

**Memorandum of Understanding  
On the Conservation and Management of the Middle-European Population  
Of the Great Bustard (*Otis tarda*)**

**NATIONAL REPORT  
(by 2004)**

**Republic of Bulgaria**

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## **1. Habitat protection**

### 1.1. Designation of protected areas

No protected areas for the Great Bustard have been designated in Bulgaria so far.

It is probably the right place in the beginning to throw some light on the current status of the Great Bustard in Bulgaria. This information is based on the publications of Georgiev (1996) and Zehtindjiev *at al.* (2002).

Until the 1930s there are breeding records from several parts of the country – SE (Burgas district, Jambol, Elhovo, Sakar), the Danube plane (Zlatiata, Orijahovo, Biala Slatina) and mainly Dobrudja region (NE). However, after this period the only reports about breeding pairs are from Zlatiata and Dobrudja. The last confirmed nesting in Zlatiata is from 1949, while in Dobrudja last breeding pair was reported in 1983. According to local people, one pair was breeding probably once in each of both regions in the 1990s. However, locals report many (?) observations of flocks of 3-5 birds in the non-breeding season during the 1990s. *This it was concluded the breeding population of the Great Bustard in Bulgaria nowadays is in a critical condition, most probably extinct. Single pairs might breed sporadically in Zlatiata and/or Dobrudja yet, but it has not been confirmed in the last decades.* The most severe decline of the breeding population was recorded after 1950 simultaneously with increasing agricultural intensification and habitat fragmentation.

In the 1990s and later there are several observations of wintering flocks of up to 6 birds, mainly in Dobrudja and Zlatiata, but also reported from other regions of E Bulgaria. However, Dobrudja is thought to be the main winter range for the species in the country nowadays. Similarly to the breeding population, the size of wintering groups has crashed from up to 200 birds before 1990 to less than 10 afterwards.

1.2. Measures taken to ensure the maintenance of Great Bustard habitats outside of protected areas

No such measures have been taken so far.

1.3. Measures taken to avoid fragmentation of Great Bustard habitats

Most of the Great Bustard habitat in the range of already extinct population in Dobrudja region (NE Bulgaria) has been fragmented several decades ago (in the 1950s and the 1960s), when vast farm fields were planted with anti-wind-erosion tree belts. The network of three belts has not been expanded since, but it is regularly maintained and trees are being systematically replanted.

## **2. Prevention of hunting, disturbance and threats**

2.1. Hunting

The Great Bustard used to be a game species in Bulgaria. However, since the demise of the breeding population it has been declared a protected species and inscribed on the National Red Data Book. Having in mind current status of the species in the country no extensive activities on prevention of hunting have been undertaken. Irregularly, during winter visits to former breeding grounds, local people, including hunters, were interviewed and current species' conservation status was explained.

2.2. Prevention of disturbance

Having in mind current species' status in Bulgaria, disturbance has not defined as a major threat and no activities have been undertaken.

2.3.1 Prevention of predation

No breeding population exists in the country, predation not recognised as a threat.

2.3.2 Adoption of measures for power lines

No casualties of Great Bustards from electrocution known in Bulgaria, power lines not recognised as a threat in the light of the current species' status in the country.

2.3.3 Compensatory measures

No such measures have been taken so far.

## **3. Possession and trade**

Being a globally threatened species, the Great Bustard in Bulgaria is strictly protected under the Biodiversity Act (2002). As such it is prohibited to take and/or possess eggs, dead or alive birds of any age, as well as stuffed specimens (unless registered under special conditions for collections of stuffed animals).

#### **4. Recovery measures**

##### 4.1. Captive breeding in emergency situations

Captive breeding of Great Bustards in Bulgaria has never been applied so far. In recent years, the only attempt to establish a flock in captivity in 2001 failed due to administrative reasons. Several birds were negotiated for import from Saratov region of the Russian Federation in order to organise captive breeding in Field Station “Kalimok” of the Institute of Zoology/BAS. Offspring of this flock had to be released in the wild, but close to settlements in the countryside, where to establish semi-sinantropic sub-populations.

Next step towards captive breeding and reintroduction is to clarify which of the existing populations in other countries are genetically closest to the extinct Bulgarian population. For this purpose, the Institute of Zoology with support from German experts will carry out DNA analysis of stuffed museum specimens, which originated from the extinct local breeding population, and compare with samples from other populations in Europe. Results from this study will underpin all further reintroduction efforts.

##### 4.2. Reintroduction

No attempts have been done so far.

##### 4.3. Monitoring of the success of release programmes

No releases, respectively no monitoring, have taken place so far.

#### **5. Cross-border conservation measure**

No cross-border cooperation with neighbouring countries has been established so far. The only existing contacts are with the Russian Federation, Saratov region, with regard to import of birds for captive breeding.

#### **6. Monitoring and research**

##### 6.1.1 Monitoring of population size and population trends

In recent years, the only study on Great Bustard population status was carried out in the period 1998-2001 by Zehtindjiev *at al*, (2002) from the Institute of Zoology/BAS. This survey consisted of five spring, summer and winter expeditions of some 600-km-long pedestrian transect in an area of ca. 3,000 km<sup>2</sup>. Along with the fieldwork were carried out synchronous inquiries among local farmers, hunters, forest rangers, etc.

##### 6.1.2 Monitoring of the effects of habitat management

No such management, respectively monitoring, have taken place so far.

##### 6.2.1 Comparative ecological studies

No such studies have been carried out.

##### 6.2.2 Promotion of studies on mortality factors

As major mortality factors in the past were recognised hunting and farming activities, such as mechanical harvest. No studies on mortality factors have been initiated in recent decades.

##### 6.2.3 Investigation of factors limiting breeding success

Neither in the past, nor in recent years such studies have been carried out.

#### 6.2.4 Studies on migration

No studies on migration have been carried out in Bulgaria.

### **7. Training of staff working in conservation bodies**

No such training has taken place so far. Expert capacity is confined to several (2-3) ornithologists from the Institute of Zoology/BAS and BSPB/Birdlife Bulgaria.

### **8. Increasing awareness of the need to protect Great Bustards and their habitat**

There is general regret among local population, particularly hunters, that the Great Bustard became extinct. This is a good ground for carrying out a successful PA campaign for the need of actions, preceding release, on habitat restoration and regulation of human activities, such as some farming practices and illegal hunting.

### **9. Economic measures**

None have been taken so far.

### **10. Threats**

As main threats to the Great Bustard population in the past were identified habitat fragmentation (planting of a network of anti-wind-erosion tree belts) intensive farming (chemicals and harvest) and illegal hunting. All these factors are still valid and prior to any reintroduction release of birds should be undertaken intensive work on avoidance of these factors. In order to set a coordinated strategy and work plan BSPB/BirdLife Bulgaria is considering elaborating a National Action Plan for the Great Bustard.

### **References:**

Georgiev, D. (1996). Vorkommen and Schutz der Großtrappen (*Otis t tarda* L., 1758) in Bulgarien.- Naturschutz and Landschaftspflege in Brandenburg 5: 18-20.

Zehtindjiev, P.H., Shurulinkov, P.S. & Tzonev, R.T. (2002). Present status of the Great Bustard (*Otis tarda* L.) in Bulgaria. Proceedings from the International Great Bustard Conference, Harkov, 24-28 October 2001. 42-47p.