



THE IUCN RED LIST
OF THREATENED SPECIES™



***Mareca strepera* (Gadwall)**

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.

Mareca strepera (Gadwall)

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	0-5	<1	2002-2012	poor	?				?				
Armenia	250-400	<1	2002-2012	medium	?				?				
Austria	250-350	<1	2001-2012	good	0	0	2001-2012	medium	+	50-100	1980-2012	medium	M. s. strepera
Azerbaijan	100-200	<1	1996-2000	poor	?				?				
Belarus	1,000-1,500	1	2010	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Belgium	1,000-1,500	1	2008-2012	medium	0	0	2000-2012	medium	+	5782-149900	1973-2012	medium	M. s. strepera
Bosnia & HG	20-50	<1	2010-2014	poor	?				?				
Bulgaria	80-120	<1	2005-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	M. s. strepera
Croatia	40-70	<1	2010	medium	0	0	2002-2010	medium	?				
Czech Rep.	1,800-3,200	3	2001-2003	good	+	105-120	2000-2012	medium	+	110-117	1982-2012	medium	M. s. strepera
Denmark	500	1	2011	medium	+	50-100	1999-2011	medium	+	100-1000	1980-2011	medium	M. s. strepera
Estonia	2,000-3,000	3	2008-2012	medium	+	20-50	2001-2012	medium	+	50-70	1980-2012	medium	M. s. strepera
Finland	500-1,000	1	2006-2010	medium	+	132-270	2000-2011	good	+	3039-5167	1980-2011	medium	M. s. strepera
France	1,500-1,800	2	2009-2012	medium	+	60-70	2000-2012	medium	+	20-50	1980-2012	medium	M. s. strepera
Georgia	Present	<1			?				?				
Germany	6,500-8,500	8	2005-2009	good	+	41-100	1998-2009	medium	+	31-400	1985-2009	medium	M. s. strepera
Greece	10-20	<1	2008-2012	poor	0	0	2001-2012	good	-	50-80	1980-2012	poor	M. s. strepera
Hungary	160-400	<1	2000-2012	medium	+	0-10	2000-2012	poor	?				M. s. strepera
Iceland	400-500	<1	2012	good	+	30-50	2012-	good	+	30-50	1980-2012	medium	
Rep. Ireland	14-23	<1	2008-2011	medium	+	0-23	1991-2011	poor	+	0-575	1980-2011	poor	M. s. strepera
Italy	50-100	<1	2003	medium	?				?				M. s. strepera
Kosovo	0-3	<1	2009-2014	medium	?				?				
Latvia	34-107	<1	2000-2004	good	?				?				M. s. strepera
Lithuania	250-350	<1	2008-2012	medium	+	100-250	2001-2012	medium	+	200-340	1980-2012	medium	M. s. strepera
FYRO Macedonia	5-30	<1	2001-2012	poor	?				?				
Moldova	30-50	<1	2000-2010	medium	F	0	2000-2010	medium	F	0	1980-2010	medium	
Netherlands	12,069-20,409	16	2008-2011	medium	+	110-139	2002-2011	good	+	856-904	1984-2011	good	M. s. strepera
Norway	10-50	<1	2007-2013	medium	F	0	2000-2013	poor	?				
Poland	3,000-4,000	4	2008-2012	medium	+	50-80	2000-2012	medium	+	100-170	1980-2012	medium	M. s. strepera
Portugal	500-1,000	1	2008-2012	poor	+		2001-2012	medium	+		1980-2012	medium	M. s. strepera
Romania	2,601-5,956	4	2008-2013	medium	?				?				M. s. strepera
Russia	35,000-50,000	44	2000-2008	medium	?				?				

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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	
Serbia	204-337	<1	2008-2012	medium	+	30	2000-2012	medium	+	30	1980-2012	medium	
Slovakia	100-200	<1	2012	medium	+	50-100	2000-2012	medium	+	50-100	1980-2012	medium	M. s. strepera
Slovenia	5-20	<1	2008-2012	medium	+	0-10	2001-2012	medium	+	0-10	1980-2012	medium	M. s. strepera
Spain	2,350-13,000	6	2007	good	F	2924	1998-2011	medium	+		1980-2011	medium	M. s. strepera
Sweden	1,400-2,600	2	2008-2012	medium	+	60-90	2001-2012	medium	+	300-500	1980-2012	medium	M. s. strepera
Switzerland	15-30	<1	2008-2012	medium	0	0	2001-2012	medium	+	0-782	1990-2012	medium	
Turkey	300-400	<1	2013	medium	-	20-29	2000-2012	medium	-	0-19	1990-2013	poor	
Ukraine	650-1,400	1	2000	medium	F	10-20	2001-2012	medium	F	15-25	1980-2012	medium	
United Kingdom	690-1,730	1	2006-2010	medium	+	191	1997-2007	good	+	562	1973-2008	good	M. s. strepera
EU27	37,400-69,900	53			Increasing								
Europe	75,400-125,000	100			Increasing								

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.

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Table 2. Reported national wintering population sizes and trends in Europe¹. Note that some countries within the species' wintering range did not report any data, and that only minimum totals are presented, to avoid double-counting of birds moving between countries.

Country (or territory) ²	Population estimate				Short-term population trend ⁴				Long-term population trend ⁴				Subspecific population (where relevant)
	Size (individuals) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	
Albania	100-600	<1	2002-2012	good	F	20-50	2002-2012	good	-	20-50	1980-2012	medium	
Armenia	2-2,076	<1	2002-2013	good	?				?				
Austria	1,000-1,100	1	2008-2010	good	0	0	2001-2012	good	+	40-80	1980-2012	medium	
Azerbaijan	5,000-50,000	8	2014	medium	+		2000-2014	medium	+		1980-2014	medium	
Belgium	11,178-13,825	7	2008-2012	good	+	2-4	2001-2012	good	+	7-8	1992-2012	good	
Bosnia & HG	200-400	<1	2008-2013	medium	F	10-20	2000-2013	medium	?				
Bulgaria	160-660	<1	2008-2012	medium	+	57	2000-2012	medium	F	10-20	1980-2012	medium	
Croatia	50-300	<1	2010	medium	F	0-500	2001-2012	poor	?				
Cyprus	5-40	<1	2008-2012	good	-	40-75	2001-2012	medium	+	50-200	1980-2012	medium	
France	14,166-44,124	13	2000-2012	good	+	18-25	2002-2012	medium	+	25-30	1980-2012	medium	
Georgia	Present	<1	2012		?				?				
Germany	19,000	10	2000-2005	good	+	54-186	1997-2009	good	+	179-385	1984-2009	good	
Iceland	Present	<1	2012		?				?				
Rep. Ireland	560	<1	2006-2011	good	+	47	1999-2011	good	+	69	1987-2011	medium	
Italy	8,069-10,409	5	2007-2009	good	+	15-30	2000-2009	good	+	40-85	1991-2009	good	
Kosovo	30-50	<1	2009-2014		?				?				
Luxembourg	10-100	<1	2008-2012	good	F	50-90	2000-2012	good	+	50-100	1980-2012	medium	
FYRO Macedonia	20-50	<1	2001-2012	medium	0	0	2002-2012	medium	-	10-20	1980-2012	medium	
Moldova	10-50	<1	2000-2010	medium	-	5-10	2000-2010	medium	F	20-40	1980-2010	medium	
Montenegro	100-200	<1	2003-2012	good	-		2003-2012	good	-		1991-2012	good	
Netherlands	44,862-51,843	25	2006-2010	medium	+	55-138	2000-2011	good	+	1578-2464	1981-2011	good	
Portugal	2,311	1	2007-2011	medium	+	4-15	2001-2012	good	0	0	1987-2012	good	
Romania	500-3,500	1	2008-2013	medium	0	0	2000-2013	medium	?				
Serbia	800-2,000	1	2008-2012	medium	F	0	2000-2012		?				
Slovenia	20-180	<1	2008-2012	medium	+	180-300	2001-2012	good	+	300-350	1980-2012	medium	
Spain	15,490-23,617	10	2008-2010	good	+	27	2000-2010	good	+	1-4	1980-2010	good	
Switzerland	5,988-8,297	4	2008-2012	good	+	13-18	2001-2012	good	+	176-181	1980-2012	good	
Turkey	184-2,946	<1	2002-2012	good	F	0	2002-2012	poor	?				
Ukraine	50-100	<1	1998-2009	medium	F	10-30	1998-2009	medium	F	15-25	1980-2009	medium	
United Kingdom	25,000	13	2004-2008	good	+	12	1999-2010	good	+	525	1980-2010	good	
EU27	142,000-196,000	83			Increasing								

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Table 2. Reported national wintering population sizes and trends in Europe¹. Note that some countries within the species' wintering range did not report any data, and that only minimum totals are presented, to avoid double-counting of birds moving between countries.

Country (or territory) ²	Population estimate				Short-term population trend ⁴				Long-term population trend ⁴				Subspecific population (where relevant)
	Size (individuals) ³	Europe (%)	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	Direction ⁵	Magnitude (%) ⁶	Year(s)	Quality	
Europe	155,000-263,000	100			Increasing								

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>.

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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.

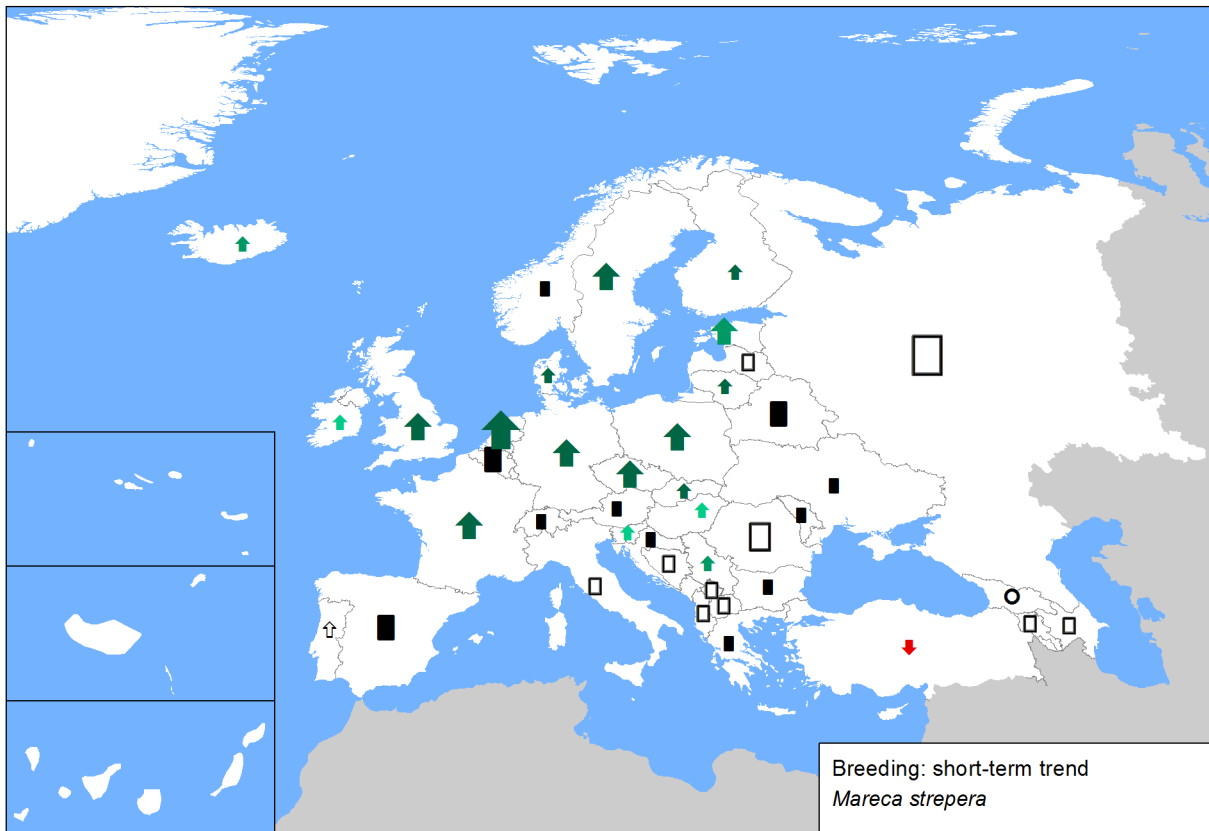


Figure 2. Breeding population sizes and long-term trends across Europe.

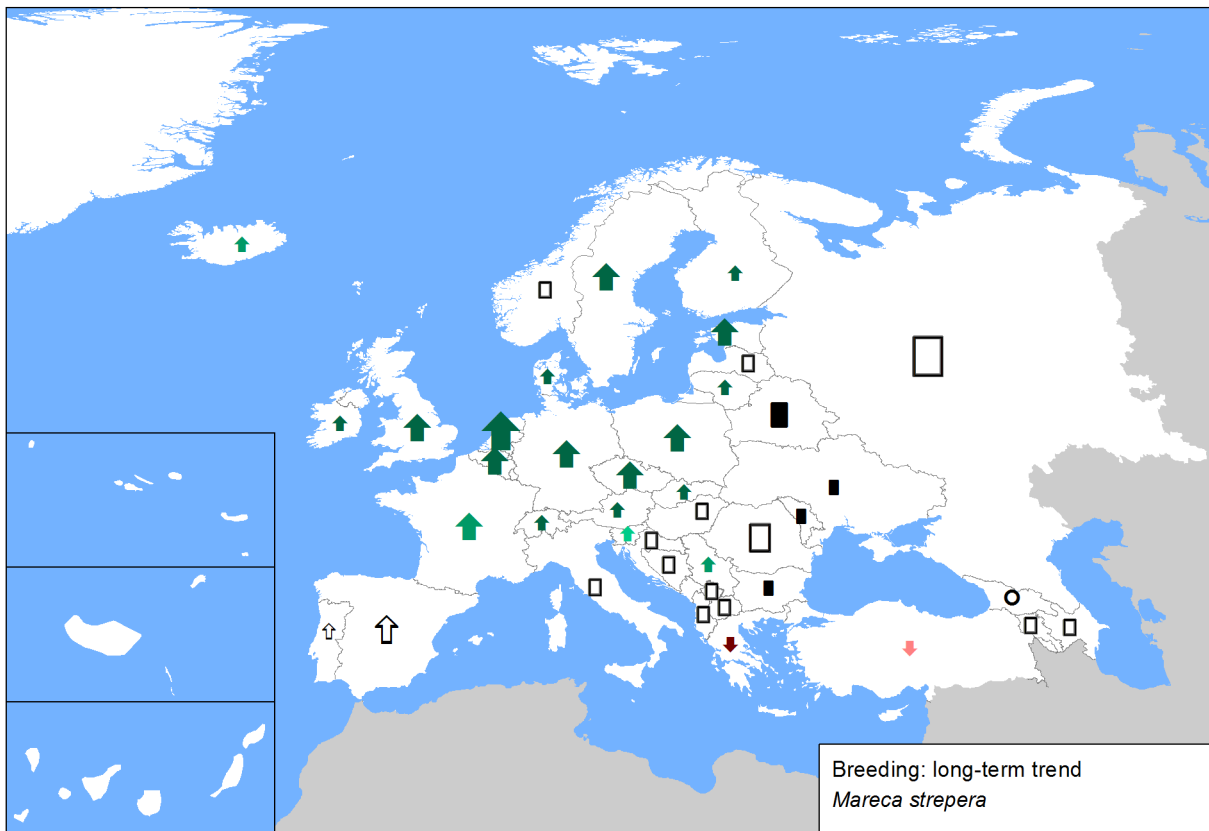


Figure 3. Reported wintering population sizes and short-term trends across Europe. Note that some countries within the species' wintering range did not report any data.

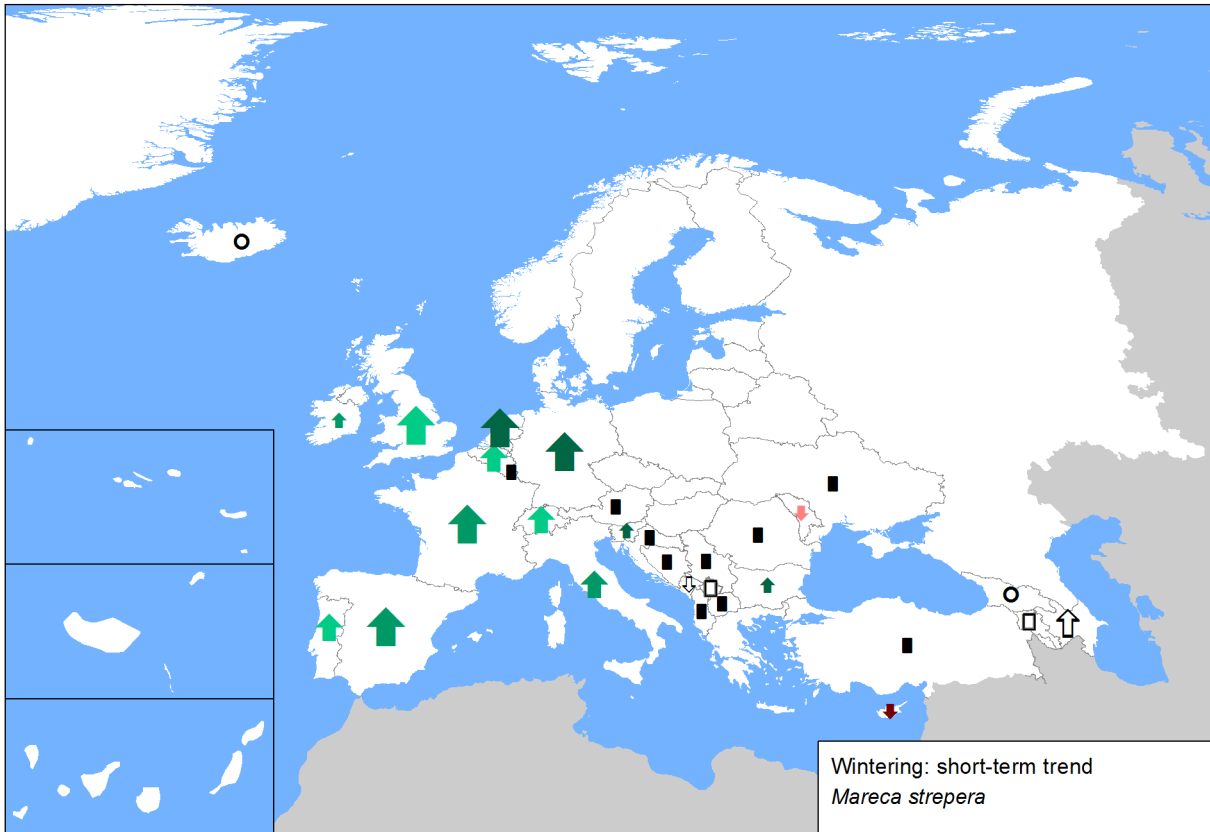
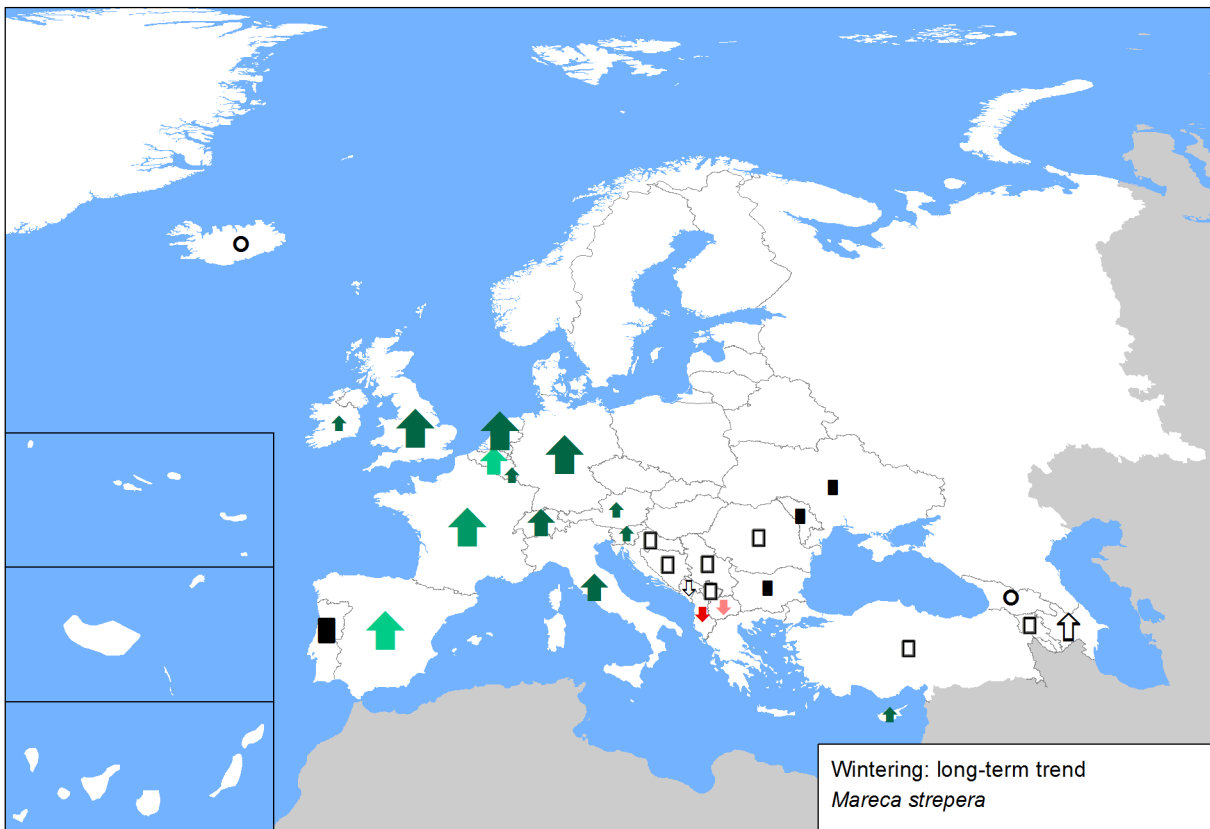


Figure 4. Reported wintering population sizes and long-term trends across Europe. Note that some countries within the species' wintering range did not report any data.



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Sources

Albania

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

Armenia

Breeding population size: ASPB data
Winter population size: ASPB IWC counts

Austria: *A. s. strepera*

Winter population size: BirdLife Austria, unpublished IWC data
Winter short-term trend: BirdLife Austria, unpublished IWC data
Winter long-term trend: BirdLife Austria, unpublished IWC data

Austria: *M. s. strepera*

Breeding population size: BirdLife Austria, estimate on the basis of available unpublished and published population data
Breeding short-term trend: BirdLife Austria, estimate on the basis of available unpublished and published trend data
Breeding long-term trend: BirdLife Austria, estimate on the basis of available unpublished and published trend data

Azerbaijan

Breeding population size: BirdLife International 2004
Winter population size: AOS data base
Winter short-term trend: AOS data base
Winter long-term trend: AOS data base

Belarus

Breeding population size: Viksne J., Svazas S., Czajkovski A., Janaus M., Mischenko A., Kozulin A., Kuresoo A., Serebryakov V. Atlas of Duck populations in Eastern Europe. – 2010. – Vilnius, Akstis. – 199 p.
Breeding short-term trend: Kozulin A., Yourko V., Pareiko O., Pavlushchick T., Tcherkas N. 1998. Waterfowl in Belarus - population estimates and habitat changes. Acta orn. 33:113-126. Viksne J., Svazas S., Czajkovski A., Janaus M., Mischenko A., Kozulin A., Kuresoo A., Serebryakov V. Atlas of Duck populations in Eastern Europe. – 2010. – Vilnius, Akstis. – 199 p.
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: *A. s. strepera*

Winter population size: waterbird database INBO + Aves
Winter short-term trend: waterbird database INBO and Aves
Winter long-term trend: waterbird database INBO and Aves

Belgium: *M. s. strepera*

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: Rare bird panel
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. Ornitološko društvo "Naše ptice", interno izdanje za projekat "Evaluacija IBA područja u FBiH", Sarajevo
Winter population size: Kotrošan, D., Dervović, I., 2010: Rezultati zimskog brojanja ptica močvarica u Bosni i Hercegovini za period od 2008. do 2010. godine. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 6(6): 23-45., Dervović, I. & Kotrošan, D., 2011/2012: Rezultati zimskog brojanja ptica močvarica u Bosni i Hercegovini u 2011. godini. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 7-8(7-8): 44-55., Topić, G. & Kotrošan, D., 2011/2012: Rezultati Međunarodnog cenzusa ptica vodenih staništa u Bosni i Hercegovini 2012. godine. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 7-8(7-8): 56-73., Topić, G., 2013: Rezultati Međunarodnog cenzusa ptica vodenih staništa u Bosni i Hercegovini 2013. godine. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 7-8(7-8): 14-40.
Winter short-term trend: Dervović, I. 2005: Rezultati januarskog brojanja vodenih ptica 1998-2005. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 1(1): 43-45. Dervović, I. 2006: Rezultati zimskog prebrojavanja ptica močvarica u Bosni i Hercegovini u 2006. godini. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 2(2): 20-22. Dervović, I. 2007: Izvještaj o januarskom prebrojavanju vodenih ptica u 2007. godini. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 3(3): 47. Kotrošan, D., Dervović, I., 2010: Rezultati zimskog brojanja ptica močvarica u Bosni i Hercegovini za period od 2008. do 2010. godine. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 6(6): 23-45., Dervović, I. & Kotrošan, D., 2011/2012: Rezultati zimskog brojanja ptica močvarica u Bosni i Hercegovini u 2011. godini. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 7-8(7-8): 44-55., Topić, G. & Kotrošan, D., 2011/2012: Rezultati Međunarodnog cenzusa ptica vodenih staništa u Bosni i Hercegovini 2012. godine. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 7-8(7-8): 56-73., Topić, G., 2013: Rezultati Međunarodnog cenzusa ptica vodenih staništa u Bosni i Hercegovini 2013. godine. Bilten Mreže posmatrača ptica u Bosni i Hercegovini, 7-8(7-8): 14-40.

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Bulgaria: A. s. strepera

Winter population size: Mid-winter count of waterfowl

Winter short-term trend: Statistical analysis made by expert on base of Mid-winter count data

Winter long-term trend: Michev T., Profirov L. 2003. Mid-Winter Numbers of Waterbirds in Bulgaria (1977-2001). Pensoft, Sofia, 160 pp. Dimitrov, M., T. Michev, L. Profirov, K. Nyagolov. 2005. Waterbirds of Bourgas Wetlands: Results and Evaluation of the Monthly Waterbirds Monitoring 1996-2002. Bulgarian Biodiversity Foundation and Publ. House Pensoft, Sofia, 160 pp.

Bulgaria: M. s. strepera

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. Green Balkans. 2009. Integrated management plan for Special Protection Area "Pomorie Lake" (BG0000152) under the Bird Directive, Site of Community Interest "Pomorie" (BG0000620) under the Habitat Directive, "Pomorie Lake" Protected Area and "Pomorie Lake" Ramsar site, 212 c. BSPB Bird Database Po sledite na pticite (<http://www.worldbirds.org>) Shurulinkov, P. G. Daskalova, R. Tzonev, 2013. Breeding Waterbirds in Temporally Flooded Wetlands in Northern Bulgaria. Acta zool. bulg., 65 (2), 2013: 207-215

Breeding short-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. Green Balkans. 2009. Integrated management plan for Special Protection Area "Pomorie Lake" (BG0000152) under the Bird Directive, Site of Community Interest "Pomorie" (BG0000620) under the Habitat Directive, "Pomorie Lake" Protected Area and "Pomorie Lake" Ramsar site, 212 c. BSPB Bird Database Po sledite na pticite (<http://www.worldbirds.org>) Shurulinkov, P. G. Daskalova, R. Tzonev, 2013. Breeding Waterbirds in Temporally Flooded Wetlands in Northern Bulgaria. Acta zool. bulg., 65 (2), 2013: 207-215

Breeding long-term trend: Червена книга на България: <http://e-ecodb.bas.bg/rdb/bg/vol2/Anstrepe.html>

Croatia

Breeding population size: Tutiš, V., Kralj, J., Radović, D., Čiković, D. i Barišić, S. (2013): Crvena knjiga ptica Republike Hrvatske. Ministarstvo zaštite okoliša i prirode, Državni zavod za zaštitu prirode, Zagreb

Breeding short-term trend: Tutiš, V., Kralj, J., Radović, D., Čiković, D. i Barišić, S. (2013): Crvena knjiga ptica Republike Hrvatske. Ministarstvo zaštite okoliša i prirode, Državni zavod za zaštitu prirode, Zagreb

Breeding long-term trend: Tutiš, V., Kralj, J., Radović, D., Čiković, D. i Barišić, S. (2013): Crvena knjiga ptica Republike Hrvatske. Ministarstvo zaštite okoliša i prirode, Državni zavod za zaštitu prirode, Zagreb

Winter population size: Report on the implementation of AEWA for the period 2009-2011 - Croatia. <http://www.unep-aewa.org/en/document/national-report-croatia-2>

Winter short-term trend: Report on the implementation of AEWA for the period 2009-2011 - Croatia. <http://www.unep-aewa.org/en/document/national-report-croatia-2>

Winter long-term trend: Report on the implementation of AEWA for the period 2009-2011 - Croatia. <http://www.unep-aewa.org/en/document/national-report-croatia-2>

Cyprus: A. s. strepera

Winter population size: Monthly waterbird counts (maxima from Dec, Jan and Feb counts) by BirdLife Cyprus and Game & Fauna Service, as published in BirdLife Cyprus monthly checklists and also by the Game & Fauna Service

Winter short-term trend: For the period 2005-12, based on systematic monthly waterbird counts (maxima from Dec, Jan and Feb counts) by BirdLife Cyprus and Game & Fauna Service, as published in BirdLife Cyprus monthly checklists and also by the Game & Fauna Service. For the period 2001-2004, based on birdwatching records as reported in BirdLife Cyprus annual reports (which included annual January waterbirds counts records)

Winter long-term trend: For the period 2005-12, based on systematic monthly waterbird counts (maxima from Dec, Jan and Feb counts) by BirdLife Cyprus and Game & Fauna Service, as published in BirdLife Cyprus monthly checklists and also by the Game & Fauna Service. For the period 1980-2004, based on birdwatching records as reported in BirdLife Cyprus annual reports (which included annual January waterbirds counts records from 1990s onwards)

Czech Republic: M. s. strepera

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

Breeding short-term trend: Common Bird Monitoring

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France: *M. s. strepera*

Georgia

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Germany: *A. s. strepera*

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Winter population size: Hornman et al 2012

Winter short-term trend: NEM (Sovon, RWS, CBS), Hornman et al 2013

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Netherlands: *M. s. strepera*

Breeding population size: NEM, Sovon en CBS, SOVON (2002)

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

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Poland: *M. s. strepera*

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Portugal: *A. s. strepera*

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Winter short-term trend: Programa Nacional de Monitorização de Aves Aquáticas Invernantes

Winter long-term trend: Programa Nacional de Monitorização de Aves Aquáticas Invernantes

Portugal: *M. s. strepera*

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Romania: *A. s. strepera*

Winter population size: International Waterbird Census, Romania SOR Database Milvus Database

Winter short-term trend: International Waterbird Census, Romania SOR Database Milvus Database

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Romania: *M. s. strepera*

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