

- Organisation** In 2006, the organisation of the Dutch ringing scheme has changed. The Netherlands Institute of Ecology (NIOO-KNAW, of which the ringing centre has been part for many decades), SOVON Dutch Centre for Field Ornithology and the Dutch Ringers Association agreed to take joint responsibility for managing the ringing centre and conducting research with the data. The aim of this cooperation, which will be evaluated in 2009, is to improve both the scientific and societal use of the data and the long-term (financial) viability of the scheme. The staff was expanded with two scientists and now consists of Woutéra van Andel (data processing, 0.6 fte), Henk van der Jeugd (coordinator/scientist, 0.4 fte), Hans Schekkerman (scientist, 0.8 fte), and Gert Speek (manager, 1 fte). The old Dutch name *Vogeltrekstation* (still printed on all rings) was reinstalled and the English name changed to 'Dutch Centre for Avian Migration and Demography'. A steering committee consisting of representatives from each organisation plus an independent scientist oversees the centre's activities.
- Permits** The number of active ringing permit holders is 418 (August 2007), with roughly equal shares of professional researchers and volunteers. Licensing is done by the Vogeltekstation (after training and evaluation by other ringers); participation in a one-day course to update general ringing skills or knowledge of specific subjects is obligatory once every three years. There is no permit fee. Dutch ringers constitute an ageing population; 25% are over 60 and just 19% are under 40. Licensing has been restrictive for many years due to financial constraints on the capacity of the ringing centre to process ringing and recovery data, but we hope to be able to gradually relax these restrictions (first for dedicated projects) and thereby also rejuvenate the ringing community. In 2007 we established a category 'Ringing Assistants' to give these a more formal status (not a ringing permit) and let them receive the ringers bulletin 'Op Het Vinkentouw'. Three issues appear each year, one containing the annual ringing report.
- Rings** We issue rings in aluminium (15 sizes) and stainless steel (8 sizes), 15 sizes in total including special rings for Kingfisher, Swift, White Stork and Mute Swan. Rings are manufactured by Mekaniska (Sweden) and Porzana (UK). Ringers pay for the rings (except those used in CES); prices vary with size and average recovery frequency. The sales revenues of rings and materials finance c. 0.6 staff fte.
- ICT** Since 1991, all ringers submit both ringing and recovery data (including local controls, but excluding biometric data) digitally by ftp or as e-mail attachments (with a few floppy discs remaining). The majority of recoveries by the general public now arrives via the website (www.vogeltrekstation.nl), but these as well as recoveries submitted through foreign ringing schemes still need to be processed manually, taking up much staff time. A web application allowing recovery data submitted via the website to be added to the database automatically (after screening by staff) is under construction. Another recent development is that ringers can choose between receiving recovery letters on paper or via e-mail (within 12 hours if the ringing data are available); a further application allowing ringers to receive recovery data in database format is ready for installment. Notwithstanding these improvements, both the current database environment (in

Microsoft SQL 2000) and the software for submitting ringing data are becoming outdated. We have recently secured funding to redevelop the database and associated software, which will allow storing more information (e.g. biometrics) and web-based data entry and extraction. Work on this will start in autumn 2007.

- Birds ringed* About 230,000 birds have been ringed annually in the last few years, yielding c. 55,000 recoveries per year (including local controls). The total number of birds ringed since the start of the scheme in 1911 has risen to 9,330,000 (data computerised for 5,911,000), the total number of recoveries (including all controls since 1991) to 1,118,000. About 80% of all birds ringed are passerines; other well-represented groups are raptors, owls, gulls and terns. Although unfledged chicks make up 27% of the total, large numbers of unfledged young are ringed of a few species only (nestbox and colonial breeders). From a monitoring and conservation viewpoint, Dutch breeding birds are underrepresented relative to migrants, and we aim to stimulate ringing effort on the former (through CES, RAS and ringing of pulli).
- Colour-rings* Colour-ringing and marking is co-ordinated (licensed) by the ringing scheme, but administration is done by the users. Scheme owners are obliged to supply resighting data as recoveries, but there has been no active follow-up. There are regular contacts with international co-ordinators; the colour-ring website of Dirk Raes is very important for us.
- Ringing Projects* Current ringing projects include Constant Effort Sites (CES), Recapturing Adults for Survival (RAS), and the EURING swallow project. In 2006, 41 CES-sites were active, contributing 5% of the annual ringing total. CES has been running since 1994 and we have recently started analyzing patterns in reproduction and survival, with promising results. Uptake of RAS has been less than of CES; there are now active projects on c. 10 species, some involving also colour-ringing. We are trying to persuade the Dutch government to include CES and RAS in long-term environmental monitoring programs, which will allow expanding both projects. In general, we aim to accommodate more ringing effort into dedicated projects, allowing both more coordinated data collection and finding specific sources of funding. Examples that we are currently working on are ringing of dabbling ducks in decoys, waders in the Wadden Sea, and nestlings in connection to SOVON's nest record scheme.
- Other Projects* In spring 2007, the Vogeltrekstation participated in the work commissioned to EURING by the EC in connection with Avian Influenza (AI), by reviewing data on natural mortality and AI prevalence in waterfowl. Plans for a Dutch Ringing Atlas have been developed; fund-raising and actual work will start autumn 2007. Recently we have obtained funding for two post-doc positions, both involving the integration of count/census data (like collected by SOVON) with ringing information. One position entails working towards an operative system of integrated population monitoring (yielding annual updates of population size, reproduction and survival); the other developing methods for using census data to correct effort-related bias in spatial distribution in ring-recovery data.

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