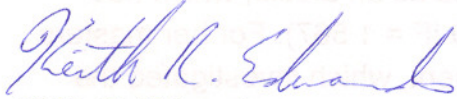## Advisor's Comments, Masters Thesis of Miroslava Káplová

The masters thesis study conducted by Miroslava (Mirka) Káplová was a continuation of her bachelor's thesis project, which investigated the effects of different nutrient loadings on a *Phalaris arundinacea*-dominated wet grassland in the Mokré Louky (wet meadows) complex near Třeboň. Part of this field study was submitted as an article, which has recently been published in the journal Plant Ecology (2009 IF = 1.567). For her masters work, Mirka conducted a manipulative mesocosm experiment, which investigated the effects of nutrient additions and water level on the growth and spread of *Phalaris arundinacea* and *Carex acuta*. These two species are co-dominants in the lower nutrient area in the field site, while *P. arundinacea* is the sole dominant in the nutrient-richer portion of the wet meadow. Based on several years of observation and research, it appeared that *C. acuta* had re-established in the lower nutrient area and over time expanded so that it now had an equal cover as *P. arundinacea* in that particular location. The main aim of the masters thesis, then, was to try and determine how important nutrient levels and flooding conditions may be in producing the observed field results.

The mesocosm experiment was established at the Institute of Botany in Třeboň. For this, both Mirka and I collected specimens of both co-dominant plant species from Mokré Louky. The establishment and maintenance of the mesocosm was performed almost completely by Mirka. She transplanted the collected plant specimens after an acclimation period, established the nutrient and water level treatments, and took the measurements on which her thesis is based. For these activities, Mirka required only minimal supervision from me. In my opinion, based on the results of her thesis, Mirka did an excellent job in conducting these endeavors. In addition, Mirka ran all of the statistical analyses after consultation with me. I did have to suggest some changes in the tests that she used in her analyses, but this should be an expected occurrence when dealing with a masters project. Overall, Mirka analyzed the data correctly and also understood what the results meant, even any possible interactions between the two experimental factors.

Mirka is a very good student who has shown that she is able to set up and run a rather complicated experiment. She has also shown clearly that she can analyze the data. In discussing the experiment and results during our regular meetings, it was also clear to me that Mirka had a very good understanding of what the results meant. She usually suggested interpretations of the data which showed this clear understanding even before I would make a comment.

It has been a very great pleasure for me to work with Mirka as both her bachelors and Masters advisor. Mirka brings a healthy curiosity and great intelligence to her work. If she ever so desires, I would be equally happy to be her doctoral advisor. It is my

sincere consideration that Mirka's work is excellent and deserves such a grade,
depending on the outcome of her defense.

Keith R. Edwards

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19 May 2011