WHITE STORK POPULATIONS ACROSS THE WORLD

Assessment of the current status of the White Stork Ciconia c. asiatica in Uzbekistan

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Zusammenfassung

Der Weißstorchzensus wurde in Usbekistan während der Brutperioden der Jahre 2004 und 2005 durchgeführt. Der Brutbestand des Weißstorchs ist vor allem in zwei Regionen konzentriert: das Ferghana Tal und die Tashkent Oase im Flussgebiet des Syrdarya. Die Anzahl der Brutpaare ist in den letzten zehn Jahren in Usbekistan um 47% zurückgegangen und beträgt durchschnittlich 745 Paare (HPa). Die Art steht unter dem gesetzlichen Schutz der Republik Usbekistan.

Summary

A census of breeding White Storks was carried out in Uzbekistan during 2004-2005. Generally, breeding storks are concentrated in two regions: the Ferghana Valley; and the Tashkent oasis, situated in the basin of the River Syrdarya. The number of breeding white storks in Uzbekistan has declined by 47% since 1994, and now is approximately 745 pairs (HPa). This species is legally protected in the Republic of Uzbekistan.

Introduction

The distribution and numbers of the White Stork in Uzbekistan have been unstable in recent decades. To assess the current status of the species in Uzbekistan, we carried out a census during the 2004-2005 nesting period, covering all parts of the country where nesting grounds had been protected, as well as places with historical breeding records.

A comparison of the findings with the results of previous surveys revealed marked changes in the White Stork distribution and numbers. In terms of distribution, it is noteworthy that, as previously, breeding storks are concentrated in two regions of Uzbekistan: the Ferghana Valley; and the Tashkent oasis, situated in the basin of the River Syrdarya.

Results

A comparison of the findings of the current and previous White Stork censuses shows a catastrophic decline in breeding numbers in Uzbekistan. Currently, there are 745 pairs of breeding White Storks in Uzbekistan. This is half the number recorded in 1994, when 1,400 nesting pairs were counted (Fig. 1).

In the second half of the twentieth century, cotton was the dominant crop grown in Uzbekistan. During the last ten years, a reduction in the area of cotton has resulted in an increase in the production of cereals, leguminous plants, vegetables, gourds and potatoes, which has to an extent contributed to an expansion of the breeding range of the White Stork in some areas.

Data from the last four international censuses show fluctuations in the number of storks in the Ferghana valley. Over the last ten years, there has been a decline in the number of breeding White Storks in the provinces of Andijan, Namangan and Ferghana, all of which are situated in the Ferghana Valley. However, new nest sites have been recorded in newly developed areas in the foothill zone. The 2004/05 census revealed 454 nesting pairs of storks (HPa) in this region, compared with more than 1,340 pairs (HPa) in 1994. At the same time, White Storks have significantly expanded their range in the Tashkent oasis, by occupying new breeding grounds in agricultural and populated areas, resulting in a significant increase in the numbers of these birds in the middle valley of the River Syrdarya.

Redistribution of the nesting grounds of the storks in the basin of the River Syrdarya during the last ten years has intensified since 2003. Thus, 40 nests were recorded on high-voltage pylons in a new breeding location parallel to the 65 km road between the towns of Buka and Bekabad (Fig. 2). In 2004, the number of nests here dropped to 34; however, 25 new nests had been recorded by 2007, the total number reaching 69.



In 2001, we recorded a new nesting ground of the White Stork in the vicinity of the Tuyabuguz reservoir on the River Akhangaran, where 34 pairs of storks had settled. The nests had been made 3 to 4 years before our visit. About the same period, dozens of new nests emerged close to the settlement Zangiota, not far from Tashkent. Two new nests were discovered near the town of Gulistan, situated in the middle Syrdarya valley.

White Storks built two new nests in each of two localities in the Sanzar valley (in districts Pakhtakor and Gallaaral). However, the nests are not used consistently by these birds. At the same time, new nesting grounds have been recorded together with old nests along the right-hand bank of the River Syrdarya, close to the town of Chinaz. Taking all this into account, over the last 5 to 6 years, White Stork numbers have increased in the Tashkent oasis by a factor of eight compared with 1994, when only 35 pairs were recorded. Currently, there are 278 nests, of which 270 are occupied and 8 are abandoned.

In our opinion, an interesting factor is the recovery of White Stork breeding grounds in the Zarafshan valley, which was believed to have been one of the strongholds of this species in Uzbekistan. However, numbers of breeding White Storks here are still very low: they are noted in the middle section of the Zarafshan valley, close to Hatyrchi, district capital of the Navoi province, where three pairs have bred successfully since 1998. In southern Uzbekistan, White Stork numbers remain insignificant, as previously. The valley of the River Sherabad supports four pairs and the valley of the River Kashkadarya fewer than 10 pairs.

In the conditions of Uzbekistan, most White Storks use human artifacts for nesting. In the Tashkent oasis, almost all stork nests are supported by human structures, mainly iron or concrete high-voltage electricity pylons (98.8%). These birds will also build nests

on the electricity lines powering railways. In 2003, two occupied nests were recorded for the first time on roofs of one- or two-storey rural houses (0.8%). Only one pair was recorded nesting on a water-tower.

In the Ferghana valley, most White Storks also nest on iron and concrete electricity pylons and telegraph posts (85.2%); fewer nest on water-towers (1.1%). The number of nests in trees is on the decrease, but old colonies of these birds can still be found in Euphrates populars *Populus diversifolia* (13.7%).

Discussion

In general, over the last 10 years there has been a decrease in White Stork numbers in Uzbekistan of 47%, due to a decline in the Ferghana valley (SHERNAZAROV 1999). The main factor behind this decline in one of the key parts of the species' range in Uzbekistan is excessive disturbance and loss of nests on pylons as a result of frequent emergency situations on power lines.

Taking into consideration the effect of various negative factors on the range of the White Stork and its unstable numbers, this species remains listed in the latest edition of the Red Data Book of the Republic of Uzbekistan (2006).

SHERNAZAROV, E. (1999). Distribution and numbers of *Ciconia c. asiatica* in Central Asia. In: H. Schulz (Ed.). Weißstorch im Aufwind? - White Storks on the up? - Proceedings, Internat. Symp. on the White Stork, Hamburg 1996: 331. NABU, Bonn.

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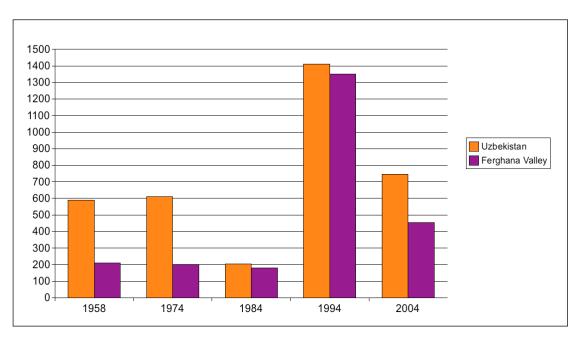


Fig. 1. Development of the breeding population of *Ciconia c. asiatica* in Uzbekistan and the Ferghana Valley 1958 – 2004/05. Entwicklung der Brutpopulation von *Ciconia c. asiatica* in Usbekistan und im Ferghana Tal 1958 – 2004/05.



Fig. 2. Localities of breeding White Storks in Uzbekistan mentioned in this article. Lage der Brutplätze des Weißstorchs in Usbekistan, die in diesem Artikel erwähnt wurden.

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