

## CHANGES TO PROGRAM

1. Wednesday's informal opening reception will be at Clarion Inn Sierra Suites, Vernadero Room, 5-7:30pm
2. Felix Sperling's correct email address is [felix.sperling@ualberta.ca](mailto:felix.sperling@ualberta.ca)
3. Chew Philly is replacing BamBam BBQ for Friday night get-together. Same time, same place

**Friday 9:30am**

**Brevan Wagner, Wei Han Lau, Felix Sperling (Student Presentation)**

Dept. Biological Sciences, University of Alberta, Edmonton, AB  
Canada

[brevan@ualberta.ca](mailto:brevan@ualberta.ca)

### **Subspecies Delimitation of *Tharsalea mariposa*: An Integrative Approach**

Subspecies are frequently used as operational units in taxonomy and conservation, yet they are often poorly defined and based on limited evidence. To address this, this study examines subspecific boundaries within the North American lycaenid butterfly *Tharsalea mariposa* using an integrative approach that combines both double-digit restriction-site associated DNA sequencing (ddRADseq) and morphological analyses. Our results provide strong support for the distinctiveness and validity of several subspecies including *T. m. makah*, which has recently garnered conservation interest, while casting doubt on the legitimacy of others. In doing so, this study underscores the value of genomic data in evaluating subspecific classifications and offers critical insights to inform and guide conservation efforts.

### **Laura Franzel (Student Poster)**

Colorado State University, Fort Collins, CO

[Laura.franzel@colostate.edu](mailto:Laura.franzel@colostate.edu)

### **The decline of Monarch populations and strategic solutions for improving their numbers**

Monarch butterflies (*Danaus plexippus*) are iconic pollinators best known for their charismatic colors and impressive long-distance migrations. However, populations across their range are in decline due to a combination of factors, including habitat loss, pesticide use, and climate change. This project explores the complex and regionally varied threats faced by monarchs, as they begin to show signs of both suppressed reproduction and decreased overwintering success. While warmer temperatures in some northern reaches of habitat may be temporarily beneficial, long-term climatic shifts and increased severe weather events are expected to reduce fecundity and increase mortality. Reproductive success is further constrained by widespread declines in milkweed, the monarch's sole host plant, largely driven by herbicide use in agricultural landscapes. Habitat fragmentation presents a dual threat, reducing the availability of overwintering sites in Mexico and the U.S. west coast while also limiting access to nectar-rich floral resources further north that are essential for breeding, migration, and overwintering preparation. To support monarch recovery, this project recommends a threefold conservation approach: halting ongoing habitat loss, restoring and creating new habitat in priority regions, and continuing research to guide adaptive conservation strategies. Strategic habitat creation, particularly in the Midwest, southern Texas, and northern Mexico, along with protection of shifting and shrinking overwintering zones and engagement in citizen science, can help monarchs persist across their range.

[www.entoquip.com](http://www.entoquip.com) is excited to be a vendor at the upcoming Lepidopterists' Society meeting in Sierra Vista, Arizona, the headquarters of our entomological supply company.

We will have UV lights for sale (both with USB and regular plug adapters) and our new entoceptor (an all-in-one portable lighting frame and sheet combo that can be assembled anywhere in just a few minutes.)

You can order on our website now or, and if you want to save on shipping, just enter "freeship" in the coupon box and pick up your order at the meeting with no shipping fee or out of state taxes. See you in Sierra Vista in a few months!

On Thursday evening, July 31 (weather permitting), entoquip will escort a group to the southwest side of the Huachuca Mountains to Ida Canyon or Bear Canyon Trailhead. These are excellent locations that harbor a high diversity of insects, but are less well known than the canyons on the east side of the Huachuca Mountains.

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