As the date for the first universal release of DemOn moves closer we thought this would be an opportune moment to send the first of a series of emails that will act as your introduction to the system.

Not that all of you will need an introduction; to date, we have well over 100 testers using the current beta development version of DemOn to input real, live data. Thus far, 72,330 ringing encounters and over 600 nest records have been input by 117 different users, with up to 1,000 new records per day now coming in. We are extremely grateful to all the users who have been testing the system for us, highlighting bugs and providing feedback to help us deliver a system that's as user-friendly and efficient as possible.

We'll be providing more details about the functionality, what you'll see and what you need to do to get started in subsequent emails but first we wanted to outline some more fundamental changes to the process of collecting and submitting data that have been stimulated by the DemOn development.

What is DemOn?
DemOn is an online application allowing users to input their ringing and/or nest records data, similar to existing BTO online systems such as BirdTrack and BBS. When you log in and start using DemOn you will be inputting data directly into the BTO Ringing/Recovery and NRS databases, which brings a number of advantages:

- No more submission files – you no longer need to send your data to your Trainer, Group Secretary or the BTO.
- No more updates to IPMR or struggling with Microsoft Access after yet another Windows update - you'll be using the latest version every time you log on.
- No loss of data should your PC crash or your laptop gets stolen – as data is held centrally on the backed up BTO database.
- Anyone can input ringing and nest record data on your/your group's behalf from any machine, provided they have been given the access permission to do so.
- Access to your data using a smartphone or tablet at any location with internet access.

Recording resolution
Using demographic data to explore variation in survival rates and nesting success relies on accurate, high resolution spatial information in order to accurately link to remotely sensed habitat type and weather datasets collected by satellite. If there is some uncertainty surrounding the grid references of the ringing/nest recording data, then these are likely to be excluded from analyses. Lack of exact location data may also hamper the ability of conservationists to protect sensitive sites on the ground. In IPMR, you have been asked to relate your observations to a 'Place' that relates to a 1 km OS grid square. By setting an accuracy of 1–2 km, however, it is possible to reduce the resolution of your data to a 3x3 km or 5x5 km square respectively, which causes issues when trying to match your records with the remote sensed datasets outlined above. For this reason, in DemOn, we are asking for all ringing and NRS data to be submitted at the 1x1 km resolution, a decision supported by Ringing Committee at the October 2017 meeting.

We realise that taking this decision in IPMR would have necessitated setting up a Place for each individual 1 km square but this is not how DemOn works. If you ring regularly at the same site or check the same nest boxes every year, you can specify their locations in advance and associate your records with them on inputting. If, as a nest recorder or RAS ringer, you move around a big study site, collecting data opportunistically, you can associate your records with the general area but input more accurate locations for each nest or capture as you go, using a form or the interactive maps provided.

Sensitive species and confidential locations
We realise that many of you are understandably concerned about data security with respect to sensitive species and we have taken great care to develop a system that allows you fine-scale control in terms of access, allowing you to determine who sees your data and who it stays hidden from. In the IPMR system, the location of Confidential sites was obscured on inputting; in DemOn, while it is still possible to flag sites as Confidential, we are asking users to input accurate location details, with the assurance that there is a thorough system that prevents these details being released to others without permission:

- Fellow ringing/nesting group members – marking a site as Confidential restricts access of data to members of your group. This can then be refined further to restrict access to individually selected group members; only the Group Secretary will have unrestricted access.
- Recovery reports – one means by which sensitive data could potentially be passed on to third parties would be via reports relating to subsequent encounters (if they are a ringer) or recoveries (if they are members of the public). To guard against this possibility, any details of sensitive species communicated through these channels will only be divulged at county, region or country resolution, as appropriate for the species (based on BTO Atlas categories); the place name will also be obscured. As a belt-and-braces system, locations of all sensitive species during the breeding season will be obscured automatically in this way, whether the site has been marked Confidential or not, but ringers will be able to log into DemOn to see the full details for non-Confidential sites.
- Reports and data requests – as above, the default resolution for dissemination in reports and data requests will be the county/region/country level, although individual ringers and recorders will be able to give permission for release of finer scale information.

For more background information on this please see the following Ringing Committee Agenda Items:

- October 2016 Agenda item 6 Appendix: Demon granular permissions, confidentiality and sensitive species.
- September 2017 Agenda item 5.1: Minimum DemOn recording resolution for non-confidential sites.

Age and moult recording updates
Development of DemOn has given us the opportunity to review the age and moult coding system, aiming to simplify the protocol and make it more intuitive, particularly in areas where there is currently the need to make subjective decisions. The detail for much of this is still under discussion and nothing will be implemented before January 2019, but we thought a heads up would be useful.

- In March 2017, the Ringing Committee supported a proposal from a ringer and BTO staff to remove the 'J' and 'I', indicating the presence of some juvenile or immature plumage, from age codes, simplifying the system and bringing it more in line with EURING.
- To prevent this additional data signifying bird age being lost, we are asking ringers to capture the 'J' as a moult code and the 'I' as a plumage code, both fields that already exist in IPMR. To ensure that the valuable 'J' information is not lost, the moult code field will become compulsory, but as this is the case we have decided to simplify it.
- The current moult recording system asks ringers to choose between collecting data on the timing of moult (*ie* the stage of feather replacement/growth) and the extent of moult (*ie* which feathers have been replaced); both these pieces of information are useful so in DemOn these fields will be split into one recording timing (equivalent to current 'active' codes), which will be compulsory, and one recording stage, which will be optional. In this

way the number of options presented in the compulsory field will be significantly reduced.

For more background information on this please see following Ringing Committee Agenda Item:

- September 2017 Agenda Item 5.2: Proposal for changes to moult code recording.
- September 2017 Agenda Item 5.3: Outline plan for removal of J aging code in DemOn.

If you have got to the bottom of this email, well done for persevering! We realise that it is a lot of information to take in but we really want to keep you all in the loop. There will be another email coming out shortly, more related to what to expect when using DemOn, so if this first email has already generated questions about the detail of what you'll see and how things will work, then we'd appreciate it if you could read that before asking us to explain as we really want to focus on launching the functionality.