

***Carpodacus erythrinus* (Common Rosefinch)**

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.

Carpodacus erythrinus (Common Rosefinch)

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	
Armenia	30800–43900	<1	2013-2018	complete	0		2007-2018		0		2003-2018	partial	
Austria	200–300	<1	2013-2018	partial	+	15 to 30	2007-2018	expert	+	200 to 500	1981-2018	expert	
Azerbaijan	5000–50000	<1	1996-2019	expert	0		2013-2019	expert	?		1980-2019	expert	
Belarus	70000–120000	2	2010-2018	partial	0	-10 to 10	2012-2019	expert	0	0	1980-2019	expert	
Belgium	0–1	<1	2013-2018	complete	0		2008-2018	complete	0		1973-2018	partial	
Bosnia & HG	3–5	<1	2015-2018	complete	+		2007-2018	complete	+		1980-2018	deficient	
Bulgaria	40–70	<1	2005-2018	partial	+	50 to 100	2000-2018	complete	+	20 to 50	1980-2018	expert	
Czechia	1200–1900	<1	2014-2017	complete	?		2007-2018	deficient	?		1980-2018	deficient	
Denmark	40	<1	2017	complete	-		2006-2017	expert	0	-84 to 1967	1981-2017	complete	
Estonia	80000–120000	2	2013-2017	expert	-	-54 to -47	2007-2018	expert	-	-40 to -32	1983-2018	expert	
Finland	103000–140000	2	2013-2018	complete	-	-34 to -11	2007-2018	complete	-	-65 to -47	1980-2018	complete	
Georgia	10500–106000	<1	2013-2017	partial	?			deficient	?				
Germany	600–1000	<1	2016-2016	expert	0		2004-2016	expert	+		1985-2016	expert	
Latvia	110000–177000	3	2016-2016	complete	-	-43 to 9	2005-2018	complete	-	-71 to -24	1995-2018	complete	
Lithuania	30000–70000	<1	2013-2018	partial	-	-15 to -10	2013-2018	partial	0	0	1980-2018	partial	
Netherlands	15–30	<1	2013-2015	complete	?	-100 to 100	2006-2017	expert	+	650 to 3250	1987-2017	partial	
Norway	500–1300	<1	2013-2018	partial	?		2013-2018	deficient	-	0 to 5	1980-2018	expert	
Poland	32000–59000	<1	2013-2018	complete	-	-39 to 1	2007-2018	complete	?		1980-2018	deficient	
Romania	100–300	<1	2013-2018	expert	+	1 to 20	2007-2018	expert	+	2000 to 3000	1980-2018	expert	
Russia	2900000–6000000	86	2006-2018	partial	-	-20 to -5	2006-2018	expert	?		1981-2018	deficient	
Serbia	20–30	<1	2013-2018	complete	+	80 to 100	2007-2018	complete	+	80 to 100	1980-2018	complete	
Slovakia	500–1000	<1	2013-2018	partial	0		2007-2018	partial	+	10 to 20	1980-2018	partial	
Slovenia	10–30	<1	2002-2018	partial	?		2007-2018	deficient	-	-20 to -10	1980-2018	expert	
Sweden	9000–17000	<1	2013-2018	partial	-	-50 to 0	2007-2018	partial	-	-73 to -48	1980-2018	partial	
Switzerland	50–70	<1	2013–2016	complete	+	63 to 690	2007-2018	complete	F	-19 to 160	1990-2018	complete	
Turkey	20000–60000	<1	2002-2012	expert	?		2008-2019	deficient	?		1980-2013	deficient	
Ukraine	10000–20000	<1	2015-2017	partial	F	5 to 15	2007-2019	expert	F	10 to 25	1980-2019	expert	
EU28	368000–587000	10											
Europe	3410000–6990000	100											

Carpodacus erythrinus (Common Rosefinch)

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	

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.

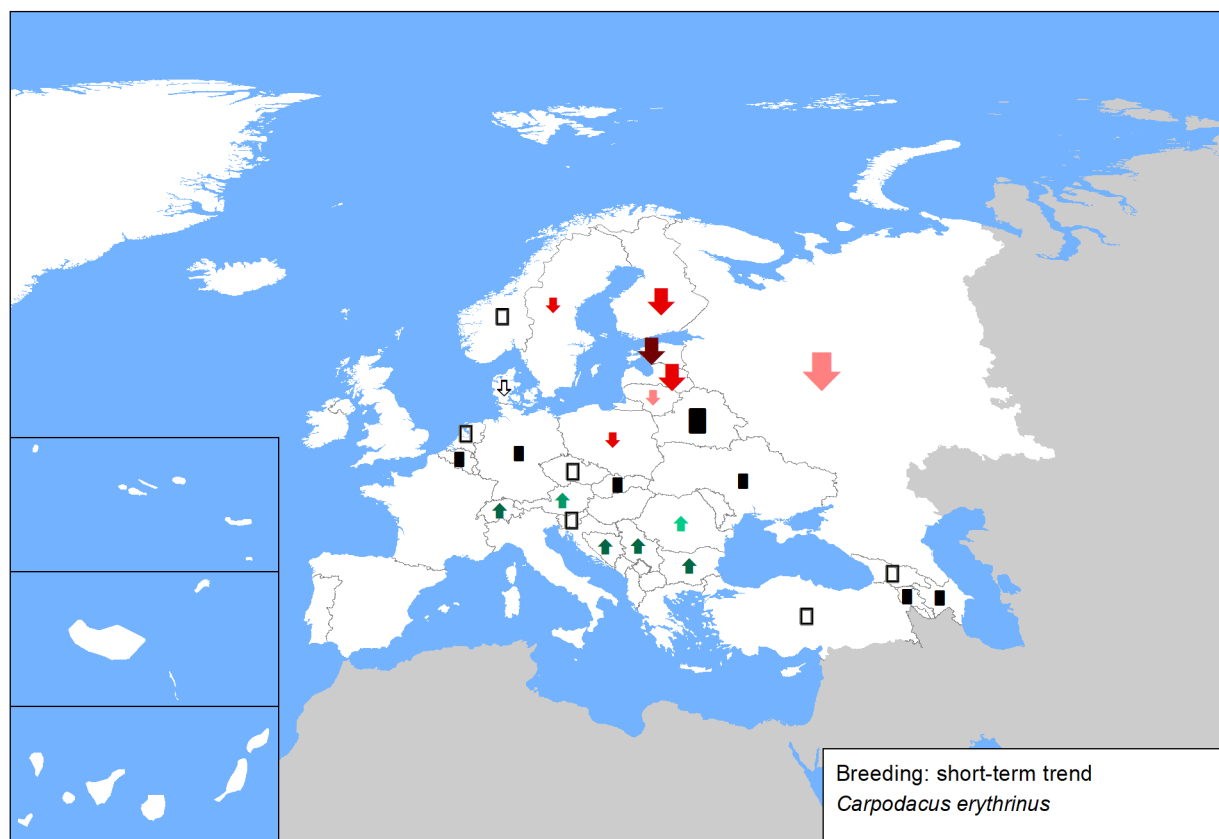
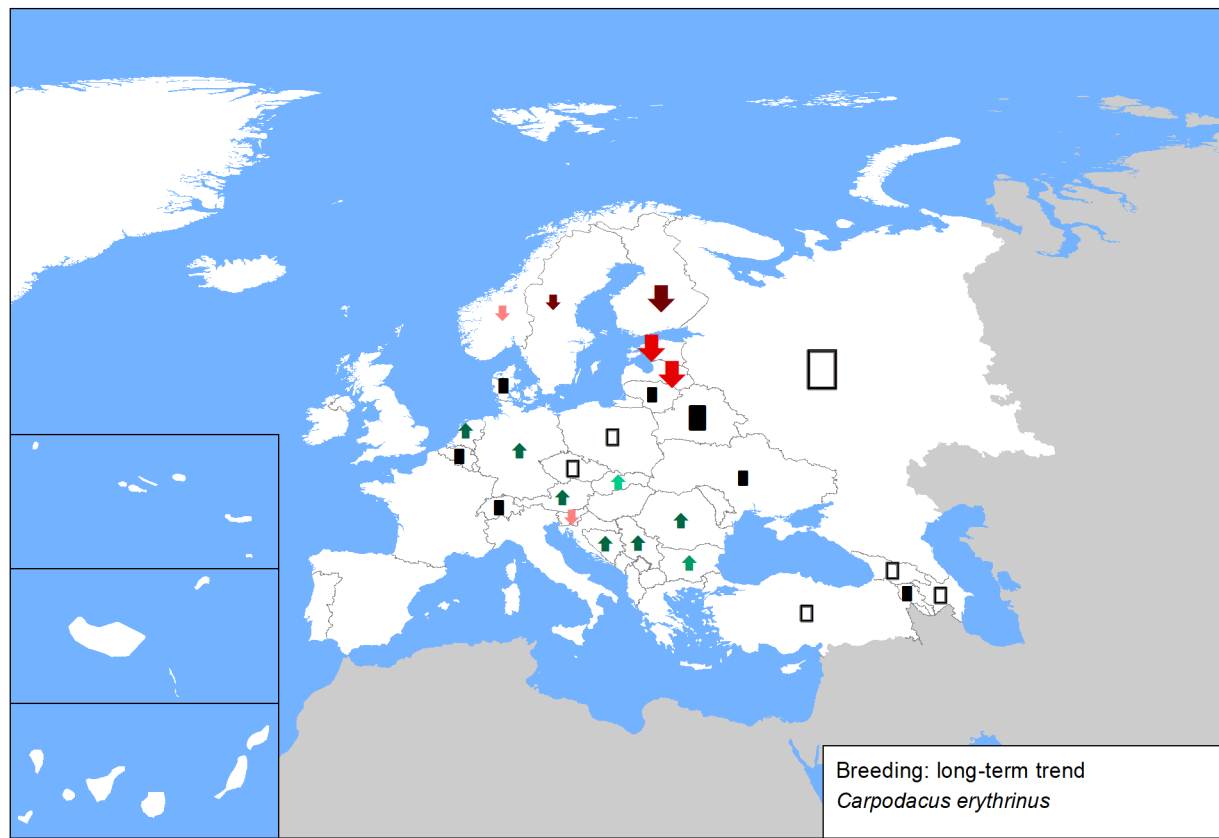


Figure 2. Breeding population sizes and long-term trends across Europe.



Sources

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 data from www.ornitho.at ; BirdLife Austria, unpublished archive data
Breeding long-term trend: 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)
Breeding long-term trend: EBBA2 data

Bulgaria

Breeding population size: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. (In Bulgarian and English); National Art. 12 reporting database 2013-2018; Shurulinkov P.- own unpublished data; S. Ch. Nikolov, D. Ragayov, L. Linnartz, D. Gradinarov & V. Shishkova: Observations of the Common Rosefinch <i>Carpodacus erythrinus</i> in Bulgaria in 2006 and 2007, <i>Acrocephalus</i> 29 (136): 55-57, 2008;
Breeding short-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. (In Bulgarian and English); National Art. 12 reporting database 2013-2018; Ivanov B. 2011 Fauna of Bulgaria. Vol 30 , Aves, part 3. BAS, Sofia. Shurulinkov P., B. Nikolov, G. Stoyanov, I. Nikolov (2003) Erstes sicheres Brüten des Karmingimpels in Bulgarien. <i>Orn. Mitteilungen</i> , 55(4): 122-127 P.Shurulinkov-own unpublished data
Breeding long-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. (In Bulgarian and English) Ivanov B. 2011 Fauna of Bulgaria. Vol 30 , Aves, part 3. BAS, Sofia. BSPB Database

Czechia

Breeding population size: Šťastný et Bejček in prep. - Atlas hnízdního rozšíření ptáků ČR 2014-2017
Breeding short-term trend: expert opinion
Breeding long-term trend: expert opinion

Denmark

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

Estonia

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

Carpodacus erythrinus (Common Rosefinch)

Estonia

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., Sirkiä, P., Tiainen, J. & Valkama, J. 2019: Suomen lintujen pesimäkantojen koot. – Linnut-vuosikirja 2018: 38-45.
Breeding short-term trend: Bird monitoring schemes of the Finnish Museum of Natural History, University of Helsinki.
Breeding long-term trend: Bird monitoring schemes of the Finnish Museum of Natural History, University of Helsinki.

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.

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. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES) Ministry of Environment of the Republic of Lithuania. 2017-2018. Lietuvos saugomų gyvūnų, augalų ir grybų vertinimo pagal IUCN kategorijas ir rūšių aprašymų parengimo paslaugos (Protected species of animals, plants and mushrooms IUCN status estimation and descriptions in Lithuania (Agreement No VPS-2017-16-AARP))
Breeding short-term trend: Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) 2015-2018. Lietuvos perinčių paukščių atlaso duomenų bazė (Lithuanian Breeding Birds Atlas Database). Vilnius. Ministry of Environment of the Republic of Lithuania. 2012. Status and trends of bird populations (Article 12, Birds Directive 2009/147/EC) National Summary 2008-2012 Lithuania. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES) Ministry of Environment of the Republic of Lithuania. 2017-2018. Lietuvos saugomų gyvūnų, augalų ir grybų vertinimo pagal IUCN kategorijas ir rūšių aprašymų parengimo paslaugos (Protected species of animals, plants and mushrooms IUCN status estimation and descriptions in Lithuania (Agreement No VPS-2017-16-AARP))
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. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES) Ministry of Environment of the Republic of Lithuania. 2017-2018. Lietuvos saugomų gyvūnų, augalų ir grybų vertinimo pagal IUCN kategorijas ir rūšių aprašymų parengimo paslaugos (Protected species of animals, plants and mushrooms IUCN status estimation and descriptions in Lithuania (Agreement No VPS-2017-16-AARP))

Netherlands

Breeding population size: Sovon Bird atlas (Sovon 2018)
Breeding short-term trend: Sovon, Sovon (2002), van Kleunen et al. (2013), Sovon (2018)
Breeding long-term trend: Sovon (2002), Sovon Bird atlas (2018)

Norway

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

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

Carpodacus erythrinus (Common Rosefinch)

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 Klemm, W., Kohl S., 1988: Die Ornis Siebenbürgens, Band III, Studia Transylvanica 8/III, Böhlau Verlag, Köln Wien

Russia

Breeding population size: Voltzit & Kalyakin 2013-2019; Database of the project on Atlas of breeding birds of European Russia
Breeding short-term trend: Kostenko 2012; Preobrazhenskaya unpublished. voop21@rambler.ru
Breeding long-term trend: Khohlova & Artemiev 2007; 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: 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 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, Krištin 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, Krištin 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, Krištin 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 gnezdičk 2002–2017. DOPPS, Ljubljana.
Breeding short-term trend: There are no sources for this information.
Breeding long-term trend: Geister I. (1995): Ornitološki atlas Slovenije. Državna založba Slovenije, Ljubljana. Mihelič T., Kmecl P., Denac K., Koce U., Vrezec A., Denac D. (eds.) (2019): Atlas ptic Slovenije. Popis gnezdičk 2002–2017. DOPPS, Ljubljana.

Sweden

Breeding population size: Ottosson, U., Ötqvist, 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

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

Bibliography

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

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

Brazil, M. 2009. *Birds of East Asia: eastern China, Taiwan, Korea, Japan, eastern Russia*. Christopher Helm, London.

Clement, P. and Christie, D.A. 2016. Common Rosefinch (*Carpodacus erythrinus*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds), *Handbook of the Birds of the World Alive*, Lynx Edicions, Barcelona.

Snow, D.W. and Perrins, C.M. 1998. *The Birds of the Western Palearctic, Volume 2: Passerines*. Oxford University Press, Oxford.