



The Isle of Man Seabird Census

Report on the census of breeding
seabirds in the Isle of Man 2017-18

Richard W. Hill, Neil G. Morris, Kimberley A. Bowman, David Wright

With especial thanks to the IOM Dept. of Environment, Food and Agriculture (DEFA),
the Walney Extension Offshore Wind Farm Project, the Isle of Man Steam Packet Company,
Mrs Anne Kaye and Mr Allen S. Moore.

Copyright © 2019 Manx BirdLife. All rights reserved.

Published April 2019 by Manx BirdLife, 35 New Road, LAXEY, Isle of Man IM4 7BG
Tel: 01624 861130, Email enquiries@manxbirdlife.im, Website www.manxbirdlife.im
Isle of Man Company No. 087312C, Isle of Man Registered Charity No. 711

No part of this report may be copied or reproduced without prior permission of Manx BirdLife.

When referencing, please cite: "Hill, R.W., Morris, N. G., Bowman, K. A., Wright, D. (April 2019).
The Isle of Man Seabird Census: Report on the census of breeding seabirds in the Isle of Man
2017-18. Manx BirdLife. Laxey, Isle of Man."

Images

Front and back pages: Arctic Tern and Puffin © Neil G. Morris
Species accounts: Black & white illustrations by Alan Harris © Manx BirdLife
Below: Northern Fulmar © Neil G. Morris



CONTENTS

Part 1 Introduction.....	5
1.1 Background.....	5
1.2 1985-86 Baseline	5
1.3 Census Method	6
1.4 Report Format	7
1.5 Abbreviations used throughout this report.....	7
Count units and qualifiers.....	7
Other abbreviations	7
Part 2 Species accounts	8
2.1 Northern Fulmar.....	8
2.2 Manx Shearwater	13
2.3 European Storm Petrel.....	15
2.4 Great Cormorant	17
2.5 European Shag.....	21
2.6 Black-headed Gull.....	27
2.7 Common Gull.....	29
2.8 Lesser Black-backed Gull	30
2.9 Herring Gull	34
2.10 Great Black-backed Gull	40
2.11 Black-legged Kittiwake.....	45
2.12 Arctic Tern.....	49
2.13 Little Tern.....	51
2.14 Common Guillemot	53
2.15 Razorbill	59
2.16 Black Guillemot.....	62
2.17 Atlantic Puffin	66
Part 3 Overview of results for all species.....	69
Part 4 Conservation management	70
4.1 Conservation Issues.....	70
4.1.1 Seabird conservation status and use as indicators.....	70
4.1.2 Seabird colonies	72

4.1.3	Predation.....	72
4.1.4	Breeding sites and space	72
4.1.5	Foraging range	73
4.1.6	Climate change.....	74
4.1.7	Commercial fisheries	74
4.1.8	Disturbance	74
4.1.9	Ecosystem services	75
4.2	Recommendations	76
4.2.1	Seabirds as indicators	76
4.2.2	Predation.....	76
4.2.3	Breeding sites and space	77
4.2.4	Foraging area	77
4.2.5	Climate change.....	78
4.2.6	Commercial fisheries	78
4.2.7	Disturbance	78
4.2.8	Ecosystem services	79
4.2.9	Concentration, impacts and stochastic events.....	79
	Appendices.....	81
	A1 List of figures and tables.....	81
	A2 Use of hi-res imaging to verify counts.....	84
	A3 Black Guillemot initial 2017 results	86
	A4 Historic Tern data	87
	A4.1 Arctic Tern.....	87
	A4.2 Little Tern.....	89
	A5 Bibliography.....	91
	Acknowledgements.....	93
	Disclaimer.....	95
	About Manx BirdLife	95

PART 1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 In 2017, Manx Birdlife undertook a census of the Isle of Man breeding seabird assemblage. Commencing on 11th May 2017, the core field work was undertaken by staff, volunteers and charter boat crews. Finishing on 17th June 2017, surveyors logged in excess of 1,000 nautical miles and some 500 field hours.

Due to logistical problems, the census of Black Guillemots *Cephus grylle* during 2017 fell outside the protocol survey period. Hence, this species was resurveyed from 5th to 21st April 2018.

- 1.1.2 The Isle of Man Seabird Census 2017-18 (hereafter ‘the IOM 2017-18 census’) was made possible thanks to the support of the Isle of Man Government’s Department of Environment, Food and Agriculture (DEFA), a donation from the Walney Extension Offshore Wind Farm Project, sponsorship from the Isle of Man Steam Packet Company, a donation from Mrs Anne Kaye, and expert input from Mr Allen S. Moore.

- 1.1.3 The IOM 2017-18 census builds on the work of:

- i) The Manx Bird Atlas Survey of Breeding Seabirds of the Isle of Man (Sharpe and Sapsford 1999) undertaken in 1999 (hereafter ‘the IOM 1999 survey’)
- ii) The Numbers and Distribution of Seabirds Breeding on the Isle of Man during 1985-86 (Moore 1987) (hereafter ‘the IOM 1985-86 survey’)

As far as possible, the format of this IOM 2017-18 census report reflects that of the IOM 1999 survey report (which incorporates Moore 1987) to enable comparison of breeding populations and survey areas.

- 1.1.4 The IOM 2017-18 census is the first comprehensive survey of the Isle of Man’s seabird population since 1999. An important development since then has been the online availability of the UK Joint Nature Conservation Committee (JNCC) Seabird Monitoring Programme (SMP) data (est. 1986, available online at www.jncc.defra.gov.uk/page-1550).

Compiled into a status and trends report (JNCC 2016a), analysis of SMP data allows direct comparison between the IOM 2017-18 census results and population trends identified by SMP for the British Isles seabird populations (JNCC 2016a).

1.2 1985-86 BASELINE

- 1.2.1 JNCC (2016a) uses the Seabird Colony Register (SCR) (1985-1988) as the baseline for all subsequent counts. It is used as the baseline due to the adoption of coordinated and

standardized survey techniques that provide more reliable population estimates across the British Isles than surveys undertaken prior to 1985 (JNCC 2016a).

Throughout this report, the IOM 2017-18 census results are compared with previous results from Sharpe and Sapsford (1999) and Moore (1987). Emphasis is placed on the 1985-86 to 2017 comparison of populations as this allows direct review of population change on the Isle of Man against the JNCC SCR and seabird status and trends for the British Isles as a whole (JNCC 2016a).

Where Sharpe and Sapsford (1999) include data from the earlier Operation Seafarer (1969-70) survey, this is again included in this report. However, direct comparison between Operation Seafarer and the IOM 2017-18 census should be treated with caution. Standardized survey methods across the UK were not adopted until the publication of comprehensive guidelines (Walsh et al 1995), although the JNCC is confident in using the 1985-88 Seabird Colony Register as the baseline for population trends (JNCC 2016a).

1.3 CENSUS METHOD

- 1.3.1 To ensure compatibility of results with seabird status and trends across the British Isles (JNCC 2016a), the IOM 2017-18 census adopted the same survey methods used to generate data for the SMP. Methods are initially described in Walsh et al. (1995), as modified by the JNCC update *Seabirds Count – Census Instructions May 2016* (JNCC 2016b).

Methods and survey timing vary according to species. Within this report, the method and timing for each species count is described, demonstrating compatibility with Sharpe and Sapsford (1999) and SMP (JNCC 2016a and JNCC 2016b).

1.4 REPORT FORMAT

1.4.1 This report is divided into four parts:

Part 1 provides an overview of the background and survey methods adopted

Part 2 presents the detailed species counts. For each species, five subsections describe:

- Previously known status on the Isle of Man
- The British Isles status of that species
- Count unit used
- Timing of the count
- Results, including outcome of the IOM 2017-18 census, analysis of trends against previous IOM surveys and comparison with SMP data (JNCC 2016a)

Part 3 provides a composite summary table of results for all species for all IOM surveys

Part 4 looks at conservation management and is divided into two subsections:

- Issues with respect to seabird conservation management
 - Recommendations based on results from the IOM 2017-18 census

1.5 ABBREVIATIONS USED THROUGHOUT THIS REPORT

Count units and qualifiers

AOB	Apparently occupied burrow
AON	Apparently occupied nest
AOS	Apparently occupied site
IND	Individual on land/ledge
TRA	Trace of nest

Other abbreviations

DEFA	Department for the Environment, Food & Agriculture, Isle of Man
DEFRA	Department for Environment, Food & Rural Affairs, UK
JNCC	Joint Nature Conservation Committee, UK
SMP	Seabird Monitoring Programme, led and coordinated by JNCC

PART 2 SPECIES ACCOUNTS

2.1 NORTHERN FULMAR

2.1.1 Previously known status

During the 20th Century expansion in the range of Northern Fulmars (*Fulmaris glacialis*), the Isle of Man was probably colonized from Ireland. The first breeding sites (6 pairs) were recorded below the Old Lower Light on the Calf of Man in 1936 (Cullen & Jennings 1986).

Breeding on the main island was first reported in 1941 at Kione ny Garee, south west of Port Erin, and Kione y Ghoggan (erroneously Choggan), east of the Anvil, where prospecting adults were noted during the 1930s (Cullen & Jennings 1986).

The Manx breeding population increased and spread to 250 sites by 1959 and then to 600 sites in 1969. The Calf held 125 sites by 1981 (Cullen & Jennings 1986). In 1985, there were between 2,091-2,118 nest sites, which increased to 2,221-2,326 by 1986 (Moore 1987). However, the high figures for both years included estimates from sites which were not surveyed (Moore 1987).

In 1999, 2,981 to 3,143 nest sites were identified (Sharpe and Sapsford 1999). Other than sites monitored by Moore (pers. comm. 2018), there is no continuous data set for the Isle of Man breeding population between 1999 and 2016. However, the Calf of Man (Figure 2.1.1) does provide a semi-continuous time series which may reflect the situation as a whole across the Isle of Man during this period.



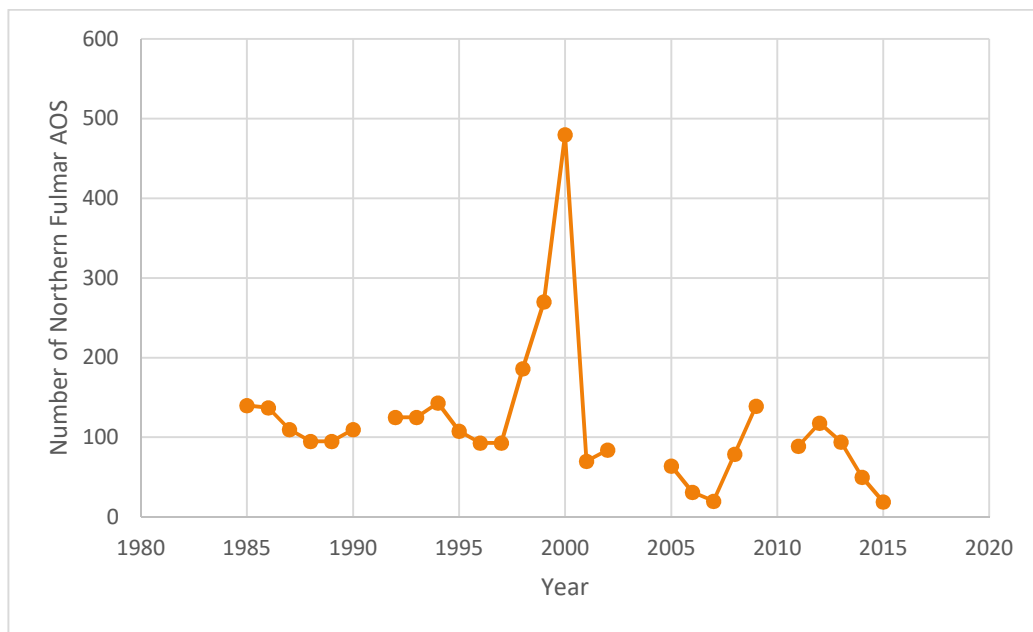


Figure 2.1.1 Trend in number of Calf of Man breeding Northern Fulmar (Apparently Occupied Sites, AOS) 1985-2015, showing a decline of 86% from 1985 to 2015. Note the increase in nests between 1997 and 2000 (JNCC SMP Database, accessed 15th July 2017).

2.1.2 British Isles status

The breeding population increase on the Isle of Man between 1969 and 1986 reflects the overall 78% increase in the *F. glacialis* population across the British Isles from 1969-70 to 1985-88 (JNCC 2016a).

The increase in numbers is thought to reflect food availability (waste and discards) from increasing fishing fleets, oceanographic change or population genetic change (JNCC 2016a).

Numbers rose from 1988 to 1996 and were then stable between 1998 and 2002, followed by a decrease to 2015 (Figure 2.1.2, JNCC 2016a).

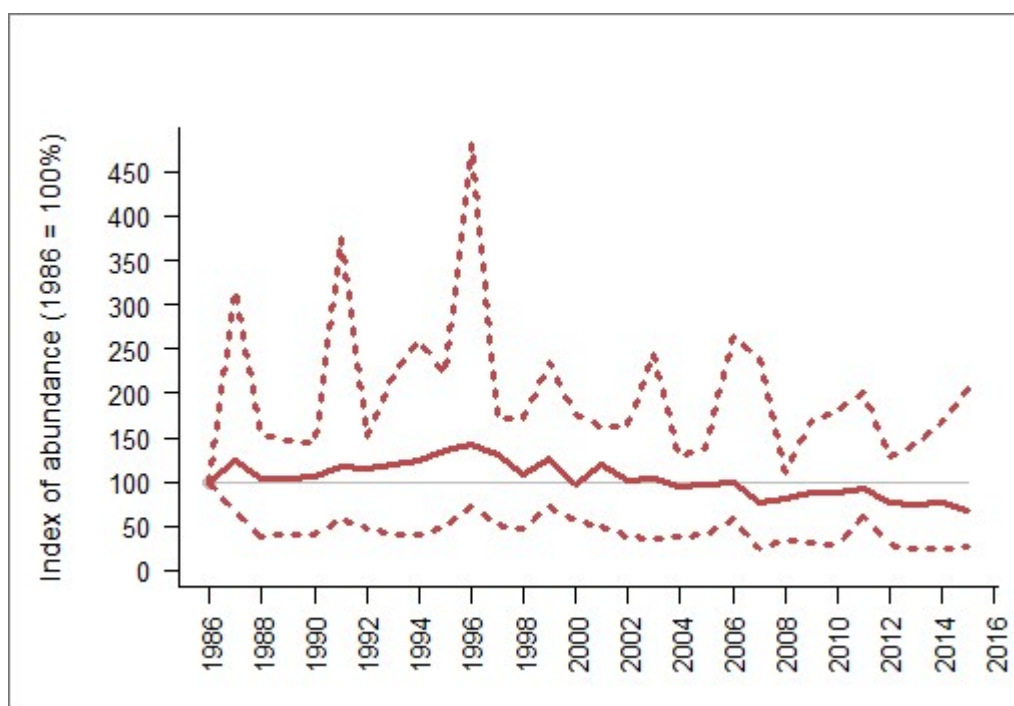


Figure 2.1.2 Trend in UK abundance index (solid line) of Northern Fulmar 1986-2015 with 95% confidence limits (dotted lines) (JNCC 2016a).

Population decline has not been uniform, with regional and local variation between sites (JNCC 2016a). Within the West Coast Region, of which the Isle of Man is part, decline between sites has varied from 14% to 72% (Table 2.1.2). Population decline is thought to be due to a re-adjustment to natural levels following a period of artificial elevation in numbers (JNCC 2016a).

Table 2.1.2 Recent counts of the number of Northern Fulmar (AOS) recorded in SPAs in the West Coast Region, compared to the number recorded during Seabird 2000. The percentage by which each colony has changed, and the *per annum* change, is also provided. (Note: data for North Rona relate to only part of the SPA) (JNCC 2016a).

Area	SPA name	Seabird 2000	Count ^(Year)	Change (%)	Change (% pa)
West Coast	North Rona	3,520 ¹⁹⁹⁸	1,438 ²⁰¹²	-59	-6.2
West Coast	Handa	3,550 ²⁰⁰⁰	1,870 ²⁰¹²	-47	-5.2
West Coast	Flannan Isles	8,143 ¹⁹⁹⁸	2,263 ²⁰¹³	-72	-8.2
West Coast	Mingulay and Berneray	10,020 ¹⁹⁹⁸	8,614 ²⁰¹⁴	-14	-0.9
West Coast	Rathlin Island	2,032 ¹⁹⁹⁹	1,518 ²⁰¹¹	-25	-2.4

2.1.3 Count unit

The count unit for *F. glacialis* is AOS. The unit is defined as a “site is counted as occupied only when a bird appears to be sitting tightly on a reasonably horizontal area judged

large enough to hold an egg” (JNCC 2016b p. 4), with two birds on one site being considered a pair and counted as one nesting site.

2.1.4 Count timing

The JNCC recommends that counts should be made between 09:00 and 17:30hrs from late May to early July (ideally June) (Walsh et al 1995, as amended by JNCC 2016b). The 2017 counts were made during these hours between 23rd May 2017 and 17th July 2017, with delays due to weather conditions.

2.1.5 Results

1,095 AOS were identified, representing a 53% decline since 1986 and a 65% decline since 1999, Table 2.1.5. These figures fall within the West Coast Region’s trend, Table 2.1.2.

There is no annual data for the Isle of Man as a whole with 18 years between the 1999 and 2017 surveys. However, the Calf of Man does provide a more complete record (Figure 2.1.1), with 27 years of annual records between 1985 and 2015. Between 1997 and 1999 there was an increase in nesting *F. glacialis* numbers on the Calf. The increase was reflected across the Isle of Man as well as the British Isles although not to the same magnitude, Figure 2.1.2. Numbers then fell back to the underlying trend of decline. The 1999 survey may therefore represent a statistical outlier from the overall trend, with the relatively accurate rate of decline (down by 53%) being reflected by the comparison between the 1986 and 2017 survey results.

The annual decline of the overall Isle of Man population (main island and Calf combined) between 1986 and 2017 would therefore be -1.7% per annum, although comparison between local colonies shows variation in the rate of decline from -3.0% (Glen Maye to Peel and Lhoob y Rheeast to Ballanayre Strand) to -0.3% (Aldrick to South of Port Erin), with one site showing a local increase (Bride Sandcliffs) of 1.4%. Two sites (Orrisdale and Jurby Sandcliffs) have suffered local extinctions (extirpation) of small sub-populations, being replaced by a new sub-population (North of Niarbyl to Glen Maye) farther south on the west coast. Rates of decline or increase at these three sites cannot be determined as the year of colonization/loss is not known.

The overall Isle of Man rate of decline (a decrease of 1.7% per annum) is similar for the closest of the neighbouring West Coast Region colonies of Rathlin Island and Mingulay & Berneray, Table 2.1.2.

Table 2.1.5 Comparison of Northern Fulmar (AOS) 1985-86, 1999 and 2017 surveys by section of coast.

Location	1985-86	1999	2017	% change from 1985-86	% change from 1999	% annual change 1986-2017
The Calf	169	290	54	-68%	-81%	-2.2%
Aldrick – South of Port Erin	155	312	142	-8%	-54%	-0.3%
Bradda – Fleshwick	138	257	100	-28%	-61%	-0.9%
North of Fleshwick – Niarbyl	130	217	45	-65%	-79%	-2.1%
North of Niarbyl – Glen Maye	0	0	57	100%	100%	*
Glen Maye – Peel	237	350	16	-93%	-95%	-3.0%
Lhoob y Rheeast – Ballanayre Strand	109	135	7	-94%	-95%	-3.0%
Gob y Deigan – Glen Trunk	146	173	41	-72%	-76%	-2.3%
Orrisdale	3	3	0	-100%	-100%	*
Jurby Sandcliffs	7	6	0	-100%	-100%	*
Bride Sandcliffs	39	56	56	44%	0%	1.4%
Stack Mooar – Port Mooar (Maughold Head)	135	192	106	-21%	-45%	-0.7%
South of Port Mooar – Cornaa	42	39	16	-62%	-59%	-2.0%
South of Cornaa – Skinscoe	139	179	43	-69%	-76%	-2.2%
Clay Head – Howstrake	106	126	34	-68%	-73%	-2.2%
Marine Drive	221	271	212	-4%	-22%	-0.1%
Port Soderick – Pistol Castle	138	154	48	-65%	-69%	-2.1%
Meary Vooar – Port Soldrick	92	175	55	-40%	-69%	-1.3%
Calloway Bay (Perwick Bay) – Bay Stacka	143	119	38	-73%	-68%	-2.4%
Black Head – Baie ny Breechyn (The Sound)	179	89	25	-86%	-72%	-2.8%
Total	2,328	3,143	1,095	-53%	-65%	-1.7%

* Annual change cannot be reported as initial date of local colonization or extirpation is not known.

ACKNOWLEDGEMENTS

Manx Birdlife acknowledges and would like to sincerely thank the following individuals and organisations for their participation in and assistance with the IOM 2017-18 census.

We'd particularly like to acknowledge:

- Dr Richard Selman and Allen Risby for their commitment to the project
- The boat crews for their expertise, patience and good cheer at all times
- Allen Moore for his additional observations, consultation and detailed input to drafts of this report
- Louise Samson, DEFA Warden, for her dedicated efforts to monitor and protect the breeding seabirds of the Ayres National Nature Reserve (ASSI) and Point of Ayres environs, and for providing supplementary records
- Chris Sharpe for his unstinting help and advice
- Ilka Win (Seabird Ecologist, JNCC) for her assistance with our efforts to correct and standardise historical Isle of Man data on the Seabird Monitoring Programme's online database

and

- Mrs Anne Kaye for her kind contribution which facilitated the 2018 Black Guillemot re-survey

Manx BirdLife Project team

Neil G. Morris, Project Director
 Richard W. Hill, Survey Team Leader
 Kimberley A. Bowman, Surveyor
 David Wright, Surveyor

Survey boat crews and support

John Payton
 George Platt
 Cilla Platt
 Bob Taylor

Mark Bolton (Royal Society for the Protection of Birds)
 Renée Caley (Isle of Man Steam Packet Company)
 Tina Canipa
 Maxine Cannon (Isle of Man Post Office)
 Steve Christian (Island Aggregates Ltd)
 Rosemary Clarke (One World Centre)
 Debra Cooper
 Brian Convery (Isle of Man Steam Packet Company)
 Richard Cope (Calf of Man Bird Observatory)
 Ronnie Crossey (Boxvale Ltd)
 Andrew Cubbon

Clive Dixon
 David Dunn
 Tim Earl
 Katherine Ellis
 Ray English (Boxvale Ltd)
 Paul Ford (Isle of Man Post Office)
 Glen Geeves
 Fiona Gell (IOM Dept. Environment, Food and Agriculture)
 Micheala Gell
 Shaun Gelling (IOM Dept. Environment, Food and Agriculture)

Rebecca George (Isle of Man Chamber of Commerce)

The Very Reverend Nigel Godfrey (St German's Cathedral, Isle of Man)

Dr Tim Graham (Manx Wildlife Trust)

Kate Hawkins (Manx National Heritage *Eiraght Ashoonagh Vannin*)

Dr Lara Howe (Manx Wildlife Trust)

Annemarie Hughes

Mark Humphrey (Long & Humphrey)

Andrew Johnston

Anne Kaye

Diane Kelly

Sheila Kennaugh

Susan Kinrade

Tony Kneale

Mandy L

Alyce Lazenbury (Calf of Man Bird Observatory)

Joanna Lewin (Abbey Properties)

Reverend Christopher Lowdon (St Paul Church, Ramsey)

Rodney Margot

Allen Moore

Alice E. E. Morris

Shaun Murphy (Manx National Heritage *Eiraght Ashoonagh Vannin*)

Lisa Nelson

Christalene Nicolaides

Rita O'Doherty

Michelle O'Malley (Isle of Man Post Office)

Carolyn Rawson

Sara Richards

Allen Risby (Walney Extension Offshore Wind Farm Project)

Jon Russell-Dunn

Louise Samson (IOM Dept. Environment, Food and Agriculture)

Aron Sapsford (Calf of Man Bird Observatory)

Dr Richard Selman (IOM Dept. Environment, Food and Agriculture)

Jenny Shanley

Chris Sharpe

Stephen Smyth (Island Aggregates Ltd)

Michelle Storton

Steve Taggart

Geoff Thomas (Boxvale Ltd)

Peter Tyreman

Sarah Tyrer

Nick Watterson

Stephen Whittaker

Nathan Wilkie (Calf of Man Estate)

Ilka Win (Joint Nature Conservation Committee)

DISCLAIMER

All information presented in this report is provided in good faith “as is”. In no event will the authors, Manx BirdLife, its sponsors, partners or employees, be liable to you or anyone else for any decision made or action taken in reliance on the information in this report or for any consequential, special or similar damages.

ABOUT MANX BIRDLIFE

Manx BirdLife is the wildlife conservation charity based on the Isle of Man working to protect the island’s wild birds and the habitats on which they depend. Founded in 1997 under the name ‘Manx Bird Atlas’, the charity changed to its present name in 2008.



Through partnership with the Manx Ornithological Society (MOS), Manx Wildlife Trust (MWT), the Royal Society for the Protection of Birds (RSPB), the Isle of Man Government and others, Manx BirdLife uses scientific research, best practice conservation, education and advocacy to achieve its objectives.

To support Manx BirdLife, please visit our website www.manxbirdlife.im or email enquiries@manxbirdlife.im. Thank you.

