

THE VALUE OF MIST NETTING

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Mist netting, because it provides an opportunity to handle a variety of species of birds, is an aspect of bird-banding which has an immediate appeal to most people interested in birds. In Australia and indeed in English speaking countries it is a new technique, but many thousands of birds have now been taken for banding purposes by this method and it is now possible to make some early evaluations.

What is the real value of mist netting? As a method of taking birds for banding it has advantages over other methods such as trapping in that the nets provide mobility, being so easily carried or moved from place to place, and many free flying birds are caught including species not readily trapped.

An obvious point with this as with other methods of taking birds is the improvement in the bander's knowledge of the species of his area and while this is an important thing for the individual, it is not a real benefit to the Scheme.

It follows also that so far as the Australian Bird-Banding Scheme is concerned there is somewhat limited value in the mist netter working a long way from home on an odd occasion to band a few birds of species new to him. The recovery rate on most passerines is very low and the real value in this activity is to the individual. Possibly this is best regarded as a "mist netter's holiday" and as such has a real value. If however the distant area is worked fairly regularly, as is being done with a few projects, the matter becomes quite different as the bander himself will secure important retraps.

While distant recoveries from which real knowledge will accrue are the chief objective of most banders, with passerines and allied species the chances are very low. However it is only by banding large numbers of individuals of migrant species that we can come to know something of the detail of their movements. This then is a worthwhile target, but the chances of that good distant recovery are so slim that this, as a solitary objective, is not sufficient to justify alone the enormous expenditure of effort that is involved.

Some migrant species tend to flock to some extent during the non-breeding season and concentrations do occur in many districts chiefly in the vicinity of food plants. Profitable hauls can be taken by mist net in these circumstances. Honey-eaters concentrate at times to feed on flowering shrubs such as grevilleas and banksias. Blackberries provide food for quite a number of migrant species during their season. These

are a few proved examples where large number of birds have been mist netted in association with food plants but it is for the individual to find out what occurs in his own area and capitalise the knowledge as best he can. If a migration of a particular species occurs in a certain district each year, mist netting during the appropriate period over a period of several years should give very profitable information.

There remains one more important aspect of mist netting and it is considered that in this point the real value of this method lies. This is the question of working one area or a series of areas on a regular basis over an extended period.

Banding an individual bird appears, of itself, to be of relatively little importance. The recoveries are the things from which knowledge comes. By banding regularly in the one area a mist netter could reasonably hope to recover something to the order of at least 25 per cent of his banded birds of that area. The figure will vary greatly depending on the type of area being worked.

From these retraps a vast amount of information can be obtained. We know relatively little of plumage changes and life histories of many of our quite well known species including many of those with distinctive adult male plumage. If notes are taken of the plumage of birds while they are in hand, later captures of such individuals will provide information regarding the details and timings of the changes. Minor differences between male and female in species where the sexes are similar can also be determined.

An illustration can be given of the use to which mist netting can be put. A regular survey is being carried out over a three year period on a small area of mountain country at an altitude of approximately 3,300 to 3,700 ft. The survey started on the basis of a count of all birds of all species to determine which are resident, migratory and nomadic in that locality. The assistance of a mist netter was sought and now the two activities have been combined for a common purpose.

Despite the utmost care in the count it is usual for the nets to add one or two species to the day's list, and occasionally for more birds of a particular species to be taken by the nets than have been seen. A few new species for the area have first been seen in the nets. By reason of regular re-trapping of individuals over the long period involved, information is being accumulated which will be invaluable when the final analysis of the survey is done.

Similarly, regular netting of selected areas cannot fail to bring to light an enormous amount of interesting material. As the value of banding lies in the retrapping, this appears to be the means by which the greatest number of retraps can be achieved by mist netting.

The final analysis and publication of much of the information would appear to be a matter for the individual rather than for C.S.I.R.O. and this is considered proper. It would be very difficult for one person to do a detailed analysis of work done by another.

One final point: there does appear to be an optimum period in the matter of mist netting in one area. During migrations etc., where there is a flow of birds through an area, netting could be carried out daily. Where the area under review is one in which a fairly large population of birds is resident it is considered unwise to disturb the area by netting too frequently. Little notice appears to be taken of nets which are in position for say half a day at a time. It would appear however from the somewhat limited experience so far available that it would be undesirable to net resident birds more frequently than once in about three weeks. Many banders would therefore be able to conduct this form of survey in more than one area.

NOTE: Warren Hitchcock has informed us that the species and numbers of birds caught by mist net during the last two banding years have been as follows :

1960-61	165 species	5,560 individuals banded
1961-62	192 species	14,235 " "

EXTRACTS FROM LETTERS.

Some of the letters we receive contain passages which are much too interesting to keep to ourselves. The following is an extract from a letter written to our Secretary last October by Derek Stone: Derek was then teaching at "Timbertop", a unit of Geelong Grammar School maintained near Mansfield, Victoria.

"I enclose also a back copy of the magazine put out by this branch of the Geelong school in order that you may appreciate what we are trying to do with the 135 fifteen year old boys who spend one complete school year here. 'Timbertop' is 200 miles N.E. of Geelong.