

Annex B - Bird Species' status and trends report (Article 12)

1. Species information

1.1 Member State	Hungary
1.2 Species code	A213
1.3 EURING code	7350
1.4 Species scientific name	Tyto alba
1.5 Subspecific population	
1.6 Alternative species scientific name	
1.7 Common name	gyöngybagoly
1.8 Season	Breeding (B)

2. Population size

2.1 Year or period	2013-2018
2.2 Population size	a) Unit number of pairs (p) b) Minimum 346 c) Maximum 860 d) Best single value
2.3 Type of estimate	Best estimate
2.4 Population size Method used	Based mainly on extrapolation from a limited amount of data
2.5 Sources	Demeter Iván, Horváth Márton & Prommer Mátyás (2019): Az MME Ragadozómadár-védelmi Szakosztálya (RMvSz) által monitorozott fajok 2017-es költési eredményeinek összefoglalása. Summary of population monitoring programmes run by MME/Birdlife Hungary's Raptor Conservation Department (RCD) in 2017. Heliaca 15: 75. Dr. Klein Ákos, László Csaba (szerk, 2019): Gyöngybagollyal kapcsolatos országos célkitűzések, ötéves terv (2017-2022) előrehaladási beszámoló Mátics, Róbert & Gyula, Hoffmann & Farkas, Sandor & Dawson, Deborah & Frantz, Alain & Varga, Dániel & Mátics, Erika & Klein, Ákos (2017): Demographic decline and detection of genetic bottleneck in a population of Barn Owl Tyto alba in Hungary. Journal of Ornithology. 158. 10.1007/s10336-017-1433-z. Hámori Dániel, Csörgő Tibor (szerk, 2017): Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme, Herman Ottó Intézet, 46. o. Consultation with national experts. National park directorates' databases http://map.mme.hu/maps/map2
2.6 Change and reason for change (since previous report)	Genuine change The change is mainly due to: Genuine change

2.7 Additional information

The population figures are based on Demeter et al. (2019).

3. Population trend

3.1 Short-term trend (last 12 years)

3.1.1 Short-term trend Period	2007-2018
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3.1.2 Short-term trend Direction	Decreasing (-)
3.1.3 Short-term trend Magnitude	a) Minimum 5 b) Maximum 10 c) Best single value
3.1.4 Short-term trend Method used	Based mainly on expert opinion with very limited data
3.1.5 Sources	Dr. Klein Ákos, László Csaba (szerk, 2019): Gyöngybagollyal kapcsolatos országos célkitűzések, ötéves terv (2017-2022) előrehaladási beszámoló Mátics, Róbert & Gyula, Hoffmann & Farkas, Sandor & Dawson, Deborah & Frantz, Alain & Varga, Dániel & Mátics, Erika & Klein, Ákos (2017): Demographic decline and detection of genetic bottleneck in a population of Barn Owl <i>Tyto alba</i> in Hungary. <i>Journal of Ornithology</i> . 158. 10.1007/s10336-017-1433-z. Hámori Dániel, Csörgő Tibor (szerk, 2017): Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme, Herman Ottó Intézet, 46. o. Consultation with national experts. National park directorates' databases http://map.mme.hu/maps/map2
3.2 Long-term trend (since c. 1980)	
3.2.1 Long-term trend Period	1998-2018
3.2.2 Long-term trend Direction	Decreasing (-)
3.2.3 Long-term trend Magnitude	a) Minimum 5 b) Maximum 15 c) Best single value
3.2.4 Long-term Trend Method used	Based mainly on expert opinion with very limited data
3.2.5 Sources	Dr. Klein Ákos, László Csaba (szerk, 2019): Gyöngybagollyal kapcsolatos országos célkitűzések, ötéves terv (2017-2022) előrehaladási beszámoló Mátics, Róbert & Gyula, Hoffmann & Farkas, Sandor & Dawson, Deborah & Frantz, Alain & Varga, Dániel & Mátics, Erika & Klein, Ákos (2017): Demographic decline and detection of genetic bottleneck in a population of Barn Owl <i>Tyto alba</i> in Hungary. <i>Journal of Ornithology</i> . 158. 10.1007/s10336-017-1433-z. Hámori Dániel, Csörgő Tibor (szerk, 2017): Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme, Herman Ottó Intézet, 46. o. Consultation with national experts. National park directorates' databases http://map.mme.hu/maps/map2
3.3 Additional information	The substantial monitoring activity started only in 1998, so before that date we do not have available data about the population size in Hungary. Data from 1998/1999 and early 2000s are not published, so the magnitude of the long-term trend is an estimation by experts. The data we actually have is insufficient to grab the exact nature of the change in the population size. The population strongly fluctuates (as shown by the wide range between the minimum and maximum population figures), but the overall trend is slightly declining, too (5-10% estimated for the short-term by national experts).

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4. Breeding distribution map and size

4.1 Sensitive species	No
4.2 Year or period	2013-2018
4.3 Breeding distribution map	Yes
4.4 Breeding distribution surface area	18881
4.5 Breeding distribution Method used	Complete survey or a statistically robust estimate
4.6 Additional maps	No
4.7 Sources	Breeding bird (MME RTM) database.
4.8 Additional information	

5. Breeding range trend

5.1 Short-term trend (last 12 years)

5.1.1 Short-term trend Period	2007-2018
5.1.2 Short-term trend Direction	Stable (0)
5.1.3 Short-term trend Magnitude	a) Minimum b) Maximum c) Best single value
5.1.4 Short-term trend Method used	Based mainly on expert opinion with very limited data
5.1.5 Sources	Dr. Klein Ákos, László Csaba (szerk, 2019): Gyöngybagollyal kapcsolatos országos célkitűzések, ötéves terv (2017-2022) előrehaladási beszámoló Mátics, Róbert & Gyula, Hoffmann & Farkas, Sandor & Dawson, Deborah & Frantz, Alain & Varga, Dániel & Mátics, Erika & Klein, Ákos (2017): Demographic decline and detection of genetic bottleneck in a population of Barn Owl <i>Tyto alba</i> in Hungary. <i>Journal of Ornithology</i> . 158. 10.1007/s10336-017-1433-z. Hámori Dániel, Csörgő Tibor (szerk, 2017): Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme, Herman Ottó Intézet, 46. o. Consultation with national experts. National park directorates' databases http://map.mme.hu/maps/map2

5.2 Long-term trend (since c. 1980)

5.2.1 Long-term trend Period	1998-2018
5.2.2 Long-term trend Direction	Stable (0)
5.2.3 Long-term trend Magnitude	a) Minimum b) Maximum c) Best single value
5.2.4 Long-term trend Method used	Based mainly on expert opinion with very limited data
5.2.5 Sources	Dr. Klein Ákos, László Csaba (szerk, 2019): Gyöngybagollyal kapcsolatos országos célkitűzések, ötéves terv (2017-2022) előrehaladási beszámoló Mátics, Róbert & Gyula, Hoffmann & Farkas, Sandor & Dawson, Deborah & Frantz, Alain & Varga, Dániel & Mátics, Erika & Klein, Ákos (2017): Demographic decline and detection of genetic bottleneck in a population of Barn Owl <i>Tyto alba</i> in Hungary. <i>Journal of Ornithology</i> . 158. 10.1007/s10336-

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Hámori Dániel, Csörgő Tibor (szerk, 2017): Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme, Herman Ottó Intézet, 46. o.

Consultation with national experts.

National park directorates' databases

<http://map.mme.hu/maps/map2>

5.3 Additional information

The existing and traditional breeding sites remain stable although the number of breeding pairs decrease.

6. Progress in work related to international Species Action Plans (SAPs), Management Plans (MPs) and Brief Management Statements (BMSs)

6.0 Is/Will the information related to international SAPs, MPs and BMSs (section 6) be provided for the other season for this species?

No

6.1 Type of international plan

No plan (NA)

6.2 Has a national plan linked to the international SAP/MP/BMS been adopted?

No

6.3 If 'NO', describe any measures and initiatives taken related to the international SAP/MP/BMS

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6.4 Assessment of the effectiveness of SAPs for globally threatened species (Art. 12, Species Action Plans)

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6.5 Assessment of the effectiveness of MPs for huntable species in non-Secure status (Articles 3 and 7, Management Plans)

6.6 Sources of further Information

7. Main pressures and threats

a) Pressure

b) Ranking

c) location

Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)

H

inside the Member State (inMS)

Closure or restricted access to site/habitat (H06)

H

inside the Member State (inMS)

Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)

H

inside the Member State (inMS)

Use of plant protection chemicals in agriculture (A21)

H

inside the Member State (inMS)

Conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F01)

H

inside the Member State (inMS)

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Transmission of electricity and communications (cables) (D06)	M	inside the Member State (inMS)
Conversion from mixed farming and agroforestry systems to specialised (e.g. single crop) production (A03)	M	inside the Member State (inMS)
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	M	inside the Member State (inMS)
a) Threat	d) Ranking	e) location
Abandonment of grassland management (e.g. cessation of grazing or mowing) (A06)	H	inside the Member State (inMS)
Closure or restricted access to site/habitat (H06)	H	inside the Member State (inMS)
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	H	inside the Member State (inMS)
Use of plant protection chemicals in agriculture (A21)	H	inside the Member State (inMS)
Conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F01)	H	inside the Member State (inMS)
Transmission of electricity and communications (cables) (D06)	M	inside the Member State (inMS)
Conversion from mixed farming and agroforestry systems to specialised (e.g. single crop) production (A03)	M	inside the Member State (inMS)
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	M	inside the Member State (inMS)

7.2 Sources of information

Hámori Dániel, Csörgő Tibor (szerk, 2017): Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme, Herman Ottó Intézet, 46-47. o.

Consultation with national experts.

National park directorates' databases

7.3 Additional information

8. Main Conservation Measures

8.1 Status of measures

Measures identified and taken

8.2 Main purpose of the measures taken

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

8.3 Location of the measures

Both inside and outside Natura 2000

8.4 Response to the measures

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

8.5 List of main conservation measures

CA01 - Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land

CA03 - Maintain existing extensive agricultural practices and agricultural landscape features

CA09 - Manage the use of natural fertilisers and chemicals in agricultural (plant and animal) production

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CC06 - Reduce impact of service corridors and networks

CE01 - Reduce impact of transport operation and infrastructure

CF02 - Habitat restoration of areas impacted by residential, commercial, industrial and recreational infrastructure, operations and activities

CH03 - Reduce impact of other specific human actions

CL04 - Other measures related to natural processes

8.6 Additional information

9. Natura 2000 (SPAs) coverage

9.1 Population size inside the Natura 2000 (SPA) network

a) Unit	number of pairs (p)
b) Minimum	100
c) Maximum	200
d) Best single value	

9.2 Type of estimate

Best estimate

9.3 Population size inside the network Method used

Based mainly on extrapolation from a limited amount of data

9.4 Short-term trend of population size within the network Direction

Unknown (X)

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

Based mainly on expert opinion with very limited data

9.6 Additional information

320 grids (10x10 km²) are occupied by this species. 68 of the 320 grids are covered at least 30% by SPAs, while 63 are covered at least 50% by SPAs. So about 20% of the grids where the species occurs are at least partly in SPAs. Using this 20% ratio, an estimate was made, also considering that habitats are better in SPAs, so probably more pairs are in the SPAs even in those grids that have a smaller degree of SPA coverage.

A madárvédelmi irányelv 12. cikke alapján készített országjelentés 2019.

Gyöngybagoly (*Tyto alba*)
nem jelölő faj

