

DRAFT

Opportunities for Improving North American Avian Monitoring Brief Summary of Problems and Recommendations

March 20, 2006

The following abbreviated list of problems and recommendations has been abstracted from the full report of the committee, which is currently in draft form. We would appreciate comments from the monitoring community to bvanhorne@fs.fed.us, or any subcommittee member. --Paul Schmidt & Bea Van Horne for the NABCI Avian Monitoring Subcommittee: Brad Andres, Jon Bart, Richard Bishop, Stephen Brown, Charles Francis, Debbie Hahn, Dale Humburg, Mark Koneff, Bruce Peterjohn, Mike Rabe, Ken Rosenberg, John Sauer, Robert Szaro, Christina Vojta, Jorge Coppen

Why Monitor?

Efficient and scientifically sound monitoring is integral to conservation and management actions. Properly implemented, it provides information that is critical for

- sustaining bird populations and preventing species from becoming endangered;
- assessing population status to inform decisions about harvest and other uses;
- informing policies that affect land use;
- discerning threats to avian communities.

Problems with Current Monitoring Efforts

1. Monitoring resources are insufficient to meet objectives. Some are also inefficient; resource use is poorly aligned with monitoring priorities and conservation needs. We are missing opportunities to meet multiple objectives of agencies, Initiatives, and NGOs with monitoring projects.
2. Monitoring programs are often not clearly linked to conservation/management issues. Conversely, many conservation/management actions do not adequately incorporate monitoring into evaluation.
3. The value of many monitoring programs is limited because of poor statistical design.
4. Monitoring programs are not sufficiently integrated across scales and institutions to solve conservation problems. Broad monitoring programs often do not address local issues and monitoring for local issues often does not contribute to large scale programs.
5. A large proportion of existing monitoring data are either not available or insufficient to aid conservation/management decision-making.

Recommendations

Actions to Enhance Efficiency and Strengthen the Role of Monitoring

1. Complete an inventory of existing monitoring efforts and protocols.
2. Evaluate existing monitoring programs with a goal of increasing efficiency, reducing duplication of effort, and finding opportunities for reinvesting resources.
3. Use existing institutional infrastructure (state wildlife plans, flyways, joint ventures) to provide forums for identifying priority questions and data needs of collective interest and for design of monitoring programs.
4. Target expanded monitoring toward species that are most at risk and for which we have inadequate information to make management decisions. The USFWS Focal Species Effort may serve as a primary means of organizing expansion of monitoring.
5. To identify continental scale management questions, use technical committees from the respective Avian Initiatives to provide forums for inter-agency collaboration for development of monitoring strategies for specific avian taxa, and collaboration among regions and across scales.
6. Periodically reevaluate current monitoring efforts to assure that they are still needed and aid in making management decisions.
7. Establish a process wherein monitoring priorities identified by the Avian Initiatives will be explicitly considered when developing agency monitoring priorities.
8. Design broad-scale programs so that projects at smaller scales can use their sampling plans, survey protocols, data management systems and analytic methods.
9. To ensure quality, efficiency and compatibility of monitoring efforts, provide oversight for local monitoring decisions from high levels within agencies and other organizations.

Actions to Improve the Quality and Usefulness of Monitoring

1. Base monitoring objectives on clearly articulated conservation/management priorities at continental, regional, or both scales.
2. Where possible, agencies, initiatives, and joint ventures with common conservation interests should adapt new and existing monitoring programs by establishing and agreeing on common monitoring goals that meet management needs.
3. In developing monitoring programs, establish clear roles and responsibilities, as well as formal lines of communication, to ensure cross- regional and cross-scale collaboration, and collaboration among the Avian Initiatives.
4. Incorporate effectiveness monitoring of consequences (outcomes) of conservation/management actions as part of an iterative process leading to desirable conservation outcomes.
5. Clearly identify how the information collected by new and existing monitoring programs can be used to address specific conservation/management issues.
6. Use protocols that yield results that can be integrated with broader scale programs when monitoring to address local issues.
7. When designing a monitoring project, specify the questions that will be asked of the data, the precision needed to answer those questions, and the procedures to be used for data analysis .
8. Design the statistical aspects of every monitoring program in consultation with a statistician familiar with bird survey design.
9. Assure that statisticians advising on the design of monitoring programs are knowledgeable about relevant practices and guidelines developed at the national or continental level.
10. Make program reports and summaries routinely available.
11. Store data in web-accessible repositories with appropriate metadata.
12. Use common data management systems in monitoring programs to eliminate redundancy and improve efficiency of resource use.