Abstract

Farmland birds are one of the most endangered groups of organisms impacted by the intensification of agriculture. At the same time, they can be used as indicators of the state of the farmland biodiversity. Various measures are used to support them, but farmland bird populations are still declining.

In this thesis, I conducted farmland birds during the breeding season 2024 in twenty study plots located in the agricultural landscape beyond the northeastern outskirts of Prague. During the counts, I recorded the birds occurring in the study plots, information about the crops present in the plots, and the structure of the fields. In total, I recorded 257 individuals of the Eurasian Skylark (*Alauda arvensis*) and I compared my counts with data collected in 2011 on the same plots using identical methodology. By that means, I aimed to assess whether the environmental measures and other changes to support farmland birds were reflected in changes in their abundance.

According to the statistical evaluation of the data, it turned out that the abundance of the skylark did not change between 2011 and 2024. This applied to all study plots, as well as to the plots where I expected higher agricultural intensity and a decrease in abundance. This result can be viewed as a positive finding indicating that the decrease of skylark population ceased in the study area, realizing that the species' national population declined by 20 % over the same period. The changes in the size of fields did not prove to be significant, which implies that the structure of the agricultural landscape has not changed significantly over these 13 years in the study area. I also found that the skylark clearly prefers central parts of fields over their edges, which is probably due to the unfavourable condition along the edge for the skylark, which outweighs the possible benefits of edges described in the literature. The number of crops planted in the study plots had no relationship to the abundance of skylarks nor to the species richness of all farmland birds.

In an effort to support farmland birds, it is therefore necessary to: a) take into account the different demands of individual species which may not correspond to the factors governing the overall species richness of farmland birds; b) continue to persist in the current direction of more environmentally friendly legislation, since the fact that skylarks are not decreasing in the study area may be the first step towards their increase; c) and probably tighten some measures, such as the maximum field size.

Key words: farmland birds, agriculture landscape structure, Eurasian Skylark (*Alauda arvensis*), environmental heterogeneity, species richness