

The diminished status of the Great Bustard *Otis tarda tarda* in central Kazakhstan

MAXIM KOSHKIN, ALEKSEI TIMOSHENKO & ALBERT SALEMGAREEV

Summary: We collate available recent information on the status of the Great Bustard *Otis tarda tarda* in central Kazakhstan. The information available suggests the region holds 20–30 breeding birds and 80–100 autumn migrants. These numbers are very low given the habitat available, with the species apparently absent from large areas of pristine steppe and arable and abandoned arable lands. We found no evidence that poaching or land-use practices in the region could be responsible for the situation. However, illegal hunting of wintering birds in southern Kazakhstan and northern Uzbekistan could well explain the low numbers estimated. To save and restore the breeding populations in central Kazakhstan, urgent action is needed to minimise poaching pressure on the birds in winter and to conduct censuses of breeding birds to identify key areas for their conservation and any additional threats they might face.

INTRODUCTION

During the first half of the 20th century, the Great Bustard *Otis tarda tarda* used to be a common breeding species in central Kazakhstan, particularly in Kostanai (Gavrin 1962) and Akmola (Lavrov 1930) provinces. A rather rapid decline in numbers followed, which some authors attribute to the Soviet ‘Virgin Lands’ campaign which started in the 1950s (Gavrin 1962, Postavnoi 1984), when huge expanses of pristine and grazed steppe were converted to arable fields. Postavnoi (1984) encountered this bird only twice in Kostanai province in the 16-year period 1966–1982. Beketov *et al* (2004) reports that only 11 birds were encountered during a car survey along a 1304 km long route through the southern part of Akmola and northern part of Karagandy provinces. The same author refers to repeated observations of breeding Great Bustard in Nura district of Karagandy province, suggesting the species was still quite numerous in this scarcely populated area until the 1970s. After the mid-20th century the Great Bustard steadily declined across Central Asia as a whole, and went extinct in many parts of the region (Kessler & Smith 2014). However, like many other bird species, the Great Bustard probably benefited from the crisis in agriculture resulting from the collapse of the Soviet Union in 1989, which left many arable fields abandoned and reduced grazing pressure and disturbance in remoter areas of the steppe and semi-desert (Kamp *et al* 2011, Kessler & Smith 2014).

METHODS

We present a short overview of the status of the Great Bustard in the years 2000–2017, summarising recent records of the species collected across Kostanai, Karagandy and Akmola provinces, which here are referred to as ‘central Kazakhstan’. We gathered a total of 32 records, most of which were provided by the Altyn Dala conservation initiative team of the Association for the Conservation of Biodiversity of Kazakhstan (ACBK). Both published (Bragin 2004, Kessler & Smith 2014, Koshkin 2017, Timoshenko 2017) and anecdotal reports collected from researchers and game wardens suggest that during this period the number of Great Bustards in the area remained low. As only one species-specific survey was conducted during the period under review (M Kessler 2006 unpublished), most of the observations presented here were opportunistic.

RESULTS

Distribution and population estimates

Great Bustards were observed relatively sparsely in Kostanai and Karagandy provinces in the years 2000–2017 (Figure 1). Several sites in Kostanai had regular observations (several

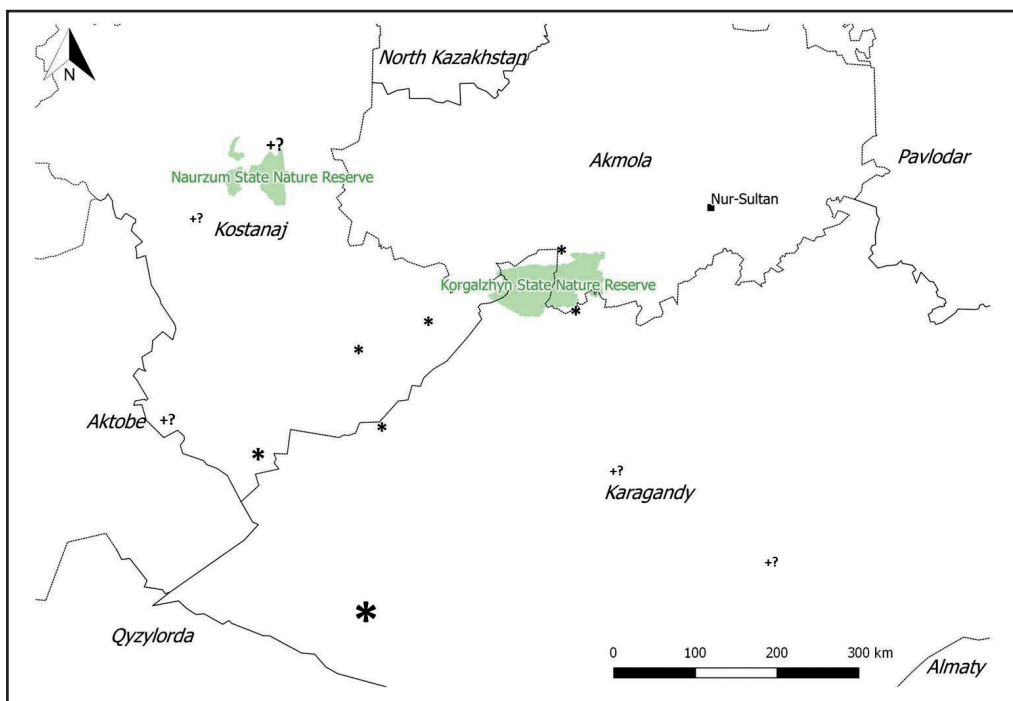


Figure 1. Locations of recent (2000–2017) observations of Great Bustards in central Kazakhstan (+? possibly breeding, * post-breeding and migration; larger symbols represent clusters of observations). Data sources: ACBK Altyn Dala conservation initiative database, M Kessler, AV Koshkin, A Timoshenko.

years in a row), including one site where adult birds were observed in May 2015 and 2016. On the other hand, only three observations of Great Bustard were reported in the Tengiz–Korgalzhyn region during the same period (Koshkin 2017), despite regular monitoring and anti-poaching patrols by Korgalzhyn State Nature Reserve’s scientists and rangers through large expanses of natural steppe and semi-desert habitat potentially suitable for the species. No observations of Great Bustards were reported during 2004–2016 by fieldworkers monitoring Sociable Lapwing *Vanellus gregarius* breeding colonies across large areas of the Tengiz–Korgalzhyn region. Similarly, the only observation from central Kazakhstan published on www.birds.kz (a country-wide web portal of around 250 ornithologists and photographers) was of three birds photographed by Timoshenko (2017) at Alakol village, Kostanai province, on 28 July 2009. However, it is worth noting that central Kazakhstan is probably the least visited area of the country by birders.

Although most records of the Great Bustard are from late summer and autumn, some observations of adult birds in May/June suggest that Kostanai and Karagandy provinces could still support breeding populations (Figure 1). However, to the best of our knowledge there have been no recent (last 15–20 years) verified observations of displaying males, nests or females with chicks in the region, with the exception of several lekking birds observed in Kostanai in 2006 (M Kessler, unpublished) and some anecdotal information of breeding ‘pairs’ observed along the border between Kostanai and Karagandy provinces (Bragin 2004). Therefore our cautious estimate of breeding numbers, 20–30 individuals, is based on observations of adult and/or juvenile birds in May/June. All observations outside this period are treated as involving pre-migratory gatherings or migrants (Table 1). The largest group of migrating birds consisted of 80 individuals and was recorded on 3 October 2009 in the southern part of Karagandy province, with other observations consisting of 1–6

individuals; hence we cautiously estimate a total of 80–100 individuals being hosted in the region at migration times. There are no records from the winter season.

Table 1. Expert evaluation of the current Great Bustard population in central Kazakhstan, with the minimum estimate for gathering or migration derived from the total number of birds recorded in the area in autumn 2009.

Season	Number of Great Bustards	Numbers of sites	Quality of estimate, from 1 (low-quality) to 5 (high-quality)
Breeding	20–30	6	2
On migration	80–100	21	3
Wintering	0	0	0

Habitat use and threats

Unfortunately there is very little information about habitat associated with recent records of Great Bustard, but evidence suggests that habitat loss is not currently an issue. Most observations in Kostanai province during the breeding and post-breeding period were relatively close to small or medium-sized settlements, suggesting that birds were using anthropogenic landscapes (pastures, hayfields, wheatfields, *etc.*). One group of birds was flushed from a hayfield, another was spotted in a recently burnt area (AT pers obs). Most records of Great Bustards during migration, particularly in south-western Karagandy province, are likely associated with natural steppe and semi-desert, as these sites are further from populated areas and human disturbance.

Although hunting is reported as a major cause of declines in Great Bustard populations elsewhere in Central Asia, we found no evidence of this in central Kazakhstan in recent years. Poor law enforcement certainly suggests that the species would be targeted by poachers, despite its listing in the *Red Data Book of Kazakhstan*. However, owing to low densities when breeding and only partly predictable behaviour during migration, Great Bustards are most likely hunted opportunistically by city-based sport hunters (*eg* from Astana, Kostanai, Arkalyk) or poachers with high-quality weapons and vehicles pursuing other species (*eg* antelopes, boar, waterfowl, *etc.*). We expect that there is much more damage to bustard populations in the south of the country, when birds congregate in large flocks during winter. Similarly, to the best of our knowledge there are no data from the region on natural and human-induced factors affecting adult and juvenile survival and breeding success.

DISCUSSION

As information on the distribution and numbers of Great Bustards in central Kazakhstan is very limited, there is an urgent need to conduct a thorough census to identify key breeding sites and important staging areas, if any. Once such areas and major threats are identified, relevant conservation actions can be proposed. On present evidence we consider the most urgent action to be the protection of wintering flocks in southern Kazakhstan and Uzbekistan to preserve breeding populations across Kazakhstan.

ACBK is the largest and most active nature conservation NGO in Kazakhstan, focusing on research and conservation of steppe and semi-desert ecosystems, using both site- and species-specific approaches. Playing an important role in running the Altyn Dala conservation initiative, ACBK successfully carries out monitoring and protection of key territories for steppe biodiversity on a large scale. Although the main focus of conservation and research work is currently the Saiga Antelope *Saiga tatarica*, the Great Bustard is now at the top of ACBK's list of priority species.

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Maxim Koshkin, Alexei Timoshenko & Albert Salemgareev, Association for the Conservation of Biodiversity of Kazakhstan (ACBK), office 406, 18 Beibytshilik Street, Nur-Sultan, 010000, Kazakhstan. makoshkin@gmail.com