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INSTRUCTIONS TO BIRD MIGRATION OBSERVERS

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The study of the distribution and migration of North American birds ranks among the oldest lines of research conducted by the Biological Survey, now a part of the Fish and Wildlife Service. These investigations were taken over from the original migration committee of the American Ornithologists' Union in 1885, when the Division that later grew to be the Fish and Wildlife Service was established. Since that time the accumulation of data on the subject has been continuous and along two lines: (1) Original observations by the Service's own staff and a corps of volunteer cooperators, and (2) records abstracted from literature. The data thus obtained are recorded on 2-by-5-inch cards, which are filed by species in the order in which they appear in the 1910 A.O.U. Checklist. The species groups are further broken down by States and other political divisions in a north and south arrangement that agrees in a general way with the four major flyways—the Atlantic, the Mississippi, the Central, and the Pacific.

During the nearly 60 years that this work has been in progress, interest in bird life has steadily increased, until today there are thousands of students of birds in all parts of the country. Every State has at least one bird club or Audubon Society, and there are four major societies devoted to the science of ornithology with continental or world-wide membership.

From the memberships of these societies the Service might enroll hundreds, if not thousands, of migration observers, but physical limitations make it no longer possible to have a large corps of cooperators or to copy every reference to a bird that appears in print. It has therefore become necessary for the Service to "pick and choose" among those interested. It desires, however, to retain the services of a carefully selected force of observers strategically located along the various migration routes that make up the different flyways. The Service greatly appreciates the work of its bird-observation cooperators; at the same time it trusts that they will understand the confidence placed in them and recognize their responsibility. Not every offer of cooperation is accepted.

In order that the data gathered by the varied force from all parts of the continent may be of practical value, standardization of recording methods is essential. For this purpose the following instructions are issued:

MAKING OBSERVATIONS

The serious student makes notes on the migrations of birds at every opportunity. The first or the last occurrences of a bird during a migration season may be noted in the yard of the observer, or while en route to or from his daily occupation, or on special bird trips to favored haunts. A pair of good field glasses (of not more than 8 power), notebook, and a pencil are part of his regular equipment.

Accuracy in identification.—The random notes of today may become the science of tomorrow. Accuracy, therefore, is very important. A bird observer may not be able to identify every bird he sees; if he cannot be absolutely positive of the identification, he should not record the incident. Guesses have no place in the scientific notebook.

Every observer should have a fairly accurate knowledge of the bird list of his section of the country and should exercise the greatest care in making additions to it. Ordinarily, a bird new to a State list should be recorded only upon the basis of a preserved specimen. For smaller sections such collecting is not always necessary, but the rare birds should always be placed on record only after the utmost pains have been taken to eliminate every possibility of error. Many a professional and well-trained naturalist has seen birds that he identified visually as a species rare or even new to the area, but which, upon collection, proved to be of a species locally common. If, after careful study, the identification of a rare bird is confirmed, notes should be made (in the field at the time) of the characters or mannerisms that aided in the decision, and these should be included in the report on the species. This rule applies also to common species seen at unusual seasons.

Use of names.—It is not necessary for the migration observer either to know or to use the scientific, or technical, names of birds, but he should know and use the accepted common name. A standard handbook or the published list of the birds of his State (if such exists) is almost as important an item in his equipment as are his field glasses. The Service will be glad to give advice on helpful books available for the purpose.

Though desirable, it is not necessary to use the qualifying adjective when referring to a species that may have several geographic races, or subspecies. For example, a robin is a robin, whether it is the eastern, northwestern, San Lucas, southern, or western form. In some cases, however, the full name should be given with meticulous care. An example of this is the bluebird, which in eastern North America can mean only the eastern bluebird (*Sialia sialis sialis*), but for an observer in Colorado to record merely "bluebird" at once raises the question whether he means the eastern bird, which does occur west to the Rocky Mountains; the mountain bluebird (*Sialia currucoides*), which is the most common species in that State; or the chestnut-backed bluebird (*Sialia mexicana bairdi*), which is found in the mountainous parts. Similarly, loose use of such group names as "wren", "oriole", or "blackbird" renders a record worthless and creates a doubt as to the care with which identifications are made. This demonstrates another reason for having at hand an up-to-date, comprehensive book on the subject. The little incomplete pocket guides serve a useful purpose, particularly for beginners, but the experienced observer whose notes are worthy of permanent record in the files of the Service should be better equipped.

RECORDING OBSERVATIONS

Every student of birds will work out the system of note taking and recording that best meets his own requirements. The Service does not wish to prescribe any particular system to be followed by cooperators any more than it does for the naturalists on its own staff. Nevertheless, reports prepared both by members of the scientific staff and by volunteer observers should follow a standard procedure. For use in preparing such reports the 2-by-5 cards (Form Bi-801) are supplied to all migration observers.

Name of bird		Wood Thrush				
Locality	Washington, D. C.					Year
Observer	John Doe.					1941
First seen	Number seen	Next seen	Became common	Last seen	Breeds	Winters
April 21	2	April 23	April 30		Yes	No.
Bird seen building May 5 Young seen out of nest June 10.						
Form Bi-801		GPO			8-5280	

Preparing report cards.—Since the Bird Migration Observation cards are to be incorporated in the permanent files, it is necessary that all entries be legibly written or stamped in ink. Some observers use the typewriter, but although this makes neat-looking cards, it is not a requirement. Lead pencil should not be used.

Essential data.—The name of the bird should be entered on the top line. (See page 2 for comments regarding names.) The square in the upper left corner should be left blank.

The locality where the observations were made should be entered on the second line. The post office address (town and State) of the observer is sufficient in covering an area within a radius of 8 or 10 miles of it. It may be desired to spot breeding or wintering records on distribution maps, and for such purpose names of counties are not sufficiently exact.

The name of the observer should be entered on the third line. Many observers use rubber stamps for their names and addresses, thus saving much time in preparing the cards. Such stamps are inexpensive and with a little care will last indefinitely.

The year in which observations were made should be entered in the square at the end of the second and third lines.

The data to be entered in the spaces below the third line are: (1) Date the species was first seen; (2) the approximate number noted on the first observation; (3) date the species was next seen, whether on the next day or not until some time later; (4) date the species became common; (5) date the species was last seen; (6 and 7) the words "yes" or "no," "abdt." (abundant), "plen." (plentiful), "com." (common), or "rare" to

indicate status as a breeding or a wintering species. If it does not breed or winter in the locality where the observation is made, enter the word "no" in either or both spaces as the case may require.

Use of terms.—Care should be exercised in using the relative words "abundant", "plentiful", and similar terms, as a certain number of individuals of one species seen during one day might represent unusual abundance for that species, whereas the same number of another species would indicate scarcity. A dozen duck hawks seen in one day would represent abundance, but the same number of juncos would, in most sections, represent scarcity. Status as a breeder should be based only on actual observation of a nest or of obviously young birds, not on the summer occurrence of apparently adult birds. Winter status usually depends on presence of birds in January.

Dates.—Observers should not list a "date first seen" that obviously is unusually late, unless explanatory comment is added. In some seasons for one reason or another, all migration may be exceptionally early or late. Also, the permanent residents of any particular locality should not be listed year after year on migration cards. New observers should list these once, writing "permanent resident" across the spaces below line 3 and indicating at the bottom of the cards the status of these species (abundant, common, etc.) in that locality.

Not all birds perform their migrations alike. Some straggle along in small numbers and may never appear plentiful or abundant in any one place. Others seem to have scouts, or an advance guard, which may arrive several days before the main body. Still others arrive en masse and are noted in numbers from the date of first observation. Date of departure can be recorded for the last day seen only when all birds of that particular species leave. Consequently, in spring, for migrants that breed in the area of observation, there can be no "date last seen". Similarly, in fall there can be no last date if the species remains through the winter. Winter residents do, however, have a "date last seen" when they depart in the spring.

Such additional information as actual breeding dates, unusual occurrence in winter, or unusual abundance or scarcity should be noted in the space at the bottom of the card or on the back. If the back of card is used, note "over" on the front.

Mailing reports.—Separate sets of cards should be used for the spring and fall migrations, and as promptly as possible after the close of the migration period they should be sent to the Service in the franked return envelopes provided. It is well not to mail more than 100 cards in an envelope for fear of damage or loss.

The 3-by-5 card provided should be filled in with the observer's name and complete address, so that the mailing list may be kept up-to-date.