

THREE YEARS' SILVEREYE BANDING - AN ANALYSIS

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I should like to present a few comments and observations on the results of banding Silvereyes (Zosterops lateralis) in one locality over a period extending from July, 1959 to 6th October, 1962. All remarks refer to Silvereyes caught at 19 Denman Street, Turramurra, N.S.W.

Facts and Figures - 1962 (up to October 6th, 1962)

<u>Season 1962</u>	<u>Total banded</u>	<u>New birds</u>	<u>Retraps</u>
Autumn (10 March - 19 May)	228	126	102
Spring (29 July - 6 Oct.)	<u>441</u>	<u>250</u>	<u>91</u>
<u>Total</u>	669	376	293

The Trap: The trap used is a rectangular cage 33 in. x 24 in. and 12 in. deep. The wire netting has a mesh size of $\frac{1}{2}$ in. and there is no frame in the cage. The entrance hole is set in the top surface, centrally placed and 7 in. in diameter. A square piece of wire netting 15 in. x 12 in. is arranged over the hole in the shape of a tunnel, so that birds enter from either end of the tunnel and drop through the hole on to the bait. The trap is placed on a small table about 2 feet off the ground. Each day of the week a piece of bread, moistened with sugar in water, is placed on the table, with the wire tunnel over the bread to keep off large birds. Silvereyes become accustomed to the wirenetting and at the weekend are easily attracted into the cage. Unfortunately, a proportion always get out as easily as they flew in!

Retraps from other seasons (up to October 6th, 1962)

<u>Year</u>	<u>First banded Season</u>	<u>Number banded</u>	<u>Number recovered to date</u>
1959	Spring	62	4
1960	Autumn	75	13
	Winter	24	9
1961	Spring	249	4
	Autumn	6	1
	Winter	22	6
1962	Spring	-	-
	Autumn	<u>126</u>	<u>17</u>
	<u>Total</u>	564	54

Note 1: The Seasons were divided as follows :
Autumn = March, April and May
Winter = June and part July until Grey-throated
Rufous-flanked Silvereyes arrive.
Spring = late July, August, September, October.

Note 2: The recoveries include only those birds which have been retrapped where they were banded, and after an interval of at least one season. This recovery percentage is very good, and if it is possible to continue banding in all seasons in 1963, then a good estimate will be made of the population size of Silvereyes which make up the group visiting this particular area of Sydney. Only one Silvereye banded elsewhere has been recovered in this garden and that was one of Bill Lane's birds. Only two Silvereyes banded in this garden have been recovered elsewhere in Sydney; one at Lane Cove and one at Longueville.

Plumage

I would appreciate the co-operation of other bird banders in reaching agreement on a uniform system of classification for the plumage of Silvereyes. At present I record only the colour of the throat and of the flank and these are sub-divided as follows :

- | | | |
|----------------------|-----|---------------|
| <u>Throat</u> colour | (a) | Grey or white |
| | (b) | Pale yellow |
| | (c) | Bright yellow |
| <u>Flank</u> colour | (a) | Grey |
| | (b) | Tawny |
| | (c) | Rufous |

It is possible to find birds which fit into every possible combination of these throat and flank colours, but the commonest are the following :

- (a) 'Local' type - Bright yellow throat
Grey flank
- (b) 'Tasmanian' type - Grey or white throat
Rufous flank.

I am not at present weighing birds but I have the impression that the 'Tasmanian' types are heavier and bigger in appearance than all other Silvereyes.

The scheme of recording plumage as outlined above has been used on all birds captured in 1962 and the results

to date are recorded as follows :

Records of new birds banded in 1962 in Autumn and Spring,
with details of throat and flank colour.

<u>Plumage colour</u>		<u>Number banded</u>		<u>Total banded</u>
<u>Throat</u>	<u>Flank</u>	<u>Autumn</u>	<u>Spring</u>	
Yellow	Grey	71	41	112
Grey	Rufous	15	86	101
Yellow	Rufous	1	6	7
Yellow	Tawny	20	12	32
Grey	Tawny	3	39	42
Grey	Grey	0	16	16
Pale Yellow	Rufous	4	22	26
Pale Yellow	Tawny	<u>12</u>	<u>28</u>	<u>40</u>
<u>Total</u>		126	250	376

By studying the distribution of those Silvereyes with plumage types other than that of the two main types, i.e. 'Local' and 'Tasmanian', it is possible to classify certain of these birds as being closely associated with one or other of the two main types, as follows :

<u>Plumage colour</u>		<u>Number banded</u>		<u>Total banded</u>
<u>Throat</u>	<u>Flank</u>	<u>Autumn</u>	<u>Spring</u>	
Yellow	Grey	71	41	112
Yellow	Tawny	<u>20</u>	<u>12</u>	
		<u>91</u>	<u>53</u>	144
Grey	Rufous	15	86	101
Grey	Tawny	3	39	
Pale Yellow	Rufous	<u>4</u>	<u>22</u>	26
		<u>22</u>	<u>147</u>	169
<u>Grand Totals:</u>		113	200	313

The remaining birds, namely 376 - 313 = 63 in number, are not easily classified by seasonal distribution or association into either of the two main groups.

It is apparent from the results of this year's banding that 'Local' types were more frequent in Autumn than 'Tasmanian' types, and vice-versa in Spring. Apart from this fact, all else is conjecture at present, but from the results of recoveries so far it is clear that a higher percentage of birds banded in Autumn and Winter are recovered than of those banded in Spring, even though more birds were banded in

Spring than in Autumn and Winter. This difference may be expressed numerically by the following calculation:

$$\text{Recovery of birds banded in Autumn and Winter} \\ \frac{46}{253} \times 100 = 18.2\%$$

$$\text{Recovery of birds banded in Spring} \\ \frac{8}{311} \times 100 = 2.6\%$$

$$\% \text{ Total recovery } \frac{54}{564} \times 100 = 9.6\%$$

- Queries:
1. What are the plumages of Silvereyes which are characteristic of adjoining States, e.g. Canberra, Melbourne?
 2. Do 'Tasmanian' birds travelling through Sydney in Autumn use a different route from that used in Spring? If they use the same route then the same percentage of 'Tasmanian' birds should be trapped in Autumn as in Spring, and this is not the case.

SILVEREYE RECOVERIES IN THE SYDNEY DISTRICT OF N.S.W.

S. G. Lane, Lane Cove.

Few if any conclusions can be drawn to date from the local recoveries of Eastern Silvereyes (Zosterops lateralis) away from their banding locations in the Sydney District, but the value of the co-operative Silvereye banding project is only now beginning to show something of the results that can be expected in future years.

The first of these local recoveries occurred when I trapped a bird at North Ryde on 6.6.1959 that had been banded by C.B.Campion at Abbotsford on 23.4.1959. Three days later (9.6.1959) the bird was caught again at Abbotsford.

During the following three years, sixteen additional Silvereye recoveries were recorded more than $\frac{1}{2}$ mile from banding locations, while a further twelve were recovered by banders in less than six weeks during August-September, 1962.

Banders have been responsible for all but three of the twenty-nine recoveries listed in the following table, and twenty-five of these have been "released alive with band".