SKYLARK (Alauda arvensis).—Mangere, 14/4/40, first heard singing (P.C.B.). Clevedon, Auckland, common (H.R.McK.). Kimbell, Fairlie, rare (K.S.G.). Wairarapa district, common (R.H.D.S.). Dunedin district, common. Singing dates: 7/5/38, 17/5/38, 3/7/38, 6/8/38 (B.J.M.).

STARLING (Sturnus vulgaris)—Mangere, breeding, common (P.C.B.) Nelson, increasing. Bird with one leg seen for about six years (P.M.). Clevedon, Auckland, common (H.R.McK.). Kimbell, Fairlie, common (K.S.G.). Paraparaumu Beach, large numbers of starlings fly in flocks to roost on islands 3 or 4 miles out to sea. This habit begins about March. This year there seem to be two or three times as many as usual. During heavy westerly winds many failed to cross and returned to roost in mainland plantations (W.K.). Mahina. Bay, only goes about 50 yards into the bush (E.W.H.). Hen I., three families of young seen (E.H.). Glenary, Waikaia, they go away for a few weeks in winter and returned 30/6/39 (G.S.G.). Coromandel, more common in winter. Roosts on islands 4 miles out (P.H.W.). Wairarapa district, common (R.H.D.S.). Dunedin district, small parties roost in bushes on coastal cliffs. Not very numerous. Oamaru, fair-sized roost in large trees in the Gardens (B.J.M.).

MYNA (Acrodotheres tristis).—Papakura, near Clevedon, reported (H.R.McK.). Wairarapa district, scarce. A few in most towns (R.H.D.S.)

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WHITE-BACKED MAGPIE (Gymnorhina hypoleuca).—Kimbell, Fairlie, common (K.S.G.). Cass district, first noticed about 1932. Present population not more than two pairs (E.P.). Glenary, Waikaia, one seen (G.S.G.). Wairarapa district, fairly common (R.H.D.S.). Travelling north from Dunedin they are usually seen first at Otaia. Glenavy, 2/11/38, one. Hampden, 22/11/38, a pair. Several between Oamaru and Ngapara and in the hills behind Duntroon, 20/11/38. Common behind Timaru and up as far as the top of Burke's Pass, but none seen beyond, 23/8/39 (B.J.M.).

BLACK-BACKED MAGPIE (Gymnorhina tibicen).—Neighbourhood of Cheviot (R.A.F.).

- * SEA HAWK (Catharacta antarctica).—A small islet off Halfmoon Bay, Stewart Island, inhabited by a pair of skuas. The remains of the birds on which they had fed were collected and they occurred in the following numbers: Diving petrel (P. urinatrix), 109; Storm petrel (P. marina), 87; Fairy prion (P. turtur), 44; Broad-billed prion (P. vittata) 16; Kaka (N. meridionalis), 1. All except the kaka nested in considerable numbers on the islet. (B.J.M.).
- ** STARLING (Sturnus vulgaris).—Small islet a few miles off Halfmoon Bay, Stewart Island, Jan., 1939, small starling roost in bushes. Also nests in cracks in the rocks (B.J.M.).

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SUMMARY OF SPECIAL INVESTIGATIONS

In addition to short notes and species lists supplied by many members there are a number of special studies which deserve more extended notice. It is hoped that members will all eventually undertake some such intensive local investigation as are here suggested. Comment on, or extension of, those recorded in the following pages would be welcomed for next year's report.

1. BANDING OF WHITE-EYES (Zosterops lateralis).

Professor Marples in Dunedin and Mr. C. A. Fleming in Auckland carried out banding experiments. In the former case all captures and returns are recorded between 21st April and 10th October and relate therefore to winter flocks; in the latter the banding is carried into the nesting season and includes some fledglings.

(a) Banding Results and Weights and Measurements of White-eyes at Dunedin.

Numbers	banded:—	
	1938, Aug. 31st to Sept. 10th	32 White-eyes
	1939, June 25th to Oct. 10th	30 White-eyes
	, -	8 Bellbirds
	1940, Apr. 21st to June 30th	105 White-eyes
	Apr. 21st to April 28th	4 Bellbirds

Returns: White-eyes

- 1938. Three, two next day and one five days later. Two retrapped in subsequent years as follows: Banded 30/8/38, two retrapped 2/6/40; banded 3/9/38, retrapped 12/8/39, again 27/8/39, and again 16/5/40.
- 1939. Two retrapped, one twice. Three retrapped in subsequent year as follows: Banded 12/8/39, retrapped 14/5/40; banded 23/7/39, retrapped 28/4/40; banded 18/10/39, retrapped 28/4/40.
- 1940. 21 retrapped, 9 once, 7 twice, 2 four times, 2 six times, 1 seven times. Intervals between banding and retrapping anything between one day and fifty-nine days.

Bellbird

Banded 23/4/39, retrapped 10/5/40.

All banding and trapping done at the same spot in a garden near the centre of Dunedin.

Measurements:

Length of beak from the feathers above the nostril to the tip—200 White-eyes. Length of wing—200 White-eyes.

Beak.	Wing.	
8.5 1 5	57	2
9.0 91	58	2
9.5 71	59 1	5
10.0 22	60 2	9
10.5 1	61 5	
	62 5	
	63 3	
	64 1	
200	20	0

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Weights.

The birds were weighed to the nearest quarter of a gram, 29 after July 1st 1939, and the rest before June 30th, 1940. From the data so far obtained they seem to increase in weight in the winter, being heaviest about the end of June. These figures should, therefore, give a fair idea of the winter weight.

11.0 11.5	$\frac{1}{3}$ {	4
12.0 12.5	9 19 }	28
13.0	$\frac{23}{27}$ }	50
13.5 14.0	39 լ	72
14.5 15.0	33 (26 _j	33
15.5 16.0	7 ⁽ 10 (11
16.5 17.0	1 ⁽	
17.5	1 7	2
	200	
	(23)	

(b) Banding and Study of White-eyes at Auckland.

Large volume of field observations have accumulated with reference to the Remuera property in which the fantail's observations were made. Only a few aspects here summarised.

Banding.—38 adults were banded between August 25 and November 31st, 1939, with numbered aluminium bands and coloured celluloid bands for sight identification. Wings were measured; of 31 measurements, there was one of 68 mm., two of 65 mm., 4 of 64 mm., 3 of 63 mm., 12 of 62mm., 4 of 61 mm., none of 60 mm., 2 of 59 mm., 2 of 58 mm., 1 of 57 mm., though it is probable that males are in general larger than females, yet the matings known show overlapping. Matings known: 65 & 58, 61 & 62, 61 & 61, 61 & 57, 65 & 62, 64 & 62.

General Cycle.—Flocking in winter. Breaking into pairs in early spring—1st in song heard on 28th June on territory (eggs for this pair laid about 23rd Oct. in this territory). Such early signs of territory and pairing seen early morning and evening. Not until Oct. could garden be mapped into territories. From middle of Oct. some adjustment of territories noted—(change of singing tree by male and replacement at former place by another male, etc.). Building by some pairs in early Oct.—2 nests found but eggs not laid, due to storm blowing down one and desertion of other and subsequent change of territory.

Late Oct.—most pairs building. Eggs laid in last week and from then on to Dec. Clutch 3, of which all chicks usually leave the nest successfully but only two survive first few days (invariable experience with five pairs). Incubation period about 10 days (no accurate dates available). Young in nest for 10 days (eggs hatched in one case on 14th Nov., young flew on 24th).

Returns from Banding: 20 of 36 birds banded have been recorded subsequent to capture; some frequently; some retrapped. Probably most of the birds trapped subsequent to Aug. were local breeding birds. In April, 1940, trapping recommenced and 3 of the 1939 birds (all adults) were retrapped before the 20th.

Movement of Individuals: A pair banded on 26th Aug. were found nesting 400 yards away on 1st Nov. (in a distant garden). Individuals with known nests or territory have not been seen further away from them than about 50 yards.

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Banding of Young.—The short time spent by the young in the nest has been responsible for my failure to band more than half of the broods found—only 9 were banded although 5 broods were recorded.

Density of Population: The accompanying sketch map of the area shows the territories mapped on Oct. 16th, mainly on the basis of singing birds, most of which were banded. The numbers of the banded birds are included within the circles which are not to be considered the exact limits of territory. When underlined, the nest of the pair was found later or the young were banded after flying.

Second Broods? No definite case recorded. Possible in view of early and late nests recorded. A brood still being fed by parents on 20/12/40 is in this category.

2. PENGUINS.

As many penguins of at least seven different species appear frequently on our coasts, especially in the autumn, it seems desirable that some effort should be made to record these occurrences. It is, however, a matter of some difficulty to recognise the species, particularly of the crested birds. If a member finds a penguin and is not certain of its identity the following procedure is recommended if possible:—

i. Photograph the under-flipper pattern of the bird.