

SUMMARY IN ENGLISH

Factors affecting the survival and dispersion of introduced pheasants

Phasianus colchicus

Common pheasant *Phasianus colchicus*, a bird species of the *Phasianidae* family, was brought to Europe and to Poland in the 18-th century as a decorative species. Because of their great adaptability, pheasants adjusted well to the conditions in Europe and became an important game animal. The species is being regularly introduced by the Polish Hunting Association to strengthen local populations of free living pheasants in areas where their decline is observed.

The goal of this doctoral dissertation is the analysis of the survival and dispersion of the introduced pheasants as well as the factors affecting these processes. Pheasants were introduced during three seasons of the year, i.e. in November 2016, August 2017 and April 2017 at three different sites. The survival analysis included the sex of introduced birds, season of the year, site, body mass, tarsus length, mobility and dispersion.

The obtained results show that 39% of released pheasants survived the first 100 days in the natural environment. Survival of females was 50% lower than survival males. Although the site and the season of the year had no major impact on survival of introduced pheasants, there were certain differences between sexes – males displayed similar survival in each season of the year, whereas the survival of females was several times higher in summer compared to autumn. Biometry of individuals did not affect their survival. More mobile individuals displayed significantly higher survival, and females were less mobile than males. Pheasants with moderate dispersion tendencies had higher survival than those with low and high tendencies. Sexes did not differ in dispersion. The analysis of various factors using a linear model showed that an important predictor of survival of released pheasants was their dispersal tendency and interaction between sex and mobility – a mobile male had three times higher chances of survival compared to a mobile female. Dispersion of individuals was affected by the site and the season of the year, whereas the correlated mobility depended on the sex of an individual, the season of the year and the length of a tarsus.

