

Hirundo rustica (Barn Swallow)

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.

Hirundo rustica (Barn Swallow)

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	15,000-30,000	<1	2002-2012	medium	-	10-20	2002-2012	medium	-	20-25	1980-2012	medium	
Andorra	15-20	<1	1999-2001	good	?				?				
Armenia	200,000-450,000	1	2002-2012	medium	?				?				
Austria	60,000-90,000	<1	2001-2012	medium	0	0	2000-2011	medium	?				
Azerbaijan	250,000-500,000	1	1996-2000	poor	?				?				
Belarus	1,000,000-1,500,000	4	2000-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Belgium	80,000-140,000	<1	2008-2012	poor	0	0	2000-2012	medium	0	0	1973-2012	medium	
Bosnia & HG	100,000-140,000	<1	2010-2014	poor	?				?				
Bulgaria	300,000-800,000	1	2005-2012	medium	-	2-39	2001-2012	good	0	0	1980-2012	poor	
Croatia	500,000-1,000,000	2	2014	poor	?				?				
Cyprus	75,000-175,000	<1	2008-2013	poor	-	25-40	2001-2013	medium	?				
Czech Rep.	272,000-544,000	1	2012	medium	-	3-37	2000-2012	good	-	16-56	1982-2012	good	
Denmark	230,000	1	2011	medium	+	18	1999-2011	good	0	0	1980-2011	good	
DK: Faroe Is	2-5	<1	2014	medium	?				?				
Estonia	100,000-200,000	<1	2008-2012	poor	-	20-50	2001-2012	poor	-	20-50	1980-2012	poor	
Finland	100,000-160,000	<1	2006-2012	good	-	29-50	2001-2012	good	-	26-46	1983-2012	good	
France	900,000-1,700,000	4	2008-2012	medium	?				-	34	1989-2011	poor	
Georgia	Present	<1			?				?				
Germany	455,000-870,000	2	2005-2009	good	-	5-17	1998-2009	good	-	9-57	1990-2009	good	
Greece	350,000-500,000	1	2007-2013	medium	0	0	2007-2013	medium	?				
Hungary	89,000-102,000	<1	1999-2012	medium	-	57	1999-2011	medium	-	50-60	1990-2012	poor	
Rep. Ireland	2,038,095-3,954,947	7	2006-2011	good	0	0	1998-2011	good	?				
Italy	500,000-1,000,000	2	2007	poor	0	0	2000-2012	medium	-		1980-2012	poor	
Kosovo	70,000-90,000	<1	2009-2014	medium	?				?				
Latvia	177,390-334,513	1	2012	good	+	20-90	2001-2012	medium	+	99-491	1995-2012	medium	
Liechtenstein	70-100	<1	2009-2014	medium	0	0	2003-2014	medium	-	20-40	1980-2014	medium	
Lithuania	150,000-250,000	1	2008-2012	medium	-	5-10	2001-2012	medium	-	10-20	1980-2012	medium	
Luxembourg	6,000-8,000	<1	2008-2012	medium	-	10-30	2000-2012	medium	-	30-50	1980-2012	medium	
FYRO Macedonia	20,000-50,000	<1	2001-2012	poor	?				?				
Malta	2-6	<1	2009	medium	+	100-500	2004-2012	medium	+	100-500	2004-2012	medium	
Moldova	15,000-20,000	<1	2000-2010	medium	F	0	2000-2010	medium	F	0	1980-2010	medium	
Montenegro	30,000-40,000	<1	2002-2012	poor	?				?				

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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	
Netherlands	232,000-276,000	1	2011	good	+	10-60	2002-2011	medium	0	0	1984-2011	medium	
Norway	30,000-50,000	<1	2000-2013	poor	0	0	2008-2013	good	0	0	1980-2013	good	
Poland	1,600,000-2,200,000	5	2008-2012	good	-	4-10	2000-2012	good	?				
Portugal	100,000-500,000	1	2008-2012	medium	+	16-42	2004-2011	medium	?				
Romania	500,000-1,000,000	2	2010-2013	medium	-	5-31	2001-2013	medium	?				
Russia	2,200,000-7,250,000	11	2000-2008	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	
Serbia	150,000-230,000	1	2008-2012	medium	0	0	2000-2012	medium	-	1-9	1980-2012	medium	
Slovakia	200,000-400,000	1	2002	medium	-	5-15	2000-2012	medium	-	10-25	1980-2012	medium	
Slovenia	180,000-290,000	1	2002-2012	good	+	10-20	2001-2012	medium	?				
Spain	12,825,000-16,635,000	37	2004-2006	good	-	41	1998-2011	good	-		1980-2011	good	
ES: Canary Is	2-3	<1	2000-2002	medium	F	0	2001-2012	poor	+		1980-2012	poor	
Sweden	111,000-256,000	1	2008-2012	medium	+	2-24	2001-2012	good	+	13-55	1980-2012	good	
Switzerland	60,000-90,000	<1	2008-2012	medium	0	0	2001-2012	good	-	4-34	1990-2012	medium	
Turkey	1,000,000-2,500,000	5	2013	medium	-	0-19	2000-2012	poor	0	0-19	1990-2013	poor	
Ukraine	870,000-1,300,000	3	2000	medium	-	10-20	1998-2010	medium	-	10-25	1980-2010	medium	
United Kingdom	860,000	2	2009	medium	+	21	1998-2010	good	+	17	1980-2010	good	
EU27	22,500,000-33,500,000	73			Decreasing								
Europe	29,000,000-48,700,000	100			Decreasing								

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.

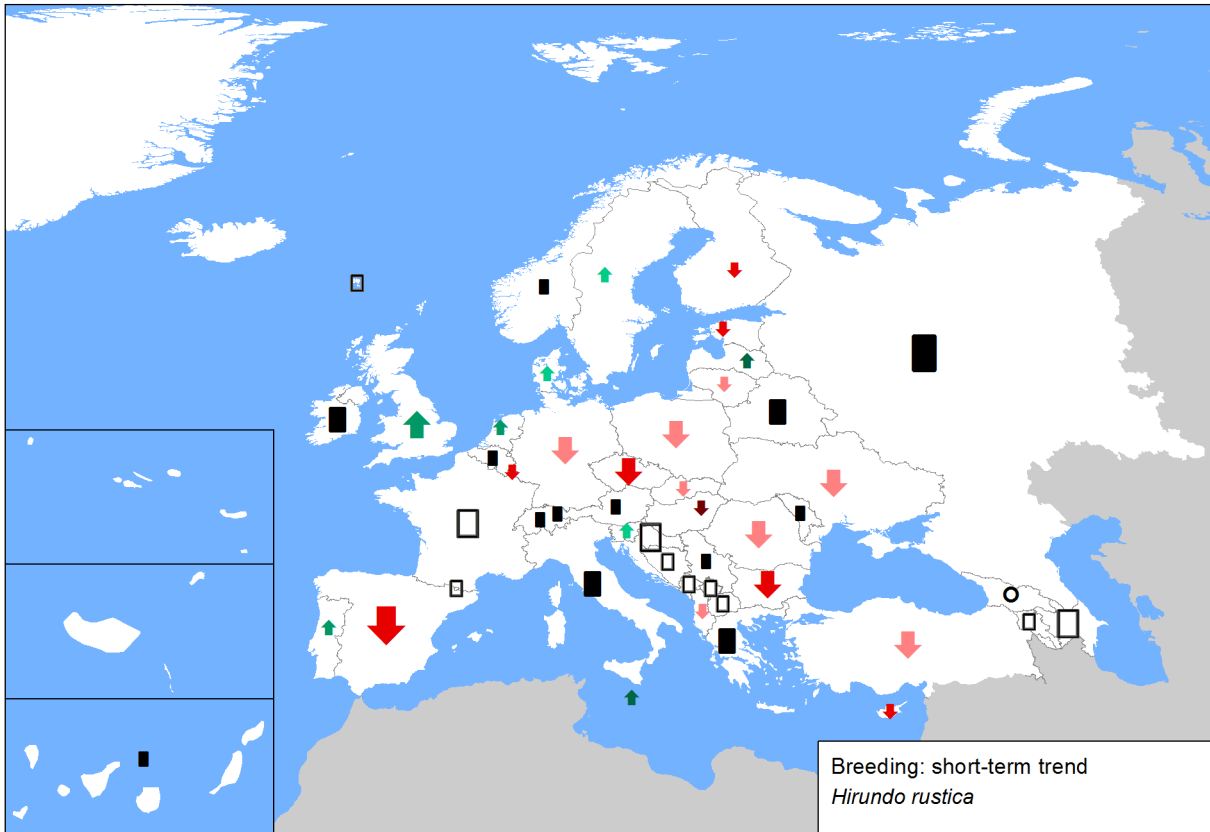
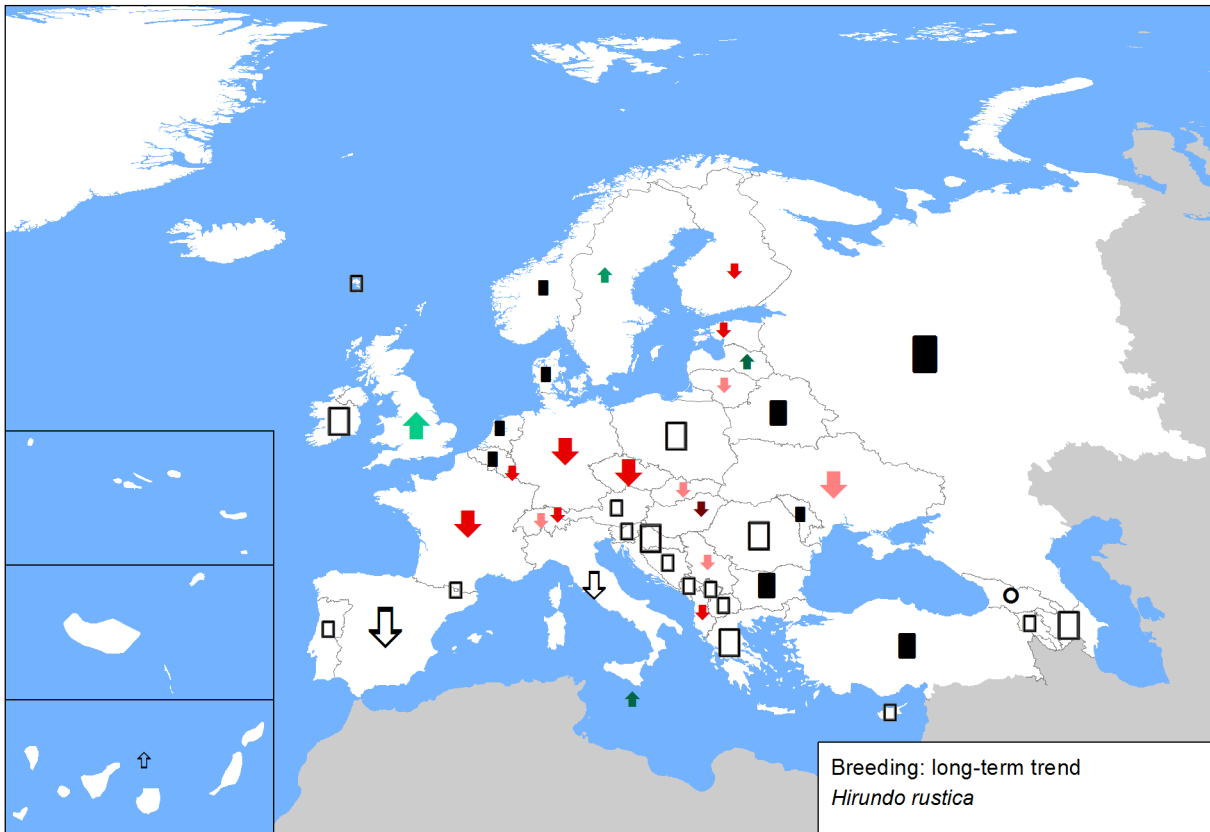


Figure 2. Breeding population sizes and long-term trends across Europe.



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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
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Armenia

Breeding population size: ASPB data
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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: Kotošan, D., Dročić, N., Trbojević, S., Šimić, E., Dervović, I., 2012: Program IBA, Međunarodno značajna područja za ptice, u Bosni i Hercegovini. Ornitološko društvo "Naše ptice", interno izdanje za projekat "Evaluacija IBA područja u FBiH", Sarajevo.

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. SPAs mapping in 2012 Common Bird Monitoring Scheme http://bspb.org/monitoring/ Geographic Information System with Ornithological Information of BSPB
Breeding short-term trend: Common Bird Monitoring Scheme http://bspb.org/monitoring/ The population trend is for 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, 679 p.

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
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 Prof 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.
Breeding long-term trend: Recent data as above, but no systematic data is available for before 2006.

Czech Republic

Breeding population size: STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnízdního rozšíření ptaku v České republice. Aventinum Praha. JPSP: http://jpsp.birds.cz/vysledky.php?taxon=692
Breeding short-term trend: JPSP: http://jpsp.birds.cz/vysledky.php?taxon=692
Breeding long-term trend: JPSP: http://jpsp.birds.cz/vysledky.php?taxon=692

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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)

DK: Faroe Is

Breeding population size: Hammer et al. (2014) Færøsk trækfugleatlas [Faroese bird migration atlas]. Fróðskapur / Faroe University Press, Tórshavn.

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/hirondelle-rustique> Muséum National d'Histoire Naturelle. coord 2012 Cahiers d'habitats Natura 2000 - connaissance et gestion des habitats et des espèces d'intérêt communautaire. Tome 8 Oiseaux (volume 1 de l'Aigle botté à la Fauvette pitchou, 382 pages ; volume 2 de la Fauvette sarde à l'Oie cendrée, 390 pages ; volume 3 de l'Oie des moissons au Venturon montagnard, 384 pages), La documentation française, Paris

Breeding long-term trend: <http://vigienature.mnhn.fr/page/hirondelle-rustique> Muséum National d'Histoire Naturelle. coord 2012 Cahiers d'habitats Natura 2000 - connaissance et gestion des habitats et des espèces d'intérêt communautaire. Tome 8 Oiseaux (volume 1 de l'Aigle botté à la Fauvette pitchou, 382 pages ; volume 2 de la Fauvette sarde à l'Oie cendrée, 390 pages ; volume 3 de l'Oie des moissons au Venturon montagnard, 384 pages), La documentation française, Paris

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. & 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.

Breeding short-term trend: National common bird monitoring scheme (MMM) database. <http://mmm.mme.hu/charts/trends>

Breeding long-term trend: Magyar, G., Hadarics, T., Waliczky, Z., Schmidt, A., Nagy, T. & Bankovics, A. (1998): Nomenclator avium Hungariae. Magyarország madarainak névjegyzéke. KTM Természetvédelmi Hivatal Madártani Intézete – Magyar Madártani és Természetvédelmi Egyesület – Winter Fair, Budapest – Szeged. p. 202.

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. 2007. *Ornitologia italiana*. Vol.4 (Apodidae-Prunellidae). 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

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Italy

Breeding long-term trend: Gustin M, Brambilla M & Celada C. 2010. Valutazione dello stato di Conservazione dell'avifauna italiana. Volume II, Passeriformes. Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Lega Italiana Protezione Uccelli (LIPU) Peronace V, Cecere JG, Gustin M & Rondinini C. 2012. Lista Rossa 2011 degli Uccelli Nidificanti in Italia. Avocetta 36: 11-58 Tucker GM & Heath MF. 1994. Birds in Europe. Their conservation status. Cambridge, UK: BirdLife International. BirdLife Conservation Series No. 3 BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status Cambridge, UK: BirdLife International. BirdLife Conservation Series No. 12 Rete Rurale Nazionale & LIPU 2013. Uccelli comuni in Italia. Gli andamenti di popolazione dal 2000 al 2012

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 pp

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: 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. Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p. Raudonikis L. 2004. Lithuania. In: Birds in Europe: population estimates, trends, and conservation status. BirdLife International, BirdLife Conservation Series No12, Cambridge, UK.

Breeding long-term trend: 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). Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p.

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 Melchior E., E. Mentgen, R. Peltzer, R. Schmitt, J. Weiss (1987): Atlas der Brutvögel Luxemburgs. Lëtzebuurger Natur- a Vulleschutzliga. Kremer-Muller & Cie, Foetz, Luxembourg

The Former Yugoslav Republic of Macedonia

Breeding population size: Veleviski, 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.

Malta

Breeding population size: Raine, A.; Sultana, J. & Gillings, S. (2009): Malta Breeding Bird Atlas 2008. Malta: BirdLife Malta. Baldacchino, A.E. & Azzopardi, J. (2012): Breeding Birds of the Maltese Islands- a scientific and historical review. Malta: Mala University Publishers Ltd.

Breeding short-term trend: Sultana, J.; Borg, J.J.; Gauci, C. & Falzon, V. (2011): The Breeding Birds of Malta. Malta: BirdLife Malta & BDL Publishing. Raine, A.; Sultana, J. & Gillings, S. (2009): Malta Breeding Bird Atlas 2008. Malta: BirdLife Malta. Baldacchino, A.E. & Azzopardi, J. (2012): Breeding Birds of the Maltese Islands- a scientific and historical review. Malta: Mala University Publishers Ltd. Fenech, N. (2010) : A Complete Guide to the Birds of Malta. Malta: Midsea Books Ltd.

Breeding long-term trend: Sultana, J.; Borg, J.J.; Gauci, C. & Falzon, V. (2011): The Breeding Birds of Malta. Malta: BirdLife Malta & BDL Publishing. Raine, A.; Sultana, J. & Gillings, S. (2009): Malta Breeding Bird Atlas 2008. Malta: BirdLife Malta. Baldacchino, A.E. & Azzopardi, J. (2012): Breeding Birds of the Maltese Islands- a scientific and historical review. Malta: Mala University Publishers Ltd. Fenech, N. (2010) : A Complete Guide to the Birds of Malta. Malta: Midsea Books Ltd.

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: The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p. Аверин Ю. В., Ганя И.М., Успенский Г. Птицы Молдавии, том 2, Кишинев, 1971, 240p Burfield I., Bommel van F., Birds in Europe. Population estimates, trends and conservation status. BirdLife International. Oxford, 2004. 374p. Zubcov, N., Birds of Moldova // The Birds of the Western Palearctic. Oxford University Press, Oxford. 1998, 1850 p.

Hirundo rustica (Barn Swallow)

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: van den Bremer et al. (2010)

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 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 Ptasiej 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. 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: 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; Programa Censos de Aves Comuns (CAC)

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

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 Yakovleva M.V., unpublished. kivach-bird@rambler.ru Sarychev V.S. (ed.) 2009. Vertebrates of Lipetsk Region. Voronezh: 494 p. Sarychev V.S., unpublished. vssar@yandex.ru Belik V.P., unpublished. vpbelik@mail.ru

Breeding long-term trend: Preobrazhenskaya E.S., unpublished. voop21@rambler.ru Yakovleva M.V., unpublished. kivach-bird@rambler.ru 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).

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.

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

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

Slovenia

Breeding population size: Mihelič, T. (2013): Novi ornitološki atlas gnezdilk Slovenije 2002-2010. Internetna baza podatkov. Spletna stran: <http://www.ptice.si/atlas>. Društvo za opazovanje in proučevanje ptic Slovenije, DOPPS - BirdLife Slovenija. 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. – DOPPS, Ljubljana. http://www.natura2000.gov.si/uploads/tx_library/SIPKK_2013_1.pdf

Breeding long-term trend: Mihelič, T. (2013): Novi ornitološki atlas gnezdilk Slovenije 2002-2010. Internetna baza podatkov. Spletna stran: <http://www.ptice.si/atlas>. Društvo za opazovanje in proučevanje ptic Slovenije, DOPPS - BirdLife Slovenija. Ljubljana.

Hirundo rustica (Barn Swallow)

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: 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 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/BirdLife. 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.

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: update on occasion of the following publication: Schmid, H. (2012): Schwalben und Segler. Schweizerische Vogelwarte, Sempach.

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, Zeynel Arslangündoğdu 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 Kirwan G.M., Boyla K. A., Castell P., Demirci B., Özen M., Welch H., Marlow T., 2008, Birds of Turkey. Londra, Christopher Helm, 978-1-4081-0475-

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. Hagemajler 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. Hagemajler/ 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. Gorban I, Flade M. The importance of the Upper Pripyat (Ukraine) for the protection of birds. The ecology and conservation of floodplains and lowland mires in the Polesya Region. Minsk. 2000. p. 103-110. 3. Dombrowski A., Piotrowska M., Gorban I., Nikiforov M. Status and threats to avifauna. (Eds. Dombrowski A., & Z. Glowacki, та інші). Bug river valley as the ecological corridor: state-threats-protection. IUCN European Programme. Warsaw. 2002. S. 87-102. 4. 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. Hagemajler 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. Hagemajler/ 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: Gibbons, D.W., Reid, J.B. & Chapman, R.A. 1993. The New Atlas of Breeding Birds in Britain and Ireland: 1988–1991. Poyser, London. 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.

Hirundo rustica (Barn Swallow)

United Kingdom

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., 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. Research Report 644. BTO, Thetford. <http://www.bto.org/birdtrends>

Bibliography

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

Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: their conservation status*. BirdLife Conservation Series no. 3, BirdLife International, Cambridge.

Turner, A. and Christie, D.A. 2012. Barn Swallow (*Hirundo rustica*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds.). 2012. *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/57729> on 17 March 2015).

Turner, A. and Rose, C. 1989. *Swallows and martins of the world*. Christopher Helm, London.