Clayoquot Biosphere Trust Society
C/O David Fraser
P.O. Box 67
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December 3, 2007

Re: Year-end Progress Report Arthropod Biodiversity Across Spatial Scales (ABASS)

All aspects of the 2007 field season (May-September) were successfully completed and during this time frame the ABASS project was promoted and integrated into community events held in and around Tofino.

Our primary canopy access sites in Clayoquot Sound are in five pristine watersheds that have Sitka spruce stands on alluvial floodplains that are associated with the estuary of each coastal watershed. Watersheds sampled were the Tranquil, Bulson, Moyeha, Watta, and the Sydney. The Sydney watershed is our benchmark reference watershed and has now been sampled twice (2006 and 2007).

Our research team is well aware of the Standard of Conduct for Research in Northern Barkley and Clayoquot Sound Communities and I would like to assure you that our team did not sample any trees that were culturally modified or perform any sampling in culturally significant areas.

ABASS remains the largest spatial scale canopy project currently in progress in North America. Highlights and progress from this year (January - December, 2007) are presented below.

Highlights, January – December 2007:

- Our field entry to the five watersheds was divided into 3 components. The first set of field trips in May and June were used to determine the watersheds and Sitka spruce trees that would be sampled. We visited 10 candidate watersheds and determined that the Tranquil, Bulson, Moyeha, Watta would be ideal study sites for this project. Within each watershed, 9 Sitka spruce trees were designated for sampling. Along with the reference watershed (Sydney) we selected a total of 45 trees to sample (5 watersheds*9 trees). In July we visited each watershed and rigged each tree for climbing. All sample collections were done in August (360 samples were collected, 180 ground, 180 canopy) and all rigging was taken down, leaving the sites exactly as we found them. In addition, on each trip we brought out any garbage that was found in and around the estuaries.

- We made full use of the Sydney Cabin as our baseline field camp and will continue to use the Sydney watershed as our reference watershed that will be sampled again in 2008 (therefore sampled 3 times).

- We used the Clayoquot Biosphere Trust (CBT) boat and Dave Hurwitz as our boat operator for all transportation to and from the five watersheds.

- Updated project information and acknowledgement to funders (NSERC, CBT,SLIP) is on our website at the University of Victoria (http://web.uvic.ca/~canopy/winchest.html).

- In conjunction with the Biology Coop, UVIC and the Tofino Botanical Gardens (TBG), we obtained funds (SLIP grant) to hire, Ms. Alana Jung, a student who worked out of TBG. This enabled us to maintain profile, extension and demonstration of the ABASS project over the summer. An article about the canopy project was written by Alana and appeared in the Tofino Times. Personal monies were used to design and print t-shirts and brochures for the project and were made available to the general public over the course of the summer. The t-shirts were printed locally at Timberline Screen Arts.

- Our ABASS field crew consisted of: Mr. Kevin Jordan (Tofino resident) for the technical climbing aspects of the project; Dave Hurwitz as our boat operator and field research assistant. We used the CBT boat for all trips to the watersheds. Ms.Alana Jung was our field research coordinator and participated in all aspects involved with sample collection and extraction.

- I completed all of the required paperwork from Parks to sample in the sound.

- I gave a public presentation at the TBG in August. The title of the talk was, Rainforest Canopies, Tales of Exploration From a Place of Many Floors. In addition I participated in the Celebration of the Biosphere in Ahousaht were I also gave a talk, 'Islands in the Sky.

- A selection of pictures from our field research was sent to the CBT for use on their website.

- I am currently in talks with Tigress films (UK) who want to do some canopy filming Clayoquot Sound. I will use this opportunity to promote aspects of the ABASS project and the CBT.

- We have processed all the samples from 3 watersheds (Sydney, Moyeha, and Bulson) and continue to process the remaining samples (Watta and Tranquil). From the 217 samples processed we identified 114 species of Oribatid mites (the target group for this project). Approximately 100,000 specimens of microarthropods have been sorted to date. *Nemacepheus dentatus* is the first record for this species in North America and only the 3 record in the world. An article on this discovery appeared in the April 2007 Friends of Clayoquot Sound newsletter. We hope to have all data processed (e.g. Watta and Tranquil remain to be processed) by February, 2008.

- We continue to work on a reference collection for this project that will act as a baseline for species identifications. We are currently working on a manuscript using the 2006 and 2007 data from the Sydney watershed.

- We processed (Berlese funnel extraction) all samples collected this summer at the TBG. Many thanks to George Patterson for giving us space (and power) to run this aspect of the project.
- In addition to the main part of the project we continued to work with the M of E to look for rare plants and collected rove beetles and spiders. The rove beetles were collected to answer inventory questions and provided a starting database for a project that I'm working on with CFS. The spiders will be deposited at the RBCM and will be used to provide important information on spider distributions in BC.

All money granted by the CBT was spent in the Tofino area and included salaries (Kevin and Dave), boat operation, and supplies for the fieldwork. Finally we would like to thank everyone associated with the ABASS project and in particular the CBT and the TBG for there support.

If any additional information is required concerning this report and our canopy project please contact me.

Sincerely,

Neville Winchester
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University of Victoria