

In Lakewood I estimate the Blue Jay population as about one hundred and sixty per square mile, or about one bird to four acres. Lakewood is a built-up city having a population of about seventy thousand in an area of slightly less than six square miles. Consequently the information presented here may not be comparable with that derived from farm territory. I capture my Blue Jays in a wire drop-trap (see cover picture).

1041 Forest Cliff Drive, Lakewood, Ohio.

A FOUR MONTHS' CAMPAIGN BANDING PURPLE FINCHES

By FREDERICK A. SAUNDERS

THE 8th of February, 1928, saw us on the way to South Hadley, Massachusetts, to enjoy a sabbatical half-year in a New England village surrounded by good bird country. We thought little of banding, as there were more serious jobs to be accomplished, but suet in the trees brought an immediate response, and when Tree Sparrows appeared in a rough blackberry hedge at the back of our yard, we yielded to temptation and put out a mixture of food. By February 14th the little automatic trap which we took with us caught its first Tree Sparrow, and that same day we saw six bright male Purple Finches (*Carpodacus p. purpureus*) decorating a little tree in the yard. Often later on its seemed as though this tree bore Finches instead of apples. In a month more than one hundred had been banded, largely in a home-made pull-string trap, and by May 14th the score of Finches had reached four hundred. The 88th (and last) Tree Sparrow was taken on April 26th. Pine Siskins were about in small numbers till May 11th. These, besides sixty-eight individuals of eleven other species, gave us plenty of company, an unprecedented chorus of song, and a local reputation.

It was interesting to see how rapidly a new spot might become a successful refuge and banding station. We were especially struck by the speed with which the birds took in the situation. A small flock of Siskins flew over one day, apparently strangers, and one dropped out, almost as though the idea hit him suddenly, and lit with the Finches beside the food. Eight Redpolls made another day memorable by a similarly sudden visit, and one of them acquired the habit -

and one of our bands. On March 19th the first Cowbird of the year appeared, in our apple tree rather than where we should have looked for him, and when he had been banded and released he reappeared (so it seemed) in an hour, but without his band! If we wanted to know what birds had just arrived anywhere in the region, the easiest and surest way seemed to be to scan our own yard carefully at dawn.

Our birds came and went in groups. We tried to (but could not quite) prove that the same individual Purple Finches kept together. At times the grouping of band-numbers on birds taken simultaneously strongly suggested it. As our trap was worked daily, and the same bird occasionally handled in all fifteen or twenty times, there were opportunities for this sort of study; but there were often as many as fifty birds about at a time, and of these seldom more than ten could be taken at one pull. Hence our data were always incomplete.

Among the Siskins it appeared probable that several were mated or, at least, preferred to live as pairs. They travelled by twos; two would often be in the trap together, and they appeared to leave the region together. Thus A26362 and A26363 were taken together on four occasions in February and March. They were seen together daily until April 6th, and were each handled a dozen times. B29492 and B29493 were seen together from April 27th to May 2d, one standing by while the other caught itself in the automatic trap, and waiting in a near-by tree until its companion was freed to go off with him. They were caught again on May 2d in the same pull.

Our biggest thrills came from Purple Finches bearing strange numbers. We were happy to welcome three already banded by Thornton W. Burgess at his Springfield station, some fifteen miles south; also one by Mrs. Lucy S. Chapin in Hartford, Connecticut, thirty-five miles south; and one by D. V. Messer in Huntington, Massachusetts, fifteen miles west. In all these cases the birds had worn their bands only a short time. Mrs. Chapin's bird made the trip in four days, and Messer's covered fifteen miles in eight weeks.

A male Purple Finch (616982), which had been tossed into the air from the hand on April 26th and had burst into song while flying away with his new band, gave us great pleasure by taking his joyous spirit straight to our good friends the Whittles at Peterboro, New Hampshire, accomplishing this fifty-mile journey in about two weeks. Very recently we have heard of another of our Finches (616795), banded

March 6th, which met its death on December 15th at China Grove, North Carolina.

The spring migration indicated by these records is a leisurely affair. Possibly some of our Purple Finches regularly winter as far south as North Carolina, but it seems more likely that most of them were spending last year in New England. We hope for more information on their habits from later returns, and are glad that some banding work will be continued in South Hadley by others.

At crowded times the personalities of the different individuals and species were forced upon our attention. Tree and Song Sparrows were jealous of any other birds. A trap which contained one was so nearly "full" that only one or two other birds could get in unattacked. This made a marked contrast to the mutual friendliness of the Purple Finches. Our Siskins had curious dispositions, usually hopping about, head down, intent on their own welfare. In a crowd, however, they had a mean way of edging over to the nearest stranger and suddenly rushing furiously at him from a few inches' distance, with wings outstretched and yellow patches prominent. Purple Finches invariably yielded, and Tree Sparrows often, but if the Sparrow won, the defeated Siskin often entered the trap again in a few seconds at the opposite end, and went calmly on with its own affairs.

When snow was falling, the Purple Finches showed plainly that they were not ground feeders by choice. They would stand helpless if an inch of snow covered their food, and wait until a Tree Sparrow had dug a hole down to it. There never were holes enough to go around, but we did not see a Finch exert himself enough to make one of his own, or even to enlarge one already made. On one occasion a Finch went after some wind-blown sunflower seeds in a fence-corner by lifting leaves with his bill, carefully placing them to one side, thus uncovering what the leaf concealed; but scratching seemed to be beyond his ken.

Plumage-changes were interesting. Several Purple Finches, possibly young males, were caught in seemingly transition (brown to rosy) plumage, and in one case the evidence that a brown or olivaceous bird in early spring became an apparently normally plumaged male in late spring seemed conclusive, as will be seen from the following observations: Purple Finch No. 616787 was trapped and banded March 1, 1928, and its card reads: "♀" (meaning ♀ or young ♂ of course). This bird was taken and its number read on March 6th, 12th, 14th, and 22d each time, and as before it was written down as ♀

and was checked up by consulting my previous observations. The bird was not trapped again until May 11th, a period of fifty days, when my notes described the bird as now in red (rosy) plumage. Two days later, on May 13th, the bird was again trapped and its number read. I think that the repeated catchings make any chance of misreading or mislabelling very small, in fact negligible.

One handsome color freak was taken, a rosy male (668137) with a bright lemon-yellow throat and upper breast. Mrs. Whittle's recent account of this color phase tempted us to keep this bird, or at least his outer garments, but he was too attractive intact, and happily regained his freedom.

Unwelcome visitors at our station were scarce. Cats became comically nervous and "jumpy" as soon as they found sling-shot stones thudding into the ground close by them, and soon learned to give the place a wide berth. Pigeons were often a nuisance, as they entered the larger trap freely, ate everything in sight, and acquired knowledge slowly; but occasionally they trapped other birds for us by flying against the pull-string. English Sparrows and Starlings had to be driven away from the food, but almost never entered the trap.

Our birds had good health as well as spirits. No foot troubles were noted among the Purple Finches except the loss of one hind claw, but four of them suffered from what looked like a corn on the lower mandible. In one case the outer horny covering of this swelling was partly loose, and was removed (February 28th) but the "corn" was there again later (April 30th). It seemed to trouble the bird very little. One Siskin had a somewhat similar lump on both mandibles; but this proved to be dried road-tar, and it was removed by a skillful biologist under a binocular microscope. Remembering the bird tragedies in asphalt lakes, one wonders if this bird tried to drink in a pool on some freshly tarred State road.

We were much puzzled by two cases of apparent injury which might perhaps be classified as temporary paralysis produced by excitement. A male Finch, 616828, was taken March 17th in the automatic trap. This trap was mounted on a tray inaccessible except by flight and was so built that no bird could injure itself in it. This Finch fluttered in a normal manner while being caught, but on being tossed into the air after banding flopped helplessly down within a few feet, and from then on for a few days could flutter but not fly. It recovered gradually, so that when last taken, ten days later, it was not yet quite normal. In this interval the bird had been caught by others, twice brought to us, kept two days in

confinement after a fruitless search for defects in its anatomy, and showed throughout a very healthy appetite. It miraculously escaped all dangers. The other case was a male Indigo Bunting, B29535, taken May 16th in the same trap, then in changing plumage with an odd mixture of blue feathers scattered about, chiefly on the back, and all-brown wings. He hid in the grass after collapsing, and was seen within twenty yards of the same spot the next day, chipping loudly and hopping under a cat-haunted porch. We thought that was the end of him, and our joy can be imagined when three weeks later his band was successfully read by means of a 25-power telescope at thirty-feet, while he sat quietly feeding on the shelf at which he was first taken. He had completely recovered, and was now in full plumage. We wonder if others have met with similar cases of temporary paralysis.

This brief sketch of our results gives an idea of the pleasure we derived from the experience, and we unhesitatingly recommend such a holiday to other city dwellers fortunate enough to be able to take it.

Cambridge, Massachusetts.

NOTES FROM NORRISTOWN, PENNSYLVANIA THREE PERMANENT-RESIDENT SONG SPARROWS

By R. J. MIDDLETON

SONG SPARROW No. 174413, banded December 17, 1926, returned March 9, 1928, and was taken again June 7 and August 21, 1928.

Song Sparrow No. 174448, banded October 13, 1927, was taken every month during the winter of 1927-28, and again taken on June 8 and July 16, 1928.

Song Sparrow No. 578790, banded October 27, 1927, was taken continually during the winter of 1927-28, and again on May 25, 1928. It was also taken January 13 and February 2, 1929.

These three birds taken here in winter were all taken at periods in spring and summer, which prove they were breeding here.

It is interesting to note that No. 174448 remained here, while another Song Sparrow, No. 174445, banded September 19, 1927 (or twenty-four days previous), was killed at Hazel-