

REPORTS, NOTES & LETTERS

THIRD EURING TECHNICAL CONFERENCE, MONTPELLIER, FRANCE

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The third EURING technical conference took place in Montpellier in the south of France in April 1992. As for the previous conference, this was a specialist conference for statisticians and ornithologists involved with the analysis of the data that is generated when birds are marked. The previous conferences were held in 1986 and 1989, and Steven Piper and I represented South Africa at both (Underhill 1986, 1989). Proceedings of these conferences were published (North 1987, 1990) and that of the 1992 conference will be published shortly (Lebreton & North in press). The 1986 conference concentrated only on the analysis of ringing recoveries, and the 1989 conference included recaptures as well as recoveries. This year the scope was broadened still further to include analysis methods for data generated by studies that make use of radio-telemetry.

For the 1992 conference, the South African contingent was strengthened by the SAFRING Ringing Organiser, Terry Oatley, who had the pleasure of meeting some of his counterparts in Europe with whom he has corresponded for a dozen years about recoveries. Terry and I presented a joint paper on merging recoveries and recaptures in the estimation of survival rates, and Steven Piper presented a poster on the survival rates of Longtailed Wagtails *Motacilla clara*.

The 62 scientists at the conference represented 16 countries, with, as at previous conferences, a roughly equal split between statisticians and biologists. There was a strong contingent representing the United States, most of whom worked on data generated by gamebird species, especially ducks and geese. Complex ringing studies, involving tens of thousands of gamebirds ringed annually by federal agencies, are undertaken in North America. This research is funded, at least partially by the revenue generated by hunting licences. The American statisticians have developed a suite of statistical models to analyse the data generated by these gamebird ringing programmes (Brownie *et al.* 1985).

The theory underlying these models is made simpler by assuming that ringing takes place during a concentrated period of a few weeks, and the recoveries are made by hunters during a relatively short hunting season. These assumptions are more or less satisfied by the gamebird populations to which these models are applied.

In contrast, there has not, up to now, been much effort put into the development of statistical analysis techniques for recovery data from non-gamebird species in the U.S. In Europe, the emphasis has been the other way round. Most research into the analysis of recovery data has been on small passerines and waders, with a traditional emphasis on using recoveries to get an understanding of movement and migration. The use of the recovery data to estimate survival rates has been tagged on as something of an afterthought. It has been a major shock to European ringing schemes to discover that to use the survival models developed by the American statisticians, it is not enough to have a computerized databank of recoveries. The Americans, plus Ken

Lakhani of Britain (Lakhani & Newton 1983), have shown that all the ringing data needs to be on the computer too! All the earlier methods to estimate survival rates using only the information about the birds recovered (i.e. no details about numbers ringed) have been demonstrated to be fatally flawed. They have now more or less been finally consigned to the dirt bin!

This is a reality that SAFRING is going to have to come to terms with as well. It is going to be essential, to make the best use of our database, to put all the primary ringing data into the computer. The primary data is the information that goes onto the ringing schedules, and stored on file at SAFRING. We are, however, in a better position than most of the European ringing schemes in that our schedule summaries have been computerized for 12 years, and we do have data that goes more than half-way to meeting the requirements for the American survival models. More about how we plan to get all our primary data onto the computer later on!

In lighter vein, Montpellier in April was a delightful place for a conference. Spring had already arrived this far south in Europe, and most trees were either in leaf or in blossom. Northwards migration of birds was in progress. After two days of lectures there was an impressive banquet at a stately home just outside Montpellier, and our host presented each of us with a bottle of French red wine. Next day there was a choice between two excursions, starting 07h00! Steven and I chose the excursion to the Carmargue, and, besides the famous flamingos (and horses), we saw Spotted Redshanks and Yellow Wagtails in full breeding plumage, plus an assortment of warblers.

Terry went to the Garrigues, the "back-country" north of Montpellier, where (unlike in most parts of the world) reafforestation is the order of the day. For the past few decades, vineyards were attacked by the disease *Phylloxera* and rabbits by myxomatosis, resulting in an environment favouring the establishment and growth of seedlings. As a result,

cultivated lands have been replaced by stands of indigenous oaks and Aleppo Pines, and there has been an overall human depopulation of these rural areas. All this is basically good news for birds!

One afternoon of the conference was devoted to computer software, enabling us to see how the statistical theory had been translated into computer programs, with various degrees of user-friendliness. One of the remarkable things about the people who have devoted a great deal of time and effort into developing these programs is their willingness to allow them to be freely distributed. So we now have copies at SAFRING of all the major programs for estimating survival rates from recoveries and recaptures.

One of the most impressive and important demonstrations that Terry, Steven and I saw that afternoon was a PC program for entering ringing data. Rinse Wassenaar of the Dutch Ringing Office showed us how those Dutch ringers who have access to a PC submit their data. Birds can be entered into the computer file in any order (generally the order in which they are handled), and the user-friendly programme has "pull-down" memories to assist the ringer with codes and help. They have moved entirely away from the concept of the ringer filling in a "ringing schedule". Instead, when the ringer posts the floppy disk containing the file with all his ringing information, the programs at the ringing office sort this information by ring size. Now, wait for it, Dutch ringers submit their ringing data as files on floppies **once a month!** So Rinse Wassenaar never has to send out those timewasting cards to ringers saying that ringing details have not yet arrived for a bird that has been recovered. We are investigating obtaining this software, and adapting it to the SAFRING environment (but we doubt if we will be going so far as to demand monthly floppies from SAFRING ringers!).

The reason we are looking at this is not for the sake of using computers, but because, as mentioned above, it is been decisively proven that survival rates

cannot be safely estimated if only data on birds recovered is available. It is absolutely essential that information on the dates, places and ages of all birds ringed also be computerized, and the latest and best computer software assumes this.

Or to put it the other way around, and bluntly, the message of EURING 1992 is that ringing schemes which are not investigating ways of getting their primary data, the ringing information, into the computer are still ringing in the dark ages!

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BLUE WAXBILL RING CEMENTED TO FOOT

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Whilst mistnetting in my garden in Lilongwe, Malawi, on 25.01.92, I retrapped a Blue Waxbill *Uraeginthus angolensis* X69675 which I had ringed five weeks previously. I was horrified to find that the bird's left ankle was severely swollen, with the ring jammed on it. On the face of it, the cause of the injury appeared to be directly from the ring. The ring had been perfectly fitted, but on closer inspection I noticed that the gap between the ring and leg was filled with a very fine, hardened, whitish cement.

I prised the ring open with a knife, scraped out the cement, cleaned the remains of the cement off the bird's ankle

with a wetted finger and refitted the ring to the other leg. The ankle was very swollen but otherwise not deformed and the bird still appeared to have full use of all toes. As luck would have it, I retrapped X69675 again on 22.02.92 and was pleased to find that the swelling was almost completely reduced and doubtless the bird was well on to the road to recovery.

The mystery is how the ring had become wedged in such a way - and what was the nature of the cement? The only explanation I can think of is that it was hardened birdlime. Perhaps the birdlimer had caught the bird and released it in view of the presence of the ring which may have been regarded as a token of ownership. Fortunately the bird was not found by a 'birdlover', or otherwise I can imagine what would have been the natural reaction to the practise of ringing.

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