

BIOCONTROL OF AN INSECT PEST IN MAPLE SUGAR BUSHES

MSc or PhD research project on the effects of plant diversity and of forest management on the forest tent caterpillar in sugar bushes.

Ecological theory suggests that increased diversity of forest trees supports higher insect diversity and better resilience in the face of disturbances such as pest outbreaks. Several top-down and bottom-up mechanisms have been proposed, but few empirical data exist to test them. This project compares sugar bushes with differing tree diversity and management strategies to evaluate forest tent caterpillar (*Malacosoma disstria)* host choice, dispersal behaviour, biological performance, predation and parasitism.

Tasks will include field studies, collection and identification of parasitoids and behavioural experiments in the laboratory.

Work Environment: The student will register at Concordia University and will be a member of CEF and QCBS. FIeldwork will be done in the region around Montreal. Financing and a teaching assistantship are garanteed for 2 years (MSc) or 3 years (PhD).

Start Date: Summer or Fall 2027

Requirements: Degree in biology-ecology with experience in statistics and data analysis; experience in entomology, insect rearing and insect identification are advantages, experience with fieldwork and a drivers license are also advantages.

To apply: Send a cover letter describing your interest for this project, a CV and an unofficial transcript to Emma Despland (Emma.Despland@concordia.ca) with « Sugarbush project – your name » as the subject.