

**Key factors affecting composition and diversity of saproxylic beetle assemblages, Ph.D.**  
thesis by Matthias Klaus Weiss

Statement of supervisor

In České Budějovice, 26.9.2017

Matthias joined our team in 2012 and today, I am happy to have his Ph.D. thesis in hands. He is the main author of the two chapters on vertical stratification of saproxylic beetles as he was responsible for data analyses and writing, and contributed to analyses and writing of the third paper. The papers concerning vertical stratification describe often discussed but rarely closely investigated patterns of stratification on fine scale across the gradient between forest floor and tree tops. The first one compares montane and lowland temperate forests in Moravia, the second one is a manuscript that adds also data from a lowland tropical forest in Panamá. Matthias still work on improving the MS with other co-authors, but I believe the main and most interesting results are presented in the thesis. Despite the selection of sampling areas is – admittedly - not ideal, the comparison showed that some patters, such as guild composition, are surprisingly stable component structuring the saproxylic beetle communities. Others, such as vertical stratification of species richness, are variable as predicted or demonstrated for other groups.

Although things sometimes could go faster (as they always can), I was generally happy with the effort that Matthias spent in analyzing the data and writing. The Panamá data were collected some 15 years ago by number of entomologists during the project IBISCA lead by Yves Basset and Maurice Leponce. The temperate data are few years younger and originate from a project lead by me and Jiri Schlaghamersky.

Despite that Matthias got „final“ data, he did not abstain from field work during his PhD. He went to Wien for an internship and in the nearby National Park Donau-Auen and in the WWF Reserve in Marchegg he exposed about 50 flight intercept traps and regularly collected samples. He also sorted the samples and mounted all the beetles from them. Hence his share of field and lab work certainly was not tiny, although it is not clear from the thesis. During his PhD Matthias also co-authored several other papers that are not part of the thesis. His presentations on various meetings and conferences were always of high standard and were received with interest of the audience.

Hence, I believe Matthias proved he is well capable of scientific work, and he contributed a lot to increase our knowledge on saproxylic beetles. Based on the thesis as well as his other performances, Matthias Klaus Weiss in my opinion certainly deserves Ph.D. degree. And although his nature often does not make him the most funny guy aboard, he was and still is an important and integral part of our team. Matthias joined our team after originally attempting to join ant-research group at our institute. I hope he did not regret his decision too often.

Lukas Cizek

