



Habilitation Thesis Reviewer's Report

Masaryk University	
Faculty	of Science
Procedure field	Ecology
Applicant	Jeffrey Nekola, PhD
Applicant's home unit, institution	Dept. Botany and Zoology
Habilitation thesis	Interdisciplinary investigations into the nature of ecology and evolution
Reviewer	Brian McGill, BA Harvard University, PhD University of Arizona
Reviewer's home unit, institution	School of Biology and Ecology and Senator George Mitchell Center for Sustainability Solutions, University of Maine

Although Jeff's body of work was well known to me beforehand, I have known Jeff personally for 8 years and we have collaborated on papers, grants and working groups ever since. In short, he is a long term research collaborator of mine.

My main impression of Jeff is that he is a wonderful strategic researcher. He can conceptualize a big picture question, figure out an angle to attack it, turn it into a research project and then pursue it, and if necessary pursue it again. This has been evident in the research questions on which I have collaborated with him. This skill set has allowed him to write important contributions in several areas.

Jeff is an extraordinarily talented field biologist. In my trips to the field with Jeff, I have seen him identify from memory every plant or insect (and snail) we encountered in places as distinct as the Pacific Northwest, desert Southwest and a bog in Maine and then launch into an explanation of a species evolutionary relationship to a sister species in Japan. As his CV shows, he has published identification guides or taxonomic work on snails, butterflies and plants.

Jeff has an international reputation in macroecology, being the first to describe one of the field's major spatial patterns: the decay of similarity with distance, a pattern which he continues to engage with and work towards mechanisms. This international reputation is further shown by the number of international invited speaking engagements he has. Jeff also works well in the purely theoretical domain (the three coPIs on a joint project were all theoretical ecologists and he holds his own with them). **This field/theory combination is quite rare, especially at the depths he achieves in both areas, and the field of ecology badly needs people with these combined talents.** Not surprisingly this talent has resulted in impressive levels of research outcomes including many grants and publications resulting in a Google h-index of 27 and publications in all the top journals in our field. This would be enough to get him tenure at nearly any university in the US.

Jeff is a pleasure to work with. He is down-to-earth, low-ego, enthusiastic, open to feedback, and just focused on producing the best end product as a team. He is one of those

handful of people I know about whom I can honestly say that I don't know a single person who doesn't like him. When he gave a seminar at Maine, several of my colleagues expressed to me afterwards that they wished they had a job opening so they could hire him. That is not a common reaction to a seminar speaker, but it is typical of Jeff.

I have not seen Jeff teach, but he gives an excellent seminar with great enthusiasm and pedagogy and I have no doubt he is a strong teacher. I also know that he taught many courses at University of Wisconsin Stevens Point. This institution is primarily a teaching university and he was awarded tenure primarily based on teaching accomplishments.

In summary, Jeff is a talented and diverse thinker who is a pleasure to work with. The department that hires Jeff will be extremely lucky. I cannot recommend Jeff highly enough.

Reviewer's questions for the habilitation thesis defence

I would ask the candidate about the role of stochasticity vs determinism in ecology, and whether stochasticity can be perceived as mechanistic.

Conclusion

The habilitation thesis entitled "Interdisciplinary investigations into the nature of ecology and evolution" by Jeffrey Nekola *fulfils* ~~—does not fulfil~~ requirements expected of a habilitation thesis in the field of Ecology.

In Orono, ME, USA on April 11, 2018

