THE FIRST TEN YEARS OF THE A.B.B.S.

W. B. Hitchcock

1. INTRODUCTION

The ABBS, which began operations in October 1953, is a technical service provided by the CSIRO, Division of Wildlife Research, but it could not function on the scale that it does without the co-operation of the State Fauna Authorities, who have been of great assistance in promoting the work of the Scheme - nor without the enthusiastic support of the individual banders who are the backbone of the Scheme.

The Scheme is now operative in all Australian States and in the A.C.T., Northern Territory, Papua-New Guinea, and the Cocos-Keeling Islands (Indian Ocean). It also supplies bands to the Department of External Affairs for use in Antarctica; to banders visiting New Guinea, Lord Howe, and Norfolk Islands, and the Coral Sea; and to a British ornithologist in North Borneo by arrangement with the British Trust for Ornithology.

Apart from providing a technical weapon of great importance to the Wildlife Division's own bird investigations, the banding scheme has enabled non-professional ornithologists to conduct studies of a higher scientific calibre than was hitherto possible. It has also brought Australia into line with most of the other civilised countries in the world, which already possessed officially sponsored banding schemes.

During the first year of operation there were 42 enrolments, 20 of whom banded birds. There are currently about 200 registered banders, of whom 15 are ladies - and most of the latter have made a solid contribution to the over-all results of the Scheme. I suspect, too, that many a bander's annual figures represent a husband-wife partnership in terms of back-yard trap-watching, neglected family-duties, and endless paper work.

11. NUMBERS BANDED AND RECOVERED

The first bird marked with a CSIRO band was a nestling Black-backed Magpie, 090-00002, at Canberra by Dr. George Dunnet on October 16, 1953. This bird, now in its tenth year, is still alive and healthy and was last retrapped on August 23, 1963. It is one of 600+ magpies individually colour-banded in the course of a population study of the species at Canberra, and its life history is known in very great detail.

During the first year of operation, 6000 birds of 49 species were banded and 85 recoveries were reported. By con-

trast, during 1962-63, about 75,000 birds of 320 species were banded and there were about 8000 recoveries. Since 1953 there have been <u>ca</u>. 312,000 birds banded and some 30,000 recovered.

The Silver Gull is still in first place with about 55,000 banded. Then follow the <u>Short-tailed Shearwater</u> and <u>Eastern Silvereye</u> with 25,000 each; <u>Crested Tern 18,000; Grey Teal 16,000; Black Duck 13,500, and Giant Petrel 10,000.</u>

The <u>Grey Teal</u> has the highest number of recoveries to date, namely 4000-odd, but it is closely followed by the <u>Black Duck</u>, <u>Silvereye</u>, and <u>Black-backed Magpie</u>. It is apparent that the number of Silvereye retraps, due to the large number of banders involved, will soon exceed that for any other species.

The patterns that have emerged during the first ten years of banding under the Scheme have confirmed the predicted movements of some species, e.g. Short-tailed Shearwater and Sharp-tailed Sandpiper, but there have also been some surprises. The Little Egret, for example, is apparently a major wanderer, and young banded in the Murrumbidgee-Lachlan basin have been recovered in New Zealand, New Guinea and New Britain. Other water birds, such as the White Egret, and White Ibis have been recovered in New Guinea, and a Straw-necked Ibis, banded in New South Wales, reached Torres Strait.

An adult <u>Sooty Shearwater</u>, banded at Macquarie Island, was recovered off California in September 1963, suggesting that, like tenuirostris, it makes a circuit of the Pacific.

Banding of the <u>Wandering Albatross</u> in New South Wales waters has revealed that wintering flocks include birds from widely-spaced breeding stations, namely South Georgia in the South Atlantic, and Marion and Kerguelen Islands in the South Indian Ocean. Doug. Gibson's Third Albatross Report in the last <u>Emu</u> gives some very interesting facts and figures on the work of the Albatross Study Group.

1 / 4

The recovery in South Australia of a Manx Shearwater, banded in Wales, and the second recovery of an Arctic Tern (banded in Sweden) last year indicate that Australia comes within the ambit of European migrants, even if only on an accidental plane.

Within Australia, the widespread movements of the Silver Gull, Crested Tern, ducks, gannets, ibises, herons, spoonbills, cormorants, birds of prey, silvereyes, and crows have been clearly demonstrated by banding. But there remain some tantalizing problems: e.g. the adult <u>Starling</u> that migrated from Tasmania to Brisbane in spring; this, the only long-distance

movement of a Starling to date, poses more questions than it answers.

Well-documented information is gradually accruing on the longevity, mortality, behaviour, and dynamics of many wild Australian birds, and this must prove of great value in future conservation, control, and management programmes. Knowledge gained from banding has in fact already been applied to conserving ducks and the Mallee-Fowl, and to the control of the Magpie Goose in the Northern Territory.

111. SPECIAL STUDIES

The lists of special studies published in the Annual Reports indicate a wide variety of interests on the part of banders. It is noteworthy, too, that of the 35 projects listed, for example, in the Seventh Report, only 12 can be classified as official university, State, or Commonwealth studies, and two of them - the Black Swan and Superb Lyrebird - are also the subject of investigation by non-professionals.

It is clear, therefore, that a great deal of initiative in bird research through banding is being taken by non-professional co-operators in the Scheme. I have no doubt whatever that this trend will continue in the years to come as banders gain competence and confidence in research methods. There is every reason to believe that banding will be the first spring-board that launches the often diffident amateur on the road to competent research on Australian birds and, equally important, the publication of his findings.

IV. ORGANIZATION AND PUBLICATIONS

These thoughts lead naturally to a consideration of the organization and publications of the Scheme and its co-operators.

In 1958, five years after the Scheme's inception, it was realized that some form of decentralization was desirable in order to spread the rapidly-growing administrative load, and to delegate some of the responsibilities of bander-training, initiation and supervision of projects, and public relations to local troups. Accordingly, meetings were convened in Sydney, Melbourne, Adelaide, and Perth to put across those ideas.

During the last five years these have born fruit in most States - notably in New South Wales, Victoria, and South Australia, and there is no reason to doubt the other States and Territories, in their own good time and under the leadership of a competent organizer or group, will do likewise.

As the Scheme grows in scope and volume it is inevitable

that its headquarters in Canberra will become largely a clearing house for the processing and storage of data, and an agency for the procurement and issuing of bands and equipment. During the first few years it was possible to maintain a very close personal liaison with individual banders, but that phase is rapidly passing and banders are being encouraged to look more and more to their Regional Organizers for advice and assistance on technical problems associated with banding, and for guidance in research studies. In most capital cities, at any rate, there is now a sufficiently large cadre of experienced and competent banders to make that feasible.

In June 1962 the first Australian bird-banders' association was formed, and its journal launched - a major step forward in the co-ordination of banding in this country, and in providing another medium for the publication of results and techniques. The quality of the journal reflects the quality of banding studies, and those of you who receive it will acknowledge its already high standard.

V. TECHNIQUES

It is rather stating the obvious to say that banding techniques have improved during the first ten years. A little initiative and adaptation can achieve wonders in the way of trapping. Some people are 'naturals' in this respect, but the average handyman - or even 'unhandyman' (like me) can learn and develop further techniques with a little perseverance, observation, and by reading the literature.

Apart from traps, many banders have already embarked on studies using various techniques of banding, e.g. colour-marking by bands, collars, or dyes, and the marking of nests methods that were unheard of in Australia before the advent of banding. In this regard I would like to draw your attention to a paper by Julian Ford in the last issue of The Emu (vol.63, pt.3, pp.185-200) which describes how certain fundamental aspects of the life history of the Yellow-tailed Thornbill were unravelled by colour-banding and nest-marking.

Mist-netting is probably the most spectacular trapping technique developed during the past five years, and has been responsible for the catching of species, such as cuckoos and swifts, that were previously regarded as untrappable. Used with caution and commonsense by trained operators mist nets are undoubtedly the most versatile modern catching technique. In 1962-63, about 34,000 birds were caught by mist net alone. A handbook on mist-netting in Australia (and New Guinea), written by three of our most competent operators will be available within the next couple of months.

The perfection of special types of bands, e.g. for penguins, pelicans, parrots and cockatoos, is a job that calls for special study and field experiment, and cannot achieved in a day or a year. Those of you who are keen to work on such species I can only ask to be patient. For reasons of policy, finance, or staff it is not possible to produce the right sort of bands at the drop of a hat, but we are trying.

In terms of migration records and migration routes, wader trapping would seem to be a very profitable field to explore further. You know some of the results from this trapping at Perth, and although there are certain intrinsic difficulties in the technique - including a relatively tideless trap site - it could be both of national and world-wide interest to trap waders at certain strategic points in S.A., Vic., Tas., N.S.W., Qld., and the N.T.

V1. PUBLIC RELATIONS

Finally, one of the most important, indeed vital, aspects of banding is public relations. It will do no harm to stress that banders are highly privileged people; it's therefore incumbent on all of us to ensure that the privilege is not abused. It's a terrible temptation sometimes to band and release a species for which there is no approved size, or a bird that has a slight injury to leg or beak. This temptation should be firmly resisted at all times. I suggest that it is good discipline to re-read your 'Instructions' from time to time in the light of your growing experience as banders.

We are all aware that we depend heavily on the general public for the reporting of banded birds and, again, it needs to be stressed that such things as unattended traps or nets can bring banding into disrepute and nullify the very considerable amounts of time, effort, and money that have been spent on developing an organization of national and international biological value.

<u>ADDENDUM</u>

Sighting of Colour-Banded Silvereye. Vol.2 No.1 p.12

The Silvereye reported at Haberfield on 9.1.62 had a red colour band on the left leg and a metal band on the right leg. This was implied in the report but not stated.