Chlidonias niger (Black Tern)

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.

Table 1. Reported national breeding population size and trends in Europe[1].

Country (or territory)[2]	Population estimate				Short-term population trend[5]				Long-term population trend[5]				Subspecific population (where relevant)
	Size (pairs)[3]	Europe (%)	Year(s)	Method[4]	Direction[6]	Magnitude (%)[7]	Year(s)	Method[4]	Direction[6]	Magnitude (%)[7]	Year(s)	Method[4]	
Albania	0	<1	2007-2018	complete	-		2007-2018	partial	-	-100 to 0	1980-2018	expert	
Armenia	0	<1	2013-2018	complete	?		2007-2018		?		2003-2018	deficient	
Belarus	6000–22000	8	2010-2018	partial	0	-10 to 10	2012-2019	expert	?		1980-2019	expert	
Bosnia & HG		<1	2015-2018		?		2007-2018		?		1980-2018	deficient	
Bulgaria	0–35	<1	2013-2018	complete	F		2000-2018	expert	-	-30 to -10	1980-2018	expert	
Czechia	0	<1	2014-2017	complete	?		2001-2017	deficient	?		1981-2017	deficient	
Denmark	44–50	<1	2017-2017	complete	F		2004-2017	complete	-	-74 to -80	1980-2017	complete	
Estonia	700–1000	<1	2013-2017	expert	-	-44 to -14	2006-2017	expert	-	-70 to -45	1980-2017	expert	
Finland	10–25	<1	2013-2018	partial	-		2007-2018	partial	-		1980-2018	partial	
France	80–230	<1	2013-2017	complete	-	-63 to -15	2007-2017	complete	F		1982-2017	expert	
Georgia	3–27	<1	2013-2017	partial	?			deficient	?				
Germany	1200	<1	2016-2016	complete	+	6 to 51	2004-2016	complete	+		1980-2016	expert	
Greece	10–30	<1	2015	partial	-		2007-2018	partial	-		1980-2018	partial	
Hungary	25–38	<1	2015-2017	complete	-	-97 to -75	2007-2018	complete	-		1980-2018	partial	
Italy	120	<1	2013-2018	expert	?		2007-2018	deficient	-	-25 to 0	1993-2018	expert	
Latvia	2800–3900	2	2013-2018	partial	+	15 to 17	2000-2018	partial	+		1980-2017	partial	
Lithuania	3000–6000	3	2013-2018	partial	+	0 to 5	2013-2018	partial	0	0	1980-2018	partial	
North Macedonia	0	<1	2014-2019	expert	?		2007-2018	deficient	?		1980-2019		
Moldova	100–200	<1	2014-2017	partial	0		2007-2018	partial	0		1990-2018	expert	
Netherlands	1300–1600	1	2013-2017	complete	0	-2 to 44	2006-2017	complete	-	-17 to -12	1980-2017	complete	
Poland	2000–3000	2	2013-2018	expert	?	-63 to 33	2007-2018	complete	-	-70 to -60	1980-2018	expert	
Romania	10–200	<1	2013-2018	expert	?		2007-2018	deficient	?		1980-2018	deficient	
Russia	90000–130000	77	2007-2018	partial	?		2008-2018	partial	?		1980-2018	partial	
Serbia	30	<1	2013-2018	complete	F	0	2007-2018	expert	-	-79 to -50	1980-2018	complete	
Slovakia	0–10	<1	2013-2018	partial	-	-100 to -75	2007-2018	partial	-	-100 to -75	1980-2018	partial	
Spain	0–40	<1	2002-2017	partial	F		2007-2018	partial	-		1980-2018	partial	
Sweden	140–290	<1	2013-2018	complete	0	-30 to 30	2007-2018	complete	+	15 to 35	1980-2018	complete	
Turkey	10–100	<1	2002-2012	partial	?		2008-2019	deficient	?		1980-2013	deficient	
Ukraine	5000–7000	4	2013-2018	complete	+	10 to 30	2009-2018	complete	+	10 to 20	1980-2018	partial	
EU28	11500–17800	10											
Europe	**112000–178000**	**100**											

Chlidonias niger (Black Tern)

Table 1. Reported national breeding population size and trends in Europe[1].

Country (or territory)[2]	Population estimate				Short-term population trend[5]				Long-term population trend[5]				Subspecific population (where relevant)
	Size (pairs)[3]	Europe (%)	Year(s)	Method[4]	Direction[6]	Magnitude (%)[7]	Year(s)	Method[4]	Direction[6]	Magnitude (%)[7]	Year(s)	Method[4]	

[1] See 'Sources' at end of factsheet, and for more details on individual EU Member State reports, see the Article 12 reporting portal at http://bd.eionet.europa.eu/article12/report.
[2] The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.
[3] In the few cases where population size estimates were reported in units other than those specified, they were converted to the correct units using standard correction factors.
[4] The '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.
[5] 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.
[6] Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).
[7] Trend magnitudes are rounded to the nearest integer.

Table 2. Reported national wintering population sizes and trends in Europe[1]. Note that some countries within the species' wintering range did not report any data, and that only minimum totals are presented, to avoid double-counting of birds moving between countries.

Country (or territory)[2]	Population estimate				Short-term population trend[5]				Long-term population trend[5]				Subspecific population (where relevant)
	Size (individuals)[3]	Europe (%)	Year(s)	Method[4]	Direction[6]	Magnitude (%)[7]	Year(s)	Method[4]	Direction[6]	Magnitude (%)[7]	Year(s)	Method[4]	
Albania	0	<1	2007-2018	complete	0	0	2007-2018	complete	-	-100 to 0	1980-2018	complete	
Europe	**0**	**100**											

[1] See 'Sources' at end of factsheet, and for more details on individual EU Member State reports, see the Article 12 reporting portal at http://bd.eionet.europa.eu/article12/report.
[2] The designation of geographical entities and the presentation of the material do not imply the expression of any opinion whatsoever on the part of IUCN or BirdLife International concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.
[3] In the few cases where population size estimates were reported in units other than those specified, they were converted to the correct units using standard correction factors.
[4] The '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.
[5] 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.
[6] Trend directions are reported as: increasing (+); decreasing (-); stable (0); fluctuating (F); or unknown (?).
[7] 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%)
- Moderate increase (20–49%)
- Small increase (<20%)
- Increase of unknown magnitude
- Large decrease (≥50%)
- Moderate decrease (20–49%)
- Small decrease (<20%)
- 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

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

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

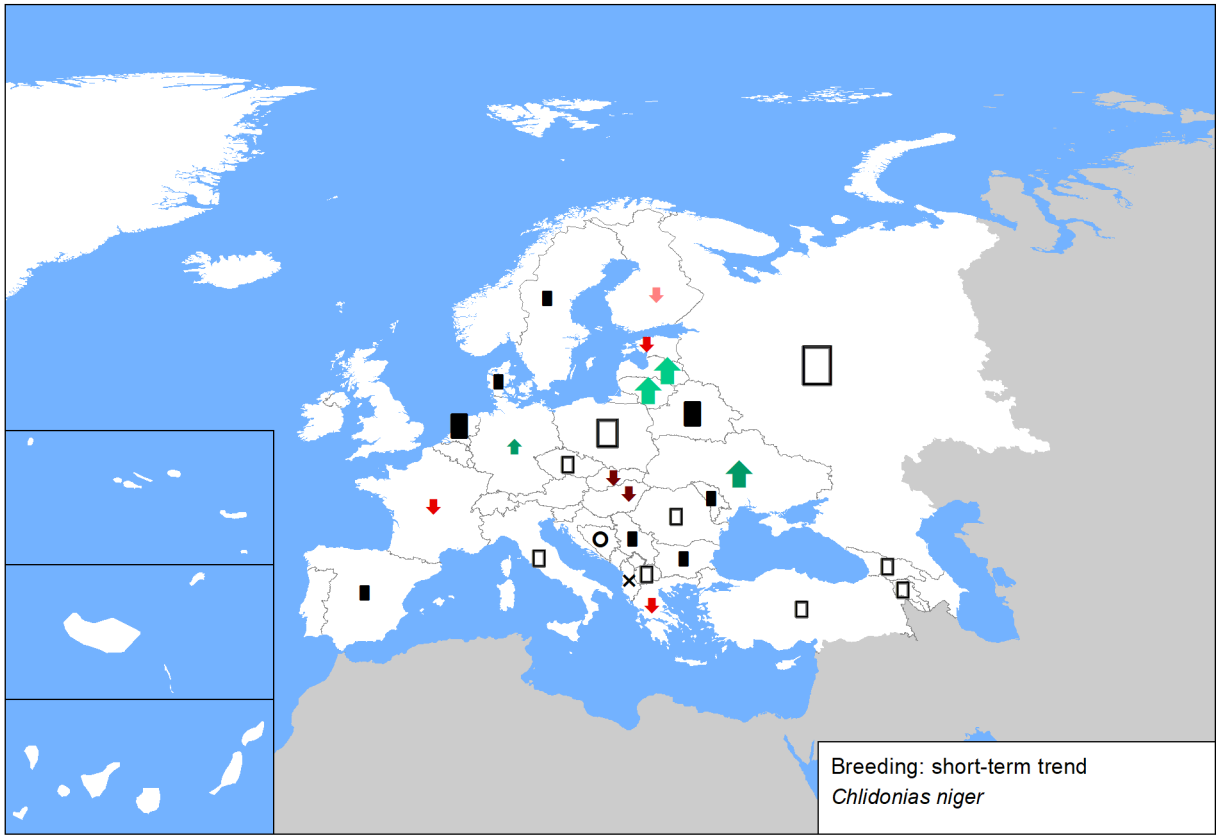

Figure 2. Breeding population sizes and long-term trends across Europe.

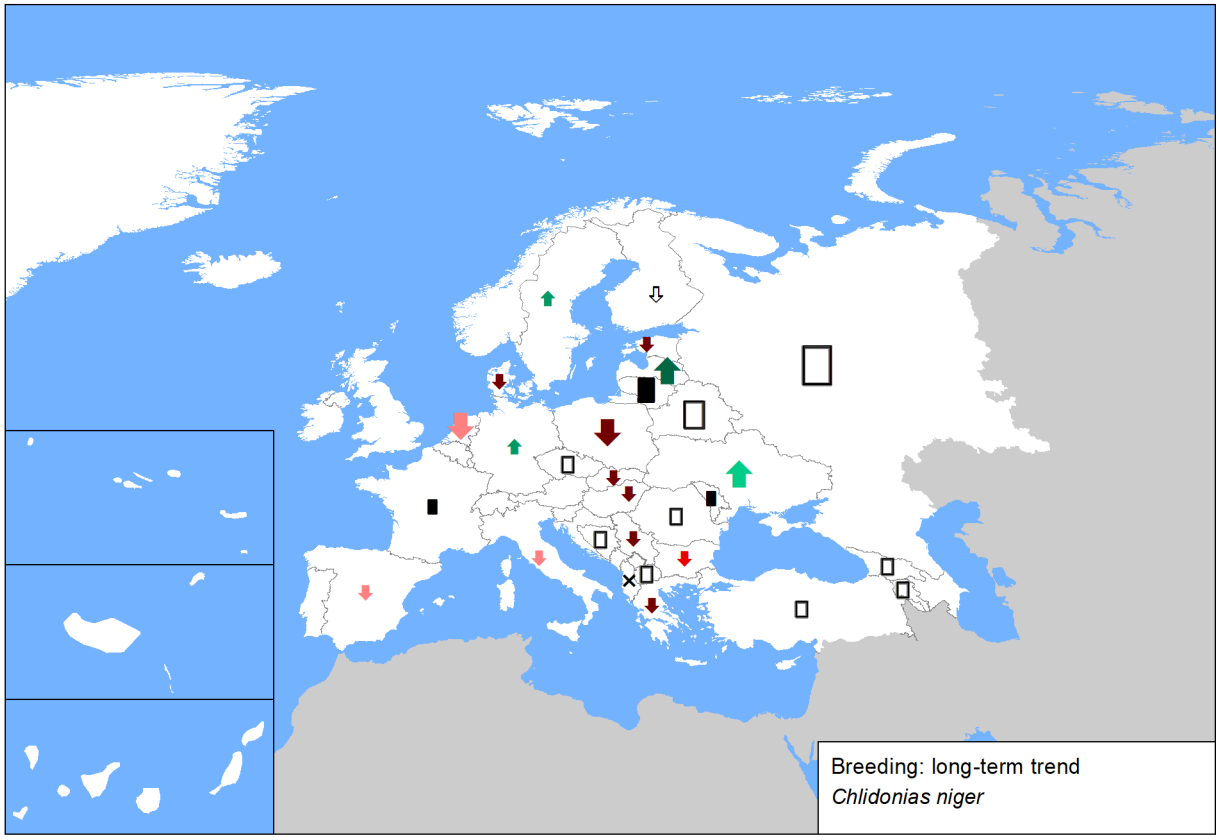

Figure 3. Reported wintering population sizes and short-term trends across Europe. Note that some countries within the species' wintering range did not report any data.

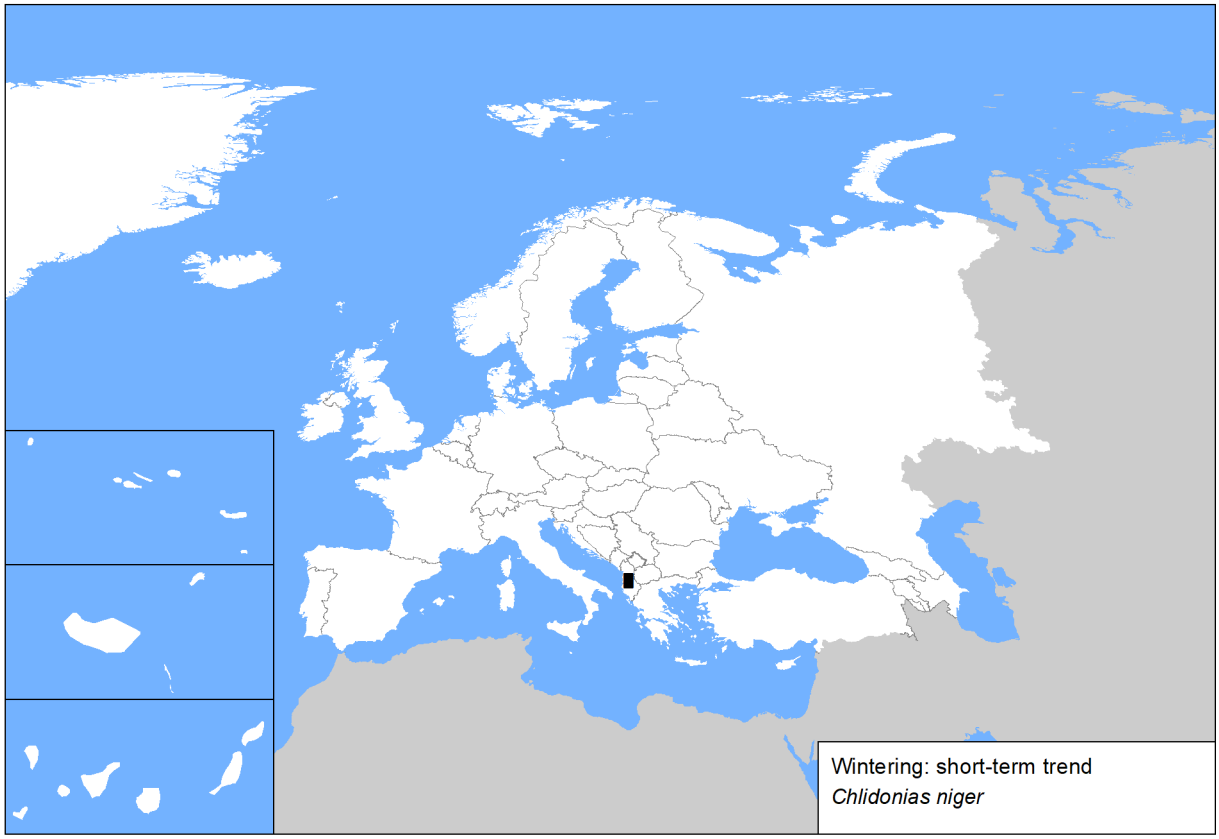

Figure 4. Reported wintering population sizes and long-term trends across Europe. Note that some countries within the species' wintering range did not report any data.

Sources

Albania

Breeding population size: Bino & Xeka 2020 in EBBA 2
Breeding short-term trend: Bino & Xeka pers. obs.
Breeding long-term trend: Bino pers. obs.
Winter population size: Bino pers. obs.
Winter short-term trend: Bino et al. 2018
Winter long-term trend: Bino et al. 2018

Armenia

Breeding population size: TSE NGO
Breeding short-term trend: TSE (2020) The Atlas of the Breeding Birds in Armenia. In preparation.
Breeding long-term trend: TSE (2020) The Atlas of the Breeding Birds in Armenia. In preparation.

Belarus

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

Bosnia and Herzegovina

Bulgaria

Breeding population size: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p.; National Art. 12 reporting database 2013-2018; Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. Http://e-ecodb.bas.bg/rdb/en/vol2/ BSPB Bird Database
Breeding short-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p.; National Art. 12 reporting database 2013-2018; Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. Http://e-ecodb.bas.bg/rdb/en/vol2/ BSPB Bird Database
Breeding long-term trend: Iankov, P. (ed.) 2007 Atlas of Breeding Birds in Bulgaria. Bulgarian Society for the Protection of Birds, Conservation Series, Book 10, Sofia, BSPB, 679 p. Botev, B. (ed.) 1985. Red Data Book of Bulgaria, Vol. 2, Animals, Sofia, BAS, 183 p. Golemansky V. (ed.) 2011. Red Data Book of Bulgaria. Vol. 2, Animals. Http://e-ecodb.bas.bg/rdb/en/vol2/ BSPB Bird Database

Czechia

Breeding population size: Šťastný et Bejček in prep. - Atlas hnízdního rozšíření ptáků ČR 2014-2017
Breeding short-term trend: absentData
Breeding long-term trend: absentData

Denmark

Breeding population size: Nielsen, R.D., Holm, T.E., Clausen, P., Bregnballe. T., Clausen, K.K., Petersen, I.K., Sterup, J., Balsby, T.J.S., Pedersen, C.L., Mikkelsen, P. & Bladt, J. (2019). Fugle 2012-2017. NOVANA. Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi. - Videnskabelig rapport nr. 314. http://dce2.au.dk/pub/SR314.pdf and http://novana.au.dk/fugle/
Breeding short-term trend: Nielsen, R.D., Holm, T.E., Clausen, P., Bregnballe. T., Clausen, K.K., Petersen, I.K., Sterup, J., Balsby, T.J.S., Pedersen, C.L., Mikkelsen, P. & Bladt, J. (2019). Fugle 2012-2017. NOVANA. Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi. - Videnskabelig rapport nr. 314. http://dce2.au.dk/pub/SR314.pdf and http://novana.au.dk/fugle/
Breeding long-term trend: Nielsen, R.D., Holm, T.E., Clausen, P., Bregnballe. T., Clausen, K.K., Petersen, I.K., Sterup, J., Balsby, T.J.S., Pedersen, C.L., Mikkelsen, P. & Bladt, J. (2019). Fugle 2012-2017. NOVANA. Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi. - Videnskabelig rapport nr. 314. http://dce2.au.dk/pub/SR314.pdf and http://novana.au.dk/fugle/

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

Finland

Breeding population size: Lehikoinen, 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: BirdLife Finland 2019: Regional observation summary database of Finnish Birdwatching societies on scarce bird species.
Breeding long-term trend: BirdLife Finland 2019: Regional observation summary database of Finnish Birdwatching societies on scarce bird species. Expert working group.

France

Breeding population size: Trotignon J. 2018. Guifette noire - Chlidonias niger. in Quaintenne G. & les coordinateurs-espèce - Les oiseaux nicheurs rares et menacés en France en 2015. Ornithos 25-2, 57-91

Chlidonias niger (Black Tern)

France

Breeding short-term trend: Trotignon J. 2008. Guifette noire - Chlidonias niger. Riegel, J. & les coordinateurs-espèce (2008) Les oiseaux nicheurs rares et menacés en France en 2007. Ornithos 15-3, 153-180

Breeding long-term trend: Trotignon J. 2018. Guifette noire - Chlidonias niger. in Quaintenne G. & les coordinateurs-espèce - Les oiseaux nicheurs rares et menacés en France en 2015. Ornithos 25-2, 57-91 ; Yeatman-Berthelot D. & G. Jarry 1994. Nouvel atlas des oiseaux nicheurs de France 1985-1989. , Société Ornithologique de France775 p

Georgia

Breeding population size: EBBA Georgia, prepared by Sabuko-Society for nature conservation, Ilia state university, NGO "psovi".

Germany

Breeding population size: Monitoring seltener Brutvögel (http://www.dda-web.de/index.php?cat=monitoring&subcat=ga&subsubcat=kontakt)

Breeding short-term trend: Monitoring seltener Brutvögel (http://www.dda-web.de/index.php?cat=monitoring&subcat=ga&subsubcat=kontakt)

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

Greece

Breeding population size: 1) Λεγάκις, Α. & Μαραγκού, Π. (επιμ.). 2009. Το Κόκκινο Βιβλίο των Απειλούμενων Ζώων της Ελλάδας. Ελληνική Ζωολογική Εταιρεία, Αθήνα, 528 σελ. 2) Πορτόλου, Δ., Μπουρδάκης, Σ., Βλάχος, Χ., Καστρίτης, Θ. & Δημαλέξης, Τ. (επιμ.).2009. Οι Σημαντικές Περιοχές για τα Πουλιά της Ελλάδας: Περιοχές Προτεραιότητας για τη Διατήρηση της Βιοποικιλότητας. Ελληνική Ορνιθολογική Εταιρεία, Αθήνα. 3) Βλάχος Χ., Μπίρτσας Π., Θωμαΐδης Χ., Χατζηνίκος Ε., Μποντζώρλος 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 «Εποπτεία 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.

Breeding short-term trend: 1) BirdLife International (2004) Birds in Europe:Population estimates, trends and conservation status. Cambridge, UK: Birdlife International (Birdlife Conservation Series No. 12). 2) Λεγάκις, Α. & Μαραγκού, Π. (επιμ.). 2009. Το Κόκκινο Βιβλίο των Απειλούμενων Ζώων της Ελλάδας. Ελληνική Ζωολογική Εταιρεία, Αθήνα, 528 σελ. 3) Natura Viewer (http://natura2000.eea.europa.eu/#). 4) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Λ., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Papazoglou, C. & Barov, B. 2009. Προσδιορισμός συμβατών δραστηριοτήτων σε σχέση με τα είδη χαρακτηρισμού των Ζωνών Ειδικής Προστασίας της ορνιθοπανίδας. Παραδοτέο 8. Οδηγός οικολογικών απαιτήσεων, απειλών και ενδεδειγμένων μέτρων για τα είδη χαρακτηρισμού. 5) Πορτόλου, Δ., Μπουρδάκης, Σ., Βλάχος, Χ., Καστρίτης, Θ. & Δημαλέξης, Τ. (επιμ.).2009. Οι Σημαντικές Περιοχές για τα Πουλιά της Ελλάδας: Περιοχές Προτεραιότητας για τη Διατήρηση της Βιοποικιλότητας. Ελληνική Ορνιθολογική Εταιρεία, Αθήνα. 6) Βλάχος Χ., Μπίρτσας Π., Θωμαΐδης Χ., Χατζηνίκος Ε., Μποντζώρλος 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 «Εποπτεία 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.

Breeding long-term trend: 1) Handrinos,G., & Akriotis, T., (1997) The birds of Greece. C. Helm, A & C Black, London. 2) BirdLife International (2004) Birds in Europe:Population estimates, trends and conservation status. Cambridge, UK: Birdlife International (Birdlife Conservation Series No. 12). 3) Λεγάκις, Α. & Μαραγκού, Π. (επιμ.). 2009. Το Κόκκινο Βιβλίο των Απειλούμενων Ζώων της Ελλάδας. Ελληνική Ζωολογική Εταιρεία, Αθήνα, 528 σελ. 4) Natura Viewer (http://natura2000.eea.europa.eu/#). 5) Δημαλέξης, Τ., Καστρίτης, Θ., Γρίβας, Κ., Μανωλόπουλος, Α., Καρδακάρη, Ν., Κακαλής, Λ., Ξηρουχάκης, Σ., Τσαϊτουρίδης, Χ., Papazoglou, C. & Barov, B. 2009. Προσδιορισμός συμβατών δραστηριοτήτων σε σχέση με τα είδη χαρακτηρισμού των Ζωνών Ειδικής Προστασίας της ορνιθοπανίδας. Παραδοτέο 8. Οδηγός οικολογικών απαιτήσεων, απειλών και ενδεδειγμένων μέτρων για τα είδη χαρακτηρισμού. 6) Πορτόλου, Δ., Μπουρδάκης, Σ., Βλάχος, Χ., Καστρίτης, Θ. & Δημαλέξης, Τ. (επιμ.).2009. Οι Σημαντικές Περιοχές για τα Πουλιά της Ελλάδας: Περιοχές Προτεραιότητας για τη Διατήρηση της Βιοποικιλότητας. Ελληνική Ορνιθολογική Εταιρεία, Αθήνα. 7) Βλάχος Χ., Μπίρτσας Π., Θωμαΐδης Χ., Χατζηνίκος Ε., Μποντζώρλος 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 «Εποπτεία 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.

Hungary

Breeding population size: National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species) http://map.mme.hu/maps/map2

Breeding short-term trend: http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Chlidonias_niger.pdf Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 620-623. National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species) http://map.mme.hu/maps/map2

Breeding long-term trend: Kovács G. (2004): Kormos szerkő. In: Ecsedi, Z. [szerk.] A Hortobágy madárvilága. Hortobágy Természetvédelmi Egyesület, Balmazújváros-Szeged. p. 356-358. http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/BD_12_jelentes_2013_anyagai/Chlidonias_niger.pdf Haraszthy L. (szerk.) (2014): Natura 2000 fajok és élőhelyek Magyarországon. Pro Vértes Közalapítvány, Csákvár. p. 620-623. National park directorates' databases (Annual survey of colonially breeding and strictly protected bird species) http://map.mme.hu/maps/map2

Italy

Breeding population size: BirdLife International 2017. European birds of conservation concern: populations, trends and national responsibilities. Cambridge, UK: BirdLife International.

Breeding short-term trend: No recent data available

Breeding long-term trend: Brichetti P., Meschini E., 1993. Stima delle popolazioni di uccelli nidificanti. In Meschini E., Frugis S.,1993. Atlante degli uccelli nidificanti in Italia. Suppl. Ric. Biol. Selvaggina, 20, 1-345.

Latvia

Breeding population size: Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv

Breeding short-term trend: Unpublished data for European Breeding Bird Atlas (2013-2017); Expert: Andris Dekants, andris.dekants@lob.lv

Breeding long-term trend: 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

Breeding population size: 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)

Breeding short-term trend: 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)

Breeding long-term trend: 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)

North Macedonia

Breeding population size: Bauer, W., H.J. Bohr, U. Mattetern and G. Muller, 1973. 2. Nachrungzum 'Catalogus Faunae Graeciae; Pars Aves'. Die Vogelwelt, 94, 1: 1-22; unpublished data from the European Breeding Bird Atlas 2

Breeding short-term trend: unpublished data from the European Breeding Bird Atlas 2

Moldova

Breeding population size: Moldova`s contribution for the second European Breeding Bird Atlas (EBBA2)

Breeding short-term trend: SPPN expert opinion (sppn.moldova@gmail.com)

Breeding long-term trend: SPPN expert opinion (sppn.moldova@gmail.com)

Netherlands

Breeding population size: Sovon NEM (Sovon, CBS and provincies) and Bird atlas (Sovon 2018)

Breeding short-term trend: NEM (Sovon, RWS, CBS, provincies)

Breeding long-term trend: Sovon

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: MFGP)

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

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: Sarychev unpublished. vssar@yandex.ru; Borodin unpublished. spinus73@mail.ru Shepel unpublished†

Breeding long-term trend: Sarychev 2009; Klimov et al. 2009; Zubakin 1998; Belik et al. 2003

Serbia

Breeding population size: EBBA2 project; Puzović, S., Radišić, D., Ružić, M., Rajković, D., Radaković, M., Pantović, U., Janković, M., Stojnić, N., Šćiban, M., Tucakov, M., Gergelj, J., Sekulić, G., Agošton, A. & Raković, M. 2015. Birds of Serbia: Breeding Population Estimates and Trends for the Period 2008-2013. Bird protection and study society of Serbia, and Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Novi Sad.

Breeding short-term trend: Puzović, S., Radišić, D., Ružić, M., Rajković, D., Radaković, M., Pantović, U., Janković, M., Stojnić, N., Šćiban, M., Tucakov, M., Gergelj, J., Sekulić, G., Agošton, A. & Raković, M. 2015. Birds of Serbia: Breeding Population Estimates and Trends for the Period 2008-2013. Bird protection and study society of Serbia, and Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Novi Sad.

Breeding long-term trend: Puzović, S., Radišić, D., Ružić, M., Rajković, D., Radaković, M., Pantović, U., Janković, M., Stojnić, N., Šćiban, M., Tucakov, M., Gergelj, J., Sekulić, G., Agošton, A. & Raković, M. 2015. Birds of Serbia: Breeding Population Estimates and Trends for the Period 2008-2013. Bird protection and study society of Serbia, and Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Novi Sad.

Slovakia

Breeding population size: Coordinatory group for reporting 2019. Karaska D., Trnka A., Krištín A., Ridzoň J.: Chránené vtáčie územia Slovenska. ŠOP SR Banská Bystrica, 2015.

Chlidonias niger (Black Tern)

Slovakia

Breeding short-term trend: Coordinatory group for reporting 2019, AVES-Symfony Database 2013-2018, KIMS Database 2013-2018.
Breeding long-term trend: Coordinatory group for reporting 2019, AVES-Symfony Database 2013-2018, KIMS Database 2013-2018.

Spain

Breeding population size: Amado, C.C., Guzmán, J.M.S., & Villegas, M.A. (2009). Pagazas, charranes y fumareles en España: población reproductora en 2007 y método de censo. SEO/BirdLife. 133 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/24_pagazas_charranes_y_fumareles_tcm30-208121.pdf). Información proporcionada por las Comunidades Autónomas. Madroño, 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. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/lrcompletoparaweb_tcm30-207942.pdf) Martí, R. & del Moral, J.C. (Eds.) (2003). Atlas de las Aves Reproductoras de España. Dirección General de Conservación de la Naturaleza- Sociedad Española de Ornitología. Madrid, 733 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)
Breeding short-term trend: Amado, C.C., Guzmán, J.M.S. & Villegas, M.A. (2009). Pagazas, charranes y fumareles en España: población reproductora en 2007 y método de censo. SEO/BirdLife. 133 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/24_pagazas_charranes_y_fumareles_tcm30-208121.pdf). Información proporcionada por las Comunidades Autónomas. Madroño, 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. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/lrcompletoparaweb_tcm30-207942.pdf) Martí, R. & del Moral, J.C. (Eds.) (2003). Atlas de las Aves Reproductoras de España. Dirección General de Conservación de la Naturaleza- Sociedad Española de Ornitología. Madrid, 733 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)
Breeding long-term trend: Amado, C.C., Guzmán, J.M.S. & Villegas, M.A. (2009). Pagazas, charranes y fumareles en España: población reproductora en 2007 y método de censo. SEO/BirdLife. 133 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/24_pagazas_charranes_y_fumareles_tcm30-208121.pdf). Información proporcionada por las Comunidades Autónomas. Madroño, 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. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/lrcompletoparaweb_tcm30-207942.pdf) Martí, R. & del Moral, J.C. (Eds.) (2003). Atlas de las Aves Reproductoras de España. Dirección General de Conservación de la Naturaleza- Sociedad Española de Ornitología. Madrid, 733 pp. (https://www.miteco.gob.es/es/biodiversidad/temas/inventarios-nacionales/inventario-especies-terrestres/inventario-nacional-de-biodiversidad/ieet_aves_atlas.aspx)

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. SOF, Halmstad. Swedish Bird Survey. BirdLife Sverige, Annual Bird reports.
Breeding short-term trend: Species observation system, www.artportalen.se
Breeding long-term trend: BirdLife Sverige annual reports

Turkey

Breeding population size: Ferdi Akarsu and Güven Eken personal communication (2019), Eken G., Bozdoğan M., İsfendiyaroğlu S., Kılıç D.T., Lise Y. (2006) Türkiye'nin Önemli Doğa Alanları. Doğa Derneği, Ankara., Zal N., Eczacıbaşı N.G., Karauz Er S. 2006. The Planning of Lower Meriç Valley Flood Plain as a Biosphere Reserve, Central Anatolia Forestry Reserach Institute Publications Muhtelif Yayınlar/Miscellaneous Publications No: 69, Karauz Er S., Özbek M.,Altınayar G., Çakır F., Yıldırım F. 2007. Manyas Lake Breeding Bird Survey (2000-2004). Doğa Koruma Ve Milli Parklar Genel Müdürlügü Publishing No:2, Ankara

Ukraine

Breeding short-term trend: Атамась, Н.С. (2011) Изменение структуры сообщества крачек в связи с трансформацией водной растительности (анализ рода Chlidonias на водохранилищах Среднего Днепра). - Экология птиц: виды, сообщества, взаимосвязи. Труды научной конференции. — Сомовская библиотека. Вып. 1. — Кн. 1. — Харьков. — С. 301-315.
Breeding long-term trend: 1. Дзюбенко Н. В. Особенности временной структуры поселений крачек в бассейне верхнего Днестра // Наук. записки Держ. природ. музею. Львів. – 2005. – 21. – С. 65-76. 2. 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. 3. Атамась Н. С. Лопарев С. А. Современное состояние поселений колониальных околоводных птиц Каневского водохранилища // Беркут. – 2009. – Т. 18, вип. 1-2. – С. 1-15. 4. Горбань І. (2003): Оцінка чисельності гніздових птахів України. - Вісн. Львів. ун-ту. Сер. біол. 34: 147-158. 5. Бокотей А.А., Дзюбенко Н.В., Горбань І.М. та інші. Гніздова орнітофауна басейну Верхнього Дністра. – Львів: ЛНУ, 2010. – 400 с

Bibliography

Beintema, A.J. 1997. European Black Terns (Chlidonias niger) in trouble: examples of dietary problems. Colonial Waterbirds 20(3): 558-565.

Bird, J. P., Martin, R., Akçakaya, H. R., Gilroy, J., Burfield, I. J., Garnett, S. G., Symes, A., Taylor, J., Sekercioglu, Ç. H. and Butchart, S. H. M. 2020. Generation lengths of the world's birds and their implications for extinction risk. Conservation Biology 34(5): 1252-1261. DOI: 10.1111/cobi.13486.

Delany, S. and Scott, D. 2006. Waterbird population estimates. Wetlands International, Wageningen, The Netherlands.

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.

Gochfeld, M. and Burger, J. 1996. Black Tern (Chlidonias niger). In: J. del Hoyo, A. Elliott, J. Sargatal, D.A. Christie & E. de Juana (eds), Handbook of the Birds of the World Alive, Lynx Edicions, Barcelona.

Heath, M. and Tucker, G. 1994. Birds in Europe. World Birdwatch 16: 9-13.

Linz, G.M. and Blixt, D.C. 1997. Black Terns benefit from cattail management in the Northern Great Plains. Colonial Waterbirds 20(3): 617-621.

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: G. Boere, C. Galbraith & D. Stroud (eds), Waterbirds around the World, pp. 432-438. The Stationery Office, Edinburgh, U.K.

Richards, A. 1990. Seabirds of the northern hemisphere. Dragon's World Ltd, Limpsfield, U.K.

Snow, D.W. and Perrins, C.M. 1998. The Birds of the Western Palearctic, Volume 1: Non-Passerines. Oxford University Press, Oxford.

Sparks, T.H., Huber, K., Bland, R.L., Crick, H.Q.P., Croxton, P.J., Flood, J., Loxton, R.G., Mason, C.F., Newnham, J.A. and Tryjanowski, P. 2007. How consistent are trends in arrival (and departure) dates of migrant birds in the UK? Journal of Ornithology 148: 503-511.

Urban, E.K., Fry, C.H. and Keith, S. 1986. The Birds of Africa, Volume II. Academic Press, London.

del Hoyo, J., Elliott, A. and Sargatal, J. (eds). 1996. Handbook of the Birds of the World, Vol. 3: Hoatzin to Auks. Lynx Edicions, Barcelona, Spain.

van der Winden, J. 2002. Disturbance as a important factor in the decline of Black Tern Chlidonias niger in the Netherlands. Vogelwelt 123(1): 33-40.

van der Winden, J. 2005. Black tern Chlidonias niger conservation in the Netherlands - a review. Vogelwelt 126(3): 187-193.

van der Winden, J., Beintema, A.J. and Heemskerk, L. 2004. Habitat related Black Tern Chlidonias niger breeding success in The Netherlands. Ardea 92(1): 53-61.