Tri-national Management of Migratory Bird Data

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Scope of "data"

Highest priority data for migratory bird program:

- Survey data providing information on distribution and abundance of species

- Demographic data (e.g., banding, recapture, recovery)

- Movement data from marked birds (including radio tracking, GPS, geolocator, etc.)

- Other data collected as part of migratory bird program activities (e.g., pond surveys)

Additional data to consider

- Raw data collected with new technologies:
  - E.g., sound recordings from acoustic recorders, photographs from aerial surveys, satellite imagery commissioned by program
  - Challenge: huge data volumes
- Data collected / managed by others but useful to migratory bird program (e.g., land cover data). May be updated / modified by mig bird program

Principles - 1

- Data should be collected using shared protocols and similar methods to the extent possible. Individual projects and programs necessarily have unique information needs, but data standardization should be a priority in study design.

Note: this principle informs both *monitoring program design* and *data management*

Principles - 2

- Databases should contain appropriate **metadata** and be subject to understood **Quality Assurance/Quality Control** procedures; all stages of the data management lifecycle should be fully documented.

Principles - 3

- Data should be easily **discoverable**. This requires both (i) clear roles and responsibilities for individual program data management, and (ii) a central location or contact to provide information about data location and access.

Principles - 4

- Data should be **openly available** and subject to minimal embargo times; following quality control, data collected collaboratively should be available without delay or restrictions.

Recommendations - 1

- Cooperatively develop and maintain a list of core, tri-nationally significant databases, representing information needed for current management and conservation action. [2015]

- Develop a secondary list of databases covering tri-nationally shared, priority bird populations; these data represent information that could be needed for future management and conservation action. [2016]

Recommendations - 2

- Appoint contacts to serve as agency/organization points-of-contact for information about data of trilateral significance.

- In addition, for each significant database, identify a contact with knowledge of, and access to, the data. [2015]

Recommendations - 3

- Develop guidelines to improve discovery, access, and sharing of significant data that are collected through partnership efforts. [2015-2016]

Recommendations - 4

- Develop and adopt shared protocols and methods, appropriate metadata standards, and common QA/QC procedures. [2015-2016]

Recommendations - 5

- Create a tri-national data management site, perhaps on Trilat.org, to house the core database list, links to existing data nodes, contact information, and documentation and resources related to standards, protocols, methods, and data sharing.

- The primary agency/organization points-of-contact would oversee this site with additional technical and administrative support. [2015]