



THE IUCN RED LIST
OF THREATENED SPECIES™



Upupa epops (Common Hoopoe)

European Red List of Birds

Supplementary Material

The European Union (EU28) Red List assessments were based principally on the official data reported by EU Member States to the European Commission under Article 12 of the Birds Directive in 2019-20. For the European Red List assessments, similar data were sourced from BirdLife Partners and other collaborating experts in other European countries and territories. For more information, see BirdLife International (2021).

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- Reported national population sizes and trends
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Recommended citation

BirdLife International (2021) European Red List of Birds. Luxembourg: Publications Office of the European Union.

Further information

- <http://datazone.birdlife.org/info/euroredlist>
- <http://www.birdlife.org/europe-and-central-asia/european-red-list-birds-0>
- <http://www.iucnredlist.org/regions/europe>
- <http://ec.europa.eu/environment/nature/conservation/species/redlist/>

Data requests and feedback

To request access to these data in electronic format, provide new information, correct any errors or provide feedback, please email science@birdlife.org.

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Table 1. Reported national breeding population size and trends in Europe¹.

Country (or territory) ²	Population estimate				Short-term population trend ⁵				Long-term population trend ⁵				Subspecific population (where relevant)
	Size (pairs) ³	Europe (%)	Year(s)	Method ⁴	Direction ⁶	Magnitude (%) ⁷	Year(s)	Method ⁴	Direction ⁶	Magnitude (%) ⁷	Year(s)	Method ⁴	
Albania	700–1700	<1	2007-2018	partial	0	-7 to 1	2007-2018	partial	-	-30 to -19	1980-2018	expert	
Andorra	0–2	<1	2014-2017	deficient	?		2011-2018	deficient	?				
Armenia	14200–19700	<1	2013-2018	complete	+	3 to 7	2007-2018	complete	+	10 to 30	2003-2018	partial	
Austria	450–650	<1	2013-2018	complete	-	-20 to -10	2007-2018	partial	-	-60 to -30	1981-2018	expert	
Azerbaijan	10000–50000	1	1996-2019	expert	0		2013-2019	expert	0		1980-2019	expert	
Belarus	16000–22000	<1	2010-2018	partial	0	-10 to 10	2012-2019	expert	0	0	1980-2019	expert	
Belgium	0–1	<1	2013-2018	complete	0		2008-2018	complete	-	-100 to -67	1973-2018	partial	
Bosnia & HG	2000–4000	<1	2015-2018	complete	?	-10 to 10	2007-2018	complete	?		1980-2018	deficient	
Bulgaria	10000–20000	<1	2013-2018	partial	?		2001-2018	expert	0	5 to 10	1980-2018	expert	
Croatia	5000–10000	<1	2014-2014	expert	?		2007-2018	deficient	?		1980-2018	deficient	
Cyprus	400–1000	<1	2013-2018	expert	-	-17 to 0	2007-2018	expert	-	-30 to -10	1980-2018	expert	
Czechia	60–120	<1	2014-2017	complete	?		2007-2018	deficient	?		1980-2018	deficient	
Estonia	5–20	<1	2013-2017	expert	0	-10 to 10	2006-2017	expert	0	-10 to 10	1980-2017	expert	
France	60000–110000	4	2013-2018	partial	-		2007-2018	partial	+	5 to 15	2001-2017	expert	
Georgia	3400–34400	<1	2013-2017	partial	?			deficient	?				
Germany	800–950	<1	2011-2016	complete	+		2004-2016	expert	+		1980-2016	expert	
Greece	60000–80000	3	2013-2018	partial	?		2007-2018	deficient	0	0	1980-2018	partial	
Hungary	9200–11500	<1	2014-2018	complete	+	49 to 69	2007-2018	expert	0		1980-2018	expert	
Italy	20000–50000	2	2013-2018	expert	0		2012-2017	partial	+	300 to 400	1993-2018	expert	
Kosovo	2500–3500	<1	2007-2019	partial	+		2007-2018	partial	+		1990-2018	partial	
Latvia	250–450	<1	2013-2018	partial	+	65 to 72	2000-2018	partial	+	85 to 101	1991-2017	partial	
Lithuania	400–670	<1	2013-2018	partial	0		2013-2018	partial	+	10 to 15	1980-2018	partial	
North Macedonia	5000–10000	<1	2014-2019	expert	0		2007-2018	expert	?		1980-2019		
Moldova	2000–3000	<1	2014-2017	partial	0		2007-2018	partial	0		1990-2018	expert	
Montenegro	1500–2500	<1	2002-2012	expert	0		2007-2018	expert	?				
Poland	43000–66000	3	2013-2018	complete	-	-31 to -3	2007-2018	complete	?		1980-2018	deficient	
Portugal	100000–500000	11	2013-2018	partial	0		2004-2018	partial	0		1980-2018	partial	
PT: Madeira	500–1000	<1	2013-2018	partial	0		2008-2018	partial	0		1980-2018	expert	
Romania	43000–430000	7	2013-2018	expert	?	-10 to 0	2008-2018	complete	?		1980-2018	deficient	
Russia	55000–95000	4	2008-2013	partial	-	0	2008-2018	expert	-	0	1980-2018	expert	
Serbia	8100–11900	<1	2013-2018	partial	0	0	2007-2018	complete	0	0	1980-2018	complete	
Slovakia	500–800	<1	2013-2018	expert	-	-20 to -10	2007-2018	expert	-	-25 to -10	1980-2018	expert	

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Table 1. Reported national breeding population size and trends in Europe¹.

Country (or territory) ²	Population estimate				Short-term population trend ⁵				Long-term population trend ⁵				Subspecific population (where relevant)
	Size (pairs) ³	Europe (%)	Year(s)	Method ⁴	Direction ⁶	Magnitude (%) ⁷	Year(s)	Method ⁴	Direction ⁶	Magnitude (%) ⁷	Year(s)	Method ⁴	
Slovenia	450–750	<1	2002-2018	complete	?	0 to 10	2008-2018	complete	-	-30 to -20	1980-2018	complete	
Spain	714000–1200000	46	2004-2018	partial	+		2007-2018	complete	0		1980-2018	complete	
ES: Canary Is	2500–10000	<1	1997-2018	expert	?		2007-2018	expert	?		1980-2018	expert	
Sweden	0–5	<1	2013-2018	complete	F	-100 to 250	2007-2018	partial	F	-100 to 500	1980-2018	partial	
Switzerland	180–260	<1	2013–2016	complete	0	-4 to 66	2007-2018	complete	+	20 to 109	1990-2018	complete	
Turkey	150000–400000	12	2002-2012	expert	?		2008-2019	deficient	?		1980-2013	deficient	
Ukraine	30000–50000	2	2014-2018	expert	0		2007-2018	partial	F	10 to 20	1980-2018	partial	
EU28	1070000–2500000	77											
Europe	1370000–3210000	100											

¹ See 'Sources' at end of factsheet, and for more details on individual EU Member State reports, see the Article 12 reporting portal at <http://bd.eionet.europa.eu/article12/report>.

² The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

³ In the few cases where population size estimates were reported in units other than those specified, they were converted to the correct units using standard correction factors.

⁴ The 'method used' (replacing the data 'quality' assessment in the 2015 European Red List) is reported as: a) Complete: complete survey or a statistically robust estimate; b) Partial: based mainly on extrapolation from a limited amount of data; c) Expert: based mainly on expert opinion with very limited data; d) Defficient: insufficient or no data available.

⁵ The robustness of regional trends to the effects of any missing or incomplete data was tested using plausible scenarios, based on other sources of information, including any other reported information, recent national Red Lists, scientific literature, other publications and consultation with relevant experts.

⁶ Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).

⁷ Trend magnitudes are rounded to the nearest integer.

Trend maps

A symbol appears in each country where the species occurs: the shape and colour of the symbol represent the population trend in that country, and the size of the symbol corresponds to the proportion of the European population occurring in that country.

KEY

- | | |
|---|----------------------------------|
| ↑ Large increase ($\geq 50\%$) | ↓ Large decrease ($\geq 50\%$) |
| ↑ Moderate increase (20–49%) | ↓ Moderate decrease (20–49%) |
| ↑ Small increase ($< 20\%$) | ↓ Small decrease ($< 20\%$) |
| ↑ Increase of unknown magnitude | ↓ Decrease of unknown magnitude |
| ■ Stable or fluctuating | |
| □ Unknown | |
| ○ Present (no population or trend data) | |
| × Extinct since 1980 | |

Each symbol, with the exception of Present and Extinct, may occur in up to three different size classes, corresponding to the proportion of the European population occurring in that country.

- ↑ Large: $\geq 10\%$ of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small: $< 1\%$ of the European population

The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Figure 1. Breeding population sizes and short-term trends across Europe.

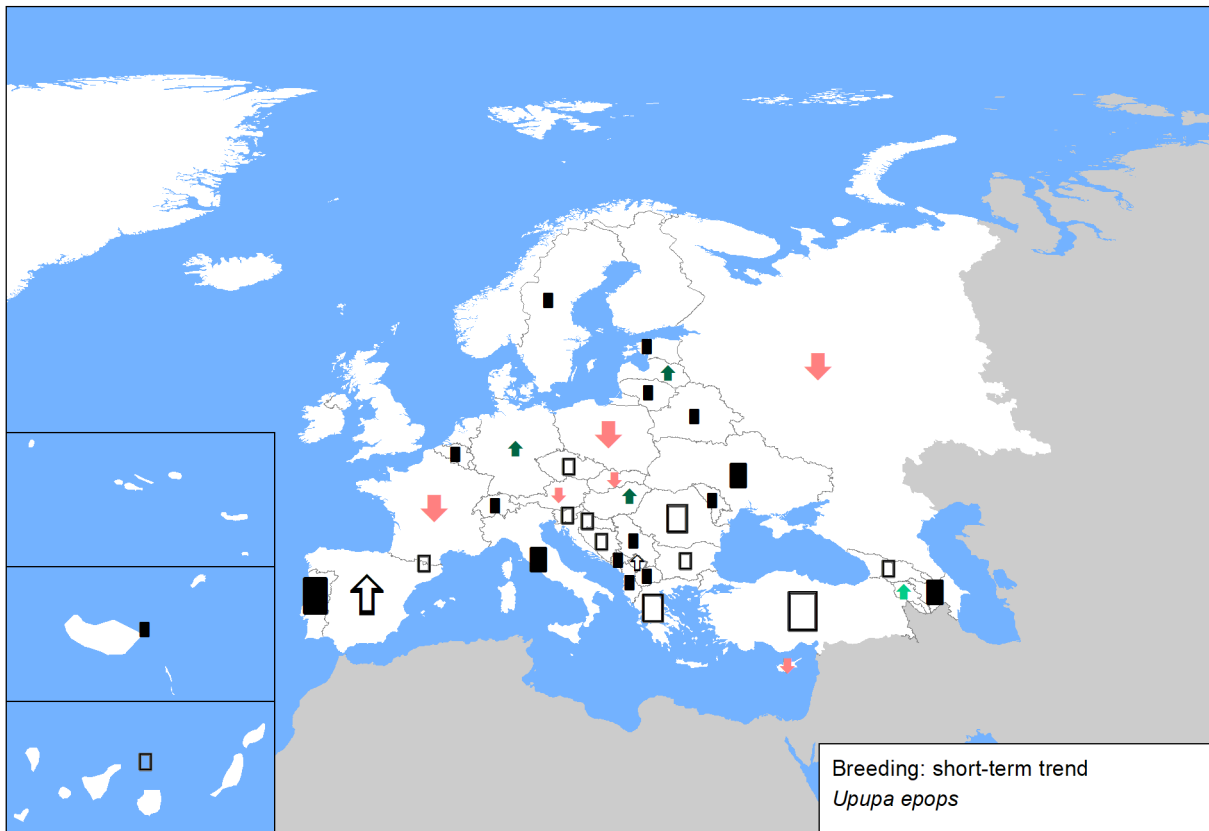
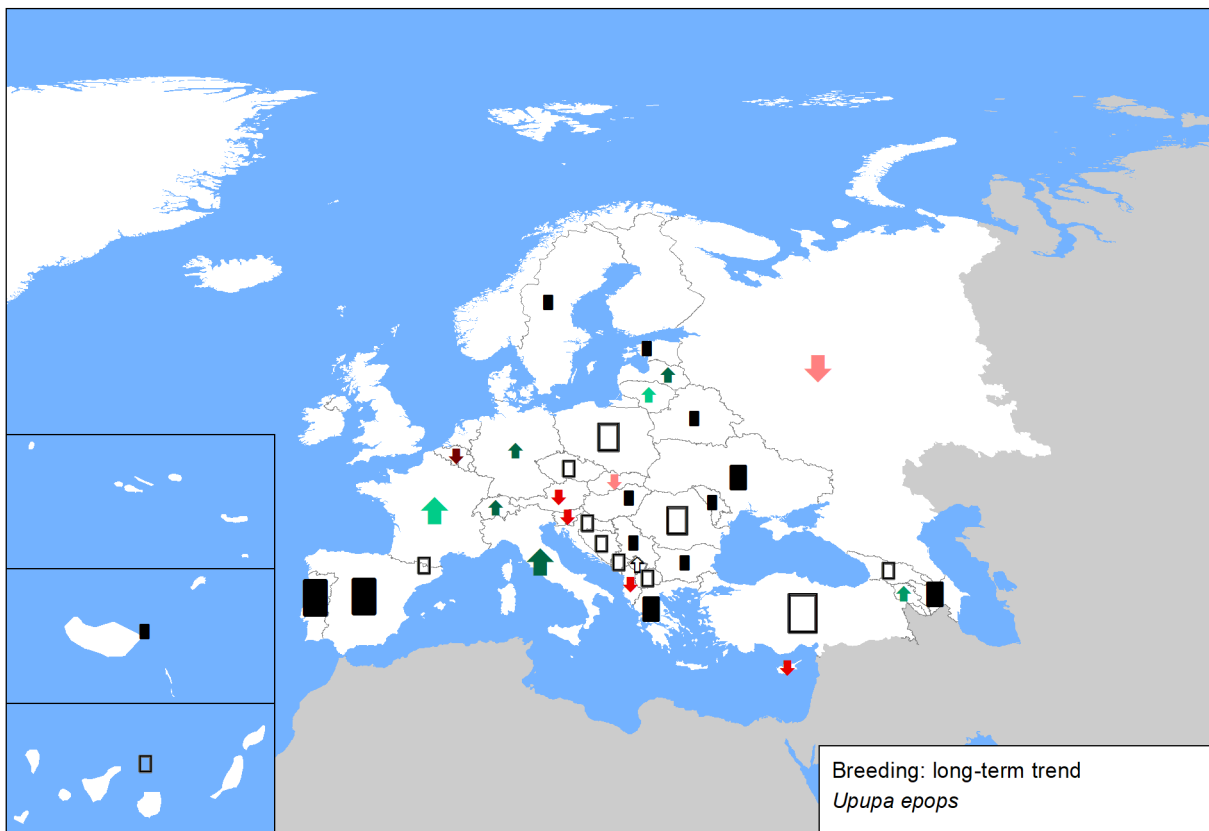


Figure 2. Breeding population sizes and long-term trends across Europe.



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Sources

Albania

Breeding population size: Bino & Xeka pers. obs.
Breeding short-term trend: Bino & Xeka pers. obs.
Breeding long-term trend: Bino pers. obs.

Andorra

Breeding population size: Fieldwork EBBA2, published at "Guia dels ocells d'Andorra. J. Nicolau & C. Pladevall, 2018"
Breeding short-term trend: Common Bird Monitoring Scheme of Andorra (SOCA)

Armenia

Breeding population size: TSE NGO National Bird Monitoring data.
Breeding short-term trend: TSE (2020) The Atlas of the Breeding Birds in Armenia. In preparation.
Breeding long-term trend: TSE (2020) The Atlas of the Breeding Birds in Armenia. In preparation.

Austria

Breeding population size: BirdLife Austria, unpublished data from www.ornitho.at
Breeding short-term trend: BirdLife Austria, unpublished data from www.ornitho.at ; BirdLife Austria, unpublished archive data
Breeding long-term trend: BirdLife Austria, unpublished archive data; Dvorak, Ranner & Berg 1993 (Atlas of Austrian Breeding Birds)

Azerbaijan

Breeding population size: BirdLife International 2004
Breeding short-term trend: AOS data base
Breeding long-term trend: AOS Data Base

Belarus

Breeding population size: Research work of the National Academy of Sciences of the Republic of Belarus "Dynamics and predictive assessment of changes in the state of populations of the main resource and biocenotically most important bird species in Belarus"
Breeding long-term trend: Nikiforov M.E., Kozulin A.V., eds. Belarussian birds at the beginning of XXI century: status, numbers, distribution. - 1997. - Minsk. - 187 p.

Belgium

Breeding population size: Vermeersch G. et al. (2018, in press). Broedvogels in Vlaanderen in de periode 2013-2018. Rapporten van het Instituut voor Natuur- en Bosonderzoek (INBO), Brussel. / Paquet, J-Y., Anselin, A., Vermeersch, G., Derouaux, A., Devos, K. (2019, in prep.). Contribution of Belgium to EBCC European Breeding Bird Atlas 2. Internal Report.
Breeding short-term trend: Vermeersch G. et al. (2018, in press). Broedvogels in Vlaanderen in de periode 2013-2018. Rapporten van het Instituut voor Natuur- en Bosonderzoek (INBO), Brussel. / Paquet, J-Y., Anselin, A., Vermeersch, G., Derouaux, A., Devos, K. (2019, in prep.). Contribution of Belgium to EBCC European Breeding Bird Atlas 2. Internal Report.
Breeding long-term trend: Vermeersch G. et al. (2018, in press). Broedvogels in Vlaanderen in de periode 2013-2018. Rapporten van het Instituut voor Natuur- en Bosonderzoek (INBO), Brussel. / Paquet, J-Y., Anselin, A., Vermeersch, G., Derouaux, A., Devos, K. (2019, in prep.). Contribution of Belgium to EBCC European Breeding Bird Atlas 2. Internal Report.

Bosnia and Herzegovina

Breeding population size: Based on data for EBBA2
Breeding short-term trend: more individual articles e.g published in magazine Bilten mreže posmatrača ptica u Bosni i Hercegovini-see https://ptice.ba/bs/category/bilteni_/ , individual reports (e.g. for EBBA2, projects etc)

Bulgaria

Breeding population size: Stoynov, E., Mitev, I. 2008. <i>Upupa epops</i> . In: Iankov, P. (Ed.) Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds Conservation series, Book 10, BSPB, Sofia.; National Art. 12 reporting database 2013-2018; Nankinov, D. et al. Breeding totals of the ornithofauna in Bulgaria. Green Balkans, Plovdiv, 2004.
Breeding short-term trend: Stoynov, E., Mitev, I. 2008. <i>Upupa epops</i> . In: Iankov, P. (Ed.) Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds Conservation series, Book 10, BSPB, Sofia.; National Art. 12 reporting database 2013-2018; Nankinov, D. et al. Breeding totals of the ornithofauna in Bulgaria. Green Balkans, Plovdiv, 2004.
Breeding long-term trend: Stoynov, E., Mitev, I. 2008. <i>Upupa epops</i> . In: Iankov, P. (Ed.) Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds Conservation series, Book 10, BSPB, Sofia. Nankinov, D. et al. Breeding totals of the ornithofauna in Bulgaria. Green Balkans, Plovdiv, 2004.

Croatia

Breeding population size: Dumbović Mazal V., Pintar V., Zdravec M. (2019): Prvo izvješće o brojnosti i rasprostranjenosti ptica u Hrvatskoj sukladno odredbama Direktive o pticama.
Breeding short-term trend: no data available
Breeding long-term trend: no data available

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Cyprus

Breeding population size: Expert opinion
Breeding short-term trend: Expert opinion
Breeding long-term trend: Bird sightings records as published in BirdLife Cyprus annual reports

Czechia

Breeding population size: Šťastný et Bejček in prep. - Atlas hnízdního rozšíření ptáků ČR 2014-2017
Breeding short-term trend: expert opinion
Breeding long-term trend: expert opinion

Estonia

Breeding population size: Estonian Working Group on Bird Status and Numbers
Breeding short-term trend: Estonian Working Group on Bird Status and Numbers
Breeding long-term trend: Estonian Working Group on Bird Status and Numbers

France

Breeding population size: Issa N. & Muller Y. 2015. Atlas des oiseaux nicheurs de France métropolitaine. , LPO/SEOF/MNHN/Delachaux et Niestlé, Paris
Breeding short-term trend: . STOC EPS / MNHN.

Georgia

Breeding population size: EBBA Georgia, prepared by Sabuko-Society for nature conservation, Iliia state university, NGO "psovi".

Germany

Breeding population size: Monitoring seltener Brutvögel (http://www.dda-web.de/index.php?cat=monitoring&subcat=ga&subsubcat=kontakt)
Breeding short-term trend: Gerlach et al. (in Vorb.): Vögel in Deutschland – 2019. Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz und Länderarbeitsgemeinschaft der Vogelschutzwarten, Münster.
Breeding long-term trend: Gerlach et al. (in Vorb.): Vögel in Deutschland – 2019. Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz und Länderarbeitsgemeinschaft der Vogelschutzwarten, Münster.

Greece

Breeding population size: (1) Hellenic Common Birds Monitoring Scheme database (2007-2019), Hellenic Ornithological Society, (2) BirdLife International (2017). European birds of conservation concern: populations, trends and national responsibilities. Cambridge, UK: BirdLife International. ISBN 978-1-912086-00-9, (3) D. Portolou & V. Kati (2017). "Abundance and distribution of selected species – SEBI 01". In: Kati V (Ed) "Greece-the state of environment 2015-2016: Nature and biodiversity. National report". National Center of Environment and Sustainable Development, Athens, pp 3-20 – 3-36 [In Greek]. Available at: http://ekpa.ypeka.gr/index.php/soer-2018
Breeding short-term trend: no data
Breeding long-term trend: 1) Handrinos, G., & Akriotis, T., (1997) The birds of Greece. C. Helm, A & C Black, London. 2) BirdLife International (2004) Birds in Europe: Population estimates, trends and conservation status. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 12).

Hungary

Breeding population size: KEHOP-4.3.0-15-2016-00001 project results, unpublished. National park directorates' databases http://map.mme.hu/maps/map2 National common bird monitoring scheme (MMM) database.
Breeding short-term trend: http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Upupa_epops.pdf National park directorates' databases http://map.mme.hu/maps/map2
Breeding long-term trend: Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998): Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 91 p. Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 235-236 p. BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No.12.), 173 p. Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy Természeti Védelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 389-390 p. MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természeti Védelmi Egyesület, Budapest. p. 154-155. KEHOP-4.3.0-15-2016-00001 project results, unpublished. National park directorates' databases http://map.mme.hu/maps/map2

Italy

Breeding population size: Brichetti P & Fracasso G. 2007. Ornitologia italiana. Vol.4 (Apodidae-Prunellidae). Alberto Perdisa Editore, Bologna
Breeding short-term trend: Extrapolated data by the average annual trend, from: Rete Rurale Nazionale & Lipu (2018). Uccelli comuni delle zone agricole in Italia. Aggiornamento degli andamenti di popolazione e del FBI per la Rete Rurale Nazionale dal 2000 al 2017. 16 pp.
Breeding long-term trend: Brichetti P., Meschini E., 1993. Stima delle popolazioni di uccelli nidificanti. In Meschini E., Frugis S., 1993. Atlante degli uccelli nidificanti in Italia. Suppl. Ric. Biol. Selvaggina, 20, 1-345.

Kosovo

Breeding population size: Qenan Maxhuni
Breeding short-term trend: Qenan Maxhuni
Breeding long-term trend: Puzovic, S. et al. (2004): Birds of Serbia and Montenegro – Size of nesting populations. I trends: 1990-2002. Ciconia 12

Latvia

Breeding population size: Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv
Breeding short-term trend: Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv Expert: Viesturs Ķerus, viesturs@lob.lv

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Latvia

Breeding long-term trend: Strazds M., Priednieks J., Vaverins G. 1994. [Size of Latvian bird populations.] (in Latvian) In: Putni dabā, 4: 3–18 Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv

Lithuania

Breeding population size: Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) 2015-2018. Lietuvos perinčių paukščių atlaso duomenų bazė (Lithuanian Breeding Birds Atlas Database). Vilnius. Ministry of Environment of the Republic of Lithuania. 2012. Status and trends of bird populations (Article 12, Birds Directive 2009/147/EC) National Summary 2008-2012 Lithuania. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES)

Breeding short-term trend: Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) 2015-2018. Lietuvos perinčių paukščių atlaso duomenų bazė (Lithuanian Breeding Birds Atlas Database). Vilnius. Ministry of Environment of the Republic of Lithuania. 2012. Status and trends of bird populations (Article 12, Birds Directive 2009/147/EC) National Summary 2008-2012 Lithuania. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES)

Breeding long-term trend: Logminas, V. (ed.). 1991. Lietuvos fauna: paukščiai. Vilnius: „Mokslas“. Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“. Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) BirdLife International/European Bird Census Council. 2000. European bird populations: estimates and trends. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 10). Raudonikis L. 2004. Important Bird Areas of the European Union Importance in Lithuania. Lithuanian Ornithological Society & Institute of Ecology of Vilnius University. Lutute, Vilnius. Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“. Ministry of Environment of the Republic of Lithuania. 2012. Status and trends of bird populations (Article 12, Birds Directive 2009/147/EC) National Summary 2008-2012 Lithuania. Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) 2015-2018. Lietuvos perinčių paukščių atlaso duomenų bazė (Lithuanian Breeding Birds Atlas Database). Vilnius. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES)

North Macedonia

Breeding population size: unpublished data from the European Breeding Bird Atlas 2

Breeding short-term trend: unpublished data from the European Breeding Bird Atlas 2

Moldova

Breeding population size: Moldova's contribution for the second European Breeding Bird Atlas (EBBA2)

Breeding short-term trend: SPPN expert opinion (sppn.moldova@gmail.com)

Breeding long-term trend: SPPN expert opinion (sppn.moldova@gmail.com)

Montenegro

Breeding population size: Puzovic, S., Simic, D., Saveljić, D., Gergelj, J., Tucakov, M., Stojnic, N., Hulo, I., Ham, I., Vizi, O., Sciban, M., Ruzic, M., Vucanovic, M., Jovanovic, T. (2004): Birds of Serbia and Montenegro – Size of nesting populations. I trends: 1990-2002. Ciconia 12,

Poland

Breeding population size: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MPPL – Common Bird Survey)

Breeding short-term trend: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MPPL)

Breeding long-term trend: Chief Inspectorate of Environmental Protection & Polish Society for the Protection of Birds (OTOP) / BirdLife Poland

Portugal

Breeding population size: eBird (2019). eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: <http://www.ebird.org/portugal/home>. (Accessed: October 22, 2018).

Breeding short-term trend: Alonso, H., Coelho, R., Costa, J., Gouveia, C., Leitão, D., Machado, R., & Teodósio, J. 2019. Relatório do Censo de Aves Comuns 2004-2018. Sociedade Portuguesa para o Estudo das Aves, Lisboa (relatório não publicado).

Breeding long-term trend: Alonso, H., Coelho, R., Costa, J., Gouveia, C., Leitão, D., Machado, R., & Teodósio, J. 2019. Relatório do Censo de Aves Comuns 2004-2018. Sociedade Portuguesa para o Estudo das Aves, Lisboa (relatório não publicado); Relatório Nacional Directiva Aves (2008-2012).

PT: Madeira

Breeding population size: Equipa Atlas, 2013 - http://www.atlasdasaves.netmadeira.com/index.php?option=com_content&view=article&id=150&Itemid=66&lang=pt 1º Atlas das Aves Invernantes e Migradoras de Portugal https://drive.google.com/drive/folders/1MJWLVHRhU9A8lgbvY2DhPiFm_Tp1hD25

Breeding short-term trend: Meirinho, A., Leal, A., Marques, A.T., Fagundes, A.I., Sampaio, H., Costa, J. & Leitão, D. 2013. O estado das aves comuns em Portugal 2011: Relatório do projeto Censo de Aves Comuns. Sociedade Portuguesa para o Estudo das Aves, Lisboa http://www.spea.pt/fotos/editor2/relatoriocac_2011.pdf

Breeding long-term trend: Oliveira, P. & Menezes, D. 2004. Aves do Arquipélago da Madeira. Serviço do Parque Natural da Madeira

Romania

Breeding population size: Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database

Breeding short-term trend: Romanian Common Bird Monitoring Programme, Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database

Breeding long-term trend: Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database

Russia

Breeding population size: Voltzit & Kalyakin 2013-2019; Database of the project on Atlas of breeding birds of European Russia

Breeding short-term trend: Belik in press.

Breeding long-term trend: Belik et al. 2003; Borodin unpublished. spinus73@mail.ru; Sarychev (ed.) 2009.

Upupa epops (Common Hoopoe)

Serbia

Breeding population size: EBBA2 project; Puzović, S., Radišić, D., Ružić, M., Rajković, D., Radaković, M., Pantović, U., Janković, M., Stojnić, N., Šćiban, M., Tucakov, M., Gergelj, J., Sekulić, G., Agošton, A. & Raković, M. 2015. Birds of Serbia: Breeding Population Estimates and Trends for the Period 2008-2013. Bird protection and study society of Serbia, and Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Novi Sad.

Breeding short-term trend: Puzović, S., Radišić, D., Ružić, M., Rajković, D., Radaković, M., Pantović, U., Janković, M., Stojnić, N., Šćiban, M., Tucakov, M., Gergelj, J., Sekulić, G., Agošton, A. & Raković, M. 2015. Birds of Serbia: Breeding Population Estimates and Trends for the Period 2008-2013. Bird protection and study society of Serbia, and Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Novi Sad.

Breeding long-term trend: Puzović, S., Radišić, D., Ružić, M., Rajković, D., Radaković, M., Pantović, U., Janković, M., Stojnić, N., Šćiban, M., Tucakov, M., Gergelj, J., Sekulić, G., Agošton, A. & Raković, M. 2015. Birds of Serbia: Breeding Population Estimates and Trends for the Period 2008-2013. Bird protection and study society of Serbia, and Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Novi Sad.

Slovakia

Breeding population size: Coordinatory group for reporting 2019. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Breeding short-term trend: Coordinatory group for reporting 2019, AVES-Symfony Database 2013-2018, KIMS Database 2013-2018. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Breeding long-term trend: Coordinatory group for reporting 2019, AVES-Symfony Database 2013-2018, KIMS Database 2013-2018. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Slovenia

Breeding population size: Mihelič T., Kmecl P., Denac K., Koce U., Vrezec A., Denac D. (eds.) (2019): Atlas ptic Slovenije. Popis gnezdičk 2002–2017. DOPPS, Ljubljana.

Breeding short-term trend: Kmecl P. & Šumrada T. (2018): Monitoring splošno razširjenih vrst ptic za določitev slovenskega indeksa ptic kmetijske krajine - končno poročilo za leto 2018. DOPPS, Ljubljana.

Breeding long-term trend: Geister I. (1995): Ornitološki atlas Slovenije. Državna založba Slovenije, Ljubljana. Mihelič T., Kmecl P., Denac K., Koce U., Vrezec A., Denac D. (eds.) (2019): Atlas ptic Slovenije. Popis gnezdičk 2002–2017. DOPPS, Ljubljana.

Spain

Breeding population size: Carrascal, L.M. & Palomino, D. (2008). Las aves comunes reproductoras en España. Población en 2004-2006. SEO/BirdLife. Madrid. 202 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/19_paseriformes_2004_2006_tcm30-208258.pdf) Información proporcionada por las Comunidades Autónomas.

Breeding short-term trend: Database of the 'Atlas de las aves reproductoras de España'. Updated version 2011 with data from SEO/BirdLife's monitoring programmes. In: Inventario Español de Especies Terrestres, Inventario Español del Patrimonio Natural y de la Biodiversidad. Ministerio de Agricultura, Alimentación y Medio Ambiente (2013). (https://www.miteco.gob.es/fr/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/ieet_aves_sist_seg_tendencia_comunes_esp.aspx) Información proporcionada por las Comunidades Autónomas. SEO/BirdLife (2019). Programas de seguimiento y grupos de trabajo de SEO/BirdLife 2018. SEO/BirdLife. Madrid. (<https://doi.org/10.31170/0073>)

Breeding long-term trend: Carrascal, L.M. & Palomino, D. (2008). Las aves comunes reproductoras en España. Población en 2004-2006. SEO/BirdLife. Madrid. 202 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/19_paseriformes_2004_2006_tcm30-208258.pdf) Database of the 'Atlas de las aves reproductoras de España'. Updated version 2011 with data from SEO/BirdLife's monitoring programmes. In: Inventario Español de Especies Terrestres, Inventario Español del Patrimonio Natural y de la Biodiversidad. Ministerio de Agricultura, Alimentación y Medio Ambiente (2013). (https://www.miteco.gob.es/fr/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/ieet_aves_sist_seg_tendencia_comunes_esp.aspx) Información proporcionada por las Comunidades Autónomas. Martí, R. & del Moral, J.C. (Eds.) (2003). Atlas de las Aves Reproductoras de España. Dirección General de Conservación de la Naturaleza- Sociedad Española de Ornitología. Madrid, 733 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx) Purroy, F.J. (Coord.) (1997). Atlas de las aves de España (1975-1995). SEO/BidLife. Lynx Edicions. Barcelona. 583 pp. SEO/BirdLife (2019). Programas de seguimiento y grupos de trabajo de SEO/BirdLife 2018. SEO/BirdLife. Madrid. (<https://doi.org/10.31170/0073>)

ES: Canary Is

Breeding population size: Lorenzo, J.A. (2007) (Ed). Atlas de las Aves Nidificantes en el Archipiélago Canario (1997-2003). Dirección General de Conservación de la Naturaleza-Sociedad Española de Ornitología. Madrid. 520 pp.

Breeding short-term trend: Lorenzo, J.A. (2007) (Ed). Atlas de las Aves Nidificantes en el Archipiélago Canario (1997-2003). Dirección General de Conservación de la Naturaleza-Sociedad Española de Ornitología. Madrid. 520 pp.

Breeding long-term trend: Carrascal, L.M. & Alonso, C.L. (2005). Censo de aves estepáricas en las islas orientales del archipiélago canario. Programa de seguimiento y planificación de especies amenazadas de canarias "centinela". CSIC-Gobierno de Canarias. Informe no publicado. Lorenzo, J.A. (2007) (Ed). Atlas de las Aves Nidificantes en el Archipiélago Canario (1997-2003). Dirección General de Conservación de la Naturaleza-Sociedad Española de Ornitología. Madrid. 520 pp. Martín, A. & Lorenzo, J.A. (2001). Aves del Archipiélago Canario. Francisco Lemus Editor. La Laguna. 787 pp.

Sweden

Breeding population size: Ottosson, U., Ottvall, R., Elmberg, J., Green, M., Gustafsson, R., Haas, F., Holmqvist, N., Lindström, Å., Nilsson, L., Svensson, M., Svensson, S. & Tjernberg, M. 2012. Fåglarna i Sverige – antal och förekomst. SOF, Halmstad. Swedish Bird Survey. BirdLife Sverige, Annual Bird reports.

Breeding short-term trend: Species observation system, www.artportalen.se

Breeding long-term trend: BirdLife Sverige annual reports

Switzerland

Breeding population size: Knaus, P., S. Antoniazza, S. Wechsler, J. Guélat, M. Kéry, N. Strebel & T. Sattler (2018): Swiss Breeding Bird Atlas 2013–2016. Distribution and population trends of birds in Switzerland and Liechtenstein. Swiss Ornithological Institute, Sempach.

Breeding short-term trend: <https://www.vogelwarte.ch/en/projects/population-trends/breeding-population-indices/>

Breeding long-term trend: <https://www.vogelwarte.ch/en/projects/population-trends/breeding-population-indices/>

Урпуа ерорс (Common Hoopoe)

Turkey

Breeding population size: Zeynel Arslangündodu, Ferdi Akarsu, Güven Eken personal communication (2019), Eken G., Bozdoğan M., İsfendiyaroğlu S., Kılıç D.T., Lise Y. (2006) Türkiye'nin Önemli Doğa Alanları. Doğa Derneği, Ankara. Birdlife International (2004) Birds in Europe: population estimates, trends and conservation status, Cambridge UK: Birdlife International (Birdlife Conservation series no: 12) Kusbank Bird Database (Ebird) Kirwan G.M., Boyla K. A., Castell P., Demirci B., Özen M., Welch H., Marlow T., 2008, Birds of Turkey. Londra, Christopher Helm, 978-1-4081-0475-, Kılıç DT, Eken G. 2004. Türkiye'nin önemli kus alanları—2004 güncellemesi (Important bird areas in Turkey—2004 update). Ankara: Doga Derneği.

Ukraine

Breeding population size: Expert: V. Grishchenko

Breeding short-term trend: 1. Горбань І. (2003): Оцінка чисельності гніздових птахів України. - Вісн. Львів. ун-ту. Сер. біол. 34: 147-158. 2. Гаврись Г.Г. (2003): Одуд. - Птахи України під охороною Бернської конвенції. Київ. 163-164. 3. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12. 2004. 374 p.

Breeding long-term trend: 1. Hagemajjer W.J.M., Blair M.J. The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance. Poyser. - London. 1997. 903 p. 2. Горбань І. (2003): Оцінка чисельності гніздових птахів України. - Вісн. Львів. ун-ту. Сер. біол. 34: 147-158. 3. Гаврись Г.Г. (2003): Одуд. - Птахи України під охороною Бернської конвенції. Київ. 163-164. 4. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12. 2004. 374 p.

Bibliography

Arlettaz, R., Fournier, J. and Zbinden, N. 2000. Evolution démographique (1979–1998) d'une population témoin de Huppe fasciée *Upupa epops* en Valais et stratégie de conservation ciblée. *Nos Oiseaux* 47: 19-27.

Bauer, H.-G. and Berthold, P. 1997. *Die Brutvögel Mitteleuropas. Bestand und Gefährdung*. Aula, Wiesbaden.

Bird, J. P., Martin, R., Akçakaya, H. R., Gilroy, J., Burfield, I. J., Garnett, S. G., Symes, A., Taylor, J., Sekercioglu, Ç. H. and Butchart, S. H. M. 2020. Generation lengths of the world's birds and their implications for extinction risk. *Conservation Biology* 34(5): 1252-1261. DOI: 10.1111/cobi.13486.

Bötsch, Y., Arlettaz, R. and Schaub, M. 2012. Breeding dispersal of Eurasian Hoopoes (*Upupa epops*) within and between years in relation to reproductive success, sex, and age. *The Auk* 129(2): 283-295.

Fournier, J. and Arlettaz, R. 2001. Food provision to nestlings in the Hoopoe *Upupa epops*: implications for the conservation of a small endangered population in the Swiss Alps. *Ibis* 143(1): 2-10.

Gordo, O. and Sanz, J.J. 2005. Phenology and climate change: a long-term study in a Mediterranean locality. *Oecologia* 146: 484-495.

Krištín, A. and Kirwan, G.M. 2015. Common Hoopoe (*Upupa epops*). In: J. del Hoyo, A. Elliott, J. Sargatal, D.A. Christie & E. de Juana (eds), *Handbook of the Birds of the World Alive*, Lynx Edicions, Barcelona.

Martin-Vivaldi, M., Palomino, J.J., Soler, M. and Soler, J.J. 1999. Determinants of reproductive success in the Hoopoe *Upupa epops*, a hole-nesting non-passerine bird with asynchronous hatching. *Bird Study* 46: 205-216.

Snow, D.W. and Perrins, C.M. 1998. *The Birds of the Western Palearctic, Volume 1: Non-Passerines*. Oxford University Press, Oxford.