

Biology Seminar



Western
UNIVERSITY · CANADA

12:30 - 1:30 pm
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BGS 0153



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Functional ecology of spruce budworm (*Choristoneura fumiferana*) and the importance of intraspecific variation

Spruce budworm (SBW) is a familiar native insect that is responsible for extensive defoliation throughout the boreal forest. SBW experiences cyclical population outbreaks and predicting SBW phenology is crucial for effective management. Existing models were developed using SBW reared in the Insect Production and Quarantine facility at the Great Lakes Forestry Centre, so there are concerns that these insects may not reflect the true range of variability expressed in wild populations. We now have four colonies established from wild populations from across the range of SBW. Initial examinations of development rate, timing, and overwintering biology show surprising variability within the wild populations, contradicting long held assumptions of SBW life history. These traits can significantly impact our developmental models and may help explain known disconnects between predicted and observed SBW population behaviour.

