

DO WE NEED ANOTHER 100 YEARS OF RINGING?

When I'm out and about celebrating the Centenary of ringing, one of the most frequent questions I hear is "Why do you need to keep ringing birds?" Admittedly, this is a very good question – after all, in 100 years we've ringed 36 million birds, which have generated nearly 700,000 'recoveries' (reports of dead birds or notable 'live' movements).

The modern ringing scheme, however, is about far more than just answering the question of where Swallows go in winter. With the data ringers are collecting being more and more accessible (thanks in large part to the advent of home computers), we can do far

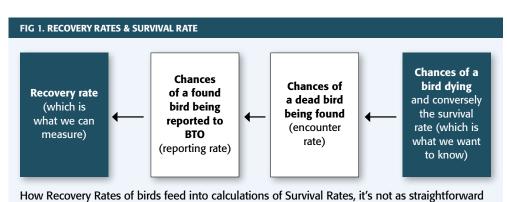
more than just look at migration movements. In an era of increasing environmental change such as climate change and habitat loss, using ringing data to measure trends in bird populations is vitally important. One of the key things we monitor in the modern scheme is survival — quite simply the proportion of birds that survive from one year to the next. Easy! But this simple measure isn't quite as straightforward as we might think.

DEAD, OR JUST NOT SEEN AGAIN?

There are two quite different things that affect the number of reports of ringed birds we receive: the chance a bird will die (and conversely the survival rate, which is what



Ring recoveries can reach us in many ways: this one uses a Snowdonia National Park paper bag and a Gatwick Airport luggage label to address it. Most come in a somewhat more standard guise, although this one did find its way here!



as it first appears! Only a fraction of ringed birds are later found, and not all are reported.

BTO News ■ May-June 2009

we are interested in) and the chance it will be found and reported (the recovery rate). So when we model changes in survival, we really need to know about the recovery rate of ringed birds, but this is also dependent on two things: the chances of a dead bird being found (the encounter rate) and the chances of that bird being reported to the BTO (the reporting rate).

Even just a quick look at the numbers (Fig 2) suggests that only one in 50 ringed birds is found dead, so we need to ring large numbers of birds to ensure that enough are subsequently found. The recovery rate has also been dropping fast, meaning we have fewer birds from which to estimate survival rates, and have to do more complex analyses to account for this change. Both of these mean we estimate survival with less precision, and in turn can provide less effective conservation advice. This drop is happening across many species groups, from waders and wildfowl to thrushes and finches, at a rate of around 20–25% per decade.

So why might the recovery rate be dropping? The cause could be either a declining encounter rate or a declining reporting rate, or both. We think that the latter is most likely theory, with fewer people generally 'out and about' in the countryside, the chances of dead birds being found will be lower. It also appears that in the modern age fewer people write letters. Even if a bird is found and the ring read, there is no guarantee that the details will be reported. In fact, experiments in the USA using 'reward bands' (additional rings with a real dollar value) show that you need a minimum reward of over \$50 to guarantee a 100% reporting rate. Well, we can't afford to go down that line, but what we can do is make it as easy as possible for people to report rings.

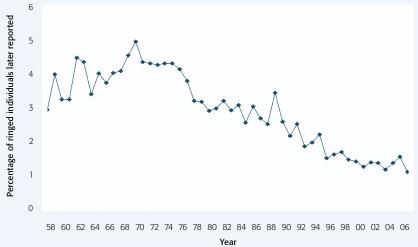
THE WEB TO THE RESCUE?

With increasing use of the Internet, we were interested in the effectiveness of adding a web address to rings (www.ring.ac). To test this, we added the address to two different sizes of ring, and looked at how many were reported compared to the same size of ring without a web address. We not only compared how many were reported online, but also the proportion of rings fitted that were returned to us. Just looking at Barn Owl, the recovery rate for birds carrying a ring with both a postal address and web address was 26% higher than those carrying a ring with just a postal address. This significant difference shows that adding a web address to rings increases the likelihood that they will be reported back to us.

WHAT YOU CAN DO TO HELP

So you can see the importance of looking for, and reporting, ringed birds and we really don't mind how we receive these. We've seen it all, over the years, including whole birds posted to us, but my personal favourite was the report that came in using a Snowdonia National Park paper bag as an envelope and a Gatwick Airport luggage tag as an address label! Sent to the address exactly





The recovery rate for Blackbirds 50 years ago was around 4%, but has dropped to just over 1%. We wondered if adding a web address to rings would help, and for those ring sizes tested it did, with recovery rates significantly higher than without.

as stamped on the ring, this duly arrived in our office and was processed.

But if you do find a ring, there are better ways to report it. On behalf of EURING, we've continued to develop the www.ring.ac reporting site, and it is possible now to report your ringed bird in 13 languages, including Turkish, Lithuanian and Catalan. So keep an eye out for anything with a ring, and get in touch.

ACKOWLEDGEMENTS

The Ringing Scheme is funded by a partnership of the BTO, the Joint Nature Conservation Committee (on behalf of Natural England, Scottish Natural Heritage and the Countryside Council for Wales, and also on behalf of the Environment and Heritage Service in Northern Ireland). The Ringing Scheme is also funded by The National Parks and Wildlife Service (Ireland) and the ringers themselves.

:IL CALBRADE/MARK GRANTHAM/ GRAY IMAGES www.grayimages.co.uk