequently used it as an illustration of the relation of birds to the pollination of flowers. *Salvia splendens*, the Scarlet Sage now so commonly cultivated, is a native of Brazil, where it is one of the splendid "hummingbird flowers." We have quite a number of flowers pollinated by the Ruby-throated Hummingbird. One of these that I noted some years ago, in 1900, is the Jewelweed (*Impatiens fulva*). This is noted in my Ecology (p. 45).

Much has been written on the subject of pollination of the "hummingbird flowers." Dr. William Trelease (*Am. Nat.* xiv, p. 362, 1880) in several articles called attention to the pollination of such flowers as the *Passiflora incarnata*, *Oenothera sinuata*, *Lobelia cardinalis* and *Erythrina herbacea*. In another splendid article (*Am. Nat.* xv, pp. 265-269, fig. 1, 1881) he describes in detail the pollination of *Salvia splendens*, giving an excellent figure, and in another connection has mentioned the bird pollination of *Salvia gesneraeifolia*. He notes the fact also in the first species that the color of the flower is most attractive to the hummingbird. Moreover, there is a reference here to the work of Fritz Mueller (*Bot. Zeit.*, p. 275, 1870) on Brazil, in which the author states that Scarlet Sages are commonly pollinated by hummingbirds. In other words, the South American hummingbirds are the important pollinators of the several *Salvias* occurring in that country.

Charles Robertson in several interesting articles has incidentally referred to the pollination of certain flowers by hummingbirds, and W. J. Beal (*Am. Nat.* xiv, p. 126, 1880) has called attention to the relationship existing between the Jewelweed and Ruby-throated Hummingbird, based on some observations made at Lansing, Michigan. My purpose in calling attention to these is the fact that I think there is a definite relationship existing between the migration of the Ruby-throated Hummingbird and the blooming of bird flowers; a matter that will be looked up later by Mr. W. M. Rosen and myself.

In a letter to me Dr. Stephens states that in 1926, on September 25 and 26, he observed the Ruby-throated Hummingbird at the *Salvia splendens* in Sioux City; that on September 25 of the same year Mr. Chas. J. Spiker saw it at the *Salvia* in another part of Sioux City; and that the same year it was observed as late as October 2 and 3 in Sioux City. Dr. Stephens further tells me that in Frank Pellett's book "Birds of the Wild" (p. 70) the hummingbird was noted at the *Salvia* as late as September 21 (year not given).

The writer was at Garner, Iowa, on October 6, 1928, and saw a beautiful patch of Scarlet Sage that was in full bloom being very appropriately used as an ornamental plant at an oil station. The owner of the station, Mr. Fred G. Hagel, told him that he had watched the hummingbirds on this all summer, and had observed sometimes as many as five or six of these birds at the same time visiting these flowers. During the last cold spell (September 26, 1928), Mr. Hagel found several hummingbirds evidently chilled. One of these died and one recovered.

Very few of the "hummingbird flowers" bloom as late as the introduced *Salvias*. I have seen the Coral Honeysuckle (*Lonicera sempervirens*) bloom as late as the month of September, but this is exceptional.—L. H. PAMMEL, Ames, Iowa.