

Notes on Banding Cedar Waxwings in California.—Banding was begun at my station in Modesto, California, on the afternoon of February 14, 1935, when great flocks of Cedar Waxwings (*Bombycilla cedrorum*) were noted canvassing the raisin warehouse district in search of raisins. At this time it was estimated that they totaled from one thousand to fifteen hundred birds. My traps were placed in position at 2.30 p.m., and by 5.00 p.m. one hundred and eleven birds had been banded. Banding continued until May 13th, when the traps were closed for the season, most of the birds having migrated north. During this four-months period, twenty-nine days were actually consumed in banding the four thousand and ten birds taken. This is an average of two hundred and six birds per day. Nineteen hundred and sixty-five birds repeated; eight returns were taken, six of them being birds that I banded last year, and two bearing "private" foreign bands the identity of which I have been unable to ascertain. One of the latter bore the number "27" and the other "35", with no inscription or other identifying mark thereon. I should like to ask any bander having information concerning these bands to communicate with me at once. The traps used were the Potter, a newly-designed warbler trap, and the "Modesto" trap, the latter being the most successful, owing to the large number it is capable of taking at one catch. At one gathering thirty-nine birds were removed from one of the 24-inch-square double-funnel types, and twenty to twenty-five birds were common captures after a flock had become well baited. It should be stated that not a single bird suffered fatal injury in the traps. A few birds were slightly hurt in handling, but I believe only two or three to the extent that they succumbed to their injuries. The greatest number of birds banded in a single day was 343; the least three. The greatest number trapped (new and repeats) was 463. A great many birds showed evidence of having suffered injuries at some time during their career, the most outstanding case being one with half of the upper mandible shot off, all toes except the hind one on the right foot gone, and the right leg broken. A partially albino bird having some pink toes and pure white feathers in the right wing was also taken. It was found that a bird or two left in each trap made excellent decoys, and birds in flight are readily attracted to the cages; in fact, when part of a flock comes to the traps, the rest immediately follow. Flocks of twenty-five hundred to three thousand birds have descended in this manner. Flocks containing as many as four thousand birds were noted at one time in this district. Dull and cloudy days, or those just after a storm, brought the best results. On clear, warm days the birds were more wary and roamed over a greater area, seeming not to care to flock together in such large numbers, but breaking up into smaller flocks. Raisins were used for bait, the dehydrated (artificially dried and bleached) being much preferred to the sun-dried ones. The amount used was about three hundred pounds. The birds were very unafraid during the early spring, and several times one would alight on the storage cage, within a foot of my hand while I was banding, to grab a loose raisin that was lying there. As the weather got warmer the birds became more wary. An effort was made to find a method of determining the sexes, but the result is withheld until a later date.—CHARLES H. FELTES, 216 Ruberto Street, Modesto, California.

A Tree Sparrow Age Record.—Tree Sparrow 494233, banded January 27, 1928, was a return-6 on March 19, 1935, being nearly eight years old at least. It has been recorded as a return at my station on February 14, 1930, March 19, 1931, January 10, 1932, November 27, 1933, and November 19, 1933.—DOROTHY A. BALDWIN, Hardwick, Massachusetts.

How Long Do Purple Finches Live?—To get some idea on the length of life of Eastern Purple Finches based on returns, I have studied my records for a period of ten years, 1922 to 1931. In those years I banded 12,468 Purple Finches at my station in Sault Ste. Marie, Michigan, and my returns for those years to the end of 1934 number 1142. The exact age cannot be given unless the bird is banded when a bird-of-the-year.

A crimson male banded in the spring can only be put down as "at least in the second year," and if banded in the fall the bird must be put down as "at least in third year." A dull-colored bird banded in the spring may be either a young male, probably hatched the year before, or a female of any age, making it necessary to say, "Less, or may be less, than one year old." Through the moulting season, except for young-of-the-year, the sex can usually be determined. A male assuming his first crimson plumage is, in almost every case, just over a year old; a female can only be said to be at least entering the second year.

Many of the birds return more than one year. As an example, my oldest bird, banded in 1922, was trapped every year after that up to 1930 inclusive, except one, and I do not doubt that it returned that year also, only I did not happen to trap it. Consequently "In, or at least in, third year," fourth year, etc. in the following tabulation does not mean the bird was not back in other years after banded.

TABLE I.
AGE ESTIMATE ON 1142 RETURNS FROM PURPLE FINCHES BANDED FROM 1922 TO 1931.

	Sex Unknown	Female	Male
Not over, or might not be over, one year old	125
In, or at least in, second year	193	219
In, or at least in, third year	134	210
In, or at least in, fourth year	65	92
In, or at least in, fifth year	27	45
In, or at least in, sixth year	10	11
In, or at least in, seventh year	4	3
In, or at least in, eighth year	3
In, or at least in, tenth year	1
Total	125	433	584

1142

These sex determinations show a male-to-female sex-ratio of approximately five to four.

From my 1930 and 1932 records I have segregated the Purple Finches known to be young of the year when banded. The tabulation is as follows:

TABLE II.
1930—480 YOUNG OF THE YEAR BANDED

Returns	Sex Unknown	Female	Male
Only retrapped in 1931	13	11	7
Retrapped 1931 and 1932	10	7
Retrapped 1931, 1932, and 1933	1	2
Retrapped 1931, 1932, 1933, and 1934	1	..
Retrapped 1931 and 1933	1	..
Only retrapped 1932	6	2
Retrapped 1932 and 1933	1
Only retrapped 1933	1
Only retrapped 1934	1	..
Total	13	31	20

64

Per cent of 1930 young retrapped in 1931—11.04
 " " " " " " " " 1932—6.25
 " " " " " " " " 1933—1.45
 " " " " " " " " 1934—.42
 1932—261 young of the year banded.

Returns	Sex Unknown	Female	Male
Only retrapped in 1933	8	9	6
Retrapped 1933 and 1934	1	5
Retrapped 1934	1
Total	8	10	12

30

Per cent of 1932 young retrapped in 1933—11.11
 1934—2.68