

Sea Duck Joint Venture
Annual Project Summary
FY 2016 – (October 1, 2015 to Sept 30, 2016)

Project Title: SDJV Project #151 Data synthesis in support of the Waterfowl Breeding Population & Habitat Survey review

Principal Investigator:

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Project Description:

The USFWS Division of Migratory Bird Management, in collaboration with the Canadian Wildlife Service, is undertaking a review of the Waterfowl Breeding Population and Habitat Survey (WBPHS). Changes to the survey's current coverage and methods could impact the quality of our monitoring information for several sea duck species. Support from the SDJV is assisting in organizing the WBPHS data, and acquiring information about related waterfowl surveys, for the review with a focus on improving information about sea duck populations. Funds are supporting a USGS student contractor to summarize complementary survey information, create and edit spatial data and metadata for the survey, and make raw data available for review analyses.

Objectives: Support the WBPHS review by organizing relevant information.

Preliminary Results:

A student contractor was hired in summer of 2016 and began work checking the survey effort data, collating the crew metadata, and collecting complementary survey information. He completed the crew metadata tables for 1974-present and made significant progress on reviewing the existing survey effort shapefiles, before he moved on to other opportunities in early fall 2016. We brought a new contractor onboard in January of 2017 and have made significant additional progress. The new contractor completed the complementary survey summary and provided it to the review team. She is currently finishing the shapefile, segment, and observation data checking, and is on contract 2 days/week through August 2017. Once she has finalized corrections, updates, and extensions to the WBPHS database and associated metadata, she will also assist PHAB staff in developing a protocol to provide access to WBPHS data via USGS BISON.

Project Status: The project is ongoing. The tasks specified in the contract and their current status are:

1. Identify ongoing monitoring programs and breeding surveys that may be complementary to the WBPHS. COMPLETED.
2. Identify the location and status of data and documentation associated with these efforts. Review and summarize: COMPLETED.
 - (i) Spatial and temporal extent;
 - (ii) Taxonomic coverage;
 - (iii) Design, SOP, and analytical methods applied
 - (iii) Resources needed (if information is available).

3. Help finalize Waterfowl Breeding Population & Habitat Survey datasets for analysis.
Specific tasks include:
 - (i) Resolve issues with determining segment lengths for 2000-15 surveys and finalize segment length table; ONGOING.
 - (ii) Assist with finalizing metadata summarizing observer and aircraft; 1974+ COMPLETED.
 - (iii) Check and finalize segment sum table; ONGOING.
 - (iv) Assist in finalizing survey history narrative.
4. Review WBPHS and programs identified in Task 1 to determine: (i) species covered “in full” and “in part” by each program, (ii) overlaps among survey efforts and gaps in information, and (iii) potential areas for survey expansion, contraction, or coordination. ONGOING BY SURVEY REVIEW TEAM.
5. Develop a protocol to provide access to the WBPHS data via USGS BISON.