# A Bank, but not as we know It

**Recently, banks have been appearing frequently in the media, often in a negative light. "Is this the place for describing yet another bank?" asks Chris du Feu, EURING Data Bank Co-ordinator. Read on!**

Wrynecks, which in common with Hoopoe, are distributed from western to eastern Europe, also migrate, but show no clearly defined migratory routes, with all the birds migrating in a similar direction.

## INTRODUCING THE BANK

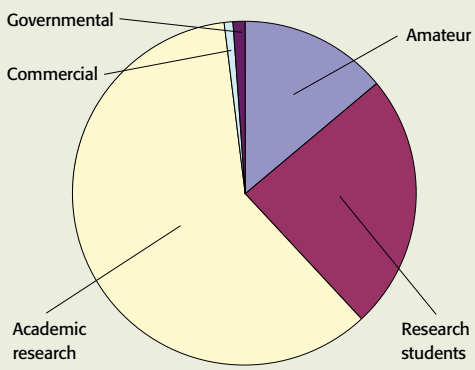
Unlike the banks in the news, this bank does not need to be underwritten using taxpayers' money, has increasing assets, does release assets to customers and awards no bonuses to directors. Banks in the financial sector might appear to have real, tangible assets but events have shown that sometimes these turn out to be toxic assets that are no more than electronic signals not representative of any real value. This bank, the EURING Data Bank (EDB), is unashamedly one with all assets electronic but all representing something real. The EDB was created in 1966 by EURING, the European Union for Bird Ringing and aimed to hold computerised reports of all ringed-bird recoveries from all European ringing schemes.

Typical mainframe computers then were less powerful than laptop computers of today and most ringing schemes, including the BTO, did not yet have a computer. It was a very ambitious and far-sighted aim. The Netherlands government supported the EDB at its ecological institute in Heteren until 2005, when it had to make many economies. The EDB then faced its own banking crisis. The BTO was one of the only schemes in a position to host the EDB, and provided resources to transfer the data and to set up the necessary computer systems. However, there was insufficient finance to pay for the EDB to be run by the Trust's staff. Like so much in the ringing world, volunteer effort has allowed it to continue. I run the EDB from home with BTO staff providing remote support. So much for a quiet retirement from a teaching career.

## WHAT IS THE DATA BANK FOR?

Ringers and finders of ringed birds obviously enjoy knowing details of the history of a recovered bird, but the justification for ringing is in increased scientific knowledge leading to better conservation. The world is changing and so historic ringing data are needed to make comparisons with modern data. Birds do not respect national boundaries, so combining data from many countries allows studies that could not be done using individual national data sets. The EDB thus provides the raw material for wide-ranging studies of

**FIG. 1** Requests for information from the EDB come from a wide variety of sources, and cross many international boundaries.




'The world is changing and so historic ringing data are needed to make comparisons with modern data.'

# Across the divide – using EDB data

**Where populations of** the same species migrate in different directions to different wintering grounds and there is a sharp demarcation line between these breeding populations, this is known as a migratory divide. These divides may be obvious natural features, such as mountain ranges, or may be apparent only after detailed analysis of migration patterns. Thus some breeding populations may breed close together, but may winter in areas far apart from each other. Detailed analysis of Hoopoe populations by Reichlin has revealed, for the first time, such a migratory divide. Birds from western Europe migrate in a southwesterly direction whereas those from eastern Europe travel south-southeastwards (Fig 2). The 'invisible' migratory divide is a narrow band running south from the east of Denmark to northern Italy. This is in sharp contrast to Wrynecks, studied at the same time: birds from all populations tend to migrate in the same south-southwesterly direction with no suggestion of a clear migratory divide.

Another study, by Prochazka *et al* showed that Reed Warblers all tend to travel in the same direction. However, birds from different breeding populations winter in different areas even where these populations' breeding grounds and wintering grounds are close to each other. So, in spite of there being no clear migratory divide, separate breeding populations still remain separate in their wintering grounds. Without ringing and analyses of international data sets, all we would know about these species' migrations would be their overall breeding and wintering grounds and we would know nothing about where particular sub-populations spent their winter.

**Hoopoes, distinctive birds of much of southern and eastern Europe, migrate on an apparently broad front, but research using EDB data has shown the birds follow two different migratory pathways, with a clear divide across the centre of Europe.**

**FIG. 2** Migration routes of Hoopoe across Europe show a clear migratory divide, although these populations are not separated by any physical features such as mountain ranges. The red dotted line shows the divide, and the arrows the main direection of migration.

bird migration and demography.

The system is simple in concept. Ringing schemes send all recovery data to the EDB in a standard format. Would-be analysts, who come from a wide range of backgrounds, make requests via the EURING web site (Fig 1). The requester receives data all in one file, in a standard format, from the EDB and pays the EDB an agreed fee. This income is sufficient to cover the costs of BTO IS staff and computing facilities (but not to provide a banker's bonus to the databank manager!). Just imagine the problems if analysts had to apply to all 40 European ringing schemes separately, and received data in 40 different formats. Requests arrived initially at the rate of about one a month but this is increasing as the reputation of the EDB increases. Some analyses have described conventional migration patterns – Hen Harriers wintering in Britain seem to be of British rather than continental origin for instance; but modern analyses can also link bird recovery data with other environmental information. Thus, rather than just being able to describe movement patterns, analyses have shown that Pochard winter movements are driven by food supply.

## LOOKING TO THE FUTURE

The EDB holds an estimated 80% of the ringing recovery records from Europe. Considering that many recoveries date from pre-computer days and that copies of some old records have been destroyed in various European conflicts, this is a pleasingly complete proportion which we hope to improve on in the next two years. There are 6,350,365 records of 553 species in the EDB from schemes in 31 European countries. The Black-headed Gull has most records – 456,531 records of 135,640 birds: many being repeated resightings of colour-marked birds. The species with most birds is the Great Tit with records of 142,429 individuals. The EDB is now running sufficiently well for EURING to contemplate an ambitious European migration atlas project. This will require fuller computerisation in schemes (which EURING is supporting) and a great deal of money. But with the EDB's continually increasing assets, and with increasing interest, we have confidence that this major project will be possible.

## FIND OUT MORE

Much more information can be found on the EURING web site at **www.euring.org**.


**Thomas S. Reichlin** *et al* (2009) Migration patterns of Hoopoe *Upupa epops* and Wryneck *Jynx torquilla*: an analysis of European ring recoveries. *J Ornithol*. 150: 393–400

**Petr Prochazka** *et al* (2008) Birds of a feather winter together: migratory connectivity in the Reed Warbler *Acrocephalus scirpaceus*. *J Ornithol*. 149: 141–150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