

16 September, 2006

Review of supervisor on M. Candidate Zdeněk Seidl

Master Thesis of Zdeněk Seidl focuses on physiological research of relationships between soil and foliage properties in fir-spruce forests located in the White Mts., NH, USA. The thesis contributes to the knowledge on carbon and nitrogen fluxes in forest ecosystems. The originality of thesis is based in multilevel, multi-disciplinary approach using a wide range of methods from different scientific fields. Foliage properties are studied on spectral reflectance level, structural analysis, and on biochemical composition. Soil properties include different carbon and nitrogen pools. Thus, the present study reaches further behind borders of plant physiological expertise. The character of the thesis was given by the joint project with the University of New Hampshire, Durham, NH, USA, in which framework it was accomplished.

Thesis was worked out in the framework of the joint Czech-American ecological project funded by NSF on American part and by the Ministry of Education of the Czech Republic on the Czech part. The PI-s of the project on the American part from the UNH – Dr. William McDowell and Dr. Jacqueline Aitkenhead-Peterson – accepted invitation to participate in the supervision of the present Master project what was crucial for the project accomplishment, since their expertise is pedology and hydrology. On the Czech part the thesis was co-supervised by Ph.D. Candidate Zuzana Lhotáková, the member of my team in the Department of Plant Physiology. In addition, the Master Candidate could have used advantage of being a member of the project team, which on American part comprised Dr. Barrett Rock specialized in remote sensing of vegetation, Dr. Richard Hallett, forest ecologist from FS USDA focused on remote sensing and eco-physiological studies of forest ecosystems, Dr. Rakesh Minocha, from FS USDA, plant physiologist. On the Czech part, the project in addition to our leading team, involved the team of Dr. Pavel Krám, from the Czech Geological Survey, a geologist and hydrologist who was kindly supporting Zdeněk with his expertise. The last team involved on the Czech part was the team of Pavel Cudlín from ISBE, ASCR, with whom Zdeněk interacted during field work.

The thesis is based on the field work accomplished in the White Mts. plots and the majority of the analyses were conducted by Zdeněk himself during his 3 stays at UNH. He was evaluated by American co-supervisors as a zealous, hard working student and well interacted with the researchers and students who were of great help and support to him. Most of all I want to thank to Jacqui, who not only fully organized all stays of Zdeněk in Durham but was also kindly supervising him with the analyses. In addition, she gave him background of her family so he spent a lot of time with her and the members of her family what was another important aspect for successful accomplishment of his stays.

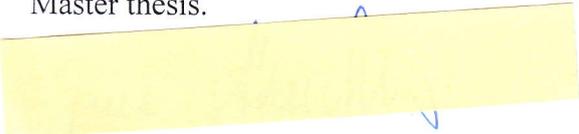
The work on the Master project, thus, enabled Zdeněk to learn not only relations of plant physiological approach to other studies of ecosystem components but also he gained an important experience of another culture. Also, he had to study and improve his English capabilities remarkably comparing to the state on the

beginning of the project. I appreciate, that in my opinion, the present study is written mostly in understandable, scientific style.

I have been knowing Zdeněk Seidl since 2003 and I had a pleasure to observe and being helpful during his scientific development. I greatly value his critical approach to his work and almost self-sacrificing approach to a task accomplishment, which he proved several times during the work of the Master project. I myself would recommend him to focus better on time-planning of activities to exclude exhausting finishing phases.

During the work on the Master project, Zdeněk co-authored two posters at the international conferences, one of which he presented as the first author. Currently, a manuscript is submitted for publication.

In my opinion, the present thesis fulfills conditions for its acceptance as Master thesis.



Jana Albrechtová