

may be secured. Bearing this in mind, I hope to continue the study of this group of Veeries next summer and to develop some method of trapping the adults successfully.

### ARE WE MAKING THE MOST OF OUR BANDING STATIONS?

Not all our banders are taking notes on a scale to get the best results. Not all realize that it is perfectly feasible to maintain a banding station on a very small scale—perhaps not more than a shelf trap at a window—and yet secure scientific information about birds of importance.

Two of the most necessary and at the same time pleasant phases of the bander's work are careful observation and note-taking. Notes should be made daily of even seemingly trivial things about the birds at your station and wherever you see them in the vicinity or elsewhere. By so doing you may in time add important facts that will

- (1) Help solve existing problems;
- (2) Bring about a reconsideration of accepted views regarding some ornithological matters;
- (3) Best of all, open up ornithological problems of your own.

In fact you may do all three of these things, which include amassing needed information regarding the life-histories of many of our commonest birds.

Not a few of you have Dr. Allen's lectures that were delivered last winter. We hope you will reread them with a view of refreshing your memory on the many problems still awaiting satisfactory explanations, at the same time seeing if some of your own observations do not assist in bringing nearer the solutions sought. The constant effort should be to discover the bearing that the observations you make have on some existing problems. The amount of interesting work to be done by the field ornithologists is incalculably great. Any day, at your station or during a walk afield, you may stumble upon an observation or a series of observations that will open up a wide vista of possibilities. May we illustrate what we mean by citing a few recent observations by some of our members?

## CASE I

One of our members has several Chickadees feeding where their behavior can be readily and continuously observed. The birds are fed on sunflower seeds and English walnuts. One bird was observed to have difficulty in opening a seed which it held flat on a branch, the toes holding it firmly. Suddenly the bird tipped the seed up on its larger end and grasped it from the sides, directing its blows into a depression (scar) in the small end where the plumule emerges in germination with the result that the seed was quickly opened. At another time halves of walnuts were placed with their flat sides downward in a feeding tray, with the result that the Chickadees almost immediately turned them over, thus gaining access to the meat within.

Another observer noted several Robins standing around a fourteen-inch bird bath awaiting their turn, while one was perched on the rim. At this moment two leaves fell into the bath. The Robin on the rim immediately reached over and picked up one of the leaves, dropping it outside on the ground, and then picked up the second one, carrying it some feet away from the bath, where it was dropped as before. The bird then returned and proceeded to bathe.

Do any of these three facts support or oppose the view held by some ornithologists that the things that birds do are mechanical (instinctive) in their nature, or that birds are quite unable to think over and solve any problem that confronts them?

## CASE II

This example is given to show that an afternoon's walk afield may lead to interesting speculations and perhaps to a solution of a presumed-to-be-solved ornithological problem.

It has been observed that about the openings to the nesting-holes of Red-breasted Nuthatches pitch is often found in the form of a partial or complete ring spread on the bark and sometimes most plentifully just below the entrance. Now, knowing this, one day you observe some of these birds sitting on little clusters of the cones of the red spruce, say in October, when they are opening and the seeds are falling. You note also that the cones have drop-like masses of soft pitch on the outside. Having the above

facts in mind, would you suspect that the situation had any bearing on the theory that these birds deliberately carry pitch to their nesting-trees in their mandibles and smear the bark as thought probable? If yes, how would you go about to test the matter?

### CASE III

There is definite proof that Canada Geese and certain Swans maintain family groups for months after the young are fully grown. There are, however, many species of birds of which in this particular we have no knowledge whatever. At all seasons, except at nesting-time, many species of birds occur in groups, at least in New England, some large and some small. Some of our wintering migrants arrive here in small groups of a single species, and, as a result of a local abundance of food, where groups of different species congregate, various species may conalesce into large composite flocks.

It is a fair probability that such arriving groups are of the family order, the migrating units. Since the tendency to flock is very marked among many species of birds, does it not appear reasonable that at least the nucleus of such flocks is a family? One of our banders has had a pair of bluebirds which during 1924 raised two broods, one of five and one of four young, and all eleven were banded. About August 15th the whole family disappeared for about four weeks, no doubt to seek seclusion during the molt, but they returned early in September pretty surely still a family group.\* Would you not like to assist in proving that such a group of any species of birds maintains this relationship through late summer and fall, as it migrates to its winter quarters, while it remains there, and perhaps as the birds come north again in the spring? All these things have been proved to be true in at least one family of Canada Geese, and even the approximate migration route of the birds going from and to their nesting-grounds has been determined. Bird-banding secured the facts in the case of the Canada Geese: it will in time prove whether or not other species of birds do likewise. If you have this problem in mind,

\*For a more complete account of these Blue birds, see Mr. A. W. Higgins's article printed in this number

will not the little groups like the Chickadees and Juncos which come to your station, and those which you meet so frequently in your bird walks take on a new interest? Bird-banding is of prime importance in such an investigation.

The country is puzzle-mad. Why not harness this surplus energy and puzzle out an ornithological riddle, thereby testing your skill, adding to your pleasure and helping the science of ornithology?

C. L. W.

#### GENERAL NOTES

**The Purple Finch's Nuptial Dance.**—I have been privileged on two occasions to witness the nuptial dance of the male Purple Finch (*Carpodacus purpureus purpureus*). The first time was in 1923 at my farm. The female stood on a large rock, while the male danced about her.

This last spring I had a pair of banded birds of this species at my banding station in Rock, Mass. The male, No. 40165, was banded by Mrs. Alice C. Pratt, of Middleboro, Mass., May 10, 1923, and the female, No. 127424, was banded by me May 6, 1924. On this second occasion the play was staged by these birds (which were mated) on the ground near a bird-trap. The female simply stood still and watched the male, who, raising his crown feathers, spreading his wings in an arc, with even the wing coverts elevated, thus exposing all his brilliant colors, danced in circles about her, dragging his wing-tips and resembling a dancing flame of fire as the sun shone on his beautiful feathers. The dance circles were fifteen to eighteen inches in diameter, the bird moving first in one direction but often reversing his course, while he faced the female continuously. In duration the dance lasted about two minutes. Of all the beautiful sights I have seen in the bird world, the nuptial dance of the Purple Finch is the most gorgeous. A. W. HIGGINS, December, 1924.

We are very anxious to study bird migration. The Connecticut River valley offers a splendid opportunity to do this, but we lack the necessary number of banders, particularly along the northern part of the valley, and by "valley" we mean both the flood plain along the stream and all the territory drained by the river.

Migration may best be studied by a large number of banders distributed over the valley as a whole, who band many birds during the spring and fall movements and who operate their stations from year to year. If we are to learn the speed and manner of migration of the different species and the routes selected, we must have the stations well distributed across (east and west) and along the valley. Will not every bander endeavor to secure another member in his or her vicinity to help push migration-study and the banding movement as a whole?

Banders should become acquainted with their nearest neighbors by correspondence or otherwise. Where in any community there are several members of this Association, the cause can be furthered by their meeting together occasionally and comparing notes with a view of obtaining co-operative study of some problem. A large community may well have enough members to warrant forming some sort of banders' club. A definite purpose or problem for study in banding work adds much to the interest taken in operating stations and in the results achieved.