Minutes from the 576th Meeting of the Connecticut Entomology Society

March 24th, 2023

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

(Acting Secretary, Leonard E. Munstermann)

Total Participants: 31

Zoom participants: members (10) + guests (8)

Live participants: members (8) + guests (5)

Social pre-meeting and organization of the “hybrid zoom” electronics from 18:30 to 19 40.

**Business Meeting:**

-Meeting called to order at 19:40 by President Ray Simpson.

**Reports:**

--Treasurer Richard Cowles noted that so far this year only 30 of the approximately 100 members have paid dues. In association with a new banking system, PayPal is the most efficient dues payment mechanism; checks are accepted by mail to the address of the treasurer. Total CES funds = $11,426.

--Secretary Max Engel’s report of the February meeting #576 is available at the CES website.

**Business:**

-- Old Business: President Simpson noted that CES merchandise is available including a new batch of CES mugs and a few caps.

-- New Business:

(a) The April CES meeting: Officers are being nominated for the formal election at the April meeting; a silent auction will be held for entomology books and equipment; pizza will be served along with potluck foods and desserts. The speaker will be Harry Zirlin of New York.

(b) The 24th Annual Rhode Island Bioblitz will be held 9-10 June, 2023.

(c) The New England Entomological Society will hold its meeting in Framington CT this week.

(d) The May meeting will be an outdoors insect collection experience, possibly at Sessions Woods, near Burlington CT.

(e) The CES speaker for 15 September is John Himmelman.

**Guests:**

Annie Stoeth (speaker), Chandler Weigand, Alexandra Kimball (L. Keras history teacher)

**Exhibits:**

-- Raymond Simpson brought a drawer of Sallow Moths; Lukas Keras had a live, early emergent Noctuidae moth, *Lithophane* sp.

**Evening presentations – Student competition:**

(1) Annie Stoeth – Yale University School of the Environment, New Haven CT. *Impact of microplastics and soil quality on density and diversity of soil arthropods.*

Soil quality is the basis for food productivity for the terrestrial organisms. Soil arthropods make up a substantial portion of its biota and quality. The impact of plastics on soil is studied in 5 parks in urban Bronx, NY. Soils were compared from 50 paired sample sites--under discarded plastics with nearby controls of open soils. Soil arthropods were surveyed at 8 representative plaths in 30 x 30 cm to a depth of 100 cm. Soils of New England tend to be rocky and sampling was arduous. Samples were sieved to retrieve all arthropods for storage in ethanol. Soils were submersed in water to obtain *p*H values and incinerated at 360 degrees F to obtain a measure of organic content. Results: (a) soils were more acid in urban areas, basic in forested areas; 4,100 organisms obtained from 21 orders; effects of plastics are yet to be quantified. Keys to soil organisms are being developed for student use in high school projects.

(2) Cindy Cinfuentes – Weselman Woods Nature Preserve, Evansville, IN. *Weselman Woods and its invasive insects.*

Indiana woodlands once covered 80% of state lands, then cleared to less than 10%; however in recent years the coverage has increased to more than 20%. It ranks 9th among the states in wood production. Weselman Woods is a 280-acre woods located amidst the 100,000-population urban city of Evansville. It is a native woods, never cleared, with many large and ancient trees. One coring produce rings dating the tree to the 1690s. Activities involve trail maintenance and several acres have been cleared and reseeded for establishment of native prairie vegetation. Wildlife surveillance include salamander surveys and camera “traps”. Already, some 14,000 surveillance photos are registered for wildlife density and diversity analysis. Emerald ash borer has decimated most of the ash; the invasive spotted lantern fly has not yet been found but is expected. Photos of these invasives were shown, as well as other Weselman insects; Kevin Weiner was credited as the photographer.

(3) Lukas Keras – Cardinal Kung Academy High School, Stamford, CT*.* Catocala *of Sherwood Island State Park*.

The genus *Catocala* (Lepitoptera, Erebidae) consists of 150 species worldwide, 81 of which are found in the northeastern region of the United States. His survey along with historical records indicated that at least 47 species occur in Connecticut and so far, at least 20 have been identified on Sherwood Island. Species number vary greatly from year to year, e.g., *C. briseus* was formerly quite common, but now rarely seen. The best host plants are hickory trees, of which 3 species are found on Sherwood Island. Daytime collecting of *Catocala* is by tapping the tree trunks (best at >85 F), causing the highly camouflaged adult to hop or make short flights. Many are found on the shagbark hickory—*C. dejecta, C. flebilis*, and *C. vidua*. These are common coastal species, commonly found on pignut hickory and mockernut hickory. Species are grouped by behaviors as well as host plant fidelity. “Hoppers” are *C. amica, C. habilis, C. residua* and *C. serana*. “Low to ground” species are *C. ultronia* and *C. amatrix*. Black walnut specialists are the very skittish *C. neogama* or the immobile *C. maestosa*. A new state record was established by his finding *C. lachrymosa* established populations on the island. It seems to be moving northward along the coast.

(4) David Rubin – Yale University, New Haven, CT. *Impact of forest management on natural bee populations in southern New England.* The study was conducted for a senior thesis project in the Yale Forest area of northeast Connecticut. Five families of bees were inspected—Apidae, Bombidae, Megachilidae, Andrenidae and Colletidae. Collections were made in the 4 forest succession stages—0-10-year-old, 11-20 years, 21-40 years, and 40 ->80 years. Colored pan traps were set in each site and bees were identified to genus. (Tracy Zadilla was acknowledged for the species identifications.) The youngest tree stage had the most species diversity and abundance, the middle stage was the most homogenous across sampling sites, and the oldest forest with lowest diversity and abundance, but with heterogeneous species across sites. Historical records indicate that probably 20 species remained unsampled. Two genera were noted has having unidentifiable species—*Trachandrena* (19 species) and *Nomada* (9 species).

Submitted 25 March, 2023

Leonard E. Munstermann, Acting Secretary