THE IUCN RED LIST
OF THREATENED SPECIES™

Pernis apivorus (European Honey-buzzard)

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).

Contents

Reported national population sizes and trends
Trend maps of reported national population data
Sources of reported national population data
Species factsheet bibliography

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.

Table 1. Reported national breeding population size and trends in Europe[1].

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	30–80	<1	2007-2018	partial	+	-6 to 50	2007-2018	partial	0	-25 to 50	1980-2018	expert	
Armenia	540–790	<1	2013-2018	complete	0		2007-2018		?		2003-2018	deficient	
Austria	1200–2000	1	2013-2018	partial	0		2007-2018	partial	?		1981-2018	deficient	
Azerbaijan	20–200	<1	1996-2019	expert	?		2013-2019	expert	?		1980-2019	expert	
Belarus	8000–11000	6	2010-2018	partial	0	-10 to 10	2012-2019	expert	?		1980-2019	deficient	
Belgium	690–1200	<1	2013-2018	partial	0	-29 to 16	2008-2018	expert	+	156 to 319	1973-2018	partial	
Bosnia & HG	500–700	<1	2015-2018	complete	?	-10 to 10	2007-2018	complete	?		1980-2018	deficient	
Bulgaria	400–800	<1	2005-2018	partial	0	0	2001-2018	expert	+	100 to 200	1980-2018	expert	
Croatia	150–250	<1	2013-2013	expert	?		2007-2018	deficient	?		1980-2018	deficient	
Czechia	650–1200	<1	2014-2017	complete	0		2007-2019	expert	0		1985-2015	expert	
Denmark	650	<1	2015-2015	expert	0		2004-2017	expert	+		1980-2017	partial	
Estonia	1000–1500	<1	2013-2017	partial	0	-5 to 21	2007-2018	partial	0	-15 to 57	1987-2018	partial	
Finland	1800–2800	2	2013-2018	partial	-	-39 to -10	2007-2018	complete	-	-58 to -44	1982-2018	complete	
France	10600–15000	9	2016-2017	expert	0		2007-2017	complete	0		1980-2017	expert	
Georgia	20–190	<1	2013-2017	partial	-	-97 to -6	2005-2017	partial	?				
Germany	4000–5500	3	2016-2016	expert	0		2004-2016	expert	0		1980-2016	expert	
Greece	1000–2000	1	2015	partial	0		2007-2018	partial	+		1980-2018	partial	
Hungary	800–1000	<1	2015-2017	partial	0		2007-2018	partial	+	50 to 100	1980-2018	expert	
Italy	800–1200	<1	2000-2010	expert	+	20 to 35	2007-2018	expert	+	50 to 60	1993-2018	expert	
Kosovo	30–60	<1	2007-2019	partial	-		2007-2018	partial	-		1990-2018	partial	
Latvia	1000–7300	2	2016-2016	complete	+	27 to 94	2007-2018	complete	+	40 to 45	1991-2016	partial	
Lithuania	1400–1800	1	2013-2018	partial	0	0	2013-2018	partial	0	0	1980-2018	expert	
Luxembourg	100–180	<1	2013-2018	partial	0	0 to 10	2007-2018	expert	0	0 to 10	1980-2018	expert	
North Macedonia	100–300	<1	2014-2019	expert	?		2007-2018		?		1980-2019		
Moldova	110–200	<1	2014-2017	partial	+		2007-2018	partial	0		1990-2018	expert	
Montenegro	150–200	<1	2002-2012	expert	0		2007-2018	expert	?				
Netherlands	360–440	<1	2013-2015	complete	?		2006-2017	deficient	?		1984-2017	deficient	
Norway	500–1000	<1	2013-2018	expert	?		2013-2018	deficient	?		1980-2018	partial	
Poland	3300–4000	2	2013-2018	complete	0	-32 to 14	2008-2018	complete	?		1980-2018	deficient	
Portugal	150–300	<1	2013-2018	partial	?		2007-2018	deficient	?		1980-2018	deficient	
Romania	8900–13600	8	2013-2014	complete	?		2007-2018	deficient	?		1980-2018	deficient	
Russia	60000–80000	48	2008-2018	partial	?		2008-2018	expert	0		1980-2018	partial	

Pernis apivorus (European Honey-buzzard)

Table 1. Reported national breeding population size and trends in Europe[1].

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]	
Serbia	900–1200	<1	2013-2018	partial	+	10 to 29	2007-2018	complete	+	30 to 49	1980-2018	complete	
Slovakia	1500–2000	1	2013-2018	partial	0		2007-2018	expert	?		1980-2018	expert	
Slovenia	300–500	<1	2002-2017	partial	?		2002-2017	deficient	?		1980-2012	deficient	
Spain	1700–2000	1	2009-2010	partial	0		1998-2015	complete	0		1980-2015	partial	
Sweden	5200–8100	5	2013-2018	partial	0	-20 to 20	2007-2018	partial	-	-70 to -30	1980-2018	partial	
Switzerland	500–1000	<1	2013–2016	partial	0	-3 to 18	2007-2018	complete	+	8 to 31	1990-2018	complete	
Turkey	100–500	<1	2002-2012	partial	?		2008-2019	deficient	?		1980-2013	deficient	
Ukraine	1500–2500	1	2010-2018	expert	0		2010-2018	partial	0		1980-2018	partial	
United Kingdom	33–70	<1	2000	complete	-		2001-2016	complete	+		1978-2016	complete	
EU28	47800–75100	41											
Europe	**120000–175000**	**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 (≥50%)
- Moderate increase (20–49%)
- Small increase (<20%)
- Increase of unknown magnitude
- Large decrease (≥50%)
- Moderate decrease (20–49%)
- Small decrease (<20%)
- 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.

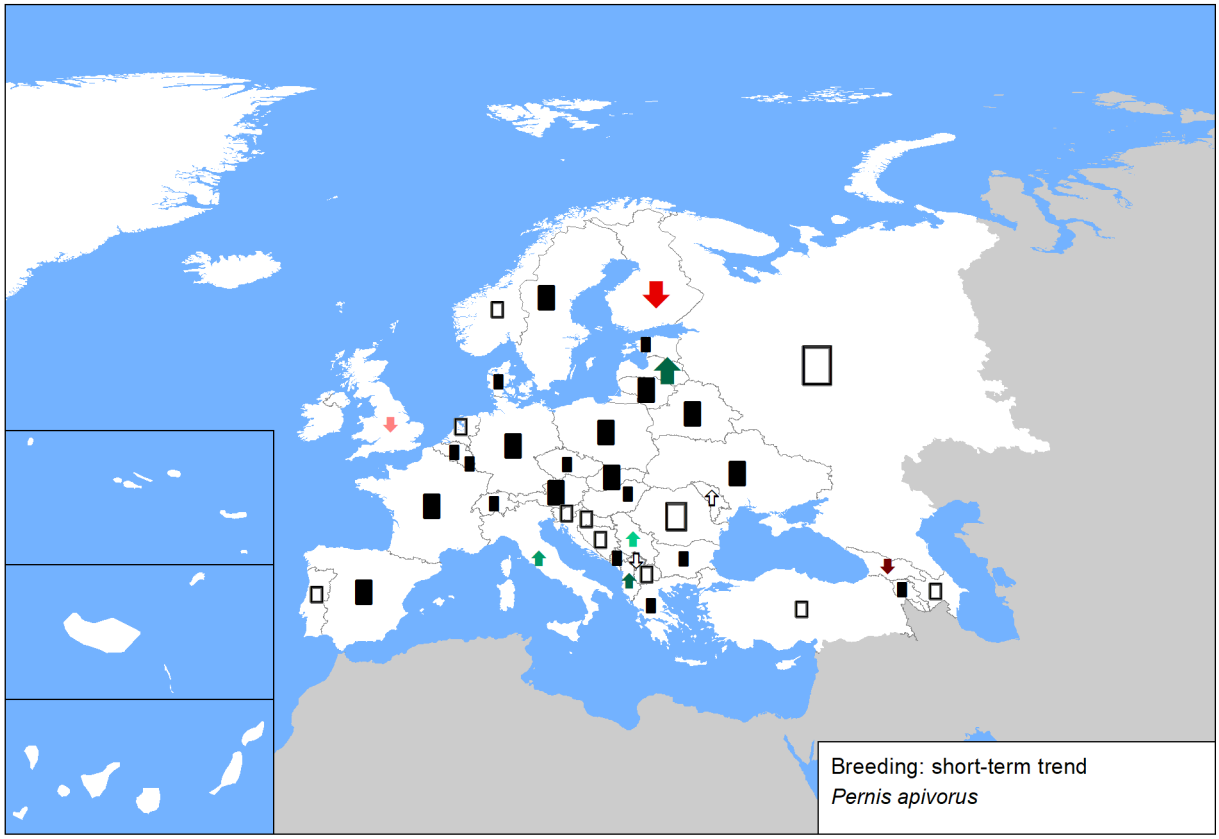
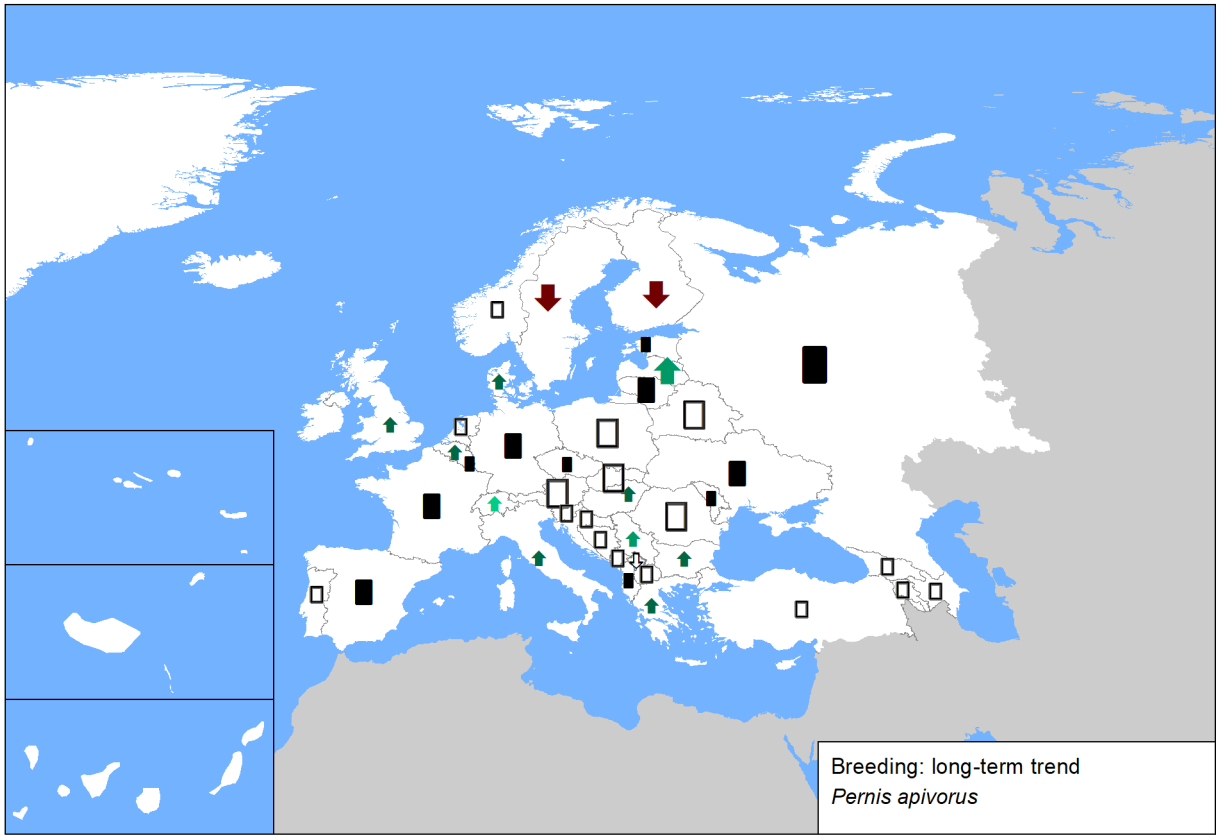


Figure 2. Breeding population sizes and long-term trends across Europe.



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

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”

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 pp.; National Art. 12 reporting database 2013-2018; Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. Http://e-ecodb.bas.bg/rdb/en/vol2/ BIRDS OF PREY DATA BASE (2013) held by Institute of Biodiversity and Ecosystem Research - Bulgarian Academy of Sciences
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 pp.; National Art. 12 reporting database 2013-2018; Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. Http://e-ecodb.bas.bg/rdb/en/vol2/ BIRDS OF PREY DATA BASE (2013) held by Institute of Biodiversity and Ecosystem Research - Bulgarian Academy of Sciences Nankinov, D., A. Dutsov, B. Nikolov, B. Borisov, G. Stoyanov, G. Gradev, D. Georgiev, D. Popov, D. Domuschiev, D. Kirov, E. Tilova, I. Nikolov, I. Ivanov, K. Dichev, K. Popov, N. Karaivanov, N. Todorov, P. Shurulinkov, R. Stanchev, R. Aleksov, R.Tsonev, S. Dalakchieva, S. Ivanov, S. Marin, S. Staikov, S. Nikolov & H. Nikolov. 2004. Breeding totals of the ornithofauna in Bulgaria, 2004. Green Balkans, Plovdiv. 32 pp. Мичев и др. (2007). Оценка на националните популации на гнездещите, мигриращите и зимуващите видове птици в България с указани литературни източници (Приложение 4.2.). В: Отчетен доклад, Етап I, Оптимизиране на внесените в МОСВ предложения за изграждане на екологичната мрежа Натура 2000, Българска Академия на Науките, 207-222.
Breeding long-term trend: Botev, B. (ed.) 1985. Red Data Book of Bulgaria, Vol. 2, Animals, Sofia, BAS, 183 p. Iankov P (ed.) (2007) Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10. Sofia, BSPB, 679 pp. Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. Http://e-ecodb.bas.bg/rdb/en/vol2/ BIRDS OF PREY DATA BASE (2013) held by Institute of Biodiversity and Ecosystem Research - Bulgarian Academy of Sciences Nankinov, D., A. Dutsov, B. Nikolov, B. Borisov, G. Stoyanov, G. Gradev, D. Georgiev, D. Popov, D. Domuschiev, D. Kirov, E. Tilova, I. Nikolov, I. Ivanov, K. Dichev, K. Popov, N. Karaivanov, N. Todorov, P. Shurulinkov, R. Stanchev, R. Aleksov, R.Tsonev, S. Dalakchieva, S. Ivanov, S. Marin, S. Staikov, S. Nikolov & H. Nikolov. 2004. Breeding totals of the ornithofauna in Bulgaria, 2004. Green Balkans, Plovdiv. 32 pp. Мичев и др. (2007). Оценка на националните популации на гнездещите, мигриращите и зимуващите видове птици в България с указани литературни източници (Приложение 4.2.). В: Отчетен доклад, Етап I, Оптимизиране на внесените в МОСВ предложения за изграждане на екологичната мрежа Натура 2000, Българска Академия на Науките, 207-222.

Croatia

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

Pernis apivorus (European Honey-buzzard)

Croatia

Breeding long-term trend: no data available

Czechia

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

Breeding short-term trend: expert opinion

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

Denmark

Breeding population size: Nielsen, R.D., Holm, T.E., Clausen, P., Bregnballe. T., Clausen, K.K., Petersen, I.K., Sterup, J., Balsby, T.J.S., Pedersen, C.L., Mikkelsen, P. & Bladt, J. (2019). Fugle 2012-2017. NOVANA. Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi. - Videnskabelig rapport nr. 314. http://dce2.au.dk/pub/SR314.pdf and http://novana.au.dk/fugle/

Breeding short-term trend: Nielsen, R.D., Holm, T.E., Clausen, P., Bregnballe. T., Clausen, K.K., Petersen, I.K., Sterup, J., Balsby, T.J.S., Pedersen, C.L., Mikkelsen, P. & Bladt, J. (2019). Fugle 2012-2017. NOVANA. Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi. - Videnskabelig rapport nr. 314. http://dce2.au.dk/pub/SR314.pdf and http://novana.au.dk/fugle/

Breeding long-term trend: Nielsen, R.D., Holm, T.E., Clausen, P., Bregnballe. T., Clausen, K.K., Petersen, I.K., Sterup, J., Balsby, T.J.S., Pedersen, C.L., Mikkelsen, P. & Bladt, J. (2019). Fugle 2012-2017. NOVANA. Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi. - Videnskabelig rapport nr. 314. http://dce2.au.dk/pub/SR314.pdf and http://novana.au.dk/fugle/

Estonia

Breeding population size: Estonian Working Group on Bird Status and Numbers

Breeding short-term trend: [1] Estonian Working Group on Bird Status and Numbers [2] Monitoring of raptors. http://seire.keskkonnainfo.ee/index.php?option=com_content&view=article&id=2059&Itemid=372

Breeding long-term trend: [1] Estonian Working Group on Bird Status and Numbers [2] Monitoring of raptors. http://seire.keskkonnainfo.ee/index.php?option=com_content&view=article&id=2059&Itemid=372

Finland

Breeding population size: Birds of Prey monitoring data, Finnish Museum of Natural History. Lehikoinen, A. , Below, A., Jukarainen, A., Laaksonen, T., Lehtiniemi, T., Mikkola-Roos, M., Pessa, J., Rajasärkkä, A., Rusanen, P., Sirkiä, P., Tiainen, J. & Valkama, J. 2019: Suomen lintujen pesimäkantojen koot. – Linnut-vuosikirja 2018: 38-45.

Breeding short-term trend: Meller, K., Björklund, H., Saurola, P. & Valkama, J. 2019: Kuuma kesä suosi haukkoja — myyräkato masensi pöllöjä. – Linnut-vuosikirja 2018: 80-95. (in Finnish with English summary). Björklund, H., Saurola, P. & Valkama, J. 2018: Breeding and population trends of common raptors and owls in Finland in 2017. – Linnut-vuosikirja 2017: 56–69. (in Finnish with English summary)

Breeding long-term trend: Meller, K., Björklund, H., Saurola, P. & Valkama, J. 2019: Kuuma kesä suosi haukkoja — myyräkato masensi pöllöjä. – Linnut-vuosikirja 2018: 80-95. (in Finnish with English summary). Björklund, H., Saurola, P. & Valkama, J. 2018: Breeding and population trends of common raptors and owls in Finland in 2017. – Linnut-vuosikirja 2017: 56–69. (in Finnish with English summary)

France

Breeding population size: LPO - CNRS 2012. Observatoire rapaces - programme de suivi des populations de rapaces nicheurs diurnes en France.. http://observatoire-rapaces.lpo.fr/index.php?m_id=1; Thiollay, J.-M. & Bretagnolle, V. 2004. Rapaces nicheurs de France, Distribution, effectifs et conservation, Delachaux et Niestlé, Paris. 175 p. ; Le Rest, K. 2013. Méthodes statistiques pour la modélisation des facteurs influençant la distribution et l'abondance de populations : application aux rapaces diurnes nichant en France. . Thèse Biologie de l'environnement, des populations, écologie. , Université de Poitiers153 p. http://nuxeo.edel.univ-poitiers.fr/nuxeo/site/esupversions/30137e63-b283-4cdd-b432-4b098e4348fc; Le Rest, K., Pinaud, D. & Bretagnolle, V. 2015. Volunteer-based surveys offer enhanced opportunities for biodiversity monitoring across broad spatial extent. Ecological Informatics 30, 313-317 https://doi.org/10.1016/j.ecoinf.2015.08.007

Breeding short-term trend: LPO - CNRS 2012. Observatoire rapaces - programme de suivi des populations de rapaces nicheurs diurnes en France.. http://observatoire-rapaces.lpo.fr/index.php?m_id=1; Le Rest, K. 2013. Méthodes statistiques pour la modélisation des facteurs influençant la distribution et l'abondance de populations : application aux rapaces diurnes nichant en France. . Thèse Biologie de l'environnement, des populations, écologie. , Université de Poitiers153 p. http://nuxeo.edel.univ-poitiers.fr/nuxeo/site/esupversions/30137e63-b283-4cdd-b432-4b098e4348fc; Le Rest, K., Pinaud, D. & Bretagnolle, V. 2015. Volunteer-based surveys offer enhanced opportunities for biodiversity monitoring across broad spatial extent. Ecological Informatics 30, 313-317 https://doi.org/10.1016/j.ecoinf.2015.08.007

Breeding long-term trend: Thiollay J.-M., Terrasse J.-F. 1984. Estimation des effectifs de rapaces nicheurs diurnes et non rupestres en France. Enquête FIR-UNAO 1979-1982 . , FIR & UNAO, Paris177 p. ; LPO - CNRS 2012. Observatoire rapaces - programme de suivi des populations de rapaces nicheurs diurnes en France.. http://observatoire-rapaces.lpo.fr/index.php?m_id=1; Le Rest, K., Pinaud, D. & Bretagnolle, V. 2015. Volunteer-based surveys offer enhanced opportunities for biodiversity monitoring across broad spatial extent. Ecological Informatics 30, 313-317 https://doi.org/10.1016/j.ecoinf.2015.08.007

Georgia

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

Breeding short-term trend: Abuladze, A.V. 2008. Изменения видового состава и численности хищных птиц Грузии в 1975-2007 гг.[Changes in the species composition and numbers of the birds of prey in Georgia in 1975-2007] // Research and Conservation of the Raptors in Northern Eurasia. [Materials of the 5th Conference on Raptors of Northern Eurasia, Ivanovo, 4-7 February 2008]. Ivanovo, Publishing House «Ivanovo State University»2008: 162-166 (in Russian). Edisherashvili, G. 2011. Birds of Prey and Owls of the Shida Kartli Region, Georgia // Materials of the International Conf. „Birds of Prey and Owls in Caucasus". Tbilisi, Abastumani – Georgia; 26th-29th October 2011: 16-18. Galvez, R.A., Gavashelishvili, L., Javakhishvili, Z. 2005. Raptors and Owls of Georgia (Field guide). Tbilisi, GCCW & Buneba Print Publishing. Tbilisi: 128 pp. (in English & in Georgian); EBBA Georgia

Germany

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

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

Germany

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) BirdLife International (2004) Birds in Europe:Population estimates, trends and conservation status. Cambridge, UK: Birdlife International (Birdlife Conservation Series No. 12). 2) Natura Viewer (http://natura2000.eea.europa.eu/#). 3) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Λ., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Papazoglou, 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) Πορτόλου, Δ., Μπουρδάκης, Σ., Βλάχος, Χ., Καστρίτης, Θ. & Δημαλέξης, Τ. (επιμ.).2009. Οι Σημαντικές Περιοχές για τα Πουλιά της Ελλάδας: Περιοχές Προτεραιότητας για τη Διατήρηση της Βιοποικιλότητας. Ελληνική Ορνιθολογική Εταιρεία, Αθήνα.

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) Natura Viewer (http://natura2000.eea.europa.eu/#). 3) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Λ., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Papazoglou, 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) Πορτόλου, Δ., Μπουρδάκης, Σ., Βλάχος, Χ., Καστρίτης, Θ. & Δημαλέξης, Τ. (επιμ.).2009. Οι Σημαντικές Περιοχές για τα Πουλιά της Ελλάδας: Περιοχές Προτεραιότητας για τη Διατήρηση της Βιοποικιλότητας. Ελληνική Ορνιθολογική Εταιρεία, Αθήνα.

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) Natura Viewer (http://natura2000.eea.europa.eu/#). 4) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Λ., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Papazoglou, 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. 5) Πορτόλου, Δ., Μπουρδάκης, Σ., Βλάχος, Χ., Καστρίτης, Θ. & Δημαλέξης, Τ. (επιμ.).2009. Οι Σημαντικές Περιοχές για τα Πουλιά της Ελλάδας: Περιοχές Προτεραιότητας για τη Διατήρηση της Βιοποικιλότητας. Ελληνική Ορνιθολογική Εταιρεία, Αθήνα.

Hungary

Breeding population size: Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 538-540. National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species) http://map.mme.hu/maps/map2 KEHOP-4.3.0-15-2016-00001 project results, unpublished.

Breeding short-term trend: Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 538-540. National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species) http://map.mme.hu/maps/map2 KEHOP-4.3.0-15-2016-00001 project results, unpublished. MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278. Horváth M., Bagyura J., Fatér I., Firmánszky G., Horváth Zoltán, Palatitz Péter & Prommer Mátyás (szerk.) (2008): Ragadozómadár és bagoly-fajok országos monitoringja 2007-ben. Kutatási jelentés. Magyar Madártani és Természetvédelmi Egyesület. Budapest. 46 pp.

Breeding long-term trend: Haraszthy L. (szerk.) (1984): Magyarország fészkelő madarai. Natura, Budapest. 247 p. Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 538-540. National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species) http://map.mme.hu/maps/map2 KEHOP-4.3.0-15-2016-00001 project results, unpublished. MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278. Horváth M., Bagyura J., Fatér I., Firmánszky G., Horváth Zoltán, Palatitz Péter & Prommer Mátyás (szerk.) (2008): Ragadozómadár és bagoly-fajok országos monitoringja 2007-ben. Kutatási jelentés. Magyar Madártani és Természetvédelmi Egyesület. Budapest. 46 pp.

Italy

Breeding population size: Brichetti P., Fracasso G., 2018. The Birds of Italy. Vol. I. Anatidae-Alcidae. Ed. Belvedere, Latina (Italy), "historia naturae" (6), pp. 512.

Breeding short-term trend: Brichetti P., Fracasso G., 2018. The Birds of Italy. Vol. I. Anatidae-Alcidae. Ed. Belvedere, Latina (Italy), "historia naturae" (6), pp. 512.

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: Avotins jun., A., Reihmanis, J. 2018. [Background monitoring scheme for Birds of Prey and Owls in Latvia. Final report for the year 2018.] (in Latvian) Latvian Ornithological society

Breeding short-term trend: Avotins jun., A., Reihmanis, J. 2018. [Background monitoring scheme for Birds of Prey and Owls in Latvia. Final report for the year 2018.] (in Latvian) Latvian Ornithological society

Breeding long-term trend: Strazds M., Priednieks J., Vaverins G. 1994. [Size of Latvian bird populations.] (in Latvian) In: Putni dabā, 4: 3–18 Avotins jun., A., Reihmanis, J. 2018. [Background monitoring scheme for Birds of Prey and Owls in Latvia. Final report for the year 2018.] (in Latvian) Latvian Ornithological society

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)

Pernis apivorus (European Honey-buzzard)

Lithuania

Breeding long-term trend: Rimgaudas Treinys rimga.t@gmail.com Rašomavičius, V. (red.) 2007. Lietuvos raudonoji knyga. Kaunas: „Lututė“, 800 p. (Red Data Book of Lithuania, 2007) 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 Cencus 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)

Luxembourg

Breeding population size: Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&ëmwelt Luxembourg. ISBN: 978-2-919920-01-3 Ornitho.lu (2018): online database natur&ëmwelt asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg ; LUXOR (2018): natur&ëmwelt – Bird-database, Luxembour

Breeding short-term trend: Weiss J., N. Paler (2006): Verbreitung, Bestand und Zukunftsaussichten des Wespenbussards Pernis apivorus in Luxemburg. Regulus Wissenschaftliche Berichte, 21: 26-30; Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&ëmwelt Luxembourg. ISBN: 978-2-919920-01-3 Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&ëmwelt Luxembourg. ISBN: 978-2-919920-01-3; Ornitho.lu (2018): online database natur&ëmwelt asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg ; LUXOR (2018): natur&ëmwelt – Bird-database, Luxembourg

Breeding long-term trend: Melchior E., E. Mentgen, R. Peltzer, R. Schmitt, J. Weiss (1987): Atlas der Brutvögel Luxemburgs. Lëtzebuerger Natur- a Vulleschutzliga. Kremer-Muller & Cie, Foetz, Luxembourg; Weiss J., N. Paler (2006): Verbreitung, Bestand und Zukunftsaussichten des Wespenbussards Pernis apivorus in Luxemburg. Regulus Wissenschaftliche Berichte, 21: 26-30Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&ëmwelt Luxembourg. ISBN: 978-2-919920-01-3 Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&ëmwelt Luxembourg. ISBN: 978-2-919920-01-3; Ornitho.lu (2018): online database natur&ëmwelt asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg ; LUXOR (2018): natur&ëmwelt – Bird-database, Luxembour

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, 36-120. Novi Sad

Netherlands

Breeding population size: Sovon Bird atlas (Sovon 2018)

Breeding short-term trend: Sovon

Breeding long-term trend: Sovon

Norway

Breeding population size: Shimmings P. & Øien, I.J. 2015. Bestandsestimater og trender for norske hekkefugler. NOF-rapport 2015-2.

Breeding long-term trend: Shimmings, P. & Øien, I.J. 2015. Bestandsestimater for norske hekkefugler. NOF Rapport 2-2015. 268 pp.

Poland

Breeding population size: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MPD – Raptor Survey)

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

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).

Romania

Breeding population size: National Raptor Monitoring Programme, OpenBirdMaps (Milvus Group) Database

Breeding short-term trend: Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) 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; Melnikov, expert opinion. vanovobirds@mail.ru

Pernis apivorus (European Honey-buzzard)

Russia

Breeding short-term trend: Melnikov 2017; Belik unpublished. vpbelik@mail.ru; Sarychev umpublished. vssar@yandex.ru
Breeding long-term trend: Melnikov et al. 2009; Belik et al. 2003; Sokolov expert opinion. falcon209@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.

Slovakia

Breeding population size: Coordinatory group for reporting 2019. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002. Karaska D., Trnka A., Krištín A., Ridzoň J.: Chránené vtáčie územia Slovenska. ŠOP SR Banská Bystrica, 2015.
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 gnezdilk 2002–2017. – DOPPS, Ljubljana.
Breeding short-term trend: Mihelič T., Kmecl P., Denac K., Koce U., Vrezec A., Denac D. (eds.) (2019): Atlas ptic Slovenije. Popis gnezdilk 2002–2017. – DOPPS, Ljubljana.
Breeding long-term trend: Mihelič T., Kmecl P., Denac K., Koce U., Vrezec A., Denac D. (eds.) (2019): Atlas ptic Slovenije. Popis gnezdilk 2002–2017. – DOPPS, Ljubljana. Geister I. (ed.) (1995): Ornitološki atlas Slovenije. – DZS, Ljubljana.

Spain

Breeding population size: Palomino, D. & Valls, J. (2011). Las rapaces forestales de España. Población reproductora en 2009-2010 y método de censo. SEO/BirdLife. Madrid, 153 pp. (https://www.seo.org/wp-content/uploads/2012/04/36_rapacesforestales.pdf)
Breeding short-term trend: Información proporcionada por las Comunidades Autónomas. Purroy, J. & Purroy, F.J. (2015). Abejero europeo – Pernis apivorus. En: Enciclopedia Virtual de los Vertebrados Españoles. Salvador, A., Morales, M. B. (Eds.). Museo Nacional de Ciencias Naturales, Madrid. (http://www.vertebradosibericos.org/) SEO/BirdLife (2013). Resultados del programa Sacre de SEO/BirdLife en 2012. SEO/BirdLife. Madrid. Información obtenida a partir de la Base de Datos del Inventario de especies terrestres. Seguimiento de Aves SACRE. (Ministerio de Agricultura, Alimentación y Medio Ambiente). (https://www.seo.org/boletin/seguimiento/boletin/2013/)
Breeding long-term trend: Palomino, D. & Valls, J. (2011). Las rapaces forestales de España. Población reproductora en 2009-2010 y método de censo. SEO/BirdLife. Madrid, 153 pp. (https://www.seo.org/wp-content/uploads/2012/04/36_rapacesforestales.pdf)

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: Svensk fågeltaxering - Swedish Bird Survey, Migration counts Falsterbo
Breeding long-term trend: Svensk fågeltaxering - Swedish Bird Survey, Migration counts Falsterbo

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/

Turkey

Breeding population size: Murat Bozdoğan, Soner Bekir personal communication (2019), 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-

Ukraine

Breeding short-term trend: Based mainly on expert opinion
Breeding long-term trend: Based mainly on expert opinion

United Kingdom

Breeding population size: RBBP; Batten, L.A. 2001. European Honey-buzzard Survey 2000 and 2001: preliminary results and request for further surveys. British Birds 94: 143-144. Ogilvie, M.A. 2003. European Honey-buzzards in the UK - correction to breeding totals. British Birds 96: 145.
Breeding short-term trend: RBBP; Holling, M. & the Rare Breeding Birds Panel. 2018. Rare breeding birds in the United Kingdom in 2016. British Birds 111: 644-694.
Breeding long-term trend: RBBP; Holling, M. & the Rare Breeding Birds Panel. 2018. Rare breeding birds in the United Kingdom in 2016. British Birds 111: 644-694.

Bibliography

Adamian, M. S.; Klem, D. J. 1999. Handbook of the birds of Armenia. American University of Armenia, Oakland.

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.

Ferguson-Lees, J. and Christie, D.A. 2001. Raptors of the World. Christopher Helm, London.

Ferguson-Lees, J. and Christie, D.A. 2001. Raptors of the World. Christopher Helm, London.

Global Raptor Information Network. 2021. Species account: European Honey Buzzard Pernis apivorus.

Orta, J., Marks, J.S., and Kirwan, G.M. 2020. Oriental Honey-buzzard (Pernis ptilorhynchus), version 1.0.In: J. del Hoyo, A. Elliott, J. Sargatal, D. A. Christie, and E. de Juana (eds), Cornell Lab of Ornithology, Ithaca, NY, USA.

Porter, R.; Aspinall, S. 2010. Birds of the Middle East. Christopher Helm, London.

Radovic, D., Kralj, J., Tutis, V. and Cikovic, D. 2003. Red data book of birds of Croatia. Ministarstvo zastite okolisa i prostornog uredenja, Zagreb.

STRIX. 2012. Developing and testing the methodology for assessing and mapping the sensitivity of migratory birds to wind energy development. BirdLife International, Cambridge.

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

del Hoyo, J., Elliott, A. and Sargatal, J. (eds). 1994. Handbook of the Birds of the World, vol. 2: New World Vultures to Guineafowl. Lynx Edicions, Barcelona, Spain.