

Abstract

Populations of insectivorous farmland birds recently underwent dramatic declines. Agricultural intensification is the main cause of these population changes, but involves numerous different mechanisms. Changes in food supply are thought to be one of the key factors. Homogenization of diet supplied to insectivorous chicks reduces their growth rate resulting in their smaller size as adults; decreased abundance of prey affects both survival and fitness of chicks and the overall breeding success. The accessibility of food is one of the most important factors limiting the use of food-rich habitats. However, the impact of all these factors on population trends has been shown in a single species – grey partridge. While the effect of changes in food supply on the breeding success has been confirmed in many other species, there is a lack of information on subsequent links to the survival of fledglings and the major causes of mortality outside the breeding period remain unclear. In general, there is insufficient information on population consequences of the changes in food supply for farmland birds, particularly in Central and Eastern Europe – the region with different characteristics from those we find in regions in which most of the findings were collected. Without this information, it is difficult to assess the specific causes of decline of individual species and then propose measures to eliminate the negative impacts of agriculture.

Key words: intensification, agriculture, farmland birds, food supply