

REPORTING FORMAT FOR THE GREAT BUSTARD MOU AND ACTION PLAN

This reporting format is designed to monitor the implementation of the Action Plan associated with the Memorandum of Understanding on the Conservation and Management of the Middle-European Population of the Great Bustard (*Otis tarda*). Reporting on the Action Plan's implementation will support exchange of information throughout the range and assist the identification of necessary future actions by the Signatory States. The questions presented here go beyond the scope of information already requested from CMS Contracting Parties for national reports to the CMS Conference of the Parties.

GENERAL INFORMATION

<p>Agency or institution responsible for the preparation of this report: Department for Nature Conservation, Ministry of Agriculture</p>
<p>List any other agencies, institutions, or NGOs that have provided input: Kiskunság National Park Directorate (KNPD) – national co-ordinator organization of the species</p> <p>Fertő-Hanság National Park Directorate (FHNPD) Duna-Ipoly National Park Directorate (DINPD) Bükk National Park Directorate (BNPD) Körös-Maros National Park Directorate (KMNPD) Hortobágy National Park Directorate (HNPD)</p>
<p>Reports submitted to date: National Report of 2004, 2008 and of March 2013</p>
<p>Period covered by this report 01 April 2013 – 31 December 2017</p>
<p>Memorandum in effect in country since: [Date: 06/06/2001]</p>
<p>Designated Focal Point (and full contact details): Name: Zoltán Czirák Title/Function: Department: Department for Nature Conservation Organization: Ministry of Agriculture Full postal address: 1055 Budapest, Kossuth tér 11. Fax: E-mail: zoltan.czirak@fm.gov.hu</p>

PART I. GENERAL

This questionnaire follows the structure and numbering of the Action Plan annexed to the Memorandum of Understanding to make it easier to read the relevant action points before the form is filled in. In some cases, however, sub-actions were not listed separately for the sake of simplicity and to avoid duplications. They should however be taken into consideration when answering the questions.

0. National work programme

Is there a national work programme or action plan already in place in your country for the Great Bustard pursuant to Paragraph 4(g) of the Memorandum of Understanding?

Yes No

1. Habitat protection

1.1. **Designation of protected areas.**

To what extent are the display, breeding, stop-over and wintering sites covered by protected areas?

Designation of protected areas under national law	Classification of Special Protection Areas according to the requirements of Art.4.1 of the EC Birds Directive
<input type="checkbox"/> Fully (>75%) <input checked="" type="checkbox"/> High (50-75%) <input type="checkbox"/> Medium (10-49%) <input type="checkbox"/> Low (<10%) <input type="checkbox"/> None <input type="checkbox"/> Not applicable ¹	<input checked="" type="checkbox"/> High (>75%) <input type="checkbox"/> High (50-75%) <input type="checkbox"/> Medium (10-49%) <input type="checkbox"/> Low (<10%) <input type="checkbox"/> None <input type="checkbox"/> Not applicable ¹

What measures were taken to ensure the adequate protection of the species and its habitat at these sites?

In general, all main sites at the current distribution area of the GB are **under protection**, either according to the **Hungarian law, or being part of the Natura 2000 network** (or both).

In Hungary a total of ca 220 000 ha area is nominated as Great Bustard habitats (total distribution area in the country) from which ca 180 000 ha is protected (nationally and/or as Natura 2000 site). From this, ca 85 000 ha land is protected by national law, ca 175 000 ha land is designated as SPA and ca 95 000 ha as SAC site (latter two giving altogether ca 180 000 ha of Natura 2000 sites for the GB in total).

- **At this point no major changes have been detected during the reporting period (2013-2017).**

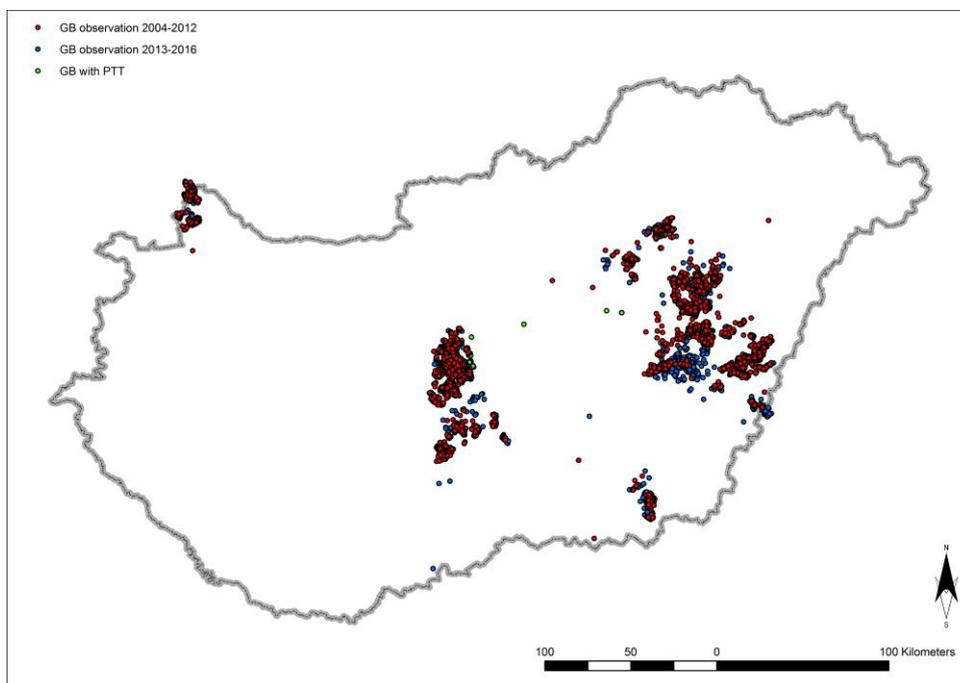
At most nationally protected sites, the National Park Directorates (NPD) own a bigger proportion of the Great Bustard habitats, and most of the NPD-s manage this land on their own, however, there are some gaps, especially those sites that are not nationally protected (but part of the Natura 2000 network) like in the FHNP in Western Hungary, or the DINPD at the Upper Kiskunság region. The two main sub-populations (Kiskunság and Dévaványa) are located on lands owned by the state and assigned for management (either direct, or indirect, through contracts) to the NPD-s, and most of this area is nationally protected.

¹ The species occurs only irregularly, no regular stop-over or wintering sites identified.

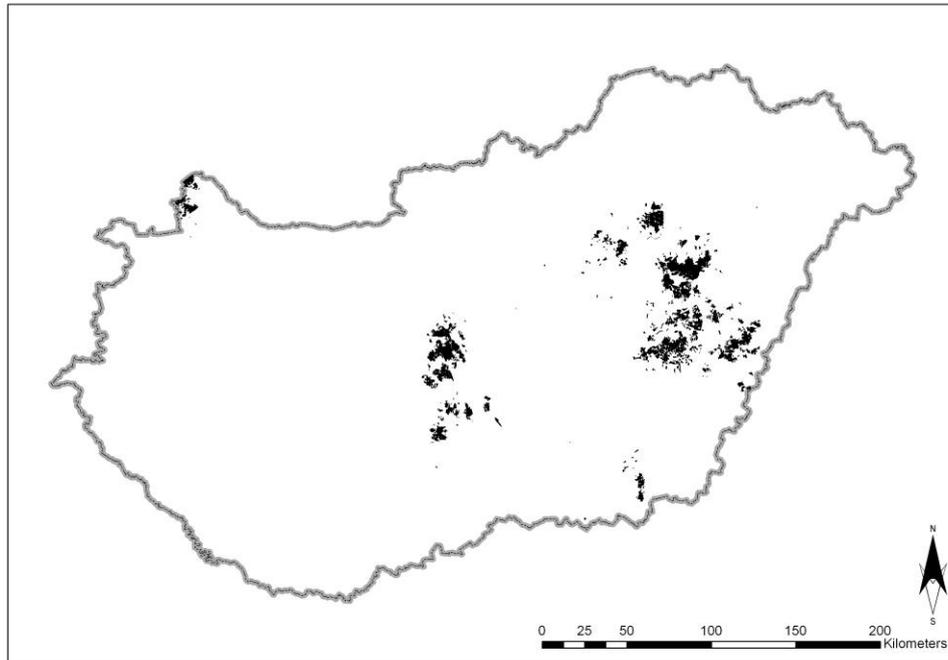
Using the Hungarian Land Parcel Identification System (MEPAR) and the Great Bustard monitoring database the agricultural area used by Great Bustards can be quantified even more precisely, and objectively. The area used by Great Bustards between 2004 and 2012 was covering a total of 137 344,5 hectares. During the reporting period (20013-2017) a total of 122 541, 32 hectares were used and documented by Great Bustards.

A single female (marked individually with satellite transmitter) between 2006 and 2016 used a total of 12 155,24 hectares of agricultural land; mostly in the Kiskunság area, but partly in Eastern Hungary as well.

With the overlaps a total of 182 266,87 hectares (180 789,3 hectares without the bird with PTT) of Great Bustard habitat is covered with GIS monitoring data. The GIS database shows a significant improvement, a total of 43 444,8 hectares during the reporting period. The growth of documented GB habitats shows the improvement of GIS database (more and more observation recorded) and the real growth and radiation of the population (especially on the marginal areas of the sub-populations) as well.



GB distribution in Hungary between 2004 and 2016.



Agricultural parcels used by GB in Hungary

During the reporting period a total of ca 78 000 hectares of Great Bustard habitats (with a mixture of grassland and arable fields) were **owned by the state** and assigned for management to the Hungarian National Park Directorate. Most of these lands are contracted out to farmers with the favourable management requirements of Great Bustard protection, but a significant proportions is directly managed by the National Park Directorates themselves.

- **At this point no major changes have been detected during the reporting period (2013-2017).**

As shown, bigger proportions of the lands owned by the state and managed by the NPD-s are **leased to farmers**. The contracts at all NPD-s contain the **prescriptions**, which support the protection of GB, however these restrictions show some minor differences between the NPD-s. The most typical use of grassland habitat is grazing at the displaying grounds, and mowing at the breeding sites. The timing of first mowing varies between 15th June and 15th July as the earliest starting dates. The most common crops on cultivated lands are the alfalfa, the winter cereals (wheat, triticale, barley), the oil-seed rape, and a relatively big percentage of the arable lands are managed as 1-3 year old fallows or set-aside fields. The use of chemicals is either completely prohibited or is only possible with strict restrictions and under control.

All **managements** (including private farming as well) on lands within the protected areas are under the control of the NPDs, so the activities permitted include the requirements of GB protection. The most typical measures relating to GB protection are the regulation of grazing, mowing (both grass and alfalfa) and the use of chemicals.

The **Natura 2000 network** in itself helps to maintain the current habitats in optimal conditions and prevent further habitat losses due to unwanted developments, like road buildings, mining (gravel pits), new electric power-lines, etc. Also the loss of quantity of grasslands and their degradation can be stopped since the introduction of the related law (269/2007.), which regulates the use of land on Natura 2000 grasslands.

The introduction of **the agri-environmental scheme** at all Great Bustard sites from 1st September 2009 was a big opportunity to offer the possibility for land-users (farmers) to harmonize their farming activity and the ecological needs of GB, outside of the protected areas as well (see chapter 1.2).

Where are the remaining gaps?

The **growth of the proportion of lands owned by the state and managed by the NPD-s** within and outside the protected area (especially on those Natura 2000 sites, which are buffering the nationally protected areas) would be in general desirable for GB protection, as only the well-constructed contracts between the NPD-s and the land users can guarantee the long-term sustainability of the GB populations all over Hungary.

The **management on Natura 2000 sites** is regulated mostly on grasslands, however in this case as well, we only find partial measures of conservation; the lack of regulation on stipulating the timing of the mowing on Natura 2000 grassland sites is a missing provision / tool. As the main distribution area of the GB in Hungary is covered by the Natura 2000 network, at the moment the most important remaining gap for the everyday conservation is the **lack of a conservation-oriented regulation on agricultural activities on arable lands** within Natura 2000 sites.

In some parts of Hungary (like Eastern Hungary) the lack of grazing animals results unwanted succession of grasslands, on the other hand on some parts the high grazing unit of grazing animals causes the overgrazing degradation of GB habitats causes the degradation of GB habitats and results in an unfavourable crop-rotation, focusing on intensively grown crops like sunflower, maize, soya bean and sugar beet.

- **At these points no major changes have been detected during the reporting period.**

A general problem on almost all GB sites is the high level of **predation** and on some parts the lack of staff specialized in GB conservation.

- **Some development can be detected on the practice of predator-management, especially Central and Eastern Hungary (see later at predator management and GB conservation projects.)**

A recent gap on conservation measures outside of protected areas is the under-financing of the agro environmental program regarding to Great Bustard schemes (ESA program), as prior conservation measures. See chapter 1.2.

Are currently unoccupied, but potential breeding habitats identified in your country?

Yes No Not applicable²

If yes, please explain how these areas are protected or managed to enable the re-establishment of Great Bustard.

There are several smaller sites within the range of the GB and also in the surrounding areas. As it happened in the near past several times, if the regular GB monitoring gives the evidence of appearance on “new” sites used as breeding, wintering or moulting site, a systematic and more intensive monitoring is carried out to clarify the importance of the particular site.

Once a site is nominated as breeding site the following measures are taken:

1. Informing the land-users and trying to find the best management for the GB in the given situation and also make planning for the future to maintain and develop the conditions of the site.
2. Informing the relevant hunting association and all other relevant stakeholders to avoid further disturbance, which is supported by the law, as the GB is a strictly protected species in Hungary.
3. If it is needed, introducing restrictive regulations by the relevant authorities, as it did happen in the past.
4. There is a regular possibility for reshaping the extension of the agro-environmental scheme every 5 years, so the economic background of restrictions can be created.
5. Well documented monitoring and mapping of the site focusing on GB, but extended to other relevant bird species with national and EU level importance.

- **At this point no major changes have been detected during the reporting period.**

² Countries *outside* of the historic (beginning of 20th Century) breeding range of the species.

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

Please describe what measures have been taken to maintain land-use practices beneficial for Great Bustard outside of protected areas (e.g., set-aside and extensification schemes, cultivation of alfalfa and oilseed rape for winter, maintenance of rotational grazing, etc.).

Agro environmental program (AKG):

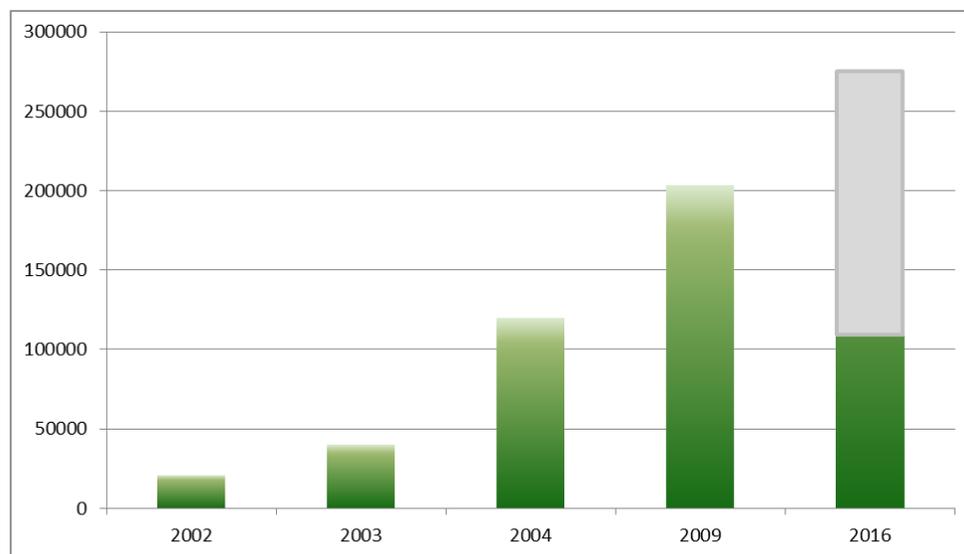
The Great Bustard schemes can be found within the Environmentally Sensitive Area program (MTÉT), as the nature conservation part of the agro-environmental program.

On the Hungarian GB habitats the following periods were covered with agro environmental schemes specialized on GB conservation measures:

2002-2003	National Agro Environmental Program (NAKP)
01. May 2004.	Hungary joins to the European Union
2004-2009	National Rural Development Plan (NVT)
2009-2014	New Hungarian Rural Development Program (ÚMVP)
2015	No GB schemes implemented
2016-2020	Rural Development Program (VP)

The regulation of the GB schemes within the period 2016-2020 considerably fulfils the requirements of the Great Bustard, and also covers the distribution area of the species. In spite of the relatively strict regulation and several innovation of the program, the number of applicants and the size of the required area were higher, than ever before.

First time ever since 2002 NOT all ESA applicants were supported, approximately two third of the required areas were rejected due to financial reasons:



Extension of areas required within the ESA program-periods and the ratio of support.

To demonstrate the effect of this (missing) measure in the Hortobágy region the extension of supported GB schemes were reduced with 37,14% in total (61,55% on arable lands and 28,63% on grasslands). The numbers shows well, that significant proportion of arable lands are effected, from which the parcels outside the national parks are in the most unfavourable condition due to the lack of suitable legislation as it is show in chapter 1.1.

Privatization of key GB habitats on Natura 2000 sites:

Within the framework of the program "Land to farmers" key formerly state-owned GB habitats have been sold to private farmers. The law, 2016. CVI. about the program of "Földet a gazdáknak!" resulted significant changes in ownership within Natura 2000 sites, especially in Kiskunság and Mosoni Plain.

The extension of sold parcels in the Moson Plain covers ca 700-800 hectares, just like in the Kiskunság where an additional ca 700-800 hectares of formerly state owned land have been sold with uncertain conditions. Some parcels are traditional breeding sites, with high quality GIS database about the importance of GB and other species of designation.

Thousands hectares of additional GB habitats are effected with leasing as well, as prior process of privatization. The regulation of habitat management (crop rotation, management techniques, etc.) in these cases is also not clear, however the NPDs with the cooperation with the Ministry of Agriculture are forcing to have better influence on management of (formerly) state-owned lands within Natura 2000 sites.

The process started in 2013, and is still on-going, however the recent trend is giving right of property management of the parcels unable to sell to the NPDs. The last measures of course are mitigating the unfavourable situation, but the sale of key parcels is having unpredictable effects on GB populations in long term.

To what extent do these measures, combined with site protection, cover the national population?

Fully (>75%)

Most (50-75%)

Some (10-49%)

Little (<10%)

Not at all

Not applicable¹

Are recently (over the last 20 years) abandoned Great Bustard breeding habitats mapped in your country?

Yes

No

Not applicable¹

What habitat management measures have been taken to encourage the return of Great Bustard?

As the currently known sites used by the GB are either nationally protected and / or part of the Natura 2000 network, the maintenance of the Hungarian population of the species can be guaranteed from the aspect of habitat management. The question of re-colonization and connection between isolated smaller sub-populations needs more attention and planning to ensure the growth of the entire population.

- **At this point no major changes have been detected during the reporting period.**

If there were any measures taken, please provide information on their impact.

Within the LIFE Great Bustard project a special action ("Habitat suitability surveys based on Spanish best practice transfer and satellite tracking in Hungary") is under execution to clarify the importance of particular sites.

1.3. Measures taken to avoid fragmentation of Great Bustard habitats.

Are new projects potentially causing fragmentation of the species' habitat (such as construction of highways and railways, irrigation, planting of shelterbelts, afforestation, power lines, etc.) subject to environmental impact assessment in your country? **Yes** No Not applicable¹

Is there any aspect of the existing legislation on impact assessment that limits its effective application to prevent fragmentation of Great Bustard habitats? Yes No Not applicable¹

If yes, please provide details.

*The **main threats**, which can cause the fragmentation or the reduction of the GB habitats in Hungary are the followings:*

- a. *Opening new gravel pits or creating lakes*
- b. *Construction of wind farms (including in neighbouring countries, with potential impact on trans-boundary populations)*
- c. *Establishing new power lines (often as a co-investment of wind farms)*
- d. *Road (and railway) construction*
- e. *Irrigation (often followed by the cultivation of unfavourable crops)*
- f. *Afforestation*
- g. *Economic developments*
- h. *Oil- and gas pumps and pipelines*

According to the Hungarian (and European) legislation, it is not allowed to destroy the habitats of the protected species, like the GB and it is not allowed to make any kind of activity (especially the ones which cause irreversible changes on the habitats), that can make negative effect on their population. In practice all these investments need the permission of the Nature Conservation Authority, which contacts the local NPD about the natural values and the possible effects on the site of the proposed project. Besides, several activities (detailed in our previous NR) are subject to EIA – with the decision / authorization given to the environmental authority. The main task of the NPD-s on this topic is to collect data of observations about the protected values, create and maintain a database on the biotical values. The Geographical Information System (TIR) contains all this information, which can be very useful for the authorities to make their decision in advance.

However, projects still happen to be implemented on GB sites (see below). Sometimes the gap in these procedures is the fact, that all decisions can be based only on the present distribution area of the GB, and not the potential ones in the future.

Have there been any such projects implemented in any Great Bustard habitat in your country since signing this Memorandum of Understanding? Yes No Not applicable¹

Please, give details and describe the outcome of impact monitoring if available.

1. *Irrigation and sometimes illegal water pumps make negative effect on almost all GB sites in Hungary resulting intensification at agrarian production. The increasing disturbance and the growing of non-preferable crops are the main problem, but sometimes their indirect effect on underground water, and chemical use as well. Their effect has been increased in the last years, as since 2016 the development of irrigation (like development of watering infrastructure) is supported (<https://www.palyazat.gov.hu/vp2-414-16-a-mezgazdasgi-vzgzazdlkods-gazat-fejlesztse#>) without territorial restrictions for Natura 2000 sites. Irrigation must be treated as potential habitat loss and fragmentation of GB as the results of several studies show that birds are avoiding these intensively managed areas.*
2. *The economic pressure on opening new gravel pits, establishment of new power lines continuously high, but no realization happened on GB habitats during the reporting period.*
3. *The development and extension of roads and railways are also a general problem nationwide. Recent worry due to its unknown volume and effects is the expansion of the railway between Budapest (Hungary) and Beograd (Serbia) as the already existing track is crossing important GB habitats in the Kiskunság region. Faster trains much more frequently passing at GB habitats resulted unfavourable conditions on several places within the range*

earlier, so special compensation measures must be taken to reduce negative affect in case of implementation, like ones happened at Havelländisches Luch in Germany.

- a. The railway line between Hegyeshalom and Szombathely has been renewed in 2015. On the section crossing GB habitats (Mosonszolnok-Csorna) bird protection measures were prescribed, however later on were not implemented. The effects are unpredictable, therefor the section is in the focus of monitoring.

Reduction of fragmentation good progress was documented as most dangerous medium-voltage power-line sections are under cabling with the cooperation of the energy supplier companies, the national park directorates and the Ministry of Agriculture. (see chapter 2.3.2.)

2. Prevention of hunting, disturbance and other threats

2.1. Hunting.

Is Great Bustard afforded strict legal protection in your country? Yes No

Please, give details of any hunting restrictions imposed for the benefit of Great Bustard including those on timing of hunting and game management activities.

The hunting restrictions are very variable in different parts of the country, however, the principles are the same. The main issues regarding hunting are roe deer hunting during displaying (disturbance) and at the breeding (endangering) sites, but several other hunting activities have an effect on GB. The HNPD, the KMNPD, the KNPD and the BNPD run the hunting activity on their own at the main part of the protected areas (mostly displaying grounds), where the GB is present, and from 2011 so does the KNPD as well.

The 20-year hunting plan to be approved in late 2017 for each hunting district contains prescriptions from the nature conservation aspects as well, which are given by the NPD-s being in charge at certain areas. These restrictions focus on:

1. Predator control (supporting only the effective methods)
2. Hunting of roe deer in spring (restrictions on location and timing)
3. Feeding of game and driven hunting of brown hare and pheasant (avoid disturbance of wintering GB flocks)
4. Hunting and game monitoring at night
5. Traffic on GB habitats

At all sites a good cooperation exists between the NPD-s and the hunting societies, with regular meetings to find the balance between the GB protection and the economic needs of the societies.

Detailed regulations on GB habitats:

1. All hunting- and wildlife management activities must be agreed with the NPDs concerned ahead on GB breeding and displaying sites between 15. March and 01. July.
2. On GB habitats the population of the following game species must be controlled systematically: European badger, red fox, golden jackal, hooded crow, magpie, and stray animals.
3. Instructions for systematic predator management:
 - 3.1. Between 15. March and 01. July territory based control (built on trapping methods) must be implemented
 - 3.2. On open habitats (grass- and arable lands) control must be undertaken until 15. April, afterwards only along linear facilities (roads, channels), the surroundings of reedbeds, woods, etc., avoiding open parts, where GBs breed.
4. Permanent population of wild boar can not be hold on GB habitats
5. Night hunting and game estimation must be agreed with the NPDs concerned ahead on GB habitats.

6. During hunting- and wildlife management activities (including traffic and driven hunts) in wintertime, the resting and feeding places of GBs must be avoided, especially in foggy conditions.
- 6.1. Location of driven hunts must be agreed with the NPDs concerned ahead on GB habitats.

Please, indicate to what extent these measures ensure the protection of the national Great Bustard population? The national population is covered by restrictions on hunting to prevent hunting-related disturbance:

X Fully (>75%)

- Most (50-75%)
- Some (10-49%)
- Little (<10%)
- Not at all
- Not applicable¹

2.2. Prevention of disturbance.

What measures have been taken to prevent disturbance of Great Bustard in your country, including both breeding birds and single individuals or small flocks on migration?

Significant part of the GB sites are under national protection, where **all activities that might have a negative effect on GB-s, including any kind of disturbance**, jeopardise of the success of their breeding or other vital functions of individuals, and of course, damaging their habitats, sites of occurrence, shelters, feeding, nesting, resting or roosting sites are **prohibited** by law and enforced by the relevant nature conservation authority.

There is **no free access** to the main part of the protected areas, so human disturbance is limited. The border of the “no entry” zones are well marked with posts and gates, and also well communicated to the local stakeholders. As farming and hunting is also restricted, the accidental disturbance (walking or driving in) is on a very low level.

Small **aeroplanes** might cause disturbance on displaying or resting birds at some places (like Kiskunság), however flying is under regulation as well. There is a very good cooperation with the nearby airports to filter out the non-cooperative pilots.

Technical sports (like kites, or gliders) can cause disturbance in the breeding and wintering season, especially outside of the nationally protected areas. According to the law, disturbing a protected species is not allowed.

Informing the general public about its importance is an everyday task of the local GB conservation officers and the ranger service of the NPD-s.

The importance of mushroom and chamomile collection nowadays is lower.

Disturbance caused by eagles: Natural disturbance raised up within the reporting period is the disturbance caused by eagle species on GB habitats. The breeding and wintering density of eagle species (white-tailed eagle – WTE, imperial eagle – IE, golden eagle – GE) has been grown during the last decades due to successful conservation projects, and also the conditions on GB habitats are more and more favourable to eagle species (e.g. the prey density is higher due to successful predator management).

The disturbance is probably more significant on places where GB density is higher and the extension of alternative suitable habitats is limited, like in Western-Hungary.

Please, indicate to what extent these measures have ensured the protection of the national population. The national population is covered by restrictions on other activities causing disturbance:

- Fully (>75%)
- X Most (50-75%)**
- Some (10-49%)
- Little (<10%)
- Not at all
- Not applicable¹

2.3. Other threats

2.3.1. Prevention of predation.

What is the significance of predation to Great Bustard in your country?

The real effect of predators to the breeding success is unknown (not quantified), but **probably very high**. Some indirect results show that the optimal habitat management and the predator control only together can ensure the optimal conditions to the GB populations in Hungary.

For healthy, **fully grown individuals** there is no natural predator, but on displaying ground the exhausted adult males are often taken by foxes, but in these cases the cause of death is not necessarily predation.

The predation on **eggs and small chicks** can be measured only on nests found in emergency situations, however this does not reflect on natural conditions, since if the nest is once disturbed, very often the environment of the nest is changed so drastically due to the agricultural activity (by flushing the female and creating a buffer zone) that it attracts predators that can ultimately cause significant losses via '**secondary predation**'.

In the Hortobágy and Bihar Plain systematic monitoring was carried out, that shows that 30–40% of eggs are predated before hatching and about 80-100% of nests found in emergency situations were unsuccessful due to predation. This study reveals to the conditions in other sites in Hungary as well.

The **intensive growth of** the Hungarian **wild boar** population causes more and more problems to ground breeding species by destroying nests and eating eggs or even smaller chicks.

The population growth of eagle species has negative effect on GB populations all over Hungary, however the direct predation is probably not significant. Some cases have been detected eagles attacking wounded, flightless adult GBs, and also juveniles were predated by eagles. Eagles have negative effect on the release program at Dévaványa as well.

In spite of these the main conflict between eagles and bustards is the disturbance caused on GB habitats; which is effecting the distribution of breeding females, but also the displaying and wintering flocks as well.(see chapter 2.2 as well)

What are the main predator species?

- **Mammals:** red fox (*Vulpes vulpes*), wild boar (*Sus scrofa*), stray dog (*Canis lupus familiaris*) and possibly goldan jackal (*Canis aureus*).
- **Birds:** hooded crow (*Corvus corone cornix*), marsh harrier (*Circus aeruginosus*), raven (*Corvus corax*) and eagle species; white-tailed eagle (*Haliaeetus albicilla*), eastern imperial eagle (*Aquila heliaca*), golden eagle (*Aquila chrysaetos*).

What measures have been taken to control predators in areas where Great Bustard occurs regularly?

- *Red fox*: trapping at the dens, using artificial burrows, shooting on feeders.
- *Wild boar*: suitable habitat management like grazing on grasslands at deeper elevations (“swamps”), reducing spread of bushes (especially the invasive species), and adjusting crop rotation and shooting on driven hunts. Prevention of permanent population to be established on “clear” sites, intensive hunting on places where present.
- *Stray dog*: shooting.
- *Golden jackal*: prevention of spreading on GB habitats.
- *Hooded crow*: trapping at nests, catching on feeders, shooting.
- *Marsh harrier*: not relevant, as it is protected species in Hungary.
- *Raven*: spreading throughout in Hungary, not relevant, as it is protected species in Hungary
- *Eagles*: not relevant, as it is protected species in Hungary, see at chapter 2.2

How effective were these measures?

Effective (predation reduced by more than 50%)

Partially effective (predation reduced by 10–49%)

Less effective (predation reduced by less than 10%)

Not applicable¹

Efficiency depends on the input of personnel, time and energy. There are well developed methods to control all predator species (see above), but as the activity of the hunting societies are different just like the protection status of the hunting areas, the predation level varies throughout the range of GB in Hungary.

2.3.2. Adoption of measures for power lines.

What is the significance of collision with power lines in your country?

Collision is still the main mortality case for adult birds, resulting approx. 80% of known fatalities. In the Kiskunság area in 2017 out of 7 carcasses found 5 were collided with medium voltage power lines.

During the reporting period no underground cabling has been completed, but several sections has been prepared to be done via different sources within the upcoming 2-3 years:

1. LIFE Great Bustard project (ELMŰ): ca 25 kms by 2020. Kiskunság
2. Own sources (NKM Zrt.): ca 35 kms by 2019. Kiskunság
3. Own sources (E.ON Zrt): ca 50 kms by 2020. Moson Plain, Dévaványa Plain, Hortobágy and Bihar Plain.

The collision on high-voltage power lines (HVPL) is still high nationwide, especially on flying transects between sub-populations.

What proactive and corrective measures have been taken to reduce the mortality caused by existing power lines in your country?

The only effective way to reduce mortality on MVPLs is the underground cabling. First all kind of founding have been examined and a cross-border conservation LIFE project has been submitted.

The NKM Zrt (former DÉMÁSZ) has been bought by the Hungarian state, and a large GB conservation project has been prepared and started to implement in the Kiskunság, thanks to the attitude change of the management.

The E.ON Zrt also started to cooperate in GB conservation, a total of 50 kms of MVPLs are planned to be buried within 2 years.

On high voltage power lines the marking is still the only possibility to reduce risk of collision. The MAVIR has marked a 1.5 km HVPL section in Western Hungary, where GB collision was recorded in 2015.

What is the size of the populations affected by these corrective measures?

As the most dangerous sections of MVPLs at all main sub-population will be buried underground, the entire Hungarian population will be effected by these measures.

How effective were these measures?

X Effective (collision with power lines reduced by more than 50%)

Partially effective (collision with power lines reduced by 10–49%)

Ineffective (collision with power lines reduced by less than 10%)

Not applicable¹

Underground cabling results a 100% effective solution. With these measures to chance of collision (and electrocution of other relevant species) declines to zero level, additional GB habitats will be suitable to GBs by eliminating fragmentation, and also has a positive effect on landscape protection.

2.3.3. Compensatory measures.

What is the size (in hectares) of Great Bustard habitat lost or degraded for any reasons since the Memorandum of Understanding entered into effect (1 June 2001)?

There wasn't any significant loss of GB habitat since the MoU entered into effect.

- **At this point no major changes have been detected during the reporting period.**

The **degradation** of habitats is also reversible, the most common type of degradation is overgrowing by different kinds of bushes, like *Eleagnus angustifolia*, or *Crataegus* species, but also the lack of grazing or mowing might cause temporary degradation. The size of degraded grassland area fluctuates year by year, but as it was mentioned, the extension in general is not significant.

The spread of irrigation system might cause significant loss of suitable GB habitats due to intensification, increase of disturbance and changes in crop rotation. (see chapter 1.3)

On Moson Plain right at the border (Austrian part) a windfarm has been established (Windpark Andau-Halbturm) with 93 turbines. The investor has buried some 11 kms of power lines underground in Austria, and has created some 11 hectares of set-aside field in Hungary as compensation.

What is the size of the populations affected?

Not relevant.

The compensation mentioned above is affecting only the Western Hungarian GBs, which counts ca 50-90 individuals in Hungary. The total West Pannonian GB population counts ca 500 birds; see National Report of Austria.

Were these habitat losses compensated? Yes Partially No **X Not applicable¹**

If yes, please explain how.

Were these measures effective? Yes Partially No **Not applicable**¹

Please, give details on the effectiveness or explain why they were not effective if that is the case.

3. **Possession and trade**

Is collection of Great Bustard eggs or chicks, the possession of and trade in the birds and their eggs prohibited in your country? **Yes** No

How are these restrictions enforced? What are the remaining shortcomings, if any?
Not relevant.

The Great Bustard is a **strictly protected species** in Hungary. According to the law Act no. LIII of 1996 on Nature Conservation in Hungary, the collection, capture, killing, possession, exchange or sale and purchase of any individual is prohibited. Authorization shall only be granted out of nature conservation or other public interest.

Please indicate if any exemption is granted or not all of these activities are prohibited.
No exemption is granted.

4. **Recovery measures**

4.1. **Captive breeding* in emergency situations.**

Is captive breeding playing any role in Great Bustard conservation in your country? **Yes** No

Please, describe the measures, staff and facilities involved and how these operations comply with the IUCN criteria on reintroductions.

The **Great Bustard Rescue Centre at Dévaványa** was established in 1978. Nowadays a well-constructed system is operating with separate buildings, rearing and releasing pens and a very well trained staff. One person is in charge, who is the head of the centre and the number of temporarily applied co-workers may vary during the year.

The main activity is the rearing of eggs rescued from emergency situations, like mowing, harvesting, grazing and spraying. Eggs or chicks are never collected from the safe side, only from emergency situations.

The releasing program is based on a **400 ha releasing pen**, where the almost fully fledged birds are taken with the maintenance of regular feeding and in the first period 24 hour guarding.

The **habitat structure** has been developed according to the ecological needs of the GB and the large size of the pen offers an optimal habitat not just for the artificially reared birds, but for the wild ones as well. This is the key factor of releasing, as the repatriated birds gradually lose the human contact and turn to wild group of birds. By the end of summer or early autumn all young birds join to wild ones and spread around the station. In the reporting period (2013-2016) 98 times were marked birds observed among wild GB-s just after release, which shows a very good success in the first stage (**joining to wild groups**). 36,84 % of the sign birds was seen after the releasing. And we have data about our birds in another GB-s territory in the Trans-Tisza region as well.

* In effect, “captive breeding” should be read as “captive rearing” according to current practices.

4.2. Reintroduction.

Have there been any measures taken to reintroduce the species in your country? Yes No

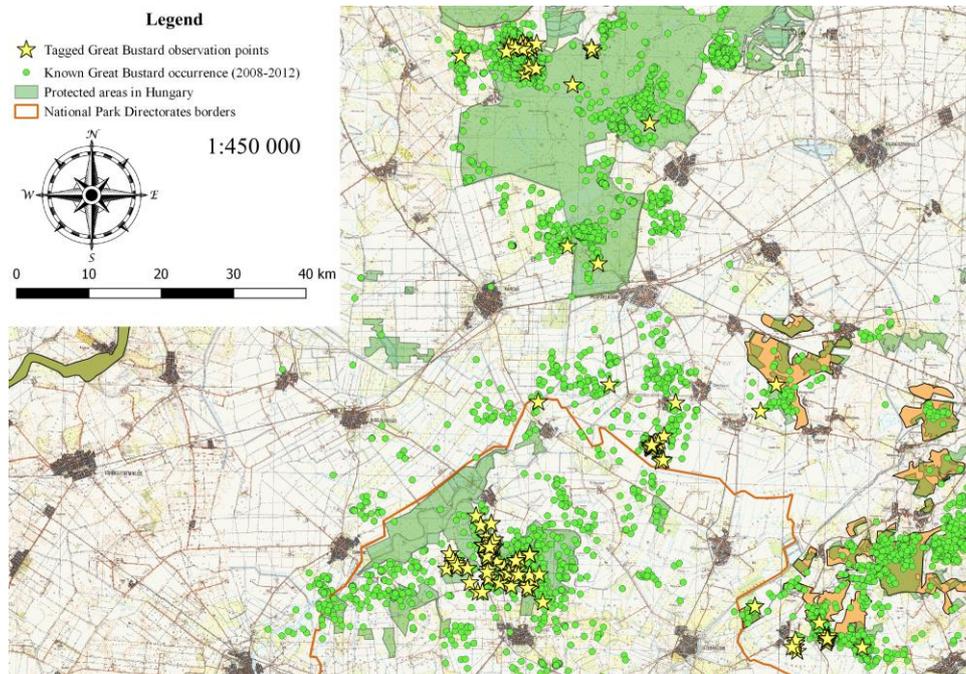
If yes, please describe the progress. If there was any feasibility study carried out, please summarize its conclusions.

4.3. Monitoring of the success of release programmes.

Are captive reared birds released in your country? Yes No

If yes, please summarize the experience with release programmes in your country. What is the survival rate of released birds? What is the breeding performance of released birds?

We have data on the survival rate of released birds at present too. The oldest released bird is 8 years old, but until now we have not had any data about breeding performance. In order to accomplish this, and track the birds in their further lifetime there is a plan to apply radio-transmitters elongate the monitored period after releasing the birds (the re-sighting of colour rings is not very easy), but a long term study would need much better detectable **marking**, like "backpacks".



Post-release dispersal of hand-raised GBs at the Dévaványa region

What is the overall assessment of release programmes based on the survival of released birds one year after release?

- Effective (the survival is about the same as of the wild ones)
- Partially effective (the survival rate is lower than 75% of the wild birds)
- Ineffective (the survival is less than 25% of wild birds)

Not applicable³

³ No release is taking place in the country.

5. Cross-border conservation measure

Has your country undertaken any cross-border conservation measures with neighbouring countries?

Yes No Not applicable⁴

Please, give details of your country's collaboration with neighbouring countries on national surveys, research, monitoring and conservation activities for Great Bustard. Especially, list any measures taken to harmonise legal instruments protecting Great Bustard and its habitats, as well as funding you have provided to Great Bustard for particular conservation actions in other Range States.

Austria: A cross-border conservation LIFE Nature project (LIFE NAT/AT/000834; "Cross-border protection of the Great Bustard in Central Europe") has been submitted in 2016. The project details can be found at www.grosstrappe.at website on the following link:
<http://grosstrappe.at/hu/projektek/life-project-2016-2023.html>

Serbia: Regular cooperation between Serbian and Hungarian Great Bustard experts, synchronous counts are implemented within the framework of the international (Central-European) coordination.

Romania: Regular cooperation between Serbian and Hungarian Great Bustard experts, synchronous counts are implemented within the framework of the international (Central-European) coordination.

⁴ For countries which do not have any transboundary population.

6. **Monitoring and research**

6.1. **Monitoring of population size and population trends.**

Are the breeding, migratory or wintering Great Bustard populations monitored in your country?

Yes No

What proportion of the national population is monitored?

All (>75%)

Most (50-75%)

Some (10-49%)

Little (<10%)

None

Not applicable¹

What is the size and trend in the national population?⁵

Breeding/resident population

1596 individuals (2007.)

Sex ratio is: 1,873

No. of adult males: **555**

No. of females: **1041**

No. immature males: **unknown**

Trend: Declined by ___% over the last 10 years

Stable

Increased by 10% over the last 10 years

Non-breeding population (on passage, wintering) **Not relevant.**

No. of adult males: _____

No. of females: _____

No. immature males: _____

Trend: Declined by ___% over the last 10 years

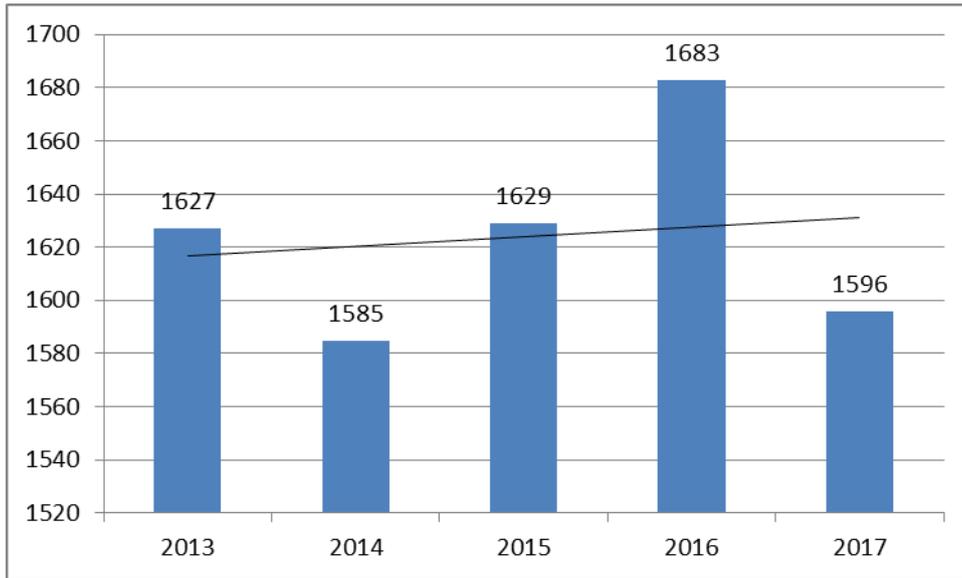
Stable

Increased by ___% over the last 10 years

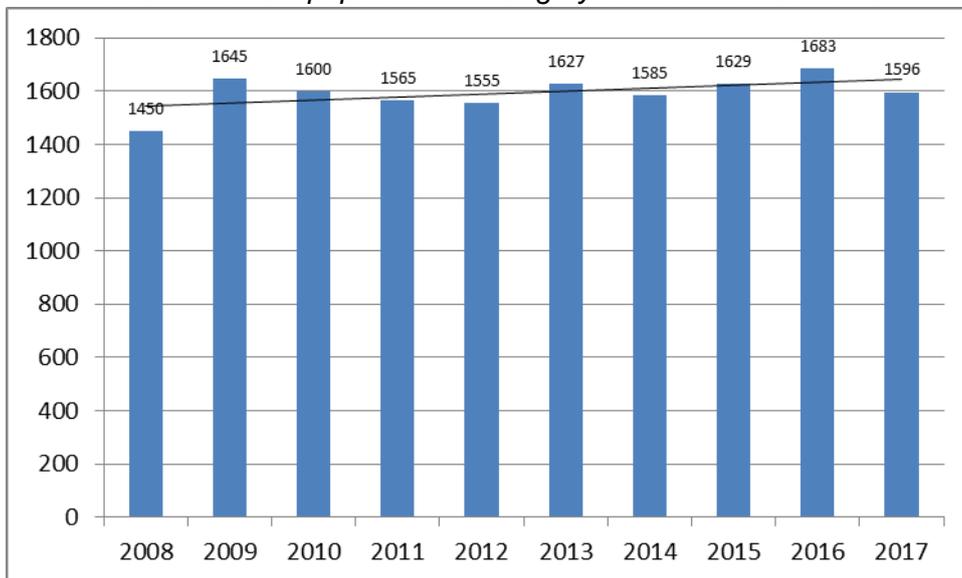
For countries where the species occurs only occasionally, please give the details of known observations within the reporting period: **Not relevant.**

The estimation of the population-size, based on monitoring data shows a general increase both short (reporting period) and long term (10-15 years):

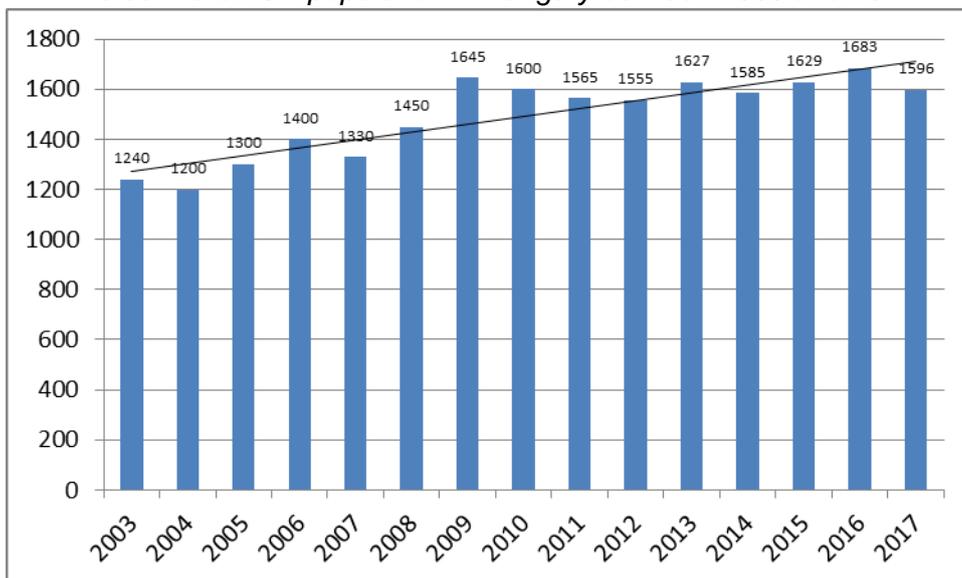
⁵ Only for countries where the species occurs regularly.



The estimated GB population in Hungary between 2013 and 2017



The estimated GB population in Hungary between 2008 and 2017



The estimated GB population in Hungary between 2003 and 2017

6.2. Monitoring of the effects of habitat management.

Is the effect of habitat conservation measures monitored in your country?

Yes Partially No Not applicable¹

Please, provide a list of on-going and completed studies with references if results are already published.

- Tirják L., Széll A.: A túzok (*Otis tarda*) előfordulási jellemzőinek vizsgálata a dévaványai Túzokvédelmi Mintaterületen. *Crisicum*, IX pp (2016)
- Tirják L., Széll A.: A dévaványai Túzokvédelmi Mintaterület működtetésének első tapasztalatai. XI. Magyar Természetvédelmi Biológia Konferencia. (2017.) & Természetvédelmi Közlemények. (in press)
- Tirják, L.: Ecological principles of the management of the Dévaványa Great Bustard conservation site. PhD dissertation, University of Western Hungary (2016)
- Végvári, Zs., Valkó, O., Deák, B., Török, P., Konyhás, S., Tóthmérész, B.: Effects of Land use and Wildfires on the Habitat Selection of Great Bustard (*Otis tarda* L.) – Implications for Species Conservation. *Land Degradation & Development* (2016) 27: 910–918
- Bankovics, A., Széll, A.: Management measures for wintering Great Bustard (*Otis tarda*) populations in the Carpathian Basin. *Aquila* (2014) 121: 65–71
- Janó, G., Végvári, Zs. Nest site selection of the Great Bustard (*Otis t. tarda*) in Körös-Maros National Park, Eastern Hungary. *Ornis Hungarica* (2016) 24(2), 32–45
- Raab, R., Schütz, C., Spakovszky P., Julius, E. & Schulze, C. H. (2015): Optimizing the attractiveness of winter oilseed rape fields as foraging habitat for the West-Pannonian Great Bustard *Otis tarda* population during winter. *Bird Conservation International* 25:366-376. doi:10.1017/S0959270914000355

What can be learned from these studies?

As a result, we found that nest sites were significantly closer to lek sites and farther from human settlements than expected by random sampling. Our results may contribute to the understanding of Great Bustard nest distributions, which can be helpful in nest detection prior to the initiation of disturbing agricultural activities, which is a key issue in the conservation of this bird. This study opens the way to analyse the effects of other environmental factors such as anthropogenic linear objects.

In the 400 hectares fenced area we trailed Great Bustard land use over a seven-year period (2009-2016). In January and February feeding and resting bustard flocks are regular guests in this territory. Their appearance becomes more and more common, approaching the displaying season. 3,20%–7,91% of the GB population of Dévaványa stay in the fenced area during the synchronous census in spring. GBs occupy this area during the mating and breeding season (from April to May) then after the chicks rearing period they leave the fenced area gradually. The density of the breeding population reached the 2,98 nest/100 hectares during the study period.

What are the remaining gaps and what measures will your country do to address these gaps?

6.3. Comparative ecological studies.

Have there been any comparative studies carried out on the population dynamics, habitat requirements, effects of habitat changes and causes of decline in your country in collaboration with other Range States?

Yes No Not applicable¹

Please, provide a list of on-going and completed studies with references if results are already published

- [Végyvári, Zs., Konyhás, S., Faragó, S.: Temporal and spatial patterns in movements of the Great Bustard \(*Otis tarda*\) in Hungary. *Aquila* \(2014\)121: 79–85](#)
- [Lóránt, M., Schmidt, A.: The protection of Great Bustard \(*Otis tarda*\) in Hungary between 2008 and 2012: an introduction to conservation measures taken and future suggestions *Aquila* \(2014\), Vol. 121, p. 37–47](#)
- [Faragó, S., Kalmár, S.: Habitat use and habitat selection of Great Bustard \(*Otis tarda* L. 1758\) in Hungary. *Hungarian Small Game Bulletin* \(2014\) 12: 33–104.](#)
- [Faragó, S., Spakovszky, P. & Raab, R.: Conservation of Great Bustard \(*Otis tarda*\) population of the Mosoni-Plain – A success story. *Ornis Hungarica* \(2014\) 22: 14-31.](#)
- [Spakovszky P. \(2012\): A túzok. In: Kárpáti L. & Fally, J. \(ed.\): Fertő-Hanság – Neusiedler See-Seewinkel Nemzeti Park – Monografikus tanulmányok a Fertő és a Hanság vidékéről. 420 pp. Fertő-Hanság Nemzeti Park Igazgatóság, Szaktudás Kiadó Ház, Budapest: 219-222.](#)
- [Horreo, J. L., Raab, R., Spakovszky P. & Alonso, J. C. \(2016\): Genetic structure of the threatened West-Pannonian population of Great Bustard \(*Otis tarda*\). *PeerJ* 4:e1759; DOI 10.7717/peerj.1759](#)
- [Faragó S. & Spakovszky P. \(2012\): A túzok a LAJTA Projectben In: Faragó S. \(ed.\): A LAJTA Project: Egy tartamos mezei vad és ökoszisztéma vizsgálat 20 éve. 636 pp. Nyugat-magyarországi Egyetem Kiadó, Sopron: 364-403.](#)
- [Spakovszky P., Raab, R. & Julius, E. \(2012\): Túzok \(*Otis tarda*\) élőhelyek fragmentálódása a Mosoni-síkon. *Fragmentation of Great Bustard \(*Otis tarda*\) habitat in the Mosoni-sík, NW Hungary. *Szélkiáltó* 15:15-16.*](#)

What can be learned from these studies?

At all sub-populations, including the presently unoccupied sites must be treated as GB habitats, especially to reject irreversible developments on habitats, like the implementation of industrial developments, erection of above ground power-lines, etc.

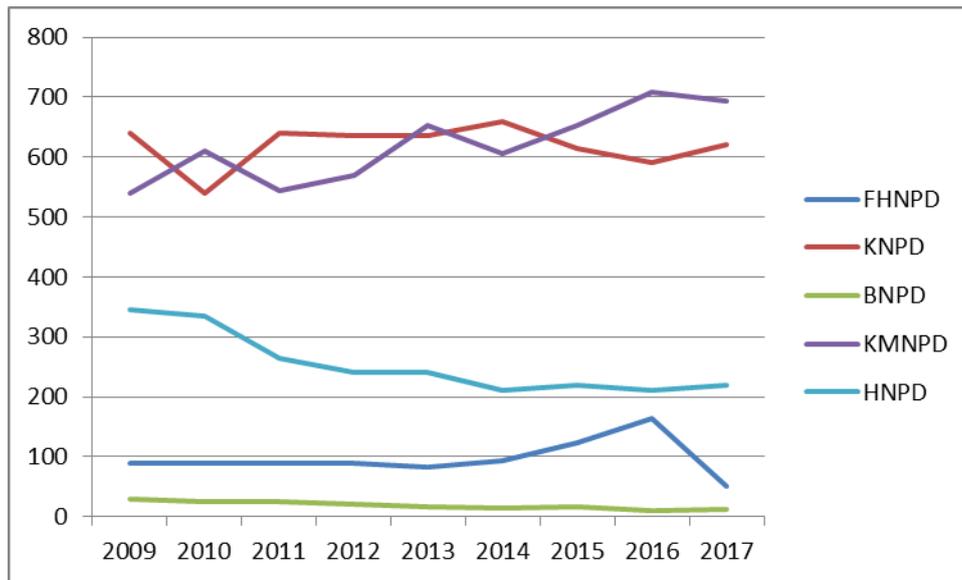
The changes in number of each sub-population are NOT independent from the dynamics of the meta-population system.

For the better understand further research must be undertaken on meta-population system and habitat suitability model must be created. Preliminary suggestions shows, that sub-populations within the Carpathian Basin show a relatively intensive fluctuation in number.

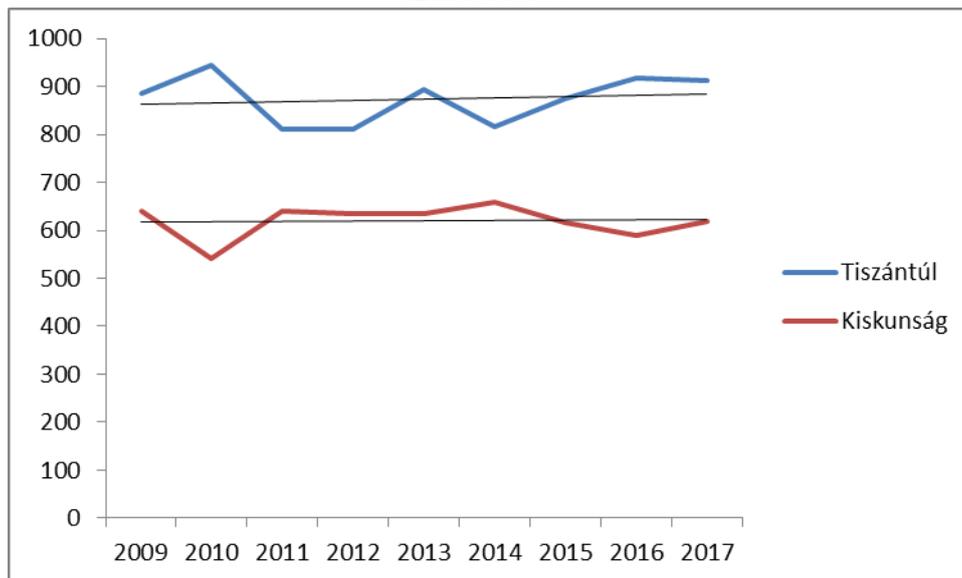
The major population like Dévaványa and Kiskunság show a continuous growth, while smaller and marginal ones rather decline. Next to conspecific aggregation, several factor could be responsible for this, but as long as the trend of the total number is positive, the GB conservation program is on its right way.

The importance of presently unoccupied habitats and smaller populations is extremely high not

just because their genetic value, but their role in meta-population dynamics.



Population trends of the sub-populations linked to the territory of the Hungarian National Park Directorates



Population trends of the two main sub-populations (Kiskunság and Tiszántúl) with a moderate increase, excluding Western Hungary, Heves Plain and Borsodi Mezőség

Marginal and small sub-populations show a significant decline in long- and short term, but the core populations are in stable position.

What are the remaining gaps where the Memorandum of Understanding could assist?

A much more detailed habitat suitability model is required for further conservation measures, just like the better understanding of the dynamics of the meta-population system within the Carpathian Basin.

For this comparative study the entire Central European population must be involved, especially Austria, Serbia, Romania, Slovakia and Check Republic.

Conservation of small population looks essential and urgent, however the effect of local (like happened in the Jászság area at the end of the 20th century) extinctions are unknown from the aspect of the Central European population.

6.4. Studies on mortality factors.

Are the causes of Great Bustard mortality understood in your country?

Yes Partially No Not applicable¹

Please, provide a list of on-going and completed studies with references if results are already published.

- **Vadász, Cs., Lóránt M. Key mortality causes of the Great Bustard (*Otis tarda*) in Central Hungary: an analysis of known fatalities *Ornis Hungarica*. (2014) 22(2): 32–41.**
- **Lóránt M., Vadász, Cs. The effect of above-ground medium voltage power lines on displaying site selection of the Great Bustard (*Otis tarda*) in Central Hungary, *Ornis Hungarica* (2014) 22(2): 42–49**
- **Raab, R., Spakovszky P. & Julius, E. (2014): Az elektromos légvezetékek hatása a nyugat-pannon tűzokállományra (*Otis tarda*) és az ausztriai tűzokvédelmi LIFE+ projekt akciói. Effects of aerial power lines on the West-Pannonian Great Bustard (*Otis tarda*) population and the actions of the Austrian Great Bustard LIFE+ projekt. *Szélkiáltó* 16:58-60.**

What can be learned from these studies?

The key mortality factor are well defined; for adult birds the collision is primary, just like the intensive agriculture for eggs and juvenile birds.

For reducing the mortality of adult birds, the cabling of above ground power-lines is the only solution, any conservation measures reducing collision must be supported on the whole range.

What are the remaining gaps and what measures will your country do to address these gaps?

Reducing collision huge steps have been prepared in the last years. In cooperation with all the three energy supplier companies on medium-voltage power lines a large scale cabling program has been started. A total ca 110 kms of MVPLs priority “1” and “2” will be buried in the upcoming two years, partly in the framework of the LIFE Great Bustard project with the remarkable self-contribution of the companies. After implementation the most dangerous sections, the upcoming target is to bury MVPLs with priority “3” as well. Further measures must be taken and further found must be raised afterwards.

6.5. Investigation of factors limiting breeding success.

Are the factors limiting breeding success in core populations understood in your country?

Yes Partially No Not applicable⁶

Please, provide a list of on-going and completed studies with references if results are already published

- **Vadász, Cs., Lóránt M.: Mennyiben járultak hozzá a 2009–2014 között lezajlott agrár-környezetgazdálkodási program tűzokvédelmi zonális célprogramjainak előírásai a tűzok (*Otis tarda*) költési sikerét a fészkelési időszakban veszélyeztető tényezők mérsékléséhez? *Aquila* (2014), Vol. 121, p. 23–33**
- **Lóránt, M.: Management of Great Bustard (*Otis tarda*) habitats in Hungary: the aspects of agri-environmental schemes *Aquila* (2014), Vol. 121, p. 87–93**

⁶ Only for breeding countries.

What can be learned from these studies?

According to the monitoring database and the results of several studies (including the ones mentioned above) the potential effect of all agricultural techniques can be predicted from the aspect of breeding success.

To ensure the successful breeding of the GBs, a well regulated agrarian system is required. The results of several pilot projects, and well built-up systems must be expanded on the whole range of the species.

What are the remaining gaps and what measures are you going to take to address these gaps?

The most important remaining gap at reducing the mortality caused by agriculture is the lack of supporting farmers applying for agro-environmental support within the ESA program on GB schemes (see chapter 1.2)

Selling state-owned land outside of the protected areas resulted unfavourable situation on several sub-populations in Hungary. Key breeding sites for example in the Kiskunság and the Mosoni Plain have been sold with uncertain conditions for the management requirements.

On the other hand a favourable process started giving particular parcel to the management of the National Park directorates (for example KNPD), which benefit for the species.

Obviously the loss of key parcels within Natura 2000 sites (SPAs) is resulting unpredictable future effects, especially in the light of deficiency of the ESA program between 2016-2020.

6.6. Studies on migration.

Were there any studies on migration routes and wintering places carried out in your country?

Yes **Partially** No Not applicable¹

Where are the key sites and what is the size of the population they support?

In Hungary the GB population is resident, but smaller movements within and between the sub-populations are regular.

Do you have any knowledge about the origin of these birds supported by ringing or other marking methods?

What are the remaining gaps and what measures will your country do to address these gaps?
Most of the marking has been carried out on captive birds released in Dévaványa Rescue Centre by the KMNPD. (see chapter 4.3)

Individual marking of birds would result more information about the movement of GBs within the Carpathian Basin. Within the LIFE Great Bustard tracking of GBs is planned, best methods are under elaboration.

7. Training of staff working in conservation bodies

Is there any mechanism in place in your country to share information on biological characteristics and living requirements of Great Bustard, legal matters, census techniques and management practices to personnel working regularly with the species? **Yes** No Not applicable¹

If yes, please describe it.

In Hungary a "Great Bustard Conservation Working Group" has existed since the early 1990s. The group comprises all (about 25) experts working for different nature conservation organizations (rangers, other national park staff, researchers, NGO-s, ministry and inspectorate staff) in different parts of the country. These experts exchange experiences by informing each

other on relevant population and nature conservation issues concerning the species during the regular meetings of the Working Group, held minimum once a year.

Have personnel dealing with Great Bustard participated in any exchange programme in other Range States? Yes No Not applicable¹

If yes, please give details on number of staff involved, country visited and how the lessons were applied in your country.

See cross border conservation measures at chapter 5.

Members of neighbouring countries are regular participants of Great Bustard Working Group's meetings in Hungary.

LIFE Great Bustard project requires regular visits between Austria and Hungary for GB expert involved.

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

What measures have been taken to increase the awareness about the protection needs of the species and its habitat in your country since signing the Memorandum of Understanding?

The GB conservation program and the species itself, is in the focus of interest in Hungary. At all GB habitats the stakeholders and the general public is regularly informed via common instruments like meetings, guided tours, leaflets, information boards etc.

A general wish was to increase the effort put on awareness raising at both target groups (stakeholders and general public), so within the framework of the LIFE Great Bustard project a significant part is focusing on this topic. A GB education- and visitor centre will be established in the Kiskunság area, but also a general demonstration program will be elaborated and introduced on the whole range of the species.

Regional cooperation has been started within the LIFE GB project between hunters and NPDs, which was a huge step (and partial success) for nature- and Gb conservation. The joint action is the predator management implemented on GB habitats, which is benefit for both small game management and GB conservation as well.

Study on GB schemes within the ago-environmental program:

“Mezőgazdálkodás AKG nélkül” – summary study: Az agrár-környezetgazdálkodási program egy éves kimaradásának hatásai és értékelése, Kalóczkai Á., Kovács Krasznai E. (2016.)

Do farmers, shepherds, political decision makers and local and regional authorities support Great Bustard conservation? Yes Partially No

What are the remaining gaps or problems and how are you going to address them?

In generally the acceptance of GB and its conservation program is on overage level throughout Hungary. The more intensive communication with stakeholders (farmers, hunters) and general public is necessary.

9. Economic measures

Have there been any initiatives taken to develop economic activities that are in line with the conservation requirements of Great Bustard in your country?

Yes **Partially** No Not applicable¹

What percentage of the population is covered in total by these measures?

All (>75%)

Most (50-75%)

Some (10-49%)

Little (<10%)

None

Not applicable

How effective were these measures?

Effective (more than 50% of the targeted area is managed according to the species' needs)

Partially effective (10–49% of the targeted area is managed according to the species' needs)

Ineffective (less than 10% according to the species' needs)

Not applicable¹

Economic measures taken are the followings:

- Agro-environmental schemes introduced and its regular overview. All modifications are supporting the development of the schemes from the aspect of the GBs and the economic factors as well.
- Suggestions to infrastructural investments like: opening and extension of gravel pits, development of road- and railway network, afforestation, etc.
- Measures taken on power-lines
- Suggestions to agro-policy and legislation on GB habitats

10. Threats

Please, fill in the table below on main threats to the species in your country. Use the threat scores categories below to quantify their significance at national level. Please, provide an explanation on what basis you have assigned the threat score and preferably provide reference. Add additional lines, if necessary.

Threat scores:

Critical: a factor causing or likely to cause **very rapid declines** (>30% over 10 years).

High: a factor causing or likely to cause **rapid declines** (20-30% over 10 years).

Medium: a factor causing or likely to cause relatively **slow, but significant, declines** (10-20% over 10 years).

Low: a factor causing or likely to cause **fluctuations**.

Local: a factor causing local declines but likely to cause **negligible declines at population level**.

Unknown: a factor that is likely to affect the species but it is unknown to what extent.

Threat name	Threat score	Explanation and reference
Habitat loss	low	
Losses of eggs and chicks	high	
Predation	high	
Collision with powerlines	high	
Human disturbance	medium	
Pesticides	unknown	
Illegal hunting	not relevant	one female was shot in 2014 at Bihar Plain
Others (specify disturbance (eagles))	medium, locally high (increasing)	intensive monitor of threat has initiated during the reporting period

PART II. COUNTRY-SPECIFIC ACTIONS

Please report on the implementation of the country-specific actions listed for your country in Part II of the Action Plan and provide information if that is not already covered by your answers under Part I. Please describe not only the measures taken but also their impact on Great Bustard or its habitat in the context of the objectives of the Memorandum of Understanding and the Action Plan. Where you have already answered on country-specific actions in Part I, please only add a reference to the relevant answer here.

Not relevant.