

native plants you use, the more native insects you will attract.



## A winter longhorned beetle

*Ted C. MacRae*<sup>1</sup>

According to the calendar it's still autumn; however, in practical terms winter has settled in across much of the U.S. For those of us who study wood-boring beetles in the families Buprestidae (jewel beetles) and Cerambycidae (longhorned beetles), our time for collecting ended long ago. Adults of most species are active in spring and early summer, although some species don't really make their appearance until summer is in full swing and a few rather distinctive species in genera such as *Crossidius* and *Megacyllene* make their appearance exclusively during fall. There is one longhorned beetle, however, that can actually be encountered in its greatest numbers during the dead of winter—*Rhagium inquisitor*, or the “ribbed pine borer.”

*Rhagium inquisitor* is unique among North American cerambycids in several respects. Most species in the family overwinter as mature or immature larvae, the former triggered to pupation by the first warm days of late winter and early spring in preparation for emergence as adults a few weeks later. *Rhagium inquisitor*, on the other hand, pupates during late summer and fall and then transforms to the adult before winter sets in (Linsley & Chemsak 1972), passing the winter in this stage and emerging during the earliest days of spring. Also unique among North American cerambycids is the place of pupation—directly under the bark. This contrasts with most other species, which either feed and pupate within the sapwood or feed under the bark but then bore into the sapwood for pupation. The species breeds exclusively in the trunks of dead conifers, with pines (*Pinus* spp.) especially favored, and as a result one can easily encounter the adults by peeling back the bark of dead pines during winter. Pupation takes place within distinctive rings of frass and coarse, fibrous wood shavings, prepared by the larva prior to



*Rhagium inquisitor* overwintering adult in Reynolds Co., Missouri. Adults overwinter in cells lined with frass and fibrous wood shavings.

<sup>1</sup> Originally posted 26 November 2013 at *Beetles in the Bush*: <http://beetlesinthebush.wordpress.com>.

pupation, so even when adults and larvae are not present the occurrence of this species can be determined by occurrence of their pupation rings.

Not only are the overwintering and pupation habits of this species unique, but the adults themselves are distinctive from all other North American cerambycids (Yanega 1996) in their appearance—"big-shouldered" build, heavily "ribbed" elytra, and unusually short antennae (that are anything but "longhorned"). Lastly, the species is distributed not only in the boreal forests of North America, but Europe and Asia as well. The species is extremely variable in size and sculpturing, which combined with its Holarctic distribution has led to an unusually high number of synonyms. In fact, much of the North American literature prior to Linsley & Chemsak (1972) concluding that the North American and Eurasian forms represented the same species refers to this species as *R. lineatum*.

#### REFERENCES:

Linsley, E. G. & J. A. Chemsak. 1972. Cerambycidae of North America, Part VI, No. 1. Taxonomy and classification of the subfamily Lepturinae. *University of California Publications in Entomology* 69:viii + 1-138, 2 plates.

Yanega, D. 1996. *Field Guide to Northeastern Longhorned Beetles (Coleoptera: Cerambycidae)*. Illinois Natural History Survey Manual 6: x + 1-174 [[preview](#)].

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## Request for Edgar Denison Materials

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### Gwyn Wahlmann

Was Edgar Denison or his field guide significant to your appreciation of Missouri ecology and native plants? We are seeking testimonials of his influence (even if you did not know him) to present to the Kirkwood Historical Society for Edgar Denison Day next April. Did he inspire or enhance your love of nature? We'd love to hear from you! Deadline: February 28<sup>th</sup>. Please send to:

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Kirkwood, MO 63122  
[gwahlmann@sbcglobal.net](mailto:gwahlmann@sbcglobal.net)  
(314) 954-1208



## Natural History Group Schedules

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### BOTANY GROUP

Chair—George Van Brunt

**Monday Botany Walks**, Leader—Fr. James Sullivan; now in his **46<sup>th</sup> year!** The WGNSS Botany Group visits many of the same locations as the Bird group: Busch Conservation Area, Shaw Nature Reserve, the Missouri Botanical Garden, Babler State Park and Cuivre River State Park. Learning plants will help you learn butterfly host plants. Sign up for WGNSS Botany Group emails from Jack Harris by contacting him at [jahar@mac.com](mailto:jahar@mac.com) or (314) 368-0655 and receive an email no later than Sunday about the following Monday's trip.

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### BRYOLOGY GROUP

Chair—John Atwood

Monthly meetings are from 6:30–9:00 p.m. on the 1<sup>st</sup> Tuesday of each month at the Maplewood Public Library, 7550 Lohmeyer Ave. Participants are encouraged to bring specimens to study, a hand-lens of at least 10x magnification and/or a microscope.

➤ **Tuesday, January 7, 6:30–9:00 p.m.** We will continue to examine our bryophyte specimens from LaBarque Creek Conservation Area as well as discuss their defining morphological characteristics.

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### ENTOMOLOGY GROUP

Chair—Phil Koenig

The Entomology Group meets September through May on the 3<sup>rd</sup> Monday of each month at the Butterfly House in Faust Park, 15193 Olive Blvd., Chesterfield. For more information and directions contact Phil Koenig at (636) 281-1313. All members are welcome! Please note that no meeting is scheduled for January, as the Butterfly House is not available. The next meeting will be:

➤ **Monday, February 17, 7:00 p.m.** Our speaker this evening will be Nathan Harness,