



Connecticut Entomological Society Minutes from the 583rd Meeting 29 March 2024 2024 Student Symposium

Hybrid Zoom held at University of Connecticut,
Biology & Physics Building.

Members met at 6:30 in the Biology & Physics Building for pizza and refreshments.

Business meeting:

President Richard Cowles called the meeting to order at 7:30pm.

New Business:

- Treasurer Mike Montgomery urged currently unpaid members to pay their dues.
- Kim Stoner: an act redesignating the Spring Azure, *Celastrina* sp., as State Butterfly will happen next year.

Old Business:

- Connecticut Entomological Society merchandise available - caps, T-shirts

Announcements:

- Bioblitz in Suffield, May 22-23rd. Contact Justin Kaput if interested (jkaput@suffield.org)

Upcoming meetings:

- April 19th - Annual meeting - Mark Stukel at Jones Auditorium in the Connecticut Agricultural Experiment Station on Cicadas in New Zealand. There will be a "silent auction" for books, equipment, and other items of entomological interest. Funds will support the CES

Exhibits:

- Connecticut Butterfly Atlas
- Jeff Fast brought a large telephoto macro lens used for insect photography
- Ray Simpson brought several drawers of beetles from Florida and Arizona
- Lukas Keras brought a field-pinning box with recently collected winter-active noctuids (*Lithophane*, *Eupsilia*)

Attendees:

- In person: Members - 16. Guests - 13
- On zoom: 8
- Total: 37

The student presentations began at 7:50 pm.

Evening Presentations:

Picky SWD Parasitoids?

Dom Rowland, UConn

Dom Rowland presented his studies of interaction between two parasitoids of *Drosophila suzukii* (Spotted-winged drosophila, or SWD) fruit flies. Initially hypothesizing that introducing a non-native parasitoid wasp would outcompete a native species already parasitizing SWD, Rowland found that the two species occupy slightly different niches and thus are able to co-occur, even within the same SWD larva. Rowland concluded that introducing a new parasitoid species (*Gynaspis* sp.) for control of SWD should not harm existing parasitoid species, and should help reduce reliance on pesticides for treating fruit.

Spit it out: Using regurgitates to disentangle the bank

Kyle Rossner, UConn

Kyle Rossner presented his efforts in understanding the diet of the rare tiger beetle *Cicindela puritana*. As tiger beetles often regurgitate their digestive juices if handled, it may be possible to identify the species which they prey on by analysis of the digestive fluid. The diet of *C. puritana* is not well known, making conservation of the species difficult. Additionally, the extent to which *puritana* larvae are preyed upon by competing *Cicindela* sp. is unclear. Rossner plans to analyze regurgitates of *Cicindela repanda* for *puritana* DNA, and regurgitates of *puritana* to more clearly delineate their prey species and diet requirements.

Testing PCR primer sensitivity and effectiveness for *L. crenatae mccanii* (Beech Leaf Disease)

Paul Kraut, Wesleyan

Paul Kraut began with an overview of Beech Leaf Disease, which is caused by an introduced nematode. The nematodes overwinter within buds of Beech. Vectors of Beech Leaf Nematode (*L. crenatae mccanii*) are not well known, making prevention of its spread difficult. For future steps, Paul Kraut plans to run tests on frass of Lepidopteran larvae to determine if it contains Beech Leaf Nematode and if it may spread Beech Leaf Disease.

Local adaption of *Chaoborus punctipennis* to seasonal and constant predation regimes

Petra Wakker, Yale University

Petra Wakker presented on the adaptations of a Phantom Midge (*Chaoborus punctipennis*) to predation by the Alewife fish. The Alewife may act as both a predator and competitor of the Phantom Midge larva, as both species feed on zooplankton. The Alewife fish is naturally a migratory species, but, when its normal migration routes are blocked by dams, assumes a behaviorally and phenotypically different stationary form. As the Alewife prefers large zooplankton, smaller midge larvae - younger instars - are much safer from predation than the last instars. Adapting to the constant predation of the stationary form of the Alewife fish, the Phantom Midge has adapted to have an unusually short last instar and more rapid reproduction as an adult.

Bees in Berkely and the Bay

Maya Sestan, Yale University

Maya Sestan presented on her experience surveying bees in the area of Berkely, CA. She recorded pollinator-plant association in several different habitats, including pasture, unmowed field, and hedgerow. Although the hedgerow was carefully maintained and planted with native nectar sources, Maya Sestan found that it was the least attractive to bees.

The presentations ended at 8:50 pm. Kyle Rossner was judged as having the best presentation.

Respectfully submitted, Secretary Lukas Keras