

***Carduelis chloris* (European Greenfinch)**

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).

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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 chloris (European Greenfinch)

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	50-100	<1	1999-2001	medium	?				?				
Armenia	30,000-100,000	<1	2002-2012	medium	?				?				
Austria	190,000-280,000	1	2001-2012	medium	0	0	2000-2011	medium	?				
Azerbaijan	100,000-200,000	1	1996-2000	poor	?				?				
Belarus	200,000-250,000	1	2001-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Belgium	70,000-130,000	<1	2008-2012	poor	+	0-42	2000-2012	medium	0	0	1973-2012	medium	
Bosnia & HG	120,000-160,000	1	2010-2014	poor	?				?				
Bulgaria	200,000-400,000	1	2005-2012	medium	F	10-25	2000-2012	good	0	10-15	1980-2012	medium	
Croatia	100,000-500,000	1	2014	poor	?				?				
Cyprus	40,000-120,000	<1	2006-2013	medium	0	0	2001-2013	medium	+	10-50	1980-2012	poor	
Czech Rep.	562,500-1,125,000	3	2012	medium	+	17-50	2000-2012	good	-	1-35	1982-2012	good	
Denmark	500,000	2	2011	medium	0	0	1999-2011	medium	+	50-100	1980-2011	medium	
Estonia	80,000-120,000	<1	2008-2012	medium	+	20-50	2001-2012	medium	+	50-70	1980-2012	medium	
Finland	170,000-400,000	1	2006-2012	good	-	41-57	2001-2012	good	+	349-570	1983-2012	good	
France	1,000,000-2,000,000	5	2008-2012	medium	-	29	2001-2011	medium	-	30	1989-2011	medium	
Georgia	Present	<1			?				?				
Germany	1,650,000-2,800,000	8	2005-2009	medium	-	20-29	1998-2009	good	-	14-29	1990-2009	good	
Greece	370,000-470,000	2	2007-2013	good	0	0	2007-2013	medium	?				
Hungary	525,000-639,000	2	2000-2012	medium	+	35	1999-2012	medium	?				
Rep. Ireland	346,987-879,350	2	2006-2011	good	-	25-41	1998-2011	good	?				
Italy	400,000-800,000	2	2013	poor	-	25-35	2000-2012	medium	-	20-30	1990-2012	poor	
Kosovo	40,000-60,000	<1	2009-2014	medium	?				?				
Latvia	113,621-194,246	1	2011	good	+	6-216	2005-2012	good	+	5-297	1995-2012	medium	
Liechtenstein	200-400	<1	2009-2014	medium	-	20-30	2003-2014	medium	-	20-30	1980-2014	medium	
Lithuania	120,000-250,000	1	2008-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Luxembourg	15,000-20,000	<1	2008-2012	medium	?				?				
FYRO Macedonia	30,000-50,000	<1	2001-2012	poor	?				?				
Moldova	15,000-20,000	<1	2000-2010	medium	F	0	2000-2010	medium	F	0	1980-2010	medium	
Montenegro	40,000-60,000	<1	2002-2012	poor	?				?				
Netherlands	90,603-181,206	<1	2008-2011	medium	+	64-100	2002-2011	medium	+	44-190	1984-2011	medium	
Norway	100,000-500,000	1	2013	poor	0	0	2007-2013	good	0	0	1980-2013	good	

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	Size (pairs) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	
Poland	1,000,000-1,300,000	4	2008-2012	good	+	58-89	2000-2012	good	?				
Portugal	500,000-1,000,000	3	2008-2012	medium	0	0	2004-2011	medium	?				
PT: Azores	Present	<1			?				?				
PT: Madeira	1,000-5,000	<1	2009-2012	medium	-	40-68	2001-2012	good	+		1980-2012	poor	
Romania	300,000-600,000	2	2010-2013	medium	?				?				
Russia	1,300,000-2,800,000	7	2008-2012	medium	?				+	5-30	1980-2012	medium	
Serbia	240,000-330,000	1	2008-2012	medium	+	1-9	2000-2012	medium	+	10-29	1980-2012	medium	
Slovakia	100,000-130,000	<1	2002	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	
Slovenia	101,000-142,000	<1	2002-2010	medium	0	0	2001-2012	medium	?				
Spain	7,780,000-9,155,000	32	2004-2006	good	+	65	1998-2012	good	+		1980-2012	medium	
ES: Canary Is	2,500-10,000	<1	1997-2003	poor	+		2001-2012	poor	+		1980-2012	poor	
Sweden	241,000-572,000	2	2008-2012	medium	-	37-48	2001-2012	good	0	0	1980-2012	good	
Switzerland	80,000-150,000	<1	2008-2012	medium	0	0	2001-2012	good	+	1-35	1990-2012	medium	
Turkey	500,000-1,000,000	3	2013	poor	0	0	2000-2012	poor	0	0	1990-2013	poor	
Ukraine	640,000-820,000	3	2000	medium	F	5-10	1998-2010	medium	F	10-15	1980-2010	medium	
United Kingdom	1,600,000-1,800,000	6	2009	medium	-	19	1998-2010	good	0	0	1980-2010	good	
EU27	18,100,000-26,000,000	81			Stable								
Europe	21,600,000-33,100,000	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

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

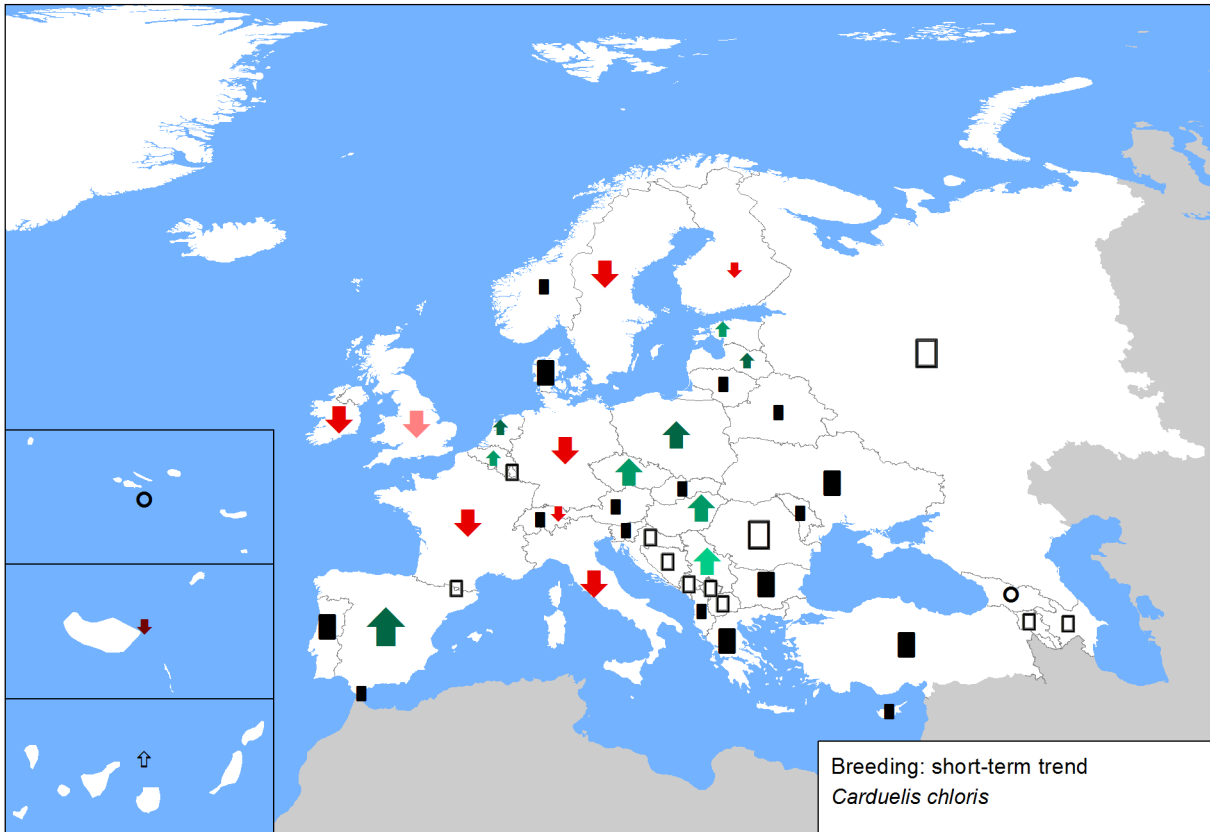
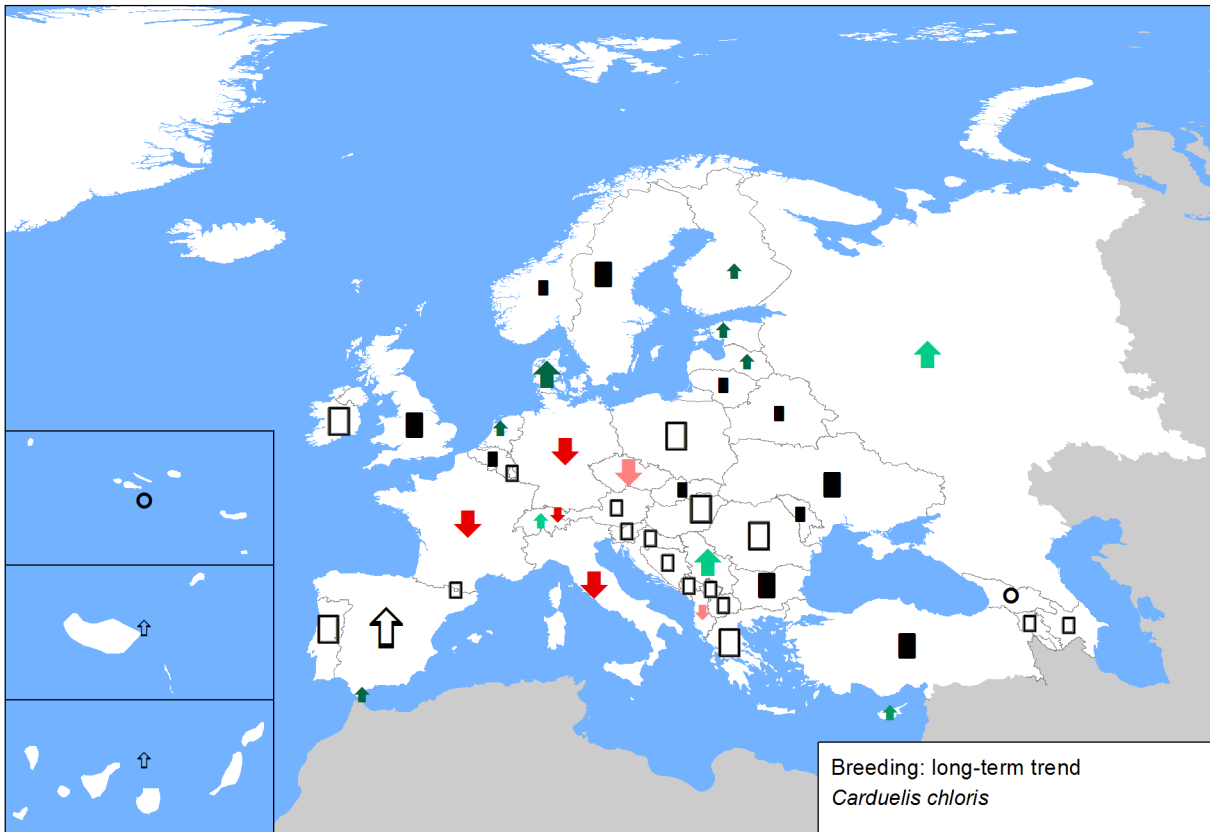


Figure 2. Breeding population sizes and long-term trends across Europe.



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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: BirdLife International 2004

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: unpublished 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. BSPB Bird Database Common birds monitoring scheme in Bulgaria <http://bspb.org/monitoring/bg/product-view/4/35.html> SPA mapping of breeding birds 201

Breeding short-term trend: Common birds monitoring scheme <http://bspb.org/monitoring/bg/product-view/4/35.html> (Population trend estimate covers the period 2005-2012)

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. Ivanov, B. 2011. Fauna of Bulgaria, Vol. 30, Aves, part III, Sofia, BAS, 409 p. (in Bulgarian with English Summary) 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; Unpublished analysis of monitoring data for the W of Cyprus by proff Derek Pomeroy; Also similar analysis of field data from surveys carried out in some SPAs by Game & Fauna Service.

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 field transects

Breeding long-term trend: Recent data as above, but no systematic data is available for before 2006; Analysis of BirdLife Cyprus bird sightings records reported in the society's annual reports.

Czech Republic

Breeding population size: STASTNY K., BEJCEK V. & HUDEK K. 2006: Atlas hnízdního rozšíření ptáku v České republice. Aventinum Praha. JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=864>

Breeding short-term trend: JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=864>

Breeding long-term trend: JPSP: <http://jpsp.birds.cz/vysledky.php?taxon=864>

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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 almindlige 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 almindlige 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 almindlige 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: 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.

France

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

Breeding short-term trend: <http://vigienature.mnhn.fr/page/verdier-d-europe>

Breeding long-term trend: <http://vigienature.mnhn.fr/page/verdier-d-europe>

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* 2012. 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: 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. 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: Brichetti 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

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.]. Latvian Ornithological society, 47

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Latvia

Breeding short-term trend: 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: Velevski, M., B. Hallmann, B. Grubač, T. Lisičanec, E. Stojnov, E. Lisičanec, V. Avukatov, L. Božič, and B. Stumberger. 2010. Important Bird Areas in Macedonia: Sites of Global and European Importance. *Acrocephalus* 31:181–282.

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. Bestandsestimer og trender for norske hekkefugler. NOF-rapport 2015-2.

Breeding short-term trend: Kålås, J.A., Husby, M., Nilsen, E.B., & Vang, R. 2014. Bestandsvariasjoner for terrestriske fugler i Norge 1996-2013. Norsk Ornitologisk Forening Rapport 4 / 2014.

Breeding long-term trend: Kålås, J.A., Husby, M., Nilsen, E.B., & Vang, R. 2014. Bestandsvariasjoner for terrestriske fugler i Norge 1996-2013. Norsk Ornitologisk Forening Rapport 4 / 2014.

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 Ptasięj w Polsce w zakresie Monitoringu Ptaków Polski w Państwowym Monitoringu Środowiska. Sprawozdanie dla Głównego Inspektoratu Ochrony Środowiska. OTOP, Marki.

Breeding short-term trend: MPPL: Chylarecki P. 2013. Czynniki kształtujące zmiany liczebności pospolitych ptaków Polski w latach 2000-2012. MiZ 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, MiZ, KOO, SOS: 29-45 (source: http://monitoringptakow.gios.gov.pl/raporty?file=files/pliki/raporty_faza4/RaportMPP4_etap1_zad2%264_wiosna2012.pdf)

Carduelis chloris (European Greenfinch)

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

PT: Madeira

Breeding population size: Equipa Atlas, 2013 -http://www.atlasdasaves.netmadeira.com/index.php?option=com_content&view=article&id=163&Itemid=66 =pt 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

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

Breeding long-term trend: Oliveira, P. & Menezes, D. 2004. Aves do Arquipélago da Madeira. Serviço do Parque Natural da Madeira

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). 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). Borodin O.V., Smirnova S.L., unpublished. spinus73@mail.ru

Breeding short-term trend: Shepel A.I., unpublished. shai53@mail.ru Preobrazhenskaya E.S., unpublished. voop21@rambler.ru Borodin O.V., Smirnova S.L., unpublished. spinus73@mail.ru Sarychev V.S. (ed.) 2009. Vertebrates of Lipetsk Region. Voronezh: 494 p. (in Russian). Klimov S.M., Sarychev V.S., Melnikov M.V., Zemlyanukhin A.I. 2004. Fauna of the Upper Don Basin. Nonpasserines. Lipetsk, LGPU: 224 p. (in Russian). Belik V.P., unpublished. vpbelik@mail.ru

Breeding long-term trend: Belik V.P. et al. 2003. Recent population trends of breeding birds in the Southern Russia. - Strepet 1: 10-30 (in Russian). Borodin O.V., Smirnova S.L., unpublished. spinus73@mail.ru Shepel A.I., unpublished. shai53@mail.ru

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 (DOPPS neobjavljeno) Kmecl, P., T. Jančar & T. Mihelič (2010): Projekt izvedbe popisa ptic v travniških sadovnjakih na območju Kozjanskega regijskega parka v okviru projekta IPA »Od vijeglavke do soka«. Naročnik: Javni zavod Kozjanski park. DOPPS, Ljubljana.

Breeding short-term trend: Kmecl, P. & Figelj, J. (2013): Monitoring splošno razširjenih vrst ptic za določitev slovenskega indeksa ptic kmetijske krajine - poročilo za leto 2013. Naročnik: Ministrstvo za kmetijstvo in okolje. DOPPS, Ljubljana.

Breeding long-term trend: Geister, I. (1995): Ornitološki atlas Slovenije. DZS, Ljubljana. NOAGS (DOPPS neobjavljeno) - Katarina Denac (katarina.denac@dopps.si)

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.

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.

Carduelis chloris (European Greenfinch)

ES: Canary Is

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. Updated 2002 for Birds in Europe 2

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. Hagemajjer 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. Hagemajjer/ 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. Hagemajjer 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. Hagemajjer/ 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>. [Long-term trend is -0.9%]

Bibliography

Clement, P. and de Juana, E. 2013. European Greenfinch (*Carduelis chloris*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds.) 2013. *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/61334> on 24 March 2015).

Lawson, B., Robinson, R.A., Colvile, K.M., Peck, K.M., Chantrey, J., Pennycott, T.W., Simpson, V.R., Toms, M.P. and Cunningham, A.A. 2012. The emergence and spread of finch trichomonosis in the British Isles. *Philosophical Transactions of the Royal Society B: Biological Sciences* 367(1604): 2852-2863.