



THE IUCN RED LIST
OF THREATENED SPECIES™



***Athene noctua* (Little Owl)**

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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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.

Athene noctua (Little Owl)

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	2100–4400	<1	2007-2018	partial	-	-46 to -45	2007-2018	partial	-	-46 to -45	1980-2018	expert	
Armenia	1800–2400	<1	2013-2018	complete	-	-5 to -3	2007-2018	complete	0		2003-2018	partial	
Austria	140–190	<1	2013-2018	complete	0		2007-2018	partial	-	-80 to -50	1981-2018	expert	
Azerbaijan	1000–10000	<1	1996-2019	expert	?		2013-2019	expert	?		1980-2019	expert	
Belarus	1200–2000	<1	2010-2018	partial	0	-10 to 10	2012-2019	expert	0	0	1980-2019	expert	
Belgium	7900–12200	1	2013-2018	partial	0	-25 to 16	2008-2018	partial	+	8 to 67	1973-2018	partial	
Bosnia & HG	3000–6000	<1	2015-2018	complete	?	-10 to 10	2007-2018	complete	?		1980-2018	deficient	
Bulgaria	5000–8000	<1	2013-2018	partial	-	-40 to -20	2000-2018	partial	0	0 to 5	1980-2018	expert	
Croatia	4000–6000	<1	2010-2010	expert	?		2007-2018	deficient	?		1980-2018	deficient	
Cyprus	4000–10000	<1	2013-2018	expert	0	0	2007-2018	expert	?		1980-2018	deficient	
Czechia	100–150	<1	2014-2017	complete	-		2007-2018	expert	-		1980-2018	expert	
Denmark	10	<1	2017	complete	-	-97 to -85	2006-2017	complete	-	-98 to -89	1990-2017	complete	
France	25000–50000	4	2009-2012	partial	0	0	2007-2018	expert	-	-50 to -20	1980-2018	expert	
Georgia	990–9900	<1	2013-2017	partial	?			deficient	?				
Germany	7500–8500	1	2011-2016	complete	0	-8 to 5	2004-2016	complete	0		1980-2016	expert	
Gibraltar	1–5	<1	2014-2018	complete	-	-5 to -1	2001-2018	complete	-	-5 to -1	1980-2018	partial	
Greece	5000–15000	1	2015	partial	0		2007-2018	partial	0		1980-2018	partial	
Hungary	3000–4000	<1	2014-2018	expert	+	20 to 50	2007-2018	complete	?		1980-2018	deficient	
Italy	40000–70000	7	2013-2018	expert	?		2007-2018	deficient	+	130 to 300	1993-2018	expert	
Kosovo	5000–6000	<1	2007-2019	partial	F		2007-2018	partial	0		1990-2018	partial	
Latvia	0	<1	2017-2017	expert	0	0	2007-2018	expert	-	-100	1980-2018	expert	
Lithuania	5–10	<1	2013-2018	partial	0	0	2013-2018	expert	0	0	1980-2018	expert	
Luxembourg	20–30	<1	2013-2018	complete	+	0 to 30	2007-2018	complete	-	-70 to -50	1980-2018	partial	
North Macedonia	3000–7000	<1	2014-2019	expert	0		2007-2018	expert	?		1980-2019		
Moldova	3000–4000	<1	2014-2017	partial	0		2007-2018	partial	0		1990-2018	expert	
Montenegro	1000–2000	<1	2002-2012	expert	0		2007-2018	expert	?				
Netherlands	7500–8500	1	2013-2015	complete	0	-7 to 11	2006-2017	complete	-	-45 to -43	1980-2017	complete	
Poland	500–1000	<1	2013-2018	expert	?		2007-2018	deficient	-	-67 to -54	1980-2018	expert	
Portugal	40000–60000	6	2013-2018	partial	-		2009-2017	partial	?		1980-2018	deficient	
Romania	15000–40000	3	2013-2018	expert	?	-8 to 21	2014-2018	complete	?		1980-2018	deficient	
Russia	20000–30000	3	2008-2018	partial	?		2008-2018	deficient	?		1980-2018	partial	
Serbia	16000–23000	2	2013-2018	partial	0	0	2007-2018	complete	0	0	1980-2018	complete	

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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	
Slovakia	300–600	<1	2013-2018	expert	-	-30 to -20	2007-2018	expert	-	-70 to -40	1980-2018	expert	
Slovenia	100–150	<1	2002-2017	partial	?		2002-2017	deficient	-	-87 to -70	1980-2017	partial	
Spain	39400–39500	5	1998-2018	partial	-		2007-2018	complete	-	-40 to -20	1980-2018	partial	
Switzerland	110–150	<1	2013–2016	complete	+	53 to 129	2007-2018	complete	+	127 to 236	1990-2018	complete	
Turkey	300000–600000	54	2002-2012	partial	?		2008-2019	deficient	?		1980-2013	deficient	
Ukraine	15000–25000	2	2014-2019	partial	0		2007-2019	expert	0		1980-2019	partial	
United Kingdom	2300–4900	100	2016	partial	-		2004-2016	complete	-		1980-2016	complete	non-native populations
EU28	206000–339000	34											
Europe	577000–1070000	100											
Europe	2300–4900	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) Deficient: 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 (≥50%) | ↓ Large decrease (≥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: ≥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.

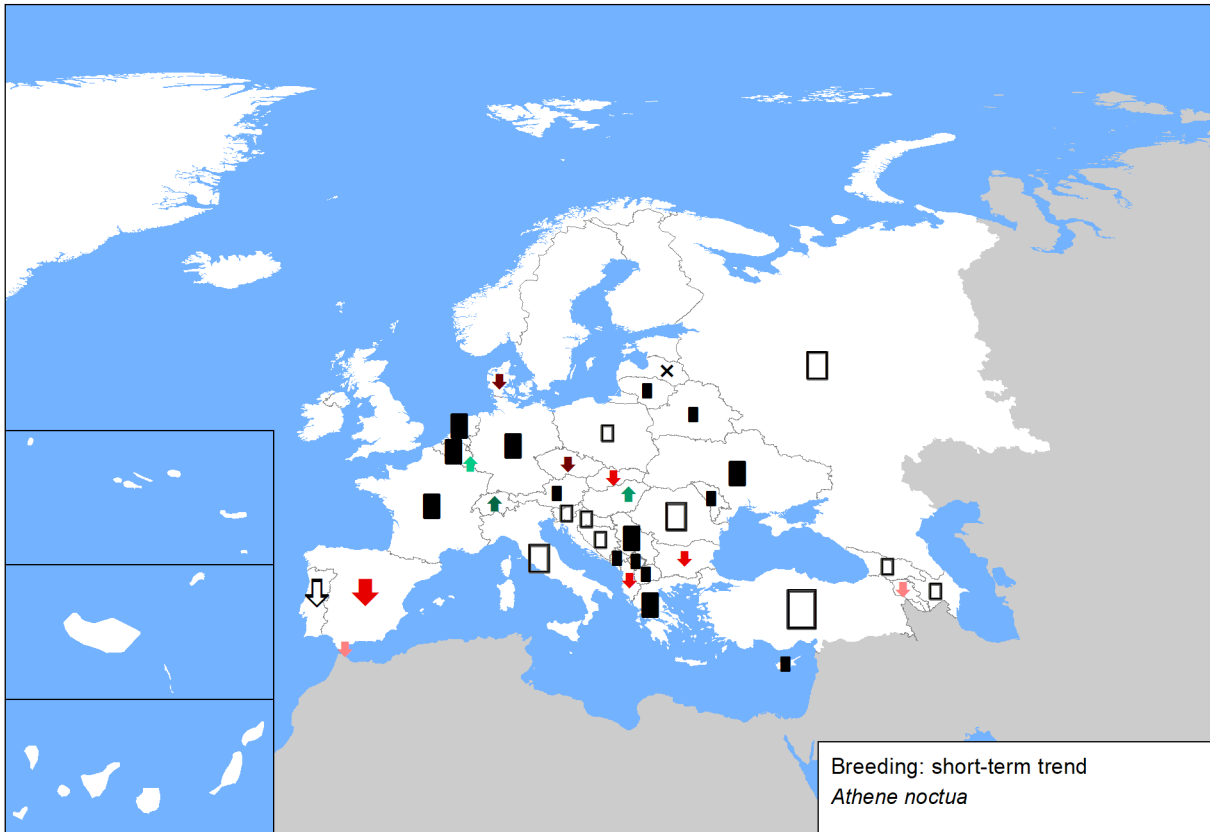
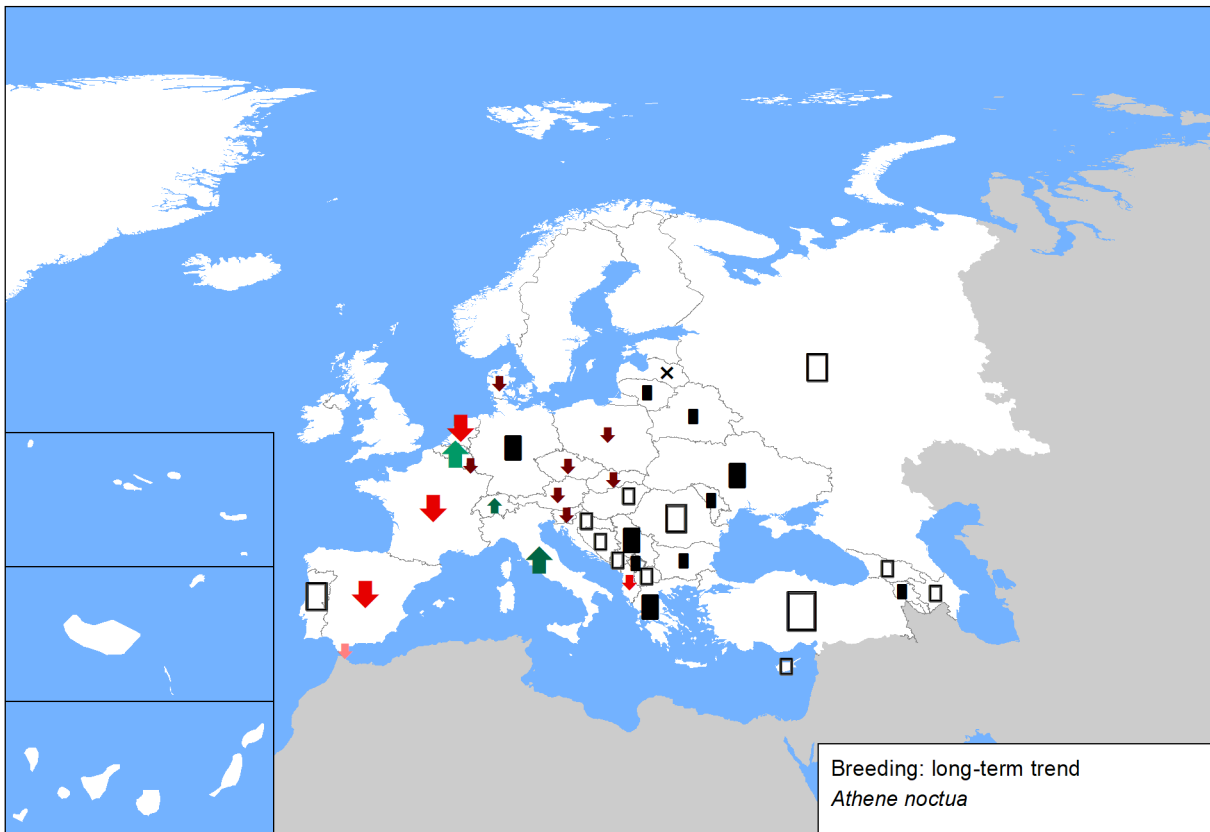


Figure 2. Breeding population sizes and long-term trends across Europe.



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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.

Armenia

Breeding population size: TSE NGO
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: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria . Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p.; National Art. 12 reporting database 2013-2018; BSPB Bird Database
Breeding short-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria . Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p.; National Art. 12 reporting database 2013-2018; BSPB Bird Database
Breeding long-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria . Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. BSPB Bird Database

Croatia

Breeding population size: Kralj i sur. (2013): Atlas selidbe ptica Hrvatske. ZZO HAZU, Zagreb.
Breeding short-term trend: no data available
Breeding long-term trend: no data available

Cyprus

Breeding population size: Very limited data. Expert opinion
Breeding short-term trend: Very limited data. Expert opinion
Breeding long-term trend: Bird sightings records as published in BirdLife Cyprus annual reports; No systematic data is available for before 2006

Czechia

Breeding population size: Šťastný et Bejček in prep. - Atlas hnízdního rozšíření ptáků ČR 2014-2017 Národní strategie ochrany dravců a sov ČR. Praha 2017 (manuscript)

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Czechia

Breeding short-term trend: Národní strategie ochrany dravců a sov ČR. Praha 2017 (manuscript)

Breeding long-term trend: expert opinion

Denmark

Breeding population size: www.dofbasen.dk & Nyegaard, T. et al., Truede og sjældne ynglefugle i Danmark 1998-2012, Dansk Ornitologisk Forenings Tidsskrift 108, nr 1, 2014 & Atlas III 2014-2017 (www.dofbasen.dk/atlas) & DOF BirdLifeDK Fugleåret 2006-2017 &

Breeding short-term trend: www.dofbasen.dk & Nyegaard, T. et al., Truede og sjældne ynglefugle i Danmark 1998-2012, Dansk Ornitologisk Forenings Tidsskrift 108, nr 1, 2014 & Atlas III 2014-2017 (www.dofbasen.dk/atlas) & DOF BirdLifeDK Fugleåret 2006-2017

Breeding long-term trend: www.dofbasen.dk & Nyegaard, T. et al., Truede og sjældne ynglefugle i Danmark 1998-2012, Dansk Ornitologisk Forenings Tidsskrift 108, nr 1, 2014 & Atlas III 2014-2017 (www.dofbasen.dk/atlas) & DOF BirdLifeDK Fugleåret 2006-2017

France

Breeding population size: Issa, N. & Muller, Y. coord. 2015. Hameau, O. (2015), Chevêche d'Athéna. in Issa N. & Muller Y. coord. (2015) Atlas des oiseaux de France Métropolitaine. Nidification et présence hivernale. LPO / SEOF / MNHN. Delachaux et Niestlé, Paris, 1408 p., Delachaux & Niestlé, Paris 1408 ; Roché, J., Muller, Y. & Sibley, J.P. 2013. Une méthode simple pour estimer les populations d'oiseaux communs nicheurs en France. Alauda, 81, p. 241 - 268

Breeding short-term trend: Issa, N. & Muller, Y. coord. 2015. Hameau, O. (2015), Chevêche d'Athéna. in Issa N. & Muller Y. coord. (2015) Atlas des oiseaux de France Métropolitaine. Nidification et présence hivernale. LPO / SEOF / MNHN. Delachaux et Niestlé, Paris, 1408 p., Delachaux & Niestlé, Paris 1408

Breeding long-term trend: Masson, L. & Nadal, R. (2010) La Chevêche d'Athéna (*Athene noctua*), Bilan du plan national d'action Chevêche d'Athéna 2000 - 2010. LPO. 61 pages. ; LPO . LPO Mission rapace - Chevêche d'Athéna. , <http://rapaces.lpo.fr/cheveche-dathena/la-cheveche-dathena#idancr1>; Issa, N. & Muller, Y. 2015. Hameau, O. 2015 Chevêche d'Athéna. in Atlas des Oiseaux de France métropolitaine. Nidification et présence hivernale. LPO / SEOF / MNHN. Delachaux et Niestlé, Paris, 1408 p., Delachaux & Niestlé, Paris 1408 ; Rocamora, G. & Yetman-Berthelot, D. 1999. Génot, J.-C. (1999) Chevêche d'Athéna, *Athene noctua*. in Rocamora, G. & Yetman-Berthelot, D. (1999) Oiseaux menacés et à surveiller en France. Listes rouges et recherche de priorités. Populations. Tendances. Menaces. Conservation. SEOF/LPO. Paris 560 p., 560

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: Monitoring seltener Brutvögel (<http://www.dda-web.de/index.php?cat=monitoring&subcat=ga&subsubcat=kontakt>)

Breeding long-term trend: Gerlach et al. (in Vorb.): Vögel in Deutschland – 2019. Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz und Länderarbeitsgemeinschaft der Vogelschutzwarten, Münster.

Gibraltar

Breeding population size: Bensusan, K.J. & Perez, C.E. (2003). A Conservation Action Plan for MOD sites in Gibraltar: Gibraltar Ornithological & Natural History Society. GONHS. Cortes, J. E. (1978). Conservation – A Future? Semi - natural Nature Reserve, Gibraltar: A Management Plan. Gibraltar Ornithological and Natural History Society. GONHS. Cortes, J.E, (1996). Windmill Hill Flats: a good view of migration across the Straits of Gibraltar. Almoraima 15:163-184. Cortes, J.E., Finlayson J.C., Garcia, E.F.J., Mosquera, M.A.J., (1980). The Birds of Gibraltar. Gibraltar Books. Gibraltar. Environmental Action & Management Plan (2012). Government of Gibraltar. Gibraltar Bird Reports (2006 - 2012). Gibraltar Ornithological & Natural History Society Gibraltar Nature News (2006 – 2012). Bi-annual Publication. Gibraltar Ornithological & Natural History Society. Nature Protection Act 1991 (2013). Perez, C.E. (2013). Report on the Conservation of Terrestrial Flora & Fauna in Gibraltar (2012). Wildlife (Gibraltar) Ltd Perez, C.E. & Bensusan, K. J. (2005). Upper Rock Nature Reserve A Management and Action. Plan. Gibraltar: The Gibraltar Ornithological & Natural History Society (GONHS). Perez, C.E. (2006). Biodiversity Action Plan, Gibraltar: Planning for Nature. Gibraltar: Gibraltar Ornithological & Natural History Society (GONHS). Southern Waters of Gibraltar Management Scheme EU Natura 2000 Site (2012).

Breeding short-term trend: Bensusan, K.J. & Perez, C.E. (2003). A Conservation Action Plan for MOD sites in Gibraltar: Gibraltar Ornithological & Natural History Society. GONHS. Cortes, J. E. (1978). Conservation – A Future? Semi - natural Nature Reserve, Gibraltar: A Management Plan. Gibraltar Ornithological and Natural History Society. GONHS. Cortes, J.E, (1996). Windmill Hill Flats: a good view of migration across the Straits of Gibraltar. Almoraima 15:163-184. Cortes, J.E., Finlayson J.C., Garcia, E.F.J., Mosquera, M.A.J., (1980). The Birds of Gibraltar. Gibraltar Books. Gibraltar. Environmental Action & Management Plan (2012). Government of Gibraltar. Gibraltar Bird Reports (2006 - 2012). Gibraltar Ornithological & Natural History Society Gibraltar Nature News (2006 – 2012). Bi-annual Publication. Gibraltar Ornithological & Natural History Society. Nature Protection Act 1991 (2013). Perez, C.E. (2013). Report on the Conservation of Terrestrial Flora & Fauna in Gibraltar (2012). Wildlife (Gibraltar) Ltd Perez, C.E. & Bensusan, K. J. (2005). Upper Rock Nature Reserve A Management and Action. Plan. Gibraltar: The Gibraltar Ornithological & Natural History Society (GONHS). Perez, C.E. (2006). Biodiversity Action Plan, Gibraltar: Planning for Nature. Gibraltar: Gibraltar Ornithological & Natural History Society (GONHS). Southern Waters of Gibraltar Management Scheme EU Natura 2000 Site (2012).

Breeding long-term trend: Bensusan, K.J. & Perez, C.E. (2003). A Conservation Action Plan for MOD sites in Gibraltar: Gibraltar Ornithological & Natural History Society. GONHS. Cortes, J. E. (1978). Conservation – A Future? Semi - natural Nature Reserve, Gibraltar: A Management Plan. Gibraltar Ornithological and Natural History Society. GONHS. Cortes, J.E, (1996). Windmill Hill Flats: a good view of migration across the Straits of Gibraltar. Almoraima 15:163-184. Cortes, J.E., Finlayson J.C., Garcia, E.F.J., Mosquera, M.A.J., (1980). The Birds of Gibraltar. Gibraltar Books. Gibraltar. Environmental Action & Management Plan (2012). Government of Gibraltar. Gibraltar Bird Reports (2006 - 2012). Gibraltar Ornithological & Natural History Society Gibraltar Nature News (2006 – 2012). Bi-annual Publication. Gibraltar Ornithological & Natural History Society. Nature Protection Act 1991 (2013). Perez, C.E. (2013). Report on the Conservation of Terrestrial Flora & Fauna in Gibraltar (2012). Wildlife (Gibraltar) Ltd Perez, C.E. & Bensusan, K. J. (2005). Upper Rock Nature Reserve A Management and Action. Plan. Gibraltar: The Gibraltar Ornithological & Natural History Society (GONHS). Perez, C.E. (2006). Biodiversity Action Plan, Gibraltar: Planning for Nature. Gibraltar: Gibraltar Ornithological & Natural History Society (GONHS). Southern Waters of Gibraltar Management Scheme EU Natura 2000 Site (2012).

Greece

Breeding population size: 1) BirdLife International (2004) Birds in Europe: Population estimates, trends and conservation status. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 12). 2) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Α., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Παρζοζιού, C. & Baron, B. 2009. Προσδιορισμός συμβατών δραστηριοτήτων σε σχέση με τα είδη χαρακτηρισμού των Ζωνών Ειδικής Προστασίας της ορνιθοπανίδας. Παραδοτέο 8. Οδηγός οικολογικών απαιτήσεων, απειλών και ενδεδειγμένων μέτρων για τα είδη χαρακτηρισμού. 3) Natura Viewer (<http://natura2000.eea.europa.eu/#>).

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Greece

Breeding short-term trend: 1) BirdLife International (2004) Birds in Europe: Population estimates, trends and conservation status. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 12). 2) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Λ., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Παπαζογλου, C. & Barov, B. 2009. Προσδιορισμός συμβατών δραστηριοτήτων σε σχέση με τα είδη χαρακτηρισμού των Ζωνών Ειδικής Προστασίας της ορνιθοπανίδας. Παραδοτέο 8. Οδηγός οικολογικών απαιτήσεων, απειλών και ενδεδειγμένων μέτρων για τα είδη χαρακτηρισμού. 3) Natura Viewer (<http://natura2000.eea.europa.eu/#>).

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). 3) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Λ., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Παπαζογλου, C. & Barov, B. 2009. Προσδιορισμός συμβατών δραστηριοτήτων σε σχέση με τα είδη χαρακτηρισμού των Ζωνών Ειδικής Προστασίας της ορνιθοπανίδας. Παραδοτέο 8. Οδηγός οικολογικών απαιτήσεων, απειλών και ενδεδειγμένων μέτρων για τα είδη χαρακτηρισμού. 4) Natura Viewer (<http://natura2000.eea.europa.eu/#>).

Hungary

Breeding population size: Hámori D., Csörgő T., (2017) – Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme. 62-70 p. Herman Ottó Intézet Demeter I., Horváth M. & Prommer M. (2017): Az MME Ragadozómadár-védelmi Szakosztálya (RMvSz) által monitorozott fajok 2017-es költési eredményeinek összefoglalása. Heliaca 15: 74-75 p. National park directorates' databases <http://map.mme.hu/maps/map2>

Breeding short-term trend: http://www.termeszvetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Athene_noctua.pdf Hámori D., Csörgő T., (2017) – Magyarországon előforduló bagolyfajok határozása és gyakorlati természetvédelme. 62-70 p. Herman Ottó Intézet Demeter I., Horváth M. & Prommer M. (2017): Az MME Ragadozómadár-védelmi Szakosztálya (RMvSz) által monitorozott fajok 2017-es költési eredményeinek összefoglalása. Heliaca 15: 74-75 p. National park directorates' databases <http://map.mme.hu/maps/map2>

Breeding long-term trend: Tucker, G. M. – Heath, M. F. (1994): Birds in Europe – Their Conservation Status. Royal Society for the Protection of Birds, BirdLife International, 330 p. Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998): Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 86 p. Haraszthy, L. (szerk.) (1998): Magyarország madarai. Mezőgazda Kiadó, Budapest. 218-219 p. BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No.12.), 163 p. Ecsedi Z. (szerk.) (2004): A Hortobágy madárvilága. Hortobágy Természetvédelmi Egyesület, Winter Fair, Balmazújváros - Szeged. 2004. 374-375 p. MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. 148 p. KEHOP-4.3.0-15-2016-00001 project results, unpublished. National park directorates' databases <http://map.mme.hu/maps/map2>

Italy

Breeding population size: BirdLife International 2017. European birds of conservation concern: populations, trends and national responsibilities. Cambridge, UK: BirdLife International.

Breeding short-term trend: No recent data available

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 Expert: Andris Avotiņš jun., avotins.puces@gmail.com

Breeding short-term trend: Unpublished data of EBBA2 and Eionet, 2014. Bird population status and trends at the EU and Member State levels [WWW Document]. URL <https://bd.eionet.europa.eu/article12/summary>

Breeding long-term trend: Priednieks J., Strazds M., Strazds A., Petrins A. 1989. Latvian Breeding Bird Atlas 1980-1984. Riga: Zinatne. Strazds M., Priednieks J., Vaverins G. 1994. [Size of Latvian bird populations.] (in Latvian) In: Putni dabā, 4: 3–18 Avotiņš sen., A., Graubics, G., Ķemlers, A., Krēsliņš, V., Ķuze, J., Ļoļāns, U., 1999. Number and breeding densities of owls in Latvia: studies in sample plots. Vogelwelt 120, 333–337.

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) Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2017. New and rare birds for Lithuania. Vilnius: „Lithuanian Ornithological Society“.

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) Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2017. New and rare birds for Lithuania. Vilnius: „Lithuanian Ornithological Society“.

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) Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2017. New and rare birds for Lithuania. Vilnius: „Lithuanian Ornithological Society“.

Athene noctua (Little Owl)

Luxembourg

Breeding population size: Ornitho.lu (2018): online database natur&emwelt asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&emwelt Luxembourg. ISBN: 978-2-919920-01-3; Biver G. (2009): Bestände der Vögel des Offenlandes europaweit rückgängig... und in Luxemburg? Regulus 4/2009: 14-16 Lorgé P., M. Jans (2006): Gehört der Steinkauz Athene noctua in Luxemburg bald zum alten Eisen? Wissenschaftliche Berichte, 21: 54-58; Biver G. & Lorgé P. (2009): Plan d'action Espèces Chouette chevêche Athene noctua. Ministère du Développement Durable et des Infrastructures & Centrale ornithologique Luxembourg.

Breeding short-term trend: Ornitho.lu (2018): online database natur&emwelt asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&emwelt Luxembourg. ISBN: 978-2-919920-01-3; Biver G. (2009): Bestände der Vögel des Offenlandes europaweit rückgängig... und in Luxemburg? Regulus 4/2009: 14-16 Lorgé P., M. Jans (2006): Gehört der Steinkauz Athene noctua in Luxemburg bald zum alten Eisen? Wissenschaftliche Berichte, 21: 54-58

Breeding long-term trend: Ornitho.lu (2018): online database natur&emwelt asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&emwelt Luxembourg. ISBN: 978-2-919920-01-3; Biver G. (2009): Bestände der Vögel des Offenlandes europaweit rückgängig... und in Luxemburg? Regulus 4/2009: 14-16 Lorgé P., M. Jans (2006): Gehört der Steinkauz Athene noctua in Luxemburg bald zum alten Eisen? Wissenschaftliche Berichte, 21: 54-58

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,

Netherlands

Breeding population size: Sovon Bird atlas (Sovon 2018)

Breeding short-term trend: NEM (Sovon, RWS, CBS, provinces)

Breeding long-term trend: Sovon

Poland

Breeding population size: Chodkiewicz T., Kuczyński L., Sikora A., Chylarecki P., Neubauer G., Ławicki Ł., Stawarczyk T. 2015. Ocena liczebności populacji ptaków lęgowych w Polsce w latach 2008–2012. Ornis Polonica 56: 149-192

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

Breeding long-term trend: Tucker G.M., Heath M.F. 1994. Birds in Europe: their conservation status. BirdLife International, Cambridge, UK.; BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status. BirdLife International, Cambridge, UK; To

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: GTAN-SPEA, 2019. Relatório do Programa NOCTUA Portugal (2009/10 - 2017/18). Sociedade Portuguesa para o Estudo das Aves, Lisboa (relatório não publicado)

Romania

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

Breeding short-term trend: Monitoring of Nocturnal Birds of Open Habitats, 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 long-term trend: Belik et al. 2003; Khohlov & Ilykh 2005; Ilykh 2010; Volkov S.V., unpublished. owl_bird@mail.ru

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.

Athene noctua (Little Owl)

Slovakia

Breeding population size: Coordinatory group for reporting 2019.

Breeding short-term trend: Coordinatory group for reporting 2019, AVES-Symfony Database 2013-2018, KIMS Database 2013-2018.

Breeding long-term trend: Coordinatory group for reporting 2019, AVES-Symfony Database 2013-2018, KIMS Database 2013-2018.

Slovenia

Breeding population size: Mihelic 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: There are no sources for this information.

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

Spain

Breeding population size: 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)

Breeding short-term trend: 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: 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/BirdLife. Lynx Edicions. Barcelona. SEO/BirdLife (2012). Atlas de las aves en invierno en España 2007-2010. Ministerio de Agricultura, Alimentación y Medio Ambiente-SEO/BirdLife. Madrid. 817 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/atlas_aves_invierno_tcm30-198034.pdf) SEO/BirdLife (2019). Programas de seguimiento y grupos de trabajo de SEO/BirdLife 2018. SEO/BirdLife. Madrid. (<https://doi.org/10.31170/0073>) Tucker, G.M. & Heath, M.F. (1994). Birds in Europe: their conservation status BirdLife International (BirdLife Conservation Series n° 3).

Switzerland

Breeding population size: Knaus, P., S. Antoniazza, S. Wechsler, J. Guélat, M. Kéry, N. Strelbel & 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/>

Turkey

Breeding population size: 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-

Ukraine

Breeding population size: Kuzmenko, pers.

United Kingdom: non-native populations

Breeding population size: Baseline = Newson, S.E., Evans, K.L., Noble, D.G., Greenwood, J.J.D. & Gaston, K.J. 2008. Use of distance sampling to improve estimates of national population sizes for common and widespread breeding birds in the UK. Journal of Applied Ecology 45: 1330-1338. Extrapolation from 2006 using Breeding Bird Survey monitoring trend.

Breeding short-term trend: Joint Common Bird Census/Breeding Bird Survey smoothed trend index. Woodward, I.D., Massimino, D., Hammond, M.J., Harris, S.J., Leech, D.I., Noble, D.G., Walker, R.H., Barimore, C., Dadam, D., Eglington, S.M., Marchant, J.H., Sullivan, M.J.P., Baillie, S.R. & Robinson, R.A. (2018) BirdTrends 2018: trends in numbers, breeding success and survival for UK breeding birds. Research Report 708. BTO, Theftford. www.bto.org/birdtrends

Breeding long-term trend: Joint Common Bird Census/Breeding Bird Survey smoothed trend index. Woodward, I.D., Massimino, D., Hammond, M.J., Harris, S.J., Leech, D.I., Noble, D.G., Walker, R.H., Barimore, C., Dadam, D., Eglington, S.M., Marchant, J.H., Sullivan, M.J.P., Baillie, S.R. & Robinson, R.A. (2018) BirdTrends 2018: trends in numbers, breeding success and survival for UK breeding birds. Research Report 708. BTO, Theftford. www.bto.org/birdtrends

Bibliography

- 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.
- BirdLife International. 2004. *Birds in Europe: population estimates, trends and conservation status*. BirdLife International, Cambridge, U.K.
- Brazil, M. 2009. *Birds of East Asia: eastern China, Taiwan, Korea, Japan, eastern Russia*. Christopher Helm, London.
- Hagemeijer, E.J.M. and Blair, M.J. 1997. *The EBCC atlas of European breeding birds: their distribution and abundance*. T. and A.D. Poyser, London.
- Heath, M. and Tucker, G. 1994. *Birds in Europe*. *World Birdwatch* 16: 9-13.
- Holt, W., Berkley, R., Deppe, C., Enríquez Rocha, P., Petersen, J.L., Rangel Salazar, J.L., Segars, K.P., Wood, K.L., Kirwan, G.M. and Christie, D.A. 2014. Little Owl (*Athene noctua*). In: J. del Hoyo, A. Elliott, J. Sargatal, D.A. Christie and E. de Juana (eds), *Handbook of the Birds of the World Alive*, Lynx Edicions, Barcelona.
- Hustings, F., Borggreve, C., van Turnhout, C. and Thissen, J. 2004. *Basisrapport voor de Rode Lijst Vogels volgens Nederlandse en IUCN-criteria*. SOVON-onderzoeksrapport 2004/13. SOVON Vogelonderzoek Nederland, Beek-Ubbergen.
- Mikkola, H. 1983. *Owls of Europe*. T. and A. D. Poyser, Calton, U.K.