## **Summary**

We plan to conduct a research project aiming at generating a detailed chronographic record of biological colonizations of Greenland, as well as an evaluation of the consequences of such colonization events for current ecosystem structure. We will be based on the Swedish icebreaker Oden, who will be tasked to the area of Nares straight for a research expedition organized by the Swedish Polar Research Secretariat. We will be helicopter lifter from Oden to a series of study sites on Greenland, and to three sites on Ellesmere Island. On each site, we will collect lake sediment cores, terrestrial arthropods as well as fecal droppings, bone, teeth, hair and feathers from birds and mammals. We will establish a small base camp at each site, and maintain this camp for a maximum of one week. Our camp will consist of small mountain tents and a larger tent for kitchen and socialising, and consist of 6-8 people. Water will be taken from the nearest water course and all grey water will be deposited in a pit, at least 35 meters away from the nearest high water mark. We will only use biodegradable detergents and soaps, and each site will be returned to its original condition to the fullest extent possible upon completed field work.