

***Chlamydotis macqueenii* (Asian Houbara)**

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

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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.

Chlamydotis macqueenii (Asian Houbara)

Table 1. Reported national breeding population size and trends in Europe¹.

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	
Russia	0	<1	2008-2018	partial	?				-		1980-2018	expert	
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 ($\geq 50\%$) | ↓ Large decrease ($\geq 50\%$) |
| ↑ Moderate increase (20–49%) | ↓ Moderate decrease (20–49%) |
| ↑ Small increase ($< 20\%$) | ↓ Small decrease ($< 20\%$) |
| ↑ Increase of unknown magnitude | ↓ Decrease of unknown magnitude |
| ■ Stable or fluctuating | |
| □ Unknown | |
| ○ Present (no population or trend data) | |
| × Extinct since 1980 | |

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

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

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

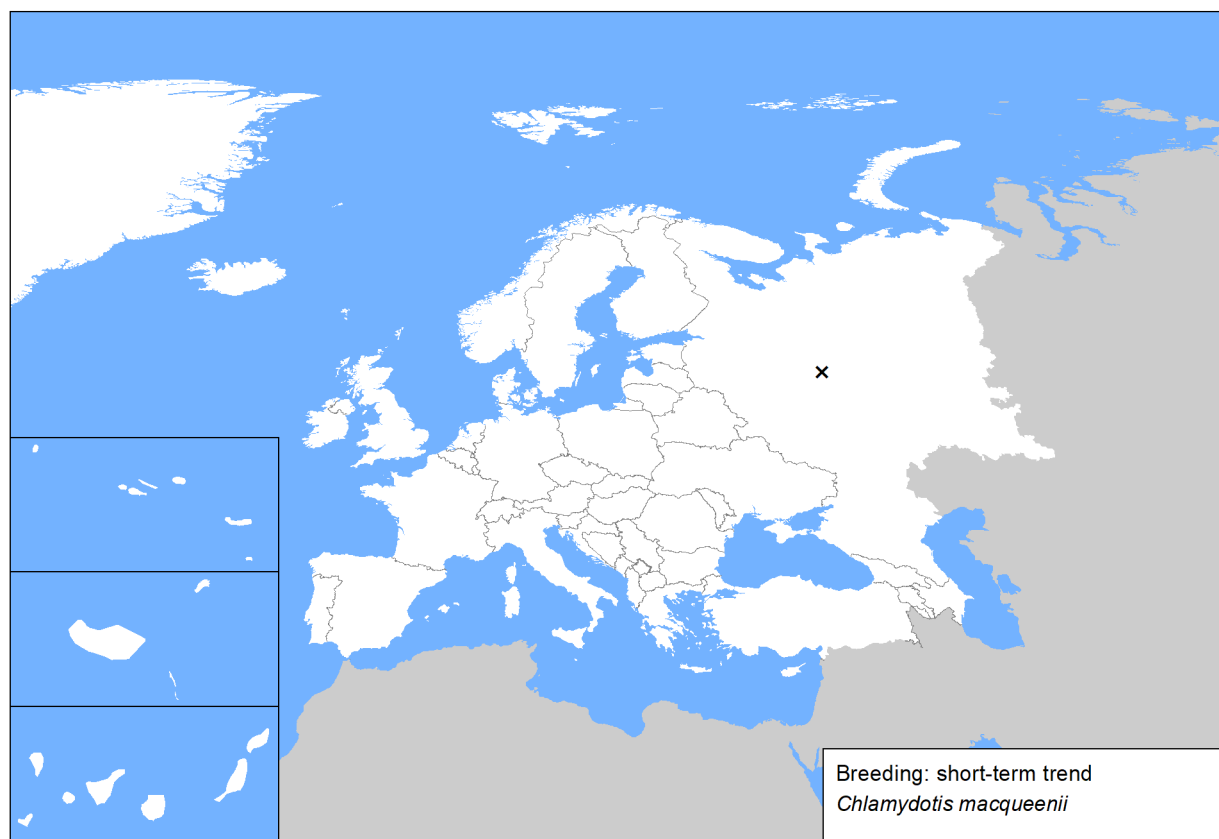
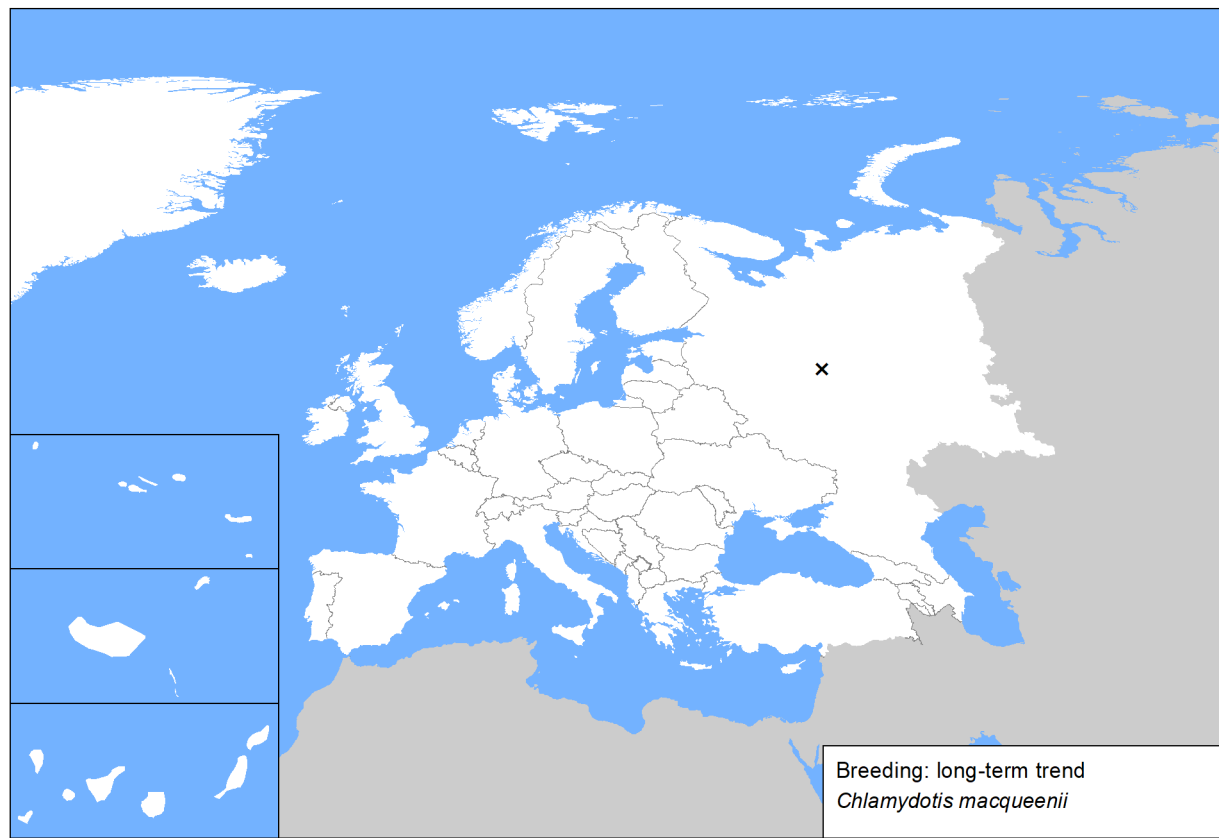


Figure 2. Breeding population sizes and long-term trends across Europe.



Sources

Russia

Breeding long-term trend: Belik 2005

Bibliography

Aghanajafizadeh, S.; Hemami, M. R.; Heydari, F. 2011. Relationship between Food Resources and Brooding Site by Asiatic Houbara (*Chlamydotis macqueenii*) in Central Steppe of Iran. *World Academy of Science, Engineering and Technology* 53: 558–560.

Aghanajafizadeh, S.; Hemami, M. R.; Heydari, F. 2012. Nest-site selection by the Asian Houbara Bustard, *Chlamydotis macqueenii*, in the steppe of Harat, Iran. *Zoology in the Middle East* 57(1): 11-18.

Aghanajafizadeh, S.; Hemami, M.R.; Karami, M.; Dolman, P. M. 2010. Wintering habitat use by houbara bustard (*Chlamydotis macqueenii*) in steppes of Harat, central Iran. *Journal of Arid Environments* 74: 912-917.

Belik. 2005. Cadastre of the nesting avifauna of Southern Russia. *Streptopetris* 3(1-2): 5-37.

Billerman, S.M., Keeney, B.K., Rodewald, P.G. and Schulenberg, T.S. (eds). 2020. *Birds of the World*. Cornell Laboratory of Ornithology, Ithaca.

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.

Collar, N. J. 1996. Otididae (Bustards). In: del Hoyo, J.; Elliott, A.; Sargatal, J. (ed.), *Handbook of the birds of the world*, pp. 240-273. Lynx Edicions, Barcelona, Spain.

Combreaux, O. 2007. Arabic falconry and the illegal Houbara trade in Arabia. *Falco*: 16-17.

Combreaux, O.; Launay, F. 1996. Activity rhythms of houbara bustards (*Chlamydotis undulata macqueenii*) in relation to some abiotic factors. *Journal of Arid Environments* 33: 463-472.

Combreaux, O.; Launay, F.; Lawrence, M. 2001. An assessment of annual mortality rates in adult sized migrant houbara bustards (*Chlamydotis [undulata] macqueenii*). *Animal Conservation* 4(2): 133-141.

Combreaux, O.; Qiao, J.; Lawrence, M.; Gao, X.; Yao, J.; Yang, W.; Launay, F. 2002. Breeding success in a Houbara Bustard *Chlamydotis [undulata] macqueenii* population on the eastern fringe of the Jungar Basin, People's Republic of China. *Ibis* 144: E45-E56.

Combreaux, O.; Smith, T. R. 1997. Summer habitat selection by houbara bustards introduced in central Saudi Arabia. *Journal of Arid Environments* 36: 149-160.

Gaucher, P.; Paillat, P.; Chappuis, C.; Saint Jalme, M.; Lotfikhah, F.; Wink, M. 1996. Taxonomy of the Houbara Bustard *Chlamydotis undulata* subspecies considered on the basis of sexual display and genetic divergence. *Ibis* 138: 273-282.

Goriup, P. 1997. The world status of the Houbara Bustard *Chlamydotis undulata*. *Bird Conservation International* 7: 373-397.

Goriup, P. 1997. The world status of the Houbara Bustard *Chlamydotis undulata*. *Bird Conservation International* 7: 373-397.

IFHC. 2014. International Fund for Houbara Conservation Website. Available at: <http://houbarafund.org>.

Judas, J.; Lawrence, M.; Combreaux, O. 2009. High mortality of Asian Houbara *Chlamydotis macqueenii* in Iran. *Falco*: 14-15.

Knox, A.G., Collinson, M., Helbig, A.J., Parkin, D.T. and Sangster, G. 2002. Taxonomic recommendations for British birds. *Ibis* 144: 707-710.

- Koshkin, M. A.; Collar, N. J.; Dolman, P. M. 2014. Do sheep affect distribution and habitat of Asian Houbara *Chlamydotis macqueenii*? *Journal of Arid Environments* 103: 53-62.
- Launay, F.; Roshier, D.; Loughland, R.; Aspinall, S. J. 1997. Habitat use by houbara bustard (*Chlamydotis undulata macqueenii*) in arid shrubland in the United Arab Emirates. *Journal of Arid Environments* 35(1): 111-121.
- Lavee, D. 1988. Why is the Houbara *Chlamydotis undulata macqueenii* still an endangered species in Israel? *Biological Conservation* 45(1): 47-54.
- Lesobre, L.; Lacroix, F.; Le Nuz, E.; Hingrat, Y.; Chalah, T.; Saint Jaime, M. 2010. Absence of male reproductive skew, along with high frequency of polyandry and conspecific brood parasitism in the lekking Houbara bustard *Chlamydotis undulata undulata*. *Journal of Avian Biology* 41(2): 117-127.
- Mansoori, J. 2006. Status of Houbara Bustard *Chlamydotis undulata* in five important habitats in Iran. *Podoces* 1(1/2): 17-20.
- Mian, A. 2003. On biology of houbara bustard (*Chlamydotis macqueenii*) in Balochistan, Pakistan: animal populations sharing habitat. *Pakistan Journal of Biological Science* 6(14): 1282-1295.
- Osborne, P. E.; Launay, F.; Gliddon, D. 1997. Wintering habitat use by Houbara Bustards *Chlamydotis undulata* in Abu Dhabi and implications for management. *Biological Conservation* 81: 51-56.
- Riou, S.; Judas, J.; Lawrence, M.; Pole, S.; Combreau, O. 2011. A 10-year assessment of Asian Houbara Bustard populations: trends in Kazakhstan reveal important regional differences. *Bird Conservation International* 21: 134-141.
- Sangster, G. 1996. Trends in systematics: taxonomy of Houbara and Macqueen's Bustards and neglect of intraspecific diversity. *Dutch Birding* 18: 248-256.
- Sangster, G.; Hazevoet, C. J.; Van den Berg, A. B.; Roselaar, C. S.; Sluys, R. 1999. Dutch avifaunal list: species concepts, taxonomic instability, and taxonomic changes in 1977-1998. *Ardea* 87: 139-165.
- Sibley, C.G. and Monroe, B.L. 1990. *Distribution and Taxonomy of Birds of the World*. Yale University Press, New Haven, USA.
- Sibley, C.G. and Monroe, B.L. 1993. *A supplement to 'Distribution and Taxonomy of Birds of the World'*. Yale University Press, New Haven, USA.
- Tigar, B. J.; Osborne, P. E. 2000. Invertebrate diet of the Houbara Bustard *Chlamydotis [undulata] macqueenii* in Abu Dhabi from calibrated faecal analysis. *Ibis* 142(3): 466-475.
- Tourenq, C.; Combreau, O.; Eichaker, X.; Xinyi, G. 2003. Predation of ground-nesting birds by Asian Houbara Bustard (*Chlamydotis [undulata] macqueenii*). *Journal of Arid Environments* 55(3): 581-582.
- Tourenq, C.; Combreau, O.; Lawrence, M.; Pole, S. B.; Spalton, A.; Gao, X.J., et al. 2005. Alarming houbara bustard population trends in Asia. *Biological Conservation* 121: 1-8.
- Tourenq, C.; Combreau, O.; Lawrence, M.; Pole, S. B.; Spalton, A.; Gao, X.J., et al. 2005. Alarming houbara bustard population trends in Asia. *Biological Conservation* 121: 1-8.
- Tourenq, C.; Combreau, O.; Pole, S. B.; Lawrence, M.; Ageyev, V.S.; Karpov, A. A.; Launay, F. 2004. Monitoring of Asian houbara bustard *Chlamydotis macqueenii* populations in Kazakhstan reveals dramatic decline. *Oryx* 38: 62-67.
- Yang, W.-K.; Qiao, J.-F.; Combreau, O.; Gao, X.-Y.; Zhong, W.-Q. 2003. Breeding habitat selection by the Houbara Bustard *Chlamydotis [undulata] macqueenii* in Mori, Xinjiang, China. *Zoological Studies* 42(3): 470-475.