

## *Asio flammeus* (Short-eared Owl)

### 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](mailto:science@birdlife.org).

*Asio flammeus* (Short-eared Owl)

**Table 1.** Reported national breeding population size and trends in Europe<sup>1</sup>.

Country (or territory) <sup>2</sup>	Population estimate				Short-term population trend <sup>4</sup>				Long-term population trend <sup>4</sup>				Subspecific population (where relevant)
	Size (pairs) <sup>3</sup>	Europe (%)	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	
Armenia	10-20	<1	2002-2012	medium	?				?				
Austria	5-15	<1	2008-2012	good	F	0	2001-2012	good	F	0	1980-2012	medium	
Azerbaijan	5-50	<1	1996-2000	poor	?				?				
Belarus	500-1,500	1	2000-2012	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	
Belgium	0	<1	2008-2012	poor	?				F	0	1973-2012	poor	
Bosnia & HG	1-5	<1	2010-2014	poor	?				?				
Croatia	0-10	<1	2013	poor	F	0	2001-2012	poor	?				
Czech Rep.	0-5	<1	2001-2003	good	?				F	0	1985-2003	medium	
Denmark	5	<1	2011	good	F	0	2000-2011	good	0	0	1980-2011	medium	
Estonia	10-50	<1	2008-2012	poor	F	10-100	2001-2012	poor	F	10-100	1980-2012	poor	
Finland	650-14,500	3	2001-2012	medium	+	22-25	1998-2012	medium	-	2-3	1986-2012	medium	
France	50-100	<1	2008-2012	medium	F	0	2000-2012	poor	F	0	1980-2012	poor	
Georgia	Present	<1			?				?				
Germany	50-180	<1	2005-2009	good	F	0	1998-2008	good	0	0	1985-2009	medium	
Greece	0-10	<1	2008-2012	poor	?				?				
Hungary	10-80	<1	2000-2012	medium	F	0	2000-2012	medium	F	0	1980-2012	medium	
Iceland	100-200	<1	1990	poor	+	30-50	1990-2010	poor	+	30-50	1990-2012	poor	
Latvia	0-5	<1	2012	poor	?				0	0	1994-2012	poor	
Lithuania	30-100	<1	2008-2012	medium	F	0	2001-2012	medium	F	0	1980-2012	medium	
FYRO Macedonia	0-5	<1	2001-2012	poor	?				?				
Moldova	1-5	<1	2000-2010	medium	-	10-20	2000-2010	medium	F	0	1980-2010	medium	
Netherlands	15-35	<1	2008-2011	good	F	0	2002-2011	good	-	91-94	1981-2011	good	
Norway	1,000-10,000	3	2013	poor	F	0	2001-2013	poor	F	0	1980-2013	poor	
Poland	0-20	<1	2008-2012	medium	-	80-100	2000-2012	medium	-	75-100	1980-2012	medium	
Romania	20-40	<1	2001-2013	poor	?				?				
Russia	50,000-150,000	88	2000-2008	poor	F	0	2000-2012	good	F	0	1980-2012	good	
Serbia	0-45	<1	2008-2012	medium	F	0	2000-2012	medium	F	0	1980-2012	medium	
Slovakia	0-50	<1	2002	poor	F	0	2000-2012	poor	F	0	1980-2012	poor	
Spain	1-360	<1	1990-2001	medium	0	0	2006-2011	good	F	0	1980-2011	medium	
Sweden	760-4,700	2	2008-2012	medium	0	0	2001-2012	medium	-	10-30	1980-2012	poor	
Turkey	1-20	<1	2013	good	-	80-99	2000-2012	good	-	0-19	1990-2013	good	
Ukraine	850-1,700	1	2000	medium	-	10-25	2001-2012	medium	-	10-30	1980-2012	medium	

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	Size (pairs) <sup>3</sup>	Europe (%)	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	Direction <sup>5</sup>	Magnitude (%) <sup>6</sup>	Year(s)	Quality	
United Kingdom	620-2,180	1	2009	medium	F	0	1999-2011	poor	F	0	1980-2011	poor	
<b>EU27</b>	<b>2,200-22,400</b>	<b>7</b>			<b>Fluctuating</b>								
<b>Europe</b>	<b>54,700-186,000</b>	<b>100</b>			<b>Fluctuating</b>								

<sup>1</sup> 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>.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

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

<sup>6</sup> Trend magnitudes are rounded to the nearest integer.

## Trend maps

A symbol appears in each country where the species occurs: the shape and colour of the symbol represent the population trend in that country, and the size of the symbol corresponds to the proportion of the European population occurring in that country.

### KEY

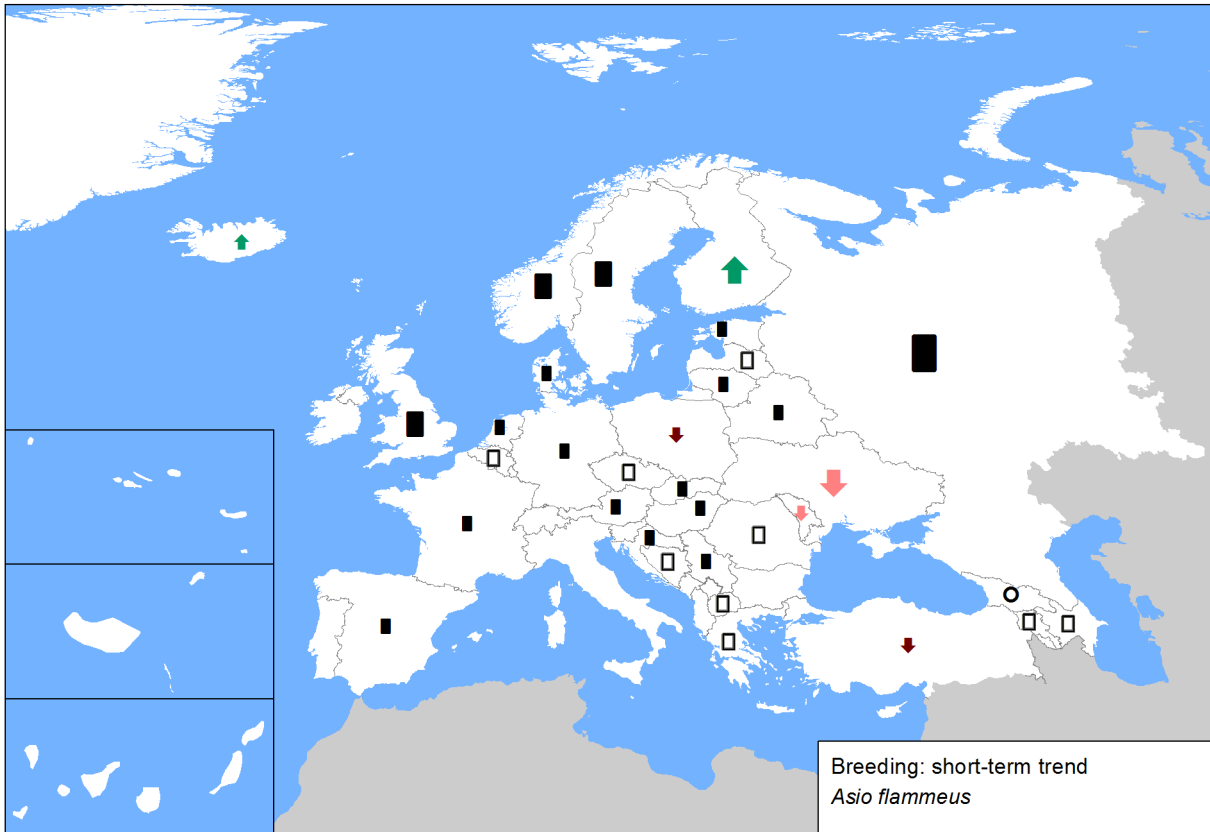
- |   |                                  |
|---|----------------------------------|
| ↑ Large increase ( $\geq 50\%$ )        | ↓ Large decrease ( $\geq 50\%$ ) |
| ↑ Moderate increase (20–49%)            | ↓ Moderate decrease (20–49%)     |
| ↑ Small increase ( $< 20\%$ )           | ↓ Small decrease ( $< 20\%$ )    |
| ↑ Increase of unknown magnitude         | ↓ Decrease of unknown magnitude  |
| ■ Stable or fluctuating                 |                                  |
| □ Unknown                               |                                  |
| ○ Present (no population or trend data) |                                  |
| × Extinct since 1980                    |                                  |

Each symbol, with the exception of Present and Extinct, may occur in up to three different size classes, corresponding to the proportion of the European population occurring in that country.

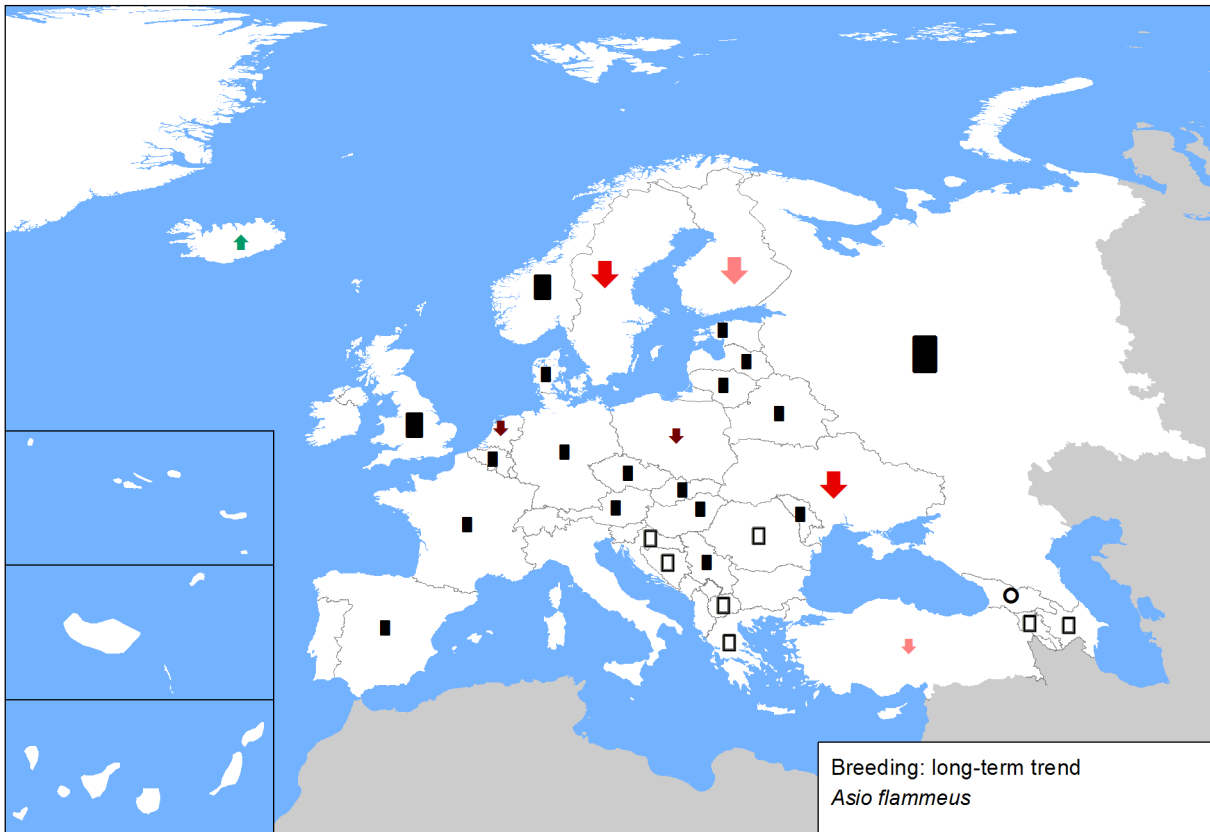
- ↑ Large:  $\geq 10\%$  of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small:  $< 1\%$  of the European population

The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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



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



## Sources

### Armenia

**Breeding population size:** ASPB data

### Austria

**Breeding population size:** H.-M. Berg & M. Dvorak, unpublished data

**Breeding short-term trend:** H.-M. Berg & M. Dvorak, unpublished data

**Breeding long-term trend:** BirdLife Austria, unpublished data, Peter (2006)

### 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:** Database Rare and less common Breeding Birds, INBO (coord. A.Anselin), selected data Waarnemingen.be, compilation of data and enquiries in ornithological community

**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:** Kotrošan, D., Dročić, N., Trbojević, S., Šimić, E., Dervović, I., 2012: Program IBA, Međunarodno značajna područja za ptice, u Bosni i Hercegovini. Ornitolološko društvo "Naše ptice", interno izdanje za projekat "Evaluacija IBA područja u FBiH", Sarajevo., Kotrošan, D. & Hatibović, E., 2012: Raptors in Bosnia and Herzegovina – status and perspectives for monitoring. *Acrocephalus* 33 (154/155): 173-179.

### Croatia

**Breeding population size:** Zavod za ornitologiju (Sanja Barišić, Davor Čiković, Jelena Kralj, Goran Sušić, Vesna Tutiš), Dragan Radović, Ivan Budinski, Robert Crnković, Antun Delić, Dubravko Dender, Vlatka Dumbović, Ivan Darko Grlica, Bariša Ilić, Luka Jurinović, Davor Krnjeta, Krešimir Leskovar, Duje Lisičić, Ivica Lolić, Gordana Lukač. Kristijan Mandić, Krešimir Mikulić, Tibor Mikuska, Gvido Piasevoli, Andrej Radalj, Zlatko Ružanović, Vlatka Ščetarić, Mirko Šetina, Adrian Tomik (2013): Procjene brojnosti za SPA područja. Državni zavod za zaštitu prirode, Zagreb

**Breeding short-term trend:** BiE III Work group, Croatia

**Breeding long-term trend:** BiE III Work group, Croatia

### Czech Republic

**Breeding population size:** STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnízdního rozšíření ptaku v České republice. Aventinum Praha

**Breeding long-term trend:** STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnízdního rozšíření ptaku v České republice. Aventinum Praha

### Denmark

**Breeding population size:** Pihl, S., Clausen, P., Petersen, I.K., Nielsen, R.D., Laursen, K., Bregnballe, T., Holm, T.E. & Søgaaard, B. (2013): Fugle 2004-2011. NOVANA. Aarhus Universitet, DCE - Nationalt Center for Miljø og Energi. - Videnskabelig rapport fra DCE nr. 49. 188 s.

**Breeding short-term trend:** Pihl, S., Clausen, P., Petersen, I.K., Nielsen, R.D., Laursen, K., Bregnballe, T., Holm, T.E. & Søgaaard, B. (2013): Fugle 2004-2011. NOVANA. Aarhus Universitet, DCE - Nationalt Center for Miljø og Energi. - Videnskabelig rapport fra DCE nr. 49. 188 s.

**Breeding long-term trend:** Pihl, S., Clausen, P., Petersen, I.K., Nielsen, R.D., Laursen, K., Bregnballe, T., Holm, T.E. & Søgaaard, B. (2013): Fugle 2004-2011. NOVANA. Aarhus Universitet, DCE - Nationalt Center for Miljø og Energi. - Videnskabelig rapport fra DCE nr. 49. 188 s.

### 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](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](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](http://www.eoy.ee/hirundo/file_download/149/Elts_et_al_2013_2.pdf)

### Finland

**Breeding population size:** Birds of Prey monitoring data, Finnish Museum of Natural History. Honkala, J., Saurola, P. & Valkama, J. 2013: Breeding and population trends of common raptors and owls in Finland in 2012. – *Linnut-vuosikirja* 2012: 50–61. (in Finnish with English summary)

**Breeding short-term trend:** Honkala, J., Saurola, P. & Valkama, J. 2013: Breeding and population trends of common raptors and owls in Finland in 2012. – *Linnut-vuosikirja* 2012: 50–61. (in Finnish with English summary) Valkama, Jari, Vepsäläinen, Ville & Lehtikoinen, Alekski 2011: Suomen III LintuAtlas. – Luonnontieteellinen keskusmuseo ja ympäristöministeriö. (viitattu [15.11.2013]) ISBN 978-952-10-6918-5.

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### Finland

**Breeding long-term trend:** Honkala, J., Saurola, P. & Valkama, J. 2013: Breeding and population trends of common raptors and owls in Finland in 2012. – Linnut-vuosikirja 2012: 50–61. (in Finnish with English summary) Valkama, Jari, Vepsäläinen, Ville & Lehtikoinen, Alekski 2011: Suomen III LintuAtlas. – Luonnontieteellinen keskusmuseo ja ympäristöministeriö. (viitattu [15.11.2013]) ISBN 978-952-10-6918-5.

### France

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

**Breeding short-term trend:** 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:** 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:** Galvez, R.A., Gavashelishvili, L., Javakhishvili, Z. 2005. Raptors and Owls of Georgia (Field guide). Tbilisi, GCCW & Buneba Print Publishing. Tbilisi: 128 pp. (in English & in Georgian).

### 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 seltener Brutvögel

**Breeding long-term trend:** Dachverband Deutscher Avifaunisten e.V.

### Greece

**Breeding population size:** BirdLife International 2004. Birds in Europe - Population estimates, trends and conservation status. Cambridge, UK, BirdLife International (BirdLife Conservation Series No 12).

### Hungary

**Breeding population size:** National Park Directorates & databases. Breeding bird (MME RTM) database.

**Breeding short-term trend:** MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278.

**Breeding long-term trend:** MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. p. 278. 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.

### Iceland

**Breeding population size:** Umhverfissráðuneytið 1992

**Breeding short-term trend:** Umhverfissráðuneytið 1992

**Breeding long-term trend:** Umhverfissráðuneytið 1992

### Latvia

**Breeding population size:** [www.latvijaspurtni.lv](http://www.latvijaspurtni.lv)

**Breeding long-term trend:** [www.latvijaspurtni.lv](http://www.latvijaspurtni.lv) Strazds M., Priednieks J., Vaverins G. 1994. Latvijas putnu skaits. – Putni daba, 4: 3–18.

### Lithuania

**Breeding population size:** Expert working group of the Lithuanian Ornithological Society ([lod@birdlife.lt](mailto: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](mailto:lod@birdlife.lt)) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“, 288 p. Raudonikis L. 2004. Lithuania. In: Birds in Europe: population estimates, trends, and conservation status. BirdLife International, BirdLife Conservation Series No12, Cambridge, UK. Rašomavičius, V. (red.) 2007. Lietuvos raudonoji knyga. Kaunas: „Lututė“, 800 p. (Red Data Book of Lithuania, 2007)

**Breeding long-term trend:** Expert working group of the Lithuanian Ornithological Society ([lod@birdlife.lt](mailto: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. Rašomavičius, V. (red.) 2007. Lietuvos raudonoji knyga. Kaunas: „Lututė“, 800 p. (Red Data Book of Lithuania, 2007)

### The Former Yugoslav Republic of Macedonia

**Breeding population size:** M. Veleviski, 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, 2. Ганя И.М., Зубков Н.И., Редкие и исчезающие виды. Изд-во Штиинца. Кишинев. 1989. 150 p. 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.

### Netherlands

**Breeding population size:** NEM, Sovon en CBS (Boele et al. 2011-2013, van Dijk et al 2010)



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### Netherlands

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

**Breeding long-term trend:** Sovon

### Norway

**Breeding population size:** Heggøy, O. & Øien, I.J. 2014. Conservation status of birds of prey in Norway. Norsk Ornitologisk Forening rapport 1/2014. 129 sider.

**Breeding short-term trend:** Heggøy, O. & Øien, I.J. 2014. Conservation status of birds of prey in Norway. Norsk Ornitologisk Forening rapport 1/2014. 129 sider.

**Breeding long-term trend:** Heggøy, O. & Øien, I.J. 2014. Conservation status of birds of prey in Norway. Norsk Ornitologisk Forening rapport 1/2014. 129 sider.

### Poland

**Breeding population size:** Komisja Faunistyczna 2009. Rzadkie ptaki obserwowane w Polsce w roku 2008. Raport nr 25. Not. Orn. 50: 111–142; Komisja Faunistyczna 2010. Rzadkie ptaki obserwowane w Polsce w roku 2009. Raport nr 26. Ornis Polonica 52: 117–148; Komisja Faunistyczna 2011. Rzadkie ptaki obserwowane w Polsce w roku 2010. Raport nr 27. Ornis Polonica 52: 117–149; Komisja Faunistyczna 2012. Rzadkie ptaki obserwowane w Polsce w roku 2011. Raport nr 28. Ornis Polonica 53: 105–140; Komisja Faunistyczna 2012. Rzadkie ptaki obserwowane w Polsce w roku 2012. Raport nr 29. Ornis Polonica 54: 109–150; [http://www.komisjafaunistyczna.pl/kf-en/index\\_en.html](http://www.komisjafaunistyczna.pl/kf-en/index_en.html) (access date: 09.10.2013); Wilk T., Jujka M., Krogulec J., Chylarecki P. (red.) 2010. Ostoje ptaków o znaczeniu międzynarodowym w Polsce. OTOP; Marki;

**Breeding short-term trend:** Chylarecki P., Sikora A. 2007. Ocena liczebności gatunków lęgowych w Polsce. W: Sikora A., Rohde Z., Gromadzki M., Neubauer G., Chylarecki P. (red.). Atlas rozmieszczenia ptaków lęgowych Polski 1985–2004. Bogucki Wyd. Nauk., Poznań, s. 34–41; BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status. Cambridge, UK: BirdLife International. BirdLife International Series No. 12.

**Breeding long-term trend:** Tucker G.M., Heath M.F. 1994. Birds in Europe: their conservation status. Cambridge, UK: BirdLife International;

### Romania

**Breeding population size:** "Milvus Group" Bird and Nature Protection Association database (unpublished data) Romanian Ornithological Society database (unpublished data) <http://rombird.ro/ro/src/index?&scr=flammeus>

### Russia

**Breeding population size:** Volkov S.V., Morozov V.V., Sharikov A.V. (eds.). 2005. Owls of the Northern Eurasia. Moscow: 472 p. (in Russian). Volkov S.V., Sharikov A.V., Morozov V.V. (eds.). 2009. Owls of the Northern Eurasia: ecology, spatial and habitat distribution. Moscow: 304 p. (in Russian).

**Breeding short-term trend:** Volkov S.V., Morozov V.V., Sharikov A.V. (eds.). 2005. Owls of the Northern Eurasia. Moscow: 472 p. (in Russian). Volkov S.V., Sharikov A.V., Morozov V.V. (eds.). 2009. Owls of the Northern Eurasia: ecology, spatial and habitat distribution. Moscow: 304 p. (in Russian). Shepel A.I., unpublished. shai53@mail.ru

**Breeding long-term trend:** Volkov S.V., Morozov V.V., Sharikov A.V. (eds.). 2005. Owls of the Northern Eurasia. Moscow: 472 p. (in Russian). Volkov S.V., Sharikov A.V., Morozov V.V. (eds.). 2009. Owls of the Northern Eurasia: ecology, spatial and habitat distribution. Moscow: 304 p. (in Russian). Belik V.P. et al. 2003. Recent population trends of breeding birds in the Southern Russia. - Strepot 1: 10-30 (in Russian). 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, Krištin Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

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

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

### Spain

**Breeding population size:** Madroño, A., González, C. & Atienza, J.C. (Eds.). 2004. Libro Rojo de las Aves de España. Dirección General para la Biodiversidad-SEO/BirdLife, Madrid. 452 pp. ([http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/LR\\_completo\\_para\\_web\\_tcm7-164856.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/LR_completo_para_web_tcm7-164856.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](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)) Onrubia, A. (2010). Búho campestre-Asio flammeus. En Enciclopedia Virtual de los Vertebrados Españoles. Salvador, A. & Bautista, L.M. (Eds.). Museo Nacional de Ciencias Naturales de Madrid. <http://www.vertebradosibericos.org>.

**Breeding short-term trend:** Información obtenida a partir de la Base de Datos del Programa NOCTUA, Programa de Seguimiento de Aves Nocturnas de España (2012) (Ministerio de Agricultura, Alimentación y Medio Ambiente/SEO/BirdLife). Subdir. Gral. Medio Natural, MAGRAMA, 2013. Gráfica de la tendencia poblacional de la especie (2006-2011): [http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/buho\\_campestre\\_tcm7-219729.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/buho_campestre_tcm7-219729.pdf)

**Breeding long-term trend:** Madroño, A., González, C. & Atienza, J.C. (Eds.). 2004. Libro Rojo de las Aves de España. Dirección General para la Biodiversidad-SEO/BirdLife, Madrid. 452 pp. ([http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/LR\\_completo\\_para\\_web\\_tcm7-164856.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/LR_completo_para_web_tcm7-164856.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](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)) Onrubia, A. (2010). Búho campestre-Asio flammeus. En Enciclopedia Virtual de los Vertebrados Españoles. Salvador, A. & Bautista, L.M. (Eds.). Museo Nacional de Ciencias Naturales de Madrid. <http://www.vertebradosibericos.org>. Purroy, F.J. (Coord.) (1997). Atlas de las aves de España (1975-1995). SEO/BidLife. Lynx Edicions. Barcelona.

### 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.



## *Asio flammeus* (Short-eared Owl)

### Turkey

**Breeding population size:** Murat Bozdoğan and Soner bekir personal communication, Eken G., Bozdoğan M., İsfendiyaroğlu S., Kılıç D.T., Lise Y. (2006) Türkiye'nin Önemli Doğa Alanları. Doğa Derneği, Ankara. [www.kusbank.org](http://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. 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. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 5. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p.

**Breeding short-term trend:** 1. Численность и размещение гнездящихся околоводных птиц в водно-болотных угодьях Азово-Черноморского побережья Украины. Под ред. В.Д. Слюхин / Wetland International Киев. 2000. 476 с. 2. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 3. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p.

**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. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 6. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p.

### 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.

**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:** 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>

## Bibliography

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

König, C., Weick, F. and Becking, J.-H. 2008. *Owls of the world*. A and C Black.

Olsen, P.D., Kirwan, G.M. and Christie, D.A. 2013. Short-eared Owl (*Asio flammeus*). 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/55128> on 11 March 2015).

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