# *Acrocephalus arundinaceus* (Great Reed-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**



**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 | 1500–3100 | <1 | 2007-2018 | partial | - | -70 to -69 | 2007-2018 | partial | - | -70 to -69 | 1980-2018 | expert | |
| Armenia | 1400–2000 | <1 | 2013-2018 | complete | 0 | | 2007-2018 | | 0 | | 2003-2018 | partial | |
| Austria | 1500–2100 | <1 | 2013-2018 | complete | - | -40 to -20 | 2007-2018 | partial | - | -80 to -50 | 1981-2018 | expert | |
| Azerbaijan | 10000–100000 | 1 | 1996-2019 | expert | ? | | 2013-2019 | expert | ? | | 1980-2019 | expert | |
| Belarus | 70000–100000 | 3 | 2010-2018 | partial | 0 | -10 to 10 | 2012-2019 | expert | 0 | 0 | 1980-2019 | expert | |
| Belgium | 6–20 | <1 | 2013-2018 | complete | + | 200 to 900 | 2008-2018 | complete | - | -95 to -85 | 1973-2018 | partial | |
| Bosnia & HG | 2000–4000 | <1 | 2015-2018 | complete | - | -10 to -1 | 2007-2018 | complete | ? | | 1980-2018 | deficient | |
| Bulgaria | 20000–40000 | <1 | 2005-2018 | partial | 0 | 0 | 2001-2018 | expert | 0 | 0 | 1980-2018 | expert | |
| Croatia | 50000–100000 | 2 | 2014-2014 | expert | ? | | 2007-2018 | deficient | ? | | 1980-2018 | deficient | |
| Czechia | 1400–2800 | <1 | 2014-2017 | partial | ? | | 2007-2018 | complete | + | | 1982-2018 | complete | |
| Denmark | 20 | <1 | 2017 | complete | + | 281 to 4426 | 2009-2017 | complete | 0 | -91 to 9 | 1980-2017 | complete | |
| Estonia | 4000–6000 | <1 | 2013-2017 | expert | 0 | | 2007-2018 | expert | + | 10 to 60 | 1980-2018 | expert | |
| Finland | 200–400 | <1 | 2013-2018 | partial | - | | 2007-2018 | partial | + | | 1980-2018 | partial | |
| France | 1500–3000 | <1 | 2013-2018 | partial | ? | | 2007-2017 | deficient | - | -50 to -30 | 1980-2017 | partial | |
| Georgia | 3300–33500 | <1 | 2013-2017 | partial | ? | | | deficient | ? | | | | |
| Germany | 18500–29000 | <1 | 2011-2016 | expert | + | | 2004-2016 | expert | + | | 1985-2016 | expert | |
| Greece | 20000–30000 | <1 | 2013-2018 | partial | ? | | 2007-2018 | deficient | + | | 1980-2018 | partial | |
| Hungary | 211000–224000 | 7 | 2014-2018 | complete | - | -45 to -19 | 2007-2018 | complete | - | -60 to -15 | 1980-2018 | expert | |
| Italy | 20000–40000 | <1 | 2013-2018 | expert | - | -25 to -10 | 2000-2014 | partial | 0 | | 1993-2018 | expert | |
| Kosovo | 100–200 | <1 | 2007-2019 | partial | + | | 2007-2018 | partial | 0 | | 1990-2018 | partial | |
| Latvia | 3000 | <1 | 2013-2018 | partial | - | -77 to -14 | 2006-2018 | complete | ? | | 1980-2018 | deficient | |
| Lithuania | 40000–80000 | 2 | 2013-2018 | expert | 0 | 0 | 2013-2018 | expert | + | 10 to 20 | 1980-2018 | expert | |
| Luxembourg | 5–8 | <1 | 2013-2018 | complete | 0 | 0 to 10 | 2007-2018 | complete | + | 100 to 800 | 1980-2018 | complete | |
| North Macedonia | 3000–10000 | <1 | 2014-2019 | expert | 0 | | 2007-2018 | expert | ? | | 1980-2019 | | |
| Moldova | 20000–30000 | <1 | 2014-2017 | partial | 0 | | 2007-2018 | partial | 0 | | 1990-2018 | expert | |
| Montenegro | 1500–2500 | <1 | 2002-2012 | expert | 0 | | 2007-2018 | expert | ? | | | | |
| Netherlands | 90–150 | <1 | 2013-2017 | complete | - | -64 to -42 | 2006-2017 | complete | - | -87 to -85 | 1980-2017 | complete | |
| Poland | 151000–224000 | 6 | 2013-2018 | complete | 0 | -6 to 37 | 2007-2018 | complete | ? | | 1980-2018 | deficient | |
| Portugal | 600–2500 | <1 | 2013-2018 | partial | ? | | 2007-2018 | partial | ? | | 1980-2018 | deficient | |
| Romania | 482000–707000 | 18 | 2013-2015 | complete | ? | -9 to 2 | 2008-2018 | complete | ? | | 1980-2018 | deficient | |
| Russia | 600000–1100000 | 25 | 2008-2018 | partial | 0 | | 2008-2018 | expert | ? | | 1980-2018 | expert | |
| Serbia | 30000–43000 | 1 | 2013-2018 | partial | 0 | 0 | 2007-2018 | complete | 0 | 0 | 1980-2018 | complete | |

*Acrocephalus arundinaceus* (Great Reed-warbler)

**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] | |
| Slovakia | 1000–2000 | <1 | 2013-2018 | partial | 0 | | 2007-2018 | partial | 0 | | 1980-2018 | partial | |
| Slovenia | 250–350 | <1 | 2002-2017 | complete | ? | | 2008-2018 | deficient | ? | | 1980-2018 | deficient | |
| Spain | 231000–473000 | 10 | 2004-2018 | partial | - | -25 to -15 | 1998-2018 | complete | 0 | | 1980-2018 | partial | |
| Sweden | 350–550 | <1 | 2013-2018 | partial | 0 | -30 to 30 | 2007-2018 | complete | + | 40 to 80 | 1980-2018 | partial | |
| Switzerland | 270–320 | <1 | 2013–2016 | complete | + | 49 to 176 | 2007-2018 | complete | + | 32 to 149 | 1990-2018 | complete | |
| Turkey | 80000–240000 | 4 | 2002-2012 | deficient | ? | | 2008-2019 | deficient | ? | | 1980-2013 | deficient | |
| Ukraine | 300000–800000 | 15 | 2015-2017 | partial | F | 5 to 10 | 2007-2019 | expert | F | 10 to 20 | 1980-2019 | expert | |
| EU28 | 1250000–1970000 | 49 | | | | | | | | | | | |
| **Europe** | **2380000–4440000** | **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.

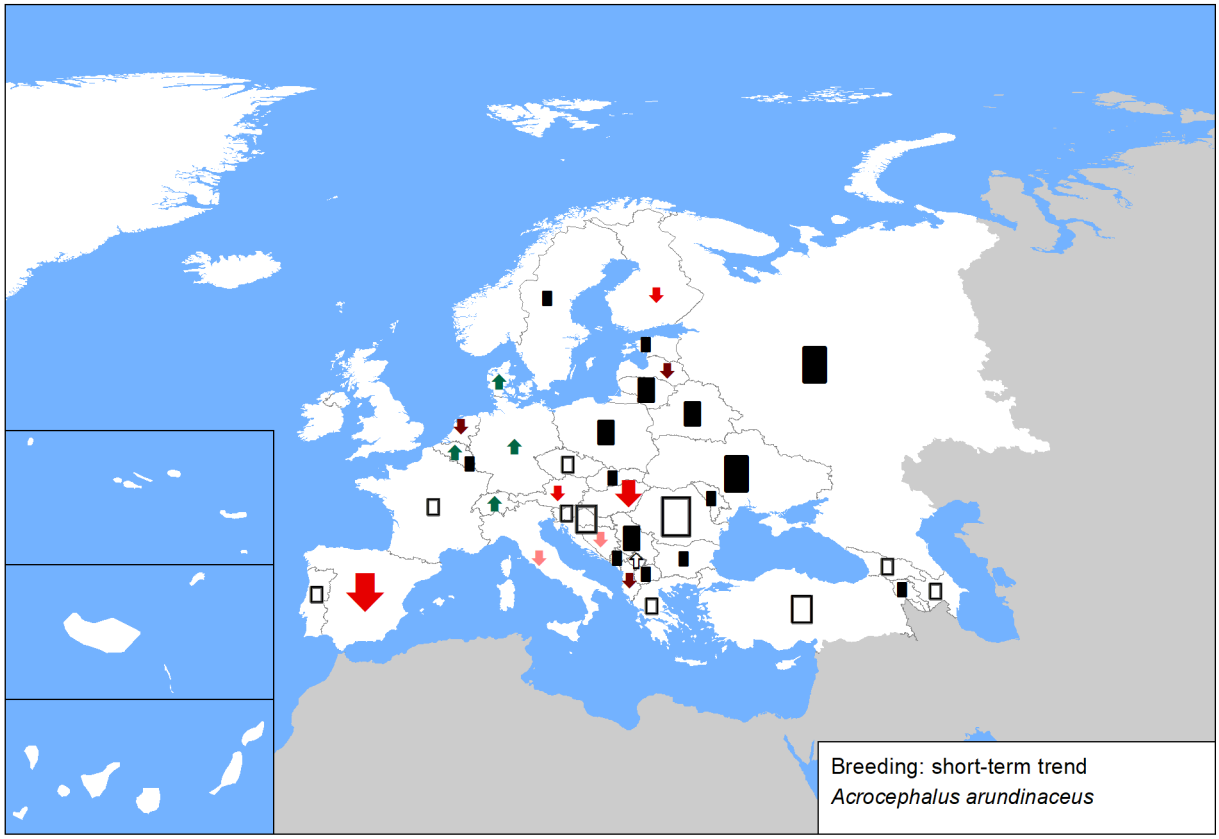
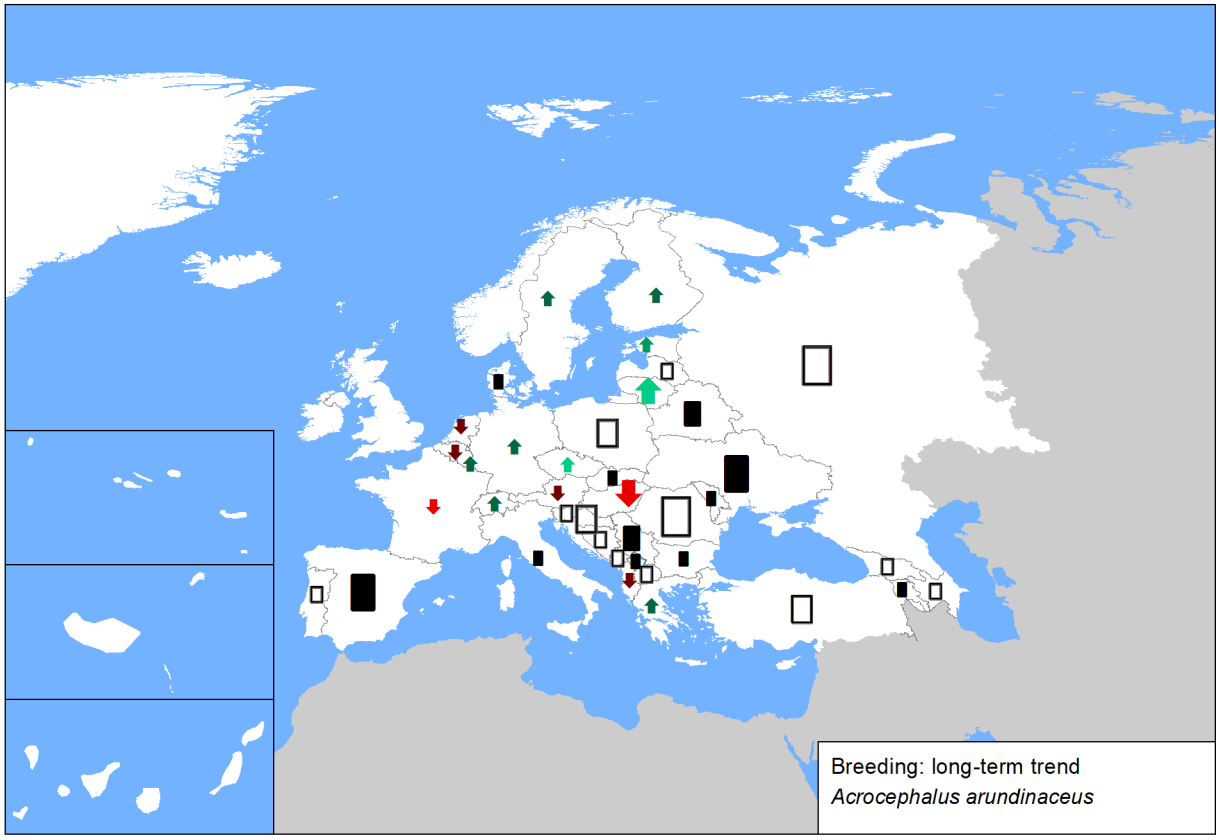



**Figure 2.** Breeding population sizes and long-term trends across Europe.



# Sources

## Albania

| |
|---|
| **Breeding population size:** Bino & Xeka 2020 in EBBA 2 |
| **Breeding short-term trend:** Bino & Xeka pers. obs. |
| **Breeding long-term trend:** Bino pers. obs. |

## Armenia

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

## Austria

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

## Azerbaijan

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

## Belarus

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

## Belgium

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

## Bosnia and Herzegovina

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

## Bulgaria

| |
|---|
| **Breeding population size:** Zenhtindjiev, P., Antonov, A., Dereliev, S., Vasilev, V. 2007. Acrocephalus arundinaceus. In: Iankov, P. (Ed.) Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds Conservation series, Book 10, BSPB, Sofia.; National Art. 12 reporting database 2013-2018; Nankinov,D. et al. Breeding totals of the ornithofauna in Bulgaria. Green Balkans, Plovdiv, 2004. |
| **Breeding short-term trend:** Zenhtindjiev, P., Antonov, A., Dereliev, S., Vasilev, V. 2007. Acrocephalus arundinaceus. In: Iankov, P. (Ed.) Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds Conservation series, Book 10, BSPB, Sofia.; National Art. 12 reporting database 2013-2018; Nankinov,D. et al. Breeding totals of the ornithofauna in Bulgaria. Green Balkans, Plovdiv, 2004. |
| **Breeding long-term trend:** Zenhtindjiev, P., Antonov, A., Dereliev, S., Vasilev, V. 2007. Acrocephalus arundinaceus. In: Iankov, P. (Ed.) Atlas of breeding birds in Bulgaria. Bulgarian Society for the Protection of Birds Conservation series, Book 10, BSPB, Sofia. Nankinov,D. et al. Breeding totals of the ornithofauna in Bulgaria. Green Balkans, Plovdiv, 2004. |

## Croatia

| |
|---|
| **Breeding population size:** BirdLife International 2015: European Red List of Birds. Luxembourg: Office for Official Publications of the European Communities.). http://datazone.birdlife.org/info/euroredlist |
| **Breeding short-term trend:** no data available |
| **Breeding long-term trend:** no data available |

## 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 |

*Acrocephalus arundinaceus* (Great Reed-warbler)

## Denmark

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

## 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] http://kabli.nigula.ee/index.php/et/pulgoja?view=species&station=pulgoja&spid=278 |
| **Breeding long-term trend:** [1] Estonian Working Group on Bird Status and Numbers [2] http://kabli.nigula.ee/index.php/et/pulgoja?view=species&station=pulgoja&spid=278 |

## Finland

| |
|---|
| **Breeding population size:** 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:** BirdLife Finland 2019: Regional observation summary database of Finnish Birdwatching societies on scarce bird species. |
| **Breeding long-term trend:** BirdLife Finland 2019: Regional observation summary database of Finnish Birdwatching societies on scarce bird species. |

## France

| |
|---|
| **Breeding population size:** Roché J. et al. 2013. Une méthode simple pour estimer les populations d'oiseaux communs nicheurs en France. Alauda, 241-268 |
| **Breeding short-term trend:** Issa N. & Muller Y. 2015. Atlas des oiseaux nicheurs de France métropolitaine. , LPO/SEOF/MNHN/Delachaux et Niestlé, Paris |
| **Breeding long-term trend:** ROCAMORA, G. & YEATMAN-BERTHELOT, D. 1999. Oiseaux menacés et à surveiller en France. Liste rouge et recherche de priorités. Populations. Tendances. Conservations, Société d'Etudes Ornithologiques de France/Ligue pour la Protection des Oiseaux, Paris. 598 p. |

## Georgia

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

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

## Greece

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

## Hungary

| |
|---|
| **Breeding population size:** National common bird monitoring scheme (MMM) database. |
| **Breeding short-term trend:** National common bird monitoring scheme (MMM) database. |
| **Breeding long-term trend:** National common bird monitoring scheme (MMM) database. |

## Italy

| |
|---|
| **Breeding population size:** BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status Cambridge, UK: BirdLife International. BirdLife Conservation Series No. 12 Brichetti P & Fracasso G. 2010. Ornitologia italiana. Vol.6 (Sylviidae-Paradoxorn |
| **Breeding short-term trend:** Extrapolated data by the average annual trend, from: Rete Rurale Nazionale & LIPU (2015). Uccelli comuni in Italia. Aggiornamento degli andamenti di popolazione e del FBI per la Rete Rurale Nazionale dal 2000 al 2014. LIPU, 16 pp. |
| **Breeding long-term trend:** Brichetti P., Meschini E., 1993. Stima delle popolazioni di uccelli nidificanti. In Meschini E., Frugis S.,1993. Atlante degli uccelli nidificanti in Italia. Suppl. Ric. Biol. Selvaggina, 20, 1-345. |

## Kosovo

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

## Latvia

| |
|---|
| **Breeding population size:** Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv |

## Latvia

| |
|---|
| **Breeding short-term trend:** Keiss O. 2018. [Countrywide monitoring of the night active birds in farmland. Final report for the year 2018.] (in Latvian) Latvian Ornithological society |
| **Breeding long-term trend:** No data available. |

## 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:** BirdLife International/European Bird Cencus Council. 2000. European bird populations: estimates and trends. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 10). Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p. Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p. 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. |

## 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 |
| **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 |
| **Breeding long-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 |

## North Macedonia

| |
|---|
| **Breeding population size:** unpublished data from the European Breeding Bird Atlas 2 |
| **Breeding short-term trend:** unpublished data from the European Breeding Bird Atlas 2 |

## Moldova

| |
|---|
| **Breeding population size:** Moldova`s contribution for the second European Breeding Bird Atlas (EBBA2) |
| **Breeding short-term trend:** SPPN expert opinion (sppn.moldova@gmail.com) |
| **Breeding long-term trend:** SPPN expert opinion (sppn.moldova@gmail.com) |

## Montenegro

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

## Netherlands

| |
|---|
| **Breeding population size:** Sovon NEM (Sovon, CBS and provincies) and Bird atlas (Sovon 2018) |
| **Breeding short-term trend:** NEM (Sovon, RWS, CBS, provincies) |
| **Breeding long-term trend:** Sovon |

## Poland

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

## Portugal

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

## Romania

| |
|---|
| **Breeding population size:** Romanian Common Bird Monitoring Programme, Breeding Waterbird 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:** Belik unpublished. vpbelik@mail.ru |

*Acrocephalus arundinaceus* (Great Reed-warbler)

## Russia

**Breeding long-term trend:** 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.

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

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

## Slovakia

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

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

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

## Slovenia

**Breeding population size:** MIHELIČ T., KMECL P., DENAC K., KOCE U., VREZEC A., DENAC D. (eds.) (2019): Atlas ptic Slovenije. Popis gnezdilk 2002–2017. – DOPPS, Ljubljana.

**Breeding short-term trend:** There are no sources for this information.

**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. (Seguimiento de Aves, 19). SEO/BirdLife. Madrid. 202 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/19_paseriformes_2004_2006_tcm30-208258.pdf) Database of the 'Atlas de las aves reproductoras de España'. Updated version 2011 with data from SEO/Birdlife's monitoring programmes. In: Inventario Español de Especies Terrestres, Inventario Español del Patrimonio Natural y de la Biodiversidad. Ministerio de Agricultura, Alimentación y Medio Ambiente (2011). (http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_bbdd.aspx) Información proporcionada por las Comunidades Autónomas. Martí, R. & del Moral, J.C. (Eds.) (2003). Atlas de las Aves Reproductoras de España. Dirección General de Conservación de la Naturaleza- Sociedad Española de Ornitología. Madrid, 733 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)

**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 (2011). (http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_bbdd.aspx) Información proporcionada por las Comunidades Autónomas. SEO/BirdLife (2019). Programas de seguimiento y grupos de trabajo de SEO/BirdLife 2018. SEO/BirdLife. Madrid. (https:doi.org/10.31170/0073)

**Breeding long-term trend:** Carrascal, L.M. & Palomino, D. (2008). Las aves comunes reproductoras en España. Población en 2004-2006. (Seguimiento de Aves, 19). SEO/BirdLife. Madrid. 202 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/19_paseriformes_2004_2006_tcm30-208258.pdf) 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 (2012). Programa de seguimiento de Avifauna de SEO/BirdLife 2011. SEO/BirdLife. Madrid. 35 pp.

## Sweden

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

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

**Breeding long-term trend:** BirdLife Sverige annual reports

## Switzerland

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

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

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

## Turkey

**Breeding population size:** Eken G., Bozdoğan M., İsfendiyaroğlu S., Kılıç D.T., Lise Y. (2006) Türkiye'nin Önemli Doğa Alanları. Doğa Derneği, Ankara. Birdlife International (2004) Birds in Europe: population estimates, trends and conservation status, Cambridge UK: Birdlife International (Birdlife Conservation series no: 12) Kusbank Bird Database (Ebird) Kirwan G.M., Boyla K. A., Castell P., Demirci B., Özen M., Welch H., Marlow T., 2008, Birds of Turkey. Londra, Christopher Helm, 978-1-4081-0475-

## Ukraine

**Breeding population size:** Atlas work, non-published data

# Bibliography

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

BirdLife International. 2004. Birds in Europe: population estimates, trends and conservation status. BirdLife International, Cambridge, U.K.

Dyrcz, A. 2006. Great Reed-warbler (Acrocephalus arundinaceus). In: J. del Hoyo, A. Elliott, J. Sargatal, D.A. Christie, and E. de Juana (eds), Handbook of the Birds of the World Alive, Lynx Edicions, Barcelona.

Graveland, J.A.A.P. 1998. Reed die-back, water level management and the decline of the Great Reed Warbler ,Acrocephalus arundinaceus in The Netherlands. Ardea-Wageningen 86: 187-201.

Hagemeijer, E.J.M. and Blair, M.J. 1997. The EBCC atlas of European breeding birds: their distribution and abundance. T. and A.D. Poyser, London.