

White Stork population in Belgium during 2004/2005

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Zusammenfassung

Während der Zensusperiode brüteten 50 bzw. 56 Weißstorchpaare (HPa) in Belgien. Der Reproduktionserfolg betrug 1,54 Junge pro Paar (JZa) im Jahr 2004 und 1,04 Junge pro Paar (JZa) im Jahr 2005. Der Bruterfolg pro erfolgreichem Paar (JZm) betrug 2004 2,27 Junge und 2005 1,90 Junge pro erfolgreichem Paar. Pro Zensusjahr brüteten fünf Paare außerhalb der Storchendörfer. Das sind nur 10 bzw. 9% der Gesamtpopulation. Die Region Flandern hat mit 0,3 bzw. 0,33 Paaren pro 100 km² die höchste Siedlungsdichte (StD) des Weißstorchs.

Summary

During the census period there were 50 and 56 White Stork pairs (HPa) breeding in Belgium. Productivity was 1.54 young per pair (JZa) in 2004 and 1.04 young per pair in 2005. Mean fledged brood size was 2.27 young per successful pair (JZm) in 2004 and 1.90 in 2005. In each census year, five pairs bred outside the Stork villages. This is respectively only 10 and 9% of the total population. The region of Flanders has the highest density (StD) with 0.30 and 0.33 pairs per 100 km².

Introduction

The White Stork population in Belgium is small and largely depends on three reintroduction projects. Two of the stork villages started as reintroduction programs in the region of Flanders at the Zwin Provincial Nature Park (Knokke-Heist) and the Planckendael Animal Park (Mechelen), and one in the Walloon region at the Paradisio Animal Park (Ath). Reintroduction of captive-bred birds started in the Zwin in 1957, in Planckendael in 1986 and in Paradisio in 1994.

Methods

The 6th International White Stork Census 2004/2005 in Belgium was coordinated by Natuurpunt (BirdLife Belgium). We collected information from all the breeding locations in 2004 and 2005. Since 2000, Natuurpunt has collected information on breeding success from all nests.

Results

Population size

The population of the White Stork in Belgium was 50 pairs (HPa) in 2004 and 56 pairs (HPa) in 2005 (Tab. 1). This is a large increase compared to the previous census years (Fig. 1).

The largest colony was found at the Stork village in Planckendael (Mechelen). There were 25 and 27 wild breeding pairs in 2004 and 2005 respectively. The number of wild pairs was 12 and 13 in the Zwin, and 8 and 11 in Paradisio in 2004 and 2005.

In both census years there were five pairs breeding away from the Stork villages. This is only 10 and 9 % of the total population in 2004 and 2005 respectively.

Breeding density

The density of the White Stork population (StD) in Belgium is very low, at 0.16 and 0.18 pairs per 100 km² in 2004 and 2005 (Tab. 2). The region of Flanders has the highest density with 0.30 and 0.33 pairs per 100 km².

Breeding success

The overall number of young Storks (JZG) was 75 in 2004 and 59 in 2005. Productivity was 1.54 young fledged per breeding pair in 2004 and 1.04 in 2005. Mean fledged brood size was 2.27 young per successful pair in 2004 and 1.90 young in 2005.

Nest locations

In 2004, we collected information on the location of nests. Out of 50 nests, 24 were placed on buildings. Most of these were built on artificial nesting platforms. Locations included a castle, houses and on top of bird aviaries. There were 20 nests in trees, about half of which were constructed by the Storks themselves without an artificial platform structure, in both pine and oak trees. The remaining 6 pairs found a breeding place on pole-mounted artificial nesting platforms. Natuurpunt has placed more than 30 nesting platforms in potential breeding habitat near nature reserves. Only 2 of these are occupied.



Discussion

The distribution and population dynamics of the White Stork in Belgium are dominated by the fidelity of the pairs to the Stork villages, and the attraction that these colonies have for new breeders. The attraction is high for locally fledged young as well as for young fledged outside Belgium (Netherlands, France and Germany). During 2000 – 2007, the proportion of pairs breeding outside the Stork villages has grown from 6 to 14 %, but is still very low. Many of these pairs breed very close to the Stork villages.

Productivity in 2004 was 1.54 young fledged per pair (JZa), the highest for any year in the period 2001 to 2007. Mean productivity for the whole of that period is 1.21 (SD 0.29). Productivity is particularly low for the pairs at the Stork village in the Zwin. The pairs at Planckendael and Paradisio are twice as productive and those breeding outside the Stork villages are almost 3 times more productive. The Zwin is located at the coast and is probably less suitable for the birds. High stork densities at the colonies result in significant disturbance and competition.

There are currently few conservation issues associated with the location of the nests. Natuurpunt has provided nesting platforms for wild pairs outside the Stork villages. There has only been one nesting attempt on an electricity pylon, alongside a railway. When unsuitable buildings are selected by a pair, a nesting platform is placed in a nearby tree.

The organisations that work on the protection of the White Stork in Flanders combined their efforts in a program called “*Ooievaars zonder Grenzen*”. Census and scientific data are made available to a wider audience through a website www.ooievaars.be. Migratory behaviour is tracked with satellite transmitters and colour ringing. Since 1999, 26 Storks have been tracked with transmitters to their wintering quarters in Spain and Africa.

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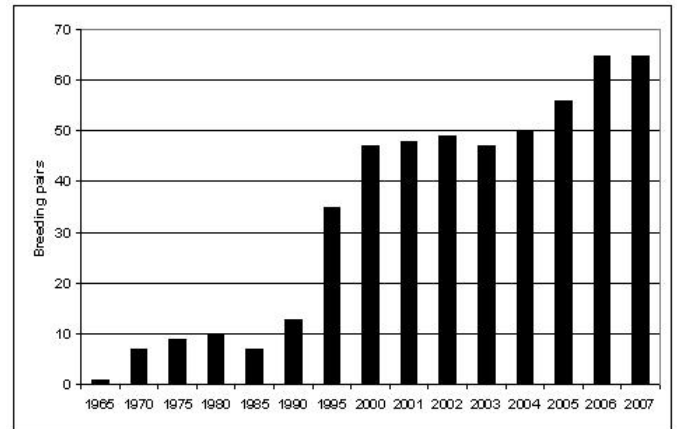


Fig. 1. Number of White Stork pairs in Belgium during 1965 – 2007.
Bestandsentwicklung des Weißstorchs in Belgien zwischen 1965 und 2007.

Tab. 1. Total numbers of White Stork pairs in Belgium in the period 1945-2005 and numbers of pairs breeding outside the Stork villages.

Brutbestand des Weißstorchs in Belgien zwischen 1945 und 2005, sowie die Anzahl von Brutpaaren außerhalb der Storchendörfer.

Year	1945	1955	1965	1975	1985	1995	2005
Pairs (HPa)	0	0	1	9	7	35	56
Pairs outside Stork villages	0	0	0	0	0	0	4

Tab. 2. Population characteristics of the White Stork pairs in Belgium in the period 2004-2005.

Populationscharakteristik der Weißstorchpaare in Belgien 2004 – 2005.

	HPa	JZG	HPo	HPm	HPx	HPo(m)	HPo(g)	HPo(0)	HPo(x)	HPa/100km ²
2004	50	75	16	33	1	2	6	2	6	0,16
2005	56	59	25	31	0	4	6	1	14	0,18

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