

However, the spiders themselves are rarely seen and despite decades of being recognized as medically important arachnids, their geographic range hasn't expanded to include Michigan. A handful of credible reports have identified recluse populations in the State. However, all findings to date cluster in SE Michigan, where human population is the densest, likely indicating that spider populations can be inadvertently brought into a home and establish an infestation. To get a better understanding of how commonly this occurs, in 2018 Rose Pest Solutions offered a \$300 cash prize and free treatment for any Michigan homeowner who had a verified brown recluse population. Respondents were first asked to submit images of the spiders they found to Rose's entomologists. Respondent's homes with images that appeared to show brown recluse spiders were then inspected in person and insect sticky traps were deployed to verify the presence of recluses.

This resulted in five homes, in four SE Michigan counties, with verified brown recluse infestations, including a new county record in Monroe. 105 total images were submitted, the bulk of which depicted other common urban spider species (primarily *Pisaurina*, *Dolomedes*, *Agelenopsis*, *Tegenaria*, and various Lycosidae). Of the five infestations, three of them appear to have been infesting an existing home prior to purchase, one resulted from the residents moving the spiders in infested belongings from their previous home in Oklahoma, and one infestation resulted from undetermined causes. Rose traditionally verifies less than one brown recluse infestation in Michigan per year; clearly paying homeowners increases reporting and detection!

## Asian Longhorned Beetle: A 2020 Update

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The Asian longhorned beetle [ALB, *Anoplophora glabripennis* (Motschulsky)], a native of China and Korea, was first discovered in North America in 1996 in New York City and elsewhere on Long Island (Haack et al. 1996, 1997). Additional ALB infestations were next discovered in Chicago in 1998, New Jersey in 2002, near Toronto in 2003 and 2013, in two areas of Massachusetts in 2008 and 2010, Ohio in 2011, and now in South Carolina in 2020 (Poland et al. 1998, Haack et al. 2010, Eyre and Haack 2017, USDA APHIS 2020a).

In each case, aggressive action was taken to eradicate the pest, first by cutting all infested trees and later by also cutting nearby high-risk host trees that could be infested but did not yet show signs of infestation. In some cases, systemic insecticides were used instead of cutting to treat high-risk host trees that were near infested trees. Successful eradication is usually declared after 4-5 years of active surveys without finding any ALB or ALB-infested trees. To date, eradication of ALB has been declared in Illinois (2008); Islip, NY (2011); Manhattan and Staten Island, NY (2013); New Jersey (2013); Toronto (2013, 1<sup>st</sup> infestation), Boston, MA (2014); Brooklyn and Queens, NY (2019), and again in Toronto (2020, 2<sup>nd</sup> infestation) (USDA APHIS 2020b, EPPO 2020).

Hundreds of millions of dollars have been spent in these eradication efforts, however, this is considered well worth the cost because ALB can infest and kill healthy hardwood trees in several genera, especially *Acer*, *Aesculus*, *Betula*, *Platanus*, *Populus*, *Salix*, *Sorbus*, and *Ulmus* (Haack et al. 2010, Eyre and Haack 2017).

ALB infestations have been found in several European countries as well (Austria, Finland, France, Germany, Italy, Montenegro, Netherlands, and the United Kingdom), and eradication has already been completed or is

ongoing in all cases (Eyre and Haack 2017, EPPO 2020). In addition, ALB was collected in the same area of Lebanon for two consecutive years (2015-16) (Moussa and Cocquemot 2017), but its current status has not been reported recently (EPPO 2020).

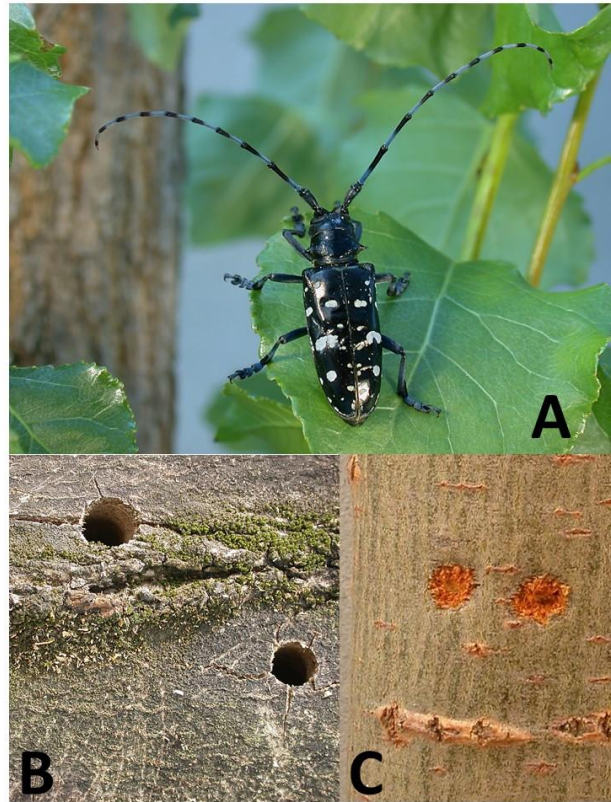
In the United States, ALB eradication efforts are ongoing in New York (in parts of Long Island, especially near Amityville), Massachusetts (near Worcester), and Ohio (near Cincinnati). As of 31 July 2020, about 7,200 ALB-infested trees have been removed in all of New York, 24,200 infested trees in Massachusetts (Worcester area), and 20,500 infested trees in Ohio (USDA APHIS 2020b). Tens of thousands of additional high-risk host trees have also been removed near each infestation.

The situation in South Carolina is still developing. Briefly, on 29 May 2020, a homeowner in Hollywood, SC (near Charleston), found a dead adult beetle on their property that they thought (luckily) looked like ALB. The homeowner contacted staff at Clemson University, who tentatively identified the beetle as ALB. It was later confirmed as ALB by APHIS on 4 June 2020. Later, on 11 June, two ALB-infested trees were found close to where the original ALB adult had been collected in Hollywood, SC (USDA APHIS 2020a). Active surveys are now occurring near Hollywood and as of 28 August 2020 a total of 1,950 infested trees had been detected. In the months ahead, we should have a better understanding of the size of this infestation and how difficult it will be to eradicate.

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A = ALB adult male; B = ALB exit holes (about the size of a dime); C = ALB oviposition pits. Adult females chew pits in the outer bark, insert their ovipositor in the center, and usually lay a single egg under the bark. Photos courtesy of Franck Hérard (USDA, Agricultural Research Service).

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## MES 2020 Election Results

**Governing Board Members at Large:**  
**Crystal Dailey**  
**Brian Scholtens**

**President Elect:**  
**Mark VanderWerp**

**Please submit articles, items or suggested topics for the next MES Newsletter**

**Publication tentatively scheduled for December 2020.**

**Send materials to Duke Elsner at [elsner@msu.edu](mailto:elsner@msu.edu) or Crystal Dailey at [smilingrainbow00@yahoo.com](mailto:smilingrainbow00@yahoo.com)**



A robber fly (Diptera: Asilidae) with its prey, a weevil (Coleoptera: Curculionidae). Photo by Duke Elsner.



Adult and nymphal treehoppers (Hemiptera: Membracidae) on the underside of a sunflower leaf. Photo by Duke Elsner.



# Newsletter of the Michigan Entomological Society

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Facebook: <https://www.facebook.com/michentsoc/>

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## 66<sup>th</sup> Annual MES Meeting

June 6, 2020, ONLINE!

For the first time in the history of the Michigan Entomological Society the annual meeting was conducted in an online format, utilizing the services of Zoom Video Communications, Inc. Members and speakers were able to participate in the meeting without leaving their homes or offices, incurring no costs for travel, lodging, meals or registration. The MES incurred no meeting expenses, thanks to our treasurer Angie Pytel allowing us to utilize her paid Zoom plan.

President-Elect Duke Elsner presided over the meeting from his home office in Traverse City. The session included eight speakers and the annual MES business meeting. Close to 30 participants participated by Zoom. The meeting was recorded and once some editing is done, it is hoped that it can be made available for members to view.

## Abstracts from the 66<sup>th</sup> Annual Meeting of the Michigan Entomological Society (part one)

**Where have all the Pine Shoot Beetles gone, long time passing? The 1992 PSB federal quarantine is coming to an end**

**Robert A. Haack**, USDA Forest Service, Northern Research Station & Michigan State University, Department of Entomology, Emeritus ([robert.haack@usda.gov](mailto:robert.haack@usda.gov) or [haack@msu.edu](mailto:haack@msu.edu))

The pine shoot beetle (PSB), *Tomicus piniperda* (L) (Coleoptera, Curculionidae, Scolytinae), a Eurasian bark beetle species, was the first exotic forest insect that I studied. This began in 1992, when a Christmas tree grower near Cleveland, Ohio, brought some unknown beetles that were infesting his pine trees to Dr. David Nielsen at The Ohio State University, who subsequently sent them to Dr. Stephen Wood at Brigham Young University, a world authority on bark and ambrosia beetles. Dr. Wood's reply letter of 16 July 1992 made a huge impact on USDA APHIS and state plant health regulators around the country, especially this sentence: "This species is the notorious *Tomicus piniperda*, the second most destructive bark beetle in Europe and the most destructive in pine."

USDA APHIS was notified of this discovery on 22 July 1992 and by the next day APHIS had established a 'New Pest Advisory Group' to evaluate its potential pest status and soon thereafter started training sessions in Ohio on how to identify and survey for PSB. This response paid