



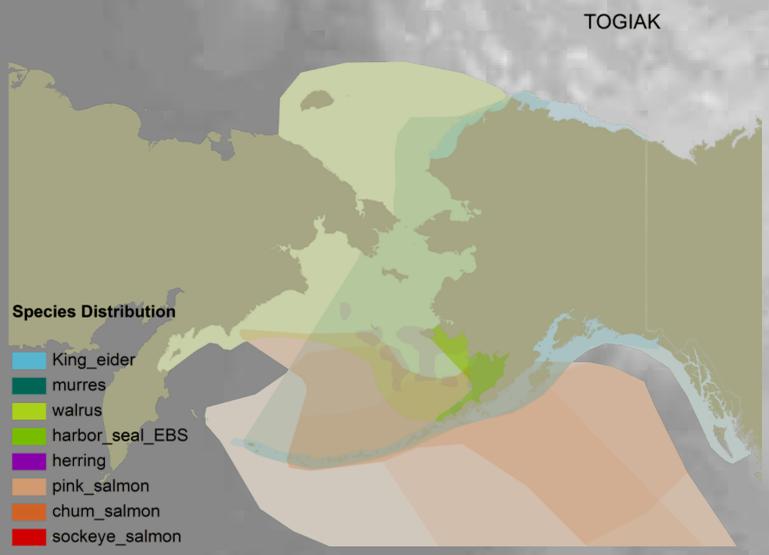
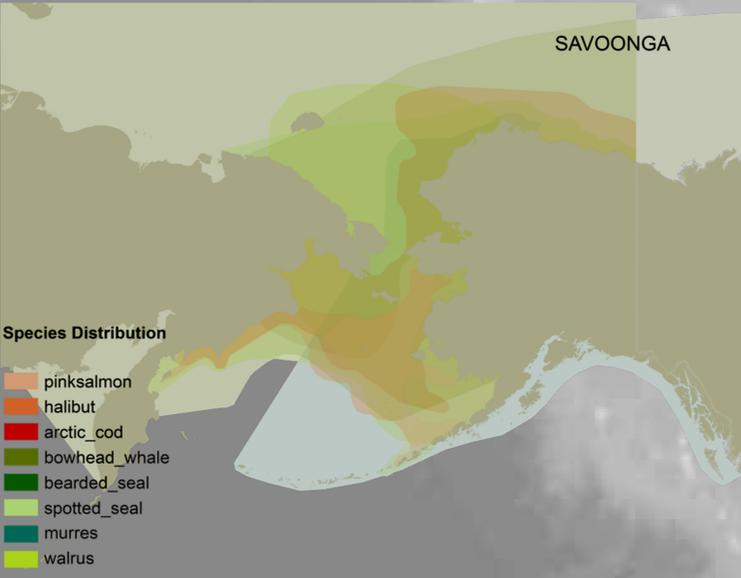
Calorie-Sheds of Subsistence Harvests: Testing the Concept in Togiak and Savoonga

Henry Huntington and Ivonne Ortiz

what are calorie-sheds?
 Subsistence harvests draw on a wide range of resources. While attention has focused on the places people hunt, fish, gather, and travel, little attention has been given to the areas over which the subsistence species range. A calorie-shed is the spatial extent of the food web of which subsistence harvests are the apex.

drawing calorie-sheds
 This first attempt is based on top marine resources harvested at Togiak and Savoonga, Alaska according to harvest surveys conducted by the Alaska Department of Fish & Game in 2008 in Togiak, and by Kawerak Inc. in 2009 as part of BSIERP. Using available data on the ranges and migrations of the species in question, we compiled a map of the first-order calorie-shed for each community.

making calorie-sheds relevant
 Further work is needed to refine species ranges to that of the stock or populations actually harvested in Togiak and Savoonga, (when possible) and to trace the calorie-shed further down the food web. To highlight relevance of particular areas, species maps could be weighted according to level of use of the species in question, or to intensity of use of a particular location by that species. Producing calorie-shed maps for other communities will allow comparisons to determine different spatial domains of harvests. Comparisons over time may also help identify potential impacts from human activity and environmental change. The maps shown here can also be used locally to identify a community's area of concern when it comes to activities that may affect them and their subsistence resources.



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