2.1 Changing Food Diversity, Wildlife Patterns and Exploitation

Summary

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Effects of climate change on the phenology of populations, the distribution of species, and the food web dynamics of wildlife communities are now apparent. Yet, as Arctic climate continues to warm up, our capacity to measure and predict the responses of biological systems and their cascading effects through food webs, and ultimately their effects on humans, is very limited. We are lacking baseline data on natural systems and are faced with complex interactions among wildlife and humans. Our objectives are first to assess the effects of climate change on wildlife (through effects on the phenology and distribution of species, and the food web dynamics of wildlife terrestrial communities) and then to assess the effects of changing wildlife patterns on the diet and health of humans. (1) Compare and integrate traditional and scientific indicators of change in wildlife populations. This part of the project will concentrate on wildlife species of interest to local communities, such as large mammals, furbearers, and migratory birds; (2) Determine climate change impacts on traditional and recreational fishing. This part of the project will place emphasis on Arctic Char, Atlantic Salmon and Lake Trout, and will establish a network of information exchange with northern communities and northern outfitters who are centrally involved in the recreational fishing industry. (3) Evaluate the potential for changes in the nutritional properties of northern wildlife and implications of a changing climate for the health of northern communities

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Publications

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