



THE IUCN RED LIST
OF THREATENED SPECIES™



***Haliaeetus albicilla* (White-tailed Sea-eagle)**

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

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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.

Haliaeetus albicilla (White-tailed Sea-eagle)

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	0	<1	2007-2018	complete	?		2007-2018	complete	-	-100 to 0	1980-2018	expert	
Austria	16–33	<1	2013-2018	complete	+		2007-2018	complete	+		1981-2018	complete	
Azerbaijan	10–20	<1	1996-2019	expert	?		2013-2019	expert	0		1980-2019	expert	
Belarus	150–200	1	2010-2018	partial	+	50 to 100	2012-2019	expert	?		1980-2019	deficient	
Bosnia & HG	8–11	<1	2015-2018	complete	?	-10 to 10	2007-2018	complete	?		1980-2018	deficient	
Bulgaria	23–45	<1	2013-2018	complete	+	150 to 200	2000-2018	partial	+	3200 to 3600	1980-2018	partial	
Croatia	130–170	1	2010-2015	complete	+		2007-2018	partial	+	120 to 125	1980-2010	partial	
Czechia	110–120	<1	2014-2017	complete	+		2007-2018	complete	+		1984-2018	complete	
Denmark	90–100	<1	2017-2017	complete	+		2006-2017	complete	+		1993-2017	complete	
DK: Greenland	200–300	2	2018	expert	?		2007-2018	deficient	+		1989-2018	expert	
Estonia	290–330	2	2013-2017	complete	+	50 to 100	2006-2017	complete	+	50 to 100	1980-2017	complete	
Finland	450–650	4	2013-2018	complete	+		2001-2017	complete	+		1980-2017	complete	
France	3	<1	2017-2018	complete	+		2011-2018	partial	+		2011-2018	partial	
Georgia	10–15	<1	2016-2017	partial	+	233 to 650	2005-2017	partial	?				
Germany	850	7	2016-2016	complete	+	67 to 98	2004-2016	complete	+	600 to 971	1980-2016	complete	
Greece	8–10	<1	2013-2018	complete	+	33 to 67	2007-2018	complete	+	5 to 233	1980-2018	partial	
Hungary	310–340	3	2015-2017	complete	+		2007-2018	complete	+		1980-2018	complete	
Iceland	80–90	<1	2018	complete	+		2006-2018	complete	+		1980-2018	complete	
Rep. Ireland	12	<1	2018-2018	complete	+		2012-2018	complete	+		1980-2018	complete	
Latvia	120–150	1	2018-2018	complete	?	-45 to 158	2012-2018	complete	+	2712 to 3327	1980-2017	complete	
Lithuania	150–170	1	2013-2018	partial	+	15 to 25	2013-2018	partial	+	2900 to 3600	1980-2018	partial	
North Macedonia	0	<1	2014-2019	expert	0		2007-2018	expert	-		1980-2019	complete	
Moldova	4–7	<1	2014-2017	partial	F		2007-2018	partial	F		1990-2018	expert	
Netherlands	5–11	<1	2013-2017	complete	+	238 to 4656	2006-2017	complete	+	238 to 4656	1980-2017	complete	
Norway	2800–4200	28	2013-2018	complete	+	0 to 5	2013-2018	expert	+	85 to 180	1980-2018	complete	
Poland	1300–1900	13	2013-2018	complete	+	42 to 146	2008-2018	complete	+	600 to 900	1980-2018	complete	
Romania	50–110	<1	2013-2018	expert	?		2007-2018	deficient	+	10 to 50	1980-2018	expert	
Russia	2000–3000	20	2008-2018	partial	+	0	2008-2018	partial	+	1	1980-2018	partial	
Serbia	150–190	1	2013-2018	complete	+	30 to 49	2007-2018	complete	+	80 to 100	1980-2018	complete	
Slovakia	30–35	<1	2013-2018	complete	+	30 to 40	2007-2018	complete	+	800 to 1000	1980-2018	complete	
Slovenia	8–11	<1	2002-2017	complete	+	30 to 260	2002-2017	partial	+	160 to 1000	1980-2017	partial	
Sweden	800–1200	7	2013-2018	partial	+	50 to 100	2007-2018	complete	+	800 to 1000	1980-2018	partial	

Haliaeetus albicilla (White-tailed Sea-eagle)

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	
Turkey	20–40	<1	2002-2012	complete	?		2008-2019	deficient	?		1980-2013	deficient	
Ukraine	150–180	1	2009-2019	complete	+	5 to 10	2013-2019	complete	+	80 to 110	1990-2019	complete	
United Kingdom	100–110	<1	2015	complete	+		2001-2016	complete	+		1978-2016	complete	
EU28	4800–6400	45											
Europe	10400–14600	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.

Haliaeetus albicilla (White-tailed Sea-eagle)

Table 2. Reported national wintering population sizes and trends in Europe¹. Note that some countries within the species' wintering range did not report any data, and that only minimum totals are presented, to avoid double-counting of birds moving between countries.

Country (or territory) ²	Population estimate				Short-term population trend ⁵				Long-term population trend ⁵				Subspecific population (where relevant)
	Size (individuals) ³	Europe (%)	Year(s)	Method ⁴	Direction ⁶	Magnitude (%) ⁷	Year(s)	Method ⁴	Direction ⁶	Magnitude (%) ⁷	Year(s)	Method ⁴	
Albania	0–1	<1	2007-2018	complete	0	0	2007-2018	complete	0	0	1980-2018	complete	
Armenia	1–5	<1	2013-2018	partial	?		2007-2018	deficient	?		2003-2018	deficient	
Austria	150–190	1	2013-2019	complete	+		2007-2018	complete	+		1990-2018	complete	
Azerbaijan	10–30	<1	1996-2019	complete	?		2010-2019	complete	?		1980-2019	expert	
Belarus	100–150	<1	2013-2018	partial	+	0 to 50	2000-2012	partial	?				
Bosnia & HG	10–20	<1	2015-2018	complete	-	-5 to -1	2007-2018	complete	?		1980-2018	deficient	
Bulgaria	20–35	<1	2013-2018	partial	0	0	2000-2018	partial	+	20 to 40	1980-2018	partial	
Czechia	140–200	1	2015-2019	complete	+		2008-2019	complete	+		1980-2019	complete	
DK: Greenland	500–1000	5	2018	expert	+		2007-2018	expert	+		1989-2018	expert	
Finland	620–1100	6	2014-2018	complete	+	128 to 165	2007-2018	complete	+	3246 to 6508	1980-2018	complete	
France	20–30	<1	2013-2018	expert	+	100 to 200	2007-2017	expert	+	220 to 260	1980-2017	partial	
Georgia	30–45	<1	2008-2012	deficient	?				+	36 to 542		deficient	
Hungary	550–890	5	2013-2018	complete	+	73 to 76	2007-2018	complete	+	1000 to 2000	1980-2018	expert	
Iceland	250–300	2	2018	partial	+		2002-2014	partial	+		1980-2014	partial	
Latvia	100–300	1	2013-2018	expert	?		2007-2018	deficient	?		1980-2018	deficient	
Lithuania	350–500	3	2013-2018	partial	+	0 to 5	2013-2018	expert	+	1000 to 1400	1980-2018	partial	
Moldova	6–14	<1	2018-2019	partial	F		2007-2018	partial	0		1990-2018	expert	
Montenegro		<1	2013-2018	expert	0		2007-2018	expert	?				
Netherlands	30–70	<1	2013-2017	partial	+	328 to 887	2006-2017	complete	+	628 to 1847	1990-2017	complete	
Poland	3000–5000	28	2013-2018	partial	+	29 to 86	2011-2018	complete	?		1980-2018	deficient	
Romania	13–260	<1	2013-2018	partial	?	-4 to 5	2013-2018	complete	0	-2 to 3	2000-2018	complete	
Serbia	450–700	4	2013-2018	partial	+	10 to 29	2013-2018	complete	+	50 to 79	1980-2018	partial	
Slovakia	70–90	<1	2013-2018	partial	+	10 to 20	2007-2018	partial	+	50 to 100	1980-2018	expert	
Sweden	4000–6000	36	2013-2018	partial	+	80 to 120	2007-2018	partial	+	700 to 1300	1980-2018	partial	
Turkey	5–20	<1	2013-2019	complete	?		2008-2019	deficient	?		1980-2019	deficient	
Ukraine	500–600	4	2017	complete	+	20 to 30	2013-2019	complete	+		1990-2019	complete	
EU28	9000–14400	84											
Europe	10900–17600	100											

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Country (or territory) ²	Population estimate				Short-term population trend ⁵				Long-term population trend ⁵				Subspecific population (where relevant)
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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>.

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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

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

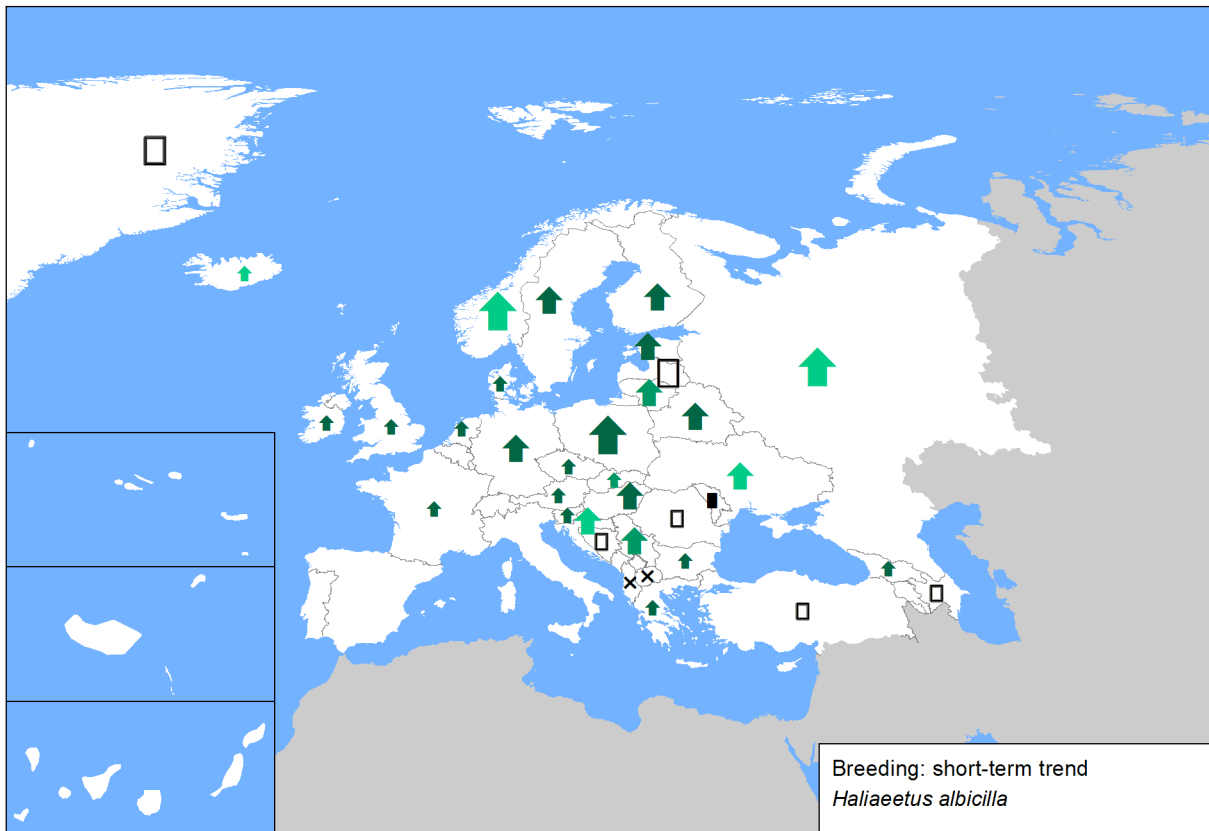


Figure 2. Breeding population sizes and long-term trends across Europe.

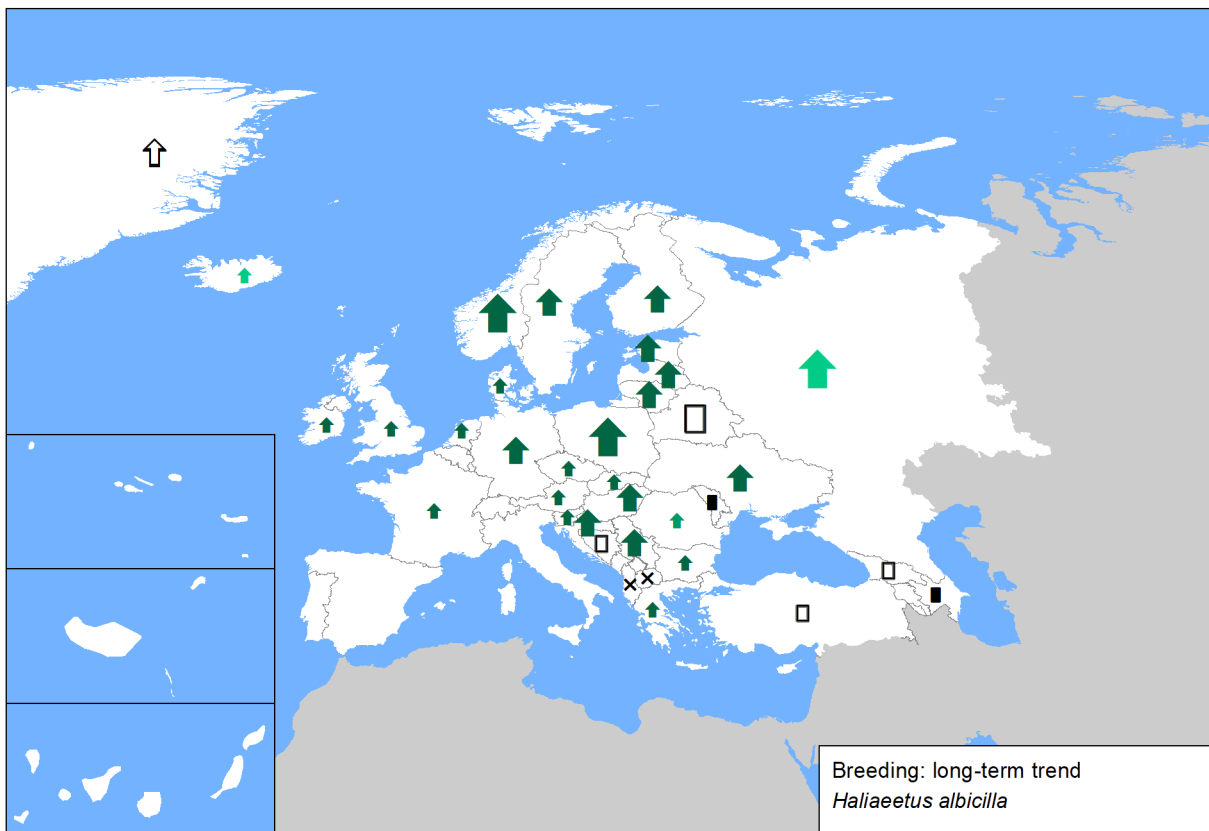


Figure 3. Reported wintering population sizes and short-term trends across Europe. Note that some countries within the species' wintering range did not report any data.

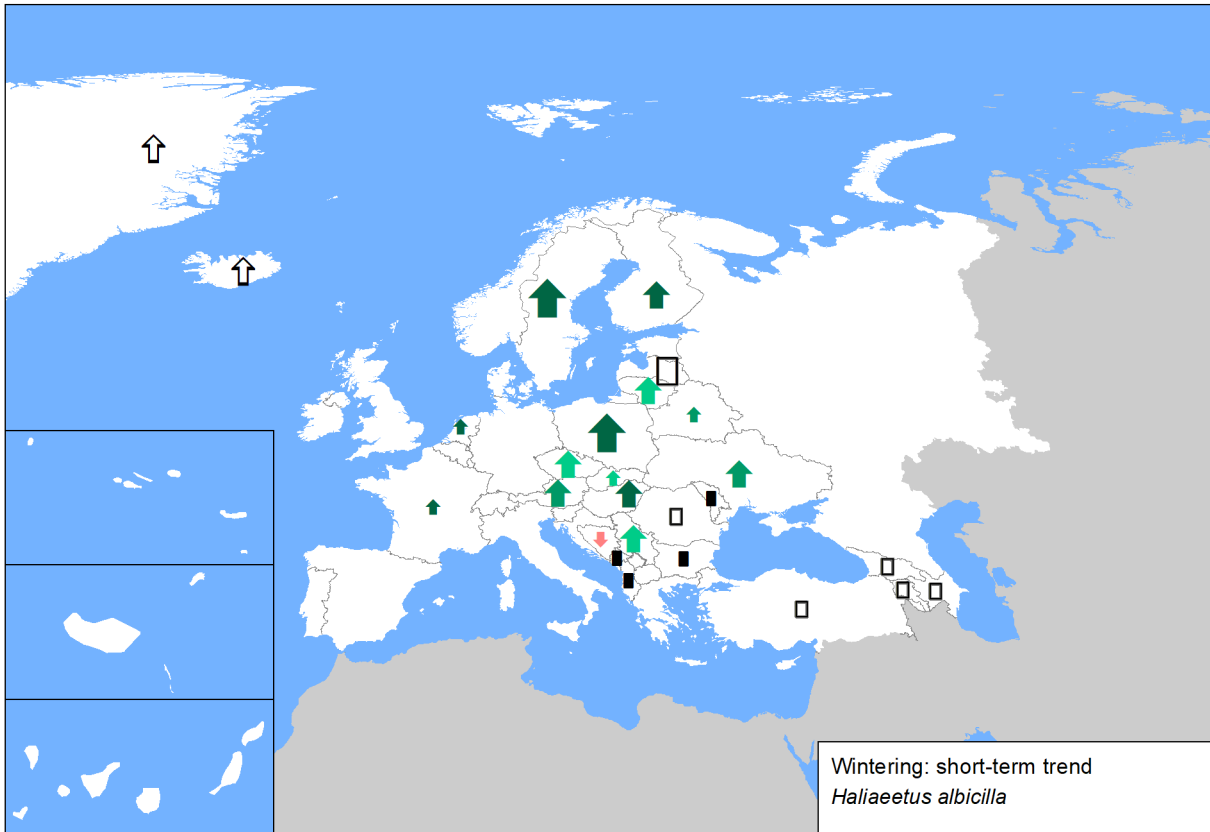
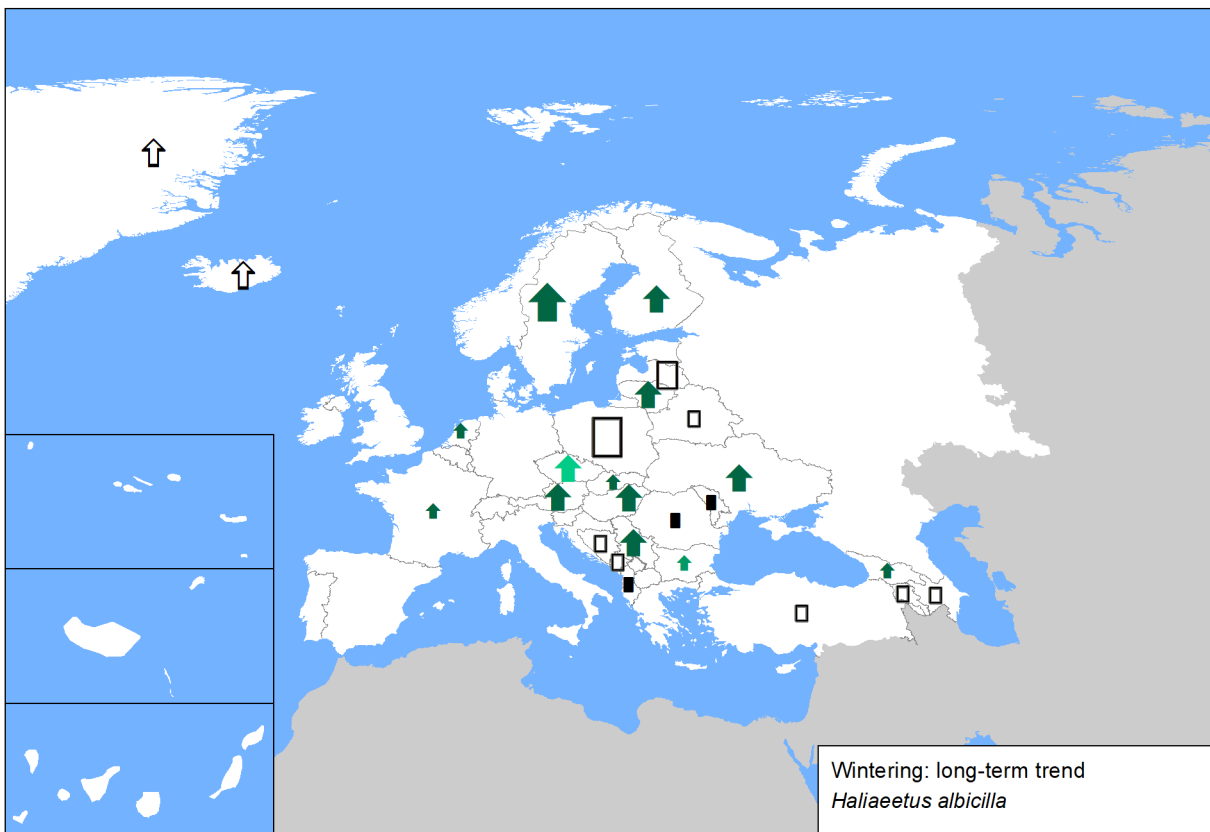


Figure 4. Reported wintering population sizes and long-term trends across Europe. Note that some countries within the species' wintering range did not report any data.



Haliaeetus albicilla (White-tailed Sea-eagle)

Sources

Albania

Breeding population size: Bino & Xeka 2020 in EBBA 2
Breeding short-term trend: Bino & Xeka pers. obs.
Breeding long-term trend: Bino pers. obs.
Winter population size: Bino pers. obs.
Winter short-term trend: Bino et al. 2018
Winter long-term trend: Bino et al. 2018

Armenia

Winter population size: TSE NGO, National Bird Monitoring
Winter short-term trend: TSE calculations using TRIM
Winter long-term trend: TSE calculations using TRIM

Austria

Breeding population size: Remo Probst, unpublished data from the White-tailed Eagle monitoring program of WWF Austria
Breeding short-term trend: Remo Probst, unpublished data from the White-tailed Eagle monitoring program of WWF Austria
Breeding long-term trend: Remo Probst, unpublished data from the White-tailed Eagle monitoring program of WWF Austria
Winter population size: yearly systematic counts in January, Remo Probst/WWF, unpublished data
Winter short-term trend: yearly systematic counts in January, Remo Probst/WWF, unpublished data
Winter long-term trend: yearly systematic counts in January, Remo Probst/WWF, unpublished data

Azerbaijan

Breeding population size: AOS data base
Breeding short-term trend: AOS data base
Breeding long-term trend: AOS Data Base
Winter population size: AOS data base
Winter short-term trend: AOS Data Base
Winter 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"
Winter population size: Yurko V.V. Contemporary state of avifauna in Poleski State Radio-ecological Reserve. // Faunistic studies in Poleski State Radio-ecological Reserve. - 2008. - Gomel. - P.65-115 Dombrovski V.Ch. - personal communication
Winter short-term trend: Dombrovski V.Ch., Pareiko O.A. Wintering Eagles in the Chernobyl zone during 1998. //Subbuteo 2 (1): P.46-48. Yurko V.V. Contemporary state of avifauna in Poleski State Radio-ecological Reserve. // Faunistic studies in Poleski State Radio-ecological Reserve. - 2008. - Gomel. - P.65-115 Dombrovski V.Ch. - personal communication

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)
Winter population size: based on IWC reports-all reports published in magazine Bilten mreže posmatrača ptica (www.ptice.ba)
Winter short-term trend: based on IWC reports-all reports published in magazine Bilten mreže posmatrača ptica (www.ptice.ba)
Winter long-term trend: There are no qualitative data before 2005 to make estimates

Bulgaria

Breeding population size: Todorov E., G. Daskalova, P. Shurulinkov (2015) Current Breeding Distribution and Conservation of White-tailed Eagle, <i>Haliaeetus albicilla</i> (L.) in Bulgaria. Acta zool. bulg., 67 (1), 2015: 3-10; National Art. 12 reporting database 2013-2018; Ivanov, B., E. Todorov, D. Georgiev, P. Shurulinkov, G. Daskalova 2007. White-tailed Eagle, <i>Haliaeetus albicilla</i> . In: Iankov, P. (ed.) 2007. Atlas of the breeding birds in Bulgaria. BSPB, Conservation Series, Book 10. Ivanov, B. 2007. Population development of the White-tailed Eagle <i>Haliaeetus albicilla</i> in Bulgaria in the period from 1977 to 2005. - <i>Acrocephalus</i> 28 (132): 17-21 pp. BSPB Bird Database
Breeding short-term trend: Ivanov, B., E. Todorov, D. Georgiev, P. Shurulinkov, G. Daskalova 2007. White-tailed Eagle, <i>Haliaeetus albicilla</i> . In: Iankov, P. 2007. Atlas of the breeding birds in Bulgaria. BSPB, Conservation Series, Book 10.; National Art. 12 reporting database 2013-2018; Ivanov, B. 2007. Population development of the White-tailed Eagle <i>Haliaeetus albicilla</i> in Bulgaria in the period from 1977 to 2005. - <i>Acrocephalus</i> 28 (132): 17-21 pp. BSPB Bird Database
Breeding long-term trend: Ivanov, B., E. Todorov, D. Georgiev, P. Shurulinkov, G. Daskalova 2007. White-tailed Eagle, <i>Haliaeetus albicilla</i> . In: Iankov, P. (ed.) 2007. Atlas of the breeding birds in Bulgaria. BSPB, Conservation Series, Book 10. Ivanov, B. 2007. Population development of the White-tailed Eagle <i>Haliaeetus albicilla</i> in Bulgaria in the period from 1977 to 2005. - <i>Acrocephalus</i> 28 (132): 17-21 pp. Ivanov, B. (1985): White-tailed Eagle. In: Red data book of Bulgaria, Vol. 2, Animals, BAS, Sofia. BSPB Bird Database

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Bulgaria

Winter population size: Kostadinova, I., M. Gramatikov (eds.) 2007. Important Bird Areas in Bulgaria and Natura 2000. Bulgarian Society for the Protection of Birds, Conservation Series, Book 11. Sofia, BSPB, p.; National Art. 12 reporting database 2013-2018; Wetlands International (2019): Submitted IWC data for Bulgaria for period 2013-2018.; Golemansky V. (ed.) 2011. Red Data Book of the Republic of Bulgaria. Digital edition, Vol. 2, Animals. BAS-MOEW, Sofia, <http://e-ecodb.bas.bg/rdb/en/vol2/>;

Winter short-term trend: Kostadinova, I., M. Gramatikov (eds.) 2007. Important Bird Areas in Bulgaria and Natura 2000. Bulgarian Society for the Protection of Birds, Conservation Series, Book 11. Sofia, BSPB, p.; National Art. 12 reporting database 2013-2018;

Winter long-term trend: Kostadinova, I., M. Gramatikov (eds.) 2007. Important Bird Areas in Bulgaria and Natura 2000. Bulgarian Society for the Protection of Birds, Conservation Series, Book 11. Sofia, BSPB, p.

Croatia

Breeding population size: Tibor Mikuška, pers comm Dumbović Mazal V., Pintar V., Zdravec M. (2019): Prvo izvješće o brojnosti i rasprostranjenosti ptica u Hrvatskoj sukladno odredbama Direktive o pticama. Tutiš, V., Kralj, J., Radović, D., Čiković, D., Barišić, S. (ur.) (2013): Crvena knjiga ptica Hrvatske. Ministarstvo zaštite okoliša i prirode, Državni zavod za zaštitu prirode, Zagreb, 258 str.

Breeding short-term trend: Dumbović Mazal V., Pintar V., Zdravec M. (2019): Prvo izvješće o brojnosti i rasprostranjenosti ptica u Hrvatskoj sukladno odredbama Direktive o pticama. BirdLife International, 2015: European Red List of Birds. Luxembourg: Office for Official Publications of the European Communities.). <http://datazone.birdlife.org/info/euroredlist> Tutiš, V., Kralj, J., Radović, D., Čiković, D., Barišić, S. (ur.) (2013): Crvena knjiga ptica Hrvatske. Ministarstvo zaštite okoliša i prirode, Državni zavod za zaštitu prirode, Zagreb, 258 str.

Breeding long-term trend: BirdLife International, 2015: European Red List of Birds. Luxembourg: Office for Official Publications of the European Communities.). <http://datazone.birdlife.org/info/euroredlist> Tutiš, V., Kralj, J., Radović, D., Čiković, D., Barišić, S. (ur.) (2013): Crvena knjiga ptica Hrvatske. Ministarstvo zaštite okoliša i prirode, Državni zavod za zaštitu prirode, Zagreb, 258 str.

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)

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

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

Winter population size: Waterbird numbers were recorded in mid-January by regular citizen-science monitoring programme - the International Waterbird Census (IWC) – see Gilissen et al. 2002, Wetlands International 2006, Wetlands International 2019. Hundreds of volunteer birdwatchers conduct the mid-January counts on predetermined dates and sites each year, aiming to maximize synchrony (Gilissen et al. 2002, Musil et al. 2011, Musilová et al. 2014). The estimation of population size was calculated by Trends and Indices for Monitoring data (TRIM) software (Statistics Netherlands version 3.52, Pannekoek and Van Strien, 2005). 'Time Totals' values of the data (i.e. the actual count values plus the numbers of birds estimated by the TRIM software) for all 1155 sites included in the analysis were used to generate total estimates of the range of numbers of the waterbird species wintering in the Czech Republic between 2015 and 2019. We use the range (min–max) of population estimates due to the effect of between-year variation in numbers because of variable climatic conditions (Musil et al. 2008, Musilová et al. 2018). Gilissen N, Haanstra L, Delany S, Boere G, Hagemeyer W (2002) Numbers and distribution of wintering waterbirds in the Western Palearctic and Southwest Asia in 1987, 1988 and 1999. Results from the International Waterbird Census. Wetlands International Global Series No. 11, Wetlands International, Wageningen, The Netherlands. Musil P, Darolová A, Jureček J, Musilová Z, Podhrázký M, Slabeyová K (2008) The long-term trends in numbers of wintering geese in the Czech Republic and Slovakia in 1991–2007. Tichodroma 20: 61–67. Musil P, Musilová Z, Fuchs R, Poláková S (2011) Long-term changes in numbers and distribution of wintering waterbirds in the Czech Republic, 1966–2008. Bird Study 58: 450–460. Musilová Z, Musil P, Zouhar J, Adam M (2018) Changes in habitat suitability influence non-breeding distribution of waterbirds in central Europe. Ibis: 160: 582–596. Musilová Z, Musil P, Zouhar J, Bejček V, Šťastný K, Hudec K (2014) Numbers of wintering waterbirds in the Czech Republic: long-term and spatial-scale approaches to assess population size. Bird Study 61: 321–331.

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Estonia

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Latvia

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North Macedonia

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Breeding short-term trend: unpublished data from the European Breeding Bird Atlas 2
Breeding long-term trend: unpublished data of the Macedonian Ecological Society

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)

Haliaeetus albicilla (White-tailed Sea-eagle)

Moldova

Breeding long-term trend: SPPN expert opinion (sppn.moldova@gmail.com)
Winter population size: Winter Raptor Survey
Winter short-term trend: SPPN expert opinion (sppn.moldova@gmail.com)
Winter long-term trend: SPPN expert opinion (sppn.moldova@gmail.com)

Montenegro

Winter population size: IWC reports (2013-2018): Dubak, Vešović, N., Jovičević, M., Vizi O., Vizi, A.
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Netherlands

Breeding population size: Sovon NEM (Sovon, CBS and provinces) and Bird atlas (Sovon 2018)
Breeding short-term trend: NEM (Sovon, RWS, CBS, provinces)
Breeding long-term trend: NEM (Sovon, RWS, CBS, provinces)
Winter population size: NEM waterbird monitoring scheme (Sovon, RWS, CBS, provinces)
Winter short-term trend: NEM waterbird monitoring scheme (Sovon, RWS, CBS, provinces)
Winter long-term trend: NEM waterbird monitoring scheme (Sovon, RWS, CBS, provinces)

Norway

Breeding population size: (a) Shimmings P. & Øien, I.J. 2015. Bestandsestimater og trender for norske hekkefugler. NOF-rapport 2015-2. (b) BirdLife Norway White-tailed Eagle project
Breeding short-term trend: BirdLife Norway White-tailed Eagle project,
Breeding long-term trend: (a) Shimmings, P. & Øien, I.J. 2015. Bestandsestimater for norske hekkefugler. NOF Rapport 2-2015. 268 pp. (b) Alv Ottar Folkestad pers. comm.

Poland

Breeding population size: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MPD – Raptor Survey); expert knowledge
Breeding short-term trend: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MPD)
Breeding long-term trend: Tomiałojć L., Stawarczyk T. 2003. Awifauna Polski: rozmieszczenie, liczebność i zmiany. PTPP "pro Natura"; Komitet Ochrony Orłów 2012. Raport z działalności Komitetu Ochrony Orłów w latach 2008-2010. Biuletyn Komitetu Ochrony Orłów 18: 2-22; Zawadzka D.,
Winter population size: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MZPW – Wintering Waterbird Survey); A. Sikora - unpublished information
Winter short-term trend: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MZPW)
Winter long-term trend: Chief Inspectorate of Environmental Protection & Polish Society for the Protection of Birds (OTOP) / BirdLife Poland

Romania

Breeding population size: Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database
Breeding short-term trend: Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database
Breeding long-term trend: Ciochia V., (1992), Păsările clocitoare din România, Editura Științifică, București Weber, P. (ed) (1994) Atlasul Provizoriu Al Păsărilor Clocitoare din România. Publ SOR 2, Mediaș Munteanu, D., Papadopol, A. și Weber, P. 2002. Atlasul Păsărilor Clocitoare din România. Societatea Ornitologică Română, Cluj-Napoca. Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database
Winter population size: International Waterbird Census, Romania, Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database
Winter short-term trend: International Waterbird Census, Romania, Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database
Winter long-term trend: International Waterbird Census, Romania, Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) 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: Melnikov 2017; Pchelintsev in prep.
Breeding long-term trend: Babushkin & Kuznetsov 2013; Melnikov et al. 2009; Pchelintsev 2012; Belik et al. 2003

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.
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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.
Winter population size: IWC database
Winter short-term trend: IWC database
Winter long-term trend: IWC database; Bioras database http://www.bioras.petnica.rs/home.php

Haliaeetus albicilla (White-tailed Sea-eagle)

Slovakia

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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. Jozef Chavko: Súhrnná správa o výsledkoch monitoringu hniezdenia vybraných populácií dravých vtákov realizovaného členmi OZ Ochrana dravcov na Slovensku v rokoch 2000 až 2011. Časopis BUTEO, ročníky 1/1986 až 13/2003 (vydávala RPS) CHAVKO, J., ADAMEC, M., VONGREJ, D., 2004: Program záchrany orliaka morského (*Haliaeetus albicilla* Linnaeus, 1758)

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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

Breeding long-term trend: Svensk fågeltaxering - Swedish Bird Survey

Winter population size: Artportalen, Species Observation System www.artportalen.se

Winter short-term trend: Artportalen, Species Observation System www.artportalen.se

Winter long-term trend: Artportalen, Species Observation System www.artportalen.se

Turkey

Breeding population size: Kuş Atlas Çalışması

Winter population size: Ebird Database and Midwinter Fowl Counts (2013-2018), Birdlife Estimate

Winter short-term trend: Midwinter bird counts 2012-2019

Winter long-term trend: Midwinter bird counts 1980-2019 and Historical Records come from OSME and other midwinter counts

Ukraine

Breeding population size: 1. Гаврилюк М.Н. (власні дані) 2. Франчук М.В., Височин М.О., Яковлев М. В. (особисті повідомлення) 3. Витер С.Г., 2012. Структура гнездової фауни хищних птахів лісних біотопів басейна Северського Донця. Екологічні та історичні фактори, впливаючі на видову різноманітність. // «Русский орнитологический журнал», Т.21, №768. – с. 1423 – 1446. 4. Франчук М.В., Добринський О.В., Кривульський Т.Ю. Сучасний статус, поширення, чисельність та деякі аспекти екології орлана-білохвоста *Haliaeetus albicilla* в Рівненській області // 36. конф. "Природа Полісся: дослідження та охорона. - Сарни, 2019.

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United Kingdom

Breeding population size: RBBP; Holling, M. & the Rare Breeding Birds Panel. 2018. Rare breeding birds in the United Kingdom in 2016. *British Birds* 111: 644-694. We use the 2015 figure of 108 as complete monitoring ceased after 2015. Precise figure for 2016 was 102.

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