

***Carduelis carduelis* (European Goldfinch)**

European Red List of Birds

Supplementary Material

The European Union (EU27) 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 2013-14. 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 (2015).

Contents

Reported national population sizes and trends	p. 2
Trend maps of reported national population data	p. 4
Sources of reported national population data	p. 6
Species factsheet bibliography	p. 11

Recommended citation

BirdLife International (2015) European Red List of Birds. Luxembourg: Office for Official Publications of the European Communities.

Further information

<http://www.birdlife.org/datazone/info/euroredlist>

<http://www.birdlife.org/europe-and-central-asia/european-red-list-birds-0>

<http://www.iucnredlist.org/initiatives/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.

Carduelis carduelis (European Goldfinch)

Table 1. Reported national breeding population size and trends in Europe¹.

Country (or territory) ²	Population estimate				Short-term population trend ⁴				Long-term population trend ⁴				Subspecific population (where relevant)
	Size (pairs) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	
Albania	20,000-50,000	<1	2002-2012	medium	0	0	2002-2012	medium	-	5-10	1980-2012	medium	
Andorra	400-1,000	<1	1999-2001	poor	?				?				
Armenia	80,000-150,000	<1	2002-2012	medium	?				?				
Austria	50,000-80,000	<1	2001-2012	medium	0	0	2000-2011	medium	?				
Azerbaijan	500,000-1,000,000	2	2014	poor	0.0	0	2000-2014	poor	0.0	0	1980-2014	poor	
Belarus	180,000-200,000	1	2001-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Belgium	8,000-14,500	<1	2008-2012	poor	+	2-100	2000-2012	medium	+	19-303	1973-2012	medium	
Bosnia & HG	70,000-100,000	<1	2010-2014	poor	?				?				
Bulgaria	400,000-600,000	1	2005-2012	medium	-	10-50	2000-2012	good	-	5-10	1980-2012	medium	
Croatia	100,000-500,000	1	2014	poor	?				?				
Cyprus	70,000-150,000	<1	2006-2013	medium	-	10-20	2001-2013	medium	?				
Czech Rep.	200,000-400,000	1	2012	medium	0	0	2000-2012	good	0	0	1982-2012	good	
Denmark	23,000	<1	2011	medium	-	20-33	1999-2011	good	+	100-1000	1980-2011	good	
Estonia	40,000-60,000	<1	2008-2012	medium	0	0-10	2001-2012	medium	0	0-10	1980-2012	medium	
Finland	7,700-15,000	<1	2006-2012	good	+	30-148	2001-2012	medium	+	603-1342	1983-2012	medium	
France	800,000-1,500,000	3	2008-2012	medium	-	49	2001-2011	good	-	18	1989-2011	medium	
Georgia	Present	<1			?				?				
Germany	305,000-520,000	1	2005-2009	medium	-	37-48	1998-2009	good	-	26-52	1990-2009	good	
Greece	830,000-1,080,000	3	2007-2013	good	0	0	2007-2013	medium	?				
Hungary	622,000-763,000	2	2000-2012	medium	0	0	1999-2012	medium	?				
Rep. Ireland	367,927-989,620	1	2006-2011	good	+	135-216	1998-2011	good	?				
Italy	1,000,000-1,800,000	4	2013	poor	-	20-30	2000-2012	medium	-	20-30	1990-2012	poor	
Kosovo	50,000-70,000	<1	2009-2014	medium	?				?				
Latvia	48,861-139,543	<1	2009	medium	0	0-60	2001-2012	medium	0	0-70	1995-2012	medium	
Liechtenstein	60-80	<1	2009-2014	medium	+	20-40	2003-2014	medium	+	30-50	1980-2014	medium	
Lithuania	50,000-100,000	<1	2008-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Luxembourg	3,000-6,000	<1	2008-2012	medium	?				?				
FYRO Macedonia	10,000-50,000	<1	2001-2012	poor	?				?				
Moldova	20,000-30,000	<1	2000-2010	medium	F	0	2000-2010	medium	0	0	1980-2010	medium	
Montenegro	50,000-70,000	<1	2002-2012	poor	?				?				
Netherlands	31,664-42,219	<1	2008-2011	medium	+	80-119	2002-2011	medium	+	407-1125	1984-2011	medium	
Norway	1,000-5,000	<1	2013	poor	+	10-25	2000-2013	medium	?				

Carduelis carduelis (European Goldfinch)

Table 1. Reported national breeding population size and trends in Europe¹.

Country (or territory) ²	Population estimate				Short-term population trend ⁴				Long-term population trend ⁴				Subspecific population (where relevant)
	Size (pairs) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	
Poland	650,000-1,000,000	2	2008-2012	good	-	35-44	2000-2012	good	?				
Portugal	500,000-1,000,000	2	2008-2012	medium	0	0	2004-2011	medium	?				
PT: Azores	0-127,273	<1	2008-2012	poor	?				?				
PT: Madeira	1,000-5,000	<1	2009-2012	medium	0	0	2001-2012	medium	+		1980-2012	medium	
Romania	750,000-1,500,000	3	2010-2013	medium	F	0-20	2001-2013	medium	?				
Russia	1,000,000-2,500,000	5	2000-2012	medium	?				+	10-50	1980-2012	medium	
Serbia	140,000-190,000	<1	2008-2012	medium	-	1-9	2000-2012	medium	0	0	1980-2012	medium	
Slovakia	100,000-150,000	<1	2002	good	0	0	2000-2012	good	0	0	1980-2012	good	
Slovenia	28,000-112,000	<1	2008-2012	medium	-	27-35	2001-2012	good	?				
Spain	15,515,000-19,010,000	51	2004-2006	good	0	0	1998-2012	good	0	0	1980-2012	medium	
ES: Canary Is	2,500-10,000	<1	1997-2003	poor	?				?				
Sweden	21,000-49,000	<1	2008-2012	medium	+	70-260	2001-2012	good	+	590-3300	1980-2012	good	
Switzerland	20,000-50,000	<1	2008-2012	medium	0	0	2001-2012	good	-	23-52	1990-2012	medium	
Turkey	1,500,000-4,500,000	8	2013	poor	0	0	2000-2012	poor	-	0-19	1990-2013	poor	
Ukraine	560,000-720,000	2	2000	medium	-	5-10	1998-2010	medium	-	10-15	1980-2010	medium	
United Kingdom	1,100,000-1,300,000	4	2009	medium	+	84	1998-2010	good	+	82	1980-2010	good	
EU27	23,500,000-32,500,000	80			Stable								
Europe	27,800,000-42,700,000	100			Stable								

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 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.

⁵ Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).

⁶ 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.

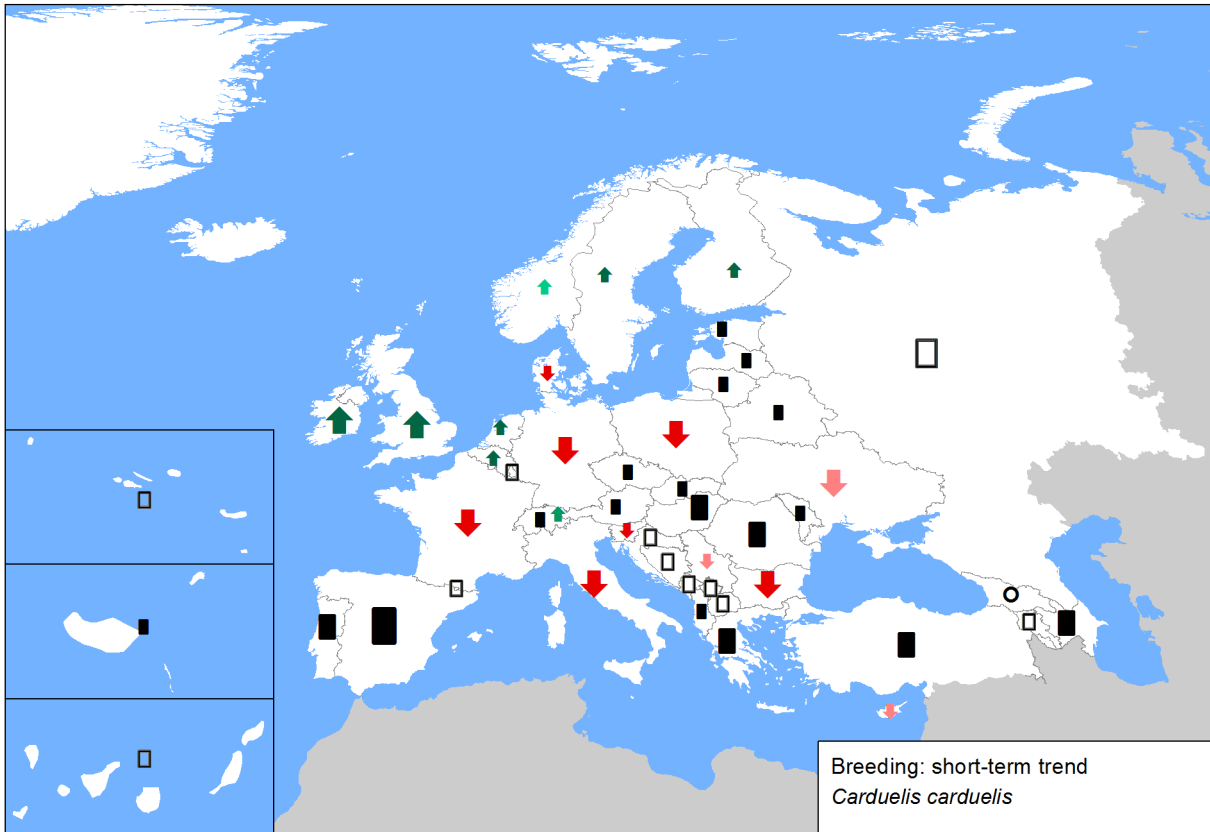
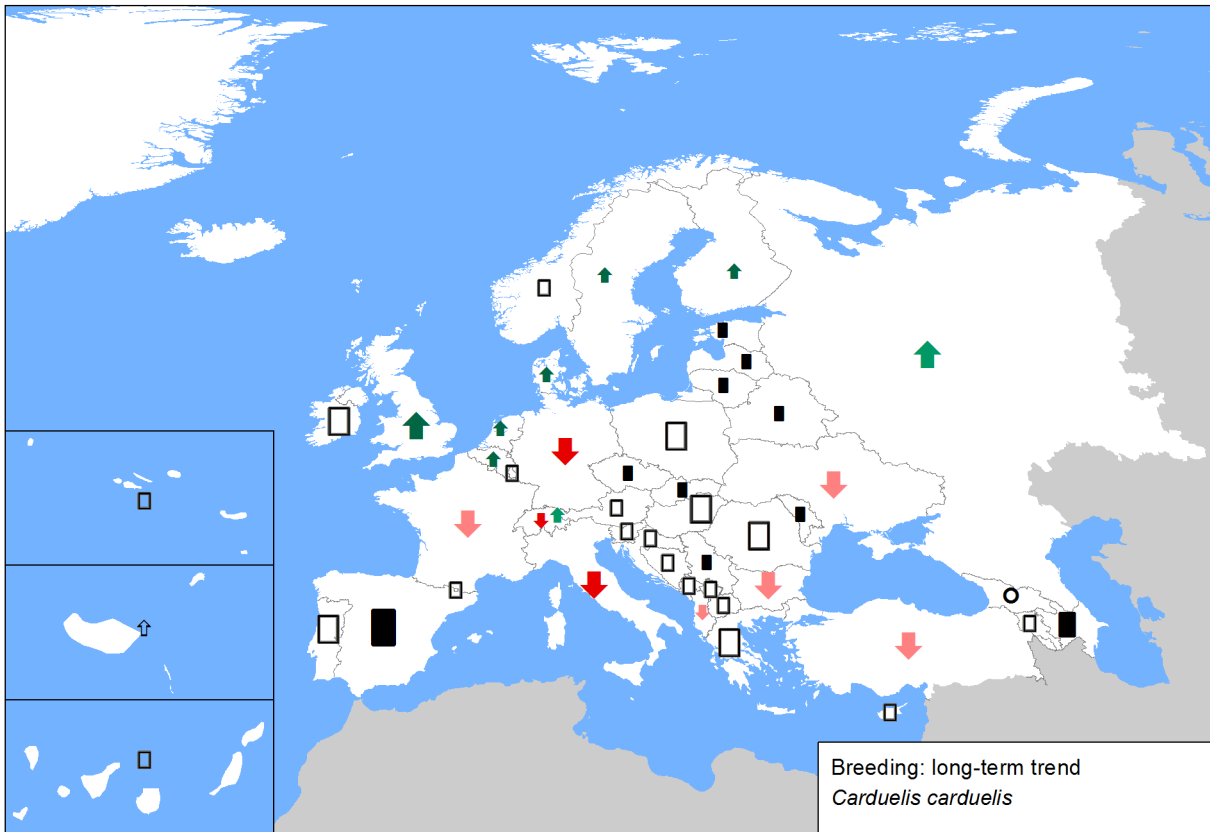


Figure 2. Breeding population sizes and long-term trends across Europe.



Carduelis carduelis (European Goldfinch)

Sources

Albania

Breeding population size: Bino pers. obs.
Breeding short-term trend: Bino pers. obs.
Breeding long-term trend: Bino pers. obs.

Andorra

Breeding population size: BirdLife International 2004
--

Armenia

Breeding population size: ASPB data
--

Austria

Breeding population size: BirdLife Austria, extrapolation on the basis of available unpublished and published population and density data
Breeding short-term trend: N. Teufelbauer based on data from the Austrian Common Breeding Bird Monitoring

Azerbaijan

Breeding population size: AOS data base
Breeding short-term trend: AOS data base
Breeding long-term trend: AOS data base

Belarus

Breeding population size: Zhuravliev D.V. - personal communication
Breeding short-term trend: BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. (BirdLife Conservation Series, No 12).
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: Data Breeding Bird atlas Wallonia (Jacob et al 2010), Brussels (Weiserbs 2012) and Flanders (Vermeersch et al 2004) in combination with trend data.
Breeding short-term trend: Common bird monitoring schemes
Breeding long-term trend: Comparison between 2008-2012 estimate and Devillers, 1989 (Atlas of the Belgian Breeding Bird) population estimate

Bosnia and Herzegovina

Breeding population size: unpublsh 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. Hristov, I. and N. Petkov, 2013. State of Common Birds in Bulgaria 2005-2011. Bulgarian Society for the Protection of Birds. Conservation series. Book 26. BSPB. Sofia. Common birds monitoring scheme in Bulgaria http://bspb.org/monitoring/bg/product-view/2/11.html BSPB Bird Database SPA mapping of breeding birds 2012
Breeding short-term trend: Common birds monitoring scheme in Bulgaria http://bspb.org/monitoring/bg/product-view/2/11.html (Population trend estimate covers the period 2005-2012) BSPB Bird Database
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. BSPB Bird Database

Croatia

Breeding population size: BiE III Work group, Croatia
Breeding short-term trend: BiE III Work group, Croatia
Breeding long-term trend: BiE III Work group, Croatia

Cyprus

Breeding population size: 2013 Common Birds Monitoring programme set up by BirdLife Cyprus, with relevant line transect survey data analysed using DISTANCE programme; Also similar analysis of field data from surveys carried out in some SPAs by Game & Fauna Service; Unpublished analysis of monitoring data for the W of Cyprus by proff Derek Pomeroy;
Breeding short-term trend: Analysis of records from line transect survey data for the period 2006-2013 using TRIM software. The data was from line transect surveys carried out under three different but compatible common birds survey programmes (one a 2006-12 pilot programme set up by BirdLife Cyprus and the other a 2006-11 W Cyprus programme operated by Proff Derek Pomeroy). These programmes were merged and expanded in 2013 under a Common Birds Monitoring programme managed by BirdLife Cyprus. This analysis has been detailed in a September 2013 report by BirdLife Cyprus to the Cyprus government, under a contract to produce the Farmland Birds Index for Cyprus; Also data from Game & Fauna Service transects 2004-2013
Breeding long-term trend: Recent data as above, but no systematic data is available for before 2006.

Carduelis carduelis (European Goldfinch)

Czech Republic

Breeding population size: STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnízdního rozšíření ptáku v České republice. Aventinum Praha. JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=865>

Breeding short-term trend: JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=865>

Breeding long-term trend: JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=865>

Denmark

Breeding population size: BIRDLIFE INTERNATIONAL (2004) Birds in Europe: population estimates, trends and conservation status. Wageningen, The Netherlands: BirdLife International. (BirdLife Conservation Series No. 12) Heldbjerg, H. & Lerche-Jørgensen, M. (2012): Overvågning af de danske almindelige fuglearter i Danmark 1975-2011. Årsrapport for Punkttællingsprojektet. Dansk Ornitologisk Forening. (The Danish Point Count Census for breeding birds during the period 1999-2011)

Breeding short-term trend: Heldbjerg, H. & Lerche-Jørgensen, M. (2012): Overvågning af de danske almindelige fuglearter i Danmark 1975-2011. Årsrapport for Punkttællingsprojektet. Dansk Ornitologisk Forening. (The Danish Point Count Census for breeding birds during the period 1999-2011)

Breeding long-term trend: Heldbjerg, H. & Lerche-Jørgensen, M. (2012): Overvågning af de danske almindelige fuglearter i Danmark 1975-2011. Årsrapport for Punkttællingsprojektet. Dansk Ornitologisk Forening. The Danish Point Count Census for breeding birds during the period 1980-2011

Estonia

Breeding population size: Elts, J., Leito, A., Leivits, A., Luigujõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. *Hirundo* 26(2): 80-112. URL: http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf

Breeding short-term trend: Elts, J., Leito, A., Leivits, A., Luigujõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. *Hirundo* 26(2): 80-112. URL: http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf

Breeding long-term trend: Elts, J., Leito, A., Leivits, A., Luigujõe, L., Mägi, E., Nellis, Rein, Nellis, Renno, Ots, M., Pehlak, H. 2013. Status and numbers of Estonian birds, 2008–2012. *Hirundo* 26(2): 80-112. URL: http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf

Finland

Breeding population size: Bird monitoring schemes of the Finnish Museum of Natural History, University of Helsinki.

Breeding short-term trend: Winter bird censuses of the Finnish Museum of Natural History, University of Helsinki.

Breeding long-term trend: Winter bird censuses of the Finnish Museum of Natural History, University of Helsinki.

France

Breeding population size: <http://www.atlas-ornitho.fr/>

Breeding short-term trend: <http://vigienature.mnhn.fr/page/chardonneret-elegant>

Breeding long-term trend: <http://vigienature.mnhn.fr/page/chardonneret-elegant>

Georgia

Breeding population size: BirdLife International 2004

Germany

Breeding population size: Gedeon, K., C. Grüneberg, A. Mitschke & C. Sudfeldt (in Vorb.): Atlas Deutscher Brutvogelarten. SVD & DDA, Münster.

Breeding short-term trend: Monitoring häufiger Brutvögel

Breeding long-term trend: Monitoring häufiger Brutvögel

Greece

Breeding population size: Hellenic Common Birds Monitoring Scheme database, Hellenic Ornithological Society

Breeding short-term trend: Hellenic Common Birds Monitoring Scheme database, Hellenic Ornithological Society

Hungary

Breeding population size: National common bird monitoring scheme (MMM) database. Szép, T., Nagy, K., Nagy, Zs. and Halmos, G. (in press) Population trends of common breeding and wintering birds in Hungary, decline of long-distance migrant and farmland birds during 1999-2012. *Ornis Hungarica*

Breeding short-term trend: National common bird monitoring scheme (MMM) database. 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. *Ornis Hungarica* 20(2): 13-63.

Republic of Ireland

Breeding population size: Crowe, O., Musgrove, A.J. & O'Halloran, J. (2014). Generating population estimates for common and widespread breeding birds in Ireland. *Bird Study* 61 (1) 82 - 90.

Breeding short-term trend: Crowe, O. (2013). Calculation of short-term trends for Common and Widespread Breeding Birds for Article 12 Reporting. Unpublished report.

Breeding long-term trend: Baillie, S.R., Marchant, J.H., Leech, D.I., Massimino, D., Eglinton, S.M., Johnston, A., Noble, D.G., Barimore, C., Kew, A.J., Downie, I.S., Risely, K. & Robinson, R.A. (2013) *BirdTrends 2012: trends in numbers, breeding success and survival for UK breeding birds*. BTO Research Report No. 644. BTO, Thetford. <http://www.bto.org/birdtrends>. Balmer, D., Gillings, S., Caffrey, B., Swan, B., Downie, I. & Fuller, R. (2013) *Bird Atlas 2007-11 The breeding and wintering birds of Britain and Ireland*. British Trust for Ornithology Crowe, O. (2013) Calculation of short-term trends for Common and Widespread Breeding Birds for Article 12 Reporting. Unpublished report. Expert opinion - O. Crowe, BirdWatch Ireland, <http://birdwatchireland.ie/>. Sharrock, J.T.R. (1976) *The Atlas of Breeding Birds in Britain and Ireland*. T. & AD Poyser.

Italy

Breeding population size: Bricchetti P & Fracasso G. 2013. *Ornitologia italiana*. Vol.8 (Sturnidae-Fringillidae). Alberto Perdisa Editore, Bologna

Breeding short-term trend: Rete Rurale Nazionale & LIPU 2013. Uccelli comuni in Italia. Gli andamenti di popolazione dal 2000 al 2012

Breeding long-term trend: Rete Rurale Nazionale, LIPU 2013. Uccelli comuni in Italia. Gli andamenti di popolazione dal 2000 al 2012 BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. BirdLife Conservation Series No. 12

Carduelis carduelis (European Goldfinch)

Kosovo

Breeding population size: NGO "Finch" (2014)

Latvia

Breeding population size: Calculation based on data collected in Latvian Breeding bird monitoring scheme: Aunins A., Keišs O. 2012. [Monitoring for the Farmland Bird Population Index. Final report for the year 2012.] (in Latvian) Latvian Ornithological society, 47 p

Breeding short-term trend: Aunins A. 2006. [Ensuring continuity and compatibility of bird monitoring data regarding changes in the Biodiversity monitoring section of the National Monitoring programme]. Aunins A. 2012. [Changes in the Abundance of Common Birds in Latvia during the Previous Seven Years]. Putni Dabā 2013/1, 10 - 13. Aunins A., Keišs O. 2012. [Monitoring for the Farmland Bird Population Index. Final report for the year 2012.]. Latvian Ornithological society, 47 pp.

Breeding long-term trend: Aunins A. 2006. [Ensuring continuity and compatibility of bird monitoring data regarding changes in the Biodiversity monitoring section of the National Monitoring programme]. Aunins A. 2012. [Changes in the Abundance of Common Birds in Latvia during the Previous Seven Years]. Putni Dabā 2013/1, 10 - 13. Aunins A., Keišs O. 2012. [Monitoring for the Farmland Bird Population Index. Final report for the year 2012.]. Latvian Ornithological society, 47 pp.

Liechtenstein

Breeding population size: Willi, G. (2014) Unpublished collection data

Breeding short-term trend: Willi, G. (2006) Die Vögel des Fürstentums Liechtenstein. Amtlicher Lehrmittelverlag, Vaduz (Naturkundliche Forschung im Fürstentum Liechtenstein, Bd. 22.

Breeding long-term trend: Willi, G. & M.F. Broggi (1986) Die Vogelwelt des Fürstentums Liechtenstein unter Berücksichtigung der benachbarten Gebiete; Teil III: Passeriformes. Ber. Bot.-Zool. Ges. Liechtenstein-Sargans-Werdenberg, Band 15, S. 37-82.; Willi, G. (2006) Die Vögel des Fürstentums Liechtenstein. Amtlicher Lehrmittelverlag, Vaduz (Naturkundliche Forschung im Fürstentum Liechtenstein, Bd. 22.

Lithuania

Breeding population size: Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p.

Breeding short-term trend: BirdLife International/European Bird Census Council 2004. Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 12). Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p. Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p. Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt)

Breeding long-term trend: BirdLife International/European Bird Census Council. 2000. European bird populations: estimates and trends. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 10). Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p. Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt)

Luxembourg

Breeding population size: LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3

Breeding short-term trend: LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3

Breeding long-term trend: LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg Lorgé P., E. Melchior (2010): Die Vögel Luxemburgs. LNVL, Luxembourg. ISBN: 978-2-919920-01-3

The Former Yugoslav Republic of Macedonia

Breeding population size: M. Velevski, unedited data

Moldova

Breeding population size: The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.

Breeding short-term trend: The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.

Breeding long-term trend: 1.Аверин Ю. В., Ганя И.М., Успенский Г. Птицы Молдавии, том 2, Кишинев,1971, 2р 2.Burfield I., Bommel van F., Birds in Europe. Population estimates, trends and conservation status. BirdLife International. Oxford, 2004. 374p. 3 .The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.

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: NEM, Sovon en CBS, SOVON (2002)

Breeding short-term trend: NEM, Sovon en CBS, Boele et al. (2013)

Breeding long-term trend: NEM, Sovon en CBS

Norway

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

Breeding short-term trend: County bird recorders (LRSK)

Poland

Breeding population size: Chodkiewicz T., Kuczyński L., Sikora A., Ławicki Ł., Chylarecki P., Neubauer G., Meissner W., Rohde Z. 2013. Opracowanie raportu dla Komisji Europejskiej z wdrażania Dyrektywy Ptasiej w Polsce w zakresie Monitoringu Ptaków Polski w Państwowym Monitoringu Środowiska. Sprawozdanie dla Głównego Inspektoratu Ochrony Środowiska. OTOP, Marki.

Carduelis carduelis (European Goldfinch)

Poland

Breeding short-term trend: MPPL: Chylarecki P. 2013. Czynniki kształtujące zmiany liczebności pospolitych ptaków Polski w latach 2000-2012. MiIZ PAN Warszawa. Bogucki. Wyd. Nauk. 1-126; Chodkiewicz T., Woźniak B., Chylarecki P. 2012. Monitoring Pospolitych Gatunków Ptaków. In: Podsumowanie sezonu lęgowego Monitoringu Ptaków Polski w 2012 r. OTOP, MiIZ, KOO, SOS: 29-45 (source: http://monitoringptakow.gios.gov.pl/raporty?file=files/pliki/raporty_faza4/RaportMPP4_etap1_zad2%264_wiosna2012.pdf)

Portugal

Breeding population size: Programa Censos de Aves Comuns (CAC); Equipa Atlas (2008). Atlas das Aves Nidificantes em Portugal (1999-2005). Instituto da Conservação da Natureza e da Biodiversidade, Sociedade Portuguesa para o Estudo das Aves, Parque Natural da Madeira e Secretaria Regional do Ambiente e do Mar. Assírio e Alvim. Lisboa.

Breeding short-term trend: Programa Censos de Aves Comuns (CAC)

PT: Azores

Breeding population size: Dados CAC Açores, extracção de dados 2008-2012 (Não publicado)

PT: Madeira

Breeding population size: Equipa Atlas, 2013 -http://www.atlasdasaves.netmadeira.com/index.php?option=com_content&view=article&id=164&Itemid=66 =pt

Breeding short-term trend: Meirinho, A., Leal, A., Marques, A.T., Fagundes, A.I., Sampaio, H., Costa, J. & Leitão, D. 2013. O estado das aves comuns em Portugal 2011: Relatório do projeto Censo de Aves Comuns. Sociedade Portuguesa para o Estudo das Aves, Lisboa http://www.spea.pt/fotos/editor2/relatoriocac_2011.pdf

Breeding long-term trend: Oliveira, P., Costa Neves, H. & Silva, I. 1998. Composition, Structure and Density Changes of Passerine Communities in Laurel Forest, Exotic Forest and Agricultural Fields on Madeira Island. Boletim Museu Municipal, nº5: 291-298.

Romania

Breeding population size: Romanian Commonbird Monitoring Programme, 2007-2012 SOR database, Milvus database

Breeding short-term trend: Romanian Commonbird Monitoring Programme, 2007-2012 SOR database, Milvus database

Breeding long-term trend: Romanian Commonbird Monitoring Programme, 2007-2012 SOR database, Milvus database

Russia

Breeding population size: Ravkin E.S., Ravkin Yu.S. 2005. Birds of Northern Eurasian plains: numbers, distribution, spatial organization of communities. Novosibirsk, Nauka: 304 p. (in Russian). Numerov A.D. 1996. Class Birds Aves. – Natural resources of Voronezh Region. Vertebrate Animals. Cadaster. Voronezh, Biomik: 48-159 (in Russian). Sarychev V.S. (ed.) 2009. Vertebrates of Lipetsk Region. Voronezh: 494 p. Sarychev V.S., unpublished. vssar@yandex.ru Belik V.P. 2005. Cadastre of breeding avifauna of South Russia. Strepet 3, no. 1-2: 5-37 (in Russian).

Breeding short-term trend: Preobrazhenskaya E.S., unpublished. voop21@rambler.ru Belik V.P., unpublished. vpbelik@mail.ru

Breeding long-term trend: Sarychev V.S. (ed.) 2009. Vertebrates of Lipetsk Region. Voronezh: 494 p. Sarychev V.S., unpublished. vssar@yandex.ru Preobrazhenskaya E.S., unpublished. voop21@rambler.ru Belik V.P. et al. 2003. Recent population trends of breeding birds in the Southern Russia. - Strepet 1: 10-30 (in Russian).

Serbia

Breeding population size: BPSSS (2014) Unpublished data

Breeding short-term trend: BPSSS (2014) Unpublished data

Breeding long-term trend: BPSSS (2014) Unpublished data

Slovakia

Breeding population size: Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002. Databáza výskytu mapovateľa: M. Fulína, dátum 15.3.2012

Breeding short-term trend: Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Breeding long-term trend: Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

Slovenia

Breeding population size: NOAGS <http://www.ptice.si/atlas> Krmecl, P. & Figelj, J. (2013): Monitoring splošno razširjenih vrst ptic za določitev slovenskega indeksa ptic kmetijske krajine - poročilo za leto 2013. – DOPPS, Ljubljana. http://www.natura2000.gov.si/uploads/tx_library/SIPKK_2013_1.pdf

Breeding short-term trend: Krmecl, P. & Figelj, J. (2013): Monitoring splošno razširjenih vrst ptic za določitev slovenskega indeksa ptic kmetijske krajine - poročilo za leto 2013. – DOPPS, Ljubljana. http://www.natura2000.gov.si/uploads/tx_library/SIPKK_2013_1.pdf

Breeding long-term trend: <http://www.ptice.si/atlas> Geister, I. (1995): Ornitološki atlas Slovenije. DZS, Ljubljana.

Spain

Breeding population size: Carrascal, L.M. & D. Palomino (2008). Las aves comunes reproductoras en España. Población en 2004-2006. (Seguimiento de Aves, 19). SEO/BirdLife. Madrid. 202 pp. http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/19_paseriformes_2004_2006_tcm7-218232.pdf

Breeding short-term trend: SEO/BirdLife (2013). Resultados del programa Sacre de SEO/BirdLife en 2012. SEO/BirdLife. Madrid. Información obtenida a partir de la Base de Datos del Inventario de especies terrestres. Seguimiento de Aves SACRE. (Ministerio de Agricultura, Alimentación y Medio Ambiente). http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/tendencia_aves_comunes_espania.aspx Gráfica de la tendencia poblacional: http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/ieet_aves_sist_seg_tendencia_comunes_esp.aspx <http://www.seo.org/RESULTADOS-SEGUIMIENTO-DE-AVES/>

Breeding long-term trend: 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. http://www.magrama.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.

Carduelis carduelis (European Goldfinch)

ES: Canary Is

Breeding population size: Martín, A. & J. A. Lorenzo. 2001. Aves del Archipiélago Canario. Francisco Lemus Editor. La Laguna. 787 pp. Lorenzo, J.A. 2007 (ed). Atlas de las Aves Nidificantes en el Archipiélago Canario (1997-2003). Dirección General de Conservación de la Naturaleza-Sociedad Española de Ornitología. Madrid. 520 pp.

Breeding short-term trend: Martín, A. & J. A. Lorenzo. 2001. Aves del Archipiélago Canario. Francisco Lemus Editor. La Laguna. 787 pp. Lorenzo, J.A. 2007 (ed). Atlas de las Aves Nidificantes en el Archipiélago Canario (1997-2003). Dirección General de Conservación de la Naturaleza-Sociedad Española de Ornitología. Madrid. 520 pp.

Breeding long-term trend: Martín, A. & J. A. Lorenzo. 2001. Aves del Archipiélago Canario. Francisco Lemus Editor. La Laguna. 787 pp. Lorenzo, J.A. 2007 (ed). Atlas de las Aves Nidificantes en el Archipiélago Canario (1997-2003). Dirección General de Conservación de la Naturaleza-Sociedad Española de Ornitología. Madrid. 520 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. Sveriges Ornitologiska Förening, Halmstad.

Breeding short-term trend: Swedish Bird Survey (Svensk Fågeltaxering), Lund University.

Breeding long-term trend: Swedish Bird Survey (Svensk Fågeltaxering), Lund University.

Switzerland

Breeding population size: Original estimate: Schmid, H., R. Luder, B. Naef-Daenzer, R. Graf & N. Zbinden (1998): Schweizer Brutvogelatlas. Verbreitung der Brutvögel in der Schweiz und im Fürstentum Liechtenstein 1993-1996/Atlas des oiseaux nicheurs de Suisse. Distribution des oiseaux nicheurs en Suisse et au Liechtenstein en 1993-1996. Schweizerische Vogelwarte/Station ornithologique suisse, Sempach. Swiss Ornithological Institute: checked with population trend: no change.

Breeding short-term trend: Swiss Ornithological Institute. <http://www.vogelwarte.ch/monitoring-common-breeding-birds.html>. 95% Confidence interval see point 3.3.

Breeding long-term trend: Swiss Ornithological Institute. <http://www.vogelwarte.ch/monitoring-common-breeding-birds.html>. Data before 1999 from less standardised survey. Min Max refer to 95% Confidence interval.

Turkey

Breeding population size: Cemil Gezgin personal communication. Birdlife International (2004) Birds in Europe: population estimates, trends and conservation status, Cambridge UK: Birdlife International (Birdlife Conservation series no:12 www.kusbank.org)

Breeding short-term trend: Doğa Derneği, Eken G., Bozdoğan M., İsfendiyaroğlu S., Kılıç D.T., Lise Y. (2006) Key Biodiversity Areas of Turkey (Türkiye'nin Önemli Doğa Alanları) Doğa Derneği, Ankara, KILIÇ, T., EKEN, G. 2004, Türkiye'nin Önemli Kuş Alanları Güncellemesi, Doğa Derneği. Ankara.

Breeding long-term trend: Birdlife International (2004) Birds in Europe: population estimates, trends and conservation status, Cambridge UK: Birdlife International (Birdlife Conservation series no: 12)

Ukraine

Breeding population size: 1. Hagemajier W.J.M., Blair M.J. The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance. Poyser. - London. 1997. 903 p. 2. Heath M.F., Evans M.I. Important birds areas in Europe. Priority sites for conservation. // Southern Europe. BirdLife International. - Cambridge. Vol.2., 2000. P. 691-724. 3. European birds populations; Estimates and trends Compiled by M. Heath, C. Borggreve, N. Peet, W. Hagemajier/ BirdLife International/EBCC. 2000. Cambridge, UK: BirdLife Conservation Series N10, 160 p. 4. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158.

Breeding short-term trend: 1. Бокотей А.А., Дзюбенко Н.В., Горбань І.М. та інші. Гніздова орнітофауна басейну Верхнього Дністра. – Львів: ЛНУ, 2010. – 400 с. 2. Dombrowski A., Piotrowska M., Gorban I., Nikiforov M. Status and threats to avifauna. (Eds. Dombrowski A., & Z. Glowacki, та інші). Bug river valleys the ecological corridor: state-threats-protection. IUCN European Programme. Warsaw. 2002. S. 87-102. 3. Горбань І.М. Рідкісні види птахів Шацького національного парку. // Вісник Львівського університету. Серія біологічна. Вип. 29. 2002. С.188-199.

Breeding long-term trend: 1. Tucker G.M., Heath M.F. Birds in Europe: their conservation status. - Cambridge. U.K. Bird Life Conservation Series № 3. 1994. 600 p. 2. Hagemajier W.J.M., Blair M.J. The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance. Poyser. - London. 1997. 903 p. 3. Heath M.F., Evans M.I. Important birds areas in Europe. Priority sites for conservation. // Southern Europe. BirdLife International. - Cambridge. Vol.2., 2000. P. 691-724. 4. European birds populations; Estimates and trends Compiled by M. Heath, C. Borggreve, N. Peet, W. Hagemajier/ BirdLife International/EBCC. 2000. Cambridge, UK: BirdLife Conservation Series N10, 160 p. 5. Горбань І.М., Бокотей А.А. Вплив трансформаційних процесів на фауну та населення птахів басейну Верхнього Дністра. Дослідження басейнової екосистеми Верхнього Дністра. Збірник наукових праць. 2000. С.145 – 155. 6. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 7. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p. 8. Бокотей А.А., Дзюбенко Н.В., Горбань І.М. та інші. Гніздова орнітофауна басейну Верхнього Дністра. – Львів: ЛНУ, 2010. – 400 с.

United Kingdom

Breeding population size: Newson, S.E., Evans, K.L., Noble, D.G., Greenwood, J.J.D. & Gaston, K.J. 2008. Use of distance sampling to improve estimates of national population sizes for common and widespread breeding birds in the UK. Journal of Applied Ecology 45: 1330–1338. Musgrove, A.J., Aebischer, N.J., Eaton, M.A., Hearn, R.D., Newson, S.E., Noble, D.G., Parsons, M., Risely, K. & Stroud, D.A. 2013. Population estimates of birds in Great Britain and the United Kingdom. British Birds 106: 64-100.

Breeding short-term trend: BTO/JNCC/RSPB Breeding Bird Survey data: Risely, K., Massimino, D., Johnston, A., Newson, S.E., Eaton, M.A., Musgrove, A.J., Noble, D.G., Procter, D. & Baillie, S.R. 2012. The Breeding Bird Survey 2011. BTO Research Report 624. British Trust for Ornithology, Thetford. <http://www.bto.org/sites/default/files/u16/downloads/reports/bbsreport11.pdf>

Breeding long-term trend: Baillie, S.R., Marchant, J.H., Leech, D.I., Massimino, D., Eglington, S.M., Johnston, A., Noble, D.G., Barimore, C., Kew, A.J., Downie, I.S., Risely, K. & Robinson, R.A. (2013). BirdTrends 2012: trends in numbers, breeding success and survival for UK breeding birds. Research Report 644. BTO, Thetford. <http://www.bto.org/birdtrends>

Bibliography

Clement, P. 2010. European Goldfinch (*Carduelis carduelis*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds.) 2014. *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/61359> on 24 March 2015).

Hagemeijer, W.J.M. and Blair, M.J. 1997. *The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance*. T & A D Poyser, London.

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