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**Journal of Forest Science**

**Detectability as an important factor influencing the knowledge of bird diversity in a floodplain forest ecosystem**

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Knowledge of the structure and diversity of bird populations in forest ecosystems is important for the conservation of forest biodiversity. The results of bird population studies in forest ecosystems are influenced by the detectability of the subject birds. In spite of this fact, the detectability of birds in different forest habitats is often paid little attention. The aim of the present study is an assessment of the key factors which are important for the detectability of birds in floodplain forest ecosystems. The paper analyses the detectability of bird species in floodplain forests (Litovelské Pomoraví, Czech Republic) during the period 1998–2012. In this study the authors analysed data with relation to the date of the census, climatic factors (cloud cover, air temperature, wind and precipitation) and the main two habitat types (closed mature forest and ecotone). The results of the study show that the numbers of dominant bird species change significantly during

the particular census dates within one season, mainly with respect to bird detectability.

### **Keywords:**

bird transect census; hardwood floodplain forest; regression model

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