

BDJV Population Monitoring Implementation Plan, 2008

**APPENDIX A: BLACK DUCK JOINT VENTURE POPULATION MONITORING  
IMPLEMENTATION PLAN, 2008**

## **Introduction**

Since its inception, the BDJV has provided critical support in the development and implementation of waterfowl monitoring programs in eastern North American, including pre-season banding and aerial surveys (e.g., mid-winter inventory and spring breeding population survey). The mission of the BDJV Population Monitoring Program is to serve as an advisory group that evaluates USFWS and CWS waterfowl monitoring (i.e., banding and aerial survey efforts) programs with a bias towards the management of American black ducks. The goals of the BDJV population monitoring program are:

- I. Evaluate trends in black duck populations based on monitoring data (i.e., banding and aerial surveys) and make recommendations for research and management;
- II. Evaluate and quantify changes in black duck population and vital rates to contrast support for competing hypotheses;
- III. Explore opportunities and make recommendations to improve the accuracy and inference of existing monitoring programs;
- IV. Explore opportunities to test and implement novel monitoring techniques to provide better or complimentary data to existing monitoring programs.

The Population Monitoring Working Group (PMWG) is a sub-committee of the BDJV Technical Committee and is responsible for leading efforts by the Technical Committee to accomplish the goals and objectives of the BDJV Population Monitoring Program. Recommendations and products of the PMWG are presented to the Technical Committee for review and approval and forwarded on to the Management Board for final approval and implementation. To meet the goals of the Population Monitoring Program, the PMWG has established the following objectives to complete during the 5-year planning horizon of the 2008-2013 strategic plan.

- I. Annual assessments and reporting; and
- II. Assessment of current and novel monitoring methods.

### **Annual Assessments and Reporting**

The PMWG is responsible for providing detailed review and assessment of annual monitoring results to the Technical Committee and Management Board. This will include basic summary of banding and survey efforts and trend in population estimates. The purpose of the annual assessment is to identify changes in population trends or vital rates, propose hypotheses to explain the observed changes, and make recommendations for research and management needs. This assessment will consist of a summary of the banding and aerial surveys (e.g., number of trap days by region, number of black ducks banded, dates of aerial surveys, etc.) and results. The PMWG will compile and synthesize information provided by the parties responsible for conducting monitoring programs (e.g., USFWS Population and Habitat Assessment Branch) efforts. The PMWG will provide a brief overview of the annual assessment at the fall BDJV meeting and in writing. The written report will be incorporated in the annual BDJV report compiled by the CWG. The report is due to the CWG by 1 October.

### **Assessment of Current and Novel Monitoring Methods**

Members of the PMWG will engage in efforts to explore opportunities to improve existing monitoring methods and develop novel methods to provide complimentary data to existing programs. These efforts will result in a variety of products ranging from recommendations provided in the annual report to detailed scoping documents. During the course of the planning horizon of this strategic plan, the PMWG will address the following topics:

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Topic	Completion Date
Develop explicit hypotheses about the influence of biotic and abiotic factors influence on black duck population dynamics that can be contrasted using existing monitoring programs.	Fall 2009
Develop recommendations for studies designed to identify sources and quantify effects of detection rates and availability bias on estimates derived from fixed-winged and helicopter surveys.	Fall 2009
Produce a scoping document that reviews opportunities to implement a regional black duck productivity monitoring program.	Fall 2010
Produce a scoping document that reviews the potential usefulness and feasibility of genetic methods to monitor the black duck population.	Fall 2011
Complete a scoping document reviewing the availability, commonalities, strengths and weakness of black duck monitoring efforts employed by state and provincial agencies.	Fall 2012

### **For more information about the BDJV Population Monitoring Program contact:**

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