Doctoral dissertation of Daiva Vaitkuvienė

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Title: Abundance and spatial distribution, breeding habitat selection, breeding success and spring arrival of the white stork *Ciconia ciconia* in the north-western periphery of the range
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Summary

In this study, changes during the period 1994–2010 in White Stork abundance and spatial distribution, as well as in nest-site selection were determined; regularities in breeding habitat selection and the effect of some habitat characteristics on the breeding success were investigated. The White Stork habitat selection study was carried out in the north-western periphery of the species' range on a sample, comprising 8.4% of the total breeding population of this species, concentrated in an area covering just 1.1% of its range. It was revealed that a considerable increase in the White Stork abundance in 1994–2010 coincided with the adaptation by birds to breeding at a new nest-site – on poles of overhead electricity lines. However, from the standpoint of reproduction, this change in the White Stork nesting behaviour was partly non-adaptive due to significantly lower breeding success in nests built on poles of operating overhead electricity lines. Data on the White Stork first spring arrival, collected during the period 1961–2000, revealed a significant advancement of spring arrival date to the breeding grounds in the north-western periphery of the range. Factors, affecting the first spring arrival to breeding grounds, were determined. The main threats facing the breeding White Storks were determined, their importance was assessed, and recommendations for the mitigation of these negative impacts were prepared for this species of the EU conservation concern.

Publications

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