

Abstract

A playback experiment in which a recording of vocalization is played to the tested subject and its response is observed, is a widely used tool for examining bird song and its functions. Most often only acoustic stimulus is used, but sometimes a visual stimulus is also provided in the form of a dummy. Taxidermic mounts or models made from different materials are used as the dummy. It is discussed among researchers, whether it is or is not necessary to use a dummy in experiments and how does its presence affect behavior of the tested individuals. However, only few studies directly focus on this issue and test the effect of dummies. The best way to test the effects of a dummy on passerines in playback experiments is to test the same individuals in both situations (with a dummy and without a dummy) and compare the reactions. The aim of this theses was to perform such experiments on Chiffchaff (*Phylloscopus collybita*) and Yellowhammer (*Emberiza citrinella*) males and to find out whether they would behave similarly in both variants of the experiment, or if their reaction would be enhanced in the presence of a dummy. Chiffchaffs reacted significantly more aggressively in the dummy experiment. The biggest difference was time spent by attacking the dummy and staying close to it. In Yellowhammers, the dummy did not have a significant effect on the behavioral response, but it did affect the vocal response. Yellowhammer males used significantly more aggressive calls in the dummy experiment. This diploma thesis shows that presence of a dummy affects behavior of males and usually intensifies the aggressive reaction in some way, but does not always lead to increased physical aggression of males. The presence of a dummy apparently affects each species in a different way and its impact on passerines in playback experiments cannot be generalized.

Keywords: playback experiment, dummy, taxidermic mount, Yellowhammer, *Emberiza citrinella*, Chiffchaff, *Phylloscopus collybita*, visual stimulus, acoustic stimulus, aggressivity.