

## ***Pterodroma madeira* (Zino's Petrel)**

### **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  
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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).

*Pterodroma madeira* (Zino's Petrel)

**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>	
PT: Madeira	60–80	100	2013-2018	partial	0		2008-2018	complete	+	30 to 40	1980-2018	partial	
EU28	60–80	100											
<b>Europe</b>	<b>60–80</b>	<b>100</b>											

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

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

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

<sup>4</sup> The '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.

## Trend maps

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

### KEY

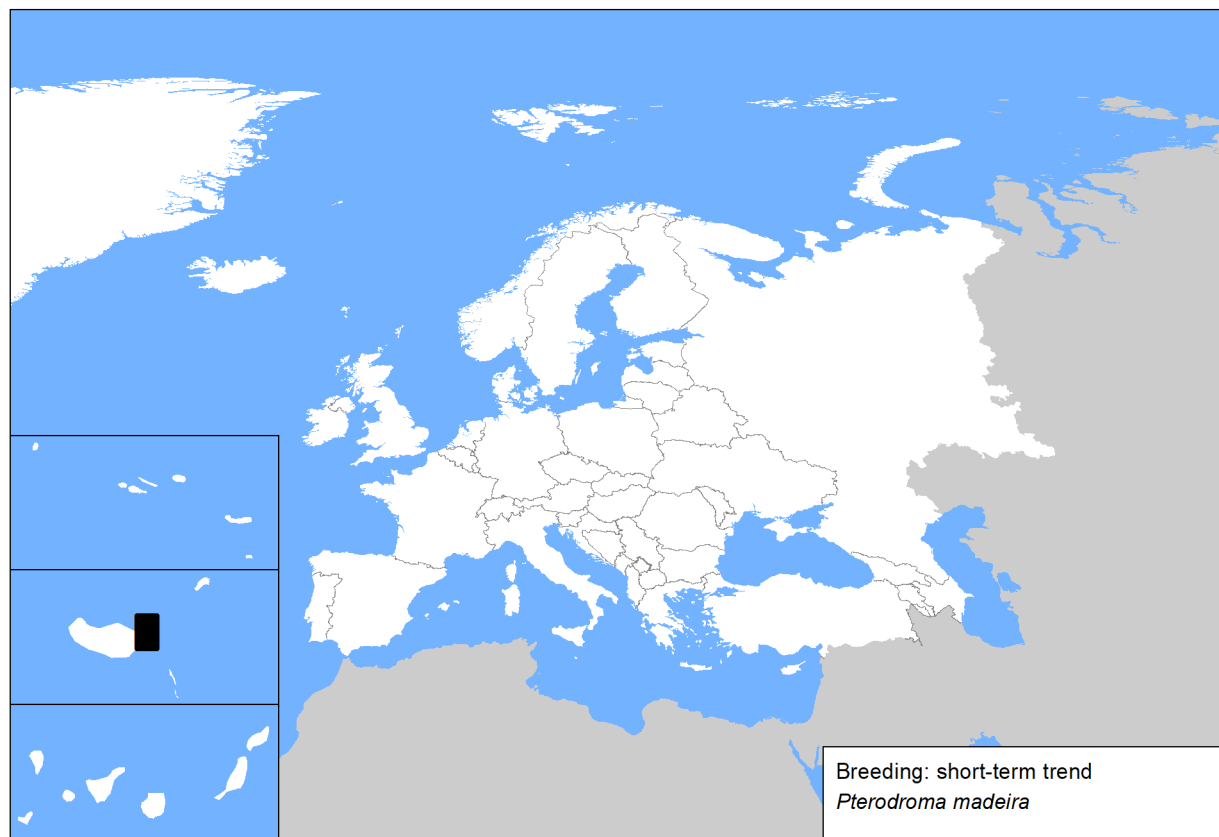
- |   |                                  |
|---|----------------------------------|
| ↑ Large increase ( $\geq 50\%$ )        | ↓ Large decrease ( $\geq 50\%$ ) |
| ↑ Moderate increase (20–49%)            | ↓ Moderate decrease (20–49%)     |
| ↑ Small increase ( $< 20\%$ )           | ↓ Small decrease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

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

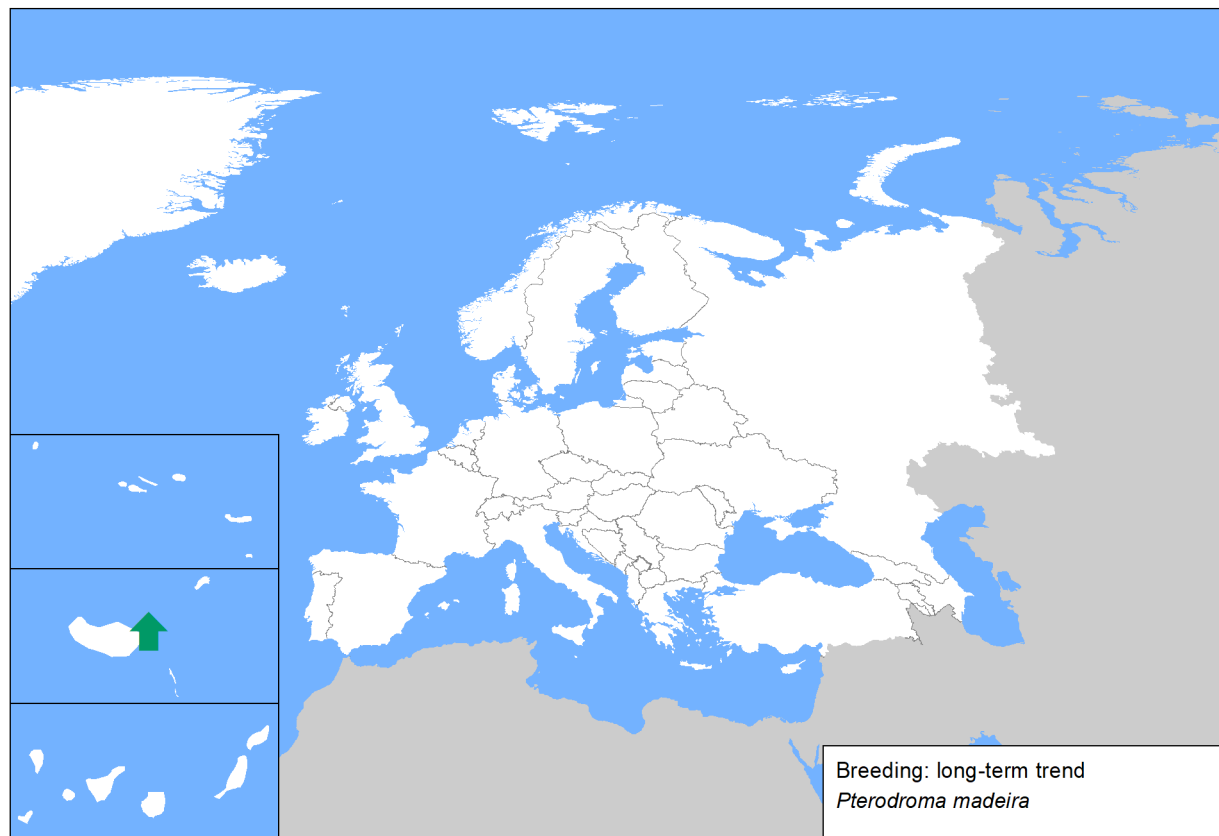
- ↑ Large:  $\geq 10\%$  of the European population
- ↑ Medium: 1–9% of the European population
- ↑ Small:  $< 1\%$  of the European population

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

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



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



## Sources

### PT: Madeira

**Breeding population size:** Menezes, D., Oliveira, P., Ramírez, I. 2010. Pterodromas do arquipélago da Madeira. Duas espécies em recuperação. Funchal, Portugal: Serviço do Parque Natural da Madeira. Ramos, Raúl & Ramírez, Iván & Paiva, Vitor & Militão, Teresa & Biscoito, Manuel & D., Menezes & Phillips, Richard & Zino, Francis & González-Solís, Jacob. (2016). Global spatial ecology of three closely-related gadfly petrels. Scientific Reports. 6. 23447. 10.1038/srep23447. 1º Atlas das Aves Invernantes e Migradoras de Portugal [https://drive.google.com/drive/folders/1MJWLVHRhU9A8IgbvY2DhPiFm\\_Tp1hD25](https://drive.google.com/drive/folders/1MJWLVHRhU9A8IgbvY2DhPiFm_Tp1hD25)

**Breeding short-term trend:** Menezes, D., Oliveira, P., Ramírez, I. 2010. Pterodromas do arquipélago da Madeira. Duas espécies em recuperação. Funchal, Portugal: Serviço do Parque Natural da Madeira. Ramos, Raúl & Ramírez, Iván & Paiva, Vitor & Militão, Teresa & Biscoito, Manuel & D., Menezes & Phillips, Richard & Zino, Francis & González-Solís, Jacob. (2016). Global spatial ecology of three closely-related gadfly petrels. Scientific Reports. 6. 23447. 10.1038/srep23447.

**Breeding long-term trend:** Based on expert opinion

# Bibliography

Barov, B and Derhé, M. A. 2011. Zino's Petrel *Pterodroma madeira* species action plan implementation review. In: Barov, B and Derhé, M. A. (eds), Review of The Implementation of Species Action Plans for Threatened Birds in the European Union 2004-2010. Final report. BirdLife International For the European Commission.

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.

BirdLife International. 2012. Emergency conservation work pays off: Zino's Petrel bounces back! Available at: <http://www.birdlife.org/community/2012/02/emergency-conservation-work-pays-off-zinos-petrel-bounces-back/>. (Accessed: 10 May 2012).

Carboneras, C., Jutglar, F. and Kirwan, G.M. 2014. Zino's Petrel (*Pterodroma madeira*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds), *Handbook of the Birds of the World Alive*, Lynx Edicions, Barcelona.

Carlile, N.; Priddel, D.; Zino, F.; Natavidad, C.; Wingate, D. B. 2003. A review of four successful recovery programmes for threatened sub-tropical petrels. *Marine Ornithology* 31: 185-192.

Hagemeijer, E.J.M. and Blair, M.J. 1997. *The EBCC atlas of European breeding birds: their distribution and abundance*. T. and A.D. Poyser, London.

Menezes, D. 2004. Relatório sobre a época reprodutora de 2004 da Freira da Madeira *Pterodroma madeira*.

Menezes, D. 2004. Relatório sobre a época reprodutora de 2004 da Freira da Madeira *Pterodroma madeira*.

Menezes, D., Oliveira, P., Ramírez, I. 2010. *Pterodromas do arquipélago da Madeira. Duas espécies em recuperação*. Serviço do Parque Natural da Madeira, Funchal, Madeira, Portugal.

Menezes, D.; Oliveira, P. 2003. Conservação da Freira da Madeira, *Pterodroma madeira*, através da recuperação do seu habitat. In: Rodriguez, J. (ed.), *Control de vertebrados invasores en Islas de Espana e Portugal*, pp. 35-42. Consejería del Medio Ambiente y Ordenación Territorial del Gobierno de Canarias.

Menezes, D.; Zino, F.; Oliveira, P.; Buckle, A. 2005. Conservation of Madeira's Petrel *Pterodroma madeira* through restoration of its habitat.

Menezes, D.; Zino, F.; Oliveira, P.; Buckle, A. 2005. Conservation of Madeira's Petrel *Pterodroma madeira* through restoration of its habitat.

Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: Their Conservation Status*. BirdLife International, Cambridge, U.K.

Unwin, B. 2004. Zino's Petrel boost. *Birding World* 17: 396.

Zino, F. J. and Biscoito, M. 2011. Fires destroy breeding habitat of Zino's petrel. *Oryx* 45(1): 14.

Zino, F.; Heredia, B.; Biscoito, M. J. 1996. Action plan for Zino's Petrel (*Pterodroma madeira*). In: Heredia, B.; Rose, L.; Painter, M. (ed.), *Globally threatened birds in Europe: action plans*, pp. 33-39. Council of Europe and BirdLife International, Strasbourg, France.

Zino, F.; Oliveira, P.; King, S.; Buckle, A.; Biscoito, M.; Neves, H. C.; Vasconcelos, A. 2001. Conservation of Zino's Petrel *Pterodroma madeira* in the archipelago of Madeira. *Oryx* 35: 128-136.

Zino, F.; Phillips, R.; Bischoito, M. 2011. Zino's Petrel movements at sea - a preliminary analysis of datalogger results. *Birding World* 24(5): 216-219.