

Understanding the Dorset Palaeoeskimo Impact on the landscape at Phillip's Garden through archaeoentomological data

The proposed research aims at understanding the Dorset Palaeoeskimo impact on the landscape at Port au Choix National Historic Site, northwestern Newfoundland, by using entomological data. The recovery and analysis of entomological remains associated with Palaeoeskimo sod houses from the Phillip's Garden site will allow us to address this question : *Are there specific entomological fauna associated with Dorset sod houses?*

Archaeoentomology, as a discipline, studies the remains of insects and arthropods found in archaeological sediments to assess past environmental conditions. As a relatively young discipline, this type of analysis has not been widely used in arctic archaeological contexts. Insects, especially coleoptera (ground beetles) are tightly linked to their ecological niches. Archaeoentomology is based on the superimposition of modern insect's ecological niches to past ecological conditions. The insects found in archaeological sediments are used as proxy data to infer past ecological conditions near the site where the sample was taken [1-2].

By looking at the entomological fauna associated with the human environment of Phillip's Garden, as well as the natural environment of the site, it will be possible to explore how human behaviour impacted the environment. Statistical testing of the analyzed samples will allow us to ascertain if the distribution of insects found in the structures is significantly different than the distribution in the control samples.

While the entomological and statistical analysis will enable us to answer the previous question, they will also help us achieve the secondary objectives of this research: 1) To document the living conditions of the Dorset Paleoeskimo; 2) To further our understanding of the human impact on the environment at the time of occupation.

1. Coope, G.R., 1979. *Coleoptera analysis*, in *Handbook of Holocene Paleoecology and Paleohydrology*, B.E. Berglund, Editor. Blackburn Press: Caldwell, New Jersey. pp. 315-328.
2. Kenward, H.K., 1978. *The Analysis of Archaeological Insect Assemblages : A New Approach*. The Archaeology of York : Principles and Methods.