



THE IUCN RED LIST  
OF THREATENED SPECIES™



## ***Phoenicopterus roseus* (Greater Flamingo)**

### **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. 4
Sources of reported national population data	p. 7
Species factsheet bibliography	p. 9

#### **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).

*Phoenicopterus roseus* (Greater Flamingo)

**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	
Azerbaijan	100-500	<1	1996-2000	medium	?				?				
France	8,800-13,720	21	2008-2012	good	F	0	2000-2012	good	F	0	1980-2012	good	West Mediterranean
Italy	4,152	8	2010	good	+	25-35	2000-2010	medium	+	195-220	1993-2010	poor	West Mediterranean
Montenegro	300-350	1	2002-2012	good	+		2002-2012	good	?				
Spain	18,976-19,076	36	2007	good	+	1-35	1997-2007	good	+	7	1980-2009	good	West Mediterranean
Turkey	12,628-24,624	34	2008-2012	good	F	0	2000-2012	good	0	0-19	1990-2013	good	
<b>EU27</b>	<b>31,900-36,900</b>	<b>65</b>			<b>Increasing</b>								
<b>Europe</b>	<b>45,000-62,400</b>	<b>100</b>			<b>Increasing</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.

*Phoenicopterus roseus* (Greater Flamingo)

**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	70-1,200	<1	2002-2012	good	+	10-30	2002-2012	good	+	50-70	1980-2012	medium	
Azerbaijan	7,000-18,000	5	2014	good	F	0	2000-2014	good	F	0	1980-2014	good	
Cyprus	3,000-20,000	4	2008-2012	good	0	0	2001-2012	good	0	0	1980-2012	medium	
France	38,000	18	2008-2012	good	+	30	2000-2012	good	+	160	1980-2012	good	
Greece	8,989-27,625	8	2007-2013	good	+	172	2004-2013	good	0	0	1982-2013	good	
Italy	27,535-31,413	14	2007-2009	good	+	25-45	2000-2009	good	+	150-190	1991-2009	good	
Montenegro	300-2,500	<1	2003-2012	good	+		2003-2012	good	+		1991-2012	good	
Portugal	5,133	2	2008-2012	good	+	280-300	2001-2012	good	+	2900-3100	1980-2012	medium	
Spain	46,733-48,863	23	2008-2010	good	+	36	2000-2010	good	+	68	1980-2009	good	
Turkey	35,144-71,257	24	2002-2012	good	F	0	2002-2012	poor	?				
<b>EU27</b>	<b>129,000-171,000</b>	<b>70</b>			<b>Increasing</b>								
<b>Europe</b>	<b>172,000-264,000</b>	<b>100</b>			<b>Increasing</b>								

<sup>1</sup> See 'Sources' at end of factsheet, and for more details on individual EU Member State reports, see the Article 12 reporting portal at <http://bd.eionet.europa.eu/article12/report>.

<sup>2</sup> The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

<sup>3</sup> In the few cases where population size estimates were reported in units other than those specified, they were converted to the correct units using standard correction factors.

<sup>4</sup> The robustness of regional trends to the effects of any missing or incomplete data was tested using plausible scenarios, based on other sources of information, including any other reported information, recent national Red Lists, scientific literature, other publications and consultation with relevant experts.

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

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

## Trend maps

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

### KEY

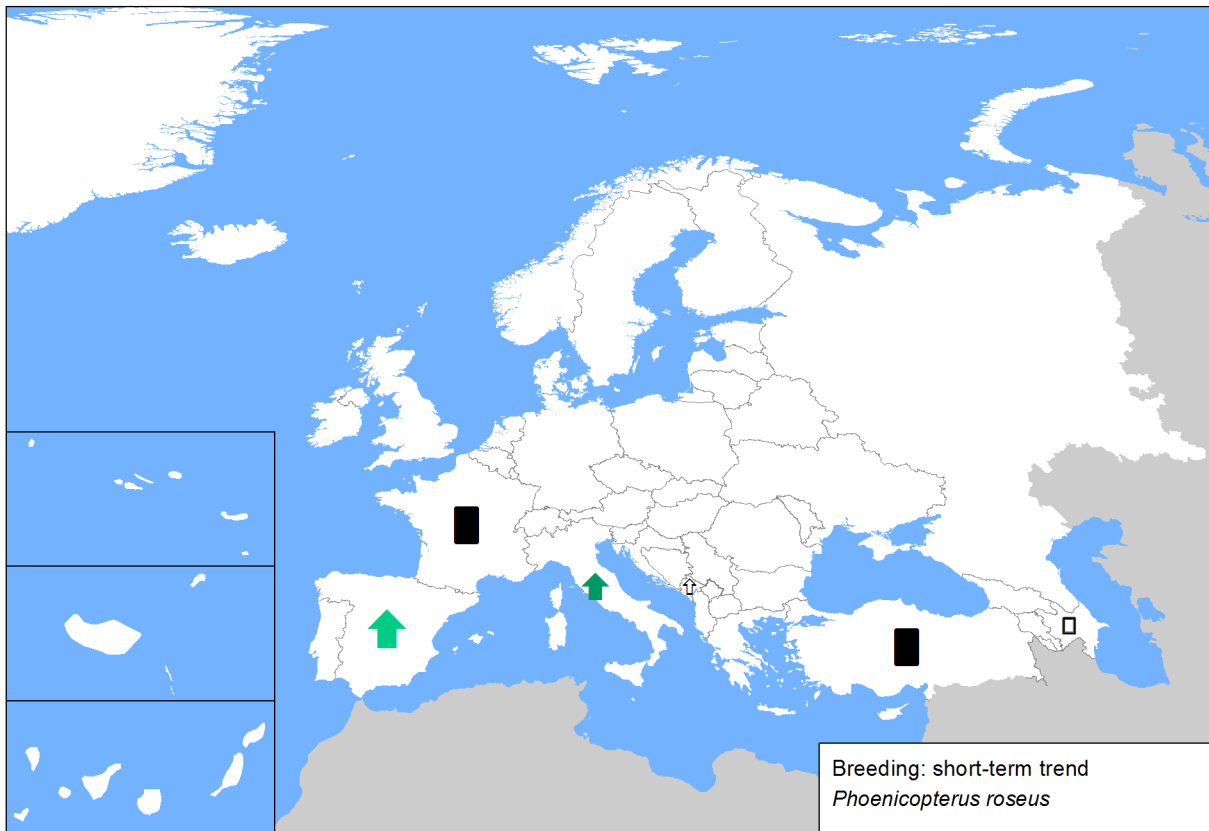
- |   |                                  |
|---|----------------------------------|
| ↑ Large increase ( $\geq 50\%$ )        | ↓ Large decrease ( $\geq 50\%$ ) |
| ↑ Moderate increase (20–49%)            | ↓ Moderate decrease (20–49%)     |
| ↑ Small increase ( $< 20\%$ )           | ↓ Small decrease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

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

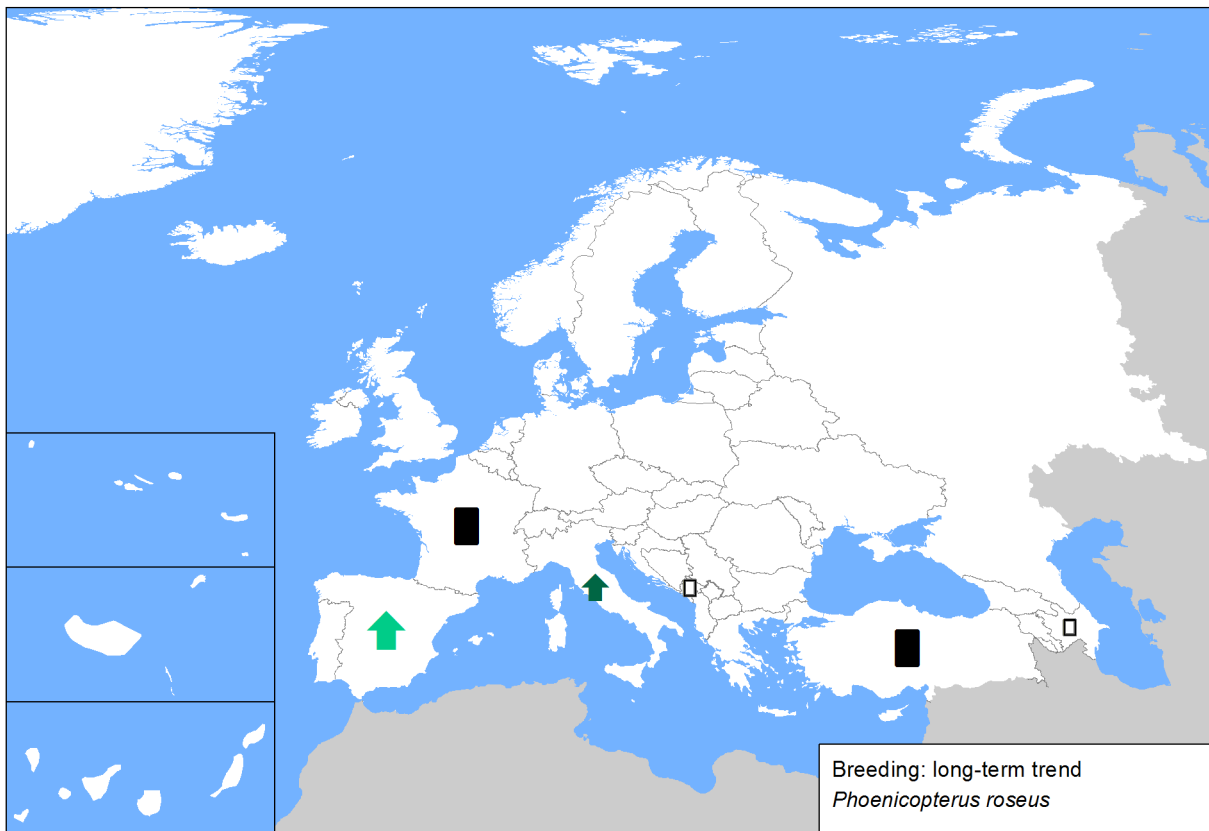
- ↑ Large:  $\geq 10\%$  of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small:  $< 1\%$  of the European population

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

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



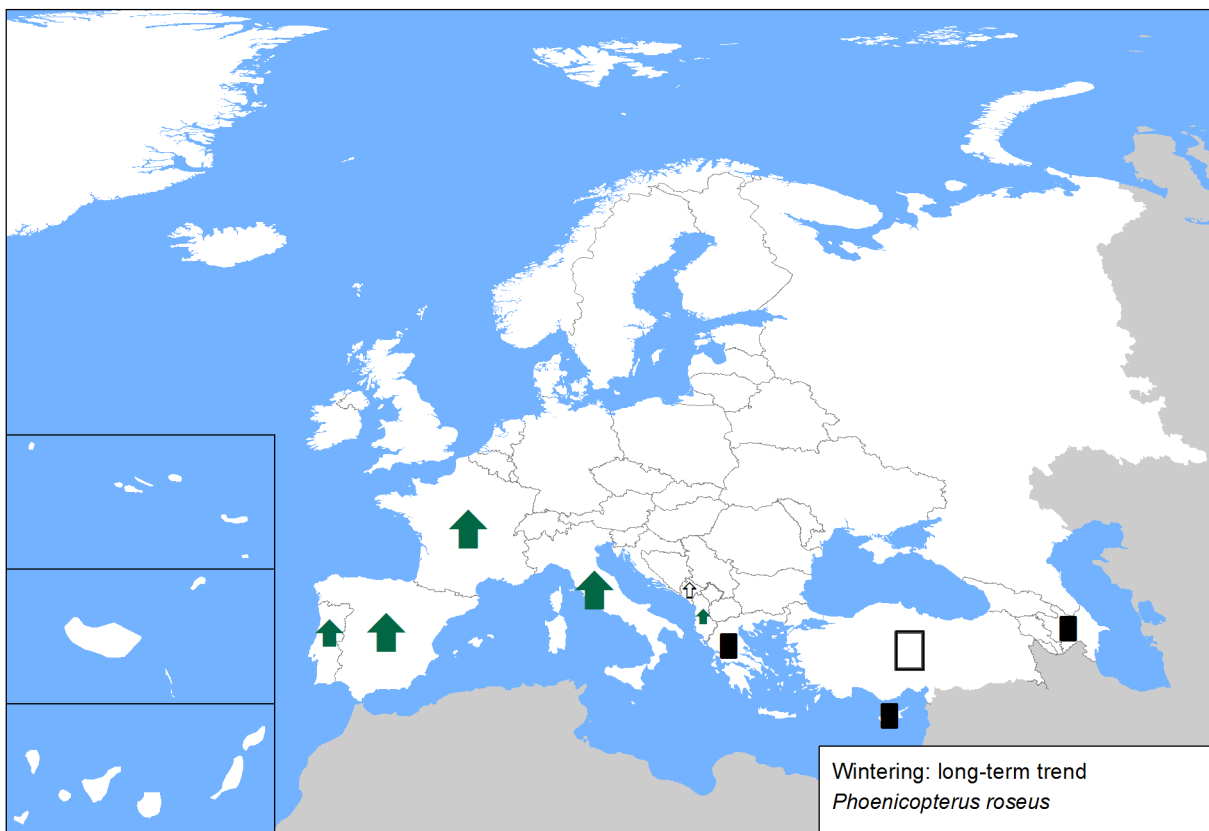
**Figure 2.** Breeding population sizes and long-term trends across Europe.



**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.



*Phoenicopterus roseus* (Greater Flamingo)

## Sources

### Albania

<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.

### Azerbaijan

<b>Breeding population size:</b> BirdLife International 2004
<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

### Cyprus: East Mediterranean

<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> Monthly waterbird counts (maxima from Dec, Jan and Feb counts) by BirdLife Cyprus (and in more recent years by Game & Fauna Service), as published in BirdLife Cyprus monthly checklists and annual reports
<b>Winter long-term trend:</b> More recent records (2000 onwards) as above, pre-2000 records based on winter counts reported in the annual reports of the two Cyprus Ornithological Societies: COS 1957 and COS 1970.

### France: West Mediterranean

<b>Breeding population size:</b> BECHET A. 2013 Avis d'expert sur les effectifs de Flamant rose en France
<b>Breeding short-term trend:</b> Kayser, Y.; m. Gauthier-Clerc; Béchet, A.; Poulin, B.; Massez, G.; Chérain, Y.; Paoli, J.; sadoul, N.; Vialet, E.; g. Paulus; n. Vincent-Martin; p. Pilard & Isenmann, P. 2008 ompte rendu ornithologique Camarguais pour les années 2001-2006, SNPN, 299-350 Alan Johnson & Frank Cézilly 2007 The Greater Flamingo, T & AD Poyser, 328
<b>Breeding long-term trend:</b> Kayser, Y.; m. Gauthier-Clerc; Béchet, A.; Poulin, B.; Massez, G.; Chérain, Y.; Paoli, J.; sadoul, N.; Vialet, E.; g. Paulus; n. Vincent-Martin; p. Pilard & Isenmann, P. 2008 ompte rendu ornithologique Camarguais pour les années 2001-2006, SNPN, 299-350 Alan Johnson & Frank Cézilly 2007 The Greater Flamingo, T & AD Poyser, 328
<b>Winter population size:</b> 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
<b>Winter short-term trend:</b> 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
<b>Winter long-term trend:</b> 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

### Greece

<b>Winter population size:</b> Midwinter Counts Database, Hellenic Ornithological Society
<b>Winter short-term trend:</b> Midwinter Counts Database, Hellenic Ornithological Society
<b>Winter long-term trend:</b> Midwinter Counts Database, Hellenic Ornithological Society

### Italy: West Mediterranean

<b>Breeding population size:</b> Lee, R., Arengo, F. & Bechet, A. (eds.). 2011. Flamingo, Bulletin of the IUCN-SSC/Wetlands International Flamingo Specialist Group, No. 18. Wildfowl & Wetlands Trust, Slimbridge, UK.
<b>Breeding short-term trend:</b> Brichetti P. & Fracasso G., 2013. Ornitologia Italiana. Vol. 1 - Parte Prima: Gaviidae-Phoenicopteridae. Edizione elettronica riveduta e aggiornata. Oasi Alberto Perdisa Editore, Bologna. Lee, R., Arengo, F. & Bechet, A. (eds.). 2011. Flamingo, Bulletin of the IUCN-SSC/Wetlands International Flamingo Specialist Group, No. 18. Wildfowl & Wetlands Trust, Slimbridge, UK.
<b>Breeding long-term trend:</b> Brichetti P. & Fracasso G., 2013. Ornitologia Italiana. Vol. 1 - Parte Prima: Gaviidae-Phoenicopteridae. Edizione elettronica riveduta e aggiornata. Oasi Alberto Perdisa Editore, Bologna. Lee, R., Arengo, F. & Bechet, A. (eds.). 2011. Flamingo, Bulletin of the IUCN-SSC/Wetlands International Flamingo Specialist Group, No. 18. Wildfowl & Wetlands Trust, Slimbridge, UK.
<b>Winter population size:</b> IWC ISPRA
<b>Winter short-term trend:</b> IWC ISPRA
<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

### Montenegro

<b>Breeding population size:</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,
<b>Breeding 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,
<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,

## *Phoenicopterus roseus* (Greater Flamingo)

### 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,

### Portugal: West Mediterranean

**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

### Spain: West Mediterranean

**Breeding population size:** Máñez, M. & Rendón-Martos, M. (Eds.). 2009. El morito, la espátula y el flamenco en España. Población en 2007 y método de censo. SEO/BirdLife. Madrid. 122pp. [http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/25\\_morito\\_espatula\\_y\\_flamenco\\_tcm7-218237.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/25_morito_espatula_y_flamenco_tcm7-218237.pdf)

**Breeding short-term trend:** Máñez, M. & Rendón-Martos, M. (Eds.). 2009. El morito, la espátula y el flamenco en España. Población en 2007 y método de censo. SEO/BirdLife. Madrid. 122pp. [http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/25\\_morito\\_espatula\\_y\\_flamenco\\_tcm7-218237.pdf](http://www.magrama.gob.es/es/biodiversidad/temas/inventarios-nacionales/25_morito_espatula_y_flamenco_tcm7-218237.pdf)

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

**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). Programas de seguimiento de SEO/BirdLife en 2011. SEO/BirdLife. Madrid. 35 pp. Información obtenida a partir de la Base de Datos del Inventario español 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.

### Turkey

**Breeding population size:** Özge Balkız personal communication. Balkız, O., Onmus, O., Siki M., Döndüren, Ö., Gül O., Arnaud, A., Germain, C., İsfendiyaroğlu, S., Ozbek, M., Çağlayan, E., Ozesmi, U., Béchet, A. (in preparation). Turkey as a crossroad for Greater flamingos *Phoenicopterus roseus*: evidence from population trends, ring-resightings and genetic information,

**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)

**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 İsfendiyaroğlu, 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., İsfendiyaroglu 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](http://www.kusbank.org)

**Winter short-term trend:** Doğa Derneği



## Bibliography

- Brown, L.H., Urban, E.K. and Newman, K. 1982. *The birds of Africa vol I*. Academic Press, London.
- Curcó, A., Vidal, F. and Piccardo, J. 2009. Conservation and management of the Greater Flamingo *Phoenicopterus roseus* at the Ebre delta. *Flamingo*, Special Publ, 1: 37-43.
- del Hoyo, J., Collar, N. and Garcia, E.F.J. 2014. Greater Flamingo (*Phoenicopterus roseus*). 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/467129> on 19 March 2015).
- Diawara, Y., Arnaud, A., Araujo, A. and Béchet, A. 2007. Nouvelles données sur la reproduction et l'hivernage des flamants roses *Phoenicopterus roseus* en Mauritanie et confirmation d'échanges avec les populations méditerranéennes. *Ostrich* 78: 469-474.
- 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.
- Hockey, P.A.R., Dean, W.R.J. and Ryan, P.G. 2005. *Roberts birds of southern Africa*. Trustees of the John Voelcker Bird Book Fund, Cape Town, South Africa.
- 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.
- Miltiadou, M. 2005. Wintering populations, breeding attempts and lead poisoning of the Great Flamingo *Phoenicopterus roseus* on the salt lakes of Cyprus. *Flamingo* 13: 31-35.
- Nasirwa, O. 2000. Conservation status of flamingos in Kenya. *Waterbirds* 23: 47-51.
- Ogilvie, M. and Ogilvie, C. 1986. *Flamingos*. Alan Sutton, Gloucester.
- Snow, D.W. and Perrins, C.M. 1998. *The Birds of the Western Palearctic vol. 1: Non-Passerines*. Oxford University Press, Oxford.
- Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: their conservation status*. BirdLife Conservation Series no. 3, BirdLife International, Cambridge.
- van Heerden, J. 1974. Botulism in the Orange Free State goldfields. *Ostrich* 45(3): 182-184.
- Yosef, R. 2000. Individual distances among Greater Flamingos as indicators of tourism pressure. *Waterbirds* 23: 26-31.