

# The near-extirpation of the Great Bustard *Otis tarda tarda* as a wintering and breeding species in Tajikistan

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**Summary:** In Tajikistan the Great Bustard *Otis tarda tarda* is a very rare migratory and irregularly wintering species. Before the 1940s it used to nest in southern Tajikistan, and at that time, before the development of fallow lands in valleys began, wintering Great Bustards were recorded in flocks of up to 20 individuals, in pairs or singly, on flatlands almost all across the country. The species still occurs on migration and in winter almost every year but in tiny numbers. Threats are hunting, development of virgin lands and degradation of habitats including through overgrazing. Conservation steps needed include organising temporary protected areas in the potential breeding grounds and controlling illegal hunting.

## INTRODUCTION

The status of the Great Bustard *Otis tarda tarda* in Tajikistan has deteriorated greatly in the past hundred years. Tajikistan is located in the southern extremity of its Central Asian range, and therefore was mainly a wintering ground for the species in considerable numbers, although it also bred. Steppe, desert and semi-desert landscapes were and remain its primary habitats; it was also found in steppe in the piedmont zone (*adyrs*). However, habitat conversion and degradation (plowing of grassland, agricultural intensification causing loss of fallows, overgrazing) combined with hunting had such a profound negative impact on the Great Bustard that the first (1988) and second (Kurbanov 2015) editions of the *Red Book of the Republic of Tajikistan* treated it as a rare and disappearing species. Here we summarise what little is known about the Great Bustard in Tajikistan.

## PAST AND PRESENT DISTRIBUTION AND POPULATION

### *Breeding*

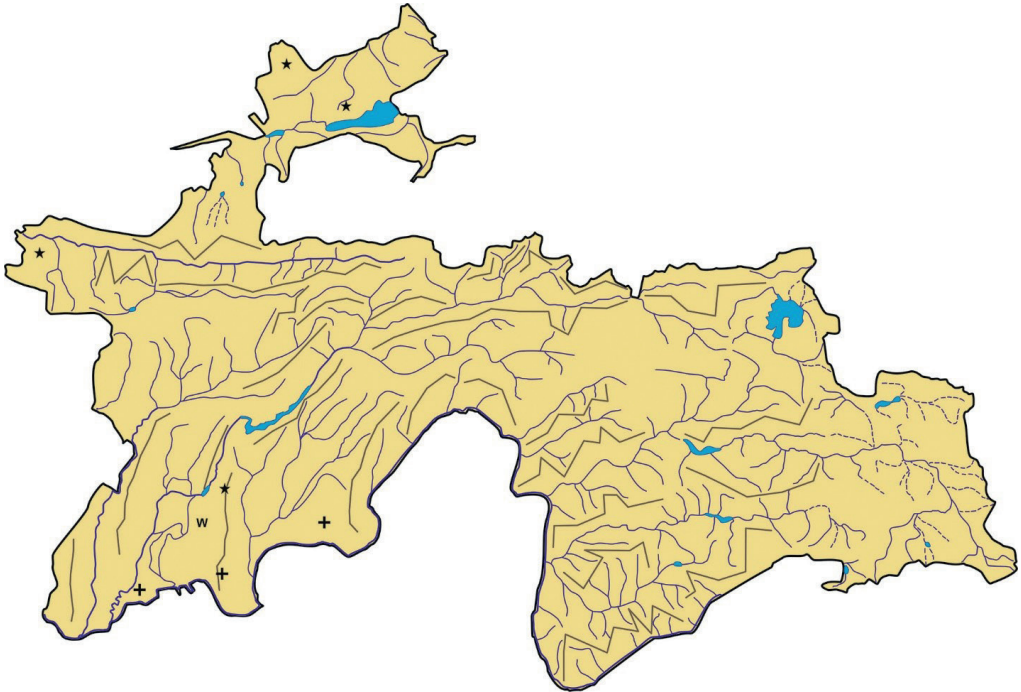
Until the 1940s, the Great Bustard nested in southern Tajikistan, in districts near the border along the Zaravshan river (near Penjikent) and along the Syrdar'ya river valley, in the Pyanj Karatau and in the region between the Pyanj and Kyzyl-Su rivers (Meklenburtsev 1937, Ivanov 1940, 1969, Abdusalyamov 1971; Figure 1). Hunters verbally reported adult Great Bustards with chicks on the right bank of the Syrdar'ya river in Sol'proma district (Abdusalyamov 1971). In former springs dating back 30 years or more, Ivanov (1969) observed the species in the Hissar valley, in Penjikent district, in 'Tigrovaya Balka' nature reserve, and in the Pyanj and Kyzil-Su river valleys. As most of these areas have been plowed, almost no natural areas remain for the species to nest in. The only places where it could possibly now do so are in the south-west of the country, in parts of the Kashkakum and Shakh (Kurdzhalakum) deserts, in the Karadum valley, and in 'Tigrovaya Balka' nature reserve.

### *Migration*

In autumn, Great Bustards have been observed outside of Dushanbe, in the Hissar and Yavan valleys, in the Parkhar district and in southern Tajikistan (Abdusalyamov 1971; see Figure 1). AI Ivanov also observed birds flying through the Hissar mountains. The discovery by Popov (1959) of Great Bustards near Iskanderkul lake on 17 September indicates that on migration these birds can occur high in the mountains (2100 m above sea level). Two to three migrating Great Bustards were seen in the Sughd region in the outlying areas of Khujand in October–November 2017.

**Table 1.** Expert evaluation of current population of Great Bustards in Tajikistan.

Season	Number of Great Bustards	Number of sites	Quality of estimate, from 1 (low-quality) – 5 (high-quality)
Breeding	No longer observed	4 (previously)	2
On migration	1–5	4	3
Wintering	1–2	1	2



**Figure 1.** Contemporary distribution of the Great Bustard in Tajikistan. \* = current migratory stopover, w = current wintering site, + = former breeding locality (no breeding record in Tajikistan in the past 40 years).

### **Wintering**

Until the 1940s, before the intensive conversion of valleys and uncultivated land, there were large numbers of Great Bustards wintering in Tajikistan. The birds were encountered in flocks of up to 20 individuals, in pairs and singly, across virtually all lowland regions of the republic. Specifically, wintering birds were observed in the Hissar and Yavan valleys, in the Rengentau mountains, and on the Kumsangirskoe plateau, in 'Tigrovaya Balka' nature reserve and Shaartuz, as well as in the Vakhsh, Syrdar'ya, Zaravshan and Kafirnigan river valleys. Wintering occurred from the end of August to 10 April, with some individuals departing as early as February (Abdusalyamov 1971). There were well-known hunting parties in the Yavan valley during the 1950s, when groups of hunters on motorcycles pursued wintering Great Bustards. A typical take was from 40–50 birds per season (hunter verbal reports).

Over the past 30 years, the species has been observed only very rarely. Currently, the Great Bustard occasionally winters near Olimtai, Saartuz and Kubodiyon in tiny numbers; see Figure 1 and Table 1. We observed a pair of Great Bustards on winter wheat in Dangarinskii district in February 2006.

## THREATS

The main threats to the Great Bustard in Tajikistan are habitat destruction and degradation, poaching and overgrazing in nesting areas. There is not enough habitat for the Great Bustard to nest, as all its territories were plowed. The situation has become even worse because of poaching. Free-ranging dogs also predate these birds, alongside natural predators such as foxes and jackals.

## CONSERVATION MEASURES

We think that it is necessary to make seasonal protected areas for the species in winter and during migration. It is also important to consider the idea of establishing one big Central Asian nursery. Another important measure is poaching reduction, with corresponding public awareness campaigns to support Great Bustard conservation.

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