PROMISING NEST SITES

- Hard packed sandy soil
- Areas of human disturbance (baseball fields, trail and road edges, informal parking lots, fire pits, etc.)
- Full sunshine
- Sparse vegetation (about 50% hard packed soil and 50% short vegetation
- Near a wooded area, about 200 yards (200 meters) or less.
- Currently, Wasp Watchers Minnesota is focused on searching baseball fields with encroaching vegetation.

Known Cerceris fumipennis nesting site
Kellogg Middle School, Rochester
Photo credit: Jennifer Schultz

Known Cerceris fumipennis nesting site
Mayo High School, Rochester
Photo credit: Jennifer Schultz

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University of Minnesota | Extension

Wasp Watchers Program
Department of Entomology
219 Hodson Hall, 1980 Folwell Ave.
St. Paul, MN 55108

Wasp Watchers

Find and monitor the wasp that hunts Emerald Ash Borer!

We are looking for colonies of these wasps throughout Minnesota and need your help.

This native wasp is not known to sting humans, even when handled.

Cerceris fumipennis
Photo credit: Jeffrey Hahn

Cerceris fumipennis is a solitary ground-nesting wasp. The female stocks her nest with Buprestid beetles as food for her offspring, including emerald ash borer (EAB) when present.

Emerald Ash Borer
Photo credit: Jeffrey Hahn

Biosurveillance for emerald ash borer can be done by observing colonies of harmless native wasps and collecting some of the prey they bring back to their nests.

Wasp Watchers Program

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EXTENSION

WHAT IS EMERALD ASH BORER?

- Small metallic green beetle (1/2 inch long, 1/8 inch wide)
- An exotic beetle from Asia
- Larvae tunnel under the bark, eventually killing the tree
- Attacks all species of ash
- First found in Minnesota in 2009; now found in 6 counties
- Spreading VERY rapidly across the U.S.A. and Canada (primarily in transported firewood)
- Early detection is difficult. Together, this wasp and Wasp Watchers can help

Emerald Ash Borer (EAB)
Photo credit: Jeffrey Hahn

Emerald Ash Borer larva
Photo credit: Mark Abrahamson

EAB larval gallery
Photo credit: Monika Chandler

HOW TO IDENTIFY CERCERIS WASP NESTS

- Nest openings are round with diameter of a pencil
- Holes typically go straight down, not angled
- Nest opening is surrounded by a mound of excavated soil, much like an ant hill
- Often tucked beside or partially under a clump of grass
- There can be 5-100 nests in an area

Cerceris fumipennis ground nest openings
Photo credit: Jennifer Schultz

IDENTIFYING MARKINGS

- ½ -3/4 inch long
- Dark smoky brown wings
- One cream/yellow band on second segment of abdomen (near "waist")
- Female has three large cream/yellow spots on face

Adult *Cerceris fumipennis*
Photo credit: Philip Careless

Female adult *C. fumipennis* facial markings
Photo credit: Philip Careless

For More Information:

Visit these websites:
http://z.umn.edu/waspwatchers
www.cerceris.info
Contact: Jennifer Schultz, Wasp Watchers Coordinator
Email: schultzj@umn.edu Phone: 612-301-8310

BIOSURVEILLANCE INSTRUCTIONS

***Cerceris fumipennis* is active in Minnesota from late June-early September (most active in July and early August).**

- Visit your colony mid-day, 4-6 sunny days during peak activity in July and early August.
- Visit site during Cerceris peak flight time; between 11am to 4pm.
- Pick up all dropped/abandoned beetles lying on the ground around the nests.
- For 1-3 hours, watch as wasps return to nests. Wasps with prey can be netted using a lightweight mesh net. Take the beetle prey and release the wasp.
- Collect a total of 50 beetles over 4-6 visits. Rule of thumb: Steal the equivalent (or less) of one beetle per wasp hole per search day. Place all beetles in labeled vials (provided by U of MN Extension) and put into freezer until the end of the summer.
- At the end of the field season (September), mail the collected beetles to the U of MN for identification in a pre-paid mailing box.

Cerceris fumipennis with native beetle prey
Photo credit: Michael Bohne, U.S. Forest Service

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