



Partners in Flight  
Monitoring & Inventory  
Working Group



Klamath Bird  
Observatory



U.S. Forest Service  
Redwood Sciences Laboratory



Bureau of Land  
Management



Cornell Laboratory of  
Ornithology

Newsletter of  
**LANDBIRD MONITORING NETWORK OF THE AMERICAS**

<http://www.klamathbird.org/lamna/>

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## The Banding Data Schema is Completed and Ready!

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### The Schema

After several months of discussions and revisions by over a dozen scientists and banders from several institutions (including Cornell Lab of Ornithology, Redwood Sciences Lab, PRBO Conservation Science, Institute for Bird Populations, Klamath Bird Observatory, Rocky Mountain Bird Observatory), a final first version of the “data exchange schema” for banding data has been completed. A databasing “schema” can be envisioned as a chart of all the variables that are stored in the database (in one or several tables). The main purpose of the schema is to accommodate any banding dataset so that it can be archived in the Avian Knowledge Network (the AKN), with mirror copies within the network at nodes and the central warehouse. Because of the variety of methods used by banders to collect data, such as several means to measure and score flight feather wear, the schema must be exhaustive. The schema builds on a previous bird monitoring schema for observational (non-banding) data and on a schema developed mainly for museum records. As such, the full length of the so-called “Bird Monitoring Data Exchange” schema (the BMDE) of the AKN is a hefty 485 fields. The LaMNA schema represents all the BMDE fields that can be applicable to banding data: a whopping 412 fields! However, don’t worry, to any bander and any dataset, only a fraction of these fields will be needed. The large number of fields is to include enough redundancy to accommodate all possible data gathered by the collective banding community.

### Data Integration Tool

We have also completed and are now testing a “data integration” tool. This tool would allow banders to create “maps” of their datasets and include descriptions of their methods to the LaMNA schema, so that their datasets can be readily exported to the schema. (A map is a translation of names; e.g., a bander’s dataset variable is named “SpCode”, which translates into the variable “Species” in the LaMNA schema). The tool is fully interactive and menu-driven, and if descriptions of data collection methods and coded values already exist in the tool, generating a map and description of methods will take only a few minutes. The map and methods description can be saved and applied to as many data files as desired afterwards, for banding at other stations or years, meaning that the process is required only once. More, if a map or

protocol changed slightly between years, the previous year's descriptions can be used as baseline for quick editing and generation of a new set of descriptions.

### **Final Testing Stages**

Last but not least, at the time of writing we are in the process of testing the schema, networking and warehousing methods. Very soon we will begin sharing the tools with the banding community in order to bring datasets into the AKN.

These are exciting times in the path toward a truly continent-wide effort to bring the highly-important information in banding datasets into the census programs to effectively monitor bird populations year-round!

## **4<sup>th</sup> International Partners in Flight Conference**

The 4th International Partners in Flight Conference will be held 13-16 February 2008, at the new McAllen Convention Center in McAllen, Texas. The conference theme will be "*Tundra to Tropics: Connecting Birds, Habitats and People*", which will be shared with International Migratory Bird Day for 2008. The focus of the conference will be international connections of all sorts that further bird and habitat conservation throughout the Western Hemisphere.

We would like to encourage everyone to come to all or part of the conference. We will have a LaMNA meeting to get everyone up to date on our progress with the LaMNA schema (see above) and discuss the next steps in our work. We will send out further information on a time and place for the meeting.

In addition, there will be workshops and scientific sessions of particular interest, especially related to our work on gathering data for the internet. Full details on the conference can be found at the conference website: <http://www.partnersinflight.org/events/mcallen/>. Below are some of the highlights.

### **Scientific Sessions**

*The Avian Knowledge Network: A Hemisphere-wide Partnership to Organize, Analyze, and Visualize Bird Observation Data for Education, Conservation, Research, and Land Management*

Chaired by Steve Kelling (Cornell Laboratory of Ornithology), Grant Ballard (PRBO) and Leo Salas (PRBO). In February of 2007, the US NABCI Monitoring Subcommittee published a report calling for improvements in the effectiveness, scope, utility, and efficiency of bird monitoring. Presentations in this session will address three of the report's main goals: integrate monitoring into bird management and conservation; coordinate monitoring programs among organizations and across spatial scales; and improve statistical design. Discussions will be interspersed with talks. Friday 9:30 am – 12:30 pm

*Bridging the Gap Between Science and Management*

Chaired by John Alexander (Klamath Bird Observatory), Jaime Stephens (Klamath Bird Observatory), Geoff Geupel (PRBO), and Tom Will (USFWS). Non-government organizations (NGOs) serve a critical role in Partners in Flight as emphasis has shifted from conservation planning to conservation implementation. With unique focus, comprehensive datasets, local expertise, and strong and diverse partners, NGOs are poised to provide the latest science to the land management tool box and work with land managers to guide conservation implementation. Decision Support Tools (DSTs), produced in various formats (e.g., interactive computer programs, brochures and pamphlets, white papers), use existing information to enhance decision-making through analysis and visualization of management alternatives and synthesis of available knowledge and data. Using the best available science, DST's link priority land management challenges and bird conservation objectives in a language specific to target audiences (e.g., land management agency decision makers, private land owners). During this

symposium we will synthesize the role NGO's play in developing the relationships necessary for getting PIF conservation plans implemented on the ground. We will provide examples of how the PIF conservation planning process is being integrated into the adaptive management process, and science is being delivered to land management decision makers who are the key to bird conservation implementation. Saturday 9:30 am – 5:30 pm.

*Gathering, Organizing, and Accessing Data for Use in Bird Conservation Across the Americas*  
Chaired by Elizabeth Martin (USGS), Bruce Peterjohn (USGS), and Steve Kelling (Cornell Lab of Ornithology). A recent report from the U.S. North American Bird Conservation Initiative (NABCI) Monitoring Subcommittee identified the development of a comprehensive plan for integrating and managing bird population monitoring data as an integral component for improving monitoring activities across North America, a recommendation applicable to the entire Western Hemisphere. Developing a comprehensive plan for managing monitoring data presents a number of significant challenges related to data quality, accessibility, archiving strategies, and new methodologies for synthesis, exploration, and analysis of these data. While recommended action items provide a framework for developing a comprehensive plan for delivery and use of monitoring data, an overview of current initiatives, existing bird monitoring data needs, and technical expertise will identify potential common goals, partnerships and specific activities necessary to move forward towards developing this comprehensive plan. Thursday 2:00 pm – 5:30 pm.

### **Avian Influenza Update from UCLA**

Recently, UCLA sent out a general update to participants in the Avian Influenza research project. Here is a brief excerpt from the letter:

To date UCLA has screened a small subset of the 25,000 samples that are being stored in our freezer. Early this summer, we discovered that the standard methods used to genetically screen samples of AIV are not optimal for inactivated ethanol and guanidine samples. We are working with researchers at Los Alamos National Lab and major biotech companies (Applied BioSystems, Roche, and Beckman Coulter) to adapt standard methods to work better with our samples. Within the next few months we will be gearing up to screen through 250 (or more) samples per week. We appreciate your patience as we work through these protocols.

During January 2008, we will be working with researchers at Los Alamos to generate DNA sequence for several species of Migratory birds (e.g. Hermit Thrush, Wilson's Warbler, Nashville Warbler, and Common Yellow throat). We will be getting sequence information for many individuals from several populations of birds, specifically from populations that take different migratory routes. Currently, very little DNA sequence is known for these species. This information will be used to find variation within DNA sequence between birds from different populations and will be used to determine detailed patterns of migratory connectivity. For more information about migratory connectivity or any other phase of the project please visit our new website at:

[http://www.ioe.ucla.edu/ctr/research/AvPath/avian\\_influenza\\_main.html](http://www.ioe.ucla.edu/ctr/research/AvPath/avian_influenza_main.html)

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**Interested in membership or learning more about LaMNA?** See our web page at <http://www.klamathbird.org/lamna/> for details and a membership application form.