

Abstract

Aggression between males of different species defending breeding territories against each other is called interspecific territoriality and it is one of the most important factors affecting the species' coexistence in birds. Interspecific territoriality most often occurs when two previously separated closely related species come in to secondary contact (sympatry). Although this topic is frequently studied, only a few studies focused on this problem in species characterized by interspecific hybridization and copying of songs.

In this thesis I focused on a system of two closely related passerines – Common Nightingale (*Luscinia megarhynchos*) and Thrush Nightingale (*Luscinia luscinia*). Both species had separated 1.8 million years ago, they have very similar morphology and ecological requirements and their ranges overlap in a narrow belt across central Europe. These species hybridize in this sympatric area, show ecological character displacement (more pronounced in Common Nightingale) and Thrush Nightingale often copies songs of Common Nightingale (Thrush Nightingale is thus called as „mixed singer“). Moreover, Thrush Nightingale has slightly larger body size than Common Nightingale. The last three patterns indicate existence of aggressive conflicts between the species, in which Thrush Nightingale may be a dominant species.

The aim of my study was to learn whether the nightingale species are territorial towards each other, and which one is more aggressive during interspecific conflicts and thus presumably more successful. To answer these questions, I used playback experiments that were conducted in the field in the sympatric zone. I was able to confirm that both species are territorial towards each other. Contrary to my initial expectations, that the Thrush Nightingale wins in the interspecific conflicts, the results showed that the aggression towards heterospecific stimulus does not differ among species, and therefore the territoriality could be symmetric. It seems that the Thrush Nightingale is not the dominant species as initially anticipated according to its larger body size. I also showed that Common Nightingale responds more aggressively to the mixed song of Thrush Nightingale (i.e. the song that contains some parts of the Common Nightingale song) than to the pure song of Thrush Nightingale (i.e. the song that does not contain any parts of the Common Nightingale song). The results suggest that the mixed singing of the Thrush Nightingale could be adaptive in the interactions between males resulting in a better space distribution among individuals.