

THE AVERAGE AGE OF THE EASTERN PURPLE FINCH

AN ESTIMATE BASED ON RETURNS AND RECOVERIES

By M. J. MAGEE

In the October, 1928, number of *The Bulletin of the Northeastern Bird-Banding Association* (Vol. IV, No. 4, p. 132), I stated, "I do not believe the average life of the Purple Finch (*Carpodacus P. Purpureus*), eliminating the mortality among the young before they are able to fly, is much, if any, over two years."

Up to the time the above was written, June 30, 1928, I had banded 7,243. Now, June 30, 1936, with a record of 17,846 Purple Finches banded<sup>1</sup> I have not changed my opinion. I base this conclusion on the fact that the number of Purple Finches returning later than the second year after banding falls off very rapidly, and after the fourth year after banding the number is reduced to just a few scattering returns.

One objection that may be raised to my opinion as to the average life not being much, if any, over two years, is the fact that with the great majority at the time of banding the age cannot be definitely determined, but must be entered on my records as "so old or older."

From the thousands of Purple Finches banded at my station it would seem as though the young-of-the-year would be banded in large numbers. This, however, is not the case, as the great majority of my Purple Finches are banded in the spring. After nesting some young come to my station and are banded, but the great majority are not seen until the following spring, and then they cannot be distinguished from adult females by their plumage alone.

This year, 1936, up to June 30th, I have banded 884 Purple Finches. Of these 207 were crimson males. Certainly a large majority of the balance of 677 must have been 1935 birds.

To get data a little more definite as to average age I have gone over my records and studied all returns and recoveries to date, June 30, 1936, of all Purple Finches banded as young-of-the-year in 1927, 1928, 1929, 1930, and 1931. I stopped at 1931 for the reason that it would allow the young of 1931 to reach their fifth year in 1936.

The result:

No. return after	1st year after banded	62	Years for averaging	62
" " " 2d	" " "	50	" " "	100
" " " 3d	" " "	11	" " "	33
" " " 4th	" " "	6	" " "	24
" " " 5th	" " "	3	" " "	15
" " " 6th	" " "	3	" " "	18
" " " 7th	" " "	1	" " "	7
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	Total	136	Total	259

<sup>1</sup>On September 5, 1936 my total number of Purple Finches banded was 18,000.

This makes the average age for these 136 birds, definitely known to be young-of-the-year when banded, a little less than two years.

My return records indicate that I probably shall have no more returns from Purple Finches banded in 1922 to 1929, inclusive, thus:

Year	Banded	Returned	Last year any returned	Number
1922	254	40	1930	1
1923	1092	103	1928	2
1924	1043	116	1930	2
1925	1510	149	1932	1
1926	1084	135	1933	1
1927	1443	128	1934	1
1928	1283	100	1934	2
1929	1971	106	1936 (to June 30)	1
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Year LIST WITH AGES OF THESE ELEVEN LAST RETURNS

Year banded	Age
1922—Adult male when banded.	Trapped every year but one to 1930, inc. 10 years or older.
1923—Adult male when banded.	Trapped every year to 1928, inc. 6 years or older.
Adult female when banded.	Trapped every year to 1928, inc. 6 years or older.
1924—Young male when banded.	Trapped 1926 and 1930. 7 years.
Adult male when banded.	Trapped only 1930. 8 years or older.
1925—Young male when banded.	Trapped every year but one to 1932, inc. 8 years.
1926—A 1926 female when banded.	Trapped 1928 and 1933. 7 years.
1927—Young male when banded.	Trapped every year to 1934, inc. 8 years.
1928—Adult male when banded.	Trapped every year to 1934, inc. 8 years or older.
Young male when banded.	Trapped every year to 1934, inc. 7 years.
1929—A 1929 male when banded.	Trapped every year but one to 1936, inc. 7 years.

The male banded in 1922 and last trapped in 1930 is still my oldest Purple Finch, ten years or older.

Since the fall of 1915 I have had food out the year round, and every year since 1922 large numbers of Purple Finches have been banded. A variation in the number banded does not necessarily mean a great deal of variation in the number that came in to feed. Some years I had more time to devote to banding than others, and several years I was away during several weeks in the spring, the time when the largest number of Purple Finches drop in. Some years they are delayed and, instead of starting to come in in March, do not begin to arrive in any number until well toward the last of April. When thus delayed they come with a rush, and I cannot take care of them all.

Possibly some years they come in in larger numbers than others, but I do not believe there is any very great variation from one year to another.

It is my opinion that the reproduction from year to year just about takes care of the destruction.

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