

Review of Dr Tomáš Václavík's habilitation thesis

March 6, 2020

Dear Prof. Emil Tkadlec and the habilitation committee:

I have now reviewed Dr Václavík's habilitation thesis and recommend, based on the corpus of work presented here, that his habilitation thesis is passed, and, if appropriate, he is awarded the title of Associate Professor. I also have a recommendation for a question about his work that the committee can ask Dr Václavík during his defence. I should add that Dr Václavík's answers to these questions would not in any way affect my opinion that he has passed his habilitation – it is more something for him to consider during his future research. I am unfortunately unlikely to be able to attend the defence in person, but could likely join remotely if that is appropriate. I lay out my justification for passing the habilitation first, followed by the question for the defence.

Dr Václavík's habilitation thesis consists of a relatively short synthesis of 10 key papers which form the basis of the submission. These 10 papers represent an extremely impressive corpus of work, in terms of their scientific level, the breadth and rigor of methods used and the quality of journals he has published in. Specifically, they show Dr Václavík's ability both in doing research in his own right and publishing it in leading journals in his field (first authored papers; Appendix 1 and 2), contributing a team member (Appendix 4 and Appendix 6), and – critically at this stage of his career – in leading research teams as senior author to produce outstanding work. Here Zabel et al. 2019 Nature Communications; Appendix 10 is particularly impressive, as it shows Dr Václavík's ability to effectively synthesize disparate modelling approaches into truly world class science in the field of landscape ecology and land system science. Moreover, the corpus of work presented here is extremely impressive in its breadth of approaches, ranging from cutting edge field based landscape ecology (Dominik et al. 2018 Journal of Applied Ecology) to global geographical 'land system' approaches (Václavík et al. 2013; Václavík et al. 2016), global integrated modelling (Zabel et al. 2019), as well as regional scale ecosystem service modelling (Dittrich et al. 2017). As such, Dr Václavík is clearly an outstanding scientist across a breadth of analytical approaches, and richly deserves to pass his habilitation. Dr Václavík has published nearly 50 papers to date, which have been cited over 1600 times. He has 9 first authored publications (as far as I can tell from Google Scholar) which seems to be one below the threshold of 10 required for a habilitation. However, I would argue that this relative lack of first authored publications is actually a reflection of Dr Václavík's success as a PI leading research projects early on in his career – in this role, senior author papers are the norm, rather than first authored papers. As such, I think not passing Dr Václavík's habilitation on the basis of this rather arbitrary threshold for first authored papers would be grossly unfair, and strongly urge the committee to show flexibility in this regard.

My suggested question during the defence concerns the degree to which the organism-centred view of landscape ecology (otherwise known as the focal patch approach) could be adapted to global land systems questions. Dr Václavík employs the focal patch approach in the fieldwork presented in his habilitation (Dominik et al. 2018 Journal of Applied Ecology) but largely ignores this approach elsewhere in this work, focusing instead on human perceptions of landscapes. While I largely agree that this focus on human perceptions of landscapes is sensible, different aspects of socio-ecological systems affect people at different scales – this is made explicit in the focal patch approach of landscape ecology, but not the 'landscapes are large areas', human-centred approach. I would be interested if and how Dr Václavík plans to incorporate such ideas into future research.

Please do not hesitate to get in touch if you have any further questions.

Yours sincerely,

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