WHITE STORK POPULATIONS ACROSS THE WORLD

White Stork Census 2004/05 in Denmark

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Zusammenfassung

In den Jahren 2004 und 2005 brüteten in Dänemark lediglich 3 bzw. 2 Weißstorchpaare. Eines dieser Paare stammte aus dem Weißstorchwiedereinbürgerungsprojekt in Schonen, Schweden. Die Wildpopulation des Weißstorchs in Dänemark ist kurz vor dem Aussterben. Es ist wahrscheinlich, dass in naher Zukunft Weißstörche aus dem Wiedereinbürgerungsprojekt in Schweden bzw. aus den halbnatürlichen Brutkolonien in Deutschland eine kleine Population in Dänemark aufbauen werden. Wahrscheinlich werden viele dieser Brutvögel ihren natürlichen Zugtrieb verloren haben und deshalb über den Winter von Menschen gefüttert werden müssen. Es gibt keinerlei Pläne für Wiedereinbürgerungsprogramme in Dänemark. Die wichtigsten Gründe für den rapiden Bestandsrückgang und das wahrscheinliche Aussterben des Weißstorchs ist die Zerstörung geeigneter Feuchtgebiete durch Entwässerung und landwirtschaftliche Intensivierung.

Summary

In 2004 and 2005 respectively, only 3 and 2 pairs of White Storks nested in Denmark. One of these pairs originates from the stork reintroduction project in Scania, Sweden. The wild breeding population of the White Stork is very close to be extinct in Denmark. It is likely that White Storks from the reintroduction project in Sweden and from semi-natural colonies in Germany will build up a small population in Denmark over the next few years. However, it is also likely that many of these White Storks will not migrate, and so will need to be fed during the winter. There are no plans to reintroduce storks to Denmark. The most important reasons for the rapid decline to near extinction are the destruction of suitable wetland habitats by drainage, and agricultural intensification.

Methods of the census

The White Stork (*Ciconia ciconia*) population in Denmark has been counted almost every year since 1952 (Fig. 1). From 1952-78 the monitoring was conducted by *Zoologisk Museum* in Copenhagen. Since 1979 the monitoring has been made by *Storkegruppen*, which is a voluntary working group of the *Dansk Ornitologisk Forening* (DOF) - BirdLife Denmark (Skov 1999, 2003). Years ago, when the population of the White Stork was larger, questionnaires

were sent to the owners or neighbours of stork's nests that had traditionally been occupied. Over the last 10 years, the population has been no more than 4 pairs of White Stork and therefore questionnaires are no longer sent out. Instead, the *Storkegruppen* visits traditional stork breeding sites, and stays in contact with nest-owners by telephone or e-mail. This is possible because Denmark is a small country, and the stork is very well known and liked by most people. It would simply not be possible for a pair or even a single stork to stay on a nest for long without the news reaching the newspapers and the DOF.

Results

In 2004, 3 pairs (HPa) of White Storks nested in Denmark (Fig. 2). Breeding locations were: Ribe, South Jutland, (HPm2); Vegger, North Jutland, (HPm2); and Hvedstrup west of Copenhagen on Zealand (HPm4). The pairs in Jutland belong to the original, wild population, while the pair in Hvedstrup comprises birds reintroduced by the stork project in Scania, Sweden. The last pair of wild White Storks bred on Zealand in 1966 at Ny-Harløse, North-Zealand. A single stork occupied this nest until 1973, but since then the White Stork has been extinct on Zealand. All storks in Denmark are migratory, except for the reintroduced pair in Hvedstrup, which had to be fed during the winter.

In 2005 2 pairs (HPa) and a single stork (HE) occupied nests in Denmark (Fig. 3). At Ribe, only a single stork was recorded. At Vegger, the female stork arrived very late and so the pair was not successful. At Hvedstrup, the over-wintering pair bred successfully, fledging 5 young.

Development of the breeding population

The White Stork population peaked in about the year 1850, when there were approximately 8,000 – 10,000 breeding pairs within the present borders of Denmark. But by about 1890, numbers had decreased to around 4,000 pairs, and a sharp decline occurred in the "Störungsjahr" of 1927, when fewer than 500 pairs were counted.



In the 1930s, the population increased again. 859 pairs were counted during the first full census in 1934, and in 1939/40, 1,100-1,200 pairs were nesting in Denmark. After that, however, there was a further rapid decline by 1949 to 300 pairs. In 1952, 222 pairs were nesting, and in 1964 111 pairs. Numbers continued to decline to 40 pairs in 1974, 10 pairs in 1984, and 6 pairs during 1994-96. In 2000, 3 pairs fledged 5 young, and between 2001 and 2003, only one pair remained and there was no successful breeding for the first time since the arrival of the White Stork in Denmark during the 15th century.

The most important reasons for the rapid decline almost to extinction are the destruction of suitable habitat caused by wetland drainage, and agricultural intensification. The trend in modern Danish agriculture leaves little prospect for the future of a wild population of White Storks in Denmark. Although it seems likely that a few White Storks will continue to breed in Denmark, these birds will probably mainly originate from the reintroduction project in Scania, Sweden, or from semi-natural colonies with supplementary food supplies in Schleswig-Holstein (Föhr; St. Peter-Ording; Hitzhusen; Eekholt). Storks from some of these places are already visiting Denmark, while the pair breeding at Hvedstrup on Zealand originates from the reintroduction project in Scania. But truly wild and migratory White Storks that do not rely on artificial feeding are almost extinct in Denmark (Skov 1999, 2003).

In Denmark there are no plans for the reintroduction of storks, unlike in Sweden, Holland, Belgium, eastern France, south-west Germany, or Switzerland. In the view of DOF, it is essential first to restore suitable habitats before any successful re-establishment of White Storks in Denmark can take place. If enough suitable White Stork habitats can be created, then storks will recolonise naturally from the breeding populations in northern Germany and Poland. Every year between 150 and 300 storks visit Denmark, and provided they can find suitable habitat, some of them will stay and begin a new breeding population. But at the moment there are not enough suitable areas for storks in Denmark, and so there is no prospect of recolonisation by wild storks within the next 10 years (SKOV 2003).

A more detailed account of the biological aspects of the White Stork in Denmark has been given by Skov (1999, 2003).

References

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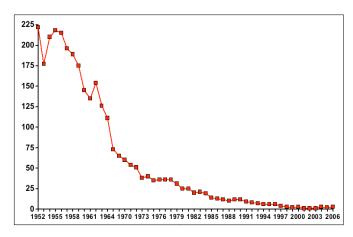


Fig. 1. Development of the White Stork population in Denmark from 1952-2005 (except 1965-67).

Entwicklung der Brutpopulation des Weißstorchs in Dänemark von 1952 bis 2005 (Datenlücken 1965 – 1967).

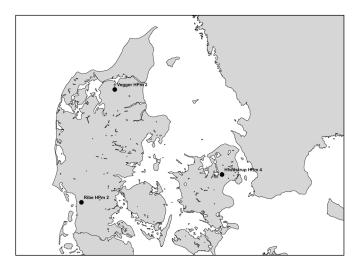


Fig. 2. Locations of occupied White Stork nests in Denmark in 2004 (Nyegaard & Grell 2005).

Verbreitung des Weißstorch in Dänemark 2004 (Nyegaard & Grell 2005).

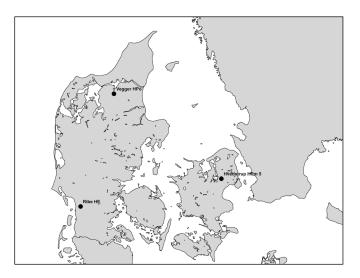


Fig. 3. Locations of occupied White Stork nests in Denmark in 2005 (Nyegaard & Grell 2006).

Verbreitung des Weißstorch in Dänemark 200 (Nyegaard & Grell 2006).



Photo 1. This stork's nest on the old smithy in Vegger (North Jutland) has been occupied each year since 1936. Photo: Hans Skov. Das Storchennest auf der alten Schmiede in Vegger (Nordjütland) war seit 1936 alljährlich besetzt. Foto: Hans Skov.

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