



THE IUCN RED LIST  
OF THREATENED SPECIES™



## ***Larus canus* (Mew Gull)**

### **European Red List of Birds**

### **Supplementary Material**

The European Union (EU28) 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 2019-20. 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 (2021).

#### **Contents**

Reported national population sizes and trends  
Trend maps of reported national population data  
Sources of reported national population data  
Species factsheet bibliography

#### **Recommended citation**

BirdLife International (2021) European Red List of Birds. Luxembourg: Publications Office of the European Union.

#### **Further information**

<http://datazone.birdlife.org/info/euroredlist>  
<http://www.birdlife.org/europe-and-central-asia/european-red-list-birds-0>  
<http://www.iucnredlist.org/regions/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).

*Larus canus* (Mew Gull)

**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>5</sup>				Long-term population trend <sup>5</sup>				Subspecific population (where relevant)
	Size (pairs) <sup>3</sup>	Europe (%)	Year(s)	Method <sup>4</sup>	Direction <sup>6</sup>	Magnitude (%) <sup>7</sup>	Year(s)	Method <sup>4</sup>	Direction <sup>6</sup>	Magnitude (%) <sup>7</sup>	Year(s)	Method <sup>4</sup>	
Austria	1–5	<1	2013-2018	complete	-		2007-2018	complete	0		1981-2018	complete	
Belarus	1500–3000	<1	2010-2018	partial	+	50 to 200	2012-2019	expert	+	25 to 100	1980-2019	expert	
Belgium	60–80	<1	2013-2018	complete	?		2008-2018	complete	+	600 to 744	1973-2018	partial	
Czechia	2–4	<1	2014-2017	complete	0	0	2001-2017	complete	-		1986-2016	complete	
Denmark	13900–14000	1	2017	complete	-	-45 to -36	2006-2017	complete	-	-69 to -54	1980-2017	complete	
DK: Faroe Is	1000	<1	1981	expert	?				?				
Estonia	7000–10000	<1	2013-2017	partial	0		2006-2017	partial	-	-35 to -8	1980-2017	partial	
Finland	56800–87200	7	2013-2018	expert	0		2001-2012	partial	+	26 to 38	1980-2012	partial	
France	21–39	<1	2013-2018	complete	F		2006-2018	complete	+	5 to 55	1980-2018	partial	
Germany	17000	2	2011-2016	expert	-		2004-2016	expert	0		1985-2016	expert	
Iceland	800–1000	<1	2013	complete	+		2000-2013	partial	+		1980-2004	partial	
Rep. Ireland	1900–2000	<1	2016-2018	complete	+		2002-2018	complete	-		1978-2018	partial	
Latvia	550–1000	<1	2013-2018	partial	-	-14 to -10	2000-2018	partial	+	47 to 50	1980-2017	partial	
Lithuania	150–200	<1	2013-2018	partial	0	0	2013-2018	partial	+	690 to 900	1980-2018	partial	
Netherlands	3300–4000	<1	2013-2016	complete	-	-52 to -30	2006-2017	complete	-	-68 to -67	1980-2017	complete	
Norway	90000–125000	9	2013-2018	partial	-	-28 to 0	2013-2018	partial	-	0 to 38	1980-2018	complete	
NO: Svalbard	50–60	<1	2015-2018	partial	?		2013-2018	expert	?		1980-2018		
Poland	600–1000	<1	2013-2018	expert	-	-88 to -67	2007-2018	complete	-	-80 to -70	1980-2018	expert	
Romania	0–2	<1	2013-2018	expert	+	100 to 200	2010-2018	expert	+	100 to 200	1980-2018	expert	
Russia	650000–850000	66	2007-2018	partial	?		2008-2018	partial	?		1980-2018	partial	
Slovakia	0–1	<1	2013-2018	complete	?		2007-2018	partial	?		1980-2018	partial	
Sweden	71000–132000	9	2013-2018	partial	0	-15 to 5	2007-2018	partial	-	-50 to -35	1980-2018	partial	
Switzerland	3	<1	2013–2016	complete	F	-99 to 43	2007-2018	complete	F	-97 to 348	1990-2018	complete	
Ukraine	20–150	<1	2013-2018	complete	0		2010-2018	expert	+	10 to 500	1980-2018	partial	
United Kingdom	48700–48800	4	1998-2002	complete	-	-47 to -5	2004-2015	complete	+	-45 to 111	1986-2015	complete	
EU28	221000–318000	24											
<b>Europe</b>	<b>964000–1300000</b>	<b>100</b>											

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<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 'method used' (replacing the data 'quality' assessment in the 2015 European Red List) is reported as: a) Complete: complete survey or a statistically robust estimate; b) Partial: based mainly on extrapolation from a limited amount of data; c) Expert: based mainly on expert opinion with very limited data; d) Defficient: insufficient or no data available.

<sup>5</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>6</sup> Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).

<sup>7</sup> Trend magnitudes are rounded to the nearest integer.

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**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>5</sup>				Long-term population trend <sup>5</sup>				Subspecific population (where relevant)
	Size (individuals) <sup>3</sup>	Europe (%)	Year(s)	Method <sup>4</sup>	Direction <sup>6</sup>	Magnitude (%) <sup>7</sup>	Year(s)	Method <sup>4</sup>	Direction <sup>6</sup>	Magnitude (%) <sup>7</sup>	Year(s)	Method <sup>4</sup>	
Albania	1–11	<1	2007-2018	complete	-	-90 to -63	2007-2018	complete	-	-90 to -63	1980-2018	complete	
Azerbaijan	500–5000	<1	1996-2019	partial	F		2010-2019	partial	?		1980-2019	expert	
Belarus	10–100	<1	2013-2018	partial	+	50 to 100	2000-2012	partial	?				
Belgium	85000–105000	27	2013-2018	partial	?		2007-2018	deficient	?		1992-2018	deficient	
Bosnia & HG	1–30	<1	2015-2018	complete	?		2007-2018	deficient	?		1980-2018	deficient	
Bulgaria	70–1400	<1	2013-2018	partial	F		2000-2018	complete	F		1980-2018	partial	
Czechia	3300–7700	1	2015-2019	complete	+		2008-2019	complete	+		1980-2019	complete	
DK: Faroe Is	300–1000	<1	1992		?				?				
France	31000–31100	9	2017-2018	partial	-		2007-2018	partial	-		1996-2018	partial	
Georgia		<1	2012	deficient	?				?		2002-2018		
Germany	165000	47	2011-2016	complete	-	-20 to -7	2003-2016	complete	-	-65 to -30	1980-2016	partial	
Greece	80–280	<1	2013-2018	partial	?		2007-2018	deficient	?		1980-2018	deficient	
Iceland	1000–2000	<1	2018	expert	+		2002-2014	partial	+		1980-2018	partial	
Rep. Ireland	21400–21500	6	2011-2016	partial	?		2004-2016	deficient	?		1987-2016	deficient	
Luxembourg	1–5	<1	2013-2018	partial	F		2007-2018	partial	?		1980-2018	expert	
Moldova	20–60	<1	2018-2019	partial	F		2007-2018	partial	0		1990-2018	expert	
Montenegro		<1	2013-2018	expert	?		2007-2018	expert	?				
Poland	7000–12000	3	2013-2018	complete	-	-48 to -21	2011-2018	complete	?		1980-2018	deficient	
Serbia	1500–5000	<1	2013-2018	complete	F		2013-2018	partial	?	-10 to 10	1980-2018	expert	
Slovenia	120–1400	<1	2013-2018	complete	-		2007-2018	complete	0		1980-2018	expert	
Switzerland	980–1900	<1	2015-2019	complete	-	-65 to -62	2008-2019	complete	-	-70 to -69	1980-2019	complete	
Turkey	5000–18000	3	2013-2019	partial	?		2008-2019	deficient	?		1980-2019	deficient	
Ukraine	5000–13000	2	2014-2017	partial	0		2007-2018	partial	F		1980-2018	partial	
EU28	313000–346000	93											
<b>Europe</b>	<b>327000–392000</b>	<b>100</b>											

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Country (or territory) <sup>2</sup>	Population estimate				Short-term population trend <sup>5</sup>				Long-term population trend <sup>5</sup>				Subspecific population (where relevant)
	Size (individuals) <sup>3</sup>	Europe (%)	Year(s)	Method <sup>4</sup>	Direction <sup>6</sup>	Magnitude (%) <sup>7</sup>	Year(s)	Method <sup>4</sup>	Direction <sup>6</sup>	Magnitude (%) <sup>7</sup>	Year(s)	Method <sup>4</sup>	

<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>6</sup> Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).

<sup>7</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

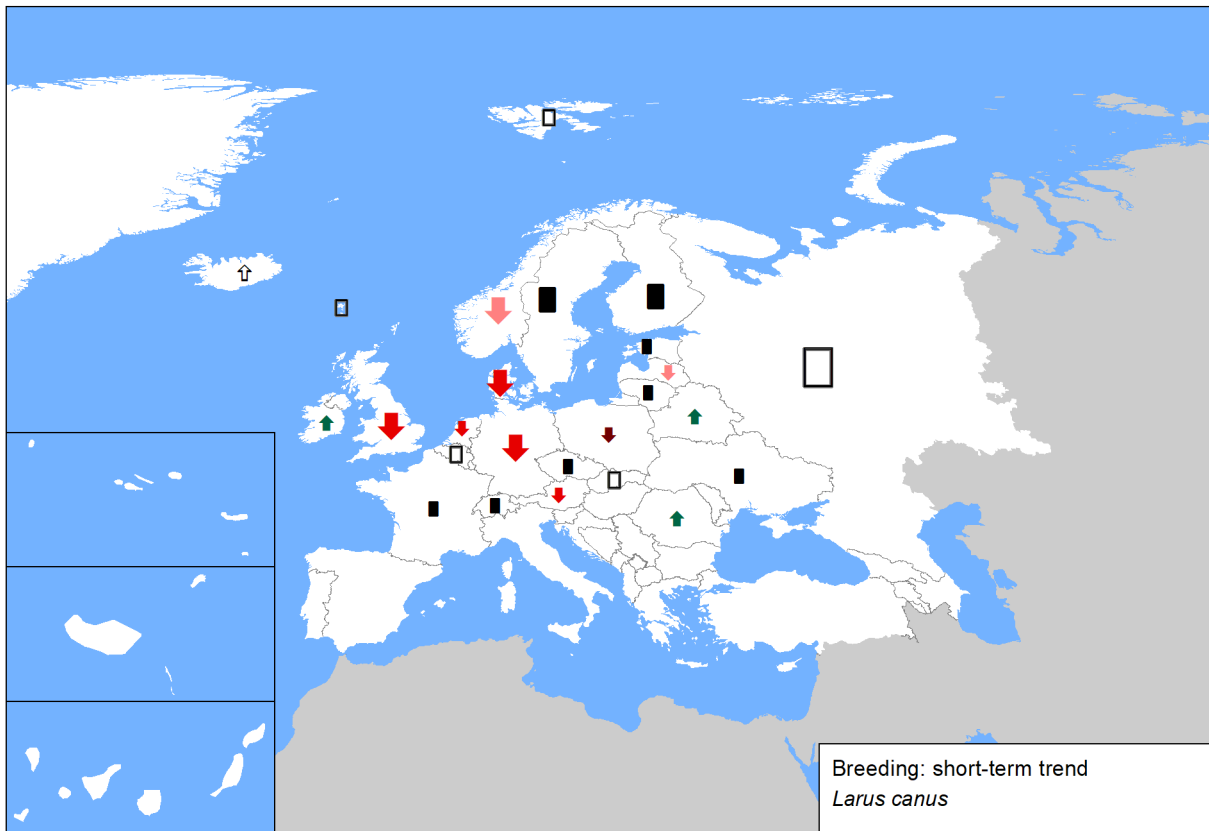
- |   |                                 |
|---|---------------------------------|
| ↑ Large increase (≥50%)                 | ↓ Large decrease (≥50%)         |
| ↑ Moderate increase (20–49%)            | ↓ Moderate decrease (20–49%)    |
| ↑ Small increase (<20%)                 | ↓ Small decrease (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

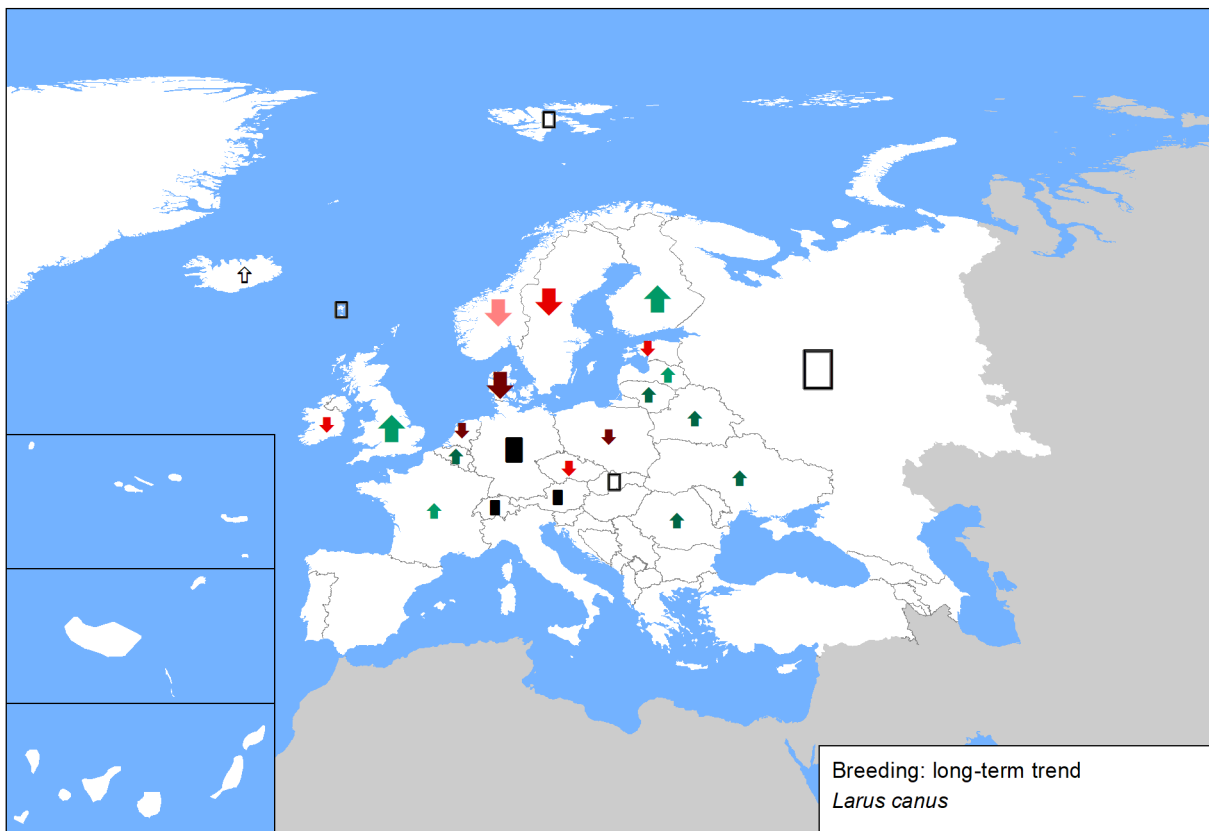
- ↑ Large: ≥10% of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small: <1% of the European population

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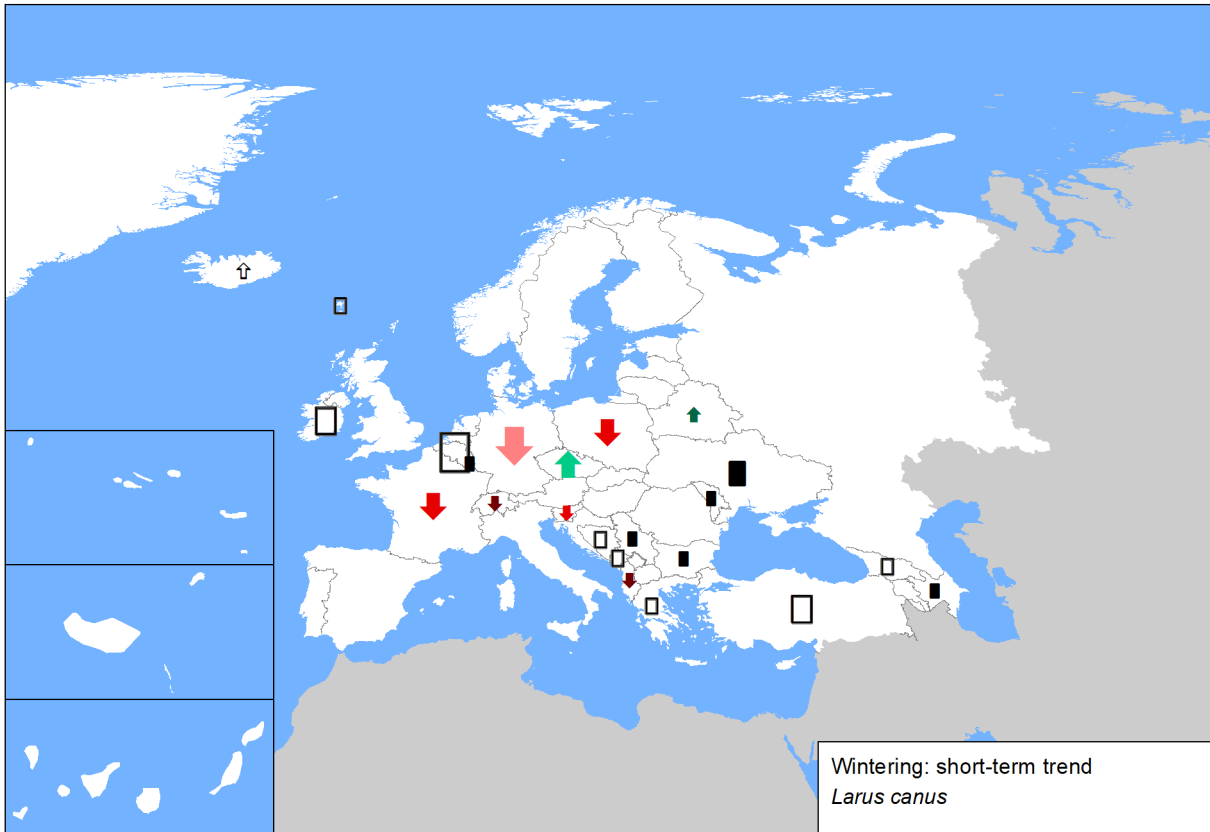
**Figure 1.** Breeding population sizes and short-term trends across Europe.



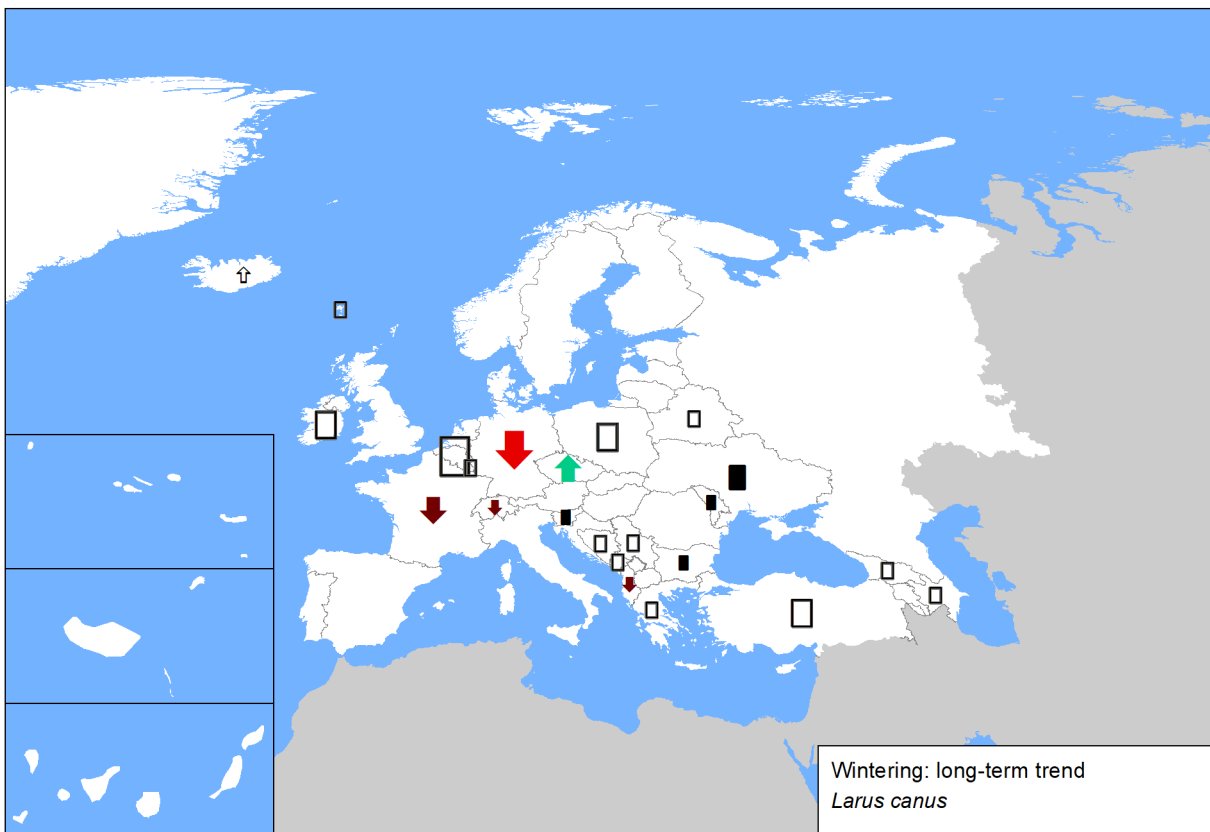
**Figure 2.** Breeding population sizes and long-term trends across Europe.



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



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



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### Sources

#### Albania

<b>Winter population size:</b> Bino pers. obs.
<b>Winter short-term trend:</b> Bino et al. 2018
<b>Winter long-term trend:</b> Bino et al. 2018

#### Austria

<b>Breeding population size:</b> Ornithologischer Rundbrief Bodensee Sommer 2013-2018 (Rheindelta); BirdLife Austria, unpublished data from <a href="http://www.ornitho.at">www.ornitho.at</a>
<b>Breeding short-term trend:</b> Ornithologischer Rundbrief Bodensee Sommer 2007-2018 (Rheindelta); BirdLife Austria, unpublished archive data
<b>Breeding long-term trend:</b> Ornithologischer Rundbrief Bodensee Sommer 2013-2018 (Rheindelta); BirdLife Austria, unpublished data from <a href="http://www.ornitho.at">www.ornitho.at</a> ; Dvorak, Ranner & Berg 1993 (Atlas of Austrian Breeding Birds)

#### 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> Research work of the National Academy of Sciences of the Republic of Belarus "Dynamics and predictive assessment of changes in the state of populations of the main resource and biocenotically most important bird species in Belarus"
<b>Breeding long-term trend:</b> Nikiforov M.E., Kozulin A.V., eds. Belarussian birds at the beginning of XXI century: status, numbers, distribution. - 1997. - Minsk. - 187 p.
<b>Winter population size:</b> Bogdanovich I.A. - personal communication
<b>Winter short-term trend:</b> Bogdanovich I.A. - personal communication Data of midwinter counts of wintering waterbirds in Belarus (2009-2013).

#### Belgium

<b>Breeding population size:</b> Vermeersch G. et al. (2018, in press). Broedvogels in Vlaanderen in de periode 2013-2018. Rapporten van het Instituut voor Natuur- en Bosonderzoek (INBO), Brussel. / Paquet, J-Y., Anselin, A., Vermeersch, G., Derouaux, A., Devos, K. (2019, in prep.). Contribution of Belgium to EBCC European Breeding Bird Atlas 2. Internal Report.
<b>Breeding short-term trend:</b> Vermeersch G. et al. (2018, in press). Broedvogels in Vlaanderen in de periode 2013-2018. Rapporten van het Instituut voor Natuur- en Bosonderzoek (INBO), Brussel. / Paquet, J-Y., Anselin, A., Vermeersch, G., Derouaux, A., Devos, K. (2019, in prep.). Contribution of Belgium to EBCC European Breeding Bird Atlas 2. Internal Report.
<b>Breeding long-term trend:</b> Vermeersch G. et al. (2018, in press). Broedvogels in Vlaanderen in de periode 2013-2018. Rapporten van het Instituut voor Natuur- en Bosonderzoek (INBO), Brussel. / Paquet, J-Y., Anselin, A., Vermeersch, G., Derouaux, A., Devos, K. (2019, in prep.). Contribution of Belgium to EBCC European Breeding Bird Atlas 2. Internal Report.
<b>Winter population size:</b> Waterbird database INBO & Aves
<b>Winter short-term trend:</b> Waterbird database INBO & Aves
<b>Winter long-term trend:</b> Waterbird database INBO & Aves

#### Bosnia and Herzegovina

<b>Winter population size:</b> based on IWC reports-all reports published in magazine Bilten mreže posmatrača ptica ( <a href="http://www.ptice.ba">www.ptice.ba</a> )
<b>Winter short-term trend:</b> based on IWC reports-all reports published in magazine Bilten mreže posmatrača ptica ( <a href="http://www.ptice.ba">www.ptice.ba</a> )
<b>Winter long-term trend:</b> There are no qualitative data before 2005 to make estimates

#### Bulgaria

<b>Winter population size:</b> Wetlands International (2019): Submitted IWC data for Bulgaria for period 2013-2018.; National Art. 12 reporting database 2013-2018; National workshop of experts, Sofia 27-29.8.2019
<b>Winter short-term trend:</b> Statistical analysis made by expert on base of Mid-winter count data; National Art. 12 reporting database 2013-2018;
<b>Winter long-term trend:</b> Michev T., Profirov L. 2003. Mid-Winter Numbers of Waterbirds in Bulgaria (1977-2001). Pensoft, Sofia, 160 pp.

#### Czechia

<b>Breeding population size:</b> Šťastný et Bejček in prep. - Atlas hnízdního rozšíření ptáků ČR 2014-2017
<b>Breeding short-term trend:</b> Trends in waterbird breeding population size were estimated using changes in population data from nation-wide numbers project of "Atlas of Breeding Bird Distribution" carried out in whole Czech Republic in 2001 -2003 and 2014 – 2017. Range of relative change in breeding population size was used as the measurement of population trend. The values of relative rate of change were compared with data from annual monitoring (census in May – see Musil & Fuchs 1994, Musil et al. 2001, Čehovská et al. 2019 for the methods) on limited amount of sites (fishpond regions in south and central Bohemia - see Musil & Fuchs 1994). Čehovská M., Musil P., Musilová Z., Poláková, K. & Zouhar J. 2019: Diving duck census efficiency based on monitoring of individually marked females: the influence of breeding stage of individual females and timing of census. Bird Study in press. Musil P. Cepák J. Hudec K. & Zárbynický J. 2001. The long-term trends in the breeding waterfowl populations in the Czech Republic. OMPO, Institute of Applied Ecology, Kostelec nad Černými lesy. Musil P. & Fuchs R. 1994: Changes in abundance of water birds species in southern Bohemia (Czech Republic) in the last 10 years. Development in Hydrobiology. In: Kerekes J. J. [ed.]: Aquatic Birds in Trophic Web of Lakes. Hydrobiologia 279/280: 511–519.
<b>Breeding long-term trend:</b> Šťastný et al. 2006

## *Larus canus* (Mew Gull)

### Czechia

**Winter population size:** Waterbird numbers were recorded in mid-January by regular citizen-science monitoring programme - the International Waterbird Census (IWC) – see Gilissen et al. 2002, Wetlands International 2006, Wetlands International 2019. Hundreds of volunteer birdwatchers conduct the mid-January counts on predetermined dates and sites each year, aiming to maximize synchrony (Gilissen et al. 2002, Musil et al. 2011, Musilová et al. 2014). The estimation of population size was calculated by Trends and Indices for Monitoring data (TRIM) software (Statistics Netherlands version 3.52, Pannekoek and Van Strien, 2005). 'Time Totals' values of the data (i.e. the actual count values plus the numbers of birds estimated by the TRIM software) for all 1155 sites included in the analysis were used to generate total estimates of the range of numbers of the waterbird species wintering in the Czech Republic between 2015 and 2019. We use the range (min–max) of population estimates due to the effect of between-year variation in numbers because of variable climatic conditions (Musil et al. 2008, Musilová et al. 2018). Gilissen N, Haanstra L, Delany S, Boere G, Hagemeyer W (2002) Numbers and distribution of wintering waterbirds in the Western Palearctic and Southwest Asia in 1987, 1988 and 1999. Results from the International Waterbird Census. Wetlands International Global Series No. 11, Wetlands International, Wageningen, The Netherlands. Musil P, Darolová A, Jureček J, Musilová Z, Podhrázký M, Slabeyová K (2008) The long-term trends in numbers of wintering geese in the Czech Republic and Slovakia in 1991–2007. Tichodroma 20: 61–67. Musil P, Musilová Z, Fuchs R, Poláková S (2011) Long-term changes in numbers and distribution of wintering waterbirds in the Czech Republic, 1966–2008. Bird Study 58: 450–460. Musilová Z, Musil P, Zouhar J, Adam M (2018) Changes in habitat suitability influence non-breeding distribution of waterbirds in central Europe. Ibis: 160: 582–596. Musilová Z, Musil P, Zouhar J, Bejček V, Štátný K, Hudec K (2014) Numbers of wintering waterbirds in the Czech Republic: long-term and spatial-scale approaches to assess population size. Bird Study 61: 321–331.

**Winter short-term trend:** Waterbird numbers were recorded in mid-January by regular citizen-science monitoring programme - the International Waterbird Census (IWC) – see Gilissen et al. 2002, Wetlands International 2006, Wetlands International 2019. Hundreds of volunteer birdwatchers conduct the mid-January counts on predetermined dates and sites each year, aiming to maximize synchrony (Gilissen et al. 2002, Musil et al. 2011, Musilová et al. 2014). The individual species trends in numbers was calculated by Trends and Indices for Monitoring data (TRIM) software (Statistics Netherlands version 3.52, Pannekoek and Van Strien, 2005). The additive slope (i.e. the change in indices from one year to the next) was used to estimate the Czech trend, see also Fouque et al. (2009), Musil et al. (2011), Musilová et al. (2015), Musilová et al. (2018 a, b). Fouque C, Guillemain M, Schricke V (2009) Trends in the numbers of Coot Fulica atra and wildfowl Anatidae wintering in France and their relationship with hunting activity at wetland sites. Wildfowl. Special Issue 2: 42–59. Gilissen N, Haanstra L, Delany S, Boere G, Hagemeyer W (2002) Numbers and distribution of wintering waterbirds in the Western Palearctic and Southwest Asia in 1987, 1988 and 1999. Results from the International Waterbird Census. Wetlands International Global Series No. 11, Wetlands International, Wageningen, The Netherlands. Musil P, Musilová Z, Fuchs R, Poláková S (2011) Long-term changes in numbers and distribution of wintering waterbirds in the Czech Republic, 1966–2008. Bird Study 58: 450–460. Musilová Z, Musil P, Zouhar J, Adam M (2018a) Changes in habitat suitability influence non-breeding distribution of waterbirds in central Europe. Ibis: 160: 582–596. Musilová Z, Musil P, Zouhar J, Adam M, Bejček V (2018b) Importance of Natura 2000 sites for wintering waterbirds: Low preference, species' distribution changes and carrying capacity of Natura 2000 could fail to protect the species. Biological Conservation 228: 79–88. Musilová Z, Musil P, Zouhar J, Bejček V, Štátný K, Hudec K (2014) Numbers of wintering waterbirds in the Czech Republic: long-term and spatial-scale approaches to assess population size. Bird Study 61: 321–331. Musilová Z, Musil P, Zouhar J, Romportl D (2015) Long-term trends, total numbers and species richness of increasing waterbird populations at sites on the edge of their winter range: cold-weather refuge sites are more important than protected sites. J Ornithol: 1–10. Pannekoek J, Van Strien AJ (2005) TRIM 3 Manual (Trends and Indices for Monitoring Data). Statistics Netherlands, Voorburg, The Netherlands. Wetlands International (2006) Waterbird population estimates. Fourth Edition. Wetlands International, Wageningen, The Netherlands. Wetlands International (2019) Waterbird Population Estimates. Available at: [wpe.wetlands.org](http://wpe.wetlands.org) (accessed 10 March 2019).

**Winter long-term trend:** Waterbird numbers were recorded in mid-January by regular citizen-science monitoring programme - the International Waterbird Census (IWC) – see Gilissen et al. 2002, Wetlands International 2006, Wetlands International 2019. Hundreds of volunteer birdwatchers conduct the mid-January counts on predetermined dates and sites each year, aiming to maximize synchrony (Gilissen et al. 2002, Musil et al. 2011, Musilová et al. 2014). The individual species trends in numbers was calculated by Trends and Indices for Monitoring data (TRIM) software (Statistics Netherlands version 3.52, Pannekoek and Van Strien, 2005). The additive slope (i.e. the change in indices from one year to the next) was used to estimate the Czech trend, see also Fouque et al. (2009), Musil et al. (2011), Musilová et al. (2015), Musilová et al. (2018 a, b). Fouque C, Guillemain M, Schricke V (2009) Trends in the numbers of Coot Fulica atra and wildfowl Anatidae wintering in France and their relationship with hunting activity at wetland sites. Wildfowl. Special Issue 2: 42–59. Gilissen N, Haanstra L, Delany S, Boere G, Hagemeyer W (2002) Numbers and distribution of wintering waterbirds in the Western Palearctic and Southwest Asia in 1987, 1988 and 1999. Results from the International Waterbird Census. Wetlands International Global Series No. 11, Wetlands International, Wageningen, The Netherlands. Musil P, Musilová Z, Fuchs R, Poláková S (2011) Long-term changes in numbers and distribution of wintering waterbirds in the Czech Republic, 1966–2008. Bird Study 58: 450–460. Musilová Z, Musil P, Zouhar J, Adam M (2018a) Changes in habitat suitability influence non-breeding distribution of waterbirds in central Europe. Ibis: 160: 582–596. Musilová Z, Musil P, Zouhar J, Adam M, Bejček V (2018b) Importance of Natura 2000 sites for wintering waterbirds: Low preference, species' distribution changes and carrying capacity of Natura 2000 could fail to protect the species. Biological Conservation 228: 79–88. Musilová Z, Musil P, Zouhar J, Bejček V, Štátný K, Hudec K (2014) Numbers of wintering waterbirds in the Czech Republic: long-term and spatial-scale approaches to assess population size. Bird Study 61: 321–331. Musilová Z, Musil P, Zouhar J, Romportl D (2015) Long-term trends, total numbers and species richness of increasing waterbird populations at sites on the edge of their winter range: cold-weather refuge sites are more important than protected sites. J Ornithol: 1–10. Pannekoek J, Van Strien AJ (2005) TRIM 3 Manual (Trends and Indices for Monitoring Data). Statistics Netherlands, Voorburg, The Netherlands. Wetlands International (2006) Waterbird population estimates. Fourth Edition. Wetlands International, Wageningen, The Netherlands. Wetlands International (2019) Waterbird Population Estimates. Available at: [wpe.wetlands.org](http://wpe.wetlands.org) (accessed 10 March 2019).

### Denmark

**Breeding population size:** [www.dofbasen.dk](http://www.dofbasen.dk) & Nyegaard, T. et al., Truede og sjældne ynglefugle i Danmark 1998-2012, Dansk Ornitologisk Forenings Tidsskrift 108, nr 1, 2014 & Atlas III 2014-2017 ([www.dofbasen.dk/atlas](http://www.dofbasen.dk/atlas)) & DOF BirdLifeDK Fugleåret 2006-2017 & Bregballe, T. et al., in prep., Udviklingen i ynglebestanden af Stormmåge i Danmark, Dansk Ornitologisk Forenings Tidsskrift

**Breeding short-term trend:** [www.dofbasen.dk](http://www.dofbasen.dk) & Nyegaard, T. et al., Truede og sjældne ynglefugle i Danmark 1998-2012, Dansk Ornitologisk Forenings Tidsskrift 108, nr 1, 2014 & Atlas III 2014-2017 ([www.dofbasen.dk/atlas](http://www.dofbasen.dk/atlas)) & DOF BirdLifeDK Fugleåret 2006-2017

**Breeding long-term trend:** [www.dofbasen.dk](http://www.dofbasen.dk) & Nyegaard, T. et al., Truede og sjældne ynglefugle i Danmark 1998-2012, Dansk Ornitologisk Forenings Tidsskrift 108, nr 1, 2014 & Atlas III 2014-2017 ([www.dofbasen.dk/atlas](http://www.dofbasen.dk/atlas)) & DOF BirdLifeDK Fugleåret 2006-2017

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**Breeding population size:** BirdLife International (2004) Birds in Europe: population estimates, trends and conservation status. BirdLife International, Cambridge, UK. Hammer et al. (2014) Færøsk trækfugleatlas [Faroe bird migration atlas]. Fróðskapur / Faroe University Press, Tórshavn.

**Winter population size:** BirdLife International 2004

### Estonia

**Breeding population size:** Estonian Working Group on Bird Status and Numbers

**Breeding short-term trend:** Estonian Working Group on Bird Status and Numbers

**Breeding long-term trend:** Estonian Working Group on Bird Status and Numbers

## Larus canus (Mew Gull)

### Finland

**Breeding population size:** Lehtinen, A., Below, A., Jukarainen, A., Laaksonen, T., Lehtiniemi, T., Mikkola-Roos, M., Pessa, J., Rajasärkkä, A., Rusanen, P., Sirkiä, P., Tiainen, J. & Valkama, J. 2019: Suomen lintujen pesimäkantojen koot. – Linnut-vuosikirja 2018: 38-45.

**Breeding short-term trend:** Finnish archipelago bird census (organized by Finnish Environment Institute SYKE, Metsähallitus and Natural Resources Institute Finland Luke) Below, A., Mikkola-Roos, M., Kurvinen, L. & Lehtinen, A. 2019: Saaristolintukantojen kehitys vuosina 1980–2018. – Linnut-vuosikirja 2018: 56-67. Laaksonen, T., Lehtinen, A., Pöysä, H., Sirkiä, P. & Ikonen, K. 2019: Sisävesien vesilintujen kannanvaihtelut 1986-2018. – Linnut-vuosikirja 2018:46-55.

**Breeding long-term trend:** Finnish archipelago bird census (organized by Finnish Environment Institute SYKE, Metsähallitus and Natural Resources Institute Finland Luke) Below, A., Mikkola-Roos, M., Kurvinen, L. & Lehtinen, A. 2019: Saaristolintukantojen kehitys vuosina 1980–2018. – Linnut-vuosikirja 2018: 56-67. Laaksonen, T., Lehtinen, A., Pöysä, H., Sirkiä, P. & Ikonen, K. 2019: Sisävesien vesilintujen kannanvaihtelut 1986-2018. – Linnut-vuosikirja 2018:46-55.

### France

**Breeding population size:** Camberlein P 2010. Le Goéland cendré *Larus canus* en France : un oiseau nicheur persévérant et atypique.. Ornithos, LPO Rochefort209-216

**Winter population size:** Dubois P.J. & Gaudard C. 2019. Résultats du 5e recensement des laridés hivernant en France (hiver 2017-2018).. Ornithos, Rochefort - LPO1-15

**Winter short-term trend:** Dubois PJ, Issa N Mars 2013. Résultats du 4e recensement des laridés hivernant en France, Rochefort, Ligue pour la Protection des Oiseaux. 136 ornithos@lpo.fr; Dubois P.J. & Gaudard C. 2019. Résultats du 5e recensement des laridés hivernant en France (hiver 2017-2018).. Ornithos 26, Rochefort - LPO1-15. ; Dubois, P. J. & F. Jiguet 2006. Résultats du 3e recensement des laridés hivernants en France (hiver 2004-2005). 146-157

**Winter long-term trend:** Dubois PJ, Issa N Mars 2013. Résultats du 4e recensement des laridés hivernant en France, Rochefort, Ligue pour la Protection des Oiseaux. 136 ornithos@lpo.fr; Dubois P.J. & Gaudard C. 2019. Résultats du 5e recensement des laridés hivernant en France (hiver 2017-2018).. Ornithos 26, Rochefort - LPO1-15. ; Créau Y. & Dubois P.J. 1997. Recensement des laridés hivernant en France. Hiver 1996/97. Ornithos 4-4, Rochefort - LPO174-183 ; Dubois, P. J. & F. Jiguet 2006. Résultats du 3e recensement des laridés hivernants en France (hiver 2004-2005). 146-157 ; . Recensement hivernal des laridés en France (janvier 1984).

### Georgia

**Winter population size:** BirdLife International 2004

### Germany

**Breeding population size:** Gerlach et al. (in Vorb.): Vögel in Deutschland – 2019. Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz und Länderarbeitsgemeinschaft der Vogelschutzwarten, Münster.

**Breeding short-term trend:** Gerlach et al. (in Vorb.): Vögel in Deutschland – 2019. Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz und Länderarbeitsgemeinschaft der Vogelschutzwarten, Münster.

**Breeding long-term trend:** Gerlach et al. (in Vorb.): Vögel in Deutschland – 2019. Dachverband Deutscher Avifaunisten, Bundesamt für Naturschutz und Länderarbeitsgemeinschaft der Vogelschutzwarten, Münster.

**Winter population size:** Dachverband Deutscher Avifaunisten e.V. und Forschungs- und Technologiezentrum Westküste, Universität Kiel

**Winter short-term trend:** Dachverband Deutscher Avifaunisten e.V. (<http://www.dda-web.de>)

**Winter long-term trend:** Dachverband Deutscher Avifaunisten e.V. (<http://www.dda-web.de>)

### Greece

**Winter population size:** 1) Natura Viewer (<http://natura2000.eea.europa.eu/#>). 2) Βλάχος Χ., Μπίρτσας Π., Θωμαΐδης Χ., Χατζηνίκος Ε., Μπονιζώρος Β., Μπραζιώτης Σ., Κόντος Κ., Βλαχάκη Δ., Δεδουσοπούλου Ε., Κιούσης Δ., Ξένος Α., Στεφάνου Λ.Μ., Κασάμπαλης Δ., και Μελικώκη Κ. (Συντονιστές έκδοσης). 2015. Γ' Φάση της Μελέτης 9 «Επιτοπεία και Αξιολόγηση της Κατάστασης Διατήρησης Ειδών Ορνιθοπανίδας στην Ελλάδα» ΥΠΑΠΕΝ, Αθήνα, Σύμπραξη Γραφείων Μελετών «"Φ.ΦΑΣΟΥΛΑΣ-Ν.ΜΑΝΤΖΙΟΣ" Ε.Ε. – ΡΟΔΟΥΛΑ ΚΩΝΣΤΑΝΤΙΝΙΔΟΥ ΤΟΥ ΓΕΩΡΓΙΟΥ – "ΑΘ.ΤΖΑΚΟΠΟΥΛΟΣ ΚΑΙ ΣΙΑ" Ε.Ε.», Θεσσαλονίκη. 3) Midwinter Counts Database (1967 - 2019), Hellenic Ornithological Society 4) BirdLife International (2017). European birds of conservation concern: populations, trends and national responsibilities. Cambridge. UK: BirdLife International. ISBN 978-1-912086-00-9, 5) 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.

**Winter short-term trend:** no data available

**Winter long-term trend:** no data available

### Iceland

**Breeding population size:** Sverrir Thorstensen og Ævar Petersen 2018. Vöktun stormmáfa í Eyjafirði 2015 [Results of monitoring Common Gulls *Larus canus* in Eyjafjörður (N-Iceland) in 2015.]; Kristinn Haukur Skarphéðinsson, Borgný Katrínardóttir, Guðmundur A. Guðmundsson og Svenja N.V. Auhage 2016. Mikilvæg fuglasvæði á Íslandi. Fjölrit Náttúrufræðistofnunar Nr. 55. 295 s. rafræn útgáfa leiðrétt í nóvember 2017. [http://utgafa.ni.is/fjolrit/fjolrit\\_55.pdf](http://utgafa.ni.is/fjolrit/fjolrit_55.pdf); Icelandic Institute of Natural History, unpubl.data.

**Breeding short-term trend:** Sverrir Thorstensen og Ævar Petersen 2018. Vöktun stormmáfa í Eyjafirði 2015 [Results of monitoring Common Gulls *Larus canus* in Eyjafjörður (N-Iceland) in 2015.]

**Breeding long-term trend:** Sverrir Thorstensen og Ævar Petersen 2018. Vöktun stormmáfa í Eyjafirði 2015 [Results of monitoring Common Gulls *Larus canus* in Eyjafjörður (N-Iceland) in 2015.]

**Winter population size:** Icelandic Institute of Natural History. Mid-winter bird counts, <https://www.ni.is/greinar/vetrafuglatalningar-nidurstodur>; Icelandic Institute of Natural History, unpubl.data.

**Winter short-term trend:** Icelandic Institute of Natural History. Mid-winter bird counts, <https://www.ni.is/greinar/vetrafuglatalningar-nidurstodur>; Icelandic Institute of Natural History, unpubl.data.

**Winter long-term trend:** Icelandic Institute of Natural History. Mid-winter bird counts, <https://www.ni.is/greinar/vetrafuglatalningar-nidurstodur>; Icelandic Institute of Natural History, unpubl.data.

### Republic of Ireland

**Breeding population size:** Cummins, S., Lauder, C., Lauder, A & Tierney, T. D. (2019) The status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018. Irish Wildlife Manuals, No. XXX. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

**Breeding short-term trend:** Cummins, S., Lauder, C., Lauder, A & Tierney, T. D. (2019) The status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018. Irish Wildlife Manuals, No. XXX. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

## Larus canus (Mew Gull)

### Republic of Ireland

<b>Breeding long-term trend:</b> Cummins, S., Lauder, C., Lauder, A. & Tierney, T. D. (2019) The status of Ireland's Breeding Seabirds: Birds Directive Article 12 Reporting 2013 – 2018. Irish Wildlife Manuals, No. XXX. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.
<b>Winter population size:</b> Lewis, L. J., Burke, B., Fitzgerald, N., Tierney, T. D. & Kelly, S. (2019) Irish Wetland Bird Survey: Waterbird Status and Distribution 2009/10-2015/16. Irish Wildlife Manuals, No. 106. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.
<b>Winter short-term trend:</b> The Irish Wetland Bird Survey only provides partial data on this and other wintering gull species. Furthermore only limited historical data exists for this group of birds (see Hutchinson 1979). Therefore due to the insufficiency of data no conclusive determination can be made on both the short- and the long-term trends.
<b>Winter long-term trend:</b> The Irish Wetland Bird Survey only provides partial data on this and other wintering gull species. Furthermore only limited historical data exists for this group of birds (see Hutchinson 1979). Therefore due to the insufficiency of data no conclusive determination can be made on both the short- and the long-term trends. Hutchinson, C. (1979) Ireland's Wetlands and their Birds. Irish Wildbird Conservancy.

### Latvia

<b>Breeding population size:</b> Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv
<b>Breeding short-term trend:</b> Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv
<b>Breeding long-term trend:</b> Priednieks J., Strazds M., Strazds A., Petrins A. 1989. Latvian Breeding Bird Atlas 1980-1984. Riga: Zinatne Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv

### Lithuania

<b>Breeding population size:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) 2015-2018. Lietuvos perinčių paukščių atlaso duomenų bazė (Lithuanian Breeding Birds Atlas Database). Vilnius. Ministry of Environment of the Republic of Lithuania. 2012. Status and trends of bird populations (Article 12, Birds Directive 2009/147/EC) National Summary 2008-2012 Lithuania. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES) Ministry of Environment of the Republic of Lithuania. 2017-2018. Lietuvos saugomų gyvūnų, augalų ir grybų vertinimo pagal IUCN kategorijas ir rūšių aprašymų parengimo paslaugos (Protected species of animals, plants and mushrooms IUCN status estimation and descriptions in Lithuania (Agreement No VPS-2017-16-AARP))
<b>Breeding short-term trend:</b> Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) 2015-2018. Lietuvos perinčių paukščių atlaso duomenų bazė (Lithuanian Breeding Birds Atlas Database). Vilnius. Ministry of Environment of the Republic of Lithuania. 2012. Status and trends of bird populations (Article 12, Birds Directive 2009/147/EC) National Summary 2008-2012 Lithuania. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES) Ministry of Environment of the Republic of Lithuania. 2017-2018. Lietuvos saugomų gyvūnų, augalų ir grybų vertinimo pagal IUCN kategorijas ir rūšių aprašymų parengimo paslaugos (Protected species of animals, plants and mushrooms IUCN status estimation and descriptions in Lithuania (Agreement No VPS-2017-16-AARP))
<b>Breeding long-term trend:</b> Logminas, V. (ed.). 1991. Lietuvos fauna: paukščiai. Vilnius: „Mokslas“. Kurlavičius, P. (ed.) 2006. Lietuvos perinčių paukščių atlasas. Kaunas: „Lututė“. 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). Raudonikis L. 2004. Important Bird Areas of the European Union Importance in Lithuania. Lithuanian Ornithological Society & Institute of Ecology of Vilnius University. Lutute, Vilnius. Jusys, V., Karalius, S., Raudonikis, L. 2012. Lietuvos paukščių pažinimo vadovas. Kaunas: „Lututė“. Ministry of Environment of the Republic of Lithuania. 2012. Status and trends of bird populations (Article 12, Birds Directive 2009/147/EC) National Summary 2008-2012 Lithuania. Expert working group of the Lithuanian Ornithological Society (lod@birdlife.lt) 2015-2018. Lietuvos perinčių paukščių atlaso duomenų bazė (Lithuanian Breeding Birds Atlas Database). Vilnius. Ministry of Environment of the Republic of Lithuania. 2016-2018. Leidinio "Lietuvos raudonoji knyga" parengimo paslaugos (Red data book of Lithuania). (Agreement No VPS-2016-104-ES) Ministry of Environment of the Republic of Lithuania. 2017-2018. Lietuvos saugomų gyvūnų, augalų ir grybų vertinimo pagal IUCN kategorijas ir rūšių aprašymų parengimo paslaugos (Protected species of animals, plants and mushrooms IUCN status estimation and descriptions in Lithuania (Agreement No VPS-2017-16-AARP))

### Luxembourg

<b>Winter population size:</b> Biver, G. (2013): Waterbird count - recensement hivernal des oiseaux d'eau 2009-2012. Regulus Wissenschaftliche Berichte, 28: 43-58.; Ornitho.lu (2018): online database natur&environment asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&environment Luxembourg. ISBN: 978-2-919920-01-3
<b>Winter short-term trend:</b> Ornitho.lu (2018): online database natur&environment asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&environment Luxembourg. ISBN: 978-2-919920-01-3; LUXOR (2018): natur&environment – Bird-database, Luxembourg
<b>Winter long-term trend:</b> Ornitho.lu (2018): online database natur&environment asbl & Dachverband Deutscher Avifaunisten (DDA) e.V.; Luxembourg Recorder (2018): database Musée national d'histoire naturelle; Luxembourg Lorgé P., E. Melchior (2016): Die Vögel Luxemburgs. Natur&environment Luxembourg. ISBN: 978-2-919920-01-3; LUXOR (2018): natur&environment – Bird-database, Luxembourg

### Moldova

<b>Winter population size:</b> International Waterbird Census
<b>Winter short-term trend:</b> SPPN expert opinion (sppn.moldova@gmail.com)
<b>Winter long-term trend:</b> SPPN expert opinion (sppn.moldova@gmail.com)

### Montenegro

<b>Winter population size:</b> IWC reports (2013-2018): Dubak, Vešović, N., Jovičević, M., Vizi O., Vizi, A.
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### Netherlands

<b>Breeding population size:</b> Sovon NEM (Sovon, CBS and provinces) and Bird atlas (Sovon 2018)
<b>Breeding short-term trend:</b> NEM (Sovon, RWS, CBS, provinces)
<b>Breeding long-term trend:</b> Sovon

### Norway

<b>Breeding population size:</b> Shimmings P. & Øien, I.J. 2015. Bestandsestimater og trender for norske hekkfugler. NOF-rapport 2015-2.
<b>Breeding short-term trend:</b> (a) Terrestrial monitoring programme - extensive (TOV-e), (b) Fiskemåke Larus canus, unpublished factsheet BirdLife Norway

## *Larus canus* (Mew Gull)

### Norway

**Breeding long-term trend:** Shimmings, P. & Øien, I.J. 2015. Bestandsestimater for norske hekkefugler. NOF Rapport 2-2015. 268 pp.

### NO: Svalbard

**Breeding population size:** Anker-Nilssen, T., Strøm, H., Barrett, R.T. & Siverstsen, K. 2018. Sjøfugl i Norge 2017. Resultater fra SEAPOP-programmet. Årsrapport. 27 pp.

**Breeding short-term trend:** Shimmings P. & Øien, I.J. 2015. Bestandsestimater og trender for norske hekkefugler. NOF-rapport 2015-2.

**Breeding long-term trend:** (a) Shimmings P. & Øien, I.J. 2015. Bestandsestimater og trender for norske hekkefugler. NOF-rapport 2015-2. (b) Norwegian Polar Institutt pers. comm.

### Poland

**Breeding population size:** Chodkiewicz T., Kuczyński L., Sikora A., Chylarecki P., Neubauer G., Ławicki Ł., Stawarczyk T. 2015. Ocena liczebności populacji ptaków lęgowych w Polsce w latach 2008–2012. *Ornis Polonica* 56: 149-189; expert assessment

**Breeding short-term trend:** State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MMC)

**Breeding long-term trend:** Tucker G.M., Heath M.F. 1994. Birds in Europe: their conservation status. BirdLife International, Cambridge, UK; BirdLife International 2004. Birds in Europe: population estimates, trends and conservation status. BirdLife International, Cambridge, UK; To

**Winter population size:** State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MZPW – Wintering Waterbird Survey & MZPM – Wintering Seabirds Survey)

**Winter short-term trend:** State Environmental Monitoring / Chief Inspectorate of Environmental Protection (survey: MZPW)

**Winter long-term trend:** Chief Inspectorate of Environmental Protection & Polish Society for the Protection of Birds (OTOP) / BirdLife Poland

### Romania

**Breeding population size:** Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database

**Breeding short-term trend:** Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database

**Breeding long-term trend:** Ornitodata (Romanian Ornithological Society) Database, OpenBirdMaps (Milvus Group) Database, Rombird (Romanian Rarity Commission) Database

### Russia

**Breeding population size:** Voltzit & Kalyakin 2013-2019; Database of the project on Atlas of breeding birds of European Russia

**Breeding short-term trend:** Preobrazhenskaya, unpublished. voop21@rambler.ru; Borodin, unpublished. spinus73@mail.ru; Shepel, unpublished †; Yakovleva, unpublished. kivach-bird@rambler.ru

**Breeding long-term trend:** Zubakin 1998; Bianki 2011

### Serbia

**Winter population size:** IWC database

**Winter short-term trend:** IWC database

**Winter long-term trend:** IWC database; Bioras database <http://www.bioras.petnica.rs/home.php>

### Slovakia

**Breeding population size:** Coordinatory group for reporting 2019. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002. Karaska D., Trnka A., Krištín A., Ridzoo J.: Chránené vtácie územia Slovenska. ŠOP SR Banská Bystrica, 2015.

**Breeding short-term trend:** Coordinatory group for reporting 2019. AVES-Symfony Database 2013-2018, KIMS Database 2013-2018. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

**Breeding long-term trend:** Coordinatory group for reporting 2019, AVES-Symfony Database 2013-2018, KIMS Database 2013-2018. Danko Štefan, Darolová Alžbeta, Krištín Anton: Rozšírenie vtákov na Slovensku. VEDA, vyd. SAV Bratislava, 2002.

### Slovenia

**Winter population size:** Božič L. (2013): Rezultati januarskega štetja vodnih ptic leta 2013 v Sloveniji. – *Acrocephalus* 34 (156/157): 93–103. Božič L. (2014): Rezultati januarskega štetja vodnih ptic leta 2014 v Sloveniji. – *Acrocephalus* 35 (160/161): 73–83. Božič L. (2015): Rezultati januarskega štetja vodnih ptic leta 2015 v Sloveniji. – *Acrocephalus* 36 (164/165): 57–67. Božič L. (2016): Rezultati januarskega štetja vodnih ptic leta 2016 v Sloveniji. – *Acrocephalus* 37 (170/171): 209–219. Božič L. (2017): Rezultati januarskega štetja vodnih ptic leta 2017 v Sloveniji. – *Acrocephalus* 38 (174/175): 203–215. Božič L. (2018): Rezultati januarskega štetja vodnih ptic leta 2018 v Sloveniji. – *Acrocephalus* 39 (178/179): xx–xx.

**Winter short-term trend:** Božič L. (2007): Rezultati januarskega štetja vodnih ptic leta 2007 v Sloveniji. – *Acrocephalus* 28 (132): 23–31. 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. Božič, L. (2008): Monitoring populacij izbranih vrst ptic – Zimsko štetje vodnih ptic 2002–2008. Končno poročilo. – DOPPS, Maribor. Rubinič, B. & 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. – DOPPS, Ljubljana. Božič, L. (2010): Monitoring populacij izbranih ciljnih vrst ptic – Zimsko štetje vodnih ptic. Poročilo. – DOPPS, Ljubljana. Božič, L. (2011): Monitoring populacij izbranih ciljnih vrst ptic – Zimsko štetje vodnih ptic. Poročilo. – DOPPS, Ljubljana.

**Winter long-term trend:** Birdlife International (2004): Birds in Europe: population estimates, trends and conservation status. BirdLife Conservation Series No. 12. – Birdlife International, Cambridge. Sovinc, A. (1994): Zimski ornitološki atlas Slovenije. – Tehniška založba Slovenije, Ljubljana.

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**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. SOF, Halmstad.

## *Larus canus* (Mew Gull)

### Sweden

**Breeding short-term trend:** Svensk fågeltaxering - Swedish Bird Survey

**Breeding long-term trend:** Svensk fågeltaxering - Swedish Bird Survey

### Switzerland

**Breeding population size:** Knaus, P., S. Antoniazza, S. Wechsler, J. Guélat, M. Kéry, N. Strebel & T. Sattler (2018): Swiss Breeding Bird Atlas 2013–2016. Distribution and population trends of birds in Switzerland and Liechtenstein. Swiss Ornithological Institute, Sempach.

**Breeding short-term trend:** <https://www.vogelwarte.ch/en/projects/population-trends/breeding-population-indices/>

**Breeding long-term trend:** <https://www.vogelwarte.ch/en/projects/population-trends/breeding-population-indices/>

**Winter population size:** Strebel, N. (2019): Überwinternde Wasservögel in der Schweiz: Ergebnisse der Wasservogelzählungen 2018/2019. Schweizerische Vogelwarte, Sempach./Strebel, N. (2019): Monitoring hivernal des oiseaux d'eau en Suisse: Résultats des recensements des oiseaux d'eau 2018/2019. Station ornithologique suisse, Sempach.

**Winter short-term trend:** Strebel, N. (2019): Überwinternde Wasservögel in der Schweiz: Ergebnisse der Wasservogelzählungen 2018/2019. Schweizerische Vogelwarte, Sempach./Strebel, N. (2019): Monitoring hivernal des oiseaux d'eau en Suisse: Résultats des recensements des oiseaux d'eau 2018/2019. Station ornithologique suisse, Sempach.

**Winter long-term trend:** Strebel, N. (2019): Überwinternde Wasservögel in der Schweiz: Ergebnisse der Wasservogelzählungen 2018/2019. Schweizerische Vogelwarte, Sempach./Strebel, N. (2019): Monitoring hivernal des oiseaux d'eau en Suisse: Résultats des recensements des oiseaux d'eau 2018/2019. Station ornithologique suisse, Sempach.

### Turkey

**Winter population size:** Ebird Database and Midwinter Fowl Counts (2013-2018), Birdlife Estimate

**Winter short-term trend:** Midwinter bird counts 2012-2019

**Winter long-term trend:** Midwinter bird counts 1980-2019 and Historical Records come from OSME and other midwinter counts

### Ukraine

**Breeding long-term trend:** 1. Клестов Н. Л., Фесенко Г. В. Чайковые птицы водохранилищ Днепровского каскада. – Препр. / АН Украины. Институт зоологии им. И.И. Шмальгаузена; 90.3. Киев. – 1990. – С. 1-50. 2. Мельничук В. А., Грищенко В. В., Кучерявая Л. Ф. и др. Водно-болотные угодья Киевской области как места концентрации зимующих и колониально гнездящихся птиц. – Рукоп. деп. в ВИНТИ 30.11.88 № 529-В89. – 1989. – С. 1-42. 3. Бокотей А.А., Дзюбенко Н.В., Горбань І.М. та ін. Гніздова орнітофауна басейну Верхнього Дністра. Львів. - 2010. - 399 с. 4. Горбань І. (2003): Оцінка чисельності гніздових птахів України. - Вісн. Львів. ун-ту. Сер. біол. 34: 147-158.

### United Kingdom

**Breeding population size:** Tasker, M.L. 2004. Common Gull *Larus canus*. Pp. 214-225. In: Mitchell, P.I., Newton, S., Ratcliffe, N. & Dunn, T.E. (eds.) Seabird populations of Britain and Ireland. T. & A.D. Poyser.

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**Breeding long-term trend:** JNCC 2016. Seabird Monitoring Programme data (<http://www.jncc.defra.gov.uk/page-3201>). Joint Nature Conservation Committee.

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