



BIOLOGY CENTRE CAS

Institute of Entomology

Branišovská 1160/31, 370 05 České Budějovice, Czech Republic

### **Supervisor's report: MSc Thesis of Jeni Sage Sidwell**

Jeni joined my lab and the Masters in Ecology program after working on thermal biology of velvet ants at Utah State University. Jeni started here in September 2020, that's before vaccination against COVID even begun. Now, I don't really want to bring back the memories of distance learning and social isolation, but it should suffice to say that it was a hugely challenging time. Jeni did a really good job coping with these pressures, and didn't wink twice about not being able to do the planned fieldwork in Australia. Presenting a solid master thesis after two years like this is definitely an excellent achievement!

Jeni's thesis is a part of ERC-CZ grant at the intersection of ecology and evolutionary biology. Our understanding of how evolution proceeds in communities where populations are subject to multiple selective pressures is still very limited and represents one of the frontiers in organismal biology. Trade-offs between traits are central to community evolution in which many traits are optimized at once. Surprisingly, all this is probably happening very quickly in so called eco-evolutionary dynamics in which traits evolve in the course of one to several generations.

Our key method to study trade-offs is experimental evolution which Jeni was very enthusiastic about (and despite all the hard work I think she still is). Jeni quickly grasped the project as well as the study system and helped to design the complex experiments. And then she conducted the experiments at high standard and in the extent which highly exceeds usual MSc theses. I'm also very happy with Jeni's quality of data analysis and write-up. Some of the results were not conclusive which can happen, but I would like to point out how Jeni dealt with this in the discussion. Overall, it's a solid thesis.

I wish Jeni all the best in her career and life, be it with studying pinnipeds or publishing a board game on insect conservation!

20 May 2021 in České Budějovice

Jan Hrček