Minutes from the 563rd Meeting of the Connecticut Entomology Society

April 16, 2021

Zoom

Social pre-meeting began at approximately 18:30.

**Business Meeting:**

-Meeting called to order at 19:32 by president Ray Simpson.

**Reports:**

-The CES is making more money since there aren’t any food expenses at the moment.

**Old Business:**

-Thanks to everyone who presented at last meeting’s student symposium!

**New Business:**

-CES is moving forward with the 2021-2022 officer nominations - it seems like all the officer nominations were approved.

**Announcements:**

-CES has sponsored member Lukas Keras with a $20 sponsorship to the Lepidopterist’s Society as a student member.

-There’s a virtual meeting on 4/28 on edible insects.

-On 5/6, there’s a virtual meeting on fireflies.

-Hopefully, there’ll be a field outing in May, then there might be in-person meeting later this fall!

**Exhibits:**

-Dr. David Wagner presented on insect decline during the Anthropocene. He starts off in the 1900s, where British scientists had remarked on declines even back then. More recently in 2006, there was a report on British moth decline from about 1965 to 2005, and it provided evidence of a broader insect biodiversity crisis. In 2017, a report by Gretchen Vogel stated that there was a 78% decrease in the biomass of flying insects over 24 years. In the years after, the issue of insect decline became a published topic in many notable publications, including the New York Times.

-Insects have many important purposes, such as pollination and nutrient recycling, and participating in trophic systems. Even over a 15-year period, moths had a notable decline in the Netherlands. There’s also been a decline – albeit a not very significant one – in bee species endemic to the northeastern United States. In a more general sense, terrestrial insects seem to be declining at a rate of about one or two percent every year.

-The cause or causes of this decline in insects are relatively enigmatic, but it’s not solely climate change – rather, it’s possible that the decline could be due to multiple factors, such as the aforementioned climate change, but also urbanization and habitat destruction to name some additional factors. Light pollution is a notable factor, too, as are exotic species which include invasive plants and introduced pathogens. Nitrification was another threat that was listed.

-Then there’s the issue of agricultural intensification, which involves a wider use of pesticides and deforestation. But a larger point to make is how the insect decline is heterogeneous. Costa Rica seems to have been hit especially hard. In the Netherlands, it was also found that protected areas do not mitigate butterfly biodiversity declines. It can be hard to measure an insect decline because the populations can naturally fluctuate.

-But not all insects are declining, such as bees in Panama, *Bombus* in Cape Cod, and bee communities in Spain. In fact, butterflies targeted for restoration in western and northern Europe had their populations turn around. In fact, aquatic insects in the US and UK have increased by about 25% since 2000. There are other reports of certain taxa either not declining, or growing. But the report of decline in moths in Costa Rica is among the more alarming reports in particular.

-Collect data, plant native plants while removing invasive ones, and vote on local, national, and global policies! And advocate for insect conservation, too.

**Evening Presentation:**

Meeting adjourned at 21:01.

**Note: corrections and additions to the minutes are welcomed. Please email maxengel1@gmail.com.**