Sea Duck Joint Venture
Annual Project Summary for Endorsed Projects
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Project Title: No. 6: Identifying migration routes and wintering areas of common and king eiders breeding in Nunavut, Canada and Greenland.

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Project Description: Common and King Eider ducks are heavily hunted in north eastern Canada and west Greenland. In Greenland alone, more than 90 000 eiders are killed annually; a level of harvest that may not be sustainable. Recent evidence suggests that many eiders breeding in arctic Canada migrate to Greenland for winter, but details on their migration and wintering areas are unknown. A key requirement to assess the sustainability of the harvest in Greenland, is to identify affinities between eider breeding populations in Canada and Greenland and their wintering grounds. In response, an international research team (Greenland, Canada, Denmark) initiated a satellite telemetry study in 2000 to generate information on the wintering affinities of these Common and King eider populations. Transmitters were implanted into eiders in Canada and Greenland in 2000, in Greenland only in 2001, and will be implanted in both Canada and Greenland in 2002.

Objectives:
To identify eider breeding populations in Canada and Greenland that migrate to winter in south west Greenland. This information will help determine the relative contribution of various King and Common eider duck populations to the winter harvest that occurs in Greenland. This information is required to determine the sustainability of the harvest, and also to assess whether certain sub-populations are at greater risk of population decline. Specifically, this project will, 1) determine the migration routes of Common and King eider ducks leaving Nunavut in fall (birds implanted in Canada), 2) determine the migration routes of Common and King Eider ducks returning to arctic Canada in spring (birds implanted in Greenland), 3) Locate the staging, moulting, and wintering areas of Common and King eiders breeding in west Greenland and Canada.

Preliminary Results:
Preliminary research results from this project have already been presented to the Department of Environment in Greenland which is responsible for establishing harvest regulations. When combined with ongoing demographic and modeling research done by this team (see below), this research confirmed that eiders breeding in Canada are heavily harvested in Greenland. This generated immediate efforts to legislate lower harvest

levels of eiders in west Greenland in 2001. However, these efforts were met with strong political opposition from hunters and new harvest restrictions were subsequently reversed. This response emphasizes the need to establish credible scientific information to assess the sustainability of harvest, and the information generated by this satellite telemetry project is a key component of this.