

# REPORT ON THE 'MAIN RESULTS OF THE SURVEILLANCE UNDER ARTICLE 17' FOR ANNEX II, IV AND V SPECIES OF DIRECTIVE 92/43/EEC

## NATIONAL LEVEL

### 1. GENERAL INFORMATION

1.1 Member State	HU
1.2 Species code	4011
1.3 Species scientific name	<i>Bolbelasmus unicornis</i>
1.4 Alternative species scientific name (Optional)	
1.5 Common name (Optional)	szarvas álganéjtúró

### 2. MAPS

*Distribution of the species within the Member State concerned.*

2.1 Sensitive species	No
2.2 Year or period	2019–2024
2.3 Distribution map	Yes
2.4 Distribution map Method used	Based mainly on extrapolation from a limited amount of data
2.5 Additional maps (Optional)	–
2.6 Additional information (Optional)	–

### 3. INFORMATION RELATED TO ANNEX V SPECIES (ART. 14 OF DIRECTIVE 92/43/EEC)

3.1 Is the species taken in the wild/exploited?	No	
3.2 Are measures needed for the species (only for species in favourable conservation status)?	No	
3.3 Which of the measures in Art. 14 have been taken?	a) regulations regarding access to property	–
	b) temporary or local prohibition of the taking of specimens in the wild and exploitation	–
	c) regulation of the periods and/or methods of taking specimens	–

	d) application of hunting and fishing rules which take account of the conservation of such populations	–					
	e) establishment of a system of licences for taking specimens or of quotas	–					
	f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens	–					
	g) breeding in captivity of animal species as well as artificial propagation of plant species	–					
	h) other measures, if yes, describe	–					
3.4 Hunting bag or quantity taken in the wild regardless of conservation status - for Mammals and Acipenseridae (Fish)	a) Unit	–					
	b) Statistics/ quantity taken	<i>Provide statistics/quantity taken per hunting season or per year (where season is not used) over the reporting period</i>					
		Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
	Min. (raw, i.e. not rounded)						
	Max. (raw, i.e. not rounded)						
	Unknown	–	–	–	–	–	–
3.5 Hunting bag or quantity taken in the wild Method used	–						
3.6 Additional information (Optional)	–						

## BIOGEOGRAPHICAL LEVEL

*Complete for each biogeographical region or marine region concerned.*

### 4. BIOGEOGRAPHICAL AND MARINE REGIONS

4.1 Biogeographical or marine region where the species occurs	Pannonian
4.2 First time reporting	No
4.3 Additional information	–
4.4 Sources of information	Monitoring reports (2019-2024) of Hungarian Biodiversity Monitoring System <a href="https://www.izeltlabuak.hu/faj/szarvas-alganejturo">https://www.izeltlabuak.hu/faj/szarvas-alganejturo</a> Licenz: CC BY 4.0 „A közösségi jelentőségű fajok és élőhelyek megőrzését szolgáló tudás-bázis fejlesztése” (KEHOP-4.3.0-VEKOP-15-2016-00001) projekt adatai Juřena D (2022) A critical review of the distribution of the endangered European earth-borer beetle <i>Bolbelasmus unicornis</i> (Coleoptera, Geotrupidae), with new records from 13 countries and observations on its bionomy. ZooKeys 1105: 1–125. <a href="https://doi.org/10.3897/zookeys.1105.81474">https://doi.org/10.3897/zookeys.1105.81474</a>

### 5. RANGE

*Range within the biogeographical/marine region concerned.*

5.1 Surface area (km <sup>2</sup> )	9528	
5.2 Change and reason for change in surface area of range and main reason	Is there a change between reporting periods? yes, due to improved knowledge/more accurate data yes, due to the use of different method	
	The change is mainly due to: improved knowledge or more accurate data	
5.3 Short-term trend Period	2013–2024	
5.4 Short-term trend Direction	unknown	
5.5 Short-term trend Magnitude (Optional)	a) Estimated Minimum	–
	b) Estimated Maximum	–
	c) Pre-defined range	–
	d) Unknown	–
5.6. Short-term trend Magnitude Type of estimate (Optional)	–	
5.7 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data	
5.8 Long-term trend Period (Optional)	–	
5.9 Long-term trend Direction (Optional)	–	
5.10 Long-term trend Magnitude (Optional)	a) Minimum	–
	b) Maximum	–
5.11 Long-term trend Method used (Optional)	–	
5.12 Favourable reference range	a) –	
	b) <i>if a precise favourable reference range is unknown indicate if the range is:</i> approximately equal to the favourable reference range (less than 2% smaller)	
	c) –	
	d) <i>Indicate method used to set reference value (multiple methods can be chosen)</i>	<i>Indicate the quality of information available:</i>
	Reference-based approach	Moderate
5.13 Range when Directive came into force (Optional)	–	
5.14 Additional information (Optional)	–	

## 6. POPULATION

*Population within the biogeographical/marine region concerned.*

6.1 Year or period	2019–2024	
6.2 Population size (in reporting unit)	a) Unit	number of map 1x1 km grid cells
	b) Minimum	–
	c) Maximum	–
	d) Best single value	114
	e) Class	
6.3 Type of estimate	minimum	
6.4 Quality of extrapolation to reporting unit (Optional)	–	
6.5 Additional population size (using population unit other than reporting unit) (Optional)	a) Unit	–
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
6.6 Type of estimate (Optional)	–	
6.7 Population size Method used	Based mainly on extrapolation from a limited amount of data	
6.8 Change and reason for change in population size and main reason	Is there a change between reporting periods?	
	yes, due to improved knowledge/more accurate data	
	yes, due to the use of different method	
	The change is mainly due to: improved knowledge or more accurate data	
6.9 Short-term trend Period	2013–2024	
6.10 Short-term trend Direction	unknown	
6.11 Short-term trend Magnitude	a) Estimated Minimum	–
	b) Estimated Maximum	–
	c) Pre-defined range	–
	d) Unknown	–
6.12 Short-term trend Magnitude Type of estimate	Best estimate	
6.13 Short-term trend Method used	Based mainly on expert opinion with very limited data	

6.14 Long-term trend Period (Optional)	–	
6.15 Long-term trend Direction (Optional)	–	
6.16 Long-term trend Magnitude (Optional)	a) Minimum	–
	b) Maximum	–
	c) Confidence interval	–
6.17 Long-term trend Method used (Optional)	–	
6.18 Favourable reference population	<i>a) Population size (with unit):</i>	
	<i>b) if a precise favourable reference population is unknown indicate if the population is: between 5% and 25% smaller than the FRP</i>	
	<i>c) Indicate if favourable reference population is unknown:</i> –	
	<i>d) Indicate method used to set reference value (multiple methods can be chosen)</i>	<i>Indicate the quality of information available:</i>
	Reference-based approach	Moderate
	Expert opinion	
6.19 Population size when Directive came into force (Optional)	–	
6.20 Additional Information (Optional)		

## 7. HABITAT FOR THE SPECIES

7.1 Sufficiency of area and quality of occupied habitat	a) Is area of occupied habitat sufficient (for long-term survival)? Yes
	b) Is quality of occupied habitat sufficient (for long-term survival)? Yes
	c) If NO to a) is there a sufficiently large area of unoccupied habitat of suitable quality (for long-term survival)? –
	–

7.2 Sufficiency of area and quality of occupied habitat Method used	Area of habitat: Based mainly on extrapolation from a limited amount of data	Quality of habitat: Based mainly on extrapolation from a limited amount of data
7.3 Short-term trend Period	2013–2024	
7.4 Short-term trend Direction	unknown	
7.5 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data	
7.6 Long-term trend Period (Optional)	–	
7.7 Long-term trend Direction (Optional)	–	
7.8 Long-term trend Method used (Optional)	–	
7.9 Additional information (Optional)	–	

## 8. MAIN PRESSURES AND THREATS

### 8.1 Characterisation of pressures

Pressure	Timing	Scope (proportion of population affected)	Influence (on population or habitat of the species)	Invasive alien species of Union concern	Other invasive alien species
<b>PA01</b> Agriculture - Conversion into agricultural land	ongoing and likely to be in the future	majority 50 – 90%	Medium influence		
<b>PB06</b> Forestry - Logging or thinning (excl. clear cutting)	ongoing and likely to be in the future	majority 50 – 90%	High influence		
<b>PA05</b> Agriculture - Abandonment of management/use of grasslands and other agricultural and agroforestry systems	ongoing and likely to be in the future	minority <50%	High influence		
<b>PA06</b> Agriculture - Mowing or cutting of grasslands	ongoing and likely to be in the future	minority <50%	Medium influence		
<b>PA07</b> Agriculture - Intensive grazing or overgrazing by livestock	ongoing and likely to be in the future	minority <50%	High influence		
<b>PC01</b> Extraction - Extraction of minerals	ongoing and likely to be in the future	minority <50%	High influence		

<b>PC13</b> Extraction - Mining and extraction activities not referred to above	ongoing and likely to be in the future	minority <50%	Medium influence		
<b>PD03</b> Energy - Solar power (incl. Infrastructure)	ongoing and likely to be in the future	minority <50%	High influence		
<b>PE01</b> Transport - Roads, paths, railroads and related infrastructure	ongoing and likely to be in the future	minority <50%	High influence		
<b>PF01</b> Infrastructure - Conversion from other land uses to built-up areas	ongoing and likely to be in the future	minority <50%	High influence		
<b>PG09</b> Species exploitation - Management of fishing stocks and game	ongoing and likely to be in the future	minority <50%	High influence		
<b>PH01</b> Safety - Military, paramilitary or police exercises and operations on land and freshwater	ongoing and likely to be in the future	minority <50%	High influence		
<b>PI01</b> Problematic species - Invasive alien species of Union concern	ongoing and likely to be in the future	minority <50%	High influence	<i>Asclepias syriaca</i> <i>Ailanthus altissima</i>	
<b>PI02</b> Problematic species - Other invasive alien species (other than species of Union concern)	ongoing and likely to be in the future	majority 50 – 90%	High influence		<i>Solidago spp.</i> <i>Robinia pseudoacacia</i>
<b>PM07</b> Natural - Natural processes without direct or indirect influence from human activities or climate change	ongoing and likely to be in the future	majority 50 – 90%	High influence		
<b>PJ01</b> Climate change - Temperature changes and extremes	ongoing and likely to be in the future	whole >90%	High influence		
<b>PJ03</b> Climate change - Changes in precipitation regimes	ongoing and likely to be in the future	majority 50 – 90%	Medium influence		
8.2 Methods used (Optional)	—				
8.3 Sources of information (Optional)	—				
8.4 Additional information (Optional)	—				

## 9. CONSERVATION MEASURES

9.1 Status of measures	<p>Are measures needed?</p> <p>Yes</p> <p>Status of measures:</p> <p>Part of measures identified have been taken</p>
9.2 Scope of measures taken	<50%
9.3 Main purpose of the measures taken	<p>A. Indicate the main purpose(s) of measures taken:</p> <p>Maintain the current range, population and/or habitat for the species  Expand the current range of the species (related to 'Range')  Restore the habitat of the species (related to 'Habitat for the species')</p> <p>B. The main (primary) purpose:</p> <p>Maintain current state</p>
9.4 Location of the measures taken	Only inside Natura 2000
9.5 Response to the measures <i>(when the measures start to neutralize the pressure(s) and produce positive effects)</i>	Medium-term response (within the next two reporting periods, 2025–2036)
9.6 List of main conservation measures	<p>MA01 – Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land</p> <p>MA03 – Maintain existing extensive agricultural practices and agricultural landscape features</p> <p>MA04 – Reinstatement appropriate agricultural practices to address abandonment, including mowing, grazing, burning or equivalent measures</p> <p>MA05 – Adapt mowing, grazing and other equivalent agricultural activities (e.g. burning)</p> <p>MB01 – Prevent conversion of (semi-) natural habitats into forests and of (semi-) natural forests into intensive forest plantation</p> <p>MC01 – Adapt/manage extraction of non-energy resources</p> <p>MC03 – Adapt/manage renewable energy installation, facilities and operation (excl. hydropower and abstraction activities)</p> <p>ME01 – Reduce impact of transport operation and infrastructure</p> <p>MF01 – Managing the impacts of converting land for construction and development of infrastructure</p> <p>MG02 – Management of hunting, recreational fishing, and the recreational or commercial harvesting or collection of plants and fungi (incl. restoration of habitats)</p> <p>MH01 – Reduce impact of military installations and activities</p> <p>MI01 – Early detection and rapid eradication of invasive alien species of Union concern</p> <p>MI05 – Management of problematic native species</p> <p>MJ01 – Implement climate change mitigation measures</p>
9.7 Additional information (Optional)	–

## 10. FUTURE PROSPECTS

10.1 Future prospects of parameters	a) Range	Good
	b) Population	Unknown
	c) Habitat of the species	Poor
10.2 Additional information (Optional)	–	

## 11. CONCLUSIONS

*Assessment of conservation status at end of reporting period*

11.1 Range	Inadequate (U1)	
11.2 Population	Inadequate (U1)	
11.3 Habitat for the species	Inadequate (U1)	
11.4 Future prospects	Inadequate (U1)	
11.5 Overall assessment of Conservation Status	Inadequate (U1)	
11.6 Overall trend in Conservation Status	unknown	
11.7 Change and reasons for change in conservation status and conservation status trend	Overall assessment of conservation status (11.5)	
	<i>Indicate whether there is a change from the previous reporting round and (if yes) the nature of that change.</i>	no, there is no difference
	<i>The change is mainly due to:</i>	
	Overall trend in conservation status (11.6)	
	<i>Indicate whether there is a change from the previous reporting round and (if yes) the nature of that change.</i>	no, there is no difference
	<i>The change is mainly due to:</i>	
11.8 Additional information (Optional)	–	

## 12. NATURA 2000 (PROPOSED SITES OF COMMUNITY IMPORTANCE (PSCIs), SITES OF COMMUNITY IMPORTANCE (SCIs) AND SPECIAL AREAS OF CONSERVATION (SACs) COVERAGE FOR ANNEX II SPECIES OF DIRECTIVE 92/43/EEC

12.1 Population size inside the pSCIs, SCIs and SACs network (on the	a) Unit	number of map 1x1 km grid cells
	b) Minimum	–

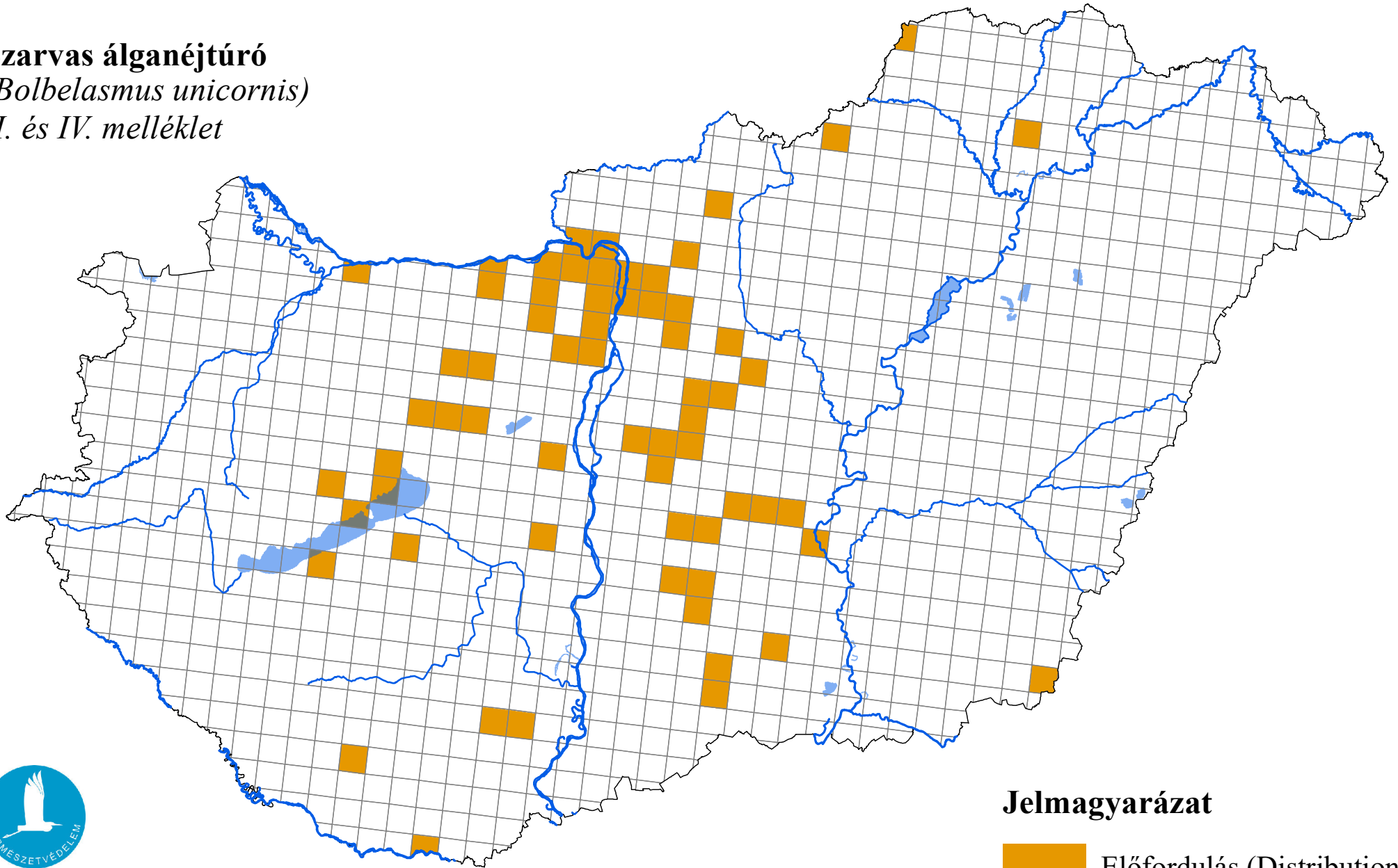
biogeographical/marine level including all sites where the species is present)	c) Maximum	–
	d) Best single value	65
12.2 Type of estimate	<b>minimum</b>	
12.3 Additional population size (using population unit other than reporting unit in field 6.2) (Optional)	a) Unit	–
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
12.4 Type of estimate (Optional)	–	
12.5 Population size inside the network Method used	Based mainly on extrapolation from a limited amount of data	
12.6 Short-term trend of population size within the network Direction	unknown	
12.7 Short-term trend of population size within the network Method used	Based mainly on extrapolation from a limited amount of data	
12.8 Short-term trend of habitat for the species within the network Direction	unknown	
12.9 Short-term trend of habitat for the species within the network Method used	Based mainly on extrapolation from a limited amount of data	
12.10 Additional information (Optional)	–	

### 13. COMPLEMENTARY INFORMATION

13.1 Justification of % thresholds for trends	–
13.2 Trans-boundary assessment	–
13.3 Other relevant information	–

# Az élőhelyvédelmi irányelv 17. cikke alapján készített országjelentés 2025

Szarvas álganéjtűró  
(*Bolbelasmus unicornis*)  
II. és IV. melléklet



Forrás: Agrárminisztérium,  
Természetmegőrzési Főosztály

## Jelmagyarázat

