



THE IUCN RED LIST
OF THREATENED SPECIES™



Mergellus albellus (Smew)

European Red List of Birds

Supplementary Material

The European Union (EU27) Red List assessments were based principally on the official data reported by EU Member States to the European Commission under Article 12 of the Birds Directive in 2013-14.

For the European Red List assessments, similar data were sourced from BirdLife Partners and other collaborating experts in other European countries and territories. For more information, see BirdLife International (2015).

Contents

Reported national population sizes and trends	p. 2
Trend maps of reported national population data	p. 5
Sources of reported national population data	p. 8
Species factsheet bibliography	p. 13

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.

Mergellus albellus (Smew)

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	
Belarus	15-30	<1	2012	medium	F	10-50	2001-2012	medium	?				
Finland	2,000-5,500	26	2006-2012	medium	0	0	2001-2012	medium	+	67-425	1986-2012	medium	North-west & Central Europe (win)
Norway	35-65	<1	2013	medium	+	75-550	2003-2013	good	+	75-550	1990-2013	good	
Romania	10-15	<1	2008-2013	medium	?				?				North-east Europe/Black Sea & East Mediterranean
Russia	6,000-10,000	61	2002-2012	poor	+	5-20	2002-2012	medium	-	5-30	1980-2012	poor	
Sweden	1,100-2,000	13	2008-2012	poor	0	0	2001-2012	poor	+	60-120	1980-2012	poor	North-west & Central Europe (win)
EU27	3,100-7,500	38			Stable								
Europe	9,200-17,600	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.

Mergellus albellus (Smew)

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	10-80	<1	2002-2012	medium	-	30-80	2002-2012	medium	-	30-50	1980-2012	poor	
Armenia	2-229	<1	2003-2013	good	?				?				
Austria	60-70	<1	2008-2010	good	-	30-60	2001-2012	good	0	0	1980-2012	medium	
Azerbaijan	100-700	1	1996-2002	medium	?				?				
Belarus	50-100	<1	2009-2013	good	0	0	2001-2012	medium	?				
Belgium	164-195	<1	2008-2012	good	-	0-3	2001-2012	good	+	1-2	1992-2012	good	
Bosnia & HG	1-10	<1	2008-2013	medium	F	0-100	2000-2013	medium	?				
Bulgaria	5-280	<1	2000-2012	good	F	20-900	2000-2012	good	F	10-700	1980-2012	good	
Croatia	50-100	<1	2011	medium	?				?				
Czech Rep.	81	<1	2011	medium	0	0	2000-2011	medium	+	350	1980-2011	medium	
Denmark	2,080	5	2008	good	+	100-1000	2000-2011	good	+	100-1000	1980-2011	good	
Estonia	1,000-4,000	5	2008-2012	medium	+	50-70	2001-2012	medium	+	50-70	1980-2012	medium	
Finland	170-1,000	1	2007-2012	medium	+	37-754	2001-2012	good	+	1186-640761	1983-2012	good	
France	225	1	2008-2012	good	F	0	2000-2012	good	F	0	1980-2012	good	
Georgia	681	2	2002	good	?				?				
Germany	11,000	26	2000-2005	good	F	0	1997-2009	good	+	113-254	1984-2009	good	
Greece	10-144	<1	2007-2013	good	0	0	2004-2013	medium	0	0	1982-2013	medium	
Hungary	600-1,500	2	2008-2012	medium	-	55-65	2000-2012	medium	?				
Rep. Ireland	2	<1	2004-2009	poor	?				?				
Kosovo	0-3	<1	2009-2014		?				?				
Latvia	20-200	<1	2001-2012	medium	0	0	2001-2012	medium	0	0	1984-2012	medium	
Lithuania	300-500	1	2011-2012	medium	F	0	2001-2012	medium	F	0	1980-2012	medium	
Luxembourg	10-40	<1	2008-2012	good	F	0-30	2000-2012	medium	+	10-20	1980-2012	medium	
FYRO Macedonia	0-40	<1	2001-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Moldova	3-15	<1	2000-2010	medium	F	0	2000-2010	medium	F	0	1980-2010	medium	
Montenegro	2-10	<1	2003-2012	good	F	0	2003-2012	medium	F	0	1991-2012	good	
Netherlands	2,639-5,649	9	2006-2010	good	F	0	2000-2011	good	0	0	1981-2011	good	
Norway	200-300	1	1994-2003	medium	?				?				
Poland	2,000-6,000	8	2011-2012	medium	?				F	0	1985-2012	medium	
Romania	3,000-6,000	10	2008-2013	medium	-	10-20	2000-2013	medium	?				
Russia	2,100-6,100	8	2010	medium	?				?				

Mergellus albellus (Smew)

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	
Serbia	600-2,000	3	2008-2012	medium	-	30-40	2000-2012	medium	?				
Slovakia	320-400	1	2011	medium	0	0	2000-2012	medium	0	0	1980-2012	poor	
Slovenia	31-100	<1	2008-2012	good	-	50-80	2001-2012	medium	0	0	1980-2012	medium	
Sweden	3,000-5,000	9	2008-2012	good	0	0	2001-2012	good	+	500-1000	1980-2012	good	
Switzerland	4-23	<1	2008-2012	good	-	60-80	2001-2012	good	-	44-88	1980-2012	good	
Turkey	33-996	<1	2012	good	F	0	2002-2012	poor	?				
Ukraine	800-9,000	6	1998-2009	medium	F	10-50	1998-2009	medium	F	25-50	1980-2009	medium	
United Kingdom	180	<1	2004-2008	medium	-	31	1999-2010	good	+	285	1980-2010	good	
EU27	26,900-44,600	77			Fluctuating								
Europe	31,500-65,000	100			Fluctuating								

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.

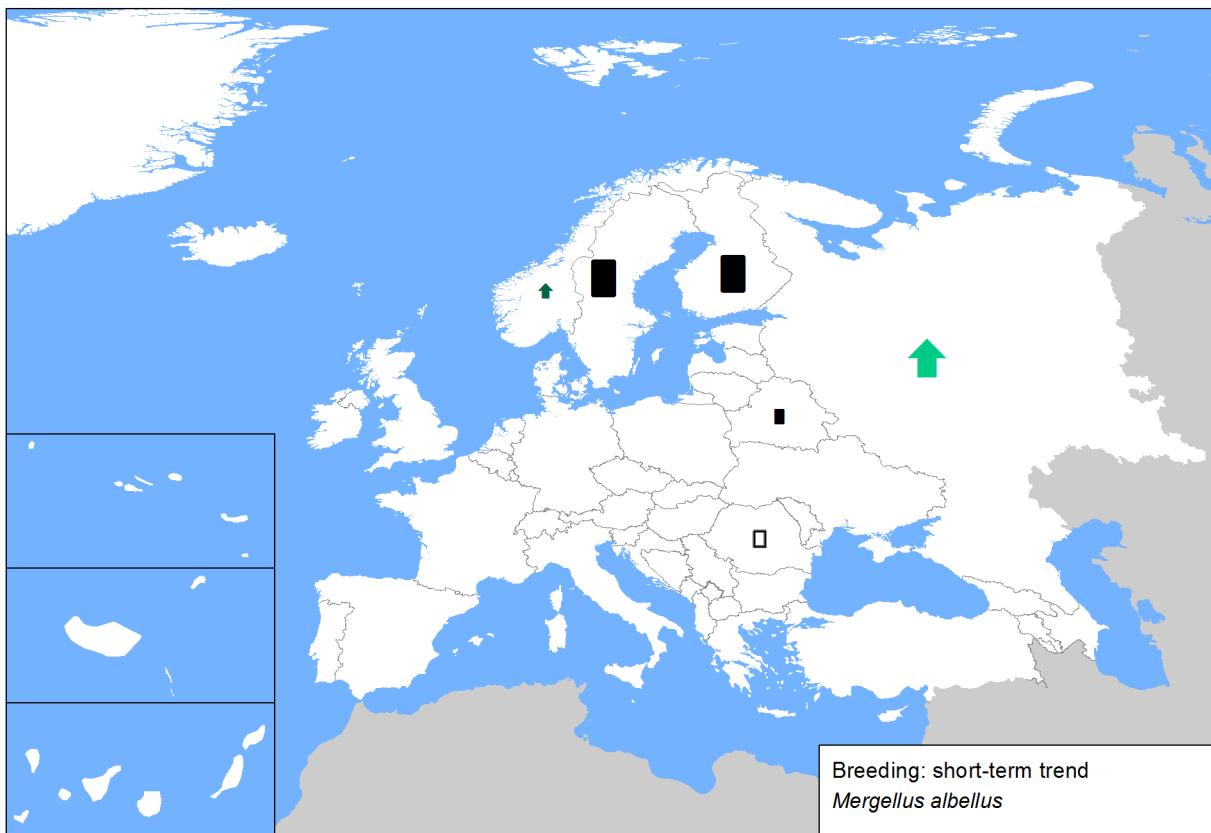


Figure 2. Breeding population sizes and long-term trends across Europe.

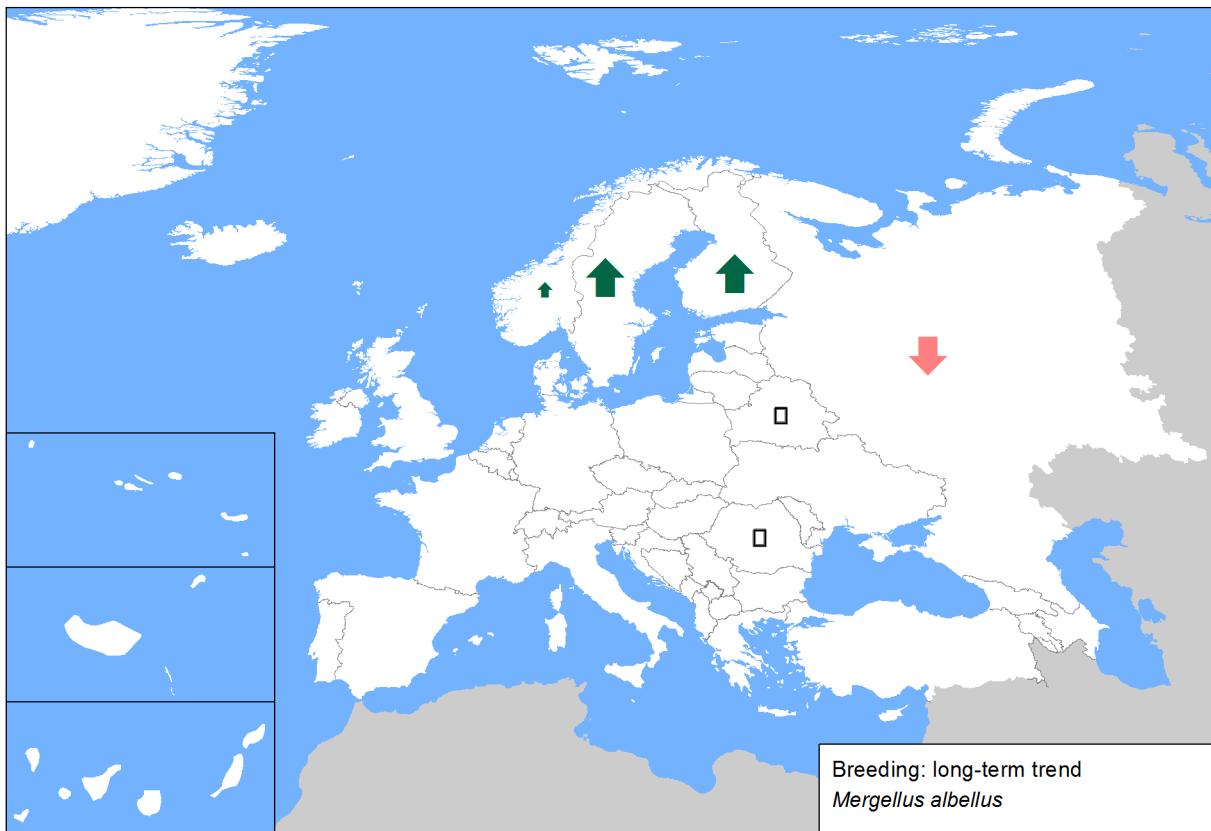


Figure 3. Reported wintering population sizes and short-term trends across Europe. Note that some countries within the species' wintering range did not report any data.

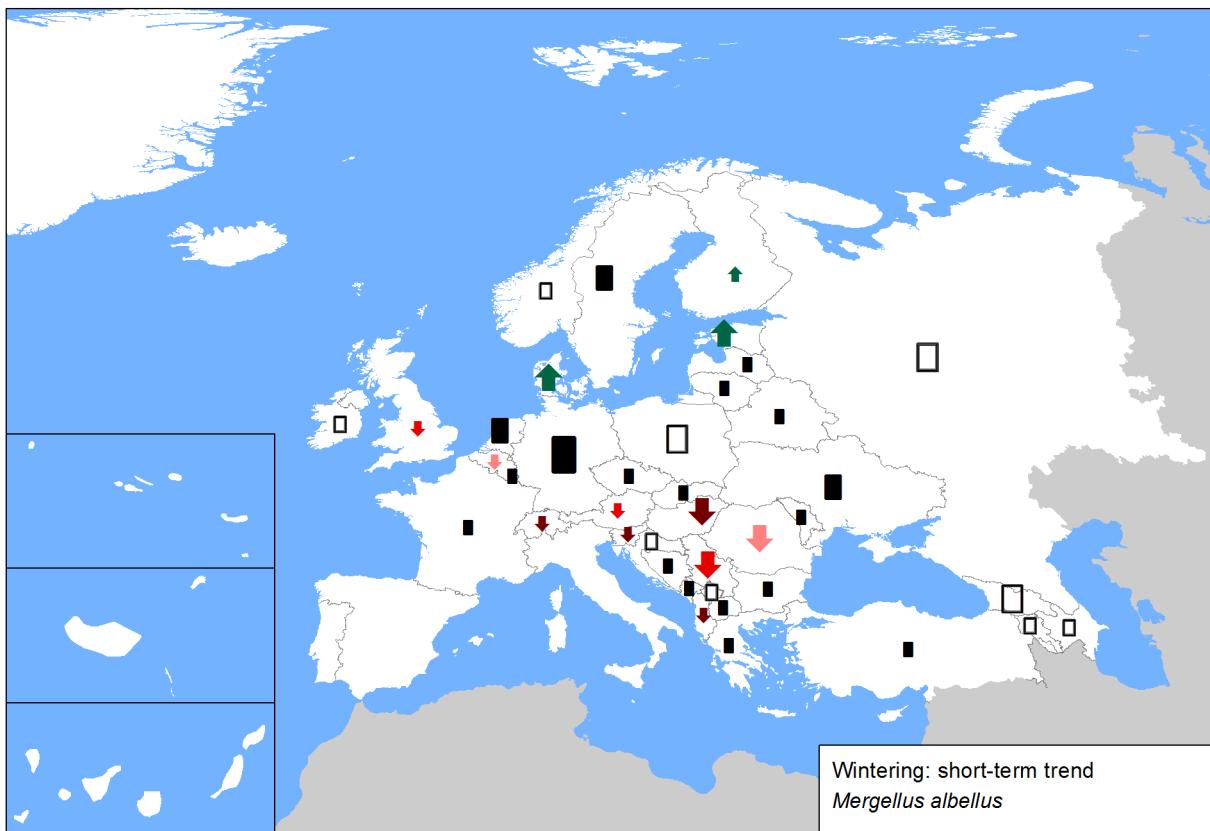
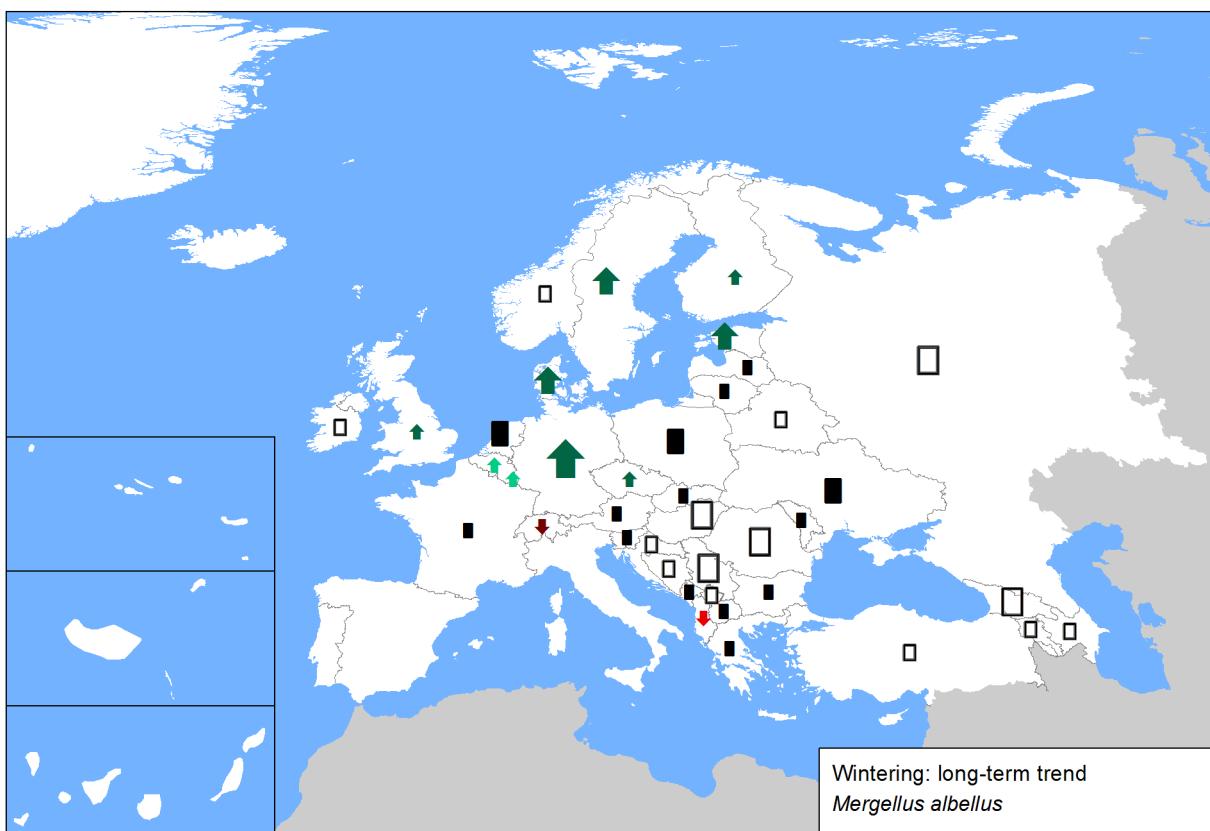


Figure 4. Reported wintering population sizes and long-term trends across Europe. Note that some countries within the species' wintering range did not report any data.



Sources

Albania

Winter population size: Bino pers. obs.

Winter short-term trend: Bino pers. obs.

Winter long-term trend: Bino pers. obs.

Armenia

Winter population size: ASPB IWC counts

Austria: North-west & Central Europe (win)

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

Azerbaijan

Winter population size: BirdLife International 2004

Belarus

Breeding population size: Bogdanovich I.A. - personal communication

Breeding short-term trend: Bogdanovich I.A. - personal communication

Winter population size: Bogdanovich I.A. - personal communication

Winter short-term trend: Bogdanovich I.A. - personal communication

Belgium: North-west & Central Europe (win)

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

Bosnia and Herzegovina

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 brojana 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 brojana 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.

Bulgaria: North-east Europe/Black Sea & East Mediterranean

Winter population size: BSPB GIS related ornithological database Michev T., Profirov L. 2003. Mid-Winter Numbers of Waterbirds in Bulgaria (1977-2001). Pensoft, Sofia, 160 pp.

Winter short-term trend: BSPB GIS related ornithological database Michev T., Profirov L. 2003. Mid-Winter Numbers of Waterbirds in Bulgaria (1977-2001). Pensoft, Sofia, 160 pp.

Winter long-term trend: IWC counts in Bulgaria Michev T., Profirov L. 2003. Mid-Winter Numbers of Waterbirds in Bulgaria (1977-2001). Pensoft, Sofia, 160 pp.

Croatia

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>

Czech Republic

Winter population size: MUSIL P.& MUSILOVA Z. 2011: Aythya 4, Univerzita Karlova v Praze, Praha.

Winter short-term trend: MUSIL P.& MUSILOVA Z. 2011: Aythya 4, Univerzita Karlova v Praze, Praha.

Winter long-term trend: MUSIL P.& MUSILOVA Z. 2011: Aythya 4, Univerzita Karlova v Praze, Praha.

Denmark: North-west & Central Europe (win)

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

Mergellus albellus (Smew)

Denmark: North-west & Central Europe (win)

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

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

Estonia: North-west & Central Europe (win)

Winter population size: Elts, J., Leito, A., Leivits, A., Luigjöe, 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

Winter short-term trend: Elts, J., Leito, A., Leivits, A., Luigjöe, 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

Winter long-term trend: Elts, J., Leito, A., Leivits, A., Luigjöe, 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: North-west & Central Europe (win)

Breeding population size: Pöysä, H., Rintala, J., Lehikoinen, A., & Väistänen, R. A. (2013). The importance of hunting pressure, habitat preference and life history for population trends of breeding waterbirds in Finland. Eur J Wild Res 59:245-256. Doi:10.1007/s10344-012-0673-8

Breeding short-term trend: Pöysä, H., Rintala, J., Lehikoinen, A., & Väistänen, R. A. (2013). The importance of hunting pressure, habitat preference and life history for population trends of breeding waterbirds in Finland. Eur J Wild Res 59:245-256. Doi:10.1007/s10344-012-0673-8 http://www.rktl.fi/riista/riistavarat/vesilinnut_vuonna.html

Breeding long-term trend: Pöysä, H., Rintala, J., Lehikoinen, A., & Väistänen, R. A. (2013). The importance of hunting pressure, habitat preference and life history for population trends of breeding waterbirds in Finland. Eur J Wild Res 59:245-256. Doi:10.1007/s10344-012-0673-8

Winter population size: BirdLife Finland 2013: Regional observation summary database of Finnish Birdwatching societies on wintering bird species.

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

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

France: North-west & Central Europe (win)

Winter population size: LPO - Wetlands International 2012 Base de données des dénombrements d'oiseaux d'eau « Wetlands International » 1980-2012 réalisés à la mi-janvier, LPO - BirdLife France, Rochefort

Winter short-term trend: LPO - Wetlands International 2012 Base de données des dénombrements d'oiseaux d'eau « Wetlands International » 1980-2012 réalisés à la mi-janvier, LPO - BirdLife France, Rochefort

Winter long-term trend: LPO - Wetlands International 2012 Base de données des dénombrements d'oiseaux d'eau « Wetlands International » 1980-2012 réalisés à la mi-janvier, LPO - BirdLife France, Rochefort

Georgia

Winter population size: BirdLife International 2004

Germany: North-west & Central Europe (win)

Winter population size: Wahl, J., J. Bellebaum, J. Blew, S. Garthe, K. Günther & T. Heinicke (in Vorb.): Rastende Wasservögel in Deutschland 2000-2005: Bestandsschätzungen und Schwellenwerte für Rastgebiete nationaler Bedeutung. Vogelwelt.

Winter short-term trend: Monitoring rastender Wasservögel

Winter long-term trend: Monitoring rastender Wasservögel

Greece

Winter population size: Midwinter Counts Database, Hellenic Ornithological Society

Winter short-term trend: Midwinter Counts Database, Hellenic Ornithological Society

Winter long-term trend: Midwinter Counts Database, Hellenic Ornithological Society

Hungary: North-west & Central Europe (win)

Winter population size: National Park Directorates databases Faragó, S. (2012): Results of Hungarian Waterfowl Monitoring in the season 2011/2012. Hungarian Waterfowl Publications 22: 62-284.

Winter short-term trend: National Park Directorates databases Faragó, S. (2012): Results of Hungarian Waterfowl Monitoring in the season 2011/2012. Hungarian Waterfowl Publications 22: 62-284.

Republic of Ireland: North-west & Central Europe (win)

Winter population size: Boland, H. & Crowe, O. (2012) Irish Wetland Bird Survey: Waterbird Status and Distribution 2001/02 - 2009/09. BirdWatch Ireland, Kilcoole, Co. Wicklow.

Winter short-term trend: Boland, H. & Crowe, O. (2012) Irish Wetland Bird Survey: Waterbird Status and Distribution 2001/02 - 2009/09. BirdWatch Ireland, Kilcoole, Co. Wicklow.

Winter long-term trend: Hutchinson, C.D. (1989) Birds in Ireland. T & A D Poyser, Staffordshire.

Kosovo

Winter population size: NGO "Finch" (2014)

Latvia: North-west & Central Europe (win)

Winter population size: WI IWC

Winter short-term trend: WI IWC

Mergellus albellus (Smew)

Latvia: North-west & Central Europe (win)

Winter long-term trend: WI IWC

Lithuania: North-west & Central Europe (win)

Winter population size: Šniaukšta, L. 2012. Results of the midwinter waterfowl counts in Lithuania. Paukščiai 14 (2): 6-14. Midwinter count data 2012 State monitoring scheme data (2011-2012) Mindaugas Dagys (dagys@ekoi.lt)

Winter short-term trend: Šniaukšta, L. 2012. Results of the midwinter waterfowl counts in Lithuania. Paukščiai 14 (2): 6-14. Midwinter count data 2010-2012 LIFE05 NAT/LV/000100 project data LIFE05 NAT/LT/000095 project data Mindaugas Dagys (dagys@ekoi.lt) State monitoring scheme data (2001-2012)

Winter long-term trend: Šniaukšta, L. 2012. Results of the midwinter waterfowl counts in Lithuania. Paukščiai 14 (2): 6-14. Midwinter count data 2010-2012 LIFE05 NAT/LV/000100 project data LIFE05 NAT/LT/000095 project data Mindaugas Dagys (dagys@ekoi.lt) State monitoring scheme data (2001-2012)

Luxembourg: North-west & Central Europe (win)

Winter 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

Winter 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

Winter long-term trend: LUXOR (2013): NATUR&EMWELT - BIRD-DATABASE, LUXEMBOURG Recorder (2013): database, Musée national d'histoire naturelle, Luxembourg

The Former Yugoslav Republic of Macedonia

Winter population size: Wetlands International database and unpublished data of the Macedonian Ecological Society

Winter short-term trend: Wetlands International database and unpublished data of the Macedonian Ecological Society

Winter long-term trend: Wetlands International database and unpublished data of the Macedonian Ecological Society

Moldova

Winter population size: Winter assessment of water birds in Moldova

Winter short-term trend: Winter assessment of water birds in Moldova

Winter long-term trend: Winter assessment of water birds in Moldova Мантров О., Визир И., Особенности зимовки и весеннего пролета водоплавающих и околоводных птиц на среднем Днестре в период 2006-2007 годов. Diversitatea, valorificarea ratională și protecția lumii animale. 2009: 66-68

Montenegro

Winter population size: IWC reports (2003-2012): Dubak, Vešović, N., Jovićević, M., Vizi O., Vizi,A.

Winter short-term trend: 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,

Winter long-term trend: 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: North-west & Central Europe (win)

Winter population size: Hornman et al 2012

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

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

Norway

Breeding population size: 1) Østnes, J.E., Kroglund, R.T., Østerås, T.R. & Myhre, T. 2013. Hekkebestanden av lappfiskand (*Mergus albellus*) i Vikna, Nord-Trøndelag. Høgskolen i Nord-Trøndelag, Utredning nr. 144. Steinkjer. 2) Morten Günther & Paul Eric Aspholm pers.comm. 3) Ingar Jostein Øien & Tomas Aarvak unpublished data. 4) Shimmings P. & Øien, I.J. 2015. Bestandestimer og trender for norske hekkfugler. NOF-rapport 2015-2.

Breeding short-term trend: 1) Østnes, J.E., Kroglund, R.T., Østerås, T.R. & Myhre, T. 2013. Hekkebestanden av lappfiskand (*Mergus albellus*) i Vikna, Nord-Trøndelag. Høgskolen i Nord-Trøndelag, Utredning nr. 144. Steinkjer. 2) Morten Günther & Paul Eric Aspholm pers.comm. 3) Ingar Jostein Øien & Tomas Aarvak unpublished data. 4). Værnesbranden, P.I. 2006. Lappfiskanda – en art i ekspansjon. Vår Fuglefauna 29: 72-76. 5). Værnesbranden, P.I. 2009. Lappfiskandas forekomst i Vikna 1996-2009. Rapport til Norsk Fuglevernfonf, Trondheim. Upublisert.

Breeding long-term trend: 1) Østnes, J.E., Kroglund, R.T., Østerås, T.R. & Myhre, T. 2013. Hekkebestanden av lappfiskand (*Mergus albellus*) i Vikna, Nord-Trøndelag. Høgskolen i Nord-Trøndelag, Utredning nr. 144. Steinkjer. 2) Værnesbranden, P.I. 2006. Lappfiskanda – en art i ekspansjon. Vår Fuglefauna 29: 72-76. 3) Værnesbranden, P.I. 2009. Lappfiskandas forekomst i Vikna 1996-2009. Rapport til Norsk Fuglevernfonf, Trondheim. Unpublished. 4) Gjershaug, , J.O., Thingstad, P.G., Eldøy, S., & Byrkjedal, S. (eds.). 1994. Norsk Fugleatlas. Norsk Ornitoligisk Forening, Klæbu.

Winter population size: Artsobservasjoner.no

Poland: North-west & Central Europe (win)

Winter population size: MZPW: Meissner W., Chodkiewicz T., Bzoma Sz., Brewka B., Woźniak B. 2012. Monitoring ptaków zimujących. Sprawozdanie dla GIOŚ. OTOP (source: http://monitoringptakow.gios.gov.pl/raporty?file=files/pliki/raporty_faza3/RaportMPP3_etap8_zad2%264_zima2012.pdf), Ławicki Ł., Guentzel, S., Wysocki D. (red.). 2012a. Wyniki inwentaryzacji przyrodniczej dla obszaru specjalnej ochrony ptaków Zalew Szczeciński PLB320009, obszaru specjalnej ochrony ptaków Zalew Kamięski i Dziwna PLB320011, obszaru specjalnej ochrony siedlisk Ujście Odry i Zalew Szczeciński PLH320018. ECO-EXPERT Sp.j., Szczecin. Opracowanie wykonane dla Urzędu Morskiego w Szczecinie w ramach projektu nr POIS.05.03.00-00-280/10 pn. „Projekty planów ochrony 5 ostoi Natura 2000 wyznaczonych na obszarach morskich w województwie zachodniopomorskim”; Ławicki Ł., Guentzel, S., Wysocki D. (red.). 2012b. Wyniki inwentaryzacji przyrodniczej dla obszaru specjalnej ochrony ptaków Zatoka Pomorska PLB990003 i obszaru specjalnej ochrony siedlisk Ostoja na Zatoce Pomorskiej PLH990002. ECO-EXPERT Sp.j., Szczecin. Opracowanie wykonane dla Urzędu Morskiego w Szczecinie w ramach projektu nr POIS.05.03.00-00-280/10 pn. „Projekty planów ochrony 5 ostoi Natura 2000 wyznaczonych na obszarach morskich w województwie zachodniopomorskim”.

Mergellus albellus (Smew)

Poland: North-west & Central Europe (win)

Winter long-term trend: Zyska P., Dombrowski A., Kot H., Rzepala M. 1990. Akcja zimowego liczenia ptaków wodnych 1985-1987. Not. Orn. 31: 113-131; Dombrowski A., Kot H., Zyska P. 1993. Liczebność ptaków wodnych zimujących w Polsce w latach 1988-1990. Not. Orn. 34: 5-21.

Romania: North-east Europe/Black Sea & East Mediterranean

Breeding population size: SOR database Executant INCDDD Tulcea //Proiect de cercetare în vederea îndeplinirii obligațiilor ce revin ţării noastre în ceea ce privește aplicarea reglementărilor comunitare privind rețeaua ecologică natura 2000.//**Finanțator: Ministerul Mediului și Pădurilor **2009-2011 /Inventarierea speciilor de floră și faună de pe teritoriul României în conformitate cu prevederile Legii nr. 462/2001 - Anexa 3 și 4/(studiu M25/MMGA/2005) *Finanțator*: Ministerul Mediului și Gospodăririi Apelor 2005

Breeding short-term trend: BirLife International (2004) Birds in Europe: population estimates, trends and conservation status. Cambridge, UK Papp T., Fântână C. – editori 2008, Ariile de Importanță Avifaunistică din România, Publicație Comună a Societății Ornitologice Române și a Asociației „Grupul Milvus”

Breeding long-term trend: Munteanu D. (ed) 2002: Atlasul păsărilor clocitoare din România, ediția a II-a, Publicațiile Societății Ornitologice Române, nr. 16, Cluj-Napoca. Weber P. et all.1994: Atlasul provizoriu al păsărilor clocitoare din România, Publicațiile Societății Ornitologice Române, nr.2, Mediaș Papp T., Fântână C. – editori 2008, Ariile de Importanță Avifaunistică din România, Publicație Comună a Societății Ornitologice Române și a Asociației „Grupul Milvus” Victor Ciochia. Dinamica și migrația păsărilor. Ed. Științifică și Enciclopedică, București, 1985

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

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

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

Russia

Breeding population size: Mischenko A.L. (ed.) 2004. Estimation of numbers and trends for birds of the European part of Russia («Birds in Europe-II»). Moscow, RBCU (in Russian). Mischenko, expert opinion

Breeding short-term trend: Gilyazov A.S. 2012. Population dynamics of *Mergus* species in Lapland Nature Reserve, the Kola Peninsula. - Casarka. Bulletin of the Goose, Swan and Duck Study Group of North Eurasia, 15 (1): 63-70 (in Russian). Kharitonova I.A., unpublished. ir.kharitonova@gmail.com

Breeding long-term trend: Krivenko V.G, Vinogradov V.G. 2008. Birds of the Water Environment and Rhythms of Climate of the Northern Eurasia. Moscow: 588 pp. (in Russian).

Winter population size: Bukreev S.A., Dzhimirzoev G.S. 2010. Results of mid-winter counts of birds in Republic Dagestan in January 2010. – Proc. of State Nature Reserve "Dagestansky", 3. Makhachkala: 74-103 (in Russian). Grishanov G.V., Romanov Yu.M. 2007. Hunting animals of Kaliningrad Region. Kaliningrad: 203 pp. (in Russian). Grishanov G.V., unpublished data

Serbia

Winter population size: Šćiban M, Đapić D, Sekereš O, Đorđević I, Ružić M, Stanković D, Radišić D, Gergelj J, Janković M, Radaković M, Rudić B, Agošton A, Dajović M. & Simić D. (2011): Rezultati Međunarodnog cenzusa ptica vodenih staništa u Srbiji 2012. godine. Ciconia 20: 120–1

Winter short-term trend: Šćiban M, Đapić D, Sekereš O, Đorđević I, Ružić M, Stanković D, Radišić D, Gergelj J, Janković M, Radaković M, Rudić B, Agošton A, Dajović M. & Simić D. (2011): Rezultati Međunarodnog cenzusa ptica vodenih staništa u Srbiji 2012. godine. Ciconia 20: 120–1

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

Slovakia: North-east Europe/Black Sea & East Mediterranean

Winter population size: Slabeyová K., Ridzoň J., Karaska D., Topercer J. & Darolová A. 2011: Správa zo zimného sčítania vodného vtáctva na Slovensku 2009/10, SOS/BirdLife Slovensko, Bratislava, 160 s.

Winter short-term trend: Slabeyová K., Ridzoň J., Karaska D., Topercer J. & Darolová A. 2011: Správa zo zimného sčítania vodného vtáctva na Slovensku 2009/10, SOS/BirdLife Slovensko, Bratislava, 160 s.

Winter long-term trend: Slabeyová K., Ridzoň J., Karaska D., Topercer J. & Darolová A. 2011: Správa zo zimného sčítania vodného vtáctva na Slovensku 2009/10, SOS/BirdLife Slovensko, Bratislava, 160 s.

Slovenia: North-east Europe/Black Sea & East Mediterranean

Winter population size: <http://www.natura2000.gov.si/index.php?id=211> Božič, L. (2008): Monitoring populacij izbranih vrst ptic – zimsko štetje vodnih ptic 2002-2008. Končno poročilo. Društvo za opazovanje in preučevanje ptic Slovenije, Ljubljana. 167 str. Božič, L. (2009): Monitoring populacij izbranih vrst ptic – Rezultati zimskega štetja vodnih ptic 2009, rezultati popisov preleta ujed v jesenski sezoni 2008/2. vmesno poročilo. Društvo za opazovanje in preučevanje ptic Slovenije, Ljubljana. 35 str. Božič, L. (2010): Monitoring populacij izbranih ciljnih vrst ptic – zimsko štetje vodnih ptic 2010. Končno poročilo. Društvo za opazovanje in preučevanje ptic Slovenije, Ljubljana. 28 str. Božič, L. (2011): Monitoring populacij izbranih ciljnih vrst ptic – zimsko štetje vodnih ptic 2011. Končno poročilo. Društvo za opazovanje in preučevanje ptic Slovenije, Ljubljana. 28 str. BOŽIČ, L. (2008A): Rezultati januarskega štetja vodnih ptic leta 2008 v Sloveniji. – Acrocephalus 29 (136): 39–49. BOŽIČ, L. (2008B): Rezultati januarskega štetja vodnih ptic leta 2009 v Sloveniji. – Acrocephalus 29 (138/139): 169–179. BOŽIČ, L. (2010): Rezultati januarskega štetja vodnih ptic leta 2010 v Sloveniji. – Acrocephalus 31 (145/146): 131–141. BOŽIČ, L. (2011): Rezultati januarskega štetja vodnih ptic leta 2011 v Sloveniji. – Acrocephalus 32 (148/149): 67–77. BOŽIČ, L. (2012): Rezultati januarskega štetja vodnih ptic leta 2012 v Sloveniji. – Acrocephalus 33 (152/153): 109–119.

Winter short-term trend: DOPPS

Winter long-term trend: SOVINC, A. (1994): Zimski ornitološki atlas Slovenije. – Tehniška založba Slovenije, Ljubljana. ŠTUMBERGER, B. (2000): Reka Drava. pp. 149–159. V. Polak, S. (ur.): Mednarodno pomembna območja za ptice v Sloveniji. Monografija DOPPS št. 1. – DOPPS, Ljubljana.

Sweden: North-west & Central Europe (win)

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.

Winter population size: Swedish Bird Survey (Svensk Fågeltaxering), Lund University.

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

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

Mergellus albellus (Smew)

Switzerland

Winter population size: Swiss Ornithological Institute. Winter waterbird census (January). <http://www.vogelwarte.ch/monitoring-wintering-waterbirds.html> Min Max of total count

Winter short-term trend: Swiss Ornithological Institute. Winter waterbird census (January). <http://www.vogelwarte.ch/monitoring-wintering-waterbirds.html>

Winter long-term trend: Swiss Ornithological Institute. Winter waterbird census (January). <http://www.vogelwarte.ch/monitoring-wintering-waterbirds.html>

Turkey

Winter population size: Kurt, B., Ozbağdatlı, N., Bozkurt, A.K., Arslangundoğdu, Z. ve Gursoy, A. 2002. Türkiye Sulakalarları Kış Ortası Sukuşu Sayımı, Doğa Hayatı Koruma Derneği, İstanbul, Türkiye. Çağlayan, E., Kılıç, D.T., Per, E. ve Gem, E. 2005. Türkiye Kış Ortası Sukuşu Sayımları 2005. Doğa Derneği, Ankara, Turkey Suseven, B., Onmus, O. ve İsfendiyaroğlu, S. 2006. Kış Ortası Sukuşu Sayımı (KOSK) Raporu, Doğa Derneği, Ankara Onmus, O. 2007. Türkiye Kış Ortası Sukuşu Sayımları 2007, Doğa Derneği, Ankara Akarsu, F. ve Balkız, Ö. 2010. Türkiye Kış Ortası Sukuşu Sayımları 2008-2009-2010, Doğa Derneği, Ankara Erciyas Yavuz, K., Kartal E. 2011. Türkiye Kış Ortası Sukuşu Sayımları, 2011, Ornitoloji Araştırma Merkezi, Samsun Erciyas Yavuz, K., İsfendiyaroğlu S. 2013. 2012 Türkiye Kış Ortası Sukuşu Sayımları, Doğa Derneği, Ankara Birdlife International (2004) Birds in Europe: population estimates, trends and conservation status, Cambridge UK: Birdlife International (Birdlife Conservation series no: 12) www.kusbank.org

Winter short-term trend: Doğa Derneği

Ukraine

Winter population size: 1. Scott, D. A. & Rose, P.M. (1996). Atlas of Anatidae Populations in Africa and Western Eurasia / Wetland International Publ. No41, Wetland International , Wageningen, The Netherlands, 336 p. 2. Русев И.Т., Корзюков А.И., Сацьк С.Ф. Мониторинг зимующих птиц в Северо-Западном Причерноморье в 1999 г. Сб. Зимние учеты птиц на Азово-Черноморском побережье Украины, Алушта-Киев, 1999, выпуск 2, С.46-60. 3. Directory of Azov – Black Sea Coastal Wetlands / Ed. By G. Marushevsky – Kyiv, 2003, Wetland International, 235 p. 4. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p. 5. Горбань І. Розміри популяцій зимуючих птахів України. Вісник Львівського університету. Серія біологічна. Вип. 35. 2004. С.23-39. 6. Бескаравайний М.М. Птицы морских берегов Южного Крыма. Симферополь. «Н.Оріанда»., 2008. 160 с. 7. Kostishyn V., Andryushchenko Yu., Goradze I., Abuladze A., Mamuchadze J., Erciyas K. Wintering Waterbird Census in the Azow – Black Sea Coastal Wetlands of Ukraine, Georgia, and Turkey. – Wetlands International Black Sea Program. – 2011. – 130 pp.

Winter short-term trend: 1. Русев И.Т., Корзюков А.И., Форманюк О.А., Панченко П.С. Зимовки водоплавающих и водно-болотных птиц в Северо-Западном Причерноморье в 2000-2001 гг. // Мониторинг зимующих птиц в Азово-Черноморском регионе Украины. – Одесса-Киев. – 2002. – С.54-74 2. Directory of Azov – Black Sea Coastal Wetlands / Ed. By G. Marushevsky – Kyiv, 2003, Wetland International, 235 p. 3. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 р. 4. Горбань І. Розміри популяцій зимуючих птахів України. Вісник Львівського університету. Серія біологічна. Вип. 35. 2004. С.23-39. 5. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 р. 6. Бескаравайний М.М. Птицы морских берегов Южного Крыма. Симферополь. «Н.Оріанда»., 2008. 160 с. 7. Гаврилюк М. Н., Домашевский С. В., Илюха А. В., Борисенко Н. Н., Грищенко В. Н., Яблоновская-Грищенко Е. Д. О зимовке водоплавающих и околоводных птиц в 2007–2008 гг. в районе Кременчугского водохранилища // Сохранение разнообразия животных и охотничье хозяйство России [Матер. 3-й Междунар. науч.-практич. конф.]. – М., 2009. – С. 572–576. 8. Гаврилюк М. Н., Илюха О. В., Борисенко М. М., Грищенко В. М., Яблоновская-Грищенко Е. Д. Зимовка водоплавающих и околоводных птиц в 2007–2008 гг. в районе Кременчугского водохранилища // Сохранение разнообразия животных и охотничье хозяйство России [Матер. 3-й Междунар. науч.-практич. конф.]. – М., 2009. – С. 572–576. 9. Гаврилюк М. Н., Домашевский С. В., Илюха А. В., Борисенко Н. Н., Грищенко В. Н., Яблоновская-Грищенко Е. Д. О зимовке водоплавающих и околоводных птиц в 2007–2008 гг. в районе Кременчугского водохранилища // Сохранение разнообразия животных и охотничье хозяйство России [Матер. 3-й Междунар. науч.-практич. конф.]. – М., 2009. – С. 572–576. 10. Гаврилюк М. Н., Илюха О. В., Борисенко М. М., Грищенко В. М., Яблоновская-Грищенко Е. Д. Зимовля водоплавных та навколіводних птахів у 2009–2010 рр. у районі Кременчуцького водосховища // Природничий альманах. Серія: Біологічні науки. – Херсон, 2011. – Вип. 15. – С. 26–32. 11. Kostishyn V., Andryushchenko Yu., Goradze I., Abuladze A., Mamuchadze J., Erciyas K. Wintering Waterbird Census in the Azow – Black Sea Coastal Wetlands of Ukraine, Georgia, and Turkey. – Wetlands International Black Sea Program. – 2011. – 130 pp.

Winter long-term trend: 1. Русев И.Т., Жмуд М.Е., Корзюков А.И., Гержик И.П., Сацьк С.Ф., Потапов О.В. Результаты рождественского учета зимующих птиц в Северо-Западном Причерноморье в 1997 г. // Сб. "Экосистемы дикой природы", 1997, - вып.6. - С.19-50. 2. Русев И.Т., Корзюков А.И., Сацьк С.Ф. Мониторинг зимующих птиц в Северо-Западном Причерноморье в 1999 г. Сб. Зимние учеты птиц на Азово-Черноморском побережье Украины, Алушта-Киев, 1999, выпуск 2, С. 46-60. 3. IBA території України: території, важливі для збереження видового різноманіття та кількісного багатства птахів. /Редактор О. Микитюк/.Київ. СофтАРТ., 1999. 324 с. 4. 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. 5. Directory of Azov – Black Sea Coastal Wetlands / Ed. By G. Marushevsky – Kyiv, 2003, Wetland International, 235 p. 6. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 р. 7. Горбань І. Розміри популяцій зимуючих птахів України. Вісник Львівського університету. Серія біологічна. Вип. 35. 2004. С.23-39. 8. Бескаравайний М.М. Птицы морских берегов Южного Крыма. Симферополь. «Н.Оріанда»., 2008. 160 с. 9. Гаврилюк М. Н., Домашевский С. В., Илюха А. В., Борисенко Н. Н., Грищенко В. Н., Яблоновская-Грищенко Е. Д. О зимовке водоплавающих и околоводных птиц в 2007–2008 гг. в районе Кременчугского водохранилища // Сохранение разнообразия животных и охотничье хозяйство России [Матер. 3-й Междунар. науч.-практич. конф.]. – М., 2009. – С. 572–576. 10. Гаврилюк М. Н., Илюха О. В., Борисенко М. М., Грищенко В. М., Яблоновская-Грищенко Е. Д. Зимовля водоплавных та навколіводних птахів у 2009–2010 рр. у районі Кременчуцького водосховища // Природничий альманах. Серія: Біологічні науки. – Херсон, 2011. – Вип. 15. – С. 26–32. 11. Kostishyn V., Andryushchenko Yu., Goradze I., Abuladze A., Mamuchadze J., Erciyas K. Wintering Waterbird Census in the Azow – Black Sea Coastal Wetlands of Ukraine, Georgia, and Turkey. – Wetlands International Black Sea Program. – 2011. – 130 pp.

United Kingdom: North-west & Central Europe (win)

Winter population size: Musgrove, A.J., Austin, G.E., Hearn, R.D., Holt, C.A., Stroud, D.A. & Wotton, S.R. 2011. Overwinter population estimates of British waterbirds. British Birds 104: 364–397.

Winter short-term trend: Holt, C.A., Austin, G.E., Calbrade, N.A., Mellan, H.J., Hearn, R.D., Stroud, D.A., Wotton, S.R. & Musgrove, A.J. (2012). Waterbirds in the UK 2010/11: The Wetland Bird Survey. BTO/RSPB/JNCC, Thetford. 183 pp.

Winter long-term trend: Holt, C.A., Austin, G.E., Calbrade, N.A., Mellan, H.J., Hearn, R.D., Stroud, D.A., Wotton, S.R. & Musgrove, A.J. (2012). Waterbirds in the UK 2010/11: The Wetland Bird Survey. BTO/RSPB/JNCC, Thetford. 183 pp.

Bibliography

- Carboneras, C. and Kirwan, G.M. 2014. Smew (*Mergus albellus*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds.) 2014. *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/52927> on 3 March 2015).
- Johnsgard, P.A. 1978. *Ducks, geese and swans of the World*. University of Nebraska Press, Lincoln and London.
- Kear, J. 2005. *Ducks, geese and swans volume 2: species accounts* (Cairina to Mergus). Oxford University Press, Oxford, U.K.
- Madge, S. and Burn, H. 1988. *Wildfowl*. Christopher Helm, London.
- Melville, D.S. and Shortridge, K.F. 2006. Migratory waterbirds and avian influenza in the East Asian-Australasian Flyway with particular reference to the 2003-2004 H5N1 outbreak. In: Boere, G., Galbraith, C. and Stroud, D. (ed.), *Waterbirds around the world*, pp. 432-438. The Stationery Office, Edinburgh, UK.
- Pavón-Jordán, D., Fox, A.D., Clausen, P., Dagys, M., Deceuninck, B., Devos, K., Hearn, R.D., Holt, C.A., Hornman, M., Keller, V., Langendoen, T., Ławicki, Ł., Lorentsen, S.H., Luigjøe, L., Meissner, W., Musil, P., Nilsson, L., Paquet, J.-Y., Stipniece, A., Stroud, D.A., Wahl, J., Zenatello, M. and Lehikoinen, A. (2015), Climate-driven changes in winter abundance of a migratory waterbird in relation to EU protected areas. *Diversity and Distributions*, 21(5): 571-582.
- Snow, D.W. and Perrins, C.M. 1998. *The Birds of the Western Palearctic vol. 1: Non-Passerines*. Oxford University Press, Oxford.