

# Branching out

from the Canadian Forest Service ■ Laurentian Forestry Centre

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## Biodiversity: 200 years of research on beetles

Canada's insects have been studied for almost 200 years. A compendium published in 1991 included no fewer than 7,436 records of Coleoptera species (beetles) in Canada. Since then, several other species have been added or described. Scientists at Natural Resources Canada's Canadian Forest Service (CFS) are participating actively in these discoveries.

Over the past 20 years, the study of beetles has been attracting growing scientific interest. These insects contribute to the carbon and nutrient dynamics in ecosystems. They interact with their predators and prey. Some are considered pests. Understanding their roles is a prerequisite to understanding how forest ecosystems work.

To gain a better understanding of these insects, one must also look at economic and environmental aspects. Climate

change, the introduction of invasive exotic species and the loss of biodiversity are some of the issues to which knowledge of beetles can be applied.

A wide variety of beetles can be found everywhere and in large numbers. They are easy to find and catch. They occupy very specific and often restricted habitats in comparison to other animals such as the moose. They therefore react much more rapidly to changes in their environment.

Beetles could thus be used as bioindicators of change in forest ecosystems. They could help predict the impacts of such changes and what adjustments are needed before the changes become too great or irreversible.

### USEFUL LINK:

Arthropods of Canadian Forests  
[cfs.nrcan.gc.ca/files/481](http://cfs.nrcan.gc.ca/files/481)

### FOR MORE INFORMATION, PLEASE CONTACT:

**Jan Klimaszewski**  
Natural Resources Canada  
Canadian Forest Service  
Laurentian Forestry Centre  
1055 du P.E.P.S.  
P. O. Box 10380, Stn. Sainte-Foy  
Québec, Quebec G1V 4C7  
Phone: 418-648-7849  
Fax: 418-648-5849  
E-mail: [jan.klimaszewski@nrcan.gc.ca](mailto:jan.klimaszewski@nrcan.gc.ca)  
Website: [cfs.nrcan.gc.ca](http://cfs.nrcan.gc.ca)

### Coleoptera???

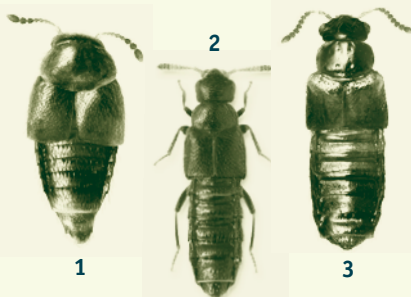


The Coleoptera are an order of insects whose most remarkable feature is the pair of forewings that form a sort of shell on their backs. The order includes over 350,000 species worldwide, including the ladybug and the mountain pine beetle.

### Some Canadian Coleoptera of the Aleocharinae family, showing their great morphological diversity

1. *Holobus vancouveri* Klimaszewski, recently discovered on Vancouver Island.
2. *Euvira micmac* Klimaszewski and Majka, recently discovered in Nova Scotia.
3. *Gyrophana keeni* Casey, commonly found on polypore fungi.

Photos: CFS



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