

# Report on the main results of the surveillance under Article 11 for Annex II, IV and V species (Annex B)

## NATIONAL LEVEL

### 1. General information

1.1 Member State	HU
1.2 Species code	1428
1.3 Species scientific name	Marsilea quadrifolia
1.4 Alternative species scientific name	
1.5 Common name (in national language)	négylevelű mételyfű

### 2. Maps

2.1 Sensitive species	No
2.2 Year or period	2013-2018
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	No

### 3. Information related to Annex V Species (Art. 14)

3.1 Is the species taken in the wild/exploited?	No	
3.2 Which of the measures in Art. 14 have been taken?	a) regulations regarding access to property	No
	b) temporary or local prohibition of the taking of specimens in the wild and exploitation	No
	c) regulation of the periods and/or methods of taking specimens	No
	d) application of hunting and fishing rules which take account of the conservation of such populations	No
	e) establishment of a system of licences for taking specimens or of quotas	No
	f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens	No
	g) breeding in captivity of animal species as well as artificial propagation of plant species	No
	h) other measures	No

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3.3 Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit

b) Statistics/ quantity taken	Provide statistics/quantity per hunting season or per year (where season is not used) over the reporting period					
	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
Min. (raw, ie. not rounded)						
Max. (raw, ie. not rounded)						
Unknown	No	No	No	No	No	No

3.4. Hunting bag or quantity taken in the wild Method used

3.5. Additional information

## BIOGEOGRAPHICAL LEVEL

### 4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs

**Pannonian (PAN)**

4.2 Sources of information

Molnár Ábel - Biró Mariann (2016): A Kis-Sárrét törzsterület botanikai vizsgálata - Kutatási Jelentés, Sopron, Bierbaum Bt., pp. 112.

Lukács B. A., Gulyás G., Horváth D., Hődör I, Schmotzer A., Sramkó G., Takács A. & Molnár A. (2017): Florisztikai adatok a Tiszántúl középső részéről. – Kitaibelia 22(2):317-357.

Mesterházy A. (2014): Négylevelű mételyfű *Marsilea quadrifolia* Linnaeus 1753. In: Haraszthy L. (szerk.): Natura 2000 fajok és élőhelyek Magyarországon. ProVértés Közalapítvány, Csákvár, pp. 31-33.

Molnár A. (2013): Mételyfű. – In: Sallai R. B. (szerk.): Veszélyeztetett Natura 2000-es fajok egyesületi fajvédelmi tervei. - Nimfea Természetvédelmi Egyesület, pp. 7–24.

Monitoring reports (2013-2018) of Hungarian Biodiversity Monitoring System

### 5. Range

5.1 Surface area

2207

5.2 Short-term trend Period

2007-2018

5.3 Short-term trend Direction

Stable (0)

5.4 Short-term trend Magnitude

a) Minimum

b) Maximum

5.5 Short-term trend Method used

Based mainly on extrapolation from a limited amount of data

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5.6 Long-term trend Period

5.7 Long-term trend Direction

5.8 Long-term trend Magnitude

a) Minimum

b) Maximum

5.9 Long-term trend Method used

5.10 Favourable reference range

a) Area (km<sup>2</sup>)

b) Operator

More than (>)

c) Unknown

d) Method

5.11 Change and reason for change in surface area of range

Improved knowledge/more accurate data

The change is mainly due to: Improved knowledge/more accurate data

5.12 Additional information

## 6. Population

6.1 Year or period

2013-2018

6.2 Population size (in reporting unit)

a) Unit

number of map 1x1 km grid cells (grids1x1)

b) Minimum

c) Maximum

d) Best single value 18

6.3 Type of estimate

Best estimate

6.4 Additional population size (using population unit other than reporting unit)

a) Unit

b) Minimum

c) Maximum

d) Best single value

6.5 Type of estimate

6.6 Population size Method used

Based mainly on extrapolation from a limited amount of data

6.7 Short-term trend Period

2007-2018

6.8 Short-term trend Direction

Uncertain (u)

6.9 Short-term trend Magnitude

a) Minimum

b) Maximum

c) Confidence interval

6.10 Short-term trend Method used

Based mainly on extrapolation from a limited amount of data

6.11 Long-term trend Period

6.12 Long-term trend Direction

6.13 Long-term trend Magnitude

a) Minimum

b) Maximum

c) Confidence interval

6.14 Long-term trend Method used

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6.15 Favourable reference population (using the unit in 6.2 or 6.4)

- a) Population size
- b) Operator More than (>)
- c) Unknown
- d) Method

6.16 Change and reason for change in population size

- Improved knowledge/more accurate data
- Use of different method
- The change is mainly due to: Improved knowledge/more accurate data

6.17 Additional information

## 7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat

- a) Are area and quality of occupied habitat sufficient (for long-term survival)? Unknown

- b) 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

Based mainly on extrapolation from a limited amount of data

7.3 Short-term trend Period

2007-2018

7.4 Short-term trend Direction

Uncertain (u)

7.5 Short-term trend Method used

Based mainly on extrapolation from a limited amount of data

7.6 Long-term trend Period

7.7 Long-term trend Direction

7.8 Long-term trend Method used

7.9 Additional information

## 8. Main pressures and threats

8.1 Characterisation of pressures/threats

Pressure	Ranking
Droughts and decreases in precipitation due to climate change (N02)	H
Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02)	H
Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)	H
Tillage practices (e.g. ploughing) in agriculture (A15)	M
Use of plant protection chemicals in agriculture (A21)	M
Sports, tourism and leisure activities (F07)	M
Invasive alien species of Union concern (I01)	M
Other invasive alien species (other than species of Union concern) (I02)	M

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Deposition and treatment of waste/garbage from household/recreational facilities (F09)	M
Problematic native species (I04)	M
<b>Threat</b>	<b>Ranking</b>
Droughts and decreases in precipitation due to climate change (N02)	H
Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02)	H
Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)	H
Use of plant protection chemicals in agriculture (A21)	M
Sports, tourism and leisure activities (F07)	H
Invasive alien species of Union concern (I01)	M
Other invasive alien species (other than species of Union concern) (I02)	M
Deposition and treatment of waste/garbage from household/recreational facilities (F09)	M
Problematic native species (I04)	M

## 8.2 Sources of information

## 8.3 Additional information

# 9. Conservation measures

## 9.1 Status of measures

- a) Are measures needed? Yes
- b) Indicate the status of measures Measures identified and taken

## 9.2 Main purpose of the measures taken

Increase the population size and/or improve population dynamics (improve reproduction success, reduce mortality, improve age/sex structure) (related to 'Population')

## 9.3 Location of the measures taken

Only inside Natura 2000

## 9.4 Response to the measures

Medium-term results (within the next two reporting periods, 2019-2030)

## 9.5 List of main conservation measures

Reintroduce species from the directives (CS02)

Improvement of habitat of species from the directives (CS03)

Maintain existing extensive agricultural practices and agricultural landscape features (CA03)

Manage drainage and irrigation operations and infrastructures in agriculture (CA15)

Reduce impact of multi-purpose hydrological changes (CJ02)

Adapt mowing, grazing and other equivalent agricultural activities (CA05)

Early detection and rapid eradication of invasive alien species of Union concern (CI01)

Management, control or eradication of established invasive alien species of Union concern (CI02)

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Management of problematic native species (CI05)

Management of habitats (others than agriculture and forest) to slow, stop or reverse natural processes (CL01)

## 9.6 Additional information

## 10. Future prospects

10.1 Future prospects of parameters	a) Range	Poor
	b) Population	Unknown
	c) Habitat of the species	Poor

## 10.2 Additional information

## 11. Conclusions

11.1. Range	Unfavourable - Inadequate (U1)
11.2. Population	Unfavourable - Inadequate (U1)
11.3. Habitat for the species	Unfavourable - Inadequate (U1)
11.4. Future prospects	Unfavourable - Inadequate (U1)
11.5 Overall assessment of Conservation Status	Unfavourable - Inadequate (U1)
11.6 Overall trend in Conservation Status	Unknown (x)
11.7 Change and reasons for change in conservation status and conservation status trend	<p>a) Overall assessment of conservation status</p> <p>No change</p> <p>The change is mainly due to:</p> <p>b) Overall trend in conservation status</p> <p>Improved knowledge/more accurate data</p> <p>The change is mainly due to: Improved knowledge/more accurate data</p>
11.8 Additional information	

## 12. Natura 2000 (pSCIs, SCIs and SACs) coverage for Annex II species

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	number of map 1x1 km grid cells (grids1x1)
	b) Minimum	
	c) Maximum	
	d) Best single value	17
12.2 Type of estimate	Best estimate	
12.3 Population size inside the network Method used	Based mainly on extrapolation from a limited amount of data	
12.4 Short-term trend of population size within the network Direction	Uncertain (u)	

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12.5 Short-term trend of population size within the network Method used

Based mainly on extrapolation from a limited amount of data

12.6 Additional information

## 13. Complementary information

13.1 Justification of % thresholds for trends

13.2 Trans-boundary assessment

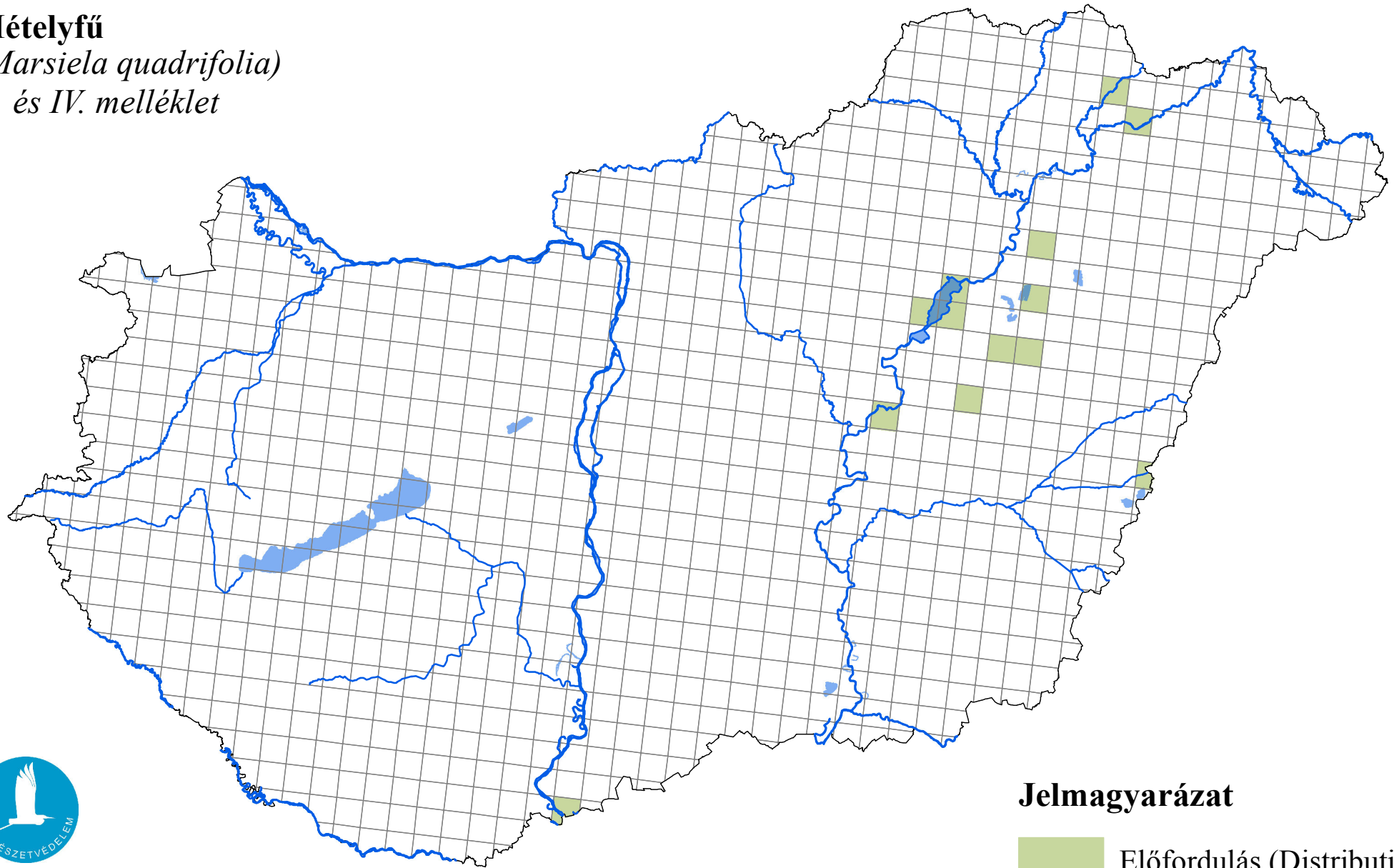
13.3 Other relevant Information

# Az élőhelyvédelmi irányelv 17. cikke alapján készített országjelentés 2019

## Mételyfű

(*Marsiela quadrifolia*)

II. és IV. melléklet



### Jelmagyarázat

 Előfordulás (Distribution)

0 25 50 Kilometers  




Forrás: Agrárminisztérium,  
Természetmegőrzési Főosztály