## SECOND EURING CONFERENCE FOR STATISTICIANS AND ORNITHOLOGISTS - SEMPACH, SWITZERLAND

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In 1986 the European Union of Ringing Schemes (EURING) organised a conference of statisticians and ornithologists, involved in the analysis of ringing recovery data at Wageningen in the Netherlands, (Underhill 1986). The proceedings of this conference were edited and published in the Polish journal Acta Ornithologica (North 1987).

A second EURING conference was held from 11 to 14 April 1989, at Sempach, Switzerland, at the Swiss ornithological institute, the Schweizerische Vogelwarte. The scope of this second conference was broader than the Wageningen conference, and the title, consequently, a bigger mouthful, 'The statistical investigation of avian population dynamics using data from ringing recoveries and live recaptures of marked birds'! In other words, the analysis of retrap data as well as recovery data was up for discussion.

The conference was superbly organised by Lucas Jenni and his colleagues at the Vogelwarte, Sempach. The 45 participants were spread over the four small hotels in the village of Sempach. Similarly, lunches were taken in small groups at five restaurants. The diners rotated around the restaurants. The delightful 500 m walk between the Vogelwarte lecture room and the village along the shore of Lake Sempach ensured that each delegate got 3 km of exercise and fresh air per day, commodities generally lacking at conferences.

A large proportion of the participants had also attended the Wageningen conference, so there was an atmosphere of friendship from the start. I bumped into the Finnish delegation at the station under Zurich airport - they were revelling in the spring, having left wintery Helsinki that morning.

20 papers were presented at the conference; the proceedings will appear as an issue of the Polish journal The Ring, which is currently being upgraded. I have selected a few papers to highlight here. The main thrust of the papers can be judged from the fact that ten of the 20 titles contained the word 'survival'. Many of these papers reported applications of newly developed methodology, carefully considering departures from the assumptions of the methods, and difficulties in their use. Such papers provide an important feedback from the users of the methods to their developers, and help to ensure that the statisticians are meeting the real, rather than perceived, needs of the ornithologists.

Philip North, in his opening paper, addressed the question "Where have we come from Wageningen to Sempach?" A major area of statistical development had been of methods that allow both retrap and recovery data to be incorporated into survival analyses. Striking progress had been made in the ready availability of packages on personal computers to do the analyses (Steve Piper compiled a list of about 10 programs in use). These programs were demonstrated after dinner in the evenings.

Tibor Szep, of the Hungarian Ornithological Society, compared estimates of the population size of Sand Martins Riparia riparia at colonies at sand-banks along 70 km of the Tisza River in eastern Hungary, obtained by capture-recapture methods, with direct counts of nest burrows. At the larger colonies, up to 2 000 Sand Martins were being ringed per year and site fidelity was also examined. This project reminded me of that proposed by Tree and Earlé (1984) for the Brownthroated Sand Martin Riparia paludicola in southern Africa: a co-operative project involving ringers operating at many sites.

A relatively new idea is the use of ringing totals for population monitoring purposes. The standardisation of ringing procedures is then essential. Two papers presented examples of such programmes (and the relevant statistical methods to handle the data they generate). About 100 British ringers participate in the Constant Effort Sites Scheme (Baillie et al. 1986) in which ringers undertake to have 12 catching sessions over spring and summer at predetermined intervals using the same nets in the same places (and to keep doing this for several years)! Intervear differences in the total number of adult birds of each species caught provide a handle on changes in population size, and the ratio of first-year birds to adults provides a measure of breeding productivity in the year. Results are combined for overall.

In Poland, at the Bird Migration Research Station, a long line of mistnets is set up <u>daily</u> in autumn across the major migration route along the Baltic Sea. All aspects of this programme are standardised (except the weather, and the occasions when the nets have to be furled because of super abundance of trapped migrants). Even the heights of the shrubs in the permanent netting sites are kept the same from year to year.

The South Africans at the conference were Steve Piper (who presented a very well-received paper "Dispersal, nomadism and conservation in the Cape Vulture *Gyps coprotheres*") and myself ("The Bayesian estimation of population size"). Steve also gave an informal talk on the last evening about his Longtailed Wagtails *Motacilla clara*.

As hinted above, one of the chief reasons for the success of both the Wageningen and Sempach EURING conferences has been in the mix of statisticians and ornithologists and their lively interaction. Both Steve and I are looking forward to the next conference scheduled for 1992.

## REFERENCES: -

Baillie, S. R., Green, R. E., Boddy, M. & Buckland, S. T. 1986. An evaluation of the Constant Efforts Sites scheme. Report of the Constant Effort Sites Review Group to the Ringing Committee of the British Trust for Ornithology. Tring: U.K.

North, P. M. (Ed.) 1987. Ringing Recovery Analytic Methods. Proceedings of the Euring Technical Conference and meeting of the Mathematical Ecology Group of the Biometric Society (British region) and British Ecological Society. Acta Ornithologica Vol. 23 (1): 1-175.

Tree, A. J. and Earlé, R. A. 1984. The Brown Sand Martin - a potential national ringing project. <u>Safring</u> News 13: 71-74.

Underhill, L. G. 1986. Euring Technical Conference on ringing recovery analytical methods. <u>Safring News</u> 15: 52-55.

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## A BELATED RECOVERY REPORT

On 1st August 1989 SAFRING received, via the National Zoological Gardens in Pretoria, a registered letter from Mr Mart Niklus of Tartu, Estonia. The following is an excerpt:

"A swallow Hirundo r. rustica male, adult, with a ring on its leg: Notify Zoo Pretoria 601/72844 was found dead quite a long time ago, June 4, 1963, in a political prison camp at the USSR, Sosnovka Village, ca 180 km W of the town of Saransk. At that time I was serving my term of imprisonment there. The bird was stuffed and its sex identified. I was released in 1966, arrested again in 1980 and released in 1988. I have found the relevant data in my papers, and I beg your pardon for being silent about this record for such a long time.".

The swallow had been ringed 3 months earlier on 21 March 1963 at Athlone, Cape Town, 10 060 km to the south. No previous notice of its recovery had been received.