

Sexual selection is a key evolutionary mechanism that is based on differential reproductive success among individuals. Sexual selection drives evolution of sexual dimorphism and secondary sexual traits. These traits are often of ornamental character and may function as indicators of individual quality and viability in mate-choice. Ornamental traits may signal viability in two ways: either directly, when their expression reflects body condition and ornament predicts the probability of future survival; or indirectly, if their expression is age-dependent and intense ornament express only individuals that proved the ability to survive to old age. Ornament expression may also decline in old age, however, as a result of negative effect of senescence. The aim of my thesis was to assess, whether, and which, ornaments signal individual age and survival in free-ranging vertebrates with determinate growth and whether is ornament expression affected by senescence.