

Graduate Module Outline

Title: Bryophyte identification and ecology

Instructor: David Garbary

Timing (month/year module will be offered): Nov. '09 to March '10

Module Description:

A field, tutorial, laboratory and independent research study involving bryophytes. Student will learn the basics of collection, the use of keys for mosses and liverworts of the region, and undertake a comparison of the bryophytes in two plant communities: a commercial blueberry field and a natural boreal forest with extensive ericaceous shrubbery. Results will be analyzed using quantitative methods (e.g., cluster analysis and ordination). A paper will be written to summarize the results of the collections in the two habitats.

Format:

Field, laboratory and independent study. At least two field trips will be undertaken to the commercial blueberry operation and to Beaver Mountain Park (Antigonish Co.) where bryophytes will be collected. The collections will then be processed in Antigonish where relevant microscopy will be done as part of identification to make a formal herbarium collection. A formal paper will be written to evaluate the results. Collections need to be completed before freeze-up.

Method of Evaluation:

Herbarium Collection 25%

Paper 75 % (the paper will be graded based on writing style (20%), organization (20%), content (30%) and references (10%).

Prerequisites (list undergraduate courses required as prerequisites):

Undergraduate courses in ecology and plant biology plus introductory statistics.