

## Abstract

The decline of farmland birds is a well-documented phenomenon attributed to the impacts of agricultural intensification. However, the specific mechanisms responsible for population declines in individual species have not yet been satisfactorily elucidated. Most research has focused either on the influence of habitat characteristics or on the food supply. The aim of my thesis was therefore to link these two factors. The study was carried out in an intensively managed farmland of southwestern Slovakia. In the fields of winter wheat, winter rape and maize, I recorded the abundance of birds, namely Yellow Wagtail (*Motacilla flava*) and Eurasian Skylark (*Alauda arvensis*), habitat characteristics and food supply.

Yellow Wagtail avoided maize fields, but its abundance did not differ among the other crops significantly. However, the number of wagtails varied within fields, as they more often occurred closer to field edges, most likely due more abundant and diverse food supply found near the edges. A positive relationship between the number of wagtails and invertebrate diversity further supports this explanation. Skylark abundance did not vary across the focal crops, but it was negatively affected by the presence of woody plants at the field edge. Neither the abundance nor the diversity of the food supply had a positive effect on the abundance of skylark, as it chose the territories primarily according to its habitat characteristics. This ultimately meant that it occurred more frequently in places with lower abundance and diversity of invertebrate. It thus seems that the link between farmland bird abundance and the amount of food supply is not straightforward: whereas the number of invertebrates increased with the increasing crop height and cover, the abundance of both wagtail and skylark decreased.

Due to a strong negative effect of insecticide applications on food supply, we can speculate that birds are unable to predict the food availability in the territories they chose at the beginning of the season.

Key words: skylark, yellow wagtail, intensification of agriculture, organic farming, invertebrates