

NABCI Monitoring Subcommittee: Work plan and updates (2017-2018)

Viviana Ruiz-Gutierrez, PhD

Co-Chair, NABCI Monitoring Subcommittee

Research Associate

Conservation Science and Bird Population Studies

The **Cornell** Lab  of Ornithology

Charge

- To foster science on bird populations that can generate information relevant to conservation
- To help different stakeholders make management decisions using the best available science

Updates 2017

- Searching for a Chair
- Demographic document done!
 - Recommendations for NABCI community
- Work Plan 2017-2018
 - AOS Symposium and meeting

Recommendations

1. Adopt conceptual framework that guides **integrated monitoring** of North America's resident and migratory birds into the future.
2. Acknowledge demographic monitoring as a means to better understand the timing, geography, and **factors that limit bird populations**.
3. Move toward a **hemisphere-wide**, integrated demographic monitoring network in which **information is shared, resources magnified, and funding secured**.
4. Review **existing** demographic monitoring programs and protocols, including MAPS and MoSI, to **improve data quality** and to **adapt, improve and integrate** efforts for better demographic monitoring of North America's bird populations.
5. **Coordinate and strengthen** existing banding efforts to maximize information most relevant to demographic monitoring across the **full annual cycle**.

Recommendations

6. Foster **improved data quality and analytical approaches** to develop robust full annual cycle population models.
7. **Expand** demographic monitoring networks to increase geographic and temporal coverage, especially in **Latin America and the Caribbean**.
8. Secure **institutional support and increased funding** for integrated demographic monitoring programs to ensure the long-term continuity of demographic information.
9. Working within academic, government and NGO sectors, to ensure monitoring efforts are **linked** to region- and country-specific **conservation priorities and needs**, in addition to broader full annual cycle monitoring and modeling objectives.
10. Integrate **results** from demographic monitoring into **management and decision making** to increase the probability that bird conservation actions can have actual positive population level impacts.

Work Plan 2017

Science and management

1. Linking science to management:

- How to make the best use of available information and data?
- Northeast Bird Monitoring Handbook as an example

Work Plan 2017

Citizen science and structured monitoring

1. Development and implementation of scalable, outcome-based bird monitoring programs
 - ***Private and Working Lands Subcommittee***: Identify regional initiatives of NABCI partners to provide specific guidance on how to:
 - coordinate monitoring activities across individual projects to provide scalable inferences
 - harness the interest of researchers, agencies and the public

Work Plan 2017

Citizen science and structured monitoring

2. Structured Monitoring Programs in eBird

- ***Best practices for bird monitoring in Latin America***: In collaboration with Doug Robinson and AOS International Committee for count-based approaches, eventually for demographic monitoring

3. Improved understanding of data storage and management

- ***Description of current programs***: Strengths and differences between the AKN and eBird

Work Plan 2017

Advances and best practices for data integration

1. Data sets that differ in spatial and temporal scales:
 - ***Integrate information from different count-based monitoring programs:*** Jointly analyze point-count data that differ in protocols, space and time (USFWS and BBS)
2. Demographic and count-based data:
 - ***Integrate information from point counts and banding programs:*** Development and applications of integrated population models (MAPS and BBS)

Work Plan 2017

Advances and best practices for data integration

3. Structured and non-structured information

- Jointly analyze data from structured surveys with semi-structured citizen-science data (TCCB in California: state surveys + eBird)

Work Plan: updates

AOS Symposia: Tools in Ornithology

- *Advances in estimating patterns of bird abundance and distributions at relevant spatial and temporal scales*
- Work that is supported by the Subcommittee
 1. Cost-effective methods for collecting large volumes of high-quality, multi-scale information
 2. Statistical methods that can integrate multiple sources of information across spatial and temporal scales

Work Plan: updates

AOS Symposia: Tools in Ornithology

- *Advances in estimating patterns of bird abundance and distributions at relevant spatial and temporal scales*
- John Sauer (USGS), Jim Saracco (IBP) from NABCI Monitoring Subcommittee
- US Fish and Wildlife Service, Cornell Lab of Ornithology, British Trust of Ornithology

Feedback and suggestions?

- New Chair: *Spring 2017?*
- Revised Workplan 2017-2018: *March 2017*
- Completed Demographic document: *Summer 2017*
- AOS Symposium: *August 2017*