be equally well represented in 1926, and, in order to enable this to be done with as little difficulty as possible, I have arranged again to collect and forward American work intended for the scientific section.

This work should consist of prints showing the use of photography for scientific purposes and its application to spectroscopy, astronomy, radiography, biology, etc. Photographs should reach me not later than Saturday, June 12th. They should be mounted but not framed. There are no fees.

I should be glad if any worker who is able to send photographs will communicate with me as soon as possible so that I may arrange for the receiving and entry of the exhibit.

A. J. NEWTON

EASTMAN KODAK COMPANY, ROCHESTER, N. Y.

## REQUEST FOR DATA ON THE TWILIGHT SONG OF THE WOOD PEWEE

THE wood pewee, one of the commonest birds of the eastern United States and Canada, sings a long, complex musical composition known as the twilight song. It is named "twilight song" because it is sung regularly at dawn, rarely at sunset, and never at any other time of day. The song lasts continuously for a very long time, even as long as forty minutes; but it contains only three different phrases, which I shall speak of as phrases 1, 2 and 3, and which are readily distinguishable from each other, thus affording a basis of exact analysis. A brief, preliminary description of the song can be found in the current (April) number of The Auk. Although there are only three different phrases, their order of succession is remarkably complex, and individual variations are so great that apparently each individual wood pewee sings a composition of his own. A thorough study of these compositions will be sure to yield results of great interest. I request that scientists and also non-scientific persons (if only they are accurate) will make records of the song for me. To make the record, you simply write the number of each phrase, 1, 2 or 3, as the case may be, while the bird is singing. This can be done by any person who is careful and reliable and has a sufficiently good ear to follow a tune. The only difficulty is that you need to rise and go out before daylight on one of the long days of early summer, in order to get a complete record. Few persons have the time to spare and the necessary interest and enthusiasm to do this. If you can take the time to make one complete record, it will be a valuable contribution. Please write to the undersigned for a copy of the directions for making a record.

WALLACE CRAIG

HARVARD MEDICAL SCHOOL, . BOSTON, MASS.

## SCIENTIFIC BOOKS

Manual of Injurious Insects. By GLENN W. HERRICK. New York, Henry Holt & Co., 1925, 474 pp., 458 illustrations.

One of the reasons why entomologists until comparatively recent years were so numerous in Europe and so scarce in America was the lack of books over here which would enable collectors to identify species. The lack of this kind of books still exists, although to a much lesser degree, in the United States. But during the past dozen years a number of good books have been published in this country on the subject of applied entomology, and of these books Professor Herrick's volume is the latest and in many respects the best. It is worthy of note that most of these books have been written by teachers, and their aim has been not only to tell everybody about injurious insects and how to combat them but to place before students a compendium of economic entomology in this country down to the date of writing. I have never taught applied entomology, but it seems to me that, if I were to try to teach, this book would be the one I should use before any as yet published.

Herrick's volume must be praised very highly. It has many good points. The illustrations are competent, and the majority of them are new. And the author has introduced several new features which are excellent. For example, wherever possible he has introduced with the consideration of each one of the principal crop pests a small outline map of the United States indicating the geographic distribution of the insect. It has not been possible to do this in all cases, on account of lack of records, but where it has been possible it can not fail to be of very great use. It shows at a glance conditions which it would take many lines of print to describe.

Another point which makes the book very useful is the introduction of synopses of the chief insects affecting the different crops. For example, after the consideration of insects injurious to apple, there is a synopsis of the chief insects injurious to this fruit in the United States, arranged according to the character of their work as well as to their general appearance in all stages; and this is done in popular language so that the apple grower will be able to find out immediately just what insect is damaging his trees, and he can do it without sending specimens to some distant economic entomologist.

Then too, Herrick has been careful to indicate in his legends to the illustrations the actual size of the insect, an important point neglected by some recent popular writers on insects, thus causing serious misconceptions. His proofreaders, unfortunately, overlooked this in a few instances, as in the case of the