



Connecticut Entomological Society Minutes from the 580th Meeting 20 October 2023

Jones Auditorium,
CT Agricultural Experiment Station
123 Huntington Ave., New Haven, CT 06511

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 approximately 7:30pm.

Old Business:

- CES merchandise available: T-shirts available to purchase after the meeting.
- T-shirt special - \$10.

Exhibits:

- Ray Simpson brought a box of field-pinned insects from the fall expedition to the Archbold Biological station in FL. Among these were several endemic *Schinia*, and other specialist species including *Feltia floridensis*, a rare noctuid described from Archbold.

Attendees:

Live attendees: 11 members, 1 guest

Zoom: 11

Total: 23 Participants

President Richard Cowles introduced the speaker.

The evening presentation started at approx. 8 pm.

Evening Presentation:

Monarch Butterfly Biology, Ecology, & Conservation Needs

Kelsey Fisher, Ph. D.

Dr. Kelsey Fisher began with an overview of the life cycle of the Monarch Butterfly, and with a description of this species' migration. Monarchs arrive in Mexico in time for Dia de los Muertos, when they are celebrated. Monarchs practice mud-puddling behavior after overwintering, and, in March, begin to fly northward. They arrive in Oklahoma and Texas in April, where they lay eggs and continue migrating, reaching Connecticut in large numbers by late July. Their overwintering habits and the presence of a large portion of the Monarch population in one place at the same time give an interesting opportunity for population monitoring as the numbers are easier to assess accurately. Dr. Fisher proceeded to show a graph of the numbers of overwintering Monarchs, which have been declining. There are many possible reasons for the decline of Monarchs overwintering in Mexico, with a likely cause being the loss of milkweed in the Midwestern USA. Dr. Fisher described working with the Iowa State University Monarch Working Group, and summarized their observations on the movement of Monarchs in a habitat, and what the most efficient placement of milkweed is for egg-laying. Breeding season monarchs are highly mobile; to track their movement, a VHF (very high frequency) radio transmitter was attached to the underside of the Monarch's wing. Dr. Fisher was able to observe that Monarchs were mostly affected by stimuli (such as plant inflorescences) within 50m. Dr. Fisher also discussed step length, or the period of flight from one stimulus to the next. In a prairie habitat, this was very small, with Monarchs flying from flower to flower; while in a cornfield, this was very large, with most Monarchs flying across the field to get to suitable habitat. If possible, the ideal configuration of milkweed in a degraded habitat (such as an agricultural field) should be plants every 50m. In addition to milkweed, it is beneficial to plant forbs blooming from May-October. As Monarch larvae often rest off of the foodplant to avoid parasitoids, and abandon a stem once all of its new foliage is consumed, it is important to have multiple plants in each 50m-spaced clump for Monarch females to utilize this clump for oviposition. As milkweed generates new growth (which Monarch larvae depend upon) when its flowers are removed, cutting back flowering milkweed may be beneficial to the Monarch. Dr. Fisher proposed cutting milkweed back in June in Connecticut. Dr. Fisher ended the evening presentation with acknowledgements.

Respectfully submitted, Secretary Lukas Keras