Abstract

The state of the populations of many insects is critical in the Czech Republic, other species have already extinct. Among the species balancing at the limit of survival is myrmecophilus Alcon Blue (*Phengaris alcon*), especially its ecological form (*P. alcon* f. *alcon*), which is associated with the Marsh Gentian (*Gentiana pneumonanthe*) during the early larval stages. The general aim of my work was to evaluate the current distribution of the Alcon Blue butterfly (*P. alcon* f. *alcon*) in the Czech Republic, to estimate the size of the remaining populations and to propose a practical action plan for conservation of the species in the Czech Republic. The analysis of the databases showed that the species survives theoretically in 11 localities. The field survey in 2016 revealed, however, that at five other sites a species in the recent past was extinct. The remaining 6 localities are concentrated in Southwestern Bohemia on a total area of only 20 hectares. Two population is however close to extinction. The cause of local extinction of Alcon Blues was the extinction of host plants. The main factors influencing the size of butterfly populations in the last localities were the abundace and vitality of host plants (number of fertile shoots, height). Part of my work was an attempt to reintroduce Alcon Blue to a locality hosting a vital population of host plant. Precise preparations were based on determining the number of Marsh Gentian at both sites, estimating the population size of the Alcon Blue in the donor population and verifying the occurrence of the host ant (*Myrmica scabrinodis*) on the acceptor site. The transfer of images and eggs carried out in 2016 was successful. We confirmed Alcon Blue reproduction on the acceptor site. Hopefully, a number of fast-paced but considered steps will lead to the conservation of one of the most interesting species of our entomofauna.

Keywords: Alcon Blue (*Phengaris alcon* f. *alcon*), Marsh Gentian (*Gentiana pneumonanthe*), butterfly, distribution, conservation, reintroduction