



Connecticut Entomological Society Minutes from the 584th Meeting 19 April 2024

Hybrid Zoom held at Connecticut Agricultural Experiment station, Jones Auditorium.

Members met for a pre-meeting social at the Experiment Station approx. 6:30pm. Refreshments were served.

Business meeting:

President Richard Cowles called the meeting to order at 7:35pm.

Old Business:

- CES merchandise available: T-shirts. Price of T-shirts dropped to \$10.
- Connecticut Butterfly Atlas available for \$25.

New Business:

- Treasurer Mike Montgomery compared pre-pandemic years to post-pandemic years:
 - Pre pandemic: CTENTSOC revenue is fairly constant, around \$1000. Expenses do not vary greatly from year to year.
 - Post pandemic: a new expense is a required annual payment for the CES website. Income remained constant, but with a decrease in donations. No donations were associated with PayPal dues payments; however, check payments were often associated with donations.
 - Note: In 2007, CTENTSOC began serving pizza at meetings.
- The Treasurer noted that we are not registered with the federal government as a non-profit organization. The governing board will discuss if we will become an official non-profit. No financial will accrue to CES if its current status is changed.
- Officers:
 - Both Michael Montgomery and Lukas Keras agreed to continue in their positions.
 - President Richard Cowles invites to reelect the current slate; Leonard Munstermann moves that the current slate be reelected; David Wagner seconds.
 - The vote in favor is unanimous.
- Treasurer Michael Montgomery moved to increase the CES dues: \$20 for members and \$10 for students. David Wagner seconds.

- Discussion: Leonard Munstermann expressed reasons for the increase. Chris Maier argued that raising the dues will increase the problem of lowered membership and that the budget be balanced by not serving pizza at the meetings. President Cowles and Treasurer Montgomery disagreed, saying that the pizza increases membership, attracts student attendance—especially when meetings are held on the University of Connecticut campus.
- Motion was tabled, and discussion discontinued due to time constraints. The evening presentation “Cicada biology, hybridization, and diversification: insights from New Zealand” was begun on time at 8:00 p.m.

Announcements:

- Bioblitz in Suffield May 22-23. Contact Justin Kaput if interested.

Exhibits:

- Victor DeMasi brought a Connecticut Butterfly Association article on the rare *Calephelis borealis* (Northern Metalmark Butterfly) at a Connecticut locality. He also announced the Connecticut Pesticide Coalition’s lobbying in Hartford against neonicotinoid pesticides, with special thanks to Anne Hughes for giving Victor DeMasi and Lukas Keras her turn to testify.

The evening presentation started at 8 pm.

Evening Presentation:

Cicada biology, hybridization, and diversification: insights from New Zealand

Mark Stukel, B. S., Ph. D. candidate

Mark Stukel presented on the diversification of cicada species in New Zealand, beginning with a background on cicadas and on their different subgroups. Cicadas are good for studying the impact of geography on rapid species radiation because they have a long life cycle as a subterranean larva and weak-flying adults. Because of their sedentary nature, they are useful for studying species distribution. The genera *Kikihia* and *Maoricicada* are both endemic to New Zealand. *Kikihia* occurs primarily in low- to mid- alpine habitat in forest, shrubland, and grassland. There is much evidence of hybridization within the genus, with many individuals exhibiting intermediate “song” characteristics. *Maoricicada* occurs in alpine areas, and is most speciose in rocky habitats above the treeline. Cicadas of this genus are hairy and dark-colored to assist with thermoregulation in their cold environment. There is little evidence for hybridization between *Maoricicada* species. Species of New Zealand cicadas occurring in similar habitat have similar mitochondrial DNA, but different nuclear

ASTRAL. This dissonance between mitochondrial and nuclear DNA suggests hybridization with other species occurring in the same habitat. Mark Stukel's hypothesis for *Kikihia*: both *Kikihia tuta muta* and *Kikihia tuta* are hybrids. He was able to find evidence for hybridization between *K. tuta* and *K. tuta muta*. Mark Stukel's hypothesis for hybridization within *Maoricicada*: *M. campbelli* and *iolanthe*, both lowland-inhabiting, hybridize with other lowland species. He was able to confirm hybridization between several lowland species. *M. "cassiomelans"* was found to be a hybrid between 2 species, rather than 3 as previously accepted. Mark Stukel showed a preliminary phylogeny of New Zealand cicadas, mentioning that the study is still ongoing. He concluded by mentioning that cicadas are a fascinating group for studying scientific questions, and New Zealand cicadas have a history of hybridization. The presentation ended with acknowledgements; end at **8:30**.

Respectfully Submitted,
Secretary Lukas Keras