ward; and Roseate Tern No. 404752 weighed sixteen grams the day of birth.

The following columns give the individual and average weights of thirty-six full-grown young Common Terns and seven full-grown young Roseate Terns:

COMMON TERN
WEIGHTS OF FULL-GROWN YOUNG

Grams	*Grams*
1 — 116	19 — 90
2 — 104	20 — 100
3 — 114	21 — 98
4 — 114	22 — 110
5 — 102	23 — 96
6 — 102	24 — 110
7 — 106	25 — 106
8 — 108	27 — 104
9 — 106	28 — 99
10 — 102	29 — 99
11 — 110	30 — 96
12 — 102	31 — 112
13 — 108	32 — 110
14 — 98	33 — 100
15 — 110	34 — 97
16[1] — 70	35 — 102
17 — 110	36 — 90
18 — 90	

Av. weight 100.29 grams

ROSEATE TERN
WEIGHTS OF FULL-GROWN YOUNG

Grams
1 — 88
2 — 90
3 — 92
4 — 96
5 — 100
6 — 96
7 — 95

Av. weight 92.4 grams

Auburndale, Massachusetts.

NOTES ON PURPLE FINCHES

BY M. J. MAGEE

I READ with a great deal of interest the article on the Eastern Purple Finch by Mr. and Mrs. Whittle in the last *Bulletin* (July, 1927). I think we are more in accord than the note on page 64 might indicate. I should have explained what I meant by "young male or female". On my cards if I feel pretty sure it is a bird of the year, I marked "young," and all other dull-colored birds I record as "young males or females". A "young male" means a male that has not acquired the crimson plumage and in some cases such a bird might be up to two years of age. A "female" might be of any age. No. 58864, referred to in the article, was banded May 12, 1923. September 4th it repeated, still in the dull plumage.

[1]Seemed very thin, omitted in averaging weights.

It was not in the traps during 1924, but on returning May 7, 1925, it appeared in adult male plumage. This change must have taken place at the 1924 molt. The bird, therefore, was a 1922 bird that did not acquire adult male plumage until 1924, or until two years old.

My statement, "Many young males trapped in the spring acquire the adult plumage by fall," does not mean birds of the year, but those of the year before. This makes these birds a year old and most males change at that age, but there are many exceptions, as the history of No. 58864 shows.

Young birds can be identified when they come into the traps soon after leaving the nest, but later, particularly after they start their post-juvenal molt, I give it up. I have tried for a number of years but I can detect no positive difference between young males and many adult females.

I have not yet found any way of telling the young males from the females. The nearest I have come to it is by watching the skin at the angles of the mouth just before the birds start molting. On adult males the skin changes first to what I would call a deep yellow, next orange-yellow, then to orange, red-orange, and, in some of the most highly colored old males, to orange-red. Every year I find some of the dull-colored birds develop this orange coloration and in some cases red-orange. I have yet to trap one of these birds after molting that was not a male. My records show that No. A74319, banded September 7, 1926, as young-of-the-year, returned this year (1927) July 22d with the skin at angle of mouth red-orange and with molting started. The bird repeated September 11th in just about adult male plumage, tail half grown, with the skin at angle of mouth bright orange, and with new wing feathers not all fully grown. The wing and tail feathers were edged with reddish.

Purple Finches move about quite a little, and the first to come in the spring are largely males. After several hundred birds have been banded, one finds that repeats are mostly birds banded rather recently, the first ones banded having moved along. This succession keeps up until the birds start to nest, when they remain about for a month or so. Later the movement is resumed. For some time after nesting very few old males are much in evidence, but later in the fall a good many visit the station.

I divide this species into five classes, based on certain habits:

(1) A few that may appear at any time, spring, summer, and fall.
(2) Those that come along in early spring and late fall.
(3) Those that appear only in the spring.

(4) Those that are here to nest.
(5) Those that appear only in the fall.

One obtains the greatest number of returns in the spring, but there are quite a number only secured later in the year. Since July 1, 1927, I have had returns on forty-one. Of these, three were banded after July 1, 1923, and five banded after July 1, 1924; none of these forty-one has ever been trapped in any following year until after July 1st. Of ten banded in 1925, only one was banded previous to July 1st, and one banded after July 1st was trapped in May, 1926, and of the twenty-three banded last year, two were trapped in May; all the others after July 1st. Thus, thirty-seven, or over ninety per-cent, of the forty-one returns since July had never been in my traps at any time previous to July 1st. In fact, the earliest date is July 9th, and most of them are recorded in August and September.

I have never had this species about my house in winter, although on three or four occasions within the past fifteen years, I have seen a stray one or two, and on one occasion six or eight were seen near the "Soo" in winter. The birds are rather irregular in their arrival and departure. My records for the past twelve years show dates of first arrival from March 7th to April 22d, and dates of departure from October 21st to November 25th.

Thus far I have been able to prove several Finches to be six years of age, more five years old, and a goodly number to be four years of age.

This year up to September 11th inclusive I have banded 1168 Purple Finches and have had 213 returns, and my totals for this species alone since I started banding are 6157 banded, with 663 returns. My total returns are made up by adding the returns for each year together. The actual number of birds returning would be less as some birds have returned for several years. Every bird was trapped within seventy-five feet of my dining-room window.

Seven of my Purple Finches have been reported to the Biological Survey as follows:

No. 118680. Banded September 4, 1923, was found dead May 1, 1924, near a farmhouse about three and one-half miles south of Sparta, Tennessee.

No. 160959. Banded June 30, 1925, was killed February 14, 1926, near Smackover, Arkansas.

No. 160871. Banded June 23, 1925, was reported killed by a Sparrow, July 14, 1926, at Sault Ste. Marie, Ontario, just across the

river from my trapping station. Was reported in by a party from Jersey City, New Jersey, who was touring through Canada.

No. 164845. Banded August 18, 1925, was found on a lawn August 11, 1926, in the Village of Pickford, twenty-four miles south of the Soo.

No. 160792. Banded May 29, 1925, was killed January 22, 1927, at Evensville, Tennessee, about thirty-five miles southeast of Sparta.

No. 190684. Banded May 26, 1926, was shot by some boys near Bonnieville, Kentucky, February 22, 1927, and reported in by the rural mail-carrier.

No. 511952. Banded July 22, 1927, collected August 31, 1927, at Munuskong Bay, twenty miles southeast of Soo.

Information received from Arkansas, Kentucky, and Tennessee is that numerous flocks of Purple Finches winter in those States.

Sault Ste. Marie, Michigan, September 14, 1927.

THE YELLOW COLORATION OF DOWNY WOODPECKERS

BY C. L. WHITTLE

WILLIAM BREWSTER is referring to abnormal plumages of fledgling Downy Woodpeckers (birds in juvenal plumage), (*Dryobates pupescens medianus*)[1], describes a young male, shot at Upton, Maine, August 1, 1874, which had his white areas, both above and below, of a "decided greenish-yellow tinge". It is not known whether this color determination was made at the time the bird was shot, or later from a skin in Brewster's collection.

The writer finds that the occurrence of this plumage-color on *medianus*, though not usually including the white portions of the upper parts, is very common. During the last five years, both at Peterboro, New Hampshire, and at Cohasset, Massachusetts, numerous instances of the sort have come to my attention, occuring on birds-of-the-year.

In the *Bulletin* of this Association for January, 1926, pages 14 and 15, attention was called by me to this phenomenon as occurring on Downies in juvenal plumage, the particular shade of color being given as chalcedony-yellow when most pronounced. A very pale yellow (approaching massicot yellow) was also observed on the under parts of two adult female birds taken in November and December, 1925.

[1] "Descriptions of First Plumage in Various Species of North American Birds," *Bulletin of the Nuttall Ornithological Club*, Vol. III, 1878, Pt. 4, p. 180.