# Notable observations of the Sociable Plover *Vanellus gregarius* from the Tengiz - Korgalzhyn area / central Kazakstan

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The Tengiz-Korgalzhyn area, a large system of salty, brackish and fresh water bodies in the dry steppe zone of central Kazakhstan, is well known as an important area for resident and migrant waterfowl and shorebirds. The authors present in this article recent observations of Sociable Plovers, mostly recorded during the post-breeding period in 1999\_and 2000, and discuss the serious population decline of this global threatened species.

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# INTRODUCTION

The Korgalzhyn zapovednik, with an area of 2,590 km<sup>2</sup>, comprises many different wetland habitats. These include both fresh and saltwater lakes, solonchaks, riverside shrubs and large expanses of steppe surrounding the lakes. The salty drainless Lake Tengiz with a surface area of 1600 km<sup>2</sup> is situated in the centre of this area. The eastern part of the zapovednik is dominated by Lake Korgalzhyn, a freshwater complex of several large lakes and extensive areas of reeds surrounding numerous smaller bodies of open water. The whole complex is fed by the river Nura. A vast number of brackish solonchaks which keep water only temporarily are scattered throughout the reserve. More wetlands, currently not under protection, can be found in the vicinity of the zapovednik. Several of them are planned to be included in the proposed biosphere reserve "Tengiz" with an area of about 24,000 km<sup>2</sup>.

An ornithological survey initiated by NABU, the German Federation for Nature Conservation, in the "Korgalzhynskiy Zapovednik" (Korgalzhyn nature reserve) in central Kazakstan was carried out by the authors between 18 July and 31 October 1999. The survey mainly focused on waterfowl and shorebirds. Additional data were collected by the authors during a short visit in May 1999 and spring 2000. Data are also included from personal communications with A. Koshkin (scientific collaborator of the Zapovednik staff) and L. Lachmann, who visited the same region in summer and autumn 2000. Among large numbers of waterfowl and shorebirds (up to tens of thousands at different localities) remarkable numbers of Sociable Plovers were observed during the post-breeding period. In view of its rapid decline, special attention should be paid to this globally threatened species.

# **OBJECTIVES AND METHODS**

The general aim of the survey was to obtain new data on the number and local distribution of resident and migrant waterfowl and shorebirds in the Tengiz area. Several parts of the study area were visited on a regular basis to gather data on season variation. Other parts of the study area could only be visited irregularly. Further data on high bird concentrations outside the reserve was collected in surrounding areas north and east of the Zapovednik. The counts were carried out using binoculars and Optolyth telescopes (with 30xWA, 45xWA and zoom 20 - 60x eyepieces).

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### RESULTS

Most of all observations of Sociable Plovers were recorded near the village Korgalzhyn [50°30' N, 70°01' E], the regional centre, situated 120 km SW of the new kazak capital Astana. The locations Lake Zhumaj, the settlements Arykty and Aktubek are situated away from Korgalzhyn about 25 km, 40 km and 60 km respectively.

## 1999

Although there was no time to cover a large area in spring 1999, a group of at least four breeding pairs was recorded near Korgalzhyn on May 15<sup>th</sup>. Judging by the birds' behaviour, the incubation period had already

Unfortunately very little direct information was available on breeding success, although it can be said that breeding was not unsuccessful. The different percentage of young birds serves as evidence that not all the counted flocks comprised the same individuals. Without any special idea of possible double counted individuals, turnover rate etc. we can make a rough estimate that over 100 birds used the area around the Korgalzhyn village in the post-breeding period 1999. In July adult birds were in active moult, including the wing-feathers. In the middle of August most of them showed almost complete winter plumage. From July until the last observation first year birds were seen in juvenile

Date	Location	Observation
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05.07.99	near Korgalzhyn	15 (6 ad., 9 juv.)
15.07.99	near Korgalzhyn	65-70 (less than 20% juv.)
21.07.99	near Korgalzhyn	38 (2 pairs with 3 and 4 fledged
		young respectively
		+11 ad., 16 juv.)
22.07.99	near Korgalzhyn	18 (3 ad., 15 juv.)
26.07.99	near Korgalzhyn	8
11.08.99	near Korgalzhyn	71 (6 ad., 37 juv. + 19 + 9)
15.08.99	near Aktubek	7 (1 ad., 6 juv.)
28.07.00	near Aktubek	69 (>= 21 juv.)
30.07.00	Lake Zhumaj	38 (mainly juv.)
04.08.00	near Korgalzhyn	48
06.08.00	near Korgalzhyn	>120 counted but estimated
		150 birds (> 75% juv.)
08.08.00	Lake Sholak	16
09.09.00	Arykty	12 (1 ad., 11 juv.)

Table 1. Observations of Sociable Plovers in post-breeding period 1999/2000 in the Tengiz-Korgalzhyn area

started. They were breeding in short vegetation, grazed by cattle, horses and sheep.

In July and August we found adult and young birds gathered in post-breeding flocks (see Table 1). The largest concentration of 71 individuals (divided in three groups close to each other) was discovered on August 15<sup>th</sup>. All observations in the post-breeding period were made in locations with sparse vegetation, quite often along field-paths around Korgalzhyn. One flock was found in a drying up river-bed near Aktubek.

The percentage of young individuals within the flocks increased considerably during the period of observation.

plumage, except on July 16<sup>th</sup> when three pulli (wing feathers just emerging from the sheath) were recorded. **2000** 

In spring 2000 the region was surveyed more intensively looking for breeding Sociable Plover. Unfortunately the results are not very different from those of 1999. The first observation of the species for this year was made on April 13<sup>th</sup> when two individuals were seen about 35 km from Korgalzhyn. Five or six territories were found near Korgalzhyn from the 7<sup>th</sup> May and two broods with one and four pulli respectively (both about five days old) were recorded there on May 26<sup>th</sup>. Additionally one breeding female was observed near Aktubek. All other attempts at finding new breeding places and more pairs



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around Korgalzhyn and other apparently suitable locations failed, which was unexpected considering the high numbers of post-breeding birds in 1999.

Nevertheless the number of birds during the postbreeding period was even higher than in 1999. Judging by the percentage of juveniles present, breeding success had been at least as good as in 1999, probably a bit better. The weather in 2000 was characterised by a dry summer. A lot of temporary waterbeds like solonchaks dried up much earlier than the year before (L. Lachmann pers. comm.).

## DISCUSSION

The serious population decline of the Sociable Plover over the last few decades is now widely recognised, but the decline seems in reality to be far more drastic than is commonly realised. Population estimates of 10,000 mature individuals or more (Collar et al. 1994, Belik 1998) are probably history. More recent estimates for the Russian European population are ca. 2,000 breeding pairs (bp) (Serebryakov 1997) or 1,000-2,000 bp for Europe, including western Kazakstan (Belik 1994, 1998). In view of the serious decline north of the Caspian Sea, where this species has become rare both as breeding and migrating bird (Shevchenko 1998), and the negative results of several expeditions to European Russian steppe lands and western and northern Kazakstan (Morozov in Belik 1998, Cresswell et al. 1999), these numbers seem to be overestimates. In European Russia there is even serious concern among specialists that the Sociable Plover has nearly disappeared already in this part of the breeding range (Tomkovich, Khrokov pers. comm.). Other current estimates have been done by Khrokov who presumes no more than 500-600 bp for Kazakstan and 1,000 pairs world-wide (Khrokov 2000 a,b). While it is true that these recent estimates are realistic, and obviously no serious results may refute this up to now, it would mean that the Sociable Plover has already reached the level of an endangered species (IUCN SSC 1994). The Sociable Plover often shows a sporadic and irregular pattern of breeding and even the regular sites are patchy in nature. Estimates for a vast breeding range, based on extrapolations from numbers of some known breeding colonies, could easily lead to overestimated results.

In 1998 an expedition to Kazakstan by Glasgow University could not confirm any occurrence of Sociable Plover at Korgalzhyn (except: "...two Sociable Plovers were possibly seen ... on 29.07.98"). Nevertheless the authors mention that the region is well known as a good breeding area for the species and in years before notable numbers were seen, for example: "In 1995 between 25 July – 10 August, about 70 individuals ... (July unpublished data)." (see Cresswell *et al.* 1999). In fact, records from the Korgalzhyn area as a breeding site for the Sociable Plover in Kazakstan are found in literature as long as 70 years ago (Lavrov 1930). A seventeen-fold decrease in number of birds within 20 years from the 1970s to the 1990s is described for the region (Khrokov 2000b). Nevertheless this area and the Naurzum region 300 km west of it still remain a sort of core zones for this more and more threatened species. This could be confirmed by our results for the Korgalzhyn area. In 1999 only one bigger flock of 132 Sociable Plovers is reported from Kalmykia Republik and this was a flock of migrating birds on 12 September (Shubin *et al.* pers. comm.). The flock of about 150 birds estimated near Korgalzhyn on 06.08.00 is certainly a very notable observation nowadays.

In both areas nature reserves are established, the "Korgalzhynskiy Zapovednik" and "Naurzumskiy Zapovednik". However, since the Sociable Plovers are usually found near settlements (Khrokov 1999, pers. obs.), they mostly live outside these protected areas. Currently, in both areas, the species favour nesting in grazed land (Khrokov 1999, pers. obs.). Nesting habitats in the Korgalzhyn area were also described before as dry steppe habitats with *Artemisia-* or *Artemisia-Stipa*vegetation with sparse vegetation cover, in the areas around several settlements (Krivitskiy *et al.* 1985).

Possible causes for the general decline of the Sociable Plover have been mentioned by different authors. No special investigations have been carried out for the Korgalzhyn area as well as for many others up to now. Climate change towards aridity, found as primary factor in the north of the Caspian Sea (Shevchenko 1998), seems not to be the ultimate factor in the Korgalzhyn area or is at least not obvious to us. We can only repeat the urgent need of studies focused on the limiting factors and problems the species is facing.

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