Abstract

Songbirds use visual and vocal signals to communicate. Visual signals have several disadvantages, for example they are more difficult to detect in darkness or poor light. On the contrary vocal signals, the most typical and advanced way of communication in passerines, can be noticeable even in these conditions. Vocalizations can be divided into songs and calls. The two main functions of a song, especially in songbirds living in temperate zone, are to defend a territory and to attract a mate.

The songbirds have a considerable variety in songs among particular species. Moreover, the individual of the same species can differ greatly in their repertoire size. This means they have different number of song types or syllables. Currently we assume that repertoires have arisen in response to widespread female preference for mates with larger repertoires. The evolution of repertoire complexity was driven by a sexual selection of females preferences. In this case the repertoire size is considered to be a phenotypic trait which should work as an honest indicator of male quality. Therefore females could obtain direct and indirect benefits.

I study the functions of repertoire size in passerines in my bachelor thesis. I focus in particular on possible benefits that females could gain from pairing with males with a large repertoire. However up-to-date studies do not support the hypothesis that female preferences for males with larger repertoire are widespread.

Key words: repertoire size, function of repertoire, direct benefit, indirect benefit, female preference, passerines