

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

ACTION PLAN

Part 1 (General)

The Signatories should, in terms of legislation and enforcement, undertake all appropriate measures which benefit the Great Bustards, in particular in the field of habitat protection and restoration, prevention of hunting, disturbance and other threats, regulation of possession and trade, recovery measures, cross-border cooperation, monitoring and research, training and awareness raising.

This action plan and the Memorandum of Understanding also represent the implementation of objective 1.1.5 of the Species Action Plan for the Great Bustard approved by the Ornis committee and referred to by the recommendation of 26 January 1996 of the Standing Committee of the Convention of the Conservation on the Conservation of European Wildlife and Natural Habitats.

Numbers in square brackets - [] - refer to the objective numbers of the 1996 Action Plan.

1. Habitat protection

It is essential that key habitats of the Great Bustard be maintained and, where appropriate, restored by means of protected areas and/or otherwise.

1.1 Protected areas

1.1.1 Legislative measures

The responsible authorities should provide the species with full legal protection throughout its range to ensure that key habitats will be maintained. *Inter alia*, protected areas for the Great Bustard should include the entire range of semi-natural habitat, such as partly-cultivated land, steppes, semi-steppes and grasslands, in which the movement of juveniles and adults during dispersal occurs. [1.1.3]

Degraded areas which are essential for the reestablishment of Great Bustard populations or for the maintenance of viable populations should also be put under legal protection, as far as appropriate and feasible, in order to restore them.

1.1.2 Enforcement [2.1]

Appropriate measures should be taken for the management of all identified breeding areas of the Great Bustard as well as its key migration and wintering sites. [2.1.1]

Special measures should be taken for the protection of threatened breeding sites. The leasing or acquisition of land for the conservation of important habitat should be considered. [2.1.2]

1.2 Maintenance or improvement of habitat quality for the Great Bustard outside protected areas [1.1.1]

1.2.1 Maintenance of Great Bustard habitat

In areas where traditional land use forms still exist or are restorable, the Range States concerned should develop policies and legislation, including the provision of appropriate incentives, to maintain "pseudo-steppe" and "puszta" habitats. Within the European Union and the EU Accession Countries, Environmentally Sensitive Areas (ESAs) and zonal programmes should be used to encourage the conservation of Great Bustard habitat.

1.2.2 Promotion of set-aside schemes and extensification programmes [2.1.2]

In extensively used farmland areas, agriculture policies and legislation should provide for the establishment of set-aside schemes, extensification and special protection measures for the Great Bustard's breeding areas.

1.2.3 Preservation of traditional agricultural methods [2.1.1]

Signatories should maintain and promote by appropriate measures land uses which are favourable to the Great Bustard, such as rotation of grazing plots, the alternation between cultivation (cereals and legumes) and fallows. The timing of agricultural practices should be adapted to the life cycle of the Great Bustard.

1.2.4 Availability and quality of the habitat in the winter quarters [2.2.1]

Cultivation of rape and alfalfa should be maintained and promoted, through appropriate incentives, in areas preferred by Great Bustards as wintering areas.

1.3 Prevention of fragmentation or isolation of the Great Bustard's habitat [1.1.2, 2.2.2]

1.3.1 Afforestation [1.1.2]

Afforestation projects should be subject to an assessment of their effects on the Great Bustard's habitats taking into account the damage to the Great Bustard which may be caused through the fragmentation of extensive farming habitats. Afforestation should be prevented in Great Bustard areas.

1.3.2 Other activities resulting in habitat fragmentation [2.2.2]

The construction of new roads or highways and railways, the planting of shelter belts and irrigation should be avoided as far as possible in Great Bustard areas. All these and other infrastructure measures should be subject to environmental impact assessments which should consider viable alternatives and take into account the special sensitivity of the Great Bustard to disturbance and habitat encroachment. Fences should either be avoided or constructed in a way that permits the free movement of chicks.

2. Prevention of hunting, disturbance and other threats

The Great Bustards should be protected from hunting, any disturbance and other threats. [1.1.6]

2.1 Hunting [2.14, 2.1.5]

Any hunting should be prohibited in areas where and at times when Great Bustards are expected to occur, where this is considered necessary for the conservation of the bustards. Any hunting restrictions officially imposed should be strictly enforced.

2.2 Prevention of disturbance

Any disturbance of Great Bustards should generally be kept low. Necessary interventions into areas where Great Bustards occur should be the least disturbing for the birds.

Disturbance should be prevented at the breeding and display sites of the Great Bustard. Appropriate means to restrict or control access to breeding sites should be developed and their use encouraged.

Immediate action should be taken to manage those breeding sites where females regularly fail to raise their young as a result of agricultural activities or other disturbances. In areas of high Great Bustard density, temporary protection schemes should be put in place and enforced to ensure appropriate breeding conditions.

2.3 Other threats to the Great Bustard

2.3.1 Prevention of predation [2.1.7]

Foxes and feral dogs should be controlled in areas where Great Bustards occur regularly.

2.3.2 Adoption of measures for power lines [2.2.3]

Existing lines which cross Great Bustard areas should be buried or marked prominently. New lines should not be built across Great Bustard areas.

2.3.3 Compensatory measures

Any activities which will create new loss or degradation of Great Bustard habitat or longer term disturbance of the species should be compensated by appropriate measures.

3. Possession and trade

The collection of eggs or chicks, the possession of and trade in the birds and their eggs should be strictly prohibited and the restrictions controlled. Exemptions should be allowed only in the case of Section 4.1 below.

4. Recovery measures

4.1 Captive breeding in emergency situations [2.1.6]

If it is not possible to guarantee the successful breeding of Great Bustards at a particular site, the possibility of taking the eggs into captivity for artificial incubation should be carefully evaluated. Dummy eggs can be left in the nest instead and replaced by the real ones shortly before hatching. The taking of eggs for artificial incubation and rearing young animals in captivity for release should be taken into consideration only when it is not possible to guarantee breeding in the wild. Captive breeding and release into the wild should be undertaken only after thorough evaluation with the support of well equipped facilities and be carried out only by well trained professionals following IUCN criteria for re-introductions.

4.2 Reintroduction

Reintroduction actions should be undertaken only at those sites where feasibility studies (following the IUCN criteria for re-introductions) have been carried out with success.

4.3 Monitoring of the success of release programmes [3.1.4]

The survival of chicks bred in captivity and of chicks hatched from artificially bred clutches should be closely monitored, as well as the survival and breeding performance of adults released into the wild. Release programmes should be permanently reassessed and discontinued if birds are failing to survive under natural conditions.

5. Cross-border conservation measures

Signatories should harmonise their legal instruments in order more efficiently to conserve and manage Great Bustards. [1.1.5]

Great Bustard populations which are shared by two or more countries should be the subject of bi- or multilateral programmes to ensure that there is appropriate co-ordination of national surveys, research, monitoring and conservation activities. [3.1.5]

6. Monitoring and research

6.1 Monitoring of population parameters and of the effects of management measures [3.1]

6.1.1 Monitoring of population size and population trends [3.1.2]

Efforts to monitor the basic parameters of all Great Bustard populations, such as size and trends, by applying methods which lead to comparable results, should be made at all breeding and wintering sites.

6.1.2 Monitoring of the effects of habitat management [3.1.3]

Studies should be carried out on the effects of habitat protection measures, implementation of agro-environmental regulations, etc. These studies should preferably be done at sites where the population has been well monitored for a number of years.

6.2 Promotion of research which is of direct application to the conservation of the Great Bustard [3.2]

6.2.1 Comparative ecological studies [3.2.1]

A comparative analysis of existing data on population dynamics, habitat requirements, effects of habitat changes and causes of decline between the populations in different Range States should be conducted in order to redefine conservation strategies in the future.

6.2.2 Promotion of studies on mortality factors [3.2.2]

All individuals found dead should be examined for the causes of mortality. This, together with field studies and monitoring of marked individuals, should help to identify the direct or indirect impact of land use on Great Bustard mortality.

6.2.3 Investigation of factors limiting breeding success [3.2.3]

The ecology of core Great Bustard populations in extensive agro-pasture systems should be studied, giving priority to the analysis of those factors which may have influence on breeding success. These should include the use of habitat and space, home range and dispersal patterns.

6.2.4 Studies on migration [3.2.4]

Studies should be made better to identify the migration routes and resting habitats of the Great Bustard and especially of key sites along such routes and in wintering areas. Ringing and studies involving satellite telemetry should be planned and implemented for those purposes.

7. Training of staff working in conservation bodies [4.4]

Personnel working regularly in Great Bustard areas (agronomists, biologists, wardens, etc.) should receive specific training on Great Bustard matters, especially their biological characteristics and living requirements, legal matters, census techniques and management practices. Also, communication and cooperation between the various sectors involved (e.g. farmer, hunter and nature conservation organisations, tourist companies and state authorities) should be intensified.

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

8.1 The Great Bustard as a flagship [4.1]

The Great Bustard should be used as a flagship for the protection and sustainable use of the entire biodiversity of steppes, dry grasslands and suitable agricultural landscapes across Europe.

8.2 Increasing the awareness of farmers and shepherds [4.2, 2.1.4]

8.2.1 Farmers

Farmers and landowners, in general, should be targeted by special campaigns designed to raise awareness of the international importance of the Great Bustard. They should also be provided with information on the biological characteristics of the species and the timing of breeding in order to prevent damage by farming activity.

Farmers should be made aware of the presence of Great Bustards in their fields and of the risk of destroying clutches. They should be encouraged to adapt their calendar of farming as much as possible to the breeding cycle of the Great Bustard and to avoid disturbance of the birds during the breeding season.

8.2.2 Shepherds

Shepherds should be informed of the problem of predation of Great Bustards by dogs and encouraged to train their dogs not to chase or kill Great Bustards.

8.3 Improving public awareness [4.3]

The public should be informed about the problems of the Great Bustard, the need for its protection and the conservation measures being undertaken.

The media as well as the political decision makers and local and regional authorities should be addressed regularly to raise the profile of the Great Bustard as an outstanding feature of European plains and as an invaluable asset to the European natural heritage.

9. Economic measures

State authorities, political decision makers, economic sectors and associations of land users (e.g. farmers, shepherds, hunters) should cooperate with the aim of developing economic activities which are not harmful to the Great Bustard and the biodiversity on which they depend in order to increase acceptance by local communities of Great Bustard conservation measures and to compensate for any damage land users may experience as a result of such conservation measures.