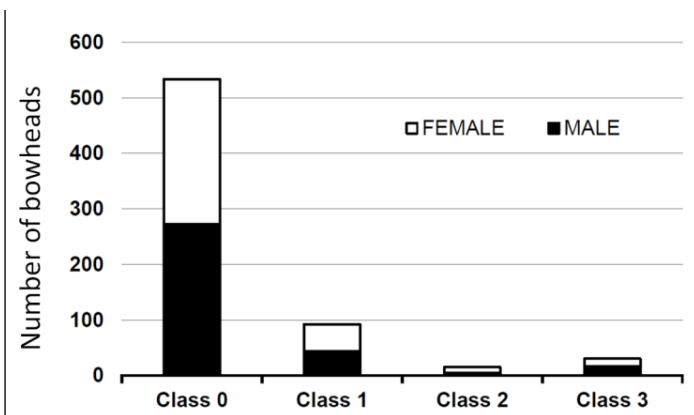




Prevalence and Abundance of Cyamid “Whale Lice” on Subsistence Harvested Bowhead Whales

Objective

Using historical records of bowheads harvested on the North Slope, we documented the presence and abundance of whale lice, or cyamids, in order to better understand the factors that affect whether bowheads get whale lice and, if so, what influences their abundance.



Quantity of whale lice found on harvested bowheads examined immediately after landing. Classes indicate the number of whale lice detected: 0 whale lice detected (class 0), 1–5 whale lice detected (class 1), 6–10 whale lice detected (class 2), > 10 whale lice detected (class 3). Classifications were scored from observer comments on bowhead harvest data forms. 80% of the whales are in class 0 and have no whale lice.

Results

- Whale lice were present on 1 out of 5 (20%) of the 673 bowheads examined between 1973 and 2015.
- The main factor that determined whale lice presence was age, with older bowheads being more likely to have them.
- When present, whale lice abundance was typically low, with most bowheads having less than 10.
- No trends found related to factors affecting the number of whale lice per bowhead.



Whale lice. These were found on the skin of a 30 foot long female bowhead caught in Barrow in 2004. Notice how the whale lice attach themselves by sinking their claws (inset photo) into the whale’s skin. Three different age groups are also visible, juveniles, subadults, and adults.

What this Means

Environmental change and increasing human disturbances are expected to occur where bowheads live. As part of a comprehensive Arctic monitoring program, we recommend continued examination of subsistence harvested bowheads for whale lice and other factors as a potentially useful early indicator of change in the ecosystem.

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See journal article: Von Duyke, A.L., R. Stimmelmayer, G. Sheffield, T. Sformo, R. Suydam, G.H. Givens, and J.C. George. 2016. Prevalence and Abundance of Cyamid “Whale Lice” (*Cyamus ceti*) on Subsistence Harvested Bowhead Whales (*Balaena mysticetus*). *Arctic* 69(4):331-340. <http://dx.doi.org/10.14430/arctic4593>