

# 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	1188
1.3 Species scientific name	<i>Bombina bombina</i>
1.4 Alternative species scientific name (Optional)	
1.5 Common name (Optional)	Vöröshasú unka

### 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	Complete survey or a statistically robust estimate
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	Dankovics, R. (2020): A kétéltű- és a hüllőfauna vizsgálata a határmenti Natura 2000 területeken. - ATHU 2 Vogelwarte Madárvárta 2 projekt kutatási jelentés, Gencsapáti, 108 pp. Harmos, K. és Magos, G. (2021): Bombina. Kétéltűek és hüllők védelme a Mátrában. – Bükk Nemzeti Park Igazgatóság, Eger, 200 pp. Purger, J. (2019): A Barcsi Ó-Dráva holtág kétéltű és hüllő faunája. In: Purger D., Purger J. szerk.: A Barcsi Ó-Dráva holtág élőhelyei és élővilága / Habitats and wildlife of the Old-Drava oxbow near Barcs BioRes, Pécs, 222 pp. A Nemzeti Biodiverzitás-Monitorozó Rendszer Keretében 2019-2024 Között Végzett Felmérések Kutatási Jelentései (Monitoring Reports (2019-2014) Of Hungarian Biodiversity Monitoring System) <a href="https://herpterkep.mme.hu/">https://herpterkep.mme.hu/</a>

## 5. RANGE

*Range within the biogeographical/marine region concerned.*

5.1 Surface area (km <sup>2</sup> )	92604	
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	
	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	stable	
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 expert opinion with very limited 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
Expert opinion		
5.13 Range when Directive came into force (Optional)	–	

5.14 Additional information (Optional)	–
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## 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	–
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
	e) Class	
6.3 Type of estimate	–	
6.4 Quality of extrapolation to reporting unit (Optional)	–	
6.5 Additional population size (using population unit other than reporting unit) (Optional)	a) Unit	number of map 1x1 km grid cells
	b) Minimum	–
	c) Maximum	–
	d) Best single value	3487
6.6 Type of estimate (Optional)	Best estimate	
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	
	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	uncertain	
6.11 Short-term trend Magnitude	a) Estimated Minimum	–
	b) Estimated Maximum	–
	c) Pre-defined range	–
	d) Unknown	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	a) Population size (with unit):	
	b) if a precise favourable reference population is unknown indicate if the population is: between 5% and 25% smaller than the FRP	
	c) Indicate if favourable reference population is unknown: –	
	d) Indicate method used to set reference value (multiple methods can be chosen)	Indicate the quality of information available:
	Reference-based approach	Moderate
	Expert opinion	
6.19 Population size when Directive came into force (Optional)	–	
6.20 Additional Information (Optional)	Monitoring methods implemented in Hungary do not make it possible to provide population estimates in individuals for this species. Nor is it scientifically justifiably possible to convert monitoring results into national population estimates in individuals, due to the large variation in abundance, both spatially and temporally, of the various subpopulations.	

## 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)? No
	c) If NO to a) is there a sufficiently large area of unoccupied habitat of suitable quality (for long-term survival)? –
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7.2 Sufficiency of area and quality of occupied habitat Method used	Area of habitat: Based mainly on expert opinion with very limited data	Quality of habitat: Insufficient or no data available
7.3 Short-term trend Period	2013–2024	
7.4 Short-term trend Direction	decreasing	
7.5 Short-term trend Method used	Based mainly on expert opinion with very limited 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>PA02</b> Agriculture - Conversion from one type of agricultural land use to another	ongoing and likely to be in the future	minority <50%	High influence		
<b>PA04</b> Agriculture - Removal of small landscape features for agricultural land parcel consolidation	ongoing and likely to be in the future	minority <50%	Low influence		
<b>PA13</b> Agriculture - Application of natural or synthetic fertilisers	ongoing and likely to be in the future	minority <50%	Medium influence		
<b>PA14</b> Agriculture - Use of plant protection chemicals	ongoing and likely to be in the future	minority <50%	Medium influence		
<b>PA22</b> Agriculture - Drainage for use as agricultural land	ongoing and likely to be in the future	majority 50 – 90%	High influence		
<b>PB09</b> Forestry - Clear-cutting, removal of all trees	ongoing and likely to be in the future	minority <50%	Low influence		

<b>PE01</b> Transport - Roads, paths, railroads and related infrastructure	ongoing and likely to be in the future	minority <50%	Medium 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>PG18</b> Species exploitation - Physical alterations of water bodies for aquaculture	ongoing and likely to be in the future	minority <50%	High influence		
<b>PG21</b> Species exploitation - Introduction and spread of new species in aquaculture	ongoing and likely to be in the future	minority <50%	Medium influence		
<b>PI01</b> Problematic species - Invasive alien species of Union concern	ongoing and likely to be in the future	majority 50 – 90%	High influence	<i>Lepomis gibbosus</i> <i>Perccottus glenii</i> <i>Pseudorasbora parva</i> <i>Ameiurus melas</i>	
<b>PI02</b> Problematic species - Other invasive alien species (other than species of Union concern)	ongoing and likely to be in the future	minority <50%	High influence		<i>Carassius auratus</i>
<b>PI04</b> Problematic species - Plant and animal diseases, pathogens and pests	only in future	–	–		
<b>PJ01</b> Climate change - Temperature changes and extremes	ongoing and likely to be in the future	whole >90%	Medium influence		
<b>PJ03</b> Climate change - Changes in precipitation regimes	ongoing and likely to be in the future	whole >90%	High influence		
<b>PJ10</b> Climate change - Change of habitat location, size and/or quality	ongoing and likely to be in the future	majority 50 – 90%	High influence		
<b>PK01</b> Pollution - Mixed source pollution to surface and ground waters (limnic and terrestrial)	ongoing and likely to be in the future	minority <50%	Medium influence		
<b>PL02</b> Water regimes - Drainage	ongoing and likely to be in the future	minority <50%	High influence		
<b>PL05</b> Water regimes - Modification of hydrological flow	ongoing and likely to be in the future	majority 50 – 90%	High influence		

<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	minority <50%	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  Increase the population size and/or improve population dynamics (improve reproduction success, reduce mortality, improve age/sex structure) (related to 'Population')  Restore the habitat of the species (related to 'Habitat for the species')</p> <p>B. The main (primary) purpose:  increase, improve population</p>
9.4 Location of the measures taken	Both inside and outside 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	MA01 – Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land MA02 – Restore small landscape features on agricultural land MA09 – Manage the use of natural and synthetic fertilisers as well as chemicals in agricultural for plant and animal production MA13 – Manage agricultural drainage and water abstraction (incl. the restoration of drained or hydrologically altered habitats) MB05 – Adapt/change forest management and exploitation practices ME01 – Reduce impact of transport operation and infrastructure MG03 – Reducing the impact of (re-) stocking for fishing and hunting, of artificial feeding and predator control MG09 – Other measures to reduce impacts from aquaculture infrastructures and operation MG12 – Restoration of habitats to address modifications of hydrological conditions for marine and freshwater aquaculture MI01 – Early detection and rapid eradication of invasive alien species of Union concern MI02 – Management, control or eradication of established invasive alien species of Union concern MI03 – Management, control or eradication of other invasive alien species MI06 – Controlling and eradicating plant and animal diseases, pathogens and pests MJ02 – Implement climate change adaptation measures MK02 – Reduce impact of multi-purpose hydrological changes MK03 – Restoration of habitats impacted by multi-purpose hydrological changes MM01 – Management of habitats (others than agriculture and forest) to slow, stop or reverse natural processes that occur without direct or indirect influence from human activities or climate change MS03 – Restoration of habitat of species from the directives MI04 – Restoration of habitats affected by invasive alien species (incl. of Union concern and others) MK01 – Reduce impact of mixed source pollution
9.7 Additional information (Optional)	–

## 10. FUTURE PROSPECTS

10.1 Future prospects of parameters	a) Range	Good
	b) Population	Poor
	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	Favourable (FV)
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	deteriorating	
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>	yes, due to genuine change
	<i>The change is mainly due to:</i>	genuine change
	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>	yes, due to genuine change
	<i>The change is mainly due to:</i>	genuine change
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 biogeographical/marine level including all sites where the species is present)	a) Unit	–
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
12.2 Type of estimate	–	
12.3 Additional population size (using population unit other than reporting unit in field 6.2) (Optional)	a) Unit	number of map 1x1 km grid cells
	b) Minimum	–
	c) Maximum	–
	d) Best single value	2764
12.4 Type of estimate (Optional)	Best estimate	

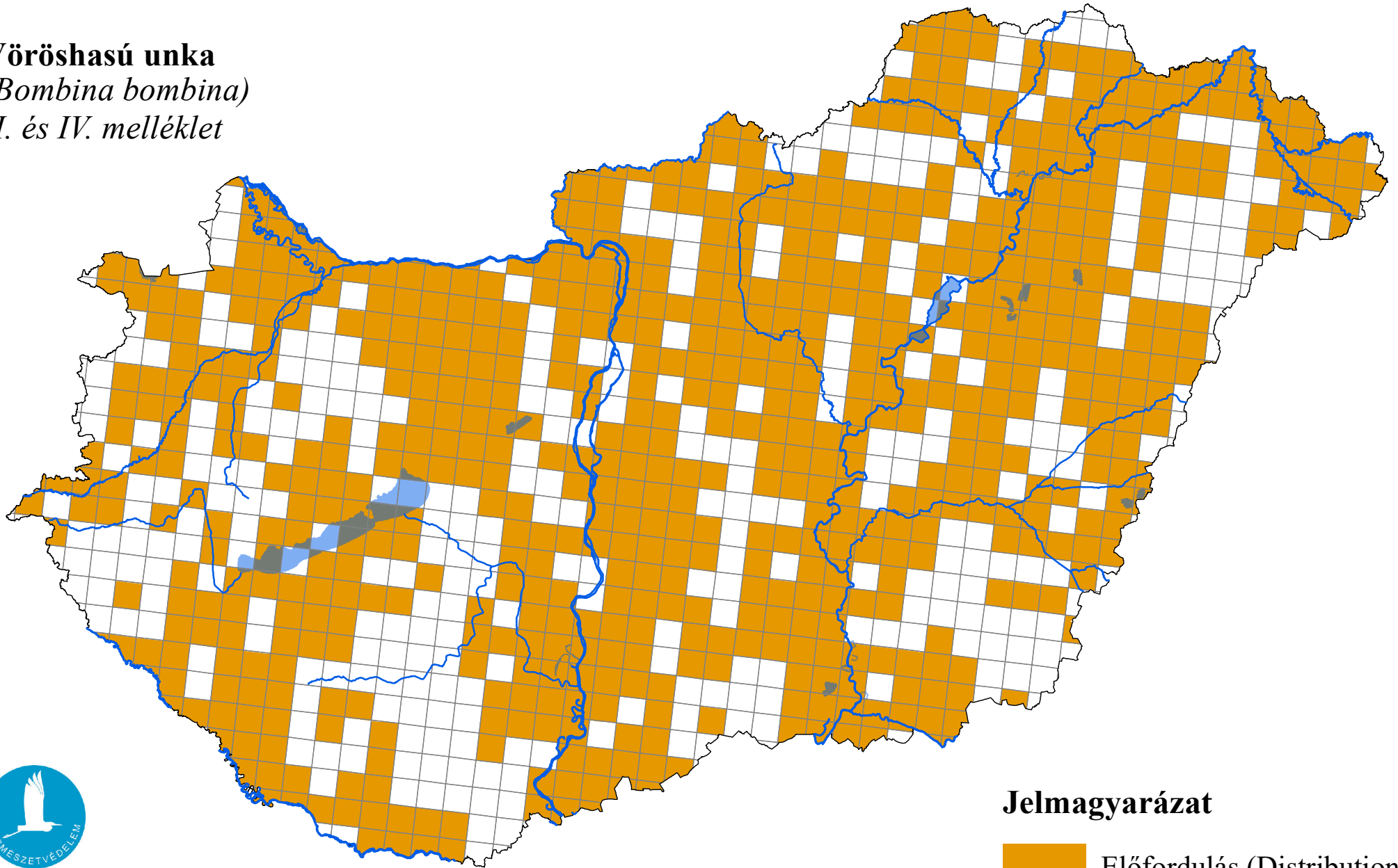
12.5 Population size inside the network Method used	Based mainly on extrapolation from a limited amount of data
12.6 Short-term trend of population size within the network Direction	uncertain
12.7 Short-term trend of population size within the network Method used	Based mainly on expert opinion with very limited data
12.8 Short-term trend of habitat for the species within the network Direction	decreasing
12.9 Short-term trend of habitat for the species within the network Method used	Based mainly on expert opinion with very limited 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

**Vöröshasú unka**  
(*Bombina bombina*)  
II. és IV. melléklet



Forrás: Agrárminisztérium,  
Természetmegőrzési Főosztály

## Jelmagyarázat

