

Assessment of seasonal range and movement patterns of Jones Sound narwhals

The objectives of this study are to investigate the seasonal distribution and dive behaviour of Jones Sound narwhals in relation to management concerns on stock identity and wintering area of the stock in relation to the Greenland harvest.

Data will be collected with the use of satellite “backpack” transmitters attached to the dorsal ridge of net-captured animals. The tentative location for the field research camp is in Jones Sound near the community of Grise Fiord, Nunavut.

Although narwhals are known to occur in Jones Sound and have been hunted in the region, nothing is known about narwhal movement and distribution in this area. This study addresses the need for stock identity information by determining if there is range overlap with other stocks in Canada and Greenland, in both summer and winter. In particular, we will assess if narwhals from Jones Sound overwinter with and contribute to the Baffin Bay narwhal population. We will also be investigating the degree of variation in winter range as it relates to the present turbot fishing exclusion zone in Davis Strait. Dive data from these individuals will add to current knowledge on dive correction factors for aerial surveys.