

and unfamiliar. The Starlings were very wild and despite my efforts to collect one I was unsuccessful. However, the birds were often seen close by and observed with a 7 x 35 binocular.

Many years of familiarity with the Starling in the East leave no doubt in my mind as to the identity of the birds. To the best of my knowledge this bird has not been reported previously from New Mexico. It is also worthy of record in the history of the westward progress of the Starling.—PHILIP F. ALLAN, *U. S. Department of Agriculture, Amarillo, Texas.*

Seasonal Starling numbers in suburban Long Island.—The Starling (*Sturnus vulgaris*) has long been well established in suburban Long Island, and there seems to have been no material change in its abundance there for many years. To obtain an index of its numbers for comparison with other localities, and learn something of the seasonal fluctuation, I made approximate counts of Starlings noticed from the trains in commuting between Garden City (occasionally Mineola, an adjacent village also about twenty miles from town) and New York, from September 8, 1936, to September 8, 1938. The first year comprised 57 such counts for 100 miles or more of observation each (100 to 143 miles), the second year 61 similar counts. The first year the counts averaged 1.6 to 5.9 birds per mile. The total for the year was 19,998 Starlings and 6,286 miles, or 3.2 per mile. The second year they averaged 1.4 to 7.1 birds per mile. The total was 18,620 Starlings for 6,762 miles, or 2.75 per mile. The seasonal fluctuations did not correspond for the two years but followed a similar pattern. The numbers were found to be lowest in the Starling's breeding season, April 20 to May 30, 1937 (varying from 1.6 to 2.3), April 21 to June 14, 1938 (varying from 1.4 to 2.35). Coincident with the appearance of young birds on the wing there was an appreciable rise in numbers in June of both years. The highest counts, attributed as an hypothesis to invasion of the area by young from outside, came between July 26 and August 15, 1937 (average 5.0), and August 11 and September 8, 1938 (average 4.1). The regular fall migration peak of adults, which from other data are thought to leave the breeding area by October normally (Bird-banding, 8: 76, 1937), is presumably reflected in a later abundance, from September 29 to October 24, 1936 (average 4.55), and from September 20 to October 20, 1937 (average 4.1). After this, numbers fall off, and there was a winter minimum from November 12 to December 31, 1936, with averages fluctuating between 1.8 and 3.1, from November 11, 1937, to January 7, 1938, between 1.3 and 2.3. Later figures seem to corroborate data from banded birds observed which indicate that the vernal return of residents is already under way in January (Bird-banding, 1937, l. c.). In 1937, numbers rose sharply for January, remained constant for February and rose again for March and April. In 1938, a slight rise for January was continued in early February, after which numbers were appreciably lower.

For the two years, September 8, 1936, to September 8, 1938, counts total 38,618 Starlings for 13,048 miles, 2.95 per mile. Combining all the averages, each for upwards of 100 miles, by averaging all those in whole or in part within each of six five-day periods of every month, gives a curve of seasonal variation in numbers (the main features of which would presumably remain unchanged if based on several years' data) as follows.

September 16-20, 3.1 per mile; 21-25, 3.6; 26-30, 3.9; October 1-5, 4.5; 6-10, 4.1; 11-15, 4.2; 16-20, 4.35; 21-25, 4.1; 26-31, 3.1; November 1-5, 3.3; 6-10, 3.5.

November 11-15, 2.5 per mile; 16-20, 2.1; 21-25, 2.2; 26-30, 2.5; December 1-5, 2.2; 6-10, 2.3; 11-15, 2.05; 16-20, 2.1; 21-25, 2.3; 26-31, 2.25; January 1-5, 2.8; 6-10, 2.8; 11-15, 2.8; 16-20, 2.75; 21-25, 2.85.

January 26-31, 3.0 per mile; February 1-5, 3.15; 6-10, 3.3; 11-15, 3.2; 16-20, 3.0; 21-25, 3.15; 26-28, 2.9; March 1-5, 3.1; 6-10, 2.75; 11-15, 2.4; 16-20, 2.7; 21-25, 3.4; 26-31, 3.2; April 1-5, 2.6; 6-10, 3.2; 11-15, 3.3.

April 16-20, 2.7 per mile; 21-25, 1.9; 26-30, 2.1; May 1-5, 1.9; 5-10, 1.8; 11-15, 1.8; 16-20, 1.75; 21-25, 1.7; 26-31, 1.7; June 1-5, 2.2; 6-10, 2.2; 11-15, 2.8.

June 16-20, 3.15 per mile; 21-25, 3.0; 26-30, 2.4; July 1-5, 2.1; 6-10, 2.35; 11-15, 3.15; 16-20, 3.1; 21-25, 2.6.

July 26-31, 4.1 per mile; August 1-5, 4.1; 6-10, 4.25; 11-15, 4.9; 16-20, 3.25; 21-25, 3.65; 26-31, 3.3; September 1-5, 5.0; 6-10, 3.7; 11-15, 3.05.

Some winter Starling counts made on a 7.5 mile bus ride, January 20 to March 9, 1937, in suburban New Jersey between Elizabeth and Tremley Point, and furnished me by Robert W. Storer are interesting in comparison. They total an estimated 3297 Starlings for some 247.5 miles,—or 13.3 per mile. This much higher figure confirms the great concentration of wintering Starlings in New Jersey as compared with Long Island (Auk, 54: 210, 1937). Arbitrarily dividing these counts into four periods by dates we have 19.7 per mile for January 20 to 29; 13.2 for February 1 to 11; 11.7 for February 15 to 26; 8.2 for March 1 to 9. This decrease presumably represents the early ebbing of birds from a point of winter concentration and is presumably correlated with their increase and the return of resident individuals on Long Island.—J. T. NICHOLS, *New York City*.

Dysmorodrepanis munroi probably not a valid form.—A careful examination of the type of *Dysmorodrepanis munroi* Perkins (Ann. Mag. Nat. Hist., (9) 3: 150, 1919), shows it to be, in all probability, an aberrant young female of *Psittacirostra psittacea*. It was taken in the Kaiholena Valley, Lanai, Hawaiian Islands, by G. C. Munro in 1919. It is no. 4792 in the B. P. Bishop Museum, Honolulu. In spite of diligent search he has never been able to find another specimen.

At first glance this bird with its generally pale-yellowish coloration, its yellowish-green lores and ill-defined yellowish-green supraocular stripe and even in the deformation of the bill is reminiscent of *Pseudonestor*. Closer examination, however, shows clearly that its affinities are with *Psittacirostra*. The bill with its ridged culmen (this character is more strongly marked in young birds), wide at the base, and the nostril which is a slit in the rounded and depressed operculum, prove this, for in *Pseudonestor* the nostril is rounded, is not set in an operculum, and, even in young birds is covered with small feathers from which vibrissae project. Furthermore, the outer webs of primaries 2, 3, 4, 5 are attenuated for one-third of their length in *Psittacirostra* and '*Dysmorodrepanis*' but are normal in *Pseudonestor*. In size the former are larger than the latter. The lower mandible is the most striking feature of this supposed form for the cutting edge is turned in and touches the upper only at the tip. In this respect it is unique. Not only is the bill of this specimen aberrant but the plumage is also partially albinistic. The outer webs of the primaries are edged with white as are the inner webs of the secondaries. The primary coverts are also tipped with white and the secondary coverts are broadly margined and tipped with white, leaving only a small dark central area. Whitish feathers are scattered indiscriminately over nape, breast and belly.

Other specimens of *Psittacirostra* from Lanai show the same tendency toward albinism in their whitish wing-coverts, but none has the yellowish tinge on lores and supraocular region, nor do they show any deformation of bill approaching the condition in '*Dysmorodrepanis*,' though bills do vary. S. B. Wilson in '*Aves Hawaiienses*' (p. 87) cites this with a cut to illustrate it. This may well mean that in the genus there is a tendency toward mutation, which, exaggerated by the smallness of the population on the island, is expressed in the extraordinarily deformed bill.