

## **Abstract:**

Extra-pair paternity, resulting from sexual promiscuity, is frequently detected in socially monogamous passerines. Previous studies on extra-pair paternity in birds have identified several traits correlated with increased fertilization success of males. However, the effect of experimental manipulation of ornament expression on male fertilization success has only seldom been evaluated. The aim of this thesis is to reveal the potential link between the size of a trait supposedly playing a role in female mate choice decision and male fertilization success in collared flycatchers (*Ficedula albicollis*), using experimental manipulation of male forehead white patch size. In addition, mating success, mating speed of the manipulated and control individuals and size of a brood (a proxy for female reproductive investments) were evaluated. Results indicate that forehead patch size manipulation did not affect male social pairing success (mating speed), his social mate reproductive investments (brood size) or male extra-pair and within-pair fertilization success.

*Keywords: extra-pair paternity, sexual selection, reproductive success, collared flycatcher*