

**Sea Duck Joint Venture
Annual Project Summary for Endorsed Projects
FY08 – (October 1, 2007 to September 28, 2008)**

Project Title: (SDJV #106) Comparative demography of three cavity nesting sea ducks: Bufflehead and Common and Barrow's goldeneye

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Project Description: The project received a one-year funding allocation from SDJV to initiate a multi-data set examination of dispersal tendencies of Bufflehead and the two goldeneye species using genetic and mark-recapture data across North America.

Objectives for FY 2008:

- 1. Estimate the probability of survival and fidelity (using live capture and dead recovery band data) for each species.**
- 2. Collect mtDNA from all three species from across their breeding ranges and estimate demographic parameters using population genetic approaches.**
- 3. Collect additional nuclear genotype data from Alaska samples of Barrow's Goldeneye to augment and finalize an on-going study of this species across North America.**

Preliminary Results:

Objectives 1 – 3. North American band-recovery data has been received from the U.S. Geological Survey Bird Banding Laboratory and are being examined for patterns of recovery distribution. Laboratory analysis of DNA samples from Alaska, British Columbia, Quebec, and Iceland are underway for mitochondrial DNA and screening of these three species with nuclear microsatellite data will begin in the winter of 2008. Approximately 290 samples from all three species have been requested from the Canadian Wildlife Service Tissue Specimen Bank that will permit a more comprehensive sampling scheme for both breeding and wintering ranges of these species.

Project Status: All stages of this project are in the data gathering and processing phase. We anticipate initial results from each of the three objectives in 2009. These results will be summarized in peer-reviewed manuscripts shortly after completion of all analyses. No additional funding will be requested from SDJV for this project.