

Sea Duck Joint Venture
Annual Project Summary for Endorsed Projects
FY 2004

Project Title: SDJV - 54 Monitoring sea duck numbers and distribution in relation to existing and proposed aquaculture sites in Atlantic Canada

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Partners: Fisheries and Oceans Canada, Nova Scotia Wildlife Division

Project Description: Aquaculture in the marine environment is a rapidly expanding industry in Canada's four Atlantic Provinces. Aquaculture has the potential to impact habitat use by sea ducks during migration and wintering either directly through loss of feeding areas to aquaculture sites or indirectly through active scaring to prevent sea duck depredation on crop or through disturbance by increased boat activity to service aquaculture sites. Through fixed wing aerial surveys this project acquires data on sea duck numbers and distribution in coastal areas where aquaculture exists or is proposed for future development.

Objectives: Project addresses SDJV priority of identifying key coastal habitats for staging and wintering sea ducks and provides that data for use in environmental assessment of proposed aquaculture sites to ensure impacts to sea ducks are minimized.

Preliminary results:

Aerial surveys:

Project contributed to first complete winter survey of Common Eider Northern race (*Somateria mollissima borealis*) in Quebec, Newfoundland and St. Pierre/Miquelon. Surveys were flown in October, November and December on north shore of Prince Edward Island to assess sea duck numbers in important mussel aquaculture areas. Bay of Fundy, NB was flown in January and March to determine distribution of wintering sea ducks in relation to salmon aquaculture. Flown again in May to count breeding Common eider (*Somateria mollissima dresseri*).

Spring and fall migration surveys were flown on NB's northeast coast where surface (floating bag) culture of oyster is increasing.

Eastern shore of NS flown to record winter distribution of sea ducks.

Data storage; All data was entered into Atlantic Coastal Block data base which was converted from File Maker Pro format to Sequel Server format with improved search and reporting capabilities. Data base expanded by entering ten years of winter aerial surveys conducted by NS Wildlife Division.

Data Use: Data used in environmental assessment of several proposed salmon sites in NB and NL as well as 30-40 proposed sites in NB for conversion from bottom culture to surface culture of oysters.

Project Status: ongoing. For FY 2004 aerial surveys will continue in areas of greatest information gaps and/or highest aquaculture activity. In April 2005, funding will be converted to permanent A base, ensuring the continuation of the project.