

# 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	1353
1.3 Species scientific name	<i>Canis aureus</i>
1.4 Alternative species scientific name (Optional)	
1.5 Common name (Optional)	Aranysakál

### 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?	Yes	
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>i</b>					
	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)	11200	12162	12620	14831	15697	
	Max. (raw, i.e. not rounded)	11200	12162	12620	14831	15697	
	Unknown						YES
3.5 Hunting bag or quantity taken in the wild Method used	Complete survey or a statistically robust estimate						
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	<b>Pannonian</b>
4.2 First time reporting	No
4.3 Additional information	–

#### 4.4 Sources of information

Data of the National Game Management Database 2019-2023, partly 2024 Bijl H, Schally G, Márton M, Heltai M, Csányi S (2024): From invaders to residents: The golden jackal (*Canis aureus*) expansion in Hungary since the mid-1990s. PLoS ONE 19(7): e0306489. <https://doi.org/10.1371/journal.pone.0306489> Milomir Stefanović, Wiesław Bogdanowicz, Roya Adavoudi, Francelly Martínez-Sosa, Karolina Doan, Alejandro Flores-Manzanero, Yellapu Srinivas, Ovidiu C. Banea, Duško Čirović, Gianluca D'Amico, Mihajla Djan, Giorgos Giannatos, Jennifer Hatlauf, Vahram Hayrapetyan, Miklós Heltai, Kanstantsin Homel, Pavel Hulva, Angela Monica Ionică, Yadvendradev Vikramsingh Jhala, Jana Juránková, Mohammad Kaboli, Rasoul Khosravi, Natia Kopaliani, Rafał Kowalczyk, Miha Krofel, József Lanszki, Luca Lapini, Petros Lymberakis, Peep Männil, Georgi Markov, Andrei Daniel Mihalca, Anastasia Miliou, David Modrý, Vladislav Molchan, Stéphane Ostrowski, Giedrė Pakeltytė, Dainis Edgars Ruņģis, Dragana Šnjegota, László Szabó, George A. Tryfonopoulos, Elena Tsingarska, Anatoliy M. Volokh, Jan M. Wójcik, Małgorzata Pilot (2024): Range-wide phylogeography of the golden jackals (*Canis aureus*) reveals multiple sources of recent spatial expansion and admixture with dogs at the expansion front. *Biological Conservation*, 290: 110448 <https://doi.org/10.1016/j.biocon.2024.110448>. Erika Csányi, József Lanszki, Miklós Heltai, Máté Pölös, Gergely Schally, Gyula Sándor (2023): The first evidence of the monogamous golden jackal's adaptive response to partner loss. *Applied Animal Behaviour Science*, 269: 106095. <https://doi.org/10.1016/j.applanim.2023.106095> Lanszki, József; Hayward, Matthew W.; Ranc, Nathan; Zalewski, Andrzej (2022): Dietary flexibility promotes range expansion: the case of golden jackals in Eurasia [Dataset]. Dryad. <https://doi.org/10.5061/dryad.cz8w9gj5j> Astrid Vik Stronen, Marjeta Konec, Barbara Boljte, Ivica Bošković, Dragan Gačić, Ana Galov, Miklós Heltai, Maja Jelenčič, Franc Kljun, Ivan Kos, Tamara Kovačić, József Lanszki, Krunoslav Pintur, Boštjan Pokorný, Tomaž Skrbinišek, Franz Suchentrunk, László Szabó, Nikica Šprem, Kristijan Tomljanović, Hubert Potočnik (2021): Population genetic structure in a rapidly expanding mesocarnivore: golden jackals in the Dinaric-Pannonian region. *Global Ecology and Conservation*. 28: e01707 <https://doi.org/10.1016/j.gecco.2021.e01707>. Fenton, Skye; Moorcroft, Paul R.; Čirović, Duško; Lanszki, József; Heltai, Miklós; Cagnacci, Francesca; Breck, Stewart; Bogdanović, Neda; Pantelić, Ilija; Ács, Kornél; and Ranc, Nathan (2021): Movement, space-use and resource preferences of European golden jackals in human-dominated landscapes: insights from a telemetry study. USDA Wildlife Services - Staff Publications. 2477. [https://digitalcommons.unl.edu/icwdm\\_usdanwrc/2477](https://digitalcommons.unl.edu/icwdm_usdanwrc/2477) Lanszki J. (2023) Aranysakál *Canis aureus* Linnaeus, 1758. In: Haraszthy L. (szerk.): *Özönállatfajok Magyarországon. Duna–Ipoly Nemzeti Park Igazgatóság – Külgazdasági és Külügyminisztérium, Budapest, 357-361.*

## 5. RANGE

*Range within the biogeographical/marine region concerned.*

5.1 Surface area (km<sup>2</sup>)

93010

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 genuine change	
	The change is mainly due to: genuine change	
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	Complete survey or a statistically robust estimate	
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	High
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 individuals
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
	e) Class	10 000-50 000
6.3 Type of estimate	Best 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	–
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
6.6 Type of estimate (Optional)	–	
6.7 Population size Method used	Complete survey or a statistically robust estimate	
6.8 Change and reason for change in population size and main reason	Is there a change between reporting periods? yes, due to genuine change	
	The change is mainly due to: genuine change	
6.9 Short-term trend Period	2013–2024	
6.10 Short-term trend Direction	increasing	
6.11 Short-term trend Magnitude	a) Estimated Minimum	–
	b) Estimated Maximum	–
	c) Pre-defined range	0 – 12%
	d) Unknown	–
6.12 Short-term trend Magnitude Type of estimate	95% confidence interval	
6.13 Short-term trend Method used	Complete survey or a statistically robust estimate	
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: approximately equal to the favourable reference population (less than 5% smaller)	
	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:
	Model-based approach	Moderate
Reference-based approach	Moderate	
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	stable
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>PG11</b> Species exploitation - Illegal shooting/killing	ongoing and likely to be in the future	minority <50%	Low 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	Are measures needed? No
9.2 Scope of measures taken	–
9.3 Main purpose of the measures taken	– –
9.4 Location of the measures taken	–
9.5 Response to the measures <i>(when the measures start to neutralize the pressure(s) and produce positive effects)</i>	–

9.6 List of main conservation measures	–
9.7 Additional information (Optional)	The Hungarian population is still in expansion phase. Threats are not strong enough to control this expansion in country level so none of the threats was reached the medium importance in population level.

## 10. FUTURE PROSPECTS

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

## 11. CONCLUSIONS

### *Assessment of conservation status at end of reporting period*

11.1 Range	Favourable (FV)	
11.2 Population	Favourable (FV)	
11.3 Habitat for the species	Favourable (FV)	
11.4 Future prospects	Favourable (FV)	
11.5 Overall assessment of Conservation Status	Favourable (FV)	
11.6 Overall trend in Conservation Status	improving	
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**

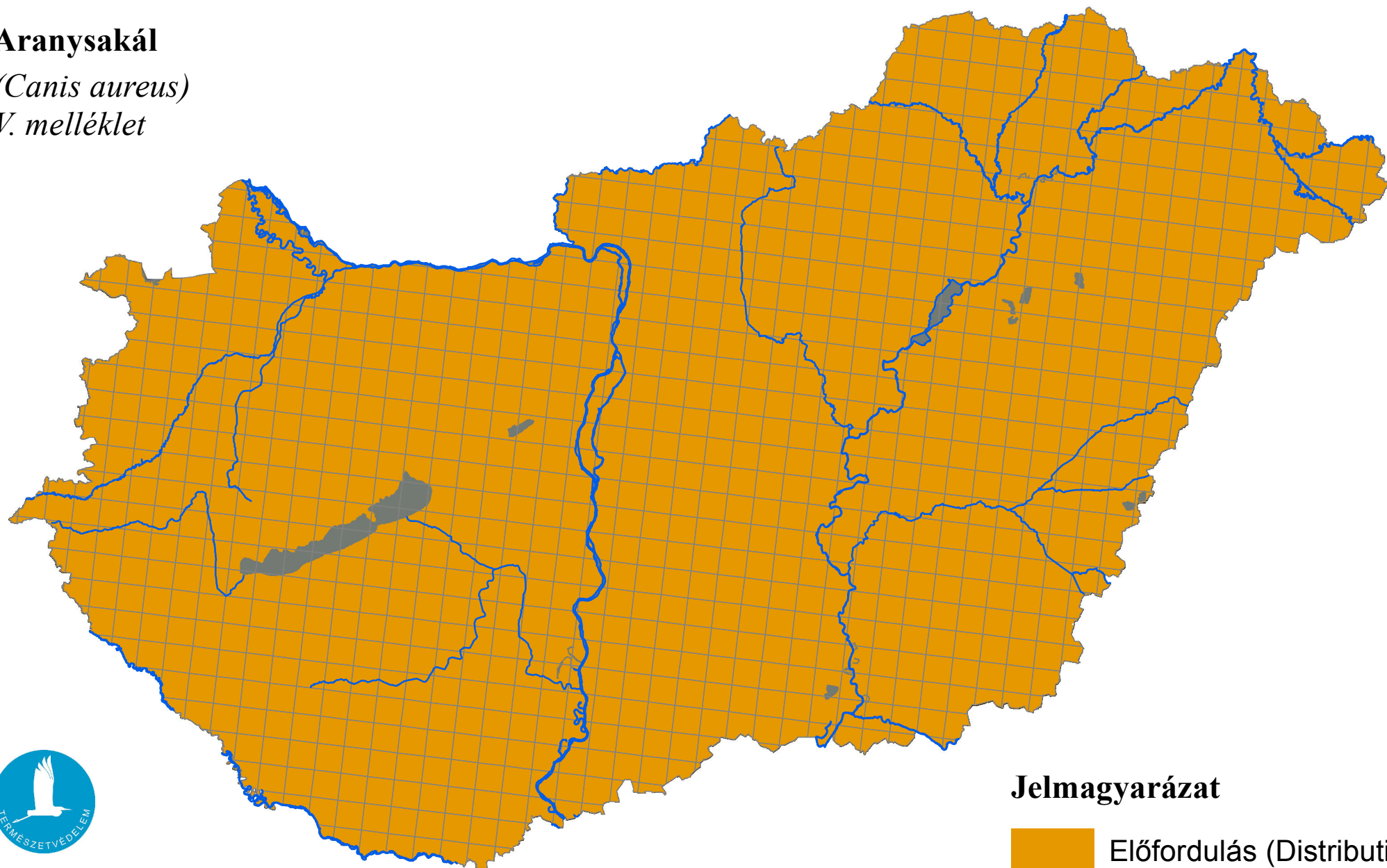
12.1 Population size inside the pSCIs, SCIs and SACs network (on the biogeographical/marine level including all sites where the species is present)	a) Unit	–
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
12.2 Type of estimate	–	
12.3 Additional population size (using population unit other than reporting unit in field 6.2) (Optional)	a) Unit	–
	b) Minimum	–
	c) Maximum	–
	d) Best single value	–
12.4 Type of estimate (Optional)	–	
12.5 Population size inside the network Method used	–	
12.6 Short-term trend of population size within the network Direction	–	
12.7 Short-term trend of population size within the network Method used	–	
12.8 Short-term trend of habitat for the species within the network Direction	–	
12.9 Short-term trend of habitat for the species within the network Method used	–	
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 szerinti országjelentés, 2025

**Aranysakál**  
(*Canis aureus*)  
V. melléklet



Forrás: Agrárminisztérium,  
Természetmegőrzési Főosztály

## Jelmagyarázat

