

***Sylvia borin* (Garden Warbler)**

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.

Sylvia borin (Garden Warbler)

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	
Andorra	70–200	<1	2014-2017	partial	?		2011-2018	complete	?				
Armenia	2500–3900	<1	2013-2018	complete	?		2007-2018	deficient	?		2003-2018	deficient	
Austria	15000–30000	<1	2013-2018	partial	0		2007-2018	complete	?		1981-2018	deficient	
Azerbaijan	10000–50000	<1	1996-2019	expert	?		2013-2019	expert	?		1980-2019	expert	
Belarus	390000–600000	3	2010-2018	partial	0	-10 to 10	2012-2019	expert	0	0	1980-2019	expert	
Belgium	49500–79200	<1	2013-2018	expert	-	-61 to -32	2008-2018	complete	-	-38 to 0	1973-2018	partial	
Bosnia & HG	30–50	<1	2015-2018	complete	?	-10 to 10	2007-2018	complete	?		1980-2018	deficient	
Bulgaria	200–800	<1	2005-2018	partial	0	0	2000-2018	partial	0	0	1980-2018	expert	
Croatia	100	<1	2013-2018	expert	?		2007-2018	deficient	?		1980-2018	deficient	
Czechia	190000–380000	2	2014-2017	complete	-		2007-2018	complete	-		1982-2018	complete	
Denmark	175000–176000	1	2017	partial	-	-34 to -5	2006-2017	complete	-	-52 to -41	1980-2017	complete	
Estonia	400000–600000	3	2013-2017	expert	-	-31 to -21	2007-2018	expert	0	0 to 6	1983-2018	expert	
Finland	524000–847000	4	2013-2018	complete	-	-39 to -29	2007-2018	complete	-	-30 to -11	1980-2018	complete	
France	500000–900000	4	2013-2018	partial	-		2007-2018	partial	-		2001-2018	partial	
Georgia	3200–32100	<1	2013-2017	partial	?			deficient	?				
Germany	690000–1000000	6	2016-2016	complete	-	-38 to -25	2004-2016	complete	-		1980-2016	expert	
Greece	10–50	<1	2013-2018	partial	?		2007-2018	deficient	?		1980-2018	deficient	
Hungary	300–800	<1	2014-2018	expert	0		2007-2018	expert	-		1999-2018	expert	
Rep. Ireland	40–60	<1	2013-2018	partial	0		2011-2018	partial	0		1991-2018	partial	
Italy	30000–60000	<1	2013-2018	expert	-	-40 to -25	2012-2017	partial	+	20 to 200	1993-2018	expert	
Kosovo	20–40	<1	2007-2019	partial	+		2007-2018	partial	+		1990-2018	partial	
Latvia	277000–383000	2	2016-2016	complete	+	10 to 79	2005-2018	complete	0	-13 to 99	1995-2018	complete	
Lithuania	200000–350000	2	2013-2018	partial	0	0	2013-2018	partial	0	0	1980-2018	partial	
Luxembourg	3000–4000	<1	2013-2018	partial	0	0	2007-2018	partial	?		1980-2018	expert	
North Macedonia	250–1000	<1	2014-2019	expert	0		2007-2018	expert	?		1980-2019		
Moldova	1000–2500	<1	2014-2017	partial	-		2007-2018	partial	0		1990-2018	expert	
Montenegro	500–1500	<1	2002-2012	expert	0		2007-2018	expert	?				
Netherlands	80000–140000	<1	2013-2015	complete	0	-13 to 1	2006-2017	complete	-	-24 to -4	1984-2017	complete	
Norway	380000–890000	4	2013-2018	expert	F		2013-2018	partial	0		1980-2018	partial	
Poland	374000–512000	3	2013-2018	complete	-	-40 to -20	2007-2018	complete	?		1980-2018	deficient	
Portugal	100–500	<1	2013-2018	partial	?		2007-2018	deficient	?		1980-2018	deficient	
Romania	188000–355000	2	2013-2015	complete	?	-3 to 12	2008-2018	complete	?		1980-2018	deficient	

Sylvia borin (Garden Warbler)

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	
Russia	5700000–9100000	48	2006-2018	partial	0		2006-2018	expert	?		1986-2018	deficient	
Serbia	140–360	<1	2013-2018	expert	0	0	2007-2018	complete	+	10 to 29	1980-2018	complete	
Slovakia	200000–400000	2	2013-2018	expert	0		2007-2018	expert	0		1980-2018	expert	
Slovenia	400–800	<1	2018-2018	complete	-		2007-2018	expert	?		1980-2018	deficient	
Spain	261000–533000	3	1998-2018	complete	+		2007-2018	complete	+		1980-2018	complete	
Sweden	696000–1630000	8	2013-2018	partial	0	-9 to 1	2007-2018	partial	-	-22 to -9	1980-2018	partial	
Switzerland	35000–50000	<1	2013–2016	partial	-	-41 to -16	2007-2018	complete	-	-51 to -31	1990-2018	complete	
Turkey	1000–10000	<1	2002-2012	expert	?		2008-2019	deficient	?		1980-2013	deficient	
Ukraine	90000–150000	<1	2015-2017	partial	F	5 to 10	2007-2019	expert	F	10 to 20	1980-2019	expert	
United Kingdom	143000–144000	1	2016	partial	0		2004-2016	complete	0		1980-2016	complete	
EU28	4990000–8530000	44											
Europe	11600000–19500000	100											

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

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

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

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

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

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

⁷ Trend magnitudes are rounded to the nearest integer.

Trend maps

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

KEY

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

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

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

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

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

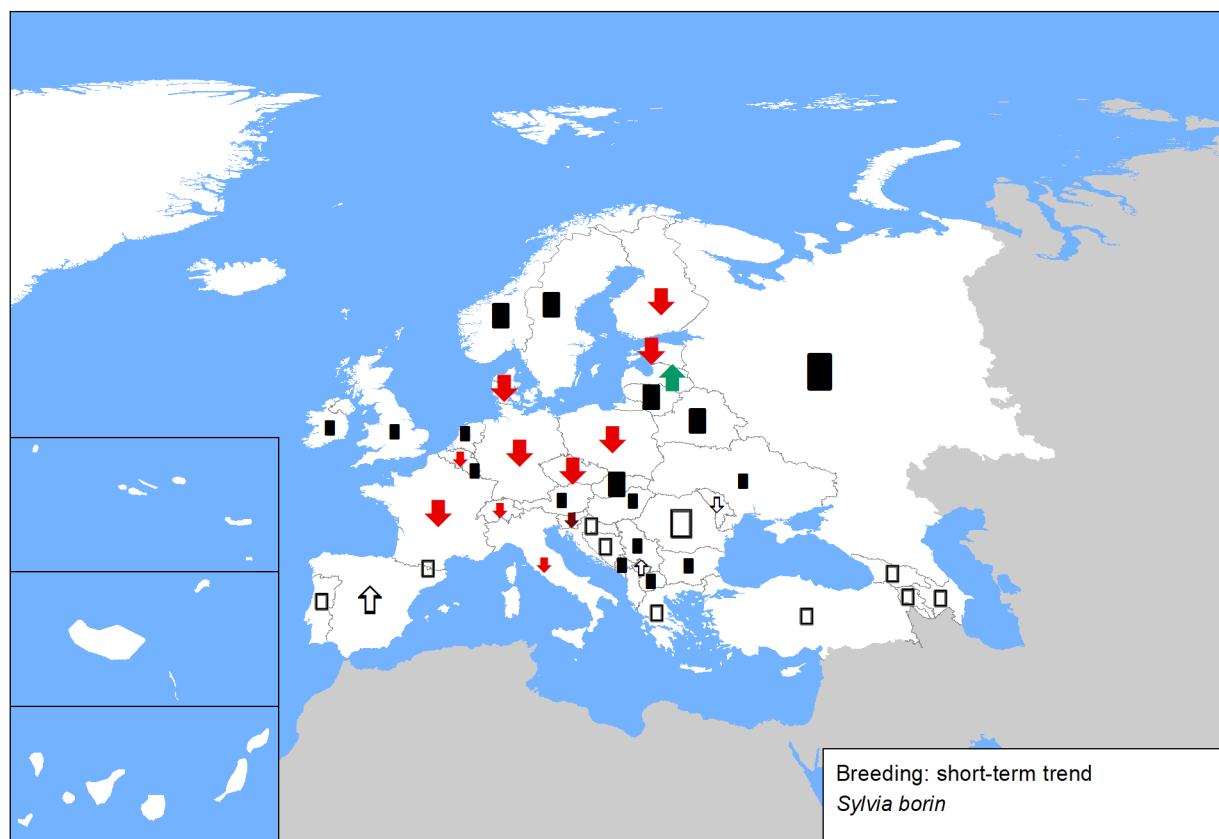
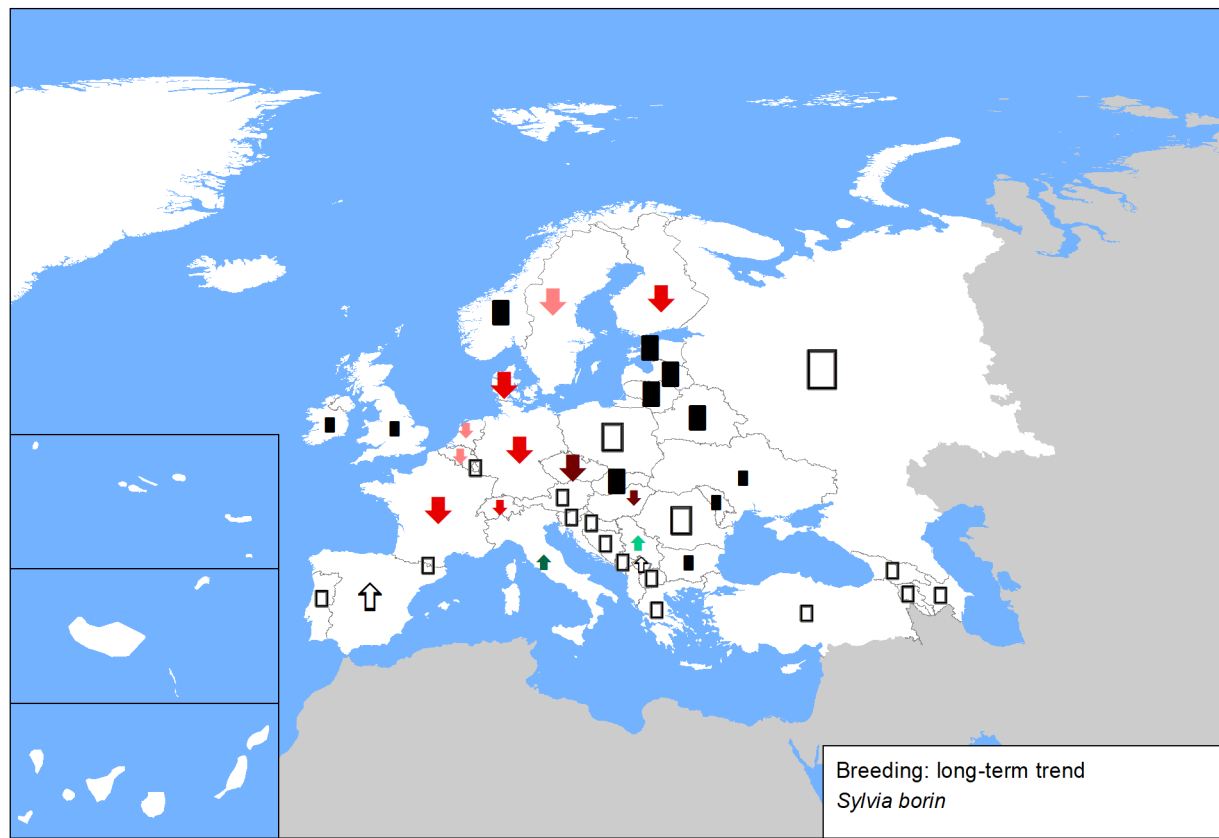


Figure 2. Breeding population sizes and long-term trends across Europe.



Sources

Andorra

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

Armenia

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

Austria

Breeding population size: BirdLife Austria, estimate based on a sample of breeding densities from different sites and habitats and corrected by the results of the Austrian breeding bird monitoring ("Brutvogelmonitoring") for 1998- 2018
Breeding short-term trend: BirdLife Austria, results of the Austrian Breeding bird monitoring ("Brutvogelmonitoring")
Breeding long-term trend: BirdLife Austria, unpublished

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: BSPB Bird Database; 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.; Nankinov, D. 2009. Studies on Fauna of Bulgaria, Birds - Aves, Passeriformes, Sofia, ETO, 407 p. (in Bulgarian); National Art. 12 reporting database 2013-2018;
Breeding short-term trend: BSPB Bird Database; 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.; Nankinov, D. 2009. Studies on Fauna of Bulgaria, Birds - Aves, Passeriformes, Sofia, ETO, 407 p. (in Bulgarian); 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 p.; National Art. 12 reporting database 2013-2018;
Breeding long-term trend: BSPB Bird Database; 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.; Nankinov, D. 2009. Studies on Fauna of Bulgaria, Birds - Aves, Passeriformes, Sofia, ETO, 407 p. (in Bulgarian); 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 p.

Croatia

Breeding population size: Dumbović Mazal V., Pintar V., Zdravec M. (2019): Prvo izvješće o brojnosti i rasprostranjenosti ptica u Hrvatskoj sukladno odredbama Direktive o pticama.
Breeding short-term trend: Dumbović Mazal V., Pintar V., Zdravec M. (2019): Prvo izvješće o brojnosti i rasprostranjenosti ptica u Hrvatskoj sukladno odredbama Direktive o pticama.
Breeding long-term trend: Dumbović Mazal V., Pintar V., Zdravec M. (2019): Prvo izvješće o brojnosti i rasprostranjenosti ptica u Hrvatskoj sukladno odredbama Direktive o pticama.

Sylvia borin (Garden Warbler)

Czechia

Breeding population size: Šťastný et Bejček in prep. - Atlas hnízdního rozšíření ptáků ČR 2014-2017
Breeding short-term trend: ČSO (unpubl.): Common Bird Monitoring Programme
Breeding long-term trend: ČSO (unpubl.): Common Bird Monitoring Programme

Denmark

Breeding population size: Charlotte M. Moshøj, Daniel Palm Eskildsen, Michael Fink Jørgensen & Thomas Vikstrøm, (2018): Overvågning af de almindelige fuglearter i Danmark 1975-2017 & Mandrup, E. 1997, Hvor mange fugle yngler i Danmark, Dansk Ornitologisk Tidsskrift, nr 3, 1997
Breeding short-term trend: Charlotte M. Moshøj, Daniel Palm Eskildsen, Michael Fink Jørgensen & Thomas Vikstrøm, (2018): Overvågning af de almindelige fuglearter i Danmark 1975-2017
Breeding long-term trend: Charlotte M. Moshøj, Daniel Palm Eskildsen, Michael Fink Jørgensen & Thomas Vikstrøm, (2018): Overvågning af de almindelige fuglearter i Danmark 1975-2017

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] Point counts of breeding birds. http://seire.keskkonnainfo.ee/index.php?option=com_content&view=article&id=3417&Itemid=5815
Breeding long-term trend: [1] Estonian Working Group on Bird Status and Numbers [2] Point counts of breeding birds. http://seire.keskkonnainfo.ee/index.php?option=com_content&view=article&id=3417&Itemid=5815

Finland

Breeding population size: Lehtinen, A. , Below, A., Jukarainen, A., Laaksonen, T., Lehtinen, T., Mikkola-Roos, M., Pessa, J., Rajasärkkä, A., Rusanen, P., Sirkä, P., Tiainen, J. & Valkama, J. 2019: Suomen lintujen pesimäkantojen koot. – Linnut-vuosikirja 2018: 38-45.
Breeding short-term trend: Väisänen, R. A., Lehtinen, A. & Sirkä, P. 2018: Suomen pesivän maalinuston kannanvaihtelut 1975-2017. – Linnut-vuosikirja 2017: 16–31.
Breeding long-term trend: Väisänen, R. A., Lehtinen, A. & Sirkä, P. 2018: Suomen pesivän maalinuston kannanvaihtelut 1975-2017. – Linnut-vuosikirja 2017: 16–31.

France

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

Georgia

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

Germany

Breeding population size: Monitoring häufiger Brutvögel (http://www.dda-web.de/index.php?cat=monitoring&subcat=ha_neu&subsubcat=kontakt)
Breeding short-term trend: Monitoring häufiger Brutvögel (http://www.dda-web.de/index.php?cat=monitoring&subcat=ha_neu&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.

Greece

Breeding population size: (1) BirdLife International (2017). European birds of conservation concern: populations, trends and national responsibilities. Cambridge. UK: BirdLife International. ISBN 978-1-912086-00-9
Breeding short-term trend: No data
Breeding long-term trend: No data available

Hungary

Breeding population size: KEHOP-4.3.0-15-2016-00001 project results, unpublished. National park directorates' databases http://map.mme.hu/maps/map2
Breeding short-term trend: http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Sylvia_borin.pdf 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, 459 p. Magyar G., Hadarics T., Waliczky Z., Schmidt A., Nagy T. & Bankovics A. (1998): Magyarország madarainak névjegyzéke. Madártani Intézet, Budapest, 111 p. Szép, T., Nagy, K., Nagy, Zs. & Halmos, G. (2012): Population trends of common breeding and wintering birds in Hungary, decline of long-distance migrant and farmland birds during 1999-2012. Ornithologica Hungarica 2012. 20(2): 13-63. Haraszthy László (1998, 2000) - Magyarország madarai; 313-314 p. BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No.12.), 233 p. MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. 191 p. KEHOP-4.3.0-15-2016-00001 project results, unpublished. National park directorates' databases http://map.mme.hu/maps/map2

Republic of Ireland

Breeding population size: Crowe, O. (2019). Status of rare breeding birds in the Republic of Ireland 2013 - 2018. Unpublished report to the National Parks and Wildlife Service, Dublin, Ireland.
Breeding short-term trend: Crowe, O. (2019). Status of rare breeding birds in the Republic of Ireland 2013 - 2018. Unpublished report to the National Parks and Wildlife Service, Dublin, Ireland.
Breeding long-term trend: Crowe, O. (2019). Status of rare breeding birds in the Republic of Ireland 2013 - 2018. Unpublished report to the National Parks and Wildlife Service, Dublin, Ireland.

Sylvia borin (Garden Warbler)

Italy

Breeding population size: Brichetti P & Fracasso G. 2010. Ornitologia italiana. Vol.6 (Sylviidae-Paradoxornithidae). Alberto Perdisa Editore, Bologna
Breeding short-term trend: Extrapolated data by the average annual trend, from: Rete Rurale Nazionale & Lipu (2018). Uccelli comuni delle zone agricole in Italia. Aggiornamento degli andamenti di popolazione e del FBI per la Rete Rurale Nazionale dal 2000 al 2017. 16 pp.
Breeding long-term trend: Brichetti P., Meschini E., 1993. Stima delle popolazioni di uccelli nidificanti. In Meschini E., Frugis S., 1993. Atlante degli uccelli nidificanti in Italia. Suppl. Ric. Biol. Selvaggina, 20, 1-345.

Kosovo

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

Latvia

Breeding population size: Aunins A., Mardega I. 2018. [Countrywide monitoring of the common birds. Final report for the year 2018.] (in Latvian) Latvian Ornithological society
Breeding short-term trend: Aunins A., Mardega I. 2018. [Countrywide monitoring of the common birds. Final report for the year 2018.] (in Latvian) Latvian Ornithological society
Breeding long-term trend: Aunins A., Mardega I. 2018. [Countrywide monitoring of the common birds. 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.
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.
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. Lututė, 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.

Luxembourg

Breeding population size: Ornitho.lu (2018): online database natur&ëmwelt 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&ëmwelt Luxembourg. ISBN: 978-2-919920-01-3
Breeding short-term trend: Ornitho.lu (2018): online database natur&ëmwelt 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&ëmwelt Luxembourg. ISBN: 978-2-919920-01-3; LUXOR (2018): natur&ëmwelt – Bird-database, Luxembourg
Breeding long-term trend: Experts' estimate

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: Rašović, 2014, unpub.data
--

Netherlands

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

Norway

Breeding population size: Shimmings P. & Øien, I.J. 2015. Bestandsestimer og trender for norske hekkefugler. NOF-rapport 2015-2.
Breeding short-term trend: Terrestrial monitoring programme - extensive (TOV-e)
Breeding long-term trend: Shimmings, P. & Øien, I.J. 2015. Bestandsestimer og trender for norske hekkefugler. NOF Rapport 2-2015. 268 pp.

Sylvia borin (Garden Warbler)

Poland

Breeding population size: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MPPL – Common Bird Survey)
Breeding short-term trend: State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MPPL)
Breeding long-term trend: Chief Inspectorate of Environmental Protection & Polish Society for the Protection of Birds (OTOP) / BirdLife Poland

Portugal

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

Romania

Breeding population size: Romanian Common Bird Monitoring Programme, Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database
Breeding short-term trend: Romanian Common Bird Monitoring Programme, Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database
Breeding long-term trend: Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database

Russia

Breeding population size: Voltzit & Kalyakin 2013-2019; Database of the project on Atlas of breeding birds of European Russia
Breeding short-term trend: Sarychev unpublished. vssar@yandex.ru Preobrazhenskaya unpublished. voop21@rambler.ru Belik unpublished. vpbelik@mail.ru
Breeding long-term trend: Sarychev unpublished. vssar@yandex.ru; Preobrazhenskaya unpublished. voop21@rambler.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: 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.

Slovakia

Breeding population size: Coordinatory group for reporting 2019. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002. Krištín in litt.
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. Ridzoň in litt. (www.vtaky.sk , 2019, manuscript in preparation), Krištín in litt.
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. Ridzoň in litt. (www.vtaky.sk , 2019, manuscript in preparation), Krištín in litt.

Slovenia

Breeding population size: Mihelič T., Kmecl P., Denac K., Koce U., Vrezec A., Denac D. (eds.) (2019): Atlas ptic Slovenije. Popis gnezdičk 2002–2017. (The atlas of birds of Slovenia. The census of breeding birds 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 gnezdičk 2002–2017. (The atlas of birds of Slovenia. The census of breeding birds 2002-2017.) – DOPPS, Ljubljana.
Breeding long-term trend: There are no sources for this information.

Spain

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

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

Sylvia borin (Garden Warbler)

Sweden

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

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: , Ferdi Akarsu 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)

Ukraine

Breeding population size: Atlas work, non-published data

United Kingdom

Breeding population size: Baseline = Gibbons, D.W., Reid, J.B. & Chapman, R.A. 1993. The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991. Poyser, London. Extrapolation from 1988-91 using Breeding Bird Survey monitoring trend.

Breeding short-term trend: BTO/JNCC/RSPB Breeding Bird Survey data: Harris, S.J., Massimino, D., Gillings, S., Eaton, M.A., Noble, D.G., Balmer, D.E., Procter, D., PearceHiggins, J.W. & Woodcock, P. 2018. The Breeding Bird Survey 2017. BTO Research Report 706 British Trust for Ornithology, Thetford. <https://www.bto.org/sites/default/files/bbs-report-2017.pdf>

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, Thetford. www.bto.org/birdtrends

Bibliography

- Aymí, R. and Gargallo, G. 2015. Garden Warbler (*Sylvia borin*). In: J. del Hoyo, A. Elliott, J. Sargatal, D.A. Christie & E. de Juana (eds), *Handbook of the Birds of the World Alive*, Lynx Edicions, Barcelona.
- 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. 2001. *Threatened birds of Asia: the BirdLife International Red Data Book*. BirdLife International, Cambridge, U.K.
- Hajzlerová, L. and Reif, J. 2014. Bird species richness and abundance in riparian vegetation invaded by exotic *Reynoutria* spp. *Biologia* 69(2): 247-253.
- Hüppop, O. and Hüppop, K. 2003. North Atlantic Oscillation and timing of spring migration in birds. *Proceedings of the Royal Society of London Series B* 270: 233-240.
- Jenni, L. and Kery, M. 2003. Timing of autumn bird migration under climate change: advances in long-distance migrants, delays in short-distance migrants. *Proceedings of the Royal Society of London Series B* 270(1523): 1467-1471.
- Jonzén, N., Lindén, A., Ergon, T., Knudsen, E., Vik, J.O., Rubolini, D., Piacentini, D., Brinch, C., Spina, F., Karlsson, L., Stervander, M., Andersson, A., Waldenström, J., Lehikoinen, A., Edvardsen, E., Solvang, R. and Stenseth, N.C. 2006. Rapid advance of spring arrival dates in long-distance migratory birds. *Science* 312(5782): 1959-1961.
- Mezquida, E.T., Villaran, A. and Pascual-Parra, J. 2007. Timing of autumn bird migration in central Spain in light of recent climate change. *Ardeola* 54: 251-259.
- Shirihai, H., Gargallo, G. and Helbig, A.J. 2001. *Sylvia warblers: identification, taxonomy and phylogeny of the genus Sylvia*. Helm, London.
- Sparks, T.H., Huber, K., Bland, R.L., Crick, H.Q.P., Croxton, P.J., Flood, J., Loxton, R.G., Mason, C.F., Newnham, J.A. and Tryjanowski, P. 2007. How consistent are trends in arrival (and departure) dates of migrant birds in the UK? *Journal of Ornithology* 148: 503-511.
- Tøttrup, A.P., Thorup, K. and Rahbek, C. 2006. Patterns of change in timing of spring migration in North European songbird populations. *Journal of Avian Biology* 37: 84-92.
- Vähätalo, A.V., Rainio, K., Lehikoinen, A. and Lehikoinen, E. 2004. Spring arrival of birds depends on the North Atlantic Oscillation. *Journal of Avian Biology* 35: 210-216.