

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

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<p>Reports submitted to date: First: Austrian National Report 2004; Period covered: 28/11/2001 to 18/09/2004 Second: Austrian National Report 2008; Period covered: 19/09/2004 to 30/09/2008 Third: Austrian National Report 2012; Period covered: 01/10/2008 to 31/12/2012 Fourth: Austrian National Report 2017; Period covered: 01/01/2013 to 31/12/2017</p>
<p>Period covered by this report Fifth: Austrian National Report 2023; Period covered: 01/01/2018 to 14/06/2023</p>

Memorandum in effect in country since:

Date: 28/11/2001

Designated Focal Point (and full contact details):**Name:** DI Dr. Enrica Seltenhammer**Title/Function:** Great Bustard CMS contact point**Department:** Section V/10, National parks, Nature- and Species protection**Organization:** Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK)**Full postal address:** Stubenbastei 5, A-1011 Vienna, Austria**Fax:** -**E-mail:** brigitte.seltenhammer@bmk.gv.at**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 checked="" type="checkbox"/> Fully (>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	<input checked="" type="checkbox"/> Fully (>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

The SPA "Westliches Weinviertel" (16,904 ha in total, of them 7,411 ha for the Great Bustard) was enacted under domestic legislation on February 4th, 2008 and April 14th, 2020 and SPA "Waasen - Hanság" (3,007 ha in total) was enacted under domestic legislation on June 3rd, 2008, SPA "Sandboden und Praterterrasse" (16,313 ha in total, of them 11,083 ha for the Great Bustard) was

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

enacted under domestic legislation on July 29th, 2009 and April 14th, 2020 and SPA “Parndorfer Platte – Heideboden” was enacted under domestic legislation on July 7th, 2020.

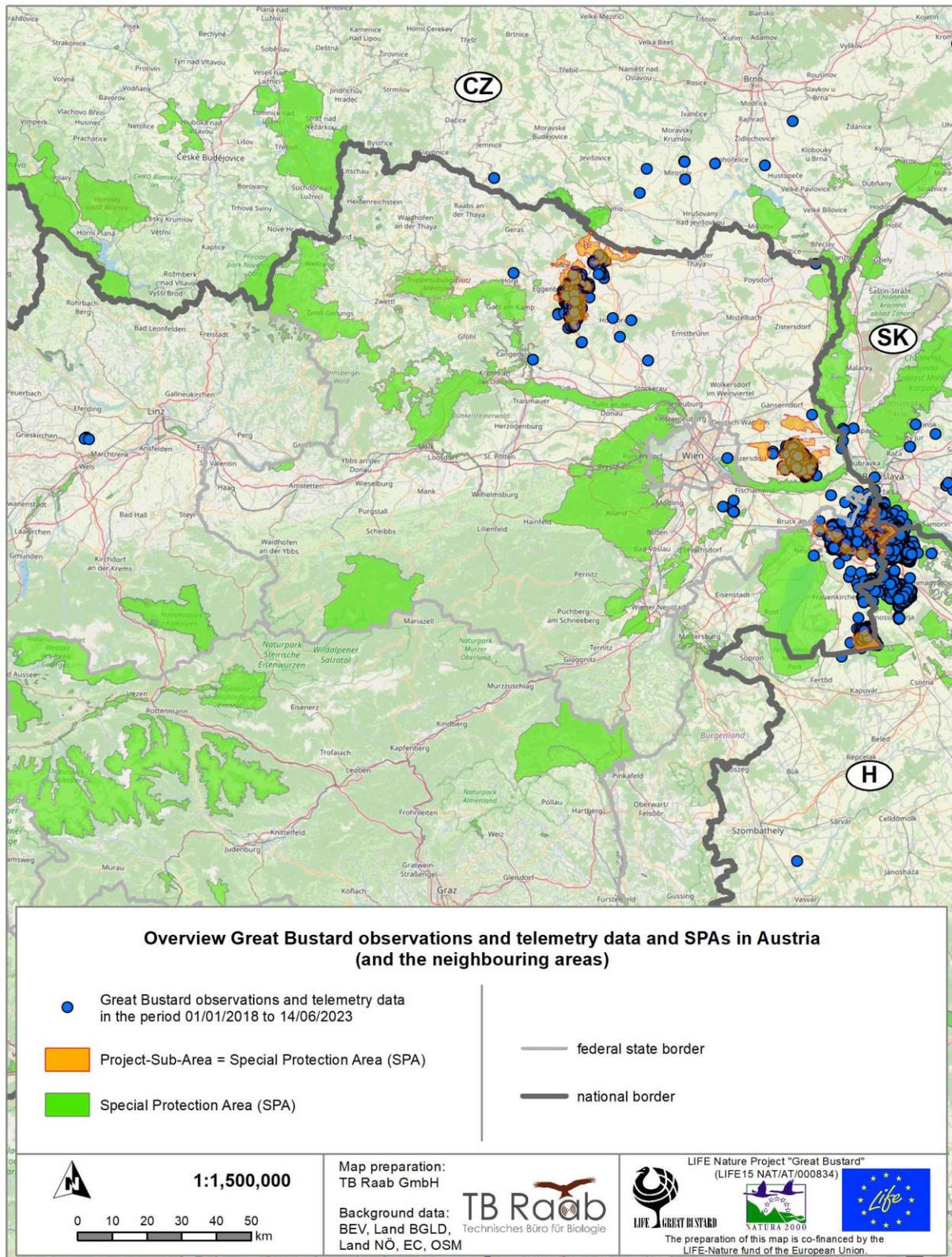


Figure 1: Overview Great Bustard observations and telemetry data and SPAs in Austria (and the neighbouring areas) in the period 01/01/2018 to 14/06/2023.

The breeding sites and leks of Great Bustard within the IBA “Feuchte Ebene – Rauchenwarther

Platte” are not within SPA “Feuchte Ebene – Leithaauen” (last observation of one male on August 6th, 2020, since then no new observations). More than 90% of the display, breeding, stop-over and wintering sites of Great Bustard are protected under national law (see also Fig. 1 – 3).

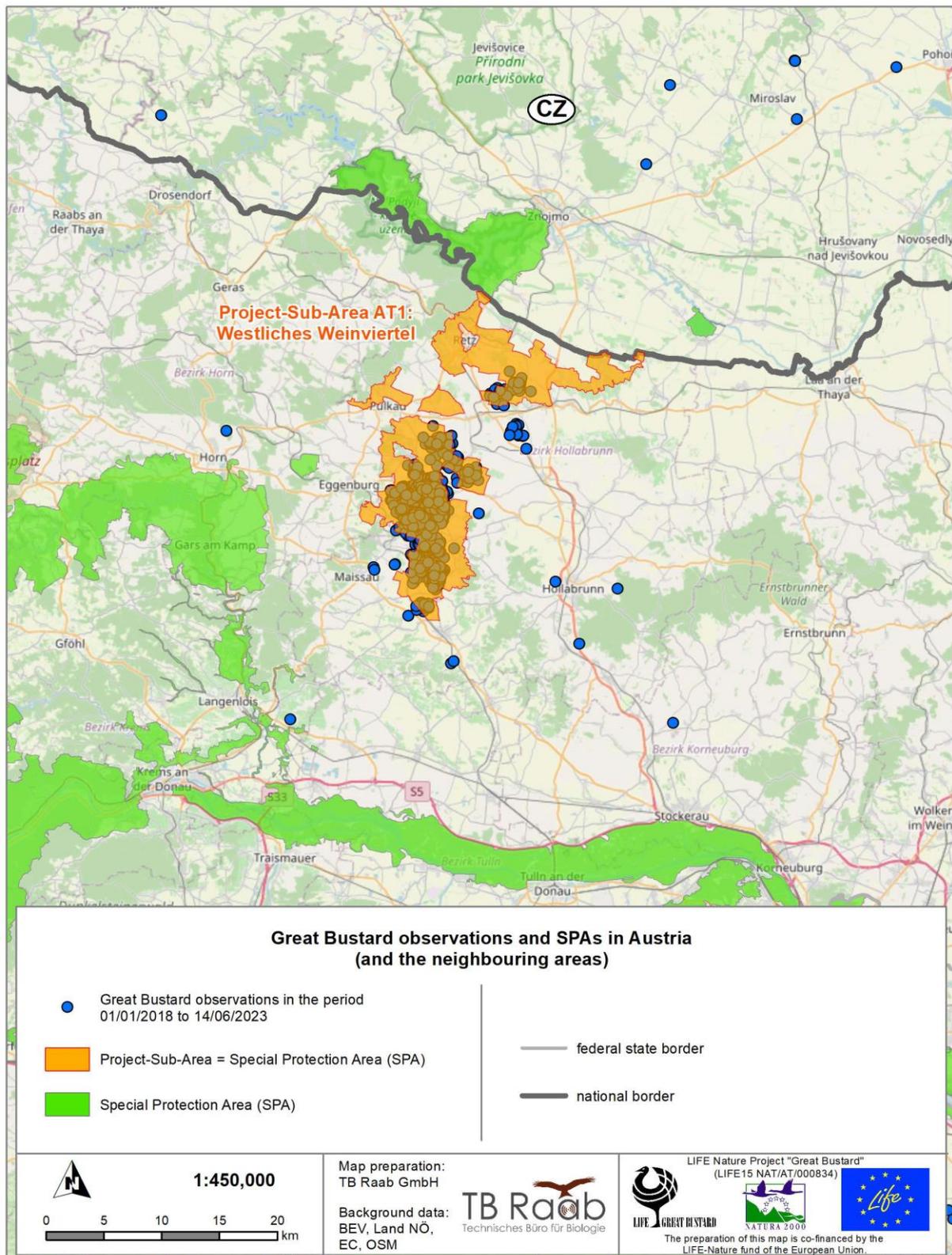


Figure 2: Great Bustard observations and SPAs in the northeastern part of Austria (and the neighbouring areas) in the period 01/01/2018 to 14/06/2023.

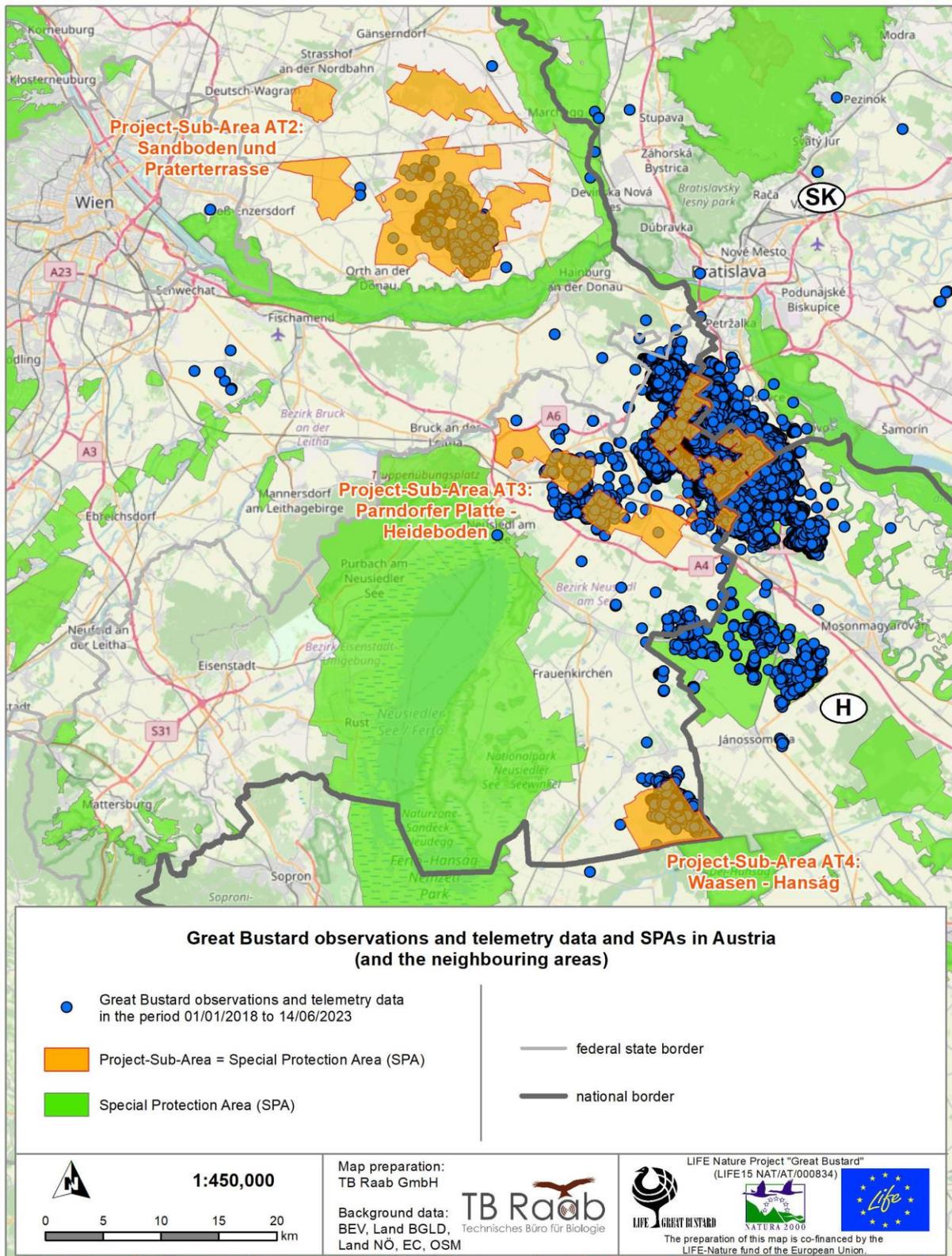


Figure 3: Great Bustard observations and telemetry data and SPAs in the eastern part of Austria (and the neighbouring areas) in the period 01/01/2018 to 14/06/2023.

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

In Austria, extensive measures are taken for the management of all breeding areas and key migration and wintering sites of the Great Bustard. In promoting the implementation of Great Bustard species conservation many institutions and organisations are collaborating excellently. In particular these are: the two State Governments of Burgenland and Lower Austria as well as the Federal Ministry (BMK), local councils, the NGOs like ÖGG (Austrian Society for Great Bustard Conservation), WWF Austria, BirdLife Austria, Naturschutzbund and others, but also the hunting associations and the farmers unions of Burgenland and Lower Austria. The majority of the conservation activities are co-financed by the EU.

In 2000, the WWF in the context of its campaign “Lass Sie leben” jointly with the Federal Ministry for Agriculture, Forestry, Environment and Water management (BMLFUW) raised the profile of Great Bustard species conservation efforts nationally and internationally leading to the signing of the Memorandum of Understanding on the Conservation and Management of the Central-European Population of the Great Bustard (*Otis tarda*) (MoU) and the publication of the Action Plan for the protection of the Great Bustard in Austria. Since 2000, the Great Bustard species protection project has been coordinated by a responsible manager, the author of the present report. In addition, regular (but not daily) surveillance is carried out in all Great Bustard ranges by surveillance officers. In all bustard areas in Lower Austria and Burgenland this work is done by Rainer Raab and his team, financed through European community funding.

In August 2005 the LIFE project “Cross-border Protection of the Great Bustard in Austria” (LIFE05 NAT/A/000077) started in Lower Austria and Burgenland. The LIFE project with a planned project budget of 5,840,760 EURO was supported by the EU and the following project partners and co-financiers: EVN AG - Energy Supply Lower Austria PLC, BEWAG - Burgenland Electricity Commerce PLC, VERBUND-Austrian Power Grid PLC, ÖBB-Infrastructure Building PLC, State Government of Lower Austria, Department for Nature Conservation, State Government of Burgenland, Department 5.III for Nature Conservation and Protection of the Environment and Austrian Federal Ministry for Agriculture, Forestry, Environment and Water management (BMLFUW). The “Great Bustard” LIFE Project was successfully finalised on July 31st, 2010.

Collision with overhead power lines was the most significant mortality factor for fully grown (i.e. immature and adult) Great Bustards in Austria for many years. The main objective of this LIFE project was to deal with this threat and at the same time to continue Austria's intensive habitat management efforts to result in a long-term increase not only of the Austrian, but of the entire cross-border West-Pannonian population of the Great Bustard. Numerous measures were implemented in the project period from August 1st, 2005 till July 31st, 2010 to reach this aim. All of the undergrounding of in total 47.4 km (10% more than previously planned) medium voltage power lines is finished in the two project areas “Westliches Weinviertel” (33.2 km) and “Parndorfer Platte – Heideboden” (14.2 km). Thus larger areas free of power lines are available for the Great Bustard due to the LIFE project. The marking of in total 153 km (22% more than previously planned) high voltage power lines (110, 220 and 380 kV) is finished in all of the 3 project areas (80.0 km in the project area “Westliches Weinviertel”). The total eligible expenditure after audit (= costs accepted by the auditors) at the end of 2012 is 5,721,139.83 EURO.

In addition to the LIFE project there was a Rural Development project in Lower Austria entitled “Cross-border Protection of the Great Bustard in Lower Austria”, RU5-S-428/001-2005, running from August 2005 to July 2010, and financed by the State Government of Lower Austria and by the EU. Both projects were implemented by the Technical office for biology Mag. Rainer Raab on behalf of the Austrian Society for Great Bustard Conservation (ÖGG). In Burgenland there was an additional project entitled “Cross-border Protection of the Great Bustard in Burgenland”, LPF: 5-N-A1025/148-2009, running from January 2007 to November 2010, implemented by the Technical office for biology Mag. Rainer Raab and financed by the State Government of Burgenland.

In October 2010 the LIFE+ project “Cross-border Protection of the Great Bustard in Austria -

continuation" (LIFE09 NAT/AT/000225) started in Lower Austria and Burgenland. The LIFE+ project with a planned project budget of 4,508,481 EURO was supported by the EU and the following project partners and co-financiers: EVN AG - Energy Supply Lower Austria PLC, BEWAG - Burgenland Electricity Commerce PLC, Austrian Power Grid PLC, "Nationalparkgesellschaft Neusiedler See-Seewinkel", State Government of Lower Austria, Department for Nature Conservation, State Government of Burgenland, Department 5.III for Nature Conservation and Protection of the Environment and Austrian Federal Ministry for Agriculture, Forestry, Environment and Water management (BMLFUW).

The main aim of the LIFE+ Project was the continuation of the successful concept of the LIFE Project "Great Bustard" in Austria until 2015 in all of the four important Great Bustard areas in Austria. As in two project areas the main mortality factor and therefore the main population threat have widely been removed (transfer of power lines below the soil and marking of power lines, respectively), further necessary transfer of power lines below the soil and marking should take place, particularly in the project area "Sandboden and Praterterrasse". In Burgenland and Lower Austria in the period 2005 till 2015 altogether ca. 100 km of medium voltage power lines have first been transferred into the ground and then the overhead cables and pylons have been removed. Therefore larger power line-free areas were recreated for Great Bustards by means of the two LIFE projects "Great Bustard". In these areas the risk of collisions with power lines was eliminated. Furthermore high voltage power lines have been marked to improve their visibility. Within the two LIFE Projects around 150 km of high voltage power lines have been marked with bird warning flags, bird warning plates and bird warning balls. They improve the visibility of the power lines and should therefore reduce the risk of collisions for Great Bustards and for other bird species. Due to these actions and due to further intensive conservation efforts such as the competent support of the Great Bustards and the extensive habitat management, the Austrian Great Bustard population doubled from the breeding period 2005 (ca. 150 individuals) to 2015 (ca. 310 individuals). For maintaining living conditions and food supply for Great Bustards in Austria in a good state, an efficient cooperation of nature conservation with local farmers and hunters was necessary. Therefore around 550 farmers and more than 100 hunters were actively involved in the project and helped encouraged. This contribute to a further long-term increase of the Austrian and the whole cross-border West-Pannonian Great Bustard population, respectively.

In addition to the LIFE+ project there was a Rural Development project in Lower Austria entitled "Cross-border Protection of the Great Bustard in Lower Austria – continuation", RU5-S-941/001-2011, running from April 2011 to March 2015, and financed by the State Government of Lower Austria and by the EU and there was a Leader project in Burgenland "Protection of the Great Bustard in Burgenland in the years 2012 and 2013", running from January 2012 to December 2013, and financed by the State Government of Burgenland and by the EU. All projects were implemented by the Technical office for biology Mag. Rainer Raab on behalf of the Austrian Society for Great Bustard Conservation (ÖGG).

On July 25th, 2016 the LIFE project "Cross-border Protection of the Great Bustard in Central Europe" (LIFE15 NAT/AT/000834) started in Austria and Hungary. The LIFE project with a planned project budget of 8,399,265 EURO in the period 2016 to 2023 is supported by the EU and the following project partners and co-financiers: Amt der Burgenländischen Landesregierung, Abteilung 5 - Anlagenrecht, Umweltschutz und Verkehr, Amt der Niederösterreichischen Landesregierung, Abteilung Naturschutz, Netz Burgenland Strom GmbH, Netz Niederösterreich GmbH, Bükk National Park Directorate, ELMŰ Hálózati Elosztó Korlátolt Felelősségű Társaság (ELMŰ Hálózati Kft.), Körös-Maros National Park Directorate, Kiskunság National Park Directorate, Hungarian Ornithological and Nature Conservation Society (BirdLife Hungary), the Federal Ministry of Sustainability and Tourism (BMNT) and the Ministry of Agriculture.

Huge progress of the coordination activity has been made since; the underground cabling of NKM Ltd. has been initiated at the HU1 KKKU project site. Within the project 19.6 km 20 kV power lines have been removed as planned in Austria. 33.8 km of 20 kV power lines have been additionally buried in Austria.

In the project sites the GB sub-populations are stable or increasing and the West Pannonian

population reached the highest number for more than 40 years. Through underground cabling, habitat improvement and predator management, the living conditions for the Great Bustard were significantly improved, resulting in increasing population numbers.

In addition, close cooperation with farmers, hunters and other local people is actively promoted by the project coordinator and surveillance officers to ensure good information exchange on all matters relevant to bustard conservation. Only through the collaboration of farmers, hunters and local politicians within the conservation project Great Bustard it was possible to create suitable breeding sites and protect them against disturbance. Farmers made use of the Austrian Agri-environmental scheme “ÖPUL” by cultivating special fields and also ensured – if necessary – the access to food supply in winter. Farmers and hunters were helping to keep disturbances in the Great Bustard areas as low as possible and were also involved in the success control of the Great Bustard conservation actions (monitoring).

Lease or acquisition of land for bustard conservation is not feasible in Austria. Therefore, the maintenance of Great Bustard habitats inside the proposed Natura 2000 sites is carried out through special Great Bustard measures under the Austrian Agri-environmental scheme “ÖPUL” since 1995 (Fig. 4 - 7). For example in 2023 the project areas for ÖPUL measures included 6,849 ha in Lower Austria and 8,117 ha in Burgenland. In 2021 4,095 ha in Lower Austria and 1,922 ha in Burgenland were declared as ÖPUL-Great bustard protection fields (including ÖPUL-meadows in Hanság) from the farmers and paid through ÖPUL.

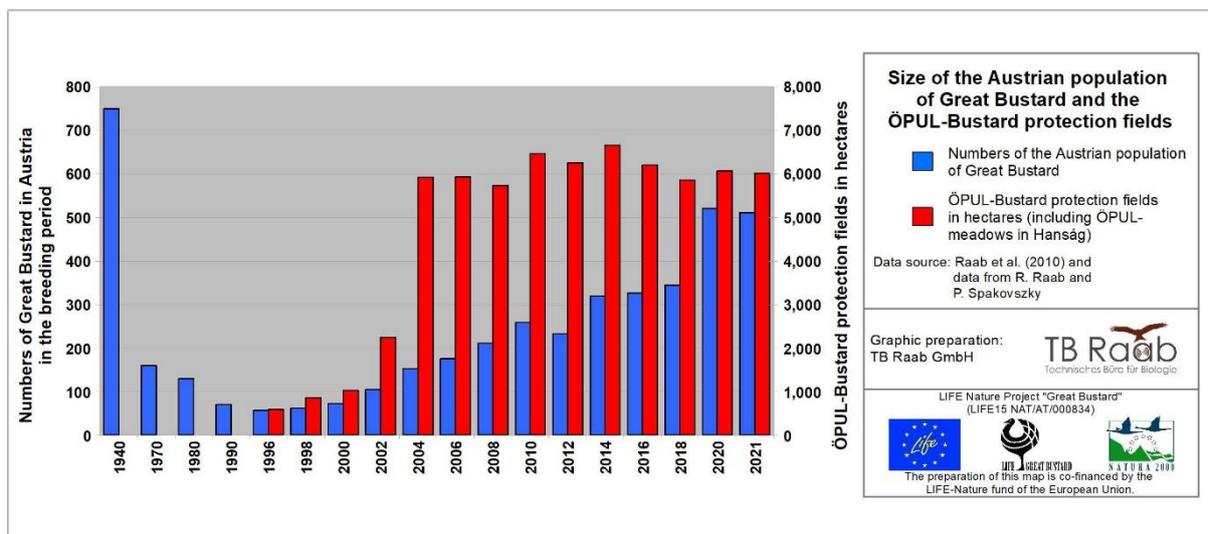


Figure 4: Overview of Great Bustard numbers (middle numbers of individuals during the breeding season) in Austria between 1940 and 2021 (blue column), and the total area of ÖPUL-Great bustard protection fields between 1996 and 2021 (red column); data: Raab et al. (2010) and own data.

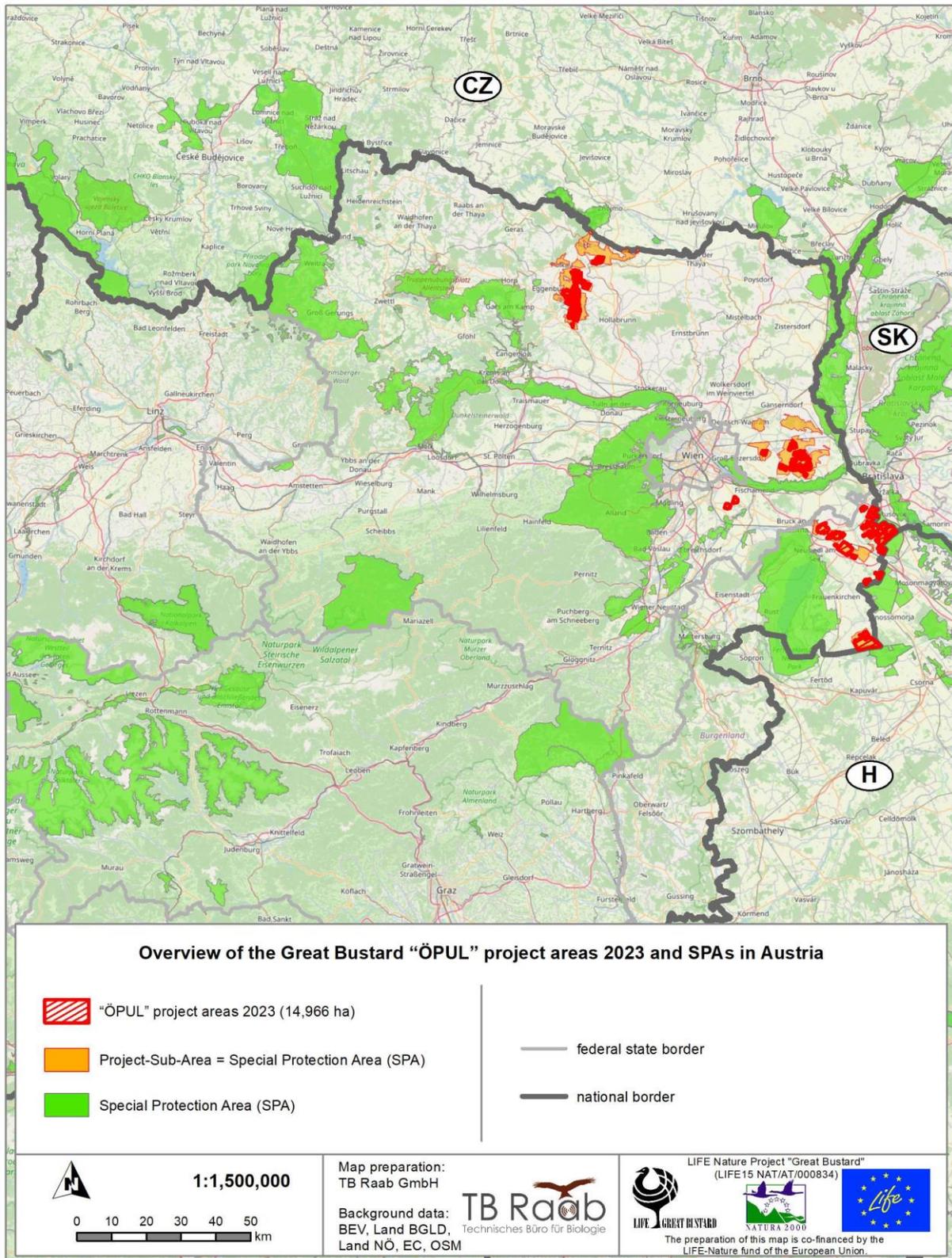


Figure 5: Overview of the Great Bustard "ÖPUL" project areas 2023 and SPAs in Austria.

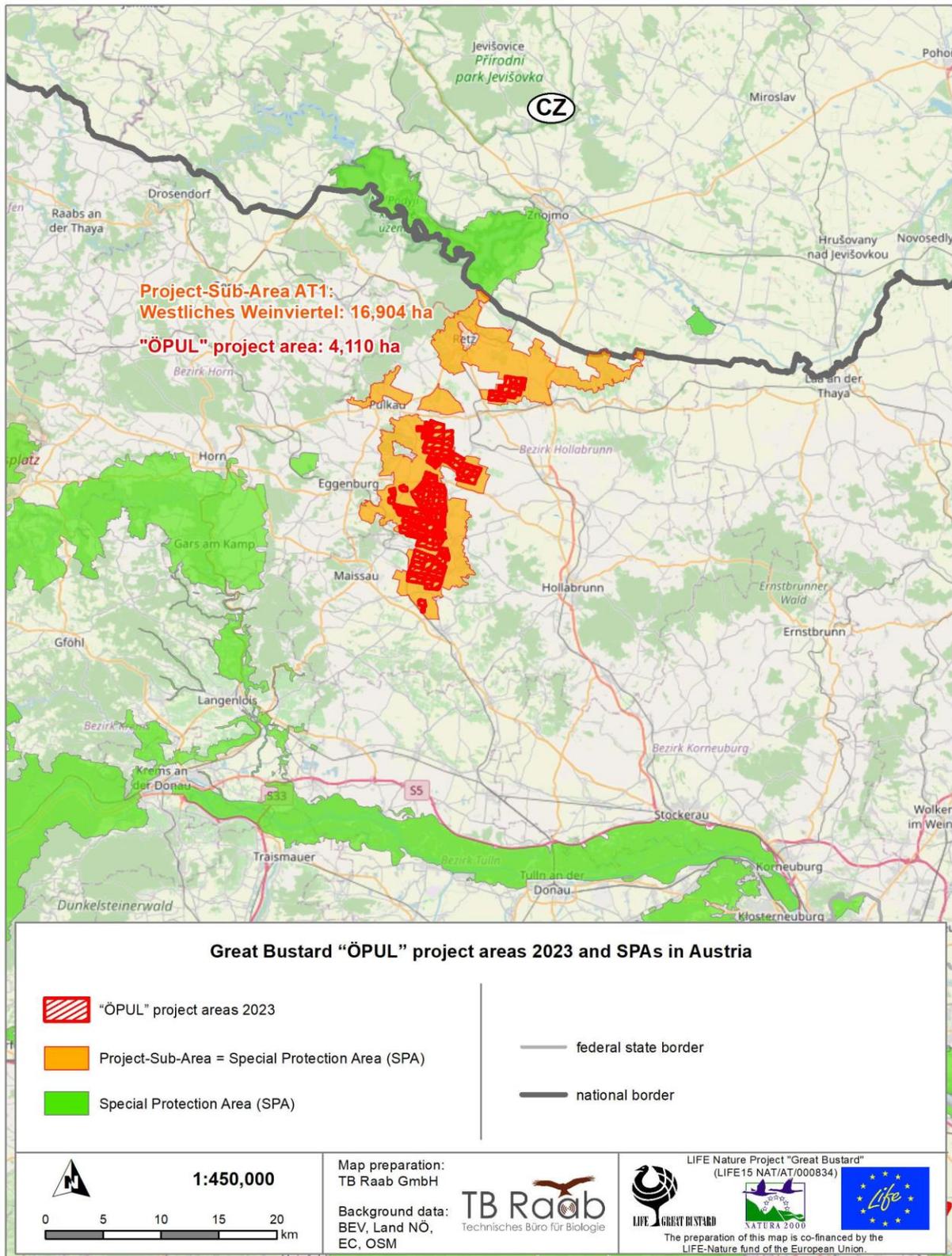


Figure 6: Great Bustard "ÖPUL" project areas 2023 and SPAs in the northeastern part of Austria.

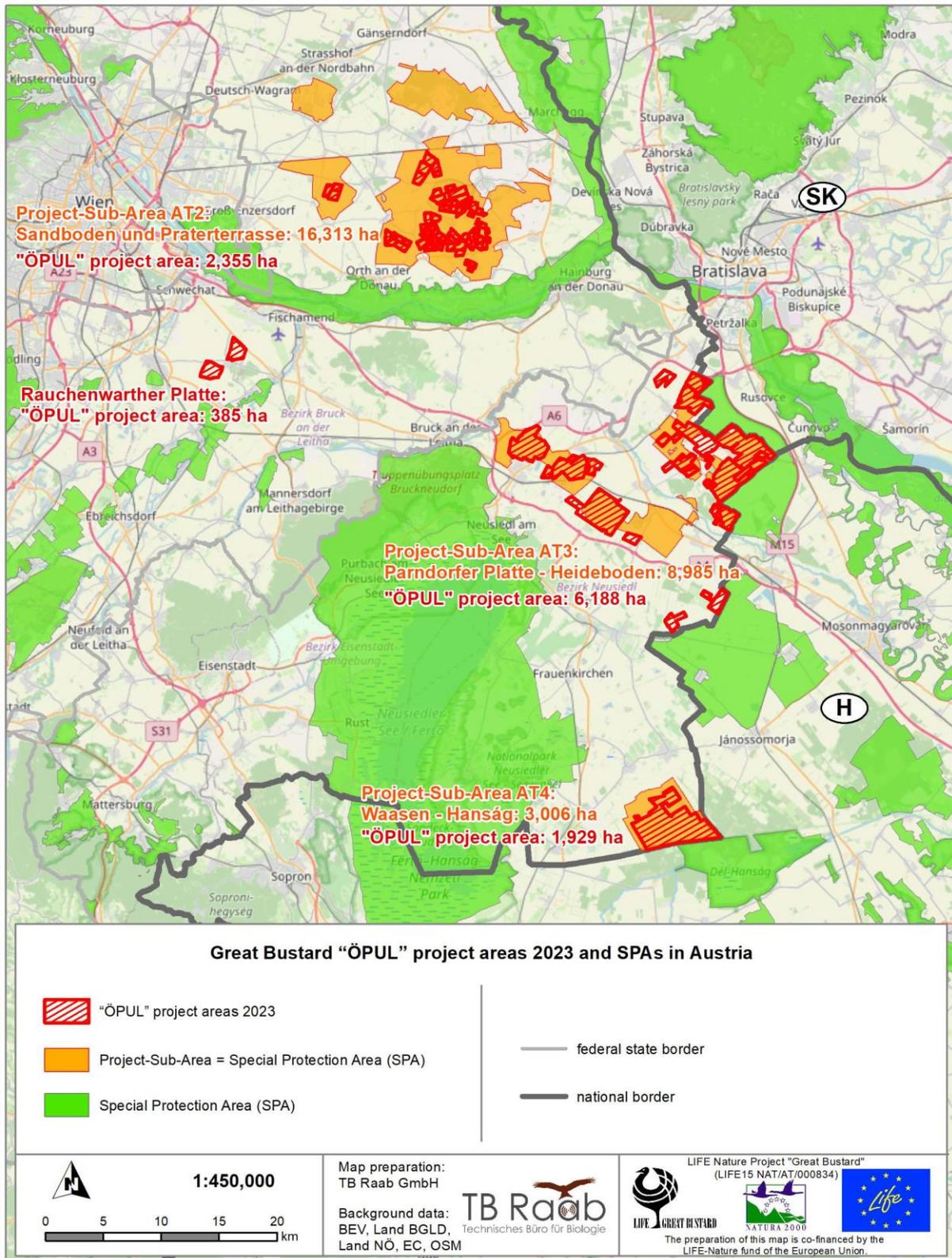


Figure 7: Great Bustard "ÖPUL" project areas 2023 and SPAs in the eastern part of Austria.

Due to undergrounding and marking of power lines (Fig. 8 – 21) and various other conservation efforts the Austrian as well as the entire cross-border West-Pannonian population of Great Bustard clearly increased in the last years.

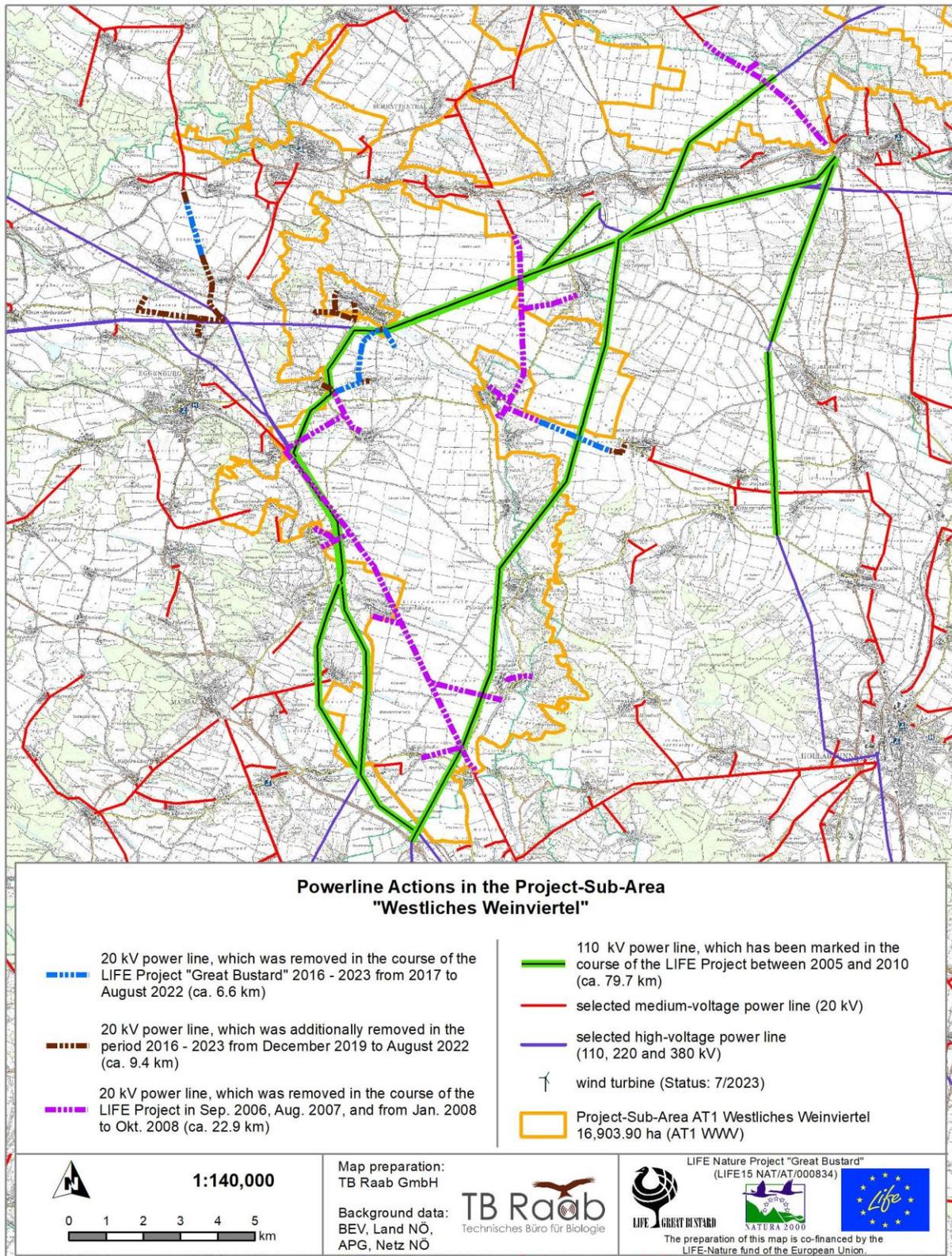


Figure 8: Powerline actions in the Project-Sub-Area "Westliches Weinviertel".

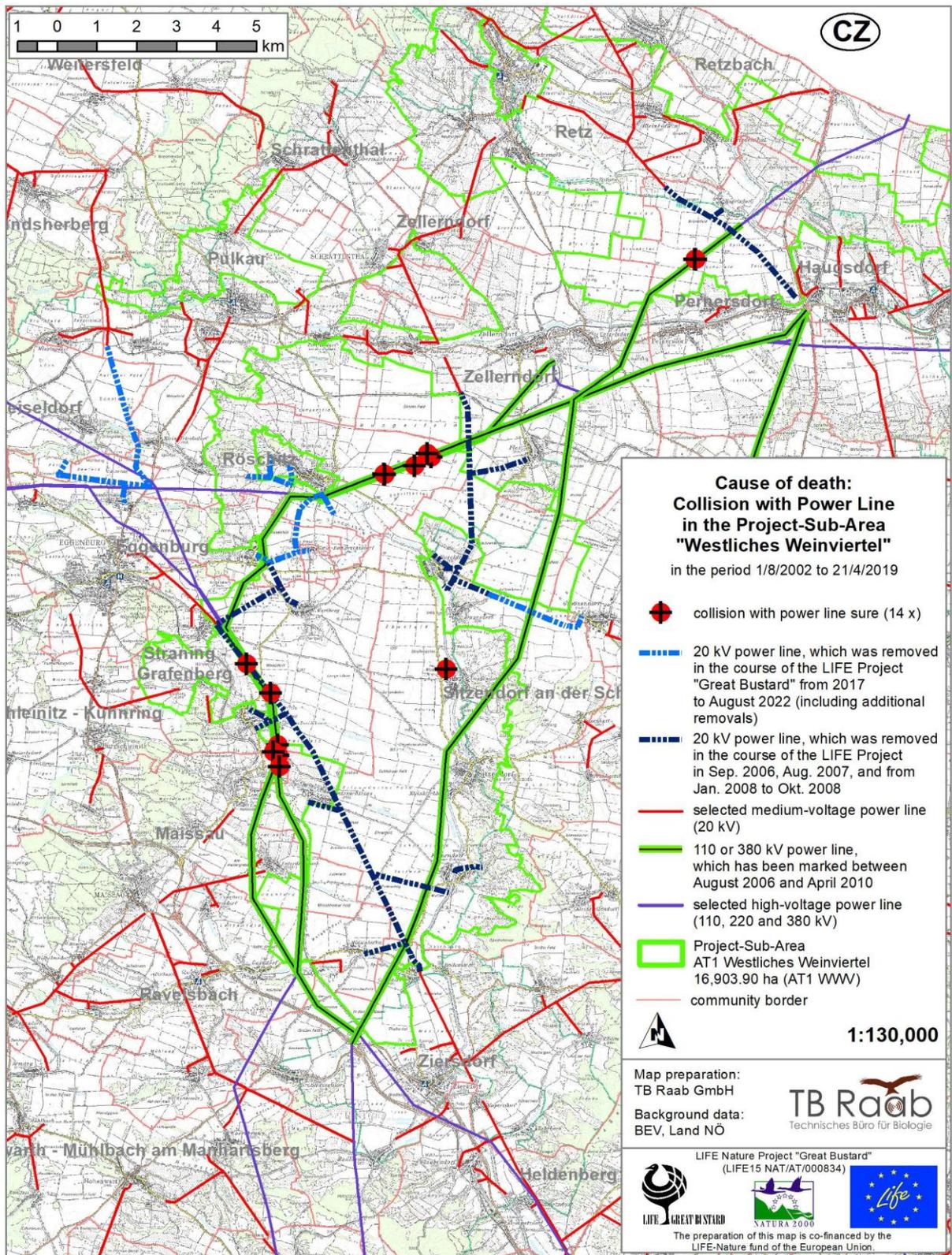


Figure 9: Collisions with power lines in the Project-Sub-Area “Westliches Weinviertel”. Most of the collisions took place before marking of the power lines.

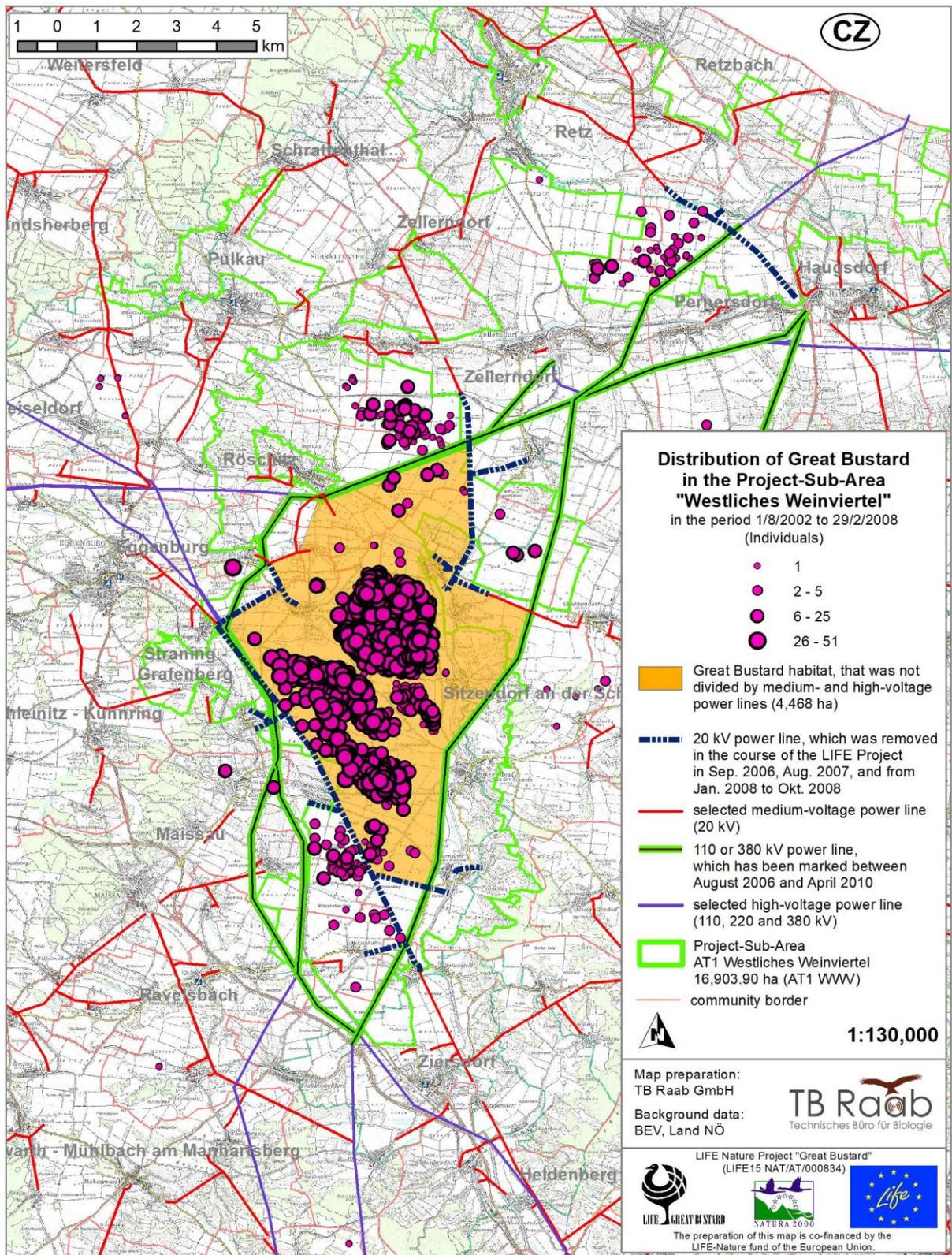


Figure 10: Medium- and high-voltage power lines, habitat in the central Great Bustard area in the Project-Sub-Area "Westliches Weinviertel", which was not fragmented by medium- and high power lines, as well as Bustard observations in the period from August 1st 2002 to February 29th 2008; Data source: own observations, as well as observations by hunters and farmers.

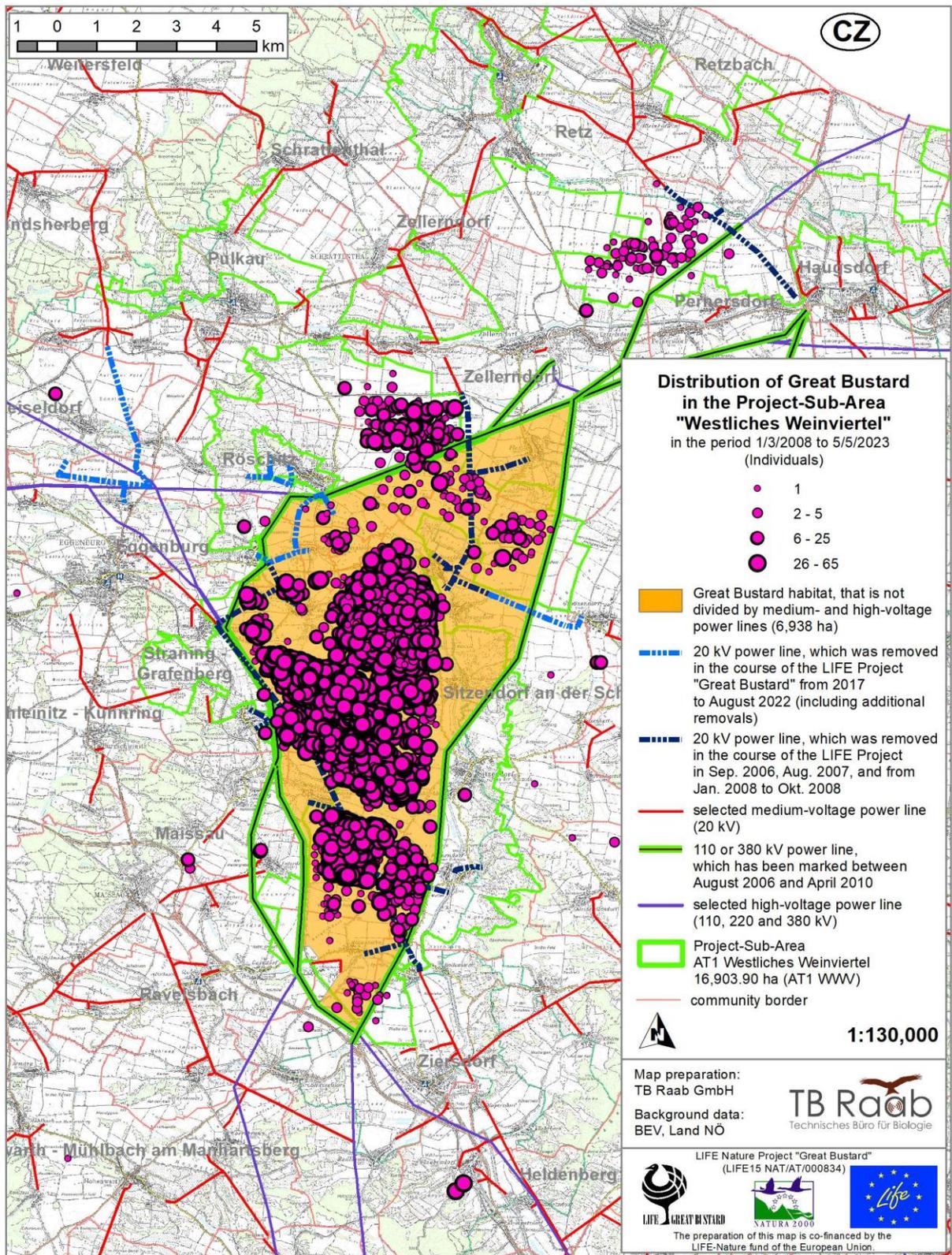


Figure 11: Medium- and high-voltage power lines, habitat in the central Great Bustard area in the Project-Sub-Area "Westliches Weinviertel", which was not fragmented by medium- and high power lines, as well as Bustard observations in the period from March 1st 2008 to May 5th 2023; Data source: own observations, as well as observations by hunters and farmers.

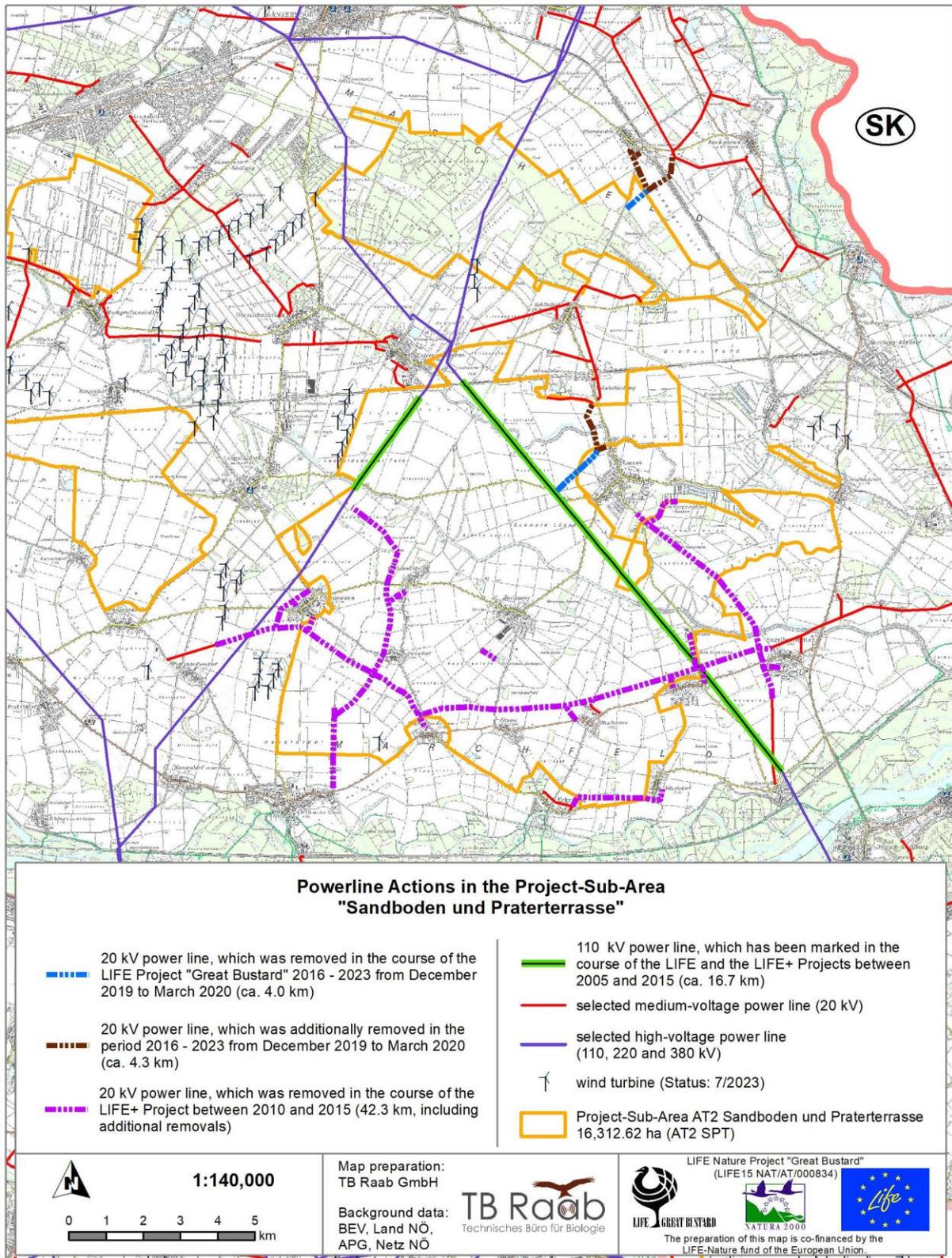


Figure 12: Powerline actions in the Project-Sub-Area "Sandboden und Praterterrasse".

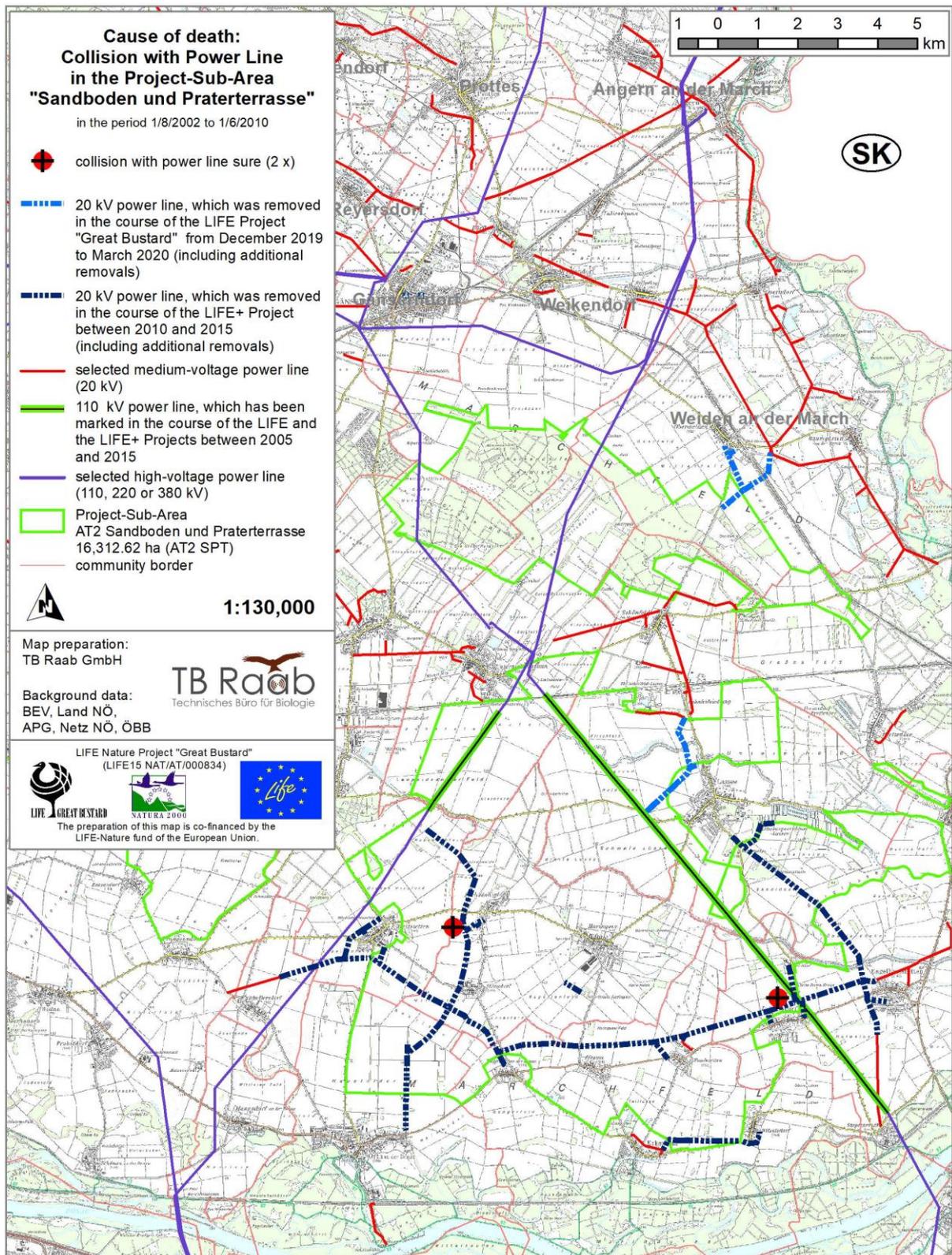


Figure 13: Collisions with power lines in the Project-Sub-Area "Sandboden und Praterterrasse".

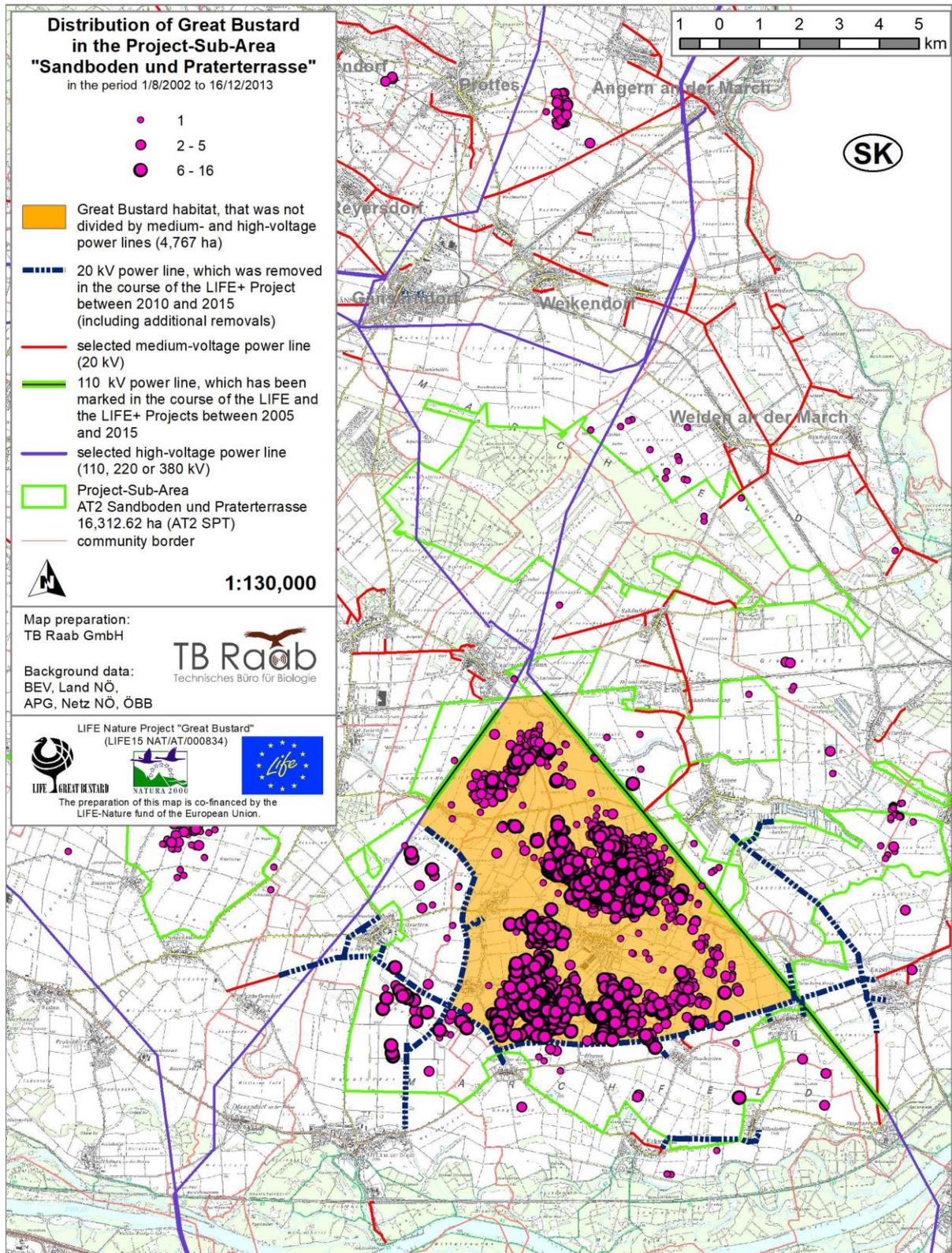


Figure 14: Medium- and high-voltage power lines, habitat in the central Bustard area in the Project-Sub-Area "Sandboden and Praterterrasse", which was not fragmented by medium- and high power lines, as well as Bustard observations in the period from August 1st 2002 to December 16th 2013; Data source: own observations, as well as observations by hunters and farmers.

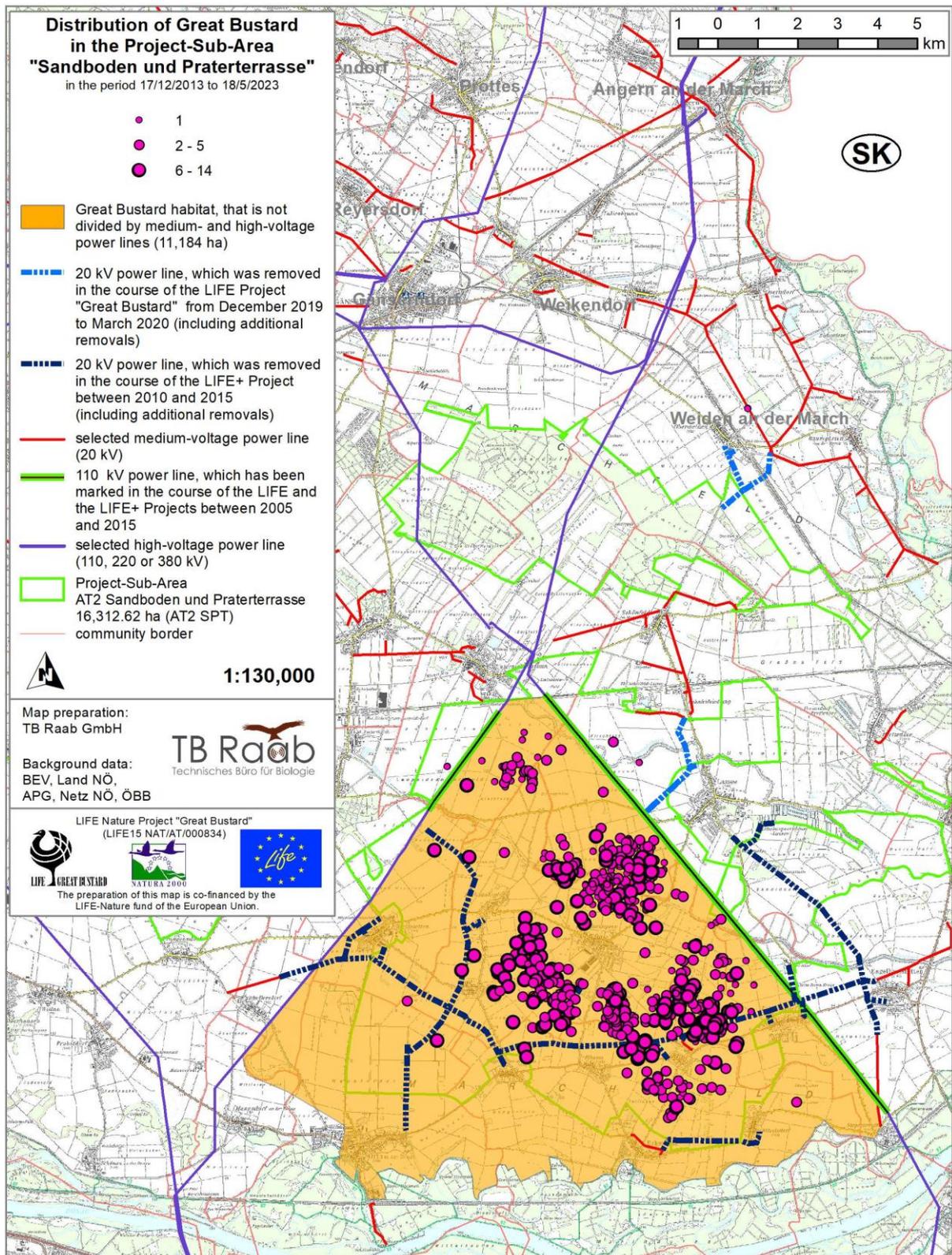


Figure 15: Medium- and high-voltage power lines, habitat in the central Bustard area in the Project-Sub-Area "Sandboden and Praterterrasse", which was not fragmented by medium- and high power lines, as well as Bustard observations in the period from December 17th 2013 to May 18th 2023; Data source: own observations, as well as observations by hunters and farmers.

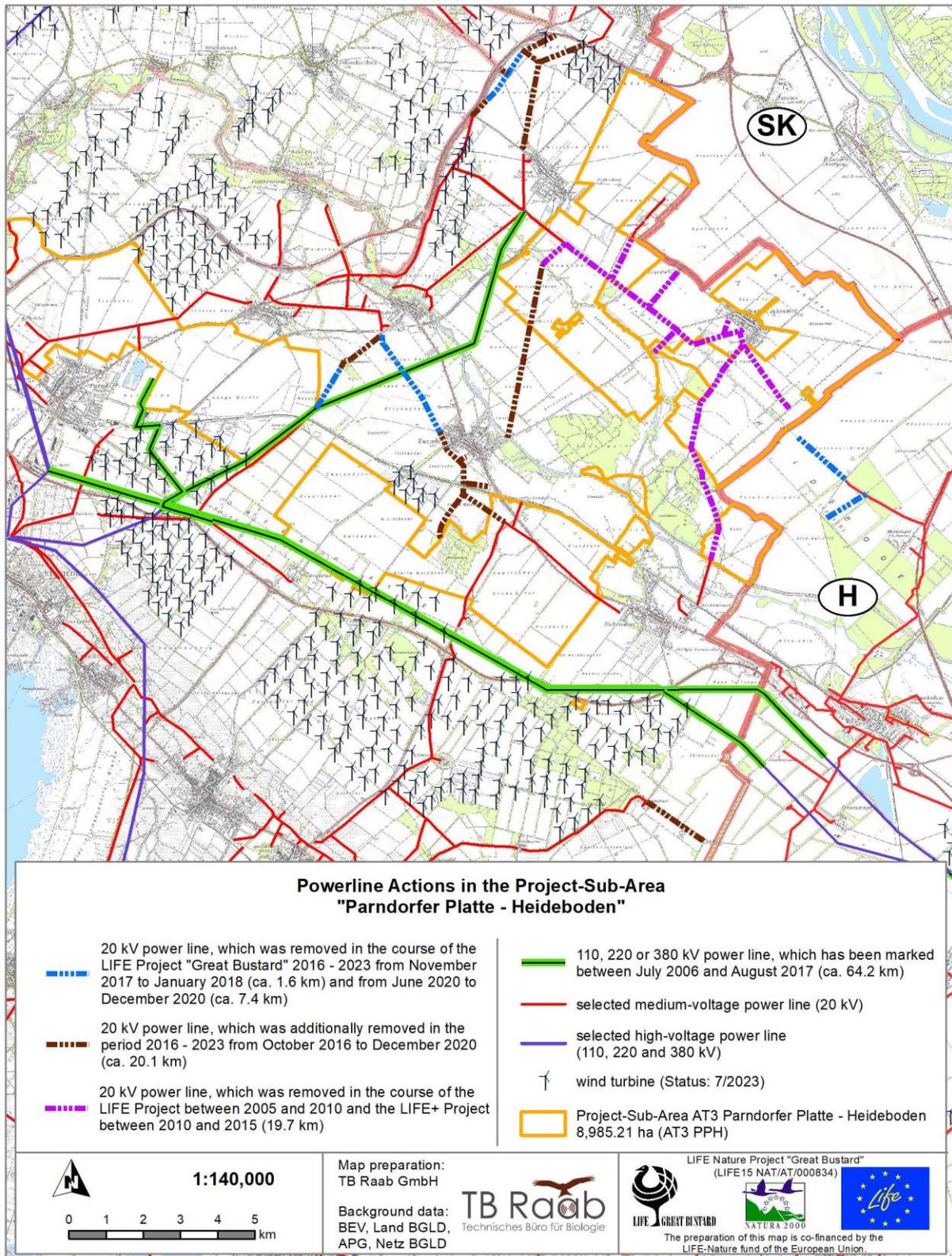


Figure 16: Powerline actions in the Project-Sub-Area "Parndorfer Platte- Heideboden".

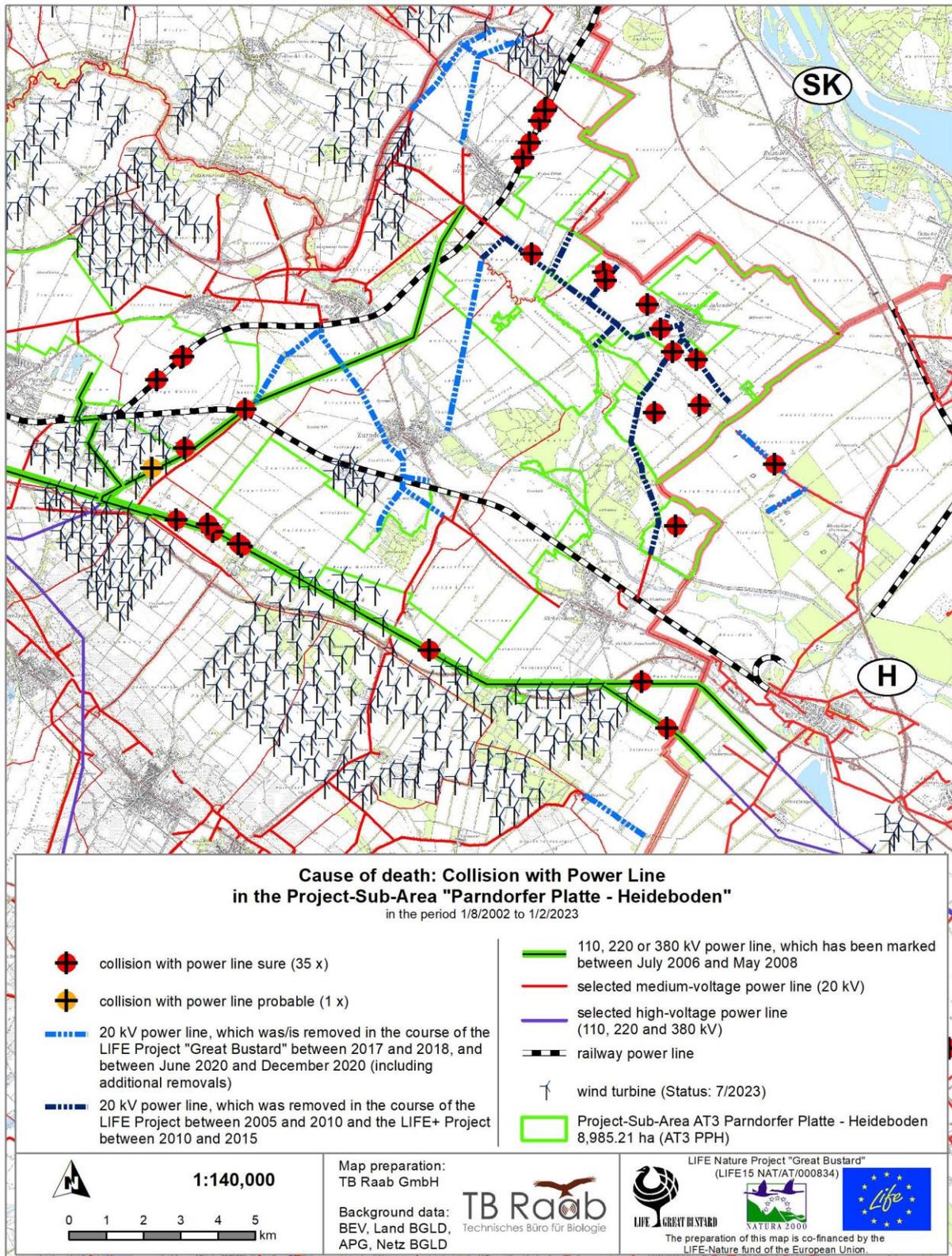


Figure 17: Collisions with power lines in the Project-Sub-Area "Parndorfer Platte- Heideboden".

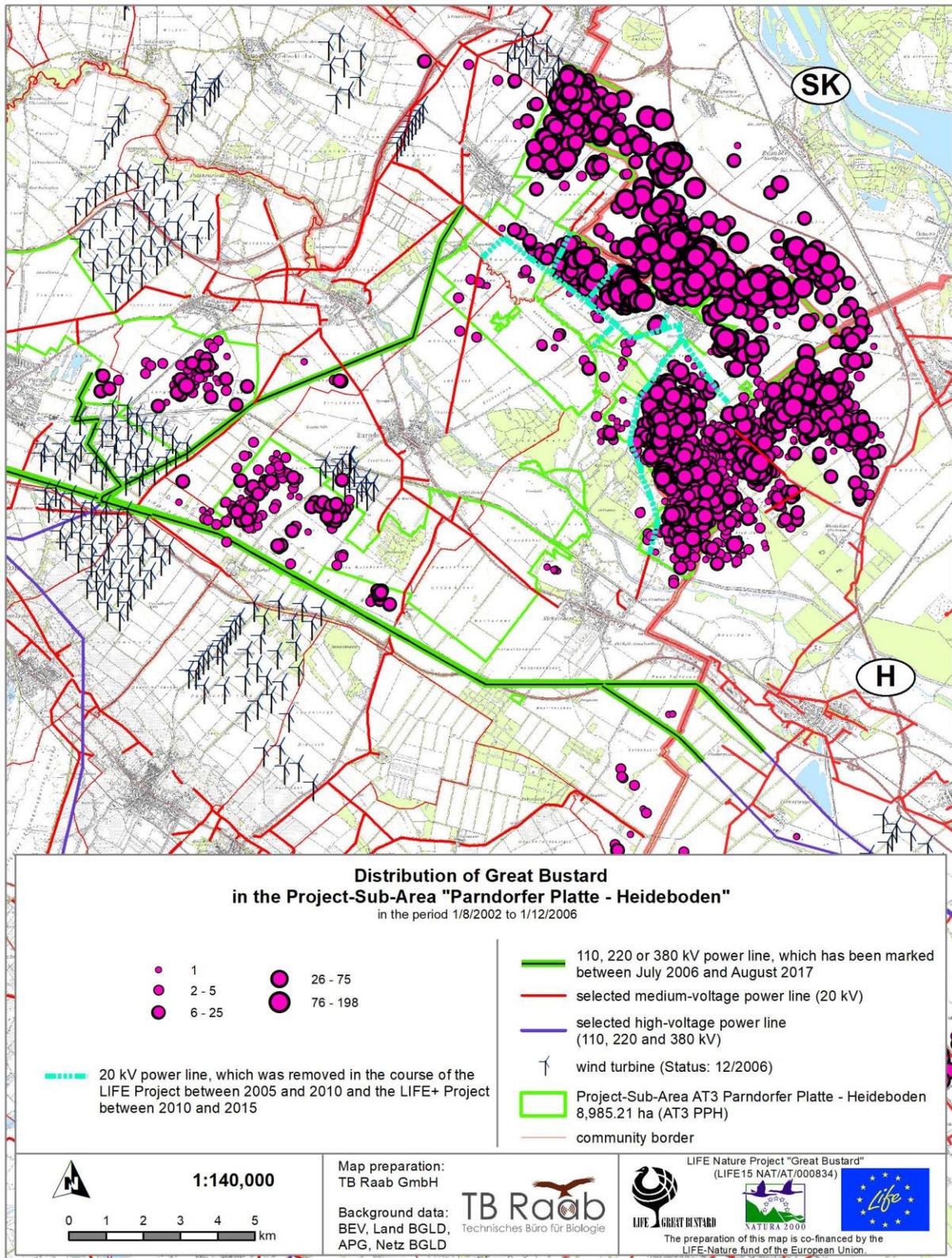


Figure 18: Medium- and high-voltage power lines and Great Bustard observations in the period from August 1st 2002 to December 1st 2006; Data source: own observations, as well as observations by hunters and farmers.

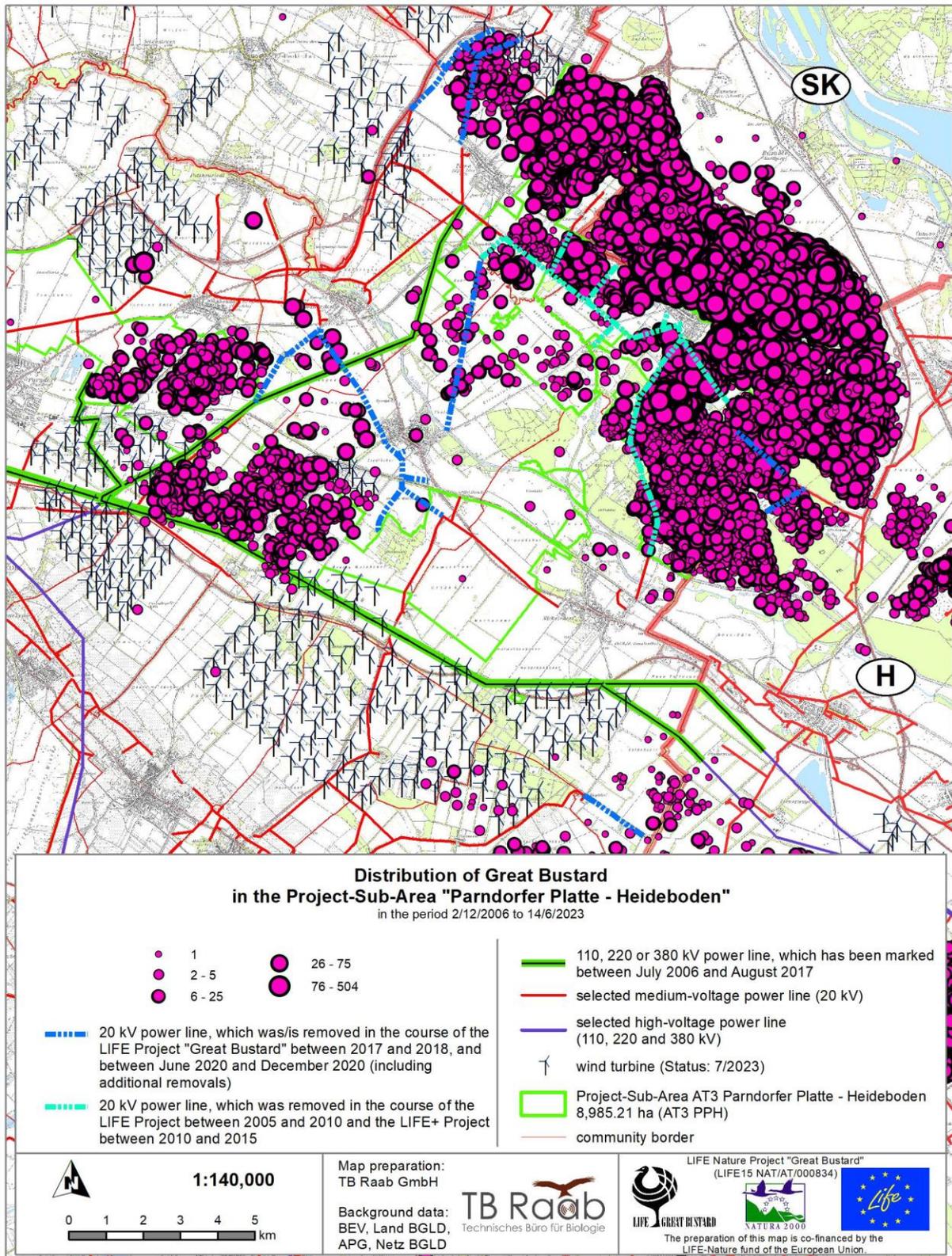


Figure 19: Medium- and high-voltage power lines and Great Bustard observations in the period from December 2nd 2006 to June 14th 2023; Data source: own observations, as well as observations by hunters and farmers.

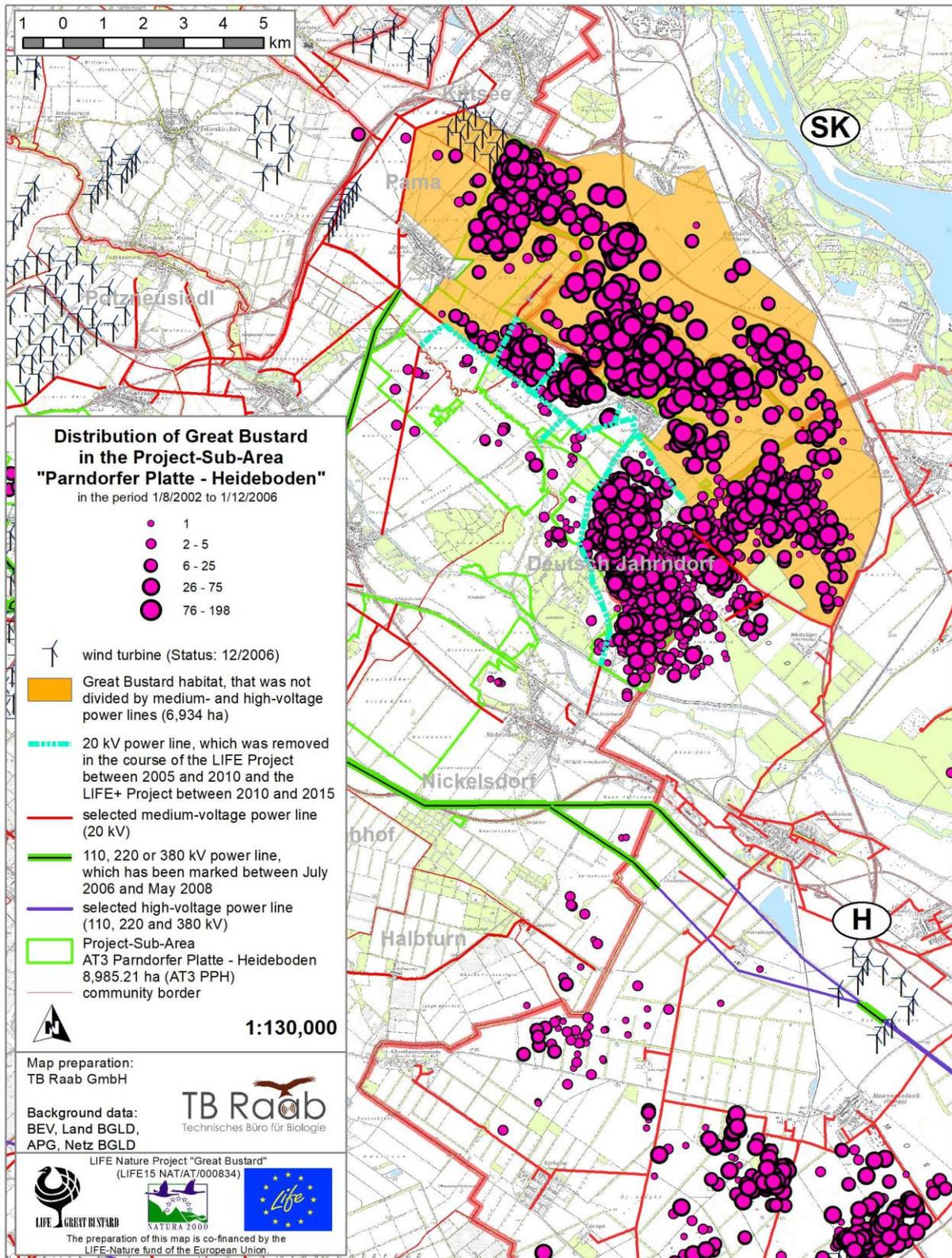


Figure 20: Medium- and high-voltage power lines, habitat in the central Great Bustard area in the Project-Sub-Area "Parndorfer Platte – Heideboden", which was not fragmented by medium- and high power lines, as well as Bustard observations in the period from August 1st 2002 to December 1st 2006; Data source: own observations, as well as observations by hunters and farmers.

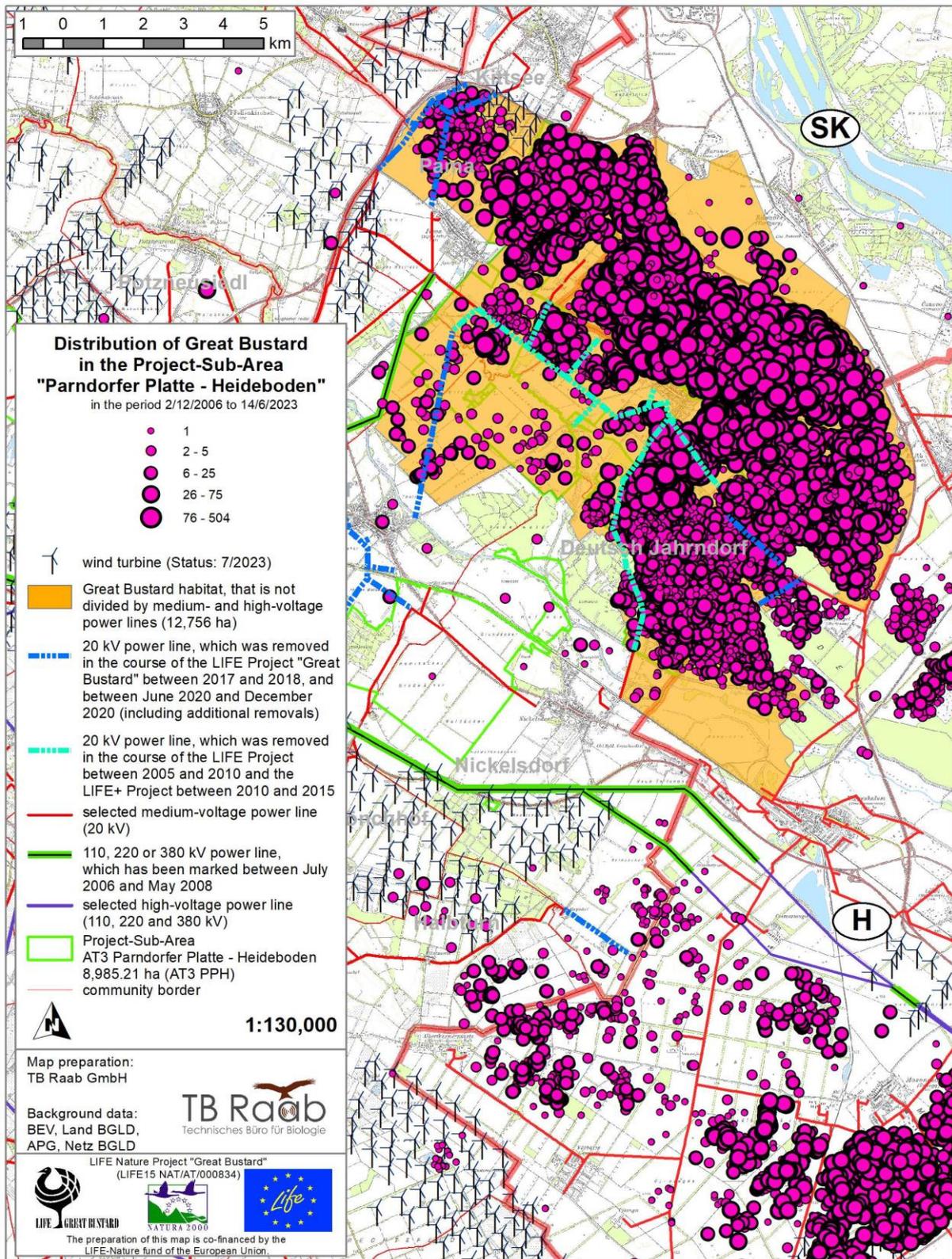


Figure 21: Medium- and high-voltage power lines, habitat in the central Great Bustard area in the Project-Sub-Area "Parndorfer Platte – Heideboden", which was not fragmented by medium- and high power lines, as well as Bustard observations in the period from December 2nd 2006 to June 14th 2023; Data source: own observations, as well as observations by hunters and farmers.

Where are the remaining gaps?

Currently there are no relevant gaps within the designation of protected areas for the Great Bustard.

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.

The identification of unoccupied areas which are potential breeding habitat of the Great Bustard is done regularly. If the Great Bustard 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.

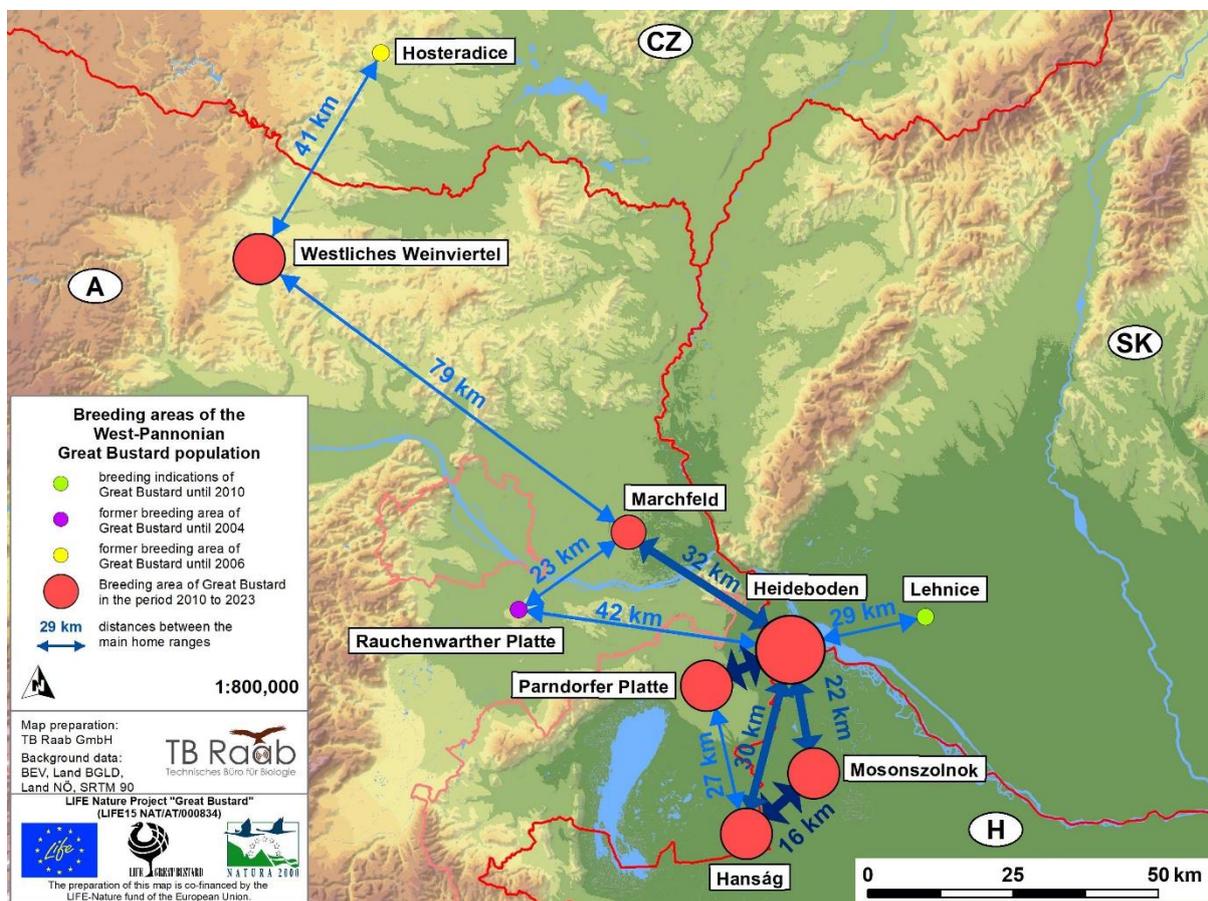


Figure 22: Overview of the distribution of the West-Pannonian population of the Great Bustard in Austria and the adjoining areas in Slovakia, Czech Republic and Hungary in the period from 2010 to 2023 (see Raab, 2009).

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

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

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.).

As more than 90% of the display, breeding, stop-over and wintering sites are covered by protected areas the question only applies to the area "Rauchenwarther Platte". There is no special Great Bustard fallow land at the moment in this area, because there was for some years only one male using the area only for a few days in autumn (last observation of one male on August 6th, 2020, since then no new observations).

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?

Measures like special Great Bustard fallow land have been taken to encourage the return of Great Bustards to abandoned breeding habitats nearby established breeding sites inside protected areas.

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

Breeding of Great Bustard could be observed on these additional fallows near the current breeding areas. The population of Great Bustard increased especially in "Heideboden".

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.

Smaller infrastructural facilities (like wind farms with only few wind power stations) are not subject to an environmental impact assessment. However the impact of every infrastructural project has to be proven according to nature conservation law before implementation. Apart from that the deterioration of the ecological condition at the designation time is prohibited within the SPAs.

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.

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.

Since 1969 hunting of Great Bustards has been banned in Austria. In all Great Bustard ranges hunters agree to take the species and its needs into consideration in agreement with the EU Bird Directive. In the breeding season most hunting activities are suspended voluntarily at the most important displaying and breeding sites. In general, hunting hides are only built or moved in agreement with the local surveillance officers. Nevertheless, seasonal hunting activities like Roe Deer hunting, particularly in May and July, and Brown Hare, pheasant and Grey Partridge hunting in the autumn can cause some degree of disturbance

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:

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?

The surveillance officers endeavour to keep disturbance of Great Bustards by humans at a low level. The ÖPUL measures help to reduce agricultural activities in bustard areas, in particular during the breeding season. If parts of the fallow land are cut or mulched during the breeding season in order to provide fresh and low growth for the chicks, the surveillance officer accompanies the farmer in order to keep disturbances for the birds to a minimum or stop the work entirely if necessary. In addition, there is a general agreement with farmers and hunters to keep all disturbances in bustard areas to a necessary minimum. The surveillance officers in cooperation with hunters and farmers try to reduce disturbance through leisure activities such as dog walking, biking, Nordic walking, jogging and horse riding. There are agreements with the armed forces to prevent unnecessary disturbances through aircraft and helicopters. There are similar agreements with a few private aviation bodies.

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:

x Fully (>75%)

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

2.3.1 Prevention of predation.

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

The role of predation in Austria obviously depends on the weather conditions. In some years (for example 2002) it is playing a certain role for the clutches. If the vegetation is developing slowly the pressure of predation is higher.

What are the main predator species?

The main predator species is in all probability the Red fox. The role of other predators is not really well known, but it looks like that Hooded Crows are also playing a certain role. In the last years through the results of tagging the relevant role of White-tailed Eagle and Eastern Imperial Eagle is more visible. However, there might be some other relevant predators, such as Marsh Harrier, badger, and Raccoon dog.

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

Populations of foxes, Hooded Crows, Raccoon dog and wild boars are hunted within legal limits, but this is mostly not enough to control these populations. So, they are still increasing and in the coming years higher negative impacts cannot be excluded. Since Red Foxes are a serious threat to juvenile Great Bustards, a good cooperation between hunters and conservationists is very valuable in this regard. The Eastern Imperial Eagle and the White-tailed Eagle are also critically endangered species in Austria which require protection measures themselves. A deliberate reduction of these rare species which can also be a threat to bustards is naturally not the aim of conservation activities.

How effective were these measures?

- Effective (predation reduced by more than 50%)
- x Partially effective (predation reduced by 10–49%)**
- Less effective (predation reduced by less than 10%)
- Not applicable¹

2.3.2 Adoption of measures for power lines.

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

For many years collisions of flying Great Bustards with power lines were the most serious threats to the Great Bustard population in Austria. In the period from June 2002 to June 2023 56 (31 %) out of 180 Great Bustards have been proven to have died through collision with power lines in Austria. Most of the collisions occurred on power lines, but on 13/12/2017 there was the first case of collision with a wind power station in Austria. An adult male collided in the Nordburgenland on a wind power station from Enercon (E 101, "Nabenhöhe" 135 m and "Rotordurchmesser" 101 m) in the Windpark Halbtorn on a station that was built in 2013.

In September 2012 an article about the effects of underground cabling and marking of power lines

on the West-Pannonian Great Bustard *Otis tarda* population was published in the scientific journal Bird Conservation International, volume 22, issue 03 (Citation: Raab, R., Schütz, C., Spakovszky, P., Julius E. and Schulze, C. H. (2012). Underground cabling and marking of power lines: conservation measures rapidly reduced mortality of West-Pannonian Great Bustards *Otis tarda*. Bird Conservation International, 22, pp 299-306.).

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

In the frame of the LIFE project between August 2005 and July 2010 approx. 47 km of existing medium voltage power lines have been transferred below the soil and 153 km of high voltage power lines have been marked with bird protection markings. In the frame of the LIFE+ project between June 2012 and December 2015 approx. 4 km of high voltage power lines have been marked with bird protection markings. In Burgenland and Lower Austria all together 50 km of power lines were transferred below the soil and existing power lines removed in the course of the LIFE+ Project. In Burgenland and Lower Austria in the period 2005 till 2015 altogether ca. 100 km of medium voltage power lines have first been transferred into the ground and then the overhead cables and pylons have been removed. Within the newest LIFE Project "Great Bustard" from 2016 – 2023 additional 53.4 km in Austria (6.6 and 9.4 km in the Westlichen Weinviertel, 4.0 and 4.3 km at the Sandboden and Praterterrasse and 9.0 and 20.1 km in the Parndorfer Platte Heideboden, and additional km in HU) of medium voltage power lines have been transferred below the soil with the support of the energy supplying companies.

Therefore larger power line-free areas were recreated for Great Bustards by means of the three LIFE projects "Great Bustard". In these areas the risk of collisions with power lines was eliminated. Furthermore high voltage power lines have been marked to improve their visibility. Within the two LIFE Projects around 150 km of high voltage power lines have been marked with bird warning flags, bird warning plates and bird warning balls. They improve the visibility of the power lines and should therefore reduce the risk of collisions for Great Bustards and for other bird species. Together with other projects some hundred km of high voltage power lines have been marked with bird protection markings within the last years. Since that time only few individuals died on marked sections.

Some maps (Fig. 8 – 21) are showing the distribution of the Great Bustard (the number of individuals is shown in different categories) before and after the implemented measures on power lines within the LIFE Project "Great Bustard" 2005 – 2010, LIFE+ Project 2010 - 2015 and the LIFE Project "Great Bustard" 2016 – 2023.

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

More than 600 individuals in winter and in the breeding time are affected by these measures. Therefore, a major part of the West-Pannonian population (a little bit more than 600 individuals in Februarz 2023) is affected.

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

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)?

In Austria, there is currently no need for compensatory measures, as any activities which will create new loss or degradation of Great Bustard habitat or longer-term disturbance of the species are kept at bay. However, if degradation should occur in future, it should be compensated by appropriate measures.

Only some hectares were lost due to creeping changes (asphalting of farm tracks, enlarging of settlements).

Great Bustard habitat was not reduced but partially the quality of the habitat changed. Due to changed EU legislation in the new rural development programme period the preservation and establishment of bustard fallow land became extremely hard. In the eastern part of Austria hundreds of hectares of fallow land (in and) especially outside of the Great Bustard habitats have been ploughed and changed back to cultivated fields within the last years.

What is the size of the populations affected?

The minor loss of Great Bustard habitat has no significant effects on the Austrian population.

Were these habitat losses compensated? Yes Partially No Not applicable¹

If yes, please explain how.

Not applicable.

Were these measures effective? Yes Partially No Not applicable¹

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

Not applicable.

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?

The Great Bustard is a strictly protected species in Lower Austria and Burgenland. In both federal states, the Great Bustard is counted as game under the hunting laws and is therefore not subject to nature conservation law. However, there is no hunting season, i.e. there is an all-year ban on hunting. Furthermore, the collection of eggs or chicks, the possession of and trade in the birds and their eggs is strictly prohibited and the restrictions are controlled. In Austria, no specimen is in private or other possession such as zoos.

Austria joined the Convention on Trade in Endangered Species (CITES or the Washington Con-

vention), the comprehensive control system on trade in endangered species in 1982. Offences are punishable by fines between € 726 and € 36,336. Particularly severe offences may entail prison sentences of up to two years.

Please indicate if any exemption is granted or not all of these activities are prohibited.
Authorization is only granted out of nature conservation interests.

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.

There was no regular captive breeding in Austria in the period covered by this report (01/01/2017 to 14/06/2023). If injured or seriously ill Great Bustards are found, they are taken into captivity and cared for until they have recovered and are then released again as soon as possible. Captive breeding of bustards is only carried out in exceptional circumstances, when a nest has been abandoned, with only six eggs incubated between 2001 and 2023 in the years 2002, 2004 and 2017. There is no specific station for Great Bustards in Austria. Injured or seriously ill Great Bustards are taken to the "Eulen- und Greifvogelstation" (owl and bird of prey station) Haringsee. Bustards receive excellent veterinary care from Professor Frey, but the housing among birds of prey is not ideal. For this reason, the four Great Bustard chicks hatched in captivity in 2004 (2 chicks) and 2017 (2 chicks) were taken to Hungary on May 27th, 2004 and June 3rd, 2017 for transfer to the Great Bustard Rescue Station at Dévaványa. One of this birds from 2017 is fitted with a transmitter and was alive for some month.

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?

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

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)

x Not applicable³

5. Cross-border conservation measure

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

X 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.

The Austrian population of the Great Bustard is a part of the West-Pannonian population (located on parts of the area of the 4 countries Austria, Hungary, Slovakia and Czech Republic). The protection of the West Pannonian population is implemented by Austria, Hungary, Slovakia and the Czech Republic, with the co-ordination of Austria. A monthly coordinated census of Great Bustards is carried out in cooperation with Hungary and Slovakia in the area Parndorfer Platte - Heideboden. Good contacts exist with ornithologists working on Great Bustards in these countries and ornithologists from the Czech Republic. Joint meetings and research field trips are organised regularly. Since the start of the LIFE Projects in Hungary, Slovakia and Austria, the cross-border cooperation on Great Bustard conservation for the common populations around the Austrian borders to Hungary and Slovakia has been intensified. The objectives of this LIFE project are to reduce the threat of collision with power lines, for many years the no. 1 mortality factor for adult and immature Great Bustards not only in Austria, and at the same time to continue intensive habitat management efforts and to reduce predation.

An important step within the last years was the enlargement of the Austrian Great Bustard database. At the moment Austria has all available data of the West-Pannonian population in one cross-border database. Also all available data of the whole Middle-European Population are in the Austrian database / not only from observations also from all tagged birds in Central Europe. For example to produce overview distribution maps and to produce detailed maps of the “Important Great Bustard Areas” in all member states of the MoU.

Additional there is a plan for a cross-border cooperation within a European-wide LIFE EUROBUSTARD Project for Great Bustard and Little Bustard. The proposal will be send in September 2023 - coordinated by MEGEG and TB Raab GmbH.

6. Monitoring and research

6.1.1 Monitoring of population size and population trends.

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

x Yes No

³ No release is taking place in the country.

⁴ For countries which do not have any transboundary population.

What proportion of the national population is monitored?

x All (>75%)

- Most (50-75%)
- Some (10-49%)
- Little (<10%)
- None
- Not applicable¹

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

The Austrian Great Bustard population declined from a total of 700-800 individuals around the middle of the 20th century to a low of about 60 individuals at the end of the century. By the breeding season of 2021 it had increased again to a population size of 437 to 584 individuals. Remarkably, population trends were different in each study area. At Rauchenwarther Platte the breeding population became extinct by the breeding season of 2005. At Marchfeld there was a huge decline in the population between 1990 and 1998 and since then the population has remained more or less stable with a small decrease of the population in the last years. At Hanság the population has remained more or less stable since 1990 with a small increase in the last two years. At Parndorfer Platte there has been an increase in population size since 2007 and in the Austrian part of Heideboden as well as in Westliches Weinviertel there has been a huge increase since as long ago as 1998. In Heideboden the increase of the population is ongoing. In Westliches Weinviertel there is again a small increase of the population in the last years.

In winter 2022/2023 more than 550 out of the ca. 620 individuals of the West-Pannonian population (located on parts of the area of the 4 countries Austria, Hungary, Slovakia and Czech Republic) spent most of the time in Austria.

The importance of Austria is also shown with the telemetry data of the tagged birds. Most of the time the birds from the West-Pannonian population spend in Austria.

Breeding/resident population
2021: 437 to 584 individuals
(2012: 213-253 individuals)
No. of adult and immature males: 146-223
No. of females: 291-361

Non-breeding population (on passage, wintering) not relevant

No. of adult males: _____
No. of females: _____

Trend: Declined by ___% over the last 10 years
 Stable
x Increased by 220 % over the last 10 years

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:

⁵ Only for countries where the species occurs regularly.

6.1.2 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.

Monitoring of effects of habitat management is carried out regularly at all sites.

In summer 2015 an article about Great Bustard and the effects of the Austrian Agri-Environmental Scheme was published in the scientific journal Aquila.

Citation: Raab, R., Julius, E., Greis, L., Schütz, C., Spakovszky, P., Steindl, J. & Schönemann, N. (2014): The Austrian Agri-Environmental Scheme for Great Bustard (*Otis tarda*). Aquila 121: 95–102.

In April 2018 an article about the successes in the LIFE project "Great Bustard Conservation through the reduction of collisions with power lines was published

Citation: Raab, R., Spakovszky, P., Steindl, J., Wojta M., Technisches Büro für Biologie Mag. Dr. Rainer Raab (Österreich) (2018): Erfolge im LIFE-Projekt „Großtrappenschutz“ durch die Reduktion von Kollisionen an Stromleitungen. Vogelschutz an Höchstspannungsfreileitungen pp 52-73

(In 2020 an article about the impact of agriculture irrigation on the habitat structure and use by Great Bustards in a Natura 2000 site (close to Austria) was published.

Citation: Spakovszky, P. & Raab, R. 2020. Impact of agriculture irrigation on the habitat structure and use by Great Bustard (*Otis tarda*) in a Natura 2000 site. – *Ornis Hungarica* 28(2): 74–84. DOI: 10.2478/orhu-2020-0018).

What can be learned from these studies?

In Europe agricultural intensification is one of the major threats for Great Bustards. In order to address this issue within the Austrian Agri-Environmental scheme "ÖPUL" (Austrian programme for an environmentally appropriate, extensive and natural habitat friendly agriculture) special measures were implemented in order to (financially) support and provide an incentive for Great Bustard friendly habitat management (e.g. fallow land, winter wheat, a certain sowing/mowing regime ...).

Through the support of both the EU and Austria itself the area managed especially for the Great Bustard through ÖPUL increased in all four Great Bustard areas and by June 2023 it involved more than 450 farmers participating on a voluntary basis.

By implementing the Austrian Agri-Environmental scheme, an increase of the Austrian Great Bustard population from 60 individuals in the 1990s to ca. 240 individuals by 2012 was achieved. Because of this success, and the high degree of satisfaction for everyone involved, a continuation is not only desired by the involved parties, but also a necessity for Great Bustard conservation, to ensure this ongoing improvement of Great Bustard habitats also in the future.

LIFE and LIFE+projects in Austria have successfully implemented measures that have led to a

significant increase in the population of the Great Bustard (*Otis tarda*) in the West Pannonia region. This positive population development was achieved by implementing habitat-improving measures. In addition to the installation of low-impact and highly nutritious bustard protection areas, the reduction in the numbers of Great Bustards lost as a result of collisions with overhead lines was decisive for the success of the protection programme. Monitoring of the number of dead birds found over an area of 100,000 ha has shown that following replacement of the medium-voltage lines with underground cabling and marking of the high-voltage power lines with bird warning balls, plates and flags, power-line collisions, as the main cause of death, can be avoided by creating line-free areas and significantly reduced by installing bird protection markers. In addition to a detailed description of the protective measures and performance reviews, the paper also provides a brief overview of the causes and effects of line collisions on bird species and populations (Raab et al. 2018).

As the whole Palearctic steppe system, its iconic bird, the Great Bustard has also suffered from the expansion of intensive agriculture. The species now typically has stable or growing populations only in protected areas, but negative processes are still prevalent even there. In this study, we present a recent change in a part of the Natura 2000 site designated for the isolated West Pannonian population. In recent years, a total of 2.3 km Center-pivot and laterally moving linear irrigation systems have been built and 4.7 km of underground pipelines have been laid, with which more than 52 % of the 1,245.5 ha study area was irrigated by 2020. In comparison to 2009, when the study period has started, the sown area of autumn cereals, one of the main breeding habitats, was roughly halved and the proportion of crops unsuitable for breeding was increased. New crops requiring irrigation have emerged with a rate of 30.6 % in the last year. Despite the available support, the area of alfalfa, which is the most significant breeding habitat, and is grown almost exclusively in the agri-environmental scheme, has decreased. As a result of habitat degradation, the number of Great Bustard females observed in the area in spring decreased to a small fraction of the beginning. Irrigation farming is expected to increase, as a response to the climate change, but in order to save agro-steppe habitats and their species, the adverse effects of agricultural intensification need to be urgently addressed at both local and European levels (Spakovszky et al. 2020)

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

In the last years natural disturbance caused by eagle species raised up and is studied more and more intensive. A telemetry study including Great Bustard, White Tailed Eagle and Imperial Eagle was started 2016. In 2017 three Great Bustards were tagged with loggers from Ecotone in East Hungary by TB Raab in cooperation with MME and the Nationalparks. Until 24.05.2023 59 Great Bustards (mostly juveniles) were equipped with GPS-based satellite transmitters in Austria and Hungary within the cross-border LIFE Project "Great Bustard". 17 individuals are still alive (Status 24.05.2023). This will also help to understand the effects of habitat management in different areas.

6.2.1 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

Comparative studies on the different sub-populations in Austria and for the whole West-Pannonian subpopulation (A, CZ, H and SK) are carried out, but only some results are published yet.

In March 2010 a large article about the West-Pannonian Great Bustard population was published in "Egretta", the scientific journal of BirdLife Austria. The article includes detailed information about the population development in Austria and West-Hungary and the implemented conservation projects.

Citation: Raab, R., Kollar, H. P., Winkler, H., Faragó, S., Spakovszky, P., Chavko, J., Maderič, B., Škorpíková, V., Patak, E., Wurm, H., Julius, E., Raab S. and Schütz, C. (2010): Die Bestandsentwicklung der westpannonischen Population der Großtrappe, *Otis tarda* Linnaeus 1758, von 1900 bis zum Winter 2008/2009. *Egretta* 51: 74-99.

In June 2011 an article about the effects of power lines on flight behaviour of the West-Pannonian Great Bustard *Otis tarda* population was published in the scientific journal Bird Conservation International, volume 21, issue 02.

Citation: Raab, R., Spakovszky, P., Julius E., Schütz, C. and Schulze, C. H. (2011). Effects of power lines on flight behaviour of the West-Pannonian Great Bustard *Otis tarda* population. Bird Conservation International, 21, pp 142-155 doi:10.1017/S0959270910000432

In September 2012 an article about the effects of underground cabling and marking of power lines on the West-Pannonian Great Bustard *Otis tarda* population was published in the scientific journal Bird Conservation International, volume 22, issue 03.

Citation: Raab, R., Schütz, C., Spakovszky, P., Julius E. and Schulze, C. H. (2012). Underground cabling and marking of power lines: conservation measures rapidly reduced mortality of West-Pannonian Great Bustards *Otis tarda*. Bird Conservation International, 22, pp 299-306 doi:10.1017/S0959270911000463

In March 2015 an article about the effects of underground cabling and marking of power lines on the West-Pannonian Great Bustard *Otis tarda* population within the LIFE+ project was published in the scientific journal Szélkiáltó.

Citation: Raab, R., Spakovszky, P. & Julius, E. (2014): Az elektromos légvezetékek hatása a nyugat-pannon tűzokvédelmi LIFE+ project akciói (Effects of aerial power lines on the West-Pannonian Great Bustard (*Otis tarda*) population and the actions of the Austrian Great Bustard LIFE+ project). Szélkiáltó 16: 58-60.

In summer 2015 two articles about Great Bustard and the effects of the LIFE+ project were published in the scientific journal Aquila.

Citation: Raab, R., Julius, E., Greis, L., Schütz, C., Spakovszky, P., Steindl, J. & Schönemann, N. (2014): The Austrian Agri-Environmental Scheme for Great Bustard (*Otis tarda*). Aquila 121: 95–102.

Citation: Raab, R., Julius, E., Greis, L., Schütz, C., Spakovszky, P., Steindl, J. & Schönemann, N. (2014): Endangering factors and their effect on adult Great Bustards (*Otis tarda*) - conservation efforts in the Austrian LIFE and LIFE+ projects. Aquila 121: 49–63.

In September 2015 an article about the effects of winter oilseed rape fields on the West-Pannonian Great Bustard *Otis tarda* population was published in the scientific journal Bird Conservation International, volume 25, issue 03.

Citation: Raab, R., Schütz, C., Spakovsky, P., Julius, E. & Schulze, C. H. (2015): Optimising 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.

In March 2016 an article about the genetic structure of the threatened West-Pannonian Great

Bustard *Otis tarda* population was published in the scientific journal PeerJ.

Citation: 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.

In April 2018 an article about the successes in the LIFE project "Great Bustard Conservation through the reduction of collisions with power lines was published

Citation: Raab, R., Spakovszky, P., Steindl, J., Wojta M., Technisches Büro für Biologie Mag. Dr. Rainer Raab (Österreich) (2018): Erfolge im LIFE-Projekt „Großtrappenschutz“ durch die Reduktion von Kollisionen an Stromleitungen. Vogelschutz an Höchstspannungsfreileitungen pp 52-73

In 2020 an article about the impact of agriculture irrigation on the habitat structure and use by Great Bustards in a Natura 2000 site (close to Austria) was published.

Citation: Spakovszky, P. & Raab, R. 2020. Impact of agriculture irrigation on the habitat structure and use by Great Bustard (*Otis tarda*) in a Natura 2000 site. – *Ornis Hungarica* 28(2): 74–84. DOI: 10.2478/orhu-2020-0018.

What can be learned from these studies?

For a better understanding of population dynamics, habitat requirements and effects of habitat changes further research must be undertaken on the whole Central European population.

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

Comparative ecological studies should be coordinated between the Member states of the MoU

6.2.2 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.

In September 2012 an article about the effects of underground cabling and marking of power lines on the West-Pannonian Great Bustard *Otis tarda* population was published in the scientific journal Bird Conservation International, volume 22, issue 03 (Citation: Raab, R., Schütz, C., Spakovszky, P., Julius E. and Schulze, C. H. (2012). Underground cabling and marking of power lines: conservation measures rapidly reduced mortality of West-Pannonian Great Bustards *Otis tarda*. Bird Conservation International, 22, pp 299-306.).

The study on mortality reasons is still ongoing and it is planned to publish the results in the next years.

What can be learned from these studies?

Mortality factors are studied whenever possible, for example targeted searches are carried out when individual birds go missing and more than 700 people are involved in the project. The results from 2002 to 2010 are published. This has been important for example in identifying collisions with power lines as an important mortality factor.

Our ongoing study includes the whole West Pannonian population, not only the Austrian population. The following figures (Fig. 22 – 27) are unpublished results for the whole West-Pannonian population (Raab et al. in prep).

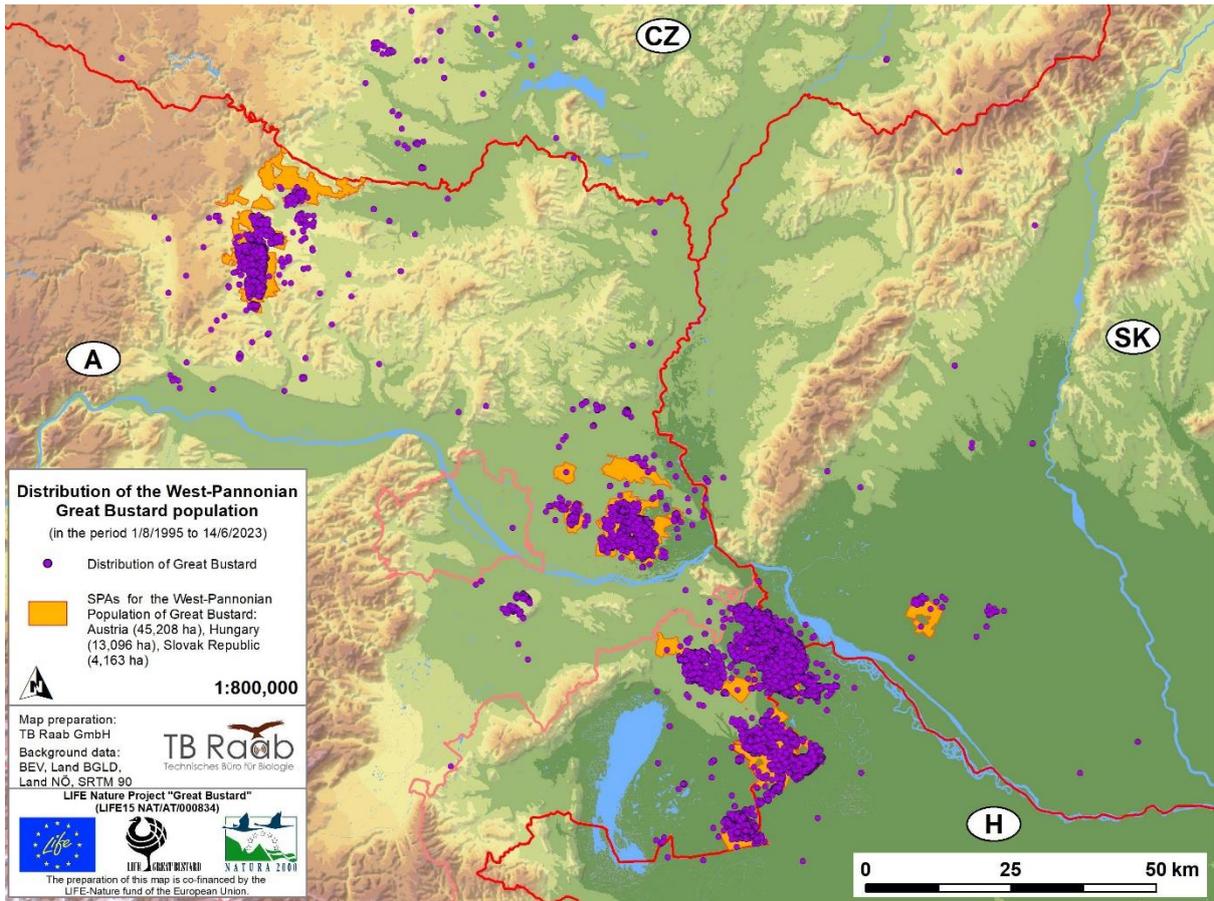


Figure 23: Distribution of the West-Pannonian population of the Great Bustard in Austria and the adjoining areas in Slovakia, Czech Republic and Hungary for the period from August 1995 to June 2023.

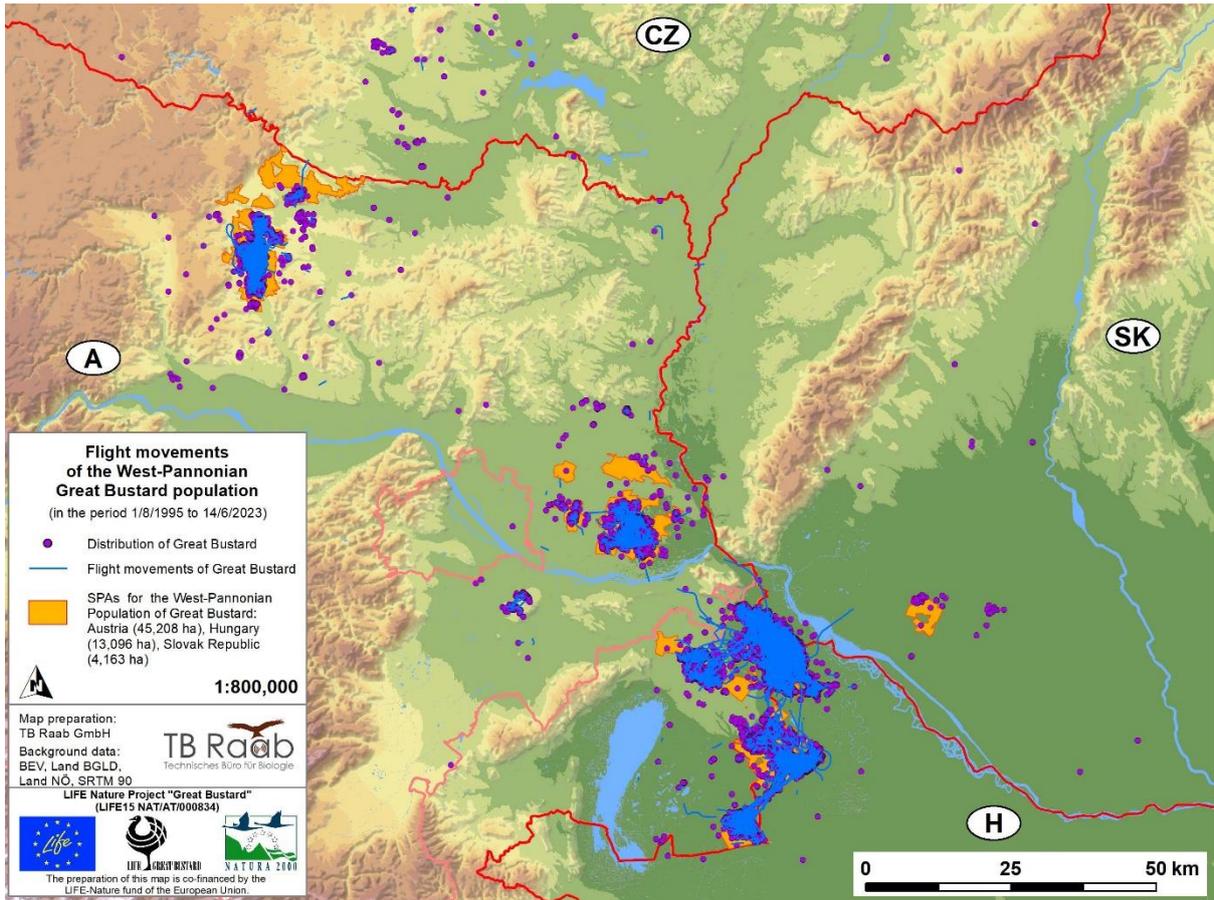


Figure 24: Flight movements of the West-Pannonian population of the Great Bustard in Austria and the adjoining areas in Slovakia, Czech Republic and Hungary for the period from August 1995 to June 2023.

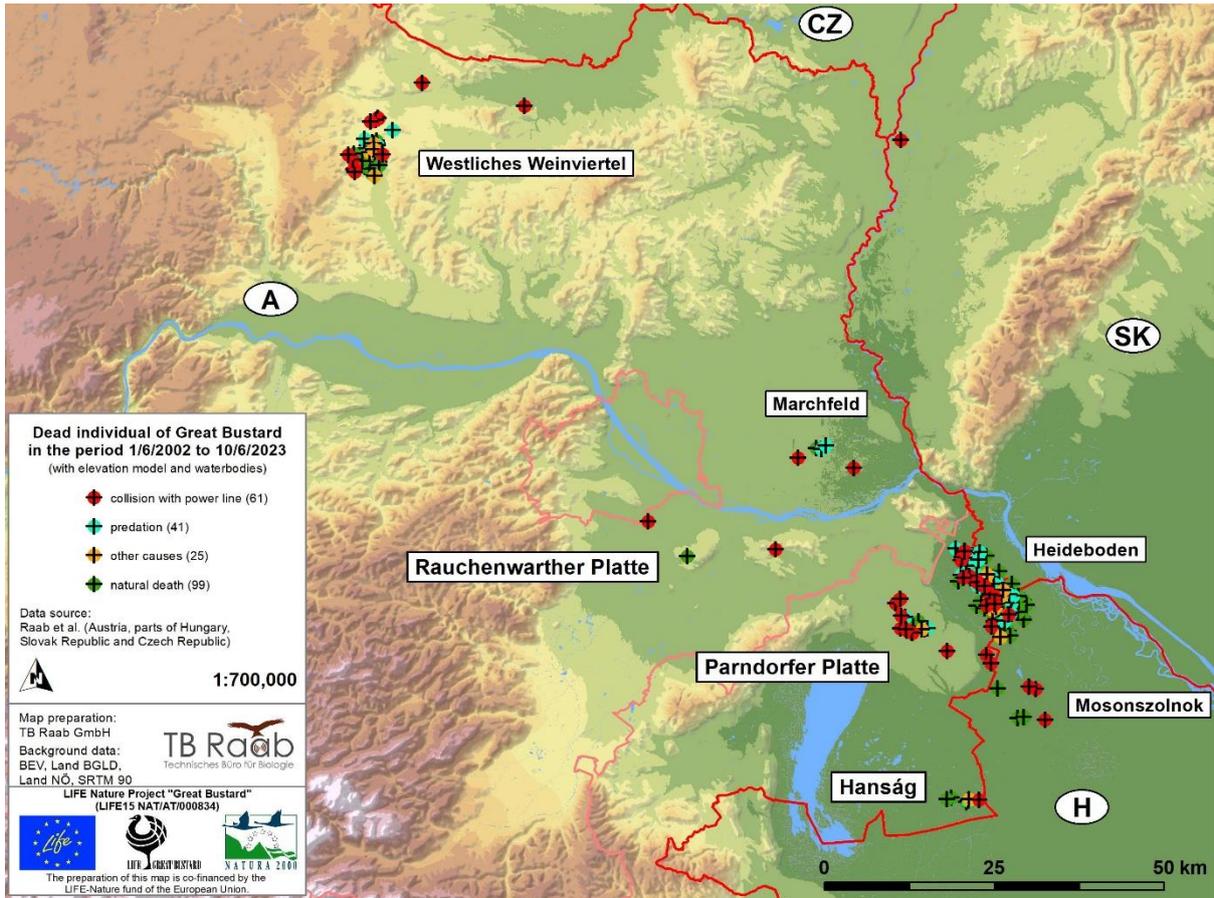


Figure 25: All 226 dead individuals of the Great Bustard in Austria and the adjoining areas in Slovakia, Czech Republic and Hungary in the period from 2002 to 2023.

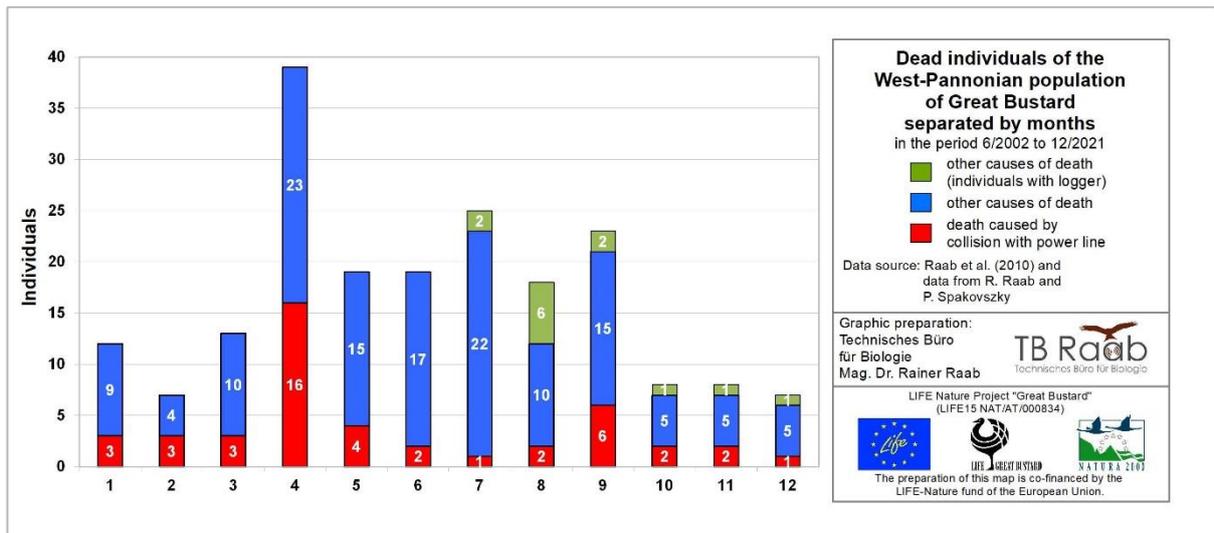


Figure 26: Dead individuals of Great Bustard separated by months in the period 6/2002 to 12/2021.

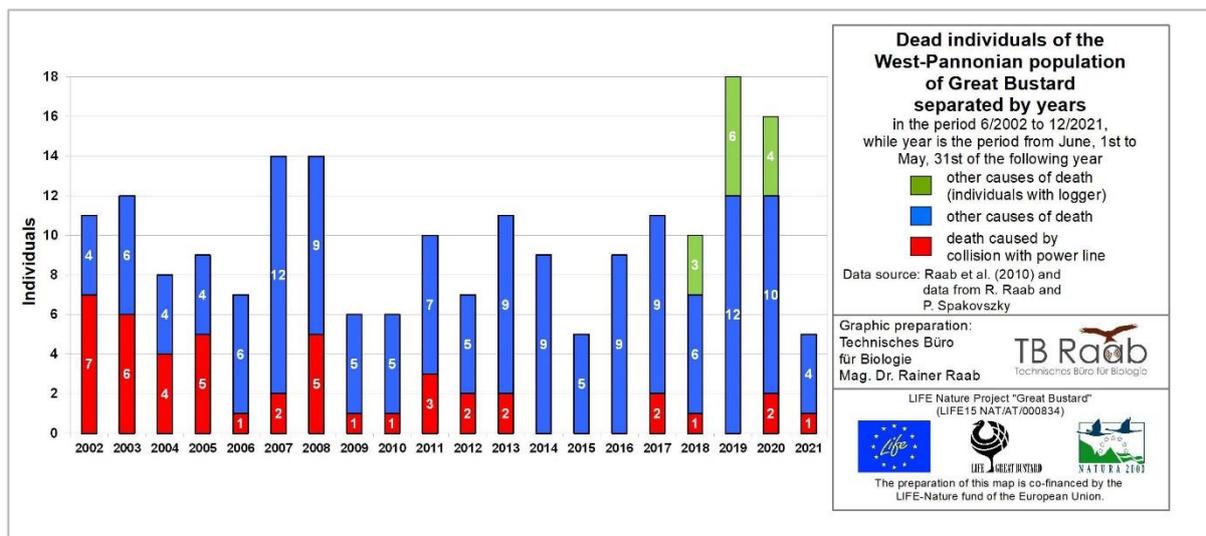


Figure 27: Dead individuals of Great Bustard separated by years 6/2002 to 12/2021. The period of the year includes the period from 1st of June till 31st May of the following year, in 2021 the lower number is a result of the shorter period.

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

The mortality factors of the adult and immature individuals are studied in detail. The mortality factors for clutches and juveniles are not surveyed, only occasional observations are recorded. The reason on the one hand is to avoid additional disturbances to the clutches and on the other hand the constant increase of Austrian Great Bustard population.

6.2.3 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

Intensive studies on breeding success have been carried out, but certain conclusions about the reasons for failure are difficult to reach. The results are still not published yet.

What can be learned from these studies?

The main factor limiting breeding success in Austria was for many decades the disturbance through agricultural activities. Due to effective design and placement of the large-scale protected areas and the special Great Bustard fields, this limiting factor is reduced nowadays.

Nowadays weather conditions in the breeding time are playing an important role for the breeding success. Climate change can cause a real threat for the populations in Austria and whole Central Europe

⁶ Only for breeding countries.

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

With the help of further research on the breeding success, but hopefully also with the help of the planned telemetry study on Great Bustards it should be possible to reach a better understanding of some of the factors limiting breeding success.

6.2.4 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 the reporting period the key sites as wintering places in Austria were still “Heideboden” and “Westliches Weinviertel”. A big part of the whole West-Pannonian population is wintering in or close to these key sites.

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

In AT and HU altogether 59 Great Bustards (Fig. 28) were equipped with GPS-based satellite transmitters to follow their movements and gather new information on habitat preference, metapopulation dynamics and use of peripheral habitats. Nevertheless, observations of Great Bustards but also of flying bustards are carefully recorded. The observations showed that there was no major migration in Austria within the last years.

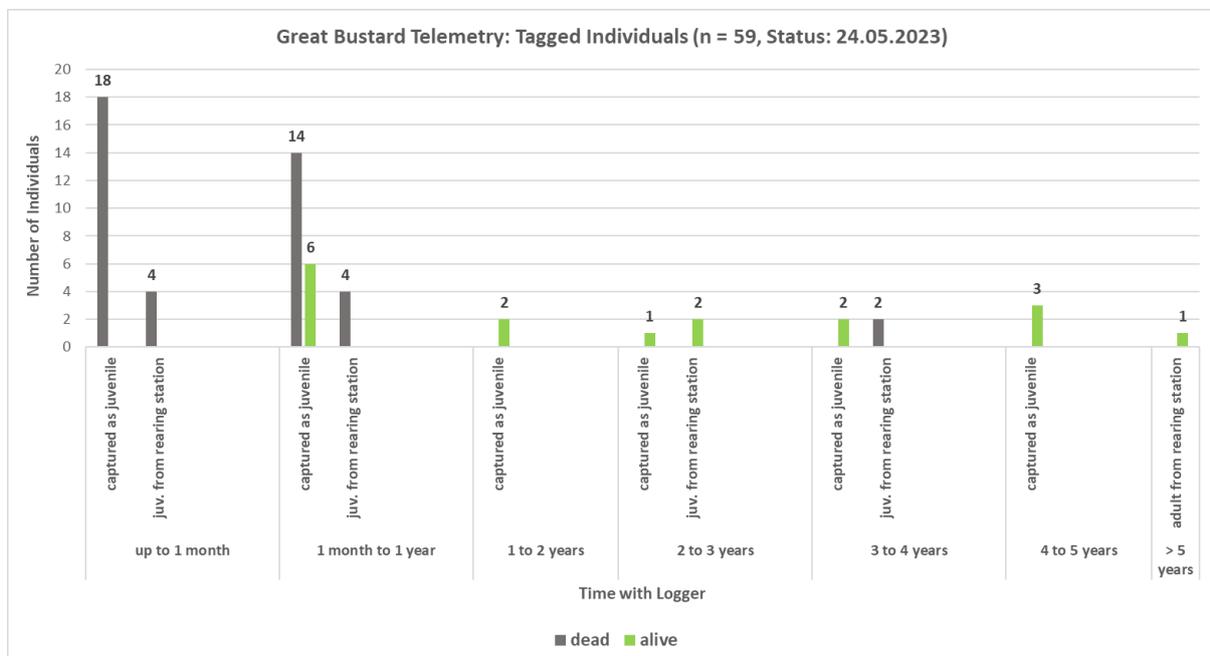


Figure 28: Tagged individuals of Great Bustard in AT and HU separated by the age, Status 24.05.2023.

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

Different methods of mounting GPS-transmitters to Great Bustards and catching Great Bustards were discussed with experts from other countries. Caused by the sensibility of the Great Bustard this is still an important topic. The main priority is to cause the least possible harm to the birds, when catching them and attaching the transmitters.

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.

The project coordinator carries out frequent personal meetings and field trips to Great Bustard areas with staff from conservation bodies and NGOs.

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.

Manfred Pöckl (Office of the State Government of Lower Austria, Nature Conservation Expert and representative of the Austrian Federal States within the MoU) was regularly visiting other countries and wrote reports for the Government of Lower Austria. Within the LIFE Project "Great Bustard" regular visits between Austria and Hungary for Great Bustard experts are implemented. Members of neighbouring countries are regular participants of Great Bustard meetings in Austria and additionally the project coordinator carries out frequent personal meetings in other countries and participates on meetings with presentations (for example in Germany and Slovakia).

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?

Austria has undertaken major efforts to increase the awareness about the protection needs of the species and its habitat since signing the Memorandum of Understanding especially within the LIFE and the LIFE+ project "Great Bustard" and will continue its efforts in the new LIFE Project "Great Bustard". There are special actions raising awareness among stakeholders in all Austrian Great Bustard habitats.

More than 90 information events for farmers and landowners have been carried out in cooperation with the farmers' chamber in the last years, and hundreds of hours of personal talks with farmers. This has led to important successes, such as nearly 100% of farmers in the bustard range of Western Weinviertel participating in the "ÖPUL" Great Bustard measures.

Occasional TV, radio, newspaper and interest group (farmers, hunters, etc.) magazine coverage

of Great Bustard issues has been promoted by the project coordinator and the Lake Neusiedl National Park, but so far without making detailed habitat locations outside the National Park public.

A dedicated internet site exists since 2001: www.grosstrappe.at. Since the beginning of the LIFE project in August 2005 the website is renewed and is available in German and English. Parts of the website have been translated into 5 additional languages and have been put online in August 2007. The website is continuously updated and includes summaries and photos of events and press releases related to the bustard protection projects. Since September 2014 the homepage appears in a completely new, more modern design.

Since January 16th 2017 a Facebook page has been created for the LIFE Project Great Bustard reaching 1.931 Followers until November 30th 2022 so the public is informed about ongoing activities for the protection of the Great Bustard.

One milestone was a Facebook post which was shared on the popular Birdwatching page "Birds", which received 1.475 Likes and was shared 336 times on other pages and profiles. Another picture shot by Franz Josef Kovacs reached more than 70.000 people and received more than 3.700 reactions, comments and shares on Facebook. On January 21st 2019, the LIFE Unit posted about the efforts of the ongoing LIFE project. On June 3rd 2021 the journalist and EU conference moderator published an Interview about the LIFE Great Bustard and the importance of LIFE projects. Additionally, Mag. Dr. Rainer Raab was interviewed for the Podcast 30 years LIFE to talk about the success of the conservation of the Great Bustard in 2022.

The illustrated book „Die Großtrappe in Mitteleuropa. Erfolgreicher Schutz der westpannonischen Population“ from Raab, R., Kovacs, F. J., Julius, E., Raab, S., Schütz, C., Spakovszky, P. und Timar, J., which was produced in 2010 within the LIFE project (1,500 copies) with the financial support of the project partner Austrian Power Grid AG (covering printing cost), was handed out to more than 400 stakeholders by R. Raab. Additional 17 project-municipals and 6 project-partners got an information board till December 26th, 2012.

The LIFE programme celebrated its 20th anniversary in May 2012. To mark this important milestone in the history of the EU's financial instrument for the environment, the Austrian Society for Great Bustard Conservation invited a lot of stakeholders to take part in the anniversary with the opening of the new bird watch tower LIFE+ Great Bustard Andau. The anniversary event was organized in Andau and was open for the public and attended by the Federal Minister for the Environment, Niki Berlakovich. From 2005 to 2015 in total an information- and observation point at the Wartberger Kirche in Straning-Grafenberg as well as 4 observation towers in Andau, Pama, Roseldorf and Zurndorf were built for the observation of the Great Bustard, which are still used every year by several thousand visitors and therefore are a visible long-term sign of the two LIFE Projects for the protection of the Great Bustards in Austria.

Several short videos including Interviews with interesting characters, who have a connection to the Great Bustard project were produced by Franz Josef Kovacs starting from July 27th 2017. So far 10 short videos have been produced and 8 of them are published on the LIFE Project Homepage, on YouTube and on Facebook. The interviews were held with Peter Sinowatz (Managing Director Netz Burgenland GmbH), Robert Essbüchel (Manager of the Netz Niederösterreich GmbH), Josef Pröll (Chief of the Hunters Association of Lower Austrian), Karin Kadenbach (Member of the European Parliament), Günter Liebel (Director General - Head of Department 1 - Environment and Climate protection in the BMLFUW), Hans Jörg Damm (Director of Agriculture and Forest Wilfersdorf of the Foundation Prince Liechtenstein), Astrid Eisenkopf (Land Councilor, Land Government of Burgenland), Werner Falb-Meixner (Chairman of the Austrian Society for Great Bustard Conservation), Ugró Sándor (Director Kiskunság National Park Directorate), Halmos Gergő (Executive Director BirdLife Hungary).

In order to raise acceptance of the large-scale protected areas for Great Bustards in Austria, and of Natura 2000 sites in general, a lot of effort will go into raising public awareness on these issues also in the coming years.

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?

It is necessary to reach political decision makers, local and regional authorities, and farmers regularly also after job positions are changed, so that they continue to support Great Bustard conservation.

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

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	Local	The minor loss of Great Bustard habitat has no significant effects on the Austrian population
Losses of eggs and chicks	Low, in some parts of the areas Medium	Influence only in extreme or adverse weather conditions during the breeding period
Predation	Low, in some parts of the areas Medium	The role of predation in Austria depends obviously on the weather conditions. If the vegetation is developing slowly the pressure of predation is higher. Hunters are very active in most parts of the areas.
Collision with powerlines	Until 2006: High, in some parts of the areas Critical, since 2006: Low, in some parts of the areas Medium or High	Within the three LIFE Projects a lot of measures have been implemented to reduce the risk of collisions with power lines and additional measures will be implemented within the new planned LIFE EUROBUSTARD Project, especially to prevent railway overhead line collisions that happened more frequent in the last month
Human disturbance	Low	The surveillance officers endeavour to keep disturbance of Great Bustards at a low level.
Pesticides	Low on some special Great Bustard protection fields, in some parts of the areas Medium or High	On special Great Bustard protection fields the use of pesticides is forbidden or restricted.
Illegal hunting	Low	Illegal hunting is normally no problem for Great Bustards in Austria.
Extreme or adverse weather conditions during the breeding period (strong downpours of rain, hail and cold periods during the hatching period)	Unknown	Annual fluctuations in breeding success have been observed also in the last years, but Climate change can cause a real threat for the populations in Austria and whole Central Europe in future.

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.

Endeavour to extend the ongoing set-aside and habitat management schemes.

Since the Memorandum of Understanding was signed by Austria in 2001, the ongoing set-aside and habitat management schemes have been extended significantly (see above).

Ensure the control of all populations locally and the care for breeding females in the field.

Regular surveillance is carried out in all bustard ranges by a surveillance officer. In all bustard areas in Lower Austria and Burgenland it is Rainer Raab and his co-workers (see above).

Improve and strengthen cross-border co-operation with neighbouring countries by reviewing and coordinating existing and/or developing new programmes for the research, monitoring and protection of Great Bustards.

In September 2004 Austria hosted a scientific symposium on Great Bustard conservation and the first meeting of the signatories of the Memorandum of Understanding.

Since the start of the LIFE Projects in Hungary, Slovakia and Austria, the cross-border cooperation on Great Bustard conservation for the common population around the Austrian-Hungarian-Slovakian border has been intensified. In the coming years, cross-border conservation measures will be extended further in this region, but also around the Austrian-Czech border.

An important step within the last years was the enlargement of the Austrian Great Bustard database. At the moment Austria has all available data of the West Pannonian population in one cross-border database. Also all available data of the whole Middle-European Population are in the Austrian database. For example to produce overview distribution maps and to produce detailed maps of the "Important Great Bustard Areas" in all member states of the MoU (see above).

In March 2017 Austria hosted a Great Bustard MoU and LIFE Project Meeting in Illmitz and the next was organized with the help of At in SK in September 2023.

In AT and HU Great Bustards were and will be equipped with GPS-based satellite transmitters to follow their movements and gather new information on habitat preference, metapopulation dynamics and use of peripheral habitats. Nevertheless, observations of Great Bustards but also of flying bustards are carefully recorded. The observations showed that there was no major migration in Austria within the last years (see above).

Additionally a new proposal will be send in September 2023 for the project LIFE EUROBUSTARD "Cross-border protection of the Great Bustard and the Little Bustard in Europe" with the two main aims:

- Replication of the experiences and the best practice protection of previous LIFE projects for the West-Pannonian population of the Great Bustard - the only population in the whole world that shows in the last 20 years an increase from 251 in 2004 to 662 individuals in 2023 (increase by 164 %) – extending the successful approach to the whole European Great Bustard and Little Bustard habitats in 8 European countries and additionally in Ukraine if possible
- Halt the decline of the two species Great Bustard and Little Bustard in Europe (compared to the current breeding population, in most countries results from 2022/2023)