The current BBL DMS (see box, right) was designed around data management needs for banding, recapture, and encounter records. The BBL staff notified record was received, quality control checks in BBL DMS, record included, quality control checks in BANDIT, and record archived in BANDIT. The BANDIT Survey is Open! To better serve the needs of contemporary bird banders and users of bird banding data, the BBL is initiating major revisions to its operations and data management system (DMS), including:

- Replacing BANDIT, the software banders use to submit banding and recapture data,
- Redesigning Reportband.gov, the website the public uses to submit encounter data, and
- Migrating to a new database to manage banding, encounter, and recapture data.

Why Does the BBL Need a New DMS Now?

The current BBL DMS is designed to support future BBL operations, where self-service tools and greater automation allow a smaller, more professional staff to keep pace with advancing methods and technology as the BBL archive continues to expand.

Overview

The Bird Banding Lab (BBL) has been a leader of the North American Bird Banding Program since the inception of the Migratory Bird Treaty Act in 1918 and is currently part of the USGS Patuxent Wildlife Research Center in Laurel, MD. To better serve the needs of contemporary bird banders and users of bird banding data, the BBL is initiating major revisions to its operations and data management system (DMS), including:

- Replacing BANDIT, the software banders use to submit banding and recapture data,
- Redesigning Reportband.gov, the website the public uses to submit encounter data, and
- Migrating to a new database to manage banding, encounter, and recapture data.

Record Lifecycle in Current DMS

1. Bird is banded
2. Banded bird is encountered
3. Record flagged for review by bander in BANDIT
4. Bander modifies record OR bypasses error flag in BANDIT
5. Record passes quality control checks in BANDIT
6. Record submitted to BBL DMS
7. BBL staff requests additional information from bander
8. BBL staff modifies record OR bypasses error flag in BANDIT
9. Record flagged for review by BBL staff
10. Quality control checks in BBL DMS
11. Record archived in BANDIT
12. BBL staff requests additional information from reporter
13. Reporter responds to BBL staff
14. Reporter creates encounter record at Reportband.gov
15. Reporter notified record was received
16. BBL staff notified record was archived and details of any modifications by BBL staff
17. Banded bird is encountered
18. Record included in BBL data products (data requests, Gamebirds CD, BISON)
19. Banded bird creates encounter record in BANDIT
20. Bander creates banding record in BANDIT

How Will the New DMS Be Different?

- Web-based data submission and management for banders
  - Currently, banders submit records via a stand-alone program, BANDIT.
  - In the future, a web-based platform will allow banders and BBL staff to interact with the same dataset.
- Streamlined, dynamic quality checks
  - Currently, records from banders run through two sets of quality control checks. Because BANDIT is a stand-alone program, updates BBL staff make to quality control checks based on new information about bird distributions are not available to banders until the next release of BANDIT.
  - In the future, banders and BBL staff will use a single set of quality control checks and updates will be immediately available to banders within the web-based platform.
- Additional self-serve resources
  - Currently, banders, reporters, and data users depend on BBL staff to complete many common tasks.
  - In the future, the BBL website will offer users access to the features they often need, limiting how frequently BBL staff are contacted for these requests.
- Fewer records requiring manual review by BBL staff
  - Currently, about 10% of banding records and 55% of encounter records are flagged for one or more quality control checks, and there is a large backlog of unreviewed recapture records.
  - In the future, redesigned user interfaces for the banding data entry and Reportband.gov will make it easier for banders and reporters to submit records that pass quality control checks. Also, enhanced automation will better identify which flagged records require manual review.

What is the BBL Doing to Prepare for the New DMS?

- Empowering banders with the Bander Portal
  - Password-protected site released in May 2018 allows banders to access permit-specific information.
  - Current features include band orders, order confirmation, transfer request, and contact information update.
  - Future features will support web-based data submission and management.
- Applying the science of usability to Reportband.gov
  - Collaboration with the University of Baltimore’s graduate program in Interaction Design and Information Architecture to:
    - Review existing website,
    - Survey 5,000+ recent users, and
    - Redesign and test information flows.
- Soliciting feedback about BANDIT
  - Following the success of working with the University of Baltimore on Reportband.gov, further collaboration to:
    - Test usability of BANDIT v4.0, and
    - Survey current users in October 2018.
  - Anticipate setting requirements for web-based replacement for BANDIT in 2019.

The BANDIT Survey is Open!

If you have a banding permit, or manage data for a permit, we want to hear from YOU!

See [https://www.usgs.gov/center-news/are-you-a-bandit-user-take-survey](https://www.usgs.gov/center-news/are-you-a-bandit-user-take-survey)

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