

## *Spatula clypeata* (Northern Shoveler)

### 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).

*Spatula clypeata* (Northern Shoveler)

**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	
Albania	0	<1	2002-2012		?				-	80-100	1980-2012	poor	
Armenia	Present	<1	2002-2012		?				?				
Austria	140-200	<1	2008-2012	good	F	0	2001-2012	good	-	40-80	1980-2012	good	
Belarus	1,000-6,400	1	2009-2010	medium	F	5-60	2000-2010	medium	F	5-60	1980-2010	medium	
Belgium	800-1,000	<1	2008-2012	medium	0	0	2000-2012	medium	+	158-270	1973-2012	medium	
Bosnia & HG	100-150	<1	2010-2014	poor	?				?				
Bulgaria	20-50	<1	2005-2012	medium	0	0	2001-2012	medium	F	10-20	1980-2012	medium	
Cyprus	1-2	<1	2010-2011	good	+	100	2001-2012	good	+	100	1980-2012	good	
Czech Rep.	80-150	<1	2001-2003	good	?				-	45	1985-2003	medium	
Denmark	800	<1	2011	medium	0	0	1999-2011	medium	+	25-50	1980-2011	medium	
Estonia	1,000-1,500	1	2008-2012	medium	0	0-10	2001-2012	medium	-	20-50	1980-2012	medium	
Finland	11,000-18,000	7	2006-2012	good	0	0	2001-2012	good	-	1-30	1986-2012	good	
France	1,500-2,000	1	2007	medium	0	0	2001-2012	poor	0	0	1985-2013	poor	
Georgia	Present	<1			?				?				
Germany	2,500-2,900	1	2005-2009	good	0	0	1998-2009	medium	0	0	1985-2009	medium	
Greece	0-50	<1	2008-2012	poor	?				?				
Hungary	150-320	<1	2010-2012	poor	-	47-70	2000-2012	poor	?				
Iceland	20-50	<1	2000	poor	?				?				
Rep. Ireland	50-100	<1	2011	medium	+	0-17	2000-2011	poor	+	0-7	1980-2011	poor	
Italy	150-200	<1	2003	medium	?				?				
Latvia	200-400	<1	2003	good	?				-	0-75	1994-2003	medium	
Lithuania	200-300	<1	2008-2012	medium	0	0	2001-2012	medium	+	10-30	1980-2012	medium	
FYRO Macedonia	0-5	<1	2001-2012	poor	?				?				
Moldova	1-5	<1	2000-2010	medium	F	0	2000-2010	medium	F	0	1980-2010	medium	
Netherlands	5,091-6,136	3	2008-2011	medium	-	10-22	2002-2011	good	-	42-57	1984-2011	good	
Norway	20-100	<1	2000-2013	poor	?				?				
Poland	600-1,100	<1	2008-2012	medium	?				-	45-60	1980-2012	medium	
Portugal	50-100	<1	2008-2012	poor	+		2001-2012	poor	?				
Romania	312-1,884	<1	2008-2013	medium	?				?				
Russia	140,000-180,000	80	2000-2002	poor	0	0	2000-2012	poor	-	5-30	1980-2012	poor	
Serbia	40-65	<1	2008-2012	medium	0	0	2000-2012	medium	0	0	1980-2012	medium	
Slovakia	10-40	<1	2002	medium	0	0	2000-2012	medium	-	10-25	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	
Slovenia	0-10	<1	2002-2012	medium	F	0	2001-2012	medium	F	0	1980-2012	medium	
Spain	365-1,600	<1	2007	good	+		1998-2011	medium	+		1980-2011	medium	
Sweden	1,800-3,000	1	2008-2012	medium	0	0	2001-2012	medium	0	0	1980-2012	medium	
Turkey	10-100	<1	2013	medium	-	20-29	2000-2012	medium	-	30-49	1990-2013	medium	
Ukraine	1,900-3,100	1	2000	medium	-	10-25	2001-2012	medium	-	25-40	1980-2012	medium	
United Kingdom	310-1,020	<1	2006-2010	medium	-	19	1990-2008	good	+	13	1970-2008	good	
<b>EU27</b>	<b>27,100-42,900</b>	<b>17</b>			<b>Stable</b>								
<b>Europe</b>	<b>170,000-233,000</b>	<b>100</b>			<b>Stable</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.

*Spatula clypeata* (Northern Shoveler)

**Table 2.** Reported national wintering population sizes and trends in Europe<sup>1</sup>. 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) <sup>2</sup>	Population estimate				Short-term population trend <sup>4</sup>				Long-term population trend <sup>4</sup>				Subspecific population (where relevant)
	Size (individuals) <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	
Albania	1,000-5,000	1	2002-2012	good	-	30-50	2002-2012	good	-	40-60	1980-2012	medium	
Armenia	27-1,783	<1	2003-2013	good	?				?				
Azerbaijan	30,000-60,000	14	2014	medium	F	0	2000-2014	medium	F	0	1980-2014	medium	
Belgium	4,033-4,878	1	2008-2012	good	-	4-5	2001-2012	good	+	2-3	1992-2012	good	
Bosnia & HG	20-50	<1	2008-2013	medium	0	0	2000-2013	medium	?				
Bulgaria	700-3,200	<1	2008-2012	medium	F	30-40	2000-2012	medium	F	10-20	1980-2012	medium	
Croatia	20-300	<1	2010	medium	F	0-1400	2001-2012	medium	F	0	1980-2012	poor	
Cyprus	1,100-1,700	<1	2008-2012	good	-	30-40	2001-2012	medium	+	300-900	1980-2012	medium	
France	21,815-34,370	9	2008-2012	good	0	0	2000-2012	good	F	0	1980-2012	good	
Germany	3,900	1	2000-2005	good	+	27-455	1997-2009	good	+	33-303	1984-2009	good	
Greece	16,251-28,103	7	2007-2013	good	0	0	2004-2013	good	+	267	1982-2013	good	
Rep. Ireland	2,770	1	2006-2011	good	F	0	1999-2011	good	?				
Italy	17,650-27,252	7	2007-2009	good	+	0-40	2000-2009	good	+	0-40	1991-2009	good	
FYRO Macedonia	0-50	<1	2001-2012	good	-	10-50	2000-2012	good	-	10-50	1980-2012	good	
Montenegro	210-400	<1	2003-2012	good	-		2003-2012	good	-		1991-2012	good	
Netherlands	6,063-14,940	3	2006-2010	good	-	5-60	2000-2011	good	0	0	1981-2011	good	
Portugal	7,195	2	2007-2011	medium	+	5-14	2001-2012	good	0	0	1987-2012	good	
Romania	100-2,000	<1	2008-2013	medium	F	0-20	2000-2013	medium	?				
Serbia	20-300	<1	2008-2012	medium	F	0	2000-2012		?				
Slovenia	52-103	<1	2008-2012	good	+	50-100	2001-2012	good	+	100-200	1980-2012	medium	
Spain	105,390-166,561	43	2008-2010	good	+	17	2000-2010	good	+	2	1980-2009	good	
Switzerland	338-482	<1	2008-2012	good	-	12-31	2001-2012	good	+	44-54	1980-2012	good	
Turkey	4,894-22,468	3	2002-2012	good	F	0	2002-2012	poor	?				
Ukraine	300-450	<1	1998-2009	medium	-	10-25	1998-2009	medium	-	15-40	1980-2009	medium	
United Kingdom	18,000	6	2004-2008	good	-	2	1999-2010	good	+	52	1980-2010	good	
<b>EU27</b>	<b>205,000-315,000</b>	<b>81</b>			<b>Increasing</b>								
<b>Europe</b>	<b>242,000-406,000</b>	<b>100</b>			<b>Increasing</b>								

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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 (individuals) <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	

<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>.

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<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

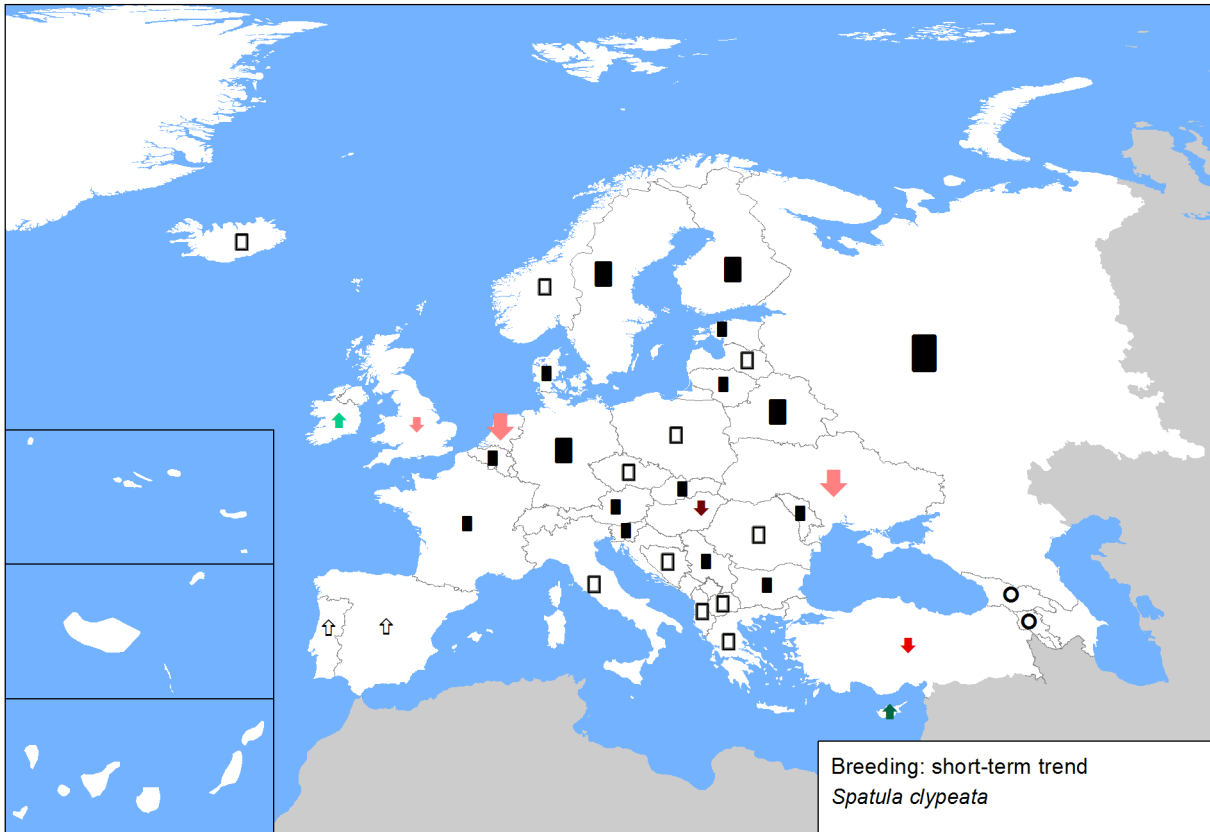
- |   |                                  |
|---|----------------------------------|
| ↑ Large increase ( $\geq 50\%$ )        | ↓ Large decrease ( $\geq 50\%$ ) |
| ↑ Moderate increase (20–49%)            | ↓ Moderate decrease (20–49%)     |
| ↑ Small increase ( $< 20\%$ )           | ↓ Small decrease ( $< 20\%$ )    |
| ↑ 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.

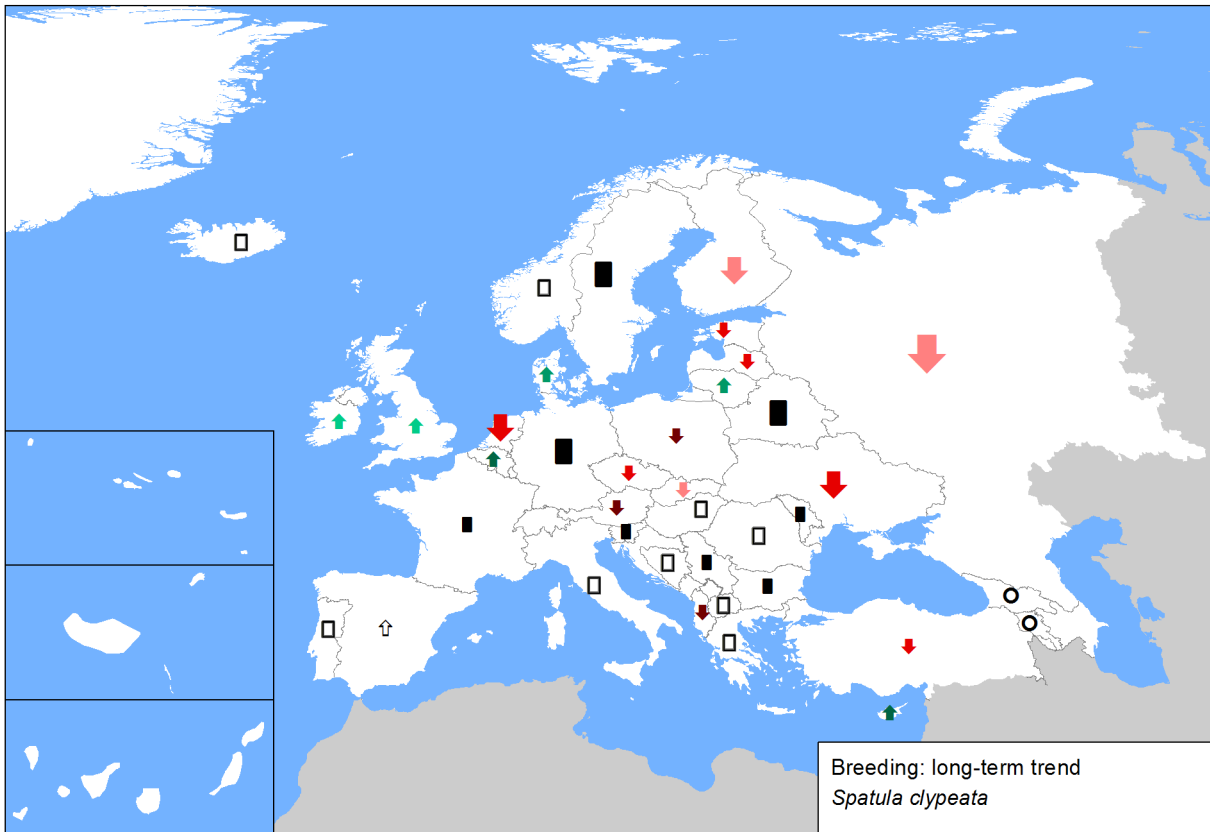
- ↑ Large:  $\geq 10\%$  of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small:  $< 1\%$  of the European population

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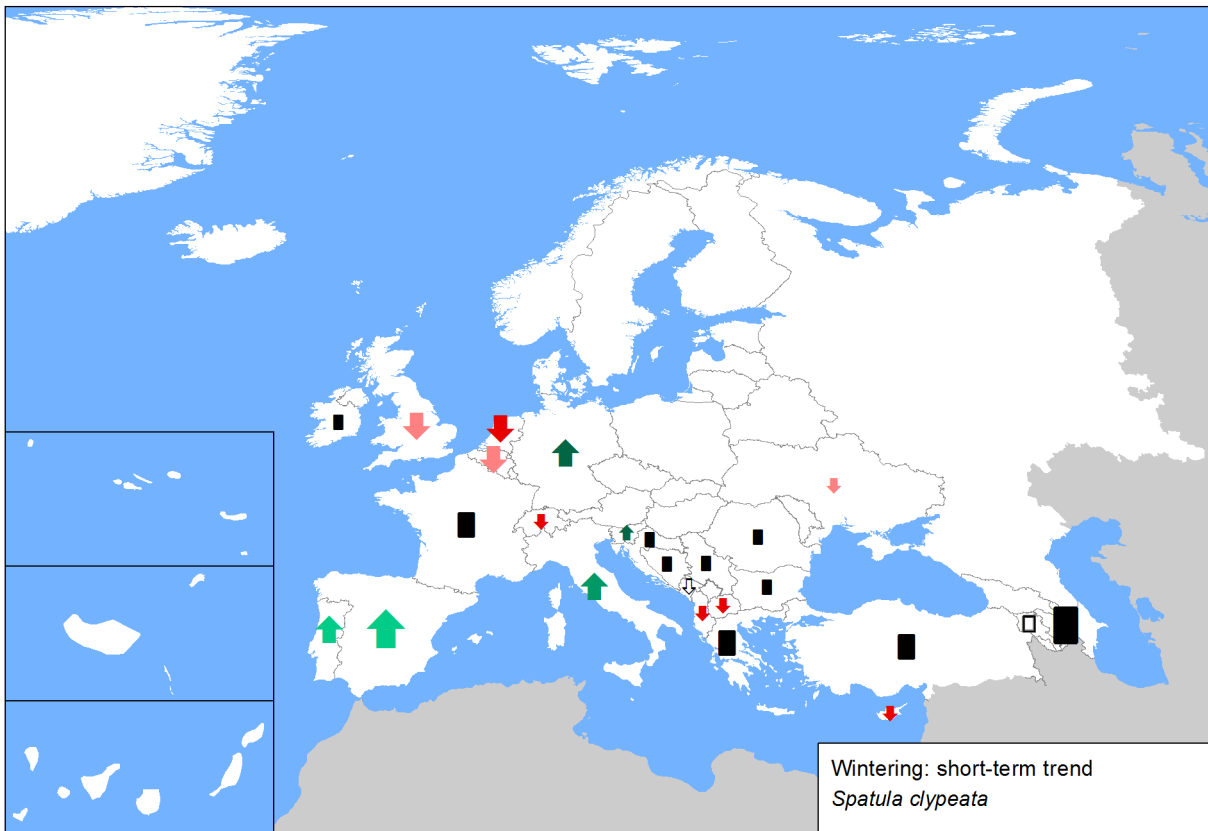
**Figure 1.** Breeding population sizes and short-term trends across Europe.



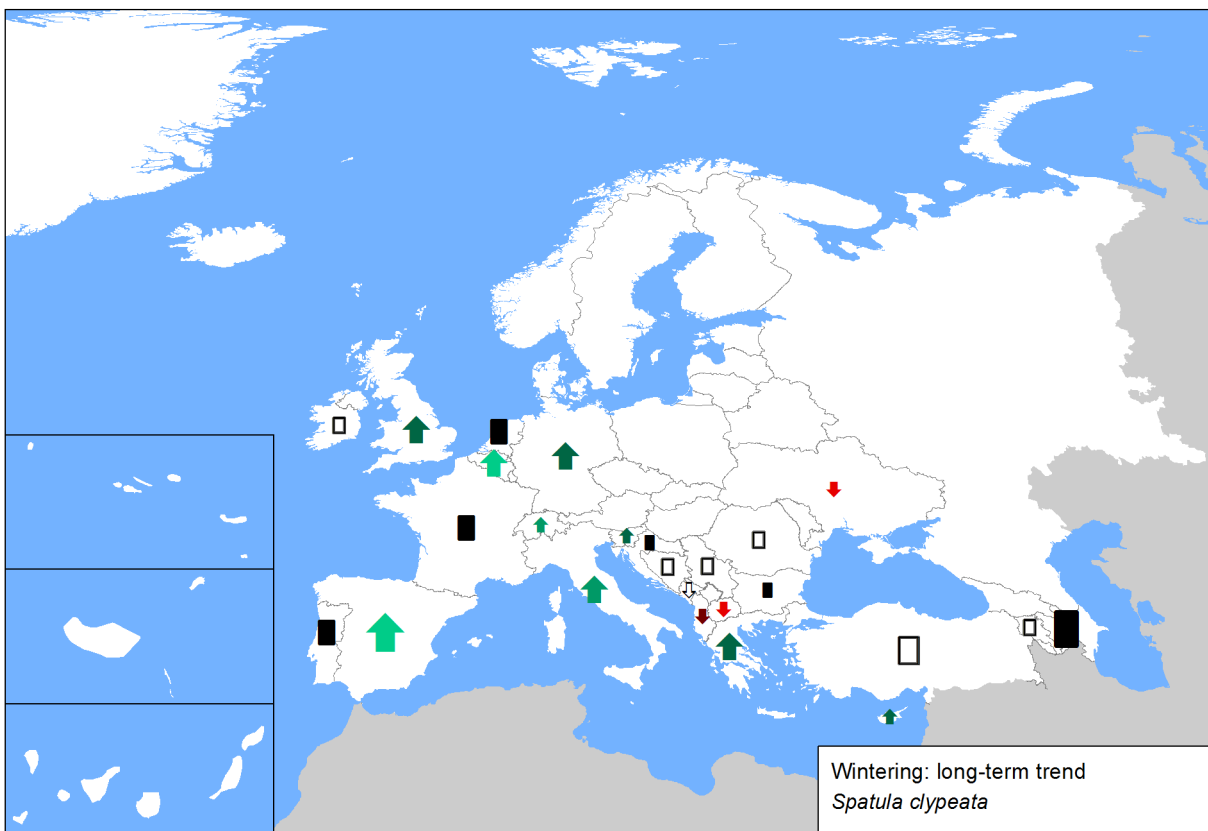
**Figure 2.** Breeding population sizes and long-term trends across Europe.



**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.





## Sources

### Albania

<b>Breeding population size:</b> Bino pers. obs.
<b>Breeding long-term trend:</b> Hallman pers. Obs. Bino pers. Obs.
<b>Winter population size:</b> Bino pers. Obs.
<b>Winter short-term trend:</b> Bino pers. obs.
<b>Winter long-term trend:</b> Bino pers. obs.

### Armenia

<b>Breeding population size:</b> ASPB data
<b>Winter population size:</b> ASPB IWC counts

### Austria

<b>Breeding population size:</b> M. Dvorak, unpublished data
<b>Breeding short-term trend:</b> M. Dvorak, unpublished data
<b>Breeding long-term trend:</b> M. Dvorak, unpublished data

### Azerbaijan

<b>Winter population size:</b> AOS data base
<b>Winter short-term trend:</b> AOS data base
<b>Winter long-term trend:</b> AOS data base

### Belarus

<b>Breeding population size:</b> 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.
<b>Breeding short-term trend:</b> 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.
<b>Breeding long-term trend:</b> 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. Nikiforov M.E., Kozulin A.V., eds. Belarussian birds at the beginning of XXI century: status, numbers, distribution. - 1997. - Minsk. - 187 p.

### Belgium

<b>Breeding population size:</b> Data Breeding Bird atlas Wallonia (Jacob et al 2010), Brussels (Weiserbs 2012) and Flanders (Vermeersch et al 2004) in combination with trend data.
<b>Breeding short-term trend:</b> Rare bird panel
<b>Breeding long-term trend:</b> Comparison between 2008-2012 estimate and Devillers, 1989 (Atlas of the Belgian Breeding Bird) population estimate
<b>Winter population size:</b> waterbird database INBO + Aves
<b>Winter short-term trend:</b> waterbird database INBO and Aves
<b>Winter long-term trend:</b> waterbird database INBO and Aves

### Bosnia and Herzegovina

<b>Breeding population size:</b> 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
<b>Winter population size:</b> 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.
<b>Winter short-term trend:</b> 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.

### Bulgaria

<b>Breeding population size:</b> 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 ( <a href="http://www.worldbirds.org">http://www.worldbirds.org</a> ) Shurulinkov, P. G. Daskalova, R. Tzonev, 2013. Breeding Waterbirds in Temporally Flooded Wetlands in Northern Bulgaria. Acta zool. bulg., 65 (2), 2013: 207-215
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## *Spatula clypeata* (Northern Shoveler)

### Bulgaria

<b>Breeding short-term trend:</b> 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 ( <a href="http://www.worldbirds.org">http://www.worldbirds.org</a> ) Shurulinkov, P. G. Daskalova, R. Tzonev, 2013. Breeding Waterbirds in Temporally Flooded Wetlands in Northern Bulgaria. Acta zool. bulg., 65 (2), 2013: 207-215
<b>Breeding long-term trend:</b> 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.
<b>Winter population size:</b> Mid-winter count of waterfowl
<b>Winter short-term trend:</b> Statistical analysis made by expert on base of Mid-winter count data Michev T., Profirov L. 2003. Mid-Winter Numbers of Waterbirds in Bulgaria (1977-2001). Pensoft, Sofia, 160 pp.
<b>Winter long-term trend:</b> 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.

### Croatia

<b>Winter population size:</b> 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
<b>Winter short-term trend:</b> 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
<b>Winter long-term trend:</b> 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

### Cyprus

<b>Breeding population size:</b> Monthly waterbird counts by BirdLife Cyprus and Game & Fauna Service, as published in BirdLife Cyprus monthly checklists and also by the Game & Fauna Service; Analysis of recent BirdLife Cyprus bird sightings records reported in the society's annual reports
<b>Breeding short-term trend:</b> Monthly waterbird counts by BirdLife Cyprus and Game & Fauna Service, as published in BirdLife Cyprus monthly checklists and also by the Game & Fauna Service; Analysis of recent BirdLife Cyprus bird sightings records reported in the society's annual reports; Whaley DJ & Dawes JC, 2003 Cyprus Breeding Birds' Atlas; Flint & Stewart BOU Checklist no.6 (1992) The Birds of Cyprus
<b>Breeding long-term trend:</b> Breeding recorded in 2010 and 2011 for this species represented foirst confirmed records since 1910
<b>Winter population size:</b> 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
<b>Winter short-term trend:</b> 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)
<b>Winter long-term trend:</b> 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)

### Czech Republic

<b>Breeding population size:</b> STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnízdního rozsireni ptaku v Ceske republice. Aventinum Praha
<b>Breeding long-term trend:</b> STASTNY K., BEJCEK V. & HUDEC K. 2006: Atlas hnízdního rozsireni ptaku v Ceske republice. Aventinum Praha

### Denmark

<b>Breeding population size:</b> Ekspertvurdering foretaget af Dansk Ornitologisk Forening på baggrund af tidligere publicerede oplysninger, modtagne oplysninger og data i <a href="http://www.dofbasen.dk">www.dofbasen.dk</a> (Knud N. Flensted).
<b>Breeding short-term trend:</b> BIRDLIFE INTERNATIONAL (2004) Birds in Europe: population estimates, trends and conservation status. Wageningen, The Netherlands: BirdLife International. (BirdLife Conservation Series No. 12) Knud N. Flensted from Dansk Ornitologisk Forening
<b>Breeding long-term trend:</b> BIRDLIFE INTERNATIONAL (2004) Birds in Europe: population estimates, trends and conservation status. Wageningen, The Netherlands: BirdLife International. (BirdLife Conservation Series No. 12) Grell, Michael Borch (1998): Fuglenes Danmark. Gads forlag i samarbejde med Dansk Ornitologisk Forening. Olsen, Klaus Malling (1992): Danmarks fugle –en oversigt. Dansk Ornitologisk Forening. Knud N. Flensted from Dansk Ornitologisk Forening

### Estonia

<b>Breeding population size:</b> 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. <i>Hirundo</i> 26(2): 80-112. URL: <a href="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</a>
<b>Breeding short-term trend:</b> 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. <i>Hirundo</i> 26(2): 80-112. URL: <a href="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</a>
<b>Breeding long-term trend:</b> 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. <i>Hirundo</i> 26(2): 80-112. URL: <a href="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</a>

### Finland

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

## *Spatula clypeata* (Northern Shoveler)

### Finland

**Breeding long-term trend:** Pöysä, H., Rintala, J., Lehikoinen, A., & Väisänen, 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 Lehikoinen, A., Pöysä, H., Rintala, J. & Väisänen, R.A. 2013: Population changes of 20 waterbird species in Finnish lakes in 1986–2012. – *Linnut-vuosikirja 2012*: 95–101. (in Finnish with English summary)

### France

**Breeding population size:** 2013 Avis du groupe d'experts Rapportage Art.12 Anatidés

**Breeding short-term trend:** 2013 Avis du groupe d'experts Rapportage Art.12 Anatidés

**Breeding long-term trend:** 2013 Avis du groupe d'experts Rapportage Art.12 Anatidés

**Winter population size:** Deceuninck, B., Maillet, N., Ward, A., Dronneau, C. & Mahéo, R. 2013 Synthèse des dénombrements d'Anatidés et de foulques hivernant en France à la mi-janvier 2012, Rochefort sur Mer, LPO, 42

**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

**Breeding population size:** BirdLife International 2004

### Germany

**Breeding population size:** Gedeon, K., C. Grüneberg, A. Mitschke & C. Sudfeldt (in Vorb.): Atlas Deutscher Brutvogelarten. SVD & DDA, Münster.

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

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

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

**Winter short-term trend:** Monitoring rastender Wasservogel

**Winter long-term trend:** Monitoring rastender Wasservogel

### Greece

**Breeding population size:** Portolou, D., Bourdakis, S., Vlachos, C., Kastritis, T., and Dimalexis, T. (eds.) 2009. Important Bird Areas of Greece: Priority sites for conservation. Hellenic Ornithological Society. Athens. Dimalexis, T., Bousbouras, D., Kastritis, T., Manolopoulos, A. & Saravia, V. (eds.) 2009. Evaluation of 69 Important Bird Areas as Special Protection Areas. Hellenic Ministry for the Environment, Physical Planning and Public Works, Athens. Hellenic Ornithological Society database

**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

**Breeding population size:** Barabás, L. (2013): Breeding distribution of Hungarian Duck species. *Hungarian Waterfowl Publications* 23: 79-120. National Park Directorates & databases.

**Breeding short-term trend:** MME Nomenclator Bizottság (2008): Magyarország madarainak névjegyzéke. Nomenclator avium Hungariae. Magyar Madártani és Természetvédelmi Egyesület, Budapest. P. 278. National Park Directorates & databases.

### Iceland

**Breeding population size:** The Icelandic Institute of Natural History

### Republic of Ireland

**Breeding population size:** BirdLife International (2004) *Birds in Europe: population estimates, trends and conservation status*. Cambridge, UK: BirdLife International. (BirdLife Conservation Series No. 12). Balmer, D., Gillings, S., Caffrey, B., Swan, B., Downie, I. & Fuller, R. (2013) *Bird Atlas 2007-11 The breeding and wintering birds of Britain and Ireland*. British Trust for Ornithology. Hillis, J. P. (2004) First Annual Report of the Irish Rare Breeding Birds Panel, 2002. *Irish Birds* 7: 375-384. Hillis, J. P. (2005) Rare breeding birds in Ireland, 2003 The Second Annual Report of the Irish Rare Breeding Birds Panel (IRBBP). *Irish Birds* 7: 539-548. Hillis, J.P. (2006) Rare Irish Breeding Birds, 2004 The Third Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 8: 97-106. Hillis, J.P. (2007) Rare Breeding Birds in Ireland 2005 and 2006. *Irish Birds* 8: 249-262. Hillis, J.P. (2008) Rare Irish Breeding Birds, 2007 The Seventh Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 8: 365-372. Hillis, J.P. (2009) Rare Irish Breeding Birds, 2008 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 8: 571-582. Hillis, J.P. (2010) Rare Irish Breeding Birds, 2009 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 9: 67-76. Hillis, J.P. (2011) Rare Irish Breeding Birds, 2010 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 9: 241-250.

**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). Balmer, D., Gillings, S., Caffrey, B., Swan, B., Downie, I. & Fuller, R. (2013) *Bird Atlas 2007-11 The breeding and wintering birds of Britain and Ireland*. British Trust for Ornithology. Hillis, J.P. (2003) *Rare Irish Breeding Birds, 1992-2001*. *Irish Birds*, Vol 7, No.2: 157-172. Hillis, J. P. (2004) First Annual Report of the Irish Rare Breeding Birds Panel, 2002. *Irish Birds* 7: 375-384. Hillis, J. P. (2005) Rare breeding birds in Ireland, 2003 The Second Annual Report of the Irish Rare Breeding Birds Panel (IRBBP). *Irish Birds* 7: 539-548. Hillis, J.P. (2006) Rare Irish Breeding Birds, 2004 The Third Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 8: 97-106. Hillis, J.P. (2007) Rare Breeding Birds in Ireland 2005 and 2006. *Irish Birds* 8: 249-262. Hillis, J.P. (2008) Rare Irish Breeding Birds, 2007 The Seventh Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 8: 365-372. Hillis, J.P. (2009) Rare Irish Breeding Birds, 2008 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 8: 571-582. Hillis, J.P. (2010) Rare Irish Breeding Birds, 2009 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 9: 67-76. Hillis, J.P. (2011) Rare Irish Breeding Birds, 2010 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) *Irish Birds* 9: 241-250. Hillis, J.P. (2012) Rare Irish Breeding Birds, 2011 The Annual Report of the Irish Rare Birds Panel (IRBBP) *Irish Birds* 9: 411-420.

## *Spatula clypeata* (Northern Shoveler)

### Republic of Ireland

<b>Breeding long-term trend:</b> Tucker, G.M. & Heath, M.F. (1994) Birds in Europe: their Conservation Status. Cambridge, U.K.: BirdLife International (BirdLife Conservation Series No. 3). Hillis, J.P. (2003) Rare Irish Breeding Birds, 1992-2001. Irish Birds, Vol 7, No.2: 157-172. Hillis, J. P. (2004) First Annual Report of the Irish Rare Breeding Birds Panel, 2002. Irish Birds 7: 375-384. Hillis, J. P (2005) Rare breeding birds in Ireland, 2003 The Second Annual Report of the Irish Rare Breeding Birds Panel (IRBBP). Irish Birds 7: 539-548. Hillis, J.P. (2006) Rare Irish Breeding Birds, 2004 The Third Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) Irish Birds 8: 97-106. Hillis, J.P. (2007) Rare Breeding Birds in Ireland 2005 and 2006. Irish Birds 8: 249-262. Hillis, J.P. (2008) Rare Irish Breeding Birds, 2007 The Seventh Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) Irish Birds 8: 365-372. Hillis, J.P. (2009) Rare Irish Breeding Birds, 2008 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) Irish Birds 8: 571-582. Hillis, J.P. (2010) Rare Irish Breeding Birds, 2009 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) Irish Birds 9: 67-76. Hillis, J.P. (2011) Rare Irish Breeding Birds, 2010 The Annual Report of the Irish Rare Breeding Birds Panel (IRBBP) Irish Birds 9: 241-250. Hillis, J.P. (2012) Rare Irish Breeding Birds, 2011 The Annual Report of the Irish Rare Birds Panel (IRBBP) Irish Birds 9: 411-420
<b>Winter population size:</b> Crowe, O. & Holt, C. (2013) Estimates of waterbird numbers wintering in Ireland, 2006/07 – 2010/11. Irish Birds 9:4.
<b>Winter short-term trend:</b> Crowe, O. (2013) Calculations of short- and long-term trends of wintering waterbirds for Article 12 reporting. Unpublished note. Crowe, O. & Holt, C. (2013) Estimates of waterbird numbers wintering in Ireland, 2006/07 – 2010/11. Irish Birds 9:4.
<b>Winter long-term trend:</b> Crowe, O. (2013) Calculations of short- and long-term trends of wintering waterbirds for Article 12 reporting. Unpublished note. Crowe, O. & Holt, C. (2013) Estimates of waterbird numbers wintering in Ireland, 2006/07 – 2010/11. Irish Birds 9:4. Sheppard, R. (1993) Ireland's Wetland Wealth. Irish Wildbird Conservancy.

### Italy

<b>Breeding population size:</b> Brichetti P & Fracasso G. 2013. Ornitologia italiana. Vol. 1/2: Anatidae. Oasi Alberto Perdisa, Bologna Gustin M, Brambilla M & Celada C. 2010. Valutazione dello stato di Conservazione dell'avifauna italiana. Volume I, Non-Passeriformes. Ministero dell'Ambiente e della Tutela del Territorio e del Mar, Lega Italiana Protezione Uccelli (LIPU)
<b>Breeding short-term trend:</b> Brichetti P & Fracasso G. 2013. Ornitologia italiana. Vol. 1/2: Anatidae. Oasi Alberto Perdisa, Bologna Gustin M, Brambilla M & Celada C. 2010. Valutazione dello stato di Conservazione dell'avifauna italiana. Volume I, Non-Passeriformes. Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Lega Italiana Protezione Uccelli (LIPU)
<b>Breeding long-term trend:</b> Brichetti P & Fracasso G. 2013. Ornitologia italiana. Vol. 1/2: Anatidae. Oasi Alberto Perdisa, Bologna Gustin M, Brambilla M & Celada C. 2010. Valutazione dello stato di Conservazione dell'avifauna italiana. Volume I, Non-Passeriformes. Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Lega Italiana Protezione Uccelli (LIPU)
<b>Winter population size:</b> IWC ISPRA
<b>Winter short-term trend:</b> IWC ISPRA; Eugenio Dupré in litt. 04-Aug-2014
<b>Winter long-term trend:</b> IWC ISPRA Baccetti N, Dall'Antonia P, Magagnoli P, Melega L, Serra L, Soldatini C & Zenatello M. 2002. Risultati dei censimenti degli uccelli acquatici svernanti in Italia: distribuzione, stima e trend delle popolazioni nel 1991-2000. Biol. Cons. Fauna 111: 1-240

### Latvia

<b>Breeding population size:</b> Mednis A., Viksne J., Stipniece A. 2003. Population of Garganey and Shoveler in Latvia. In: Svazas S., Viksne J., Kuresoo A., Kozulin A. (eds.) The Garganey and Shoveler in the Baltic States and Belarus. Vilnius: OMPO Vilnius, 51–70 pp.
<b>Breeding long-term trend:</b> Strazds M., Priednieks J., Vaverins G. 1994. Latvijas putnu skaits. – Putni daba, 4: 3–18. Mednis A., Viksne J., Stipniece A. 2003. Population of Garganey and Shoveler in Latvia. In: Svazas S., Viksne J., Kuresoo A., Kozulin A. (eds.) The Garganey and Shoveler in the Baltic States and Belarus. Vilnius: OMPO Vilnius, 51–70 pp.

### Lithuania

<b>Breeding population size:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažiņimo vadovas. Kaunas: „Lututė“, 288 p. Viksne, J., S. Švažas, A. Czajkowski, M. Janaus, A. Mischenko, A. Kozulin, A. Kuresoo, V. Serebryakov. 2010. Atlas of Duck Populations in Eastern Europe, Akstis, Vilnius.
<b>Breeding short-term trend:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažiņimo 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)
<b>Breeding long-term trend:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) BirdLife International/European Bird Census Council. 2000. European bird populations: estimates and trends. Cambridge, UK: BirdLife International (BirdLife Conservation Series No. 10). Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“, 256 p. Rašomavičius, V. (red.) 2007. Lietuvos raudonoji knyga. Kaunas: „Lututė“, 800 p. (Red Data Book of Lithuania, 2007)

### The Former Yugoslav Republic of Macedonia

<b>Breeding population size:</b> Veleviski, M., B. Hallmann, B. Grubač, T. Lisičanec, E. Stojnov, E. Lisičanec, V. Avukatov, L. Božič, and B. Stumberger. 2010. Important Bird Areas in Macedonia: Sites of Global and European Importance. Acrocephalus 31:181–282.
<b>Winter population size:</b> Wetlands International database, Macedonian Ecological Society unpublished data
<b>Winter short-term trend:</b> Wetland International database, Macedonian Ecological Society, unpublished results
<b>Winter long-term trend:</b> Wetland International database, Macedonian Ecological Society, unpublished results

### Moldova

<b>Breeding population size:</b> 1.The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.
<b>Breeding short-term trend:</b> 1.The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.
<b>Breeding long-term trend:</b> 1.Аверин Ю. В., Ганя И.М., Успенский Г. Птицы Молдавии, том 2, Кишинев,1971, 2р 2.Burfield I., Bommel van F., Birds in Europe. Population estimates, trends and conservation status. BirdLife International. Oxford, 2004. 374p. 3 .The Atlas of the Breeding Birds of Republic of Moldova. 2010. 100p.

### Montenegro

<b>Winter population size:</b> IWC reports (2003-2012): Dubak, Vešović, N., Jovičević, M., Vizi O., Vizi,A.
<b>Winter short-term trend:</b> 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,

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### Montenegro

**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

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

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

**Breeding long-term trend:** NEM, Sovon en CBS

**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) County bird recording committees (LRSK). (2) Artsobservasjoner.no #) Shimmings & Øien 2015

### Poland

**Breeding population size:** Compilation of regional figures: KRAINA ŚWIĘTOKRZYSKA (Towarzystwo Badań i Ochrony Przyrody, R. Maniarski, M. Jantarski i inni), KUJAWY (P. Zieliński i inni), LUBELSZCZYŻNA (Lubelskie Towarzystwo Ornitologiczne, M. Urban, P. Szewczyk, P. Stachyra), MAŁOPOLSKA (M. Ciach, R. Bobrek, T. Wilk), MAZOWSZE (Mazowiecko-Świętokrzyskie Towarzystwo Ornitologiczne: S. Chmielewski, A. Dombrowski, A. Goławski, H. Kot), PODLASIE (T. Tumiel, G. Grygoruk), POMORZE (Ł. Ławicki, A. Sikora), ŚLĄSK (P. Kołodziejczyk i inni), ŚLĄSK GÓRNY (J. Betleja), WARMIA I MAZURY (D. Czaścikiewicz, K. Jankowski, M. Szymkiewicz, A. Sikora), WIELKOPOLSKA (P. Wylegała, L. Kuczyński), ZIEMIA LUBUSKA (P. Czechowski, S. Rubacha, P. Baranowski, M. Jankowski, R. Kruszyk, M. Leszczyński, M. Prange, J. Udolf), ZIEMIA ŁÓDZKA (T. Janiszewski, Z. Wojciechowski, P. Minias, R. Włodarczyk, B. Lesner, M. Wężyk),

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

### Portugal

**Breeding population size:** Informação ICNF

**Breeding short-term trend:** Informação ICNF

**Winter population size:** Programa Nacional de Monitorização de Aves Aquáticas Invernantes

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

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

### Romania

**Breeding population size:** SOR database

**Breeding short-term trend:** BirdLife 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 al. 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:** 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). Viksne J., Svazas S., Czajkowski A., Janaus M., Mischenko A., Kozulin A., Kuresoo A., Serebryakov V. 2010. Atlas of Breeding Duck Populations in Eastern Europe. Vilnius, Akstis: 199 pp.

**Breeding short-term trend:** Sarychev V.S., unpublished

**Breeding long-term trend:** Belik V.P. 2005. Cadastre of breeding avifauna of South Russia. Strep 3, no. 1-2: 5-37 (in Russian). Viksne J., Svazas S., Czajkowski A., Janaus M., Mischenko A., Kozulin A., Kuresoo A., Serebryakov V. 2010. Atlas of Breeding Duck Populations in Eastern Europe. Vilnius, Akstis: 199 pp.

### Serbia

**Breeding population size:** BPSSS (2014) Unpublished data

**Breeding short-term trend:** BPSSS (2014) Unpublished data

**Breeding long-term trend:** BPSSS (2014) Unpublished data

**Winter population size:** Šciban M, Đapčić 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:** Šciban M, Đapčić 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

**Breeding population size:** Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

**Breeding short-term trend:** Ridzoň, J., Karaska, D., Darolová, A.

## *Spatula clypeata* (Northern Shoveler)

### Slovakia

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

### Slovenia

**Breeding population size:** Božič, L. & Bordjan, D. (2009): Naravovarstveno vrednotenje avifavne območja zadrževalnika Medvedce (SV Slovenija). *Acrocephalus* 30 (141/142/143): 181-193. Bordjan, D. & Božič, L. (2009): Pojavljanje vodnih ptic in ujed na območju vodnega zadrževalnika Medvedce (Dravsko polje, SV Slovenija) v obdobju 2002–2008. – *Acrocephalus* 30 (141/142/143): 55–163. Ploj, A., Gamser, M. & Basle, T. (2011): Raca žličarica *Anas clypeata*. *Acrocephalus* 32 (148/149): 87. Bordjan, D. (2012): Vodne ptice in ujede Cerkniškega polja (Južna Slovenija) v letih 2007 in 2008, s pregledom zanimivejših opazovanj do konca leta 2010. *Acrocephalus* 33 (152/153): 25-104.

**Breeding short-term trend:** BORDJAN, D. & BOŽIČ, L. (2009): Pojavljanje vodnih ptic in ujed na območju vodnega zadrževalnika Medvedce (Dravsko polje, SV Slovenija) v obdobju 2002–2008. – *Acrocephalus* 30 (141/142/143): 55–163.

**Breeding long-term trend:** BORDJAN, D. & BOŽIČ, L. (2009): Pojavljanje vodnih ptic in ujed na območju vodnega zadrževalnika Medvedce (Dravsko polje, SV Slovenija) v obdobju 2002–2008. – *Acrocephalus* 30 (141/142/143): 55–163.

**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:** SOVINČ, A. (1994): Zimski ornitološki atlas Slovenije. – Tehniška založba Slovenije, Ljubljana. ŠKORNIK I. (2012): Favnišični in ekološki pregled ptic Sečoveljskih solin. – Soline predelava soli, Seča.

### Spain

**Breeding population size:** Palomino, D. y B. Molina (Eds) (2009). Aves acuáticas reproductoras en España, Población en 2007 y método de censo. Seguimiento de Aves 26. SEO/BirdLife. Madrid. 210 pp. ([http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/26\\_aves\\_acuaticas\\_reproductoras\\_tcm7-218238.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/26_aves_acuaticas_reproductoras_tcm7-218238.pdf))

**Breeding short-term trend:** Palomino, D. y B. Molina (Eds) (2009). Aves acuáticas reproductoras en España, Población en 2007 y método de censo. Seguimiento de Aves 26. SEO/BirdLife. Madrid. 210 pp. ([http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/26\\_aves\\_acuaticas\\_reproductoras\\_tcm7-218238.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/26_aves_acuaticas_reproductoras_tcm7-218238.pdf))

**Breeding long-term trend:** Palomino, D. y B. Molina (Eds) (2009). Aves acuáticas reproductoras en España, Población en 2007 y método de censo. Seguimiento de Aves 26. SEO/BirdLife. Madrid. 210 pp. ([http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/26\\_aves\\_acuaticas\\_reproductoras\\_tcm7-218238.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/26_aves_acuaticas_reproductoras_tcm7-218238.pdf))  
Madróño, 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))

**Winter population size:** SEO/BirdLife (2012). Atlas de las aves en invierno en España 2007-2010. Ministerio de Agricultura, Alimentación y Medio Ambiente-SEO/BirdLife. Madrid. 816 pp. [http://www.magrama.gob.es/es/biodiversidad/publicaciones/atlas\\_aves\\_invierno\\_tcm7-291664.pdf](http://www.magrama.gob.es/es/biodiversidad/publicaciones/atlas_aves_invierno_tcm7-291664.pdf)

**Winter short-term trend:** SEO/BirdLife (2012). Programa de seguimiento de SEO/BirdLife 2011. SEO/BirdLife. Madrid. 35 pp. Información obtenida a partir de la Base de Datos del Inventario de especies terrestres. Censo de Aves Acuáticas Invernantes (Ministerio de Agricultura, Alimentación y Medio Ambiente).[http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/censos\\_aves\\_acuaticas\\_invernantes.aspx](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/censos_aves_acuaticas_invernantes.aspx)

**Winter long-term trend:** González, R. & Pérez-Aranda, D. (2011). Las aves acuáticas en España, 1980-2009. SEO/BirdLife, Madrid, 338 pp.

### Sweden

**Breeding population size:** Ottosson, U., Ottvall, R., Elmberg, J., Green, M., Gustafsson, R., Haas, F., Holmqvist, N., Lindström, Å., Nilsson, L., Svensson, M., Svensson, S. & Tjernberg, M. 2012. Fåglarna i Sverige - antal och förekomst. Sveriges Ornitologiska Förening, Halmstad.

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

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

### Switzerland

**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> Min Max refer to 95% Confidence interval.

**Winter long-term trend:** Swiss Ornithological Institute. Winter waterbird census (January). <http://www.vogelwarte.ch/monitoring-wintering-waterbirds.html> Min Max refer to 95% Confidence interval.

### Turkey

**Breeding population size:** Kerem Ali Boyla personal communication., [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, 978-1-4081-0475-3,32

**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)

## *Spatula clypeata* (Northern Shoveler)

### Turkey

**Winter population size:** Kurt, B., Ozbağdatlı, N., Bozkurt, A.K., Arslangundoğdu, Z. ve Gursoy, A. 2002. Türkiye Sulakalanları Kış Ortası Sucusu Sayımı, Doğal Hayatı Koruma Derneği, İstanbul, Türkiye. Çağlayan, E., Kılıç, D.T., Per, E. ve Gem, E. 2005. Türkiye Kış Ortası Sucusu Sayımları 2005. Doğa Derneği, Ankara, Turkey Suseven, B., Onmus, O. ve Isfendiyaoglu, S. 2006. Kış Ortası Sucusu Sayımı (KOSK) Raporu, Doğa Derneği, Ankara Onmus, O. 2007. Türkiye Kış Ortası Sucusu Sayımları 2007, Doğa Derneği, Ankara Akarsu, F. ve Balkız, Ö. 2010. Türkiye Kış Ortası Sucusu Sayımları 2008-2009-2010, Doğa Derneği, Ankara Erciyas Yavuz, K., Kartal E. 2011. Türkiye Kış Ortası Sucusu Sayımları, 2011, Ornitoloji Araştırma Merkezi, Samsun Erciyas Yavuz, K., Isfendiyaoglu S. 2013. 2012 Türkiye Kış Ortası Sucusu 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

**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. Poysler. - 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. Численность и размещение гнездящихся околоводных птиц в водно-болотных угодьях Азово-Черноморского побережья Украины. Под ред. В.Д. Сиохин / Wetland International Киев. 2000. 476 с. 6. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158.

**Breeding short-term trend:** 1. Directory of Azov – Black Sea Coastal Wetlands / Ed. By G. Marushevsky – Kyiv, 2003, Wetland International, 235 p. 2. Directory of Ukraine's Wetlands / Ed. By G. Marushevsky & I. Zaruk. – Kyiv, 2006, Wetland International Black Sea Programme. - 312 c..

**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. Poysler. - 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. Численность и размещение гнездящихся околоводных птиц в водно-болотных угодьях Азово-Черноморского побережья Украины. Под ред. В.Д. Сиохин / Wetland International Киев. 2000. 476 с. 6. Горбань І. Оцінка чисельності гніздових птахів України. Вісник Львівського університету. Серія біологічна. Випуск 34. 2003. с. 147 – 158. 7. Directory of Azov – Black Sea Coastal Wetlands / Ed. By G. Marushevsky – Kyiv, 2003, Wetland International, 235 p. 8. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p. 9. Directory of Ukraine's Wetlands / Ed. By G. Marushevsky & I. Zaruk. – Kyiv, 2006, Wetland International Black Sea Programme. - 312 c.

**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., Сацык С.Ф. Мониторинг зимующих птиц в Северо-Западном Причерноморье в 1999 г. Сб.Зимние учеты птиц на Азово-Черноморском побережье Украины, Алуста-Киев, 1999, выпуск 2, С.46-60. 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. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p. 6. Горбань І. Розміри популяцій зимуючих птахів України. Вісник Львівського університету. Серія біологічна. Вип. 35. 2004. С.23-39. 7. Directory of Ukraine's Wetlands / Ed. By G. Marushevsky & I. Zaruk. – Kyiv, 2006, Wetland International Black Sea Programme. - 312 c.. 8. Бескаравайный М.М. Птицы морских берегов Южного Крыма. Симферополь. «Н.Орианда», 2008. 160 с. 9. Kostiusyn V., Andryuschenko Yu., Goradze I., Abuladze A., Mamuchadze J., Erciyas K. Wintering Waterbird Census in the Azov – Black Sea Coastal Wetlands of Ukraine, Georgia, and Turkey. – Wetlands International Black Sea Program. – 2011. – 130 pp.

**Winter short-term trend:** 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., Сацык С.Ф. Мониторинг зимующих птиц в Северо-Западном Причерноморье в 1999 г. Сб.Зимние учеты птиц на Азово-Черноморском побережье Украины, Алуста-Киев, 1999, выпуск 2, С.46-60. 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. Birds in Europe: Population Estimates, Trends and Conservation Status. BirdLife Conservation Series 12; 2004. 374 p. 6. Горбань І. Розміри популяцій зимуючих птахів України. Вісник Львівського університету. Серія біологічна. Вип. 35. 2004. С.23-39. 7. Directory of Ukraine's Wetlands / Ed. By G. Marushevsky & I. Zaruk. – Kyiv, 2006, Wetland International Black Sea Programme. - 312 c.. 8. Бескаравайный М.М. Птицы морских берегов Южного Крыма. Симферополь. «Н.Орианда», 2008. 160 с. 9. Kostiusyn V., Andryuschenko Yu., Goradze I., Abuladze A., Mamuchadze J., Erciyas K. Wintering Waterbird Census in the Azov – 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., Корзюков А.И., Сацык С.Ф. Мониторинг зимующих птиц в Северо-Западном Причерноморье в 1999 г. Сб.Зимние учеты птиц на Азово-Черноморском побережье Украины, Алуста-Киев, 1999, выпуск 2, С.46-60. 2. Heath M.F., Evans M.I. Important birds areas in Europe. Priority sites for conservation. // Southern Europe. BirdLife International. - Cambridge. Vol.2., 2000. P. 691-724. 3. European birds populations; Estimates and trends Compiled by M. Heath, C. Borggreve, N. Peet, W. Hagemajier/ BirdLife International/EBCC. 2000. Cambridge, UK: BirdLife Conservation Series N10, 160 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. Directory of Ukraine's Wetlands / Ed. By G. Marushevsky & I. Zaruk. – Kyiv, 2006, Wetland International Black Sea Programme. - 312 c.. 7. Бескаравайный М.М. Птицы морских берегов Южного Крыма. Симферополь. «Н.Орианда», 2008. 160 с. 8. Kostiusyn V., Andryuschenko Yu., Goradze I., Abuladze A., Mamuchadze J., Erciyas K. Wintering Waterbird Census in the Azov – Black Sea Coastal Wetlands of Ukraine, Georgia, and Turkey. – Wetlands International Black Sea Program. – 2011. – 130 pp.

### United Kingdom

**Breeding population size:** Holling, M. & the Rare Breeding Birds Panel. 2012. Rare breeding birds in the United Kingdom in 2010. British Birds 105: 352–416.

**Breeding short-term trend:** Gibbons, D.W., Reid, J.B. & Chapman, R.A. 1993. The New Atlas of Breeding Birds in Britain and Ireland: 1988–1991. Poysler, London.; Holling, M. & the Rare Breeding Birds Panel. 2011. Non-native breeding birds in the United Kingdom in 2006, 2007 and 2008. British Birds 104: 114-138.

**Breeding long-term trend:** Sharrock, J.T.R. 1976. The Atlas of Breeding Birds in Britain and Ireland. Berkhamsted, T. & A.D. Poysler. Holling, M. & the Rare Breeding Birds Panel. 2011. Non-native breeding birds in the United Kingdom in 2006, 2007 and 2008. British Birds 104: 114-138.

**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, Theftford. 183 pp. [Short-term trend is -2.0%]

**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, Theftford. 183 pp.

## Bibliography

- Bartoszewicz, M. and Zalewski, A. 2003. American mink, *Mustela vison* diet and predation on waterfowl in the Slonsk Reserve, western Poland. *Folia Zoologica* 52(3): 225-238.
- Bregnballe, T., Noer, H., Christensen, T.K., Clausen, P., Asferg, T., Fox, A.D. and Delany, S. 2006. Sustainable hunting of migratory waterbirds: the Danish approach. In: Boere, G.; Galbraith, C. and Stroud, D. (ed.), *Waterbirds around the world*, pp. 854-860. The Stationary Office, Edinburgh, UK.
- Brown, L.H., Urban, E.K. and Newman, K. 1982. *The birds of Africa vol I*. Academic Press, London.
- Carboneras, C. and Kirwan, G.M. 2014. Northern Shoveler (*Spatula clypeata*). 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/52896> on 3 March 2015).
- Flint, V.E., Boehme, R.L., Kostin, Y.V. and Kuznetsov, A.A. 1984. *A field guide to birds of the USSR*. Princeton University Press, Princeton, New Jersey.
- Forrester, D.J., Wenner, K.C., White, F.H., Greiner, E.C., Marion, W.R., Thul, J.E. and Berkhoff, G.A. 1980. An epizootic of avian botulism in a phosphate mine settling pond in northern Florida. *Journal of Wildlife Diseases* 16(3): 323-327.
- Gaidet, N., Dodman, T., Caron, A., Balança, G., Desvaux, S., Goutard, F., Cattoli, G., Lamarque, F., Hagemeijer, W. and Monicat, F. 2007. Avian Influenza Viruses in Water Birds, Africa. *Emerging Infectious Diseases* 13(4): 626-629.
- Giles, N. 1994. Tufted Duck (*Aythya fuligula*) habitat use and brood survival increases after fish removal from gravel pit lakes. *Hydrobiologia* 279/280: 387-392.
- Gudmundsson, F. 1979. The past status and exploitation of the Myvatn waterfowl populations. *Oikos* 32(1-2): 232-249.
- Hagemeijer, W.J.M. and Blair, M.J. 1997. *The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance*. T & A D Poyser, London.
- 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.
- Malcolm, J.M. 1982. Bird collisions with a power transmission line and their relation to botulism at a Montana USA wetland. *Wildlife Society Bulletin* 10(4): 297-304.
- Mateo, R., Belliure, J., Dolz, J.C., Aguilar-Serrano, J.M. and Guitart, R. 1998. High prevalences of lead poisoning in wintering waterfowl in Spain. *Archives of Environmental Contamination and Toxicology* 35: 342-347.
- 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 Stationary Office, Edinburgh, UK.
- Mondain-Monval, J.Y., Desnouhes, L. and Taris, J.P. 2002. Lead shot ingestion in waterbirds in the Camargue, (France). *Game and Wildlife Science* 19(3): 237-246.



- Musil, P. 2006. A review of the effects of intensive fish production on waterbird breeding populations. In: Boere, G., Galbraith, C. and Stroud, D. (ed.), *Waterbirds around the world*, pp. 520-521. The Stationary Office, Edinburgh, UK.
- Nordström, M., Högmänder, J., Nummelin, J., Laine, J., Laanetu, N., Korpimäki, E. 2002. Variable responses of waterfowl breeding populations to long-term removal of introduced American mink. *Ecography* 25: 385-394.
- Opermanis, O., Mednis, A. and Bauga, I. 2001. Duck nests and predators: interaction, specialisation and possible management. *Wildlife Biology* 7(2): 87-96.
- Scott, D.A. and Rose, P.M. 1996. *Atlas of Anatidae populations in Africa and western Eurasia*. Wetlands International, Wageningen, Netherlands.
- Snow, D.W. and Perrins, C.M. 1998. *The Birds of the Western Palearctic vol. 1: Non-Passerines*. Oxford University Press, Oxford.
- Sorrenti, M., Carnacina, L., Radice, D. and Costato, A. 2006. Duck harvest in the Po delta, Italy. In: Boere, G., Galbraith, C. and Stroud, D. (ed.), *Waterbirds around the world*, pp. 864-865. The Stationary Office, Edinburgh, UK.