P5: POSTER PRESENTATION

ANNUAL CYCLE MOVEMENTS, SITE FIDELITY, AND POPULATION DELINEATION OF BARROW'S GOLDENEYES IN WESTERN NORTH AMERICA

***W. Sean Boyd**, Dan Esler, Tim D. Bowman, Jonathan E. Thompson and Jason L. Schamber*

WSB: Science & Technology Branch, Environment Canada, Pacific Wildlife Research Centre, Delta, BC, Canada, sean.boyd@ec.gc.ca
DE: US Geological Survey, Anchorage, AK, USA
TDB: US Fish and Wildlife Service, Anchorage, AK, USA
JET: Ducks Unlimited Canada, Edmonton, AB, Canada
JLS: Alaska Department of Fish and Game, Anchorage, AK, USA

We implanted Pacific Barrow's Goldeneyes (*Bucephala islandica*) with satellite transmitters during breeding, molting, and wintering periods. Our objectives were to describe migration routes, seasonal habitat affiliations, and degree of site fidelity within and across years. We will use these data to describe population structure and delineate appropriate management units. Adult males marked on breeding ponds in the Fraser Plateau of British Columbia molted over a large but annually consistent area from central Alberta to northern Northwest Territories; notably, about 30% of these males molted on Cardinal Lake, Alberta each year. Adult males and females from the Fraser Plateau and males marked during remigial molt on Cardinal Lake consistently wintered along the Pacific Coast from southern Washington to just north of Vancouver Island, which constitutes the southern portion of the species primary winter range in western North America. Hatch year birds marked on Fraser Plateau breeding areas did not travel to the coast in association with their mothers or siblings, but they ultimately overwintered in the same general region as their parents. Birds marked at wintering sites along the coasts of British Columbia and Alaska had different migration and distribution patterns and they appear to constitute largely discrete population segments throughout the annual cycle. Finally, adult birds showed high levels of site fidelity to breeding, molting, and wintering sites, and this finding has important management and conservation implications.

Sea Duck Conference

Fifth International

Iceland 2014

8-12 SEPTEMBER 2014

REYKJAVÍK • ICELAND