necessary to confirm a diagnosis. Those versed in the use of a microscope can demonstrate the tiny organisms that are the cause of the disease. They are very active and usually present in great numbers.

For diagnosis, it is particularly important that the specimen be examined in a fresh condition for the parasites do not survive long after the bird is dead. If the dead bird is to be shipped to a laboratory for confirmation of field diagnosis, it must not be frozen or otherwise preserved but simply wrapped in several thicknesses of newspaper. Such a package, if marked "perishable" and "rush" will usually reach the laboratory in good condition except during the summer months. In hot weather, unless the specimen can be delivered quickly to the laboratory, shipment is useless because of rapid decomposition. Even during cooler weather, if the bird has been dead any length of time or will be in transit for more than 2-3 days, it is a waste of time and expense to ship it, for it will then be impossible for a technician to find recognizable trichomonads. Anyone in a position to examine numbers of doves could probably arrange to have on hand a supply of culture tubes for isolation of the parasites from the fresh specimens, or even for determination of possible carriers.

We know already that the disease is widespread geographically. However, incidence and intensity of infection in dove populations are important factors upon which we have little information. The examination of an occasional dove will add little to our current knowledge but individuals trapping or otherwise handling large numbers of doves can aid considerably in the procurement of needed data.

Bird banders concentrating on mourning doves are urged to assist in obtaining quantitative evidence on seasonal incidence of this widespread disease. Findings should be reported to local game authorities, or to the U. S. Fish and Wildlife Service, and, whenever possible, field diagnosis should be confirmed by laboratory study.

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A DEVICE FOR REMOVING OVERLAPPED BANDS FROM BIRDS' LEGS

By B. M. Shaub*

Bird-banders who band the Evening Grosbeak, the Cardinal or any of the other strong-beaked birds will quickly discover that the repeat birds, unless banded with the heavy rigid band designed for these birds, will occasionally bring back badly mutilated bands. Unless one uses a closing pliers for a particular sized band, overlapped bands may occasionally result, and it is often desirable to remove the overlapped band rather than chance an injury to the bird after it is released.





It is nearly impossible for many banders to remove the stronger overlapped bands with the fingers, hence some mechanical aid is necessary. Some devices, as staple pullers, with certain modifications or adaptations have been suggested. Most of these arrangements require that the expanding force must be applied from the inside of the band. As the bird's leg fully occupies this space in a collapsed band, such devices are not practical. The removal of a band must be accomplished without applying pressure on the bird's leg, for in so doing injury to the bird is likely to result. Strong bands that are badly overlapped and crushed can be removed very easily and quickly by the use of a small pair of end cutting nipper pliers four or five inches long and a small spanner wrench (e)—see illustration.

It is not likely that one can buy a suitable spanner wrench at the local hardware store, but the small pliers is a stock item. The following suggestions are given for the construction of the spanner: It is best to start with a suitable piece of steel which should be about 1/16 to 3/32-inch thick, $\frac{3}{4}$ -inch wide and about 3 inches long. A three-inch mending plate, carried in stock by hardware stores, makes a good piece of metal for this purpose. Although such plates have four countersunk holes drilled through at various positions, these do not interfere as the hole, indicated in (a), which varies in size for the different sized bands, can be drilled close to the end hole in the plate which will be discarded with the shaded area shown in (b). The shaded area can

easily be cut away with a hack saw. The rough cut can be smoothed up and brought to the proper shape, (c), with the use of a flat file and a small sharp v-edged or preferably a small half-round file.

Due to the bander's lack of more than two hands during the bandremoving operation, the bird must first be immobilized. This can be done surprisingly easily by wrapping it in a small piece of cheese cloth. The banded leg should be allowed to protrude while the other can be held along the side of the bird by the cloth. A couple of small rubber bands may be used to hold the cloth around the bird. The operator's hands are then free to manipulate the pliers and spanner. The band, (g), is grasped with the pliers (f) and held firmly while the hook on the spanner (d) is engaged with the end of the overlapped part of the band. By using a rotating motion of the spanner the band is easily unrolled or opened up and removed. In removing the band in this manner there is no pressure applied to the bird's leg during the operation. It is completely safe insofar as accidents to the bird's leg are concerned.

After the band is removed the burrs raised by the pliers should be removed with a small file. The band can be reformed around an ice pick and then replaced on the leg and the bird released.

*Contribution No. 8 from the Shaub Ornithological Research Station.

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GENERAL NOTES

Additional Evening Grosbeak Recoveries.—A report of the records made by Evening Grosbeaks (Hesperiphona vespertina vespertina Cooper) which had been banded at our Hartford, Connecticut, station was carried in Bird-Banding, 23: 144-154, October, 1952. That report included all records known to us through November 30, 1951. Barely had our manuscript reached the editor, however, when we began to receive further reports of recoveries. A further list of the recoveries of our birds, reported to us since November 30, 1951, and complete through August 31, 1952, appears on the opposite page.

Three interesting age records are included among these birds. Female 44-214690 had worn our band for more than six years; female 45-200148, for almost as long; and female 46-213042, for almost exactly five years. It is noteworthy, too, that these three birds were released alive.

Of greater importance, perhaps, are the data which bear witness to the wide dispersal of this unpredictable species. Within a span of less than seven months (October 19, 1951, to May 8, 1952) recoveries of our Evening Grosbeaks were accomplished at such widely separated points as Wisconsin, Maine, and the province of Quebec to the west and north; as far south as Virginia and Maryland, and in intermediate New York, New Jersey, Pennsylvania, and Connecticut. Should we overlook the Quebec record for the moment it will be seen that a time span of little more than $4\frac{1}{2}$ months shows almost no diminution in the geographical dispersal.

This addendum may also supply data which will help to chart the trail of this species' historic southward invasion during the winter of 1951-1952.

The predominance of female over male records may be explained in part by the fact that a majority of the recoveries were made within the southerly range where flocks have generally shown a preponderance of females. A second possible reason may be the fact that females, if our repeat records may be accepted as any criterion, are less trap-shy than are males. The law of chance, however, is probably the greatest factor of all.