Perhaps because of the late nesting, the young grosbeaks came daily (although often briefly) to our feeders until November. This was quite contrary to our previous experience when the grosbeaks appeared but refused our food during the latter part of each September and all of October. Only twice during November, 1956, were the grosbeaks seen in our feeders. On the second such occasion (November 22nd) an adult male and an immature grosbeak fed together in the same feeder. The immature male begged to be fed (in the usual juvenal manner) and the adult fed him once. Then they both flew away. From November until early February, 1957, the grosbeaks appeared irregularly—absenting themselves for a period of eight days in November and sixteen days during the first half of December.

Glebe Farm, South Londonderry, Vt.

A JUVENAL EVENING GROSBEAK APPEARS IN NORTHAMPTON, MASSACHUSETTS IN LATE OCTOBER 1957*

BY B. M. SHAUB

The early arrival of the Evening Grosbeak in Northampton, Massachusetts in the autumn of 1957 is unprecedented. The first birds noted in the city were observed by me on September 23rd. A few days later they were reported by a number of individuals in the city as well as from the vicinal villages and towns.

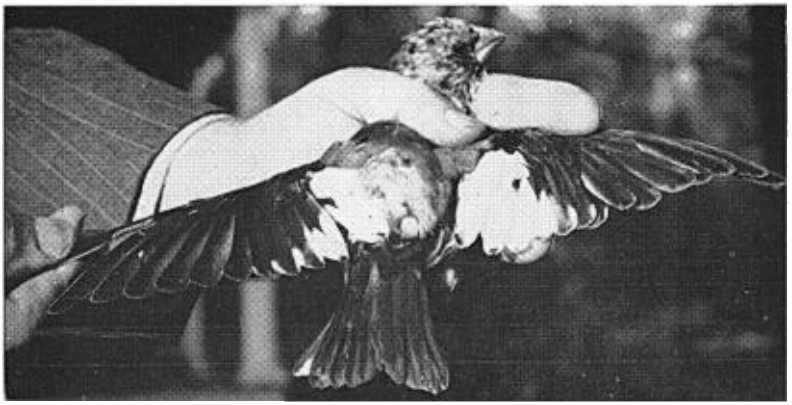
The first of the early arrivals to drop into our feeding station appeared on Saturday, October 26th, when 7 males and 1 female were observed. Among the males was a young bird which still retained most of his juvenal plumage, although clearly in the early stages of the post juvenal molt and obviously a bird of the year.

After discovering the presence of this young bird, it was decided to capture it if possible, to band it, examine it more carefully in the hand, and record the data obtained. Hence a drop door trap was selected and placed on the porch where the birds come to the feeders and where they can easily be observed from my study. The next day the Evening Grosbeaks did not appear; however on the 28th about 25 came to the feeders and to the trap. At one time 15 birds could have been captured but the desired individual was nowhere to be seen. About 3 P.M. the much looked-for juvenal arrived and entered the trap, which was sprung to capture not only the young bird but an adult male as well. The juvenal was therefore made available for study. Photographs were made in both color and black and white in order to record the color and physical appearance of our unusual guest.

*Contribution No. 20 from the Shaub Ornithological Research Station, 159 Elm Street, Northampton, Massachusetts.

DESCRIPTION OF ILLUSTRATION

Fig. 1. Juvenal male Evening Grosbeak trapped and banded (no. 55-127606) at Northampton, Massachusetts, October 28, 1957.



A description of the plumage follows: In general the plumage had a very ragged and mottled appearance (Fig. 1). The bill was of a light horn color turning to the yellow which is normal for the species during the winter months. The very tip of the bill was of a much darker horn color, similar to that noted on juvenals at Saranac Lake, New York (Shaub and Shaub, 1953), and at South Londonderry, Vermont. The top of the head consisted largely of the characteristic juvenal buffy feathers, of a rather ragged appearance and through which the black feathers of the adult plumage were prominently showing. The frontal band of yellow feathers around the forehead of the adult male was clearly outlined although it still contained many of the buffy juvenal feathers. The sides of the face and head consisted of a mixture of buffy blackish color due to a strong admixture of blackish adult feathers.

The tail feathers were black, with whitish spots on the inner tips of the outer feather, while the second and third feathers were only slightly whitish on their inner tips. In this respect there was no marked distinction from the juvenals seen elsewhere or for the average males whose tail feathers are often similarly marked.

The primaries were black, with the inner margins of the feathers showing an increasing whitish inner fringe from the outer feather inward. The three outer secondaries were black with white tips and mostly white inside of the midrib. Each succeeding feather showed more white until the entire secondary feathers became white. The three inside white secondaries were heavily fringed on the inside edges with black, the greatest intensity of black being on the inside feather. The white feathers of the secondaries were heavily fringed on the edges with yellow. The body feathers on the back were a mixture of the buffy feathers of the juvenal and the bronzy-blackish yellow feathers of the adult. The molt on the under part of the body had progressed somewhat farther, as the yellow was more intense, although there were many buffy feathers still present.

It is interesting to note that among the 20 to 30 individuals in the group at our station, this was the only individual present that carried enough of the juvenal plumage to make it stand out very conspicuously from the rest of the flock, all of which appeared to be in complete adult plumage. However, there were quite a few among the flock which were obviously one or more years old, as they too were molting, their plumage had a very ragged appearance and at places patches of the feathers were missing. It is not at all improbable that many of the birds with the freshest plumages were birds of the year that had recently completed their postjuvenal molt.

One can speculate somewhat as to the reason for the presence of a juvenal Evening Grosbeak at this date for the 1957 breeding season. Could it be an individual of a rare second nesting, or probably from a pair of grosbeaks which were very late to nest, or perhaps a second nest following the destruction of an early one by squirrels or other rodents or by birds of prey? This individual is not as likely to represent one from a brood which appeared at the normal nesting period, and for some reason was very late to assume the postjuvenal molt. Any of the previous possibilities enumerated seem more feasible than the last. The bird was in very good condition as it weighed 62.4 grams, which is the average weight found for 117 males weighed at Northampton in the early months of 1949 (Shaub and Shaub, 1950).

While this particular bird may be either a single survivor of a brood, or one of several which may be elsewhere in the general area, it shows clearly that there are still some, although probably a very small number, of grosbeaks of the year that are still in partial juvenal plumage during the latter part of October. Due chiefly to Audubon's painting (Folio plate No. 207, octavo edition, Philadelphia) there is still considerable confusion concerning the plumage of the juvenal male. There do not appear to be any authentic records of Evening Grosbeaks in juvenal plumage seen as late as the middle of October. There is a distinct plumage variation between the sexes of the Evening Grosbeak, which has been frequently reported, but such variations do not involve the presence of juvenal plumages.

Previous observations of the juvenal Evening Grosbeaks at Saranac Lake suggest that there was no brood cohesion of the juvenals; instead the young usually appeared singly after they were mature enough to be on their own.

The previous early fall appearance of the Evening Grosbeak in this vicinity was in the early part of November of 1954 (Shaub and Shaub, 1954), and at that time there were no birds which showed identifiable juvenal plumages, among those banded or at the feeders. Hence, it appeared that the postjuvenal molt was completed between the middle of September and the latter part of October. The birds at the feeders in Northampton during the latter part of October 1957 are, with this single exception, in adult plumages. Hence the posjuvenal molt must be complete for essentially all individuals by the early part or the middle of October. I observed a flock of 28 individuals near North Thetford, Vermont at close range, in low trees and nearby on the ground, on September 21st, 1957 and in every instance the individuals were in

adult plumage. One would certainly expect that at least half of the individuals of an average flock in September and October would be birds of the year, and since all were in adult plumage, the postjuvenal molt must have been complete by that time for the particular flock observed. It therefore appears to me that the individual under consideration, No. 55-127606, is a bird from a rare second brood, a second attempt to rear a brood or from a very late first nesting.

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BIRDS AND SOME HUMAN DISEASES

BY ELIZABETH M. BOYD

The subject of birds and some human diseases may be grouped under four subheadings: ectoparasites of birds attacking humans; the indirect effect of birds on certain human diseases; birds as biological distributors of specific human diseases; and lastly birds as successful experimental animals in the investigation and control of human diseases.

The ectoparasites of birds that may attack man are blood-suckers that exhibit, to a varying degree, slight host specificity. Some species of mosquitoes prefer avian blood to that of human, but if necessary will resort to *Homo sapiens* for their blood meal. Similarly bedbugs, and occasionally fleas, if stranded by the southward departure of their hosts for the winter, have been known to leave nests of swallows or swifts and invade houses and molest people in their search for a food supply. Disturbance of their homes often results in their attacks on the human intruders. Added to the discomfort that they may cause is always the danger of infection, for any break in the skin acts as a portal of entry for bacteria, especially if augmented by irritation. Chicken and related blood-sucking mites may be the cause of another type of irritation to man. Poultry-keepers working in mite-infested hen houses often discover tiny creatures, mites, crawling over their hands and up their arms. Repeated exposures to these mites may result in an allergic reaction in the form of an uncomfortable skin rash on the person.

"Swimmer's itch" may be classified under this subheading but only as an appendix since it is due to the presence not of an ectoparasite but of the immature stage of a parasitic worm, a non-human blood-fluke. This skin rash or schistosome dermatitis is also an allergic response to repeated infections. These schistosome flukes live as adults in the blood of birds and other animals, but pass their immature stages in snails. The larva escapes from the snail into the water and bores its way into the skin of its final host. If these immature stages accidentally enter the wrong animal, for example man, they will wander aimlessly