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Rings of a test series with address www.ring.ac for reporting recoveries through internet (a project by EURING)

Vogelwarte Radolfzell Status Report 2007 of the Bird Ringing Centre



by Wolfgang Fiedler

## Organisation and recent developments

The Bird Ringing Scheme "Radolfzell" (DER) is hosted at Vogelwarte Radolfzell in the small village of Möggingen near the city of Radolfzell. Since 2005 Wolfgang Fiedler is head of the ringing scheme. Vogelwarte Radolfzell is a subdivision of the Max Planck Institute for Ornithology. Two directors, Manfred Gahr and Bart Kempenaers are working at the main institute in Seewiesen (south of Munich). Information about the MPI for Ornithology is available at http://www.orn.mpg.de. Due to recent decisions at the Max Planck Society the institute is looking foreward to the appointment of a third director in 2008 who then will hold a "bridge professorship" between University of Constance and the MPI for Ornithology with a special responsibility for Vogelwarte Radolfzell. It has been agreed between all relevant corporations that the ringing centre further shall be an integral part of Vogelwarte Radolfzell.

The Bird Ringing Centre at Vogelwarte Radolfzell issues bird rings with inscription "Radolfzell Germania" for use in Southern Germany, Berlin and Austria. Strong effords have been made together with colleagues from Austria (especially from Konrad Lorenz Institute for Comparative Ethology in Vienna) to organize bird ringing independently by a future Austrian Ringing Scheme. First parts of the ringing centre's administration have been moved to Austria while the stable financing of this new Austrian scheme still is a major issue to solve. The Radolfzell scheme continues to provide all materials and services necessary until the situation stabilizes.

# Cooperation within Germany

Within Germany all three existing bird ringing schemes (besides Radolfzell: Helgoland - northern Germany and Hiddensee - former GDR area) work closely together on a high level of efficiency. In 2004 different scenarios of a future organisation of bird ringing in Germany have been reviewed among the responsible heads of the schemes. It turned out clearly that a fusion of the German bird ringing schemes would not decrease costs on the administrational side but would decrease quality of the close and fruitful relationships between the bird ringing centres and their assigned volunteer ringers. One special reason for this is the federal structure of Germany with the "Bundesländer" as main authorities for nature conservation. hunting regulations and animal welfare issues. Furthermore, for the Max Planck Institute for Ornithology – with it's subdivision Vogelwarte Radolfzell - it is a clear advantage to have close relationships to the volunteer ringers instead of using more or less anonymously collected databases from any remote ringing centre. In the current situation we can make direct use of the immense competence of the volunteer ornithologists, stimulate directly any focus projects and get instant notification of actual developments in the field such as good and bad breeding seasons, delays or advances in onset of breeding or migration, changes in breeding success, trends in population developments, bird communities etc. for much more species than we could monitor with Vogelwarte staff.

### Staff

The main people involved in the work at the bird ringing scheme are:

• Dr. Wolfgang Fiedler (Scientist, full position, 50% for the ringing centre): head of scheme, licenses, database maintenance, scientific, political and public issues.

- Dr. Volker Salewski (Post-Doc, full position, 80% for the ringing centre): data analysis and trapping fieldstation.
- Anne Bär (Technician, 50% position, 90% for the ringing centre): recovery processing.
- Andreas Schmidt (Technician, full position, 60% for the ringing centre): rings, equipment, field work.
- Monika Krome (Technician, full position, 10% for the ringing centre): database work.
- Silvia Maaß and Ute Hückler (Technicians, 10% position, 100% for the ringing centre): data management work, general assistance.

## Bird ringers

The number of holders of a ringing license at the beginning of 2007 was 309. Around 85% of them are volunteers. Since in Germany ringing licenses are bound to persons <u>and</u> projects there are approximately 50 more fully skilled volunteers who could have a ringing license but don't do so at the moment because they do not run a distinct project.

## Ringing and recovery numbers

After reducing the bird ringing activities to focus projects and largely reducing mass ringing without clear scientific aim in the 1980ies and 1990ies the annual totals are now at approximately 25,000 ringed nestlings and 37,000 ringed fledglings. The complete bird ringing database comprises 4.93 million bird ringings and 80,000 recoveries between 1947 and 2004. Through different focusses of interest and limited data storage capacity in earlier decades many retraps of ringed birds at the same site have not been entered in the central database at the ringing centre. Since especially these retraps at the same site bear inevitable information about local survival, dispersal and other crucial aspects of birds' life histories since 2000 ringers are strongly encouraged to send these data also to the central database. Since 2005 ringers with new or renewed licenses have to declare by contract that they will to do so.

The number of ring recoveries in a distance > 250 km dropped constantly and significantly from 0.5% of the annual ringing in the 1960ies to 0.15% since 2000 if the White Stork is not regarded. Including this species leads to a drop down to 2% in the early 1990ies and then an increase in the rate up to 0,65% of the annual ringing totals in the mid 2000ds. Besides a general decline in reporting probabilities in remote countries also a shift of focus species for ringing may account for this pattern.

#### Data storage

In 2000 we introduced the electronic database system RINGZENT which has been developed together with the Helgoland bird ringing scheme (Institute for Avian Research Wilhelmshaven). With the component RING ringers in 2005 and 2006 delivered 87% of all fledgling ringing data and 68 % of all nestling ringing data by electronic way to the central database. Electronically available ring recoveries increased from less than 0.2% of the annual ringing totals before the year 2000 to more than 1% until 2007 which means that electronic recovery data is available for

one out of 100 ringed birds on average which is a fairly good rate regarding that recovery probabilities of birds range between <0.01 and (rarely) 20%.

## Projects (selection):

- EURING Swallow Project (5 plots with > 1000 ringed nestlings per year)
- Integrated Monitoring of Songbirds (Constant effort sites; in cooperation with the other German ringing schemes): 5 plots
- Bird Ringing Fieldstation "Mettnau" (supported by up to 60 volonteers each season)
- Studies of breeding and population biology in various species (Barn Owl, Little Owl, Peregrine, Mediterranean Gull, Dipper, Wheatear, Field Sparrow, House Sparrow, Jackdaw, Whinchat, Stonechat, Reed Warbler, Great Reed Warbler, Hoopoe, Swift, Barn Swallow, House Martin and other).
- Nestbox project (17 plots with ca. 2000 nestboxes).
- Nest record scheme: breeding biological data of 70.000 broods of 152 species are stored at Vogelwarte Radolfzell. The most numerous ones (> 1000 records) are Barn Owl, Little Owl, Barn Swallow, Great Tit, Blue Tit, Wren, Black Redstart, Robin, Pied Flycatcher, Collared Flycatcher, Redbacked Shrike and Field Sparrow.
- Focus Project "White Stork" (in cooperation with the other German ringing schemes): Integrated population monitoring; measurement of immigrants, emigrants, recruitment, survival and age structure; migration behaviour and changes in migration.
- Various activities in the context of Avian Influenza research (wild bird sampling, movement analyses and other)
- special projects with various partners: fitness differences of Blackcaps wintering
  in Spain and in the UK; Wintering areas of Wheatears as revealed by stable
  isotope analysis; population genetics of a rapidly increasing Wheatear
  population in intensive farmland; studies of global change effects on birds.