

**Radek K. Lučan: Population ecology of Daubenton's bat, *Myotis daubentoni*.  
The supervisor's comments on the PhD project**

I know Radek Lučan already from time prior beginning of his university studies when incidentally met him at a field excursion. Already then I was immediately deeply impressed by a spectrum of his knowledge, familiarity with current topics of natural sciences and remarkable enthusiasm. As an excellent bird watcher well experienced in field study of birds he had no doubt on his further career in zoology. Despite that, he finally accepted my proposal to turn his attention to another group of flying vertebrates. He started field study of bats already during the first years of study and his 2001 bachelor thesis summarized results of three years of detailed observation on a local population of Daubenton's bat in a study area of Charles University near Veselí n.L. where a long term study of that species was performed by Vladimír Hanák already since the beginning of sixties. Radek's Bc thesis considerably exceeded a niveau expected for Bc level and demonstrated quite a rare combination of enormous enthusiasm with considerable endurance and capability to design, perform an elaborate research project and - last but not least - to finalize it in a proper way. Already at that stage Radek proved that is well capable to undertake all particular steps of a research procedure independently - I tried to encourage him in that direction so that, finally, my role of supervisor was actually quite a minute. This was the case also in his master project focused on comparison of seasonal dynamics of bat community structure in several fish pond regions of Southern Bohemia. Worth mentioning is that along with that he simultaneously continued the research started with his Bc project and subsequently succeeded to fulfil its ambitious initial setting - a complex long-term investigation of local population of *Myotis daubentoni* as a model for comprehension to specificities of tree-dwelling biology in European bats. No wonder that just this become a theme of his PhD project. The results are summarized in the present PhD thesis. The eight papers included deal with particular aspects of that topics and are all based on quite a long time series of primary data. Thanks to that Radek succeeded to analyze also the phenomena otherwise not accessible to common data-based studies (e.g. trends in timing of parturitions, exploration analyses of components of the parasite load, long term variation in roost occupancy etc.). It should be mentioned, of course, that further aspects for which a reliable record and analytic outputs have actually been available (e.g. demographic development of the population, life-history statistics, seasonal dynamics of thermal conditions of diversified tree roosts) were for some reasons not included in the thesis. Nevertheless, even without them, the thesis is quite consistent and conceptually rich - it may serve an excellent example of a professional output of a well-aided long-term field research.

I am stressing this fact with particular regards to the conditions under which the thesis was compiled, and which - to a considerable degree - accompanied whole the project. Simultaneously with his PhD project Radek worked on a profound field study of *Myotis alcathoe*, the newly described species which he discovered first in this country and for which he succeeded to gather far the most comprehensive biological data available as yet, he continuously performed a field mapping of bats, birds in various regions and as an excellent botanist also a detailed floristic and vegetation monitoring. At the same time he

organized numerous field expeditions to South America and the Middle East and has taken a prominent role in a large scale project on biology and distribution of *Rousettus aegyptiacus*, and last but not least has been particularly active in several university courses. Sometimes, it is indeed hard to believe that he could manage all these (and others) so diversified projects and activities and that their outputs do not dissolve in enthusiastic attempts focused to other directions. Yet, the quality of the thesis clearly show that Radek is capable to do it - and even under a considerable time pressure.

Out of numerous students I met during my academic career, Radek is obviously quite exceptional - he is undoubtedly an excellent naturalist and a highly creative scientist disposed to become a leading personality in the branch. I am very pleased that had an opportunity to supervise his PhD project and gladly recommend his thesis to defence.



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