LUNDY FIELD SOCIETY

ANNUAL REPORT 2023

Lundy Field Society Annual Report 2023
No.73

Published June 2024

ISSN 0143-8026

Editing: John Hedger

Design & layout: Robin Padian (*rjpdesign.co.uk*)

Printed by: Hobbs The Printers Ltd, Southampton (*hobbs.uk.com*)

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LUNDY FIELD SOCIETY ANNUAL REPORT 2023

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Chris Webster	(2021-2024)

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Robert Irving – Lundy Marine Protected Area Advisory Group Representative

Non-Committee posts
Island Representative: Sue Waterfield
Lundy Bird Observatory Representative: Tim Jones
Honorary Independent Examiner: Robin Hall

◄ *Sea Pink on Rat Island in May (photo: Paul Dean).*

WELCOME

John Hedger (Editor)

I hope you were able to visit Lundy in 2023. If not, this edition of the Annual Report will enable you to get up to speed on what happened on the island in the year, the work of your committee and the records of the wildlife made by yourselves via the logbook and by the Lundy Conservation Team. However, you will find that the content has changed. We have had a loss, but also made a gain!

In previous years around twenty to thirty pages were always occupied by the detailed reports on all the species of birds seen on Lundy during the year. In addition, there were accounts of bird ringing activities and results. Both will no longer appear in print and have migrated to the website of the newly formed Lundy Bird Observatory where you can find them at **lundybirdobs.org.uk**. You will still be able to read about highlights of the birds seen in 2023 in the unchanged 'Review of the Birding Year' which is written this year by the new Lundy Warden Joe Parker (see page 31).

I mentioned a gain; it is a surprise. We now have a completely new section in the reports on records of Lundy Wildlife-the **Amphibia**. The 2023 records of the **Common Toad** on Lundy are discussed by Jenny George and Alan Rowland on pages 55-57 and Alan goes on to speculate about other possible records of 'exotic' vertebrates on Lundy. I heard the male Toad calling at Quarry Pond in May 2023 and was convinced, having heard one a few weeks previously near our own pond at home. However, nobody has seen a toad, so there is a challenge!

Tony John was a stalwart Moth and Butterfly recorder and compiler of the Lepidoptera reports for the Annual Report, and it was a pleasure for myself, and my predecessor editor Tim Davis, to receive his beautifully drafted accounts of the butterflies and moths. We shall very much miss him. His obituary, written by Tim, appears on page 22. I am grateful to Kristin Reid and David Rowe for agreeing to take on the tasks of butterfly and moth recorders respectively. Their reports appear on page 85 and 87 and include 12 species of moth new to Lundy. 2023 also saw new records of other species of invertebrates including the **Gorse Spider Mite**, as well as a **Comb Footed Cellar Spider**, found in a cave behind landing Beach, described by Mark West on page 71. Other new records included 61 species of fungi, discussed by Mandy Dee on page 98 and including the **Scarlet Caterpillar Club**, one of the currently topical 'zombie' fungi which take control of their insect hosts. I have been searching for this fungus on Lundy for 20 plus years and have yet to see it, so congratulations to Mandy.

Thanks to all those who entered observations in the Logbook, and who sent in their photographs of wildlife. Please keep doing it. Without the hard work of the contributors and record compilers, the report would not be possible; the LFS is indebted to them. Mandy Dee has helped a lot with editing the photographs and Robin Padian has done his usual excellent job on the layout. Thanks also to Anwen Page for proofreading the text. You will notice that the Lundy maps, missing last year, are now back in place at the end of the report following an update by the designers Tim Davis and Tim Jones. Thank you both. This will be my final Annual Report; next year there will be a new editor, Kathy Weston. I wish her good luck and prompt arrivals of all the reports!

I often wonder if anyone reads the Welcome page? Our secretary Michael Williams does, and he answered the question that I posed last year when we included a report by David Ifold on granite mineralogy '*when was the last Annual Report that contained a geology report*?' He says it was 1992- quite a long gap!

HONORARY SECRETARY'S REPORT 2023

Michael Williams

The year opened with the wonderful news that Dr Keith Hiscock, Vice President and former Chair of the LFS, had been appointed an MBE for services to marine conservation. We were able to celebrate Keith's award at the AGM.

Further exciting news came in early February when the Bird Observatories Council re-admitted Lundy to the network of Bird Observatories in Britain and Ireland after an absence of nearly 50 years. This was the culmination of a process initiated by Dean Jones during his tenure as Lundy Warden, which developed into a collaborative effort involving a variety of individuals and organisations, with the LFS providing a key advisory role and pledging to continue support for bird-ringing and other activities under the aegis of the new Observatory. The LFS warmly acknowledges the significant commitment that the Landmark Trust and Lundy Company have made in taking on responsibility for running the Observatory and making critically important contributions to staff time, as well as allocating funding for day-to-day operating costs.

◄ *The Lundy Bird Observatory Logo*

A small Observatory Organising Committee, which includes a representative of LFS, meets virtually several times per year and provides advice to the Bird Observatory Warden on administrative, operational, and technical issues. In addition to providing a £25 per person contribution to the cost of rings used by LFS ringers visiting the island during 2023, the LFS also transferred to the Observatory rings and other ringing equipment previously held by the LFS. The Committee further approved specific additional funding, requested by the Observatory Warden, for the purchase of equipment needed to survey breeding seabirds, especially Manx Shearwaters and Storm Petrels. Through the Rodley family legacy, and with muscle from several Conservation Working Parties, the LFS supported the renovation of the Heligoland Trap on the Terrace, whilst we also contributed from the Rodley legacy to the new Bird Observatory and Biosecurity Hub being established near the Lodge.

The Observatory has taken over responsibility for maintaining the natural history Logbook, which continues to be kept in the Tavern for the use of all visitors and bears the names and logos of both the Bird Observatory and LFS. The Observatory has also taken on the task of compiling the annual Lundy Bird Report, which will be produced as a stand-alone, electronic publication – enabling more technical detail and greater use of graphics and photos than is possible within the LFS Annual Report. The latter will continue to carry a summary of bird highlights, bringing coverage of birds in the Annual Report more into line with that for other taxonomic groups. A further key activity that LFS is delighted to see is the Observatory leading on the progressive digitisation of LFS logbooks from past years. Unfortunately, the logbooks for much of the 1950s and 60s were destroyed by water damage many decades ago, when stored on the island.

As the inaugural year for the Lundy Bird Observatory, 2023 was fittingly full of birding highlights. None more-so than the results of the RSPB-led seabird surveys during the spring and summer. These showed that Lundy now supports a staggering 40,000 breeding seabirds, including 25,000 Manx Shearwaters, nearly 10,000 Guillemots, and over 3,500 Razorbills. Storm Petrels are expanding to new sites and the island's iconic Puffins reached a new post-rat- eradication peak count of 1,335 individuals.

Some 4,741 birds were ringed during the year – just a couple of hundred off the all-time record, which would almost certainly have been broken if the weather in the latter part of the autumn had been less stormy. Record numbers of Common Snipe, Jack Snipe, Golden Plover, and Storm Petrel were ringed, whilst Redshank, Barolo Shearwater, and Waxwing were added to the Lundy ringing list. The long-term ringing studies of Manx Shearwaters and Wheatears continued. Occupation of the Manx Shearwater nest boxes reached a new high, with a record ten chicks produced in them. A total of 518 adults and chicks were newly ringed, and plenty of valuable data on survival was provided by the 142 different individuals recaptured from past years' ringing. These included 32 returning Lundy-bred chicks, the oldest being from 2008. A bird ringed as an adult in 2004 is the oldest ever encountered on the island. The Wheatear colour-ringing project produced more good news, with estimates of 61 pairs in the study area and 163 pairs for the whole island easily surpassing previous records. Adult survival between the 2022 and 2023 breeding seasons was at least 55%.

The daily census – a key requirement for meeting the criteria to remain as part of the national Bird Observatories network – was completed on more than 95% of days, easily exceeding the required threshold. The census route covers much of the island south of Quarter Wall and is generally walked first thing in the morning by the Observatory Warden or one of the Volunteer Assistant Wardens. A Cliff Swallow (native to North America) and a Pallid Harrier (from Eastern Europe) both seen in October, were new for the island's bird list, whilst other notable rarities during the year included Cory's Shearwater, Red-eyed Vireo, Yellow-breasted Bunting and Surf Scoter.

Apart from the birds, surveys of the fauna and flora of Lundy have also been important activities during the year. The numbers of the iconic Lundy Cabbage have increased by 77% from 2,792 in 2022 to 4,959. Surveyors are collaborating with Dr. Steve Bullock, Associate Professor of Aerospace Engineering at the University of Bristol, to investigate the possibility of using remote drones and AI to identify and count cabbage in the future. A scoping exercise will be undertaken in 2024. This already is in use in agriculture where drones are used to calculate the amount of fertiliser required on crops.

Invertebrates continue to be reported in the LFS Logbook with all the most recorded species being the most visible. Rose Chafer beetles, Dor beetles, moths, and butterflies being seen in good numbers. It was a particularly good year for butterflies with the rarely recorded Clouded Yellow and Speckled Wood featuring in the reports. Emperor Dragonflies have been recorded with increasing frequency over the last few years with a first record of ovipositing at Rocket Pole Pond in 2018. This was repeated in 2021 at Quarter Wall Pond confirming attempted breeding. The exciting sighting this year of a nymph in Pondsbury by Alan Rowland confirms successful breeding. Whether nymphs will survive the depredations of the birds that use Pondsbury is another matter which will be resolved in one or two years when skin moults may be found in the spring.

► *Stuart Cossey, Assistant Warden (photographer unknown).*

Stuart Cossey carried out the Botanical Society of the British Isles (BSBI) New Year Plant Hunt on January 1st and recorded 14 species in flower. This event takes place nationwide with

hundreds of observers recording plants actually in flower (not just leaves or buds), but this is the first time we have had records from Lundy. Hopefully, this can become an annual event. The most obvious flowering plant on New Year's Day is always Common Gorse, but Stuart managed to find many less-conspicuous species like Ivy-leaved Toadflax, Petty Spurge, Early Dog-violet, and Tall Ramping Fumitory. The results are added to a national database and help to understand how wild and naturalised plants are responding to a changing climate.

Amongst the highlights for marine life, Atlantic Bluefin Tuna are being recorded off Lundy again; likely not seen for about 40 years. There has been an apparently significant recruitment of the iconic and nationally rare Sunset Cup corals at the Knoll Pins after a decline in numbers since the mid-1980s but, on the downside, the non-native Red Ripple Bryozoan on shaded intertidal surfaces has spread. Always popular with visitors, seals are doing well.

Our keen mycologists, John Hedger and Mandy Dee, requested some new identification books for the LFS library. These were used repeatedly over four weeks of recording during the autumn, and many of the 40 or so new records for the year were only identified thanks to the species being covered in these new books. With around fifteen thousand species in the UK, no one book will cover them all. We have around 800 records on Lundy – only fourteen thousand two hundred to go! John and Mandy also led two popular Fungi Forays during their visit.

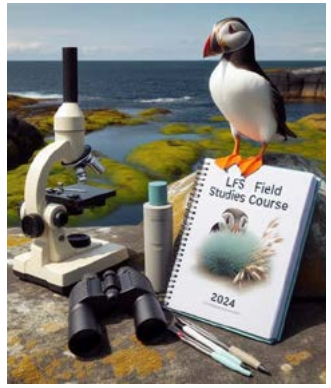
◄ *Mandy Dee and John Hedger with the new fungal identification books purchased by the LFS, November (photo: Chris Dee).*

During 2023 the LFS sent four working parties to Lundy. The March trip and the May week both had to miss the joys of the Oldenburg crossing and suffer with the helicopter trip due to the unexpected delay in the return to service of the ship. Both groups had a good mix of experience and new members with plenty of useful tasks completed including drystone walling with expert tuition from Vince Pipe. Both Autumn parties suffered from withdrawals due mainly to family illness, and our long reserve list was extremely useful in recruiting replacements for the 11 places that were cancelled for these two trips. Again, with several new faces, plenty of essential work was completed. The Lundy Conservation Team has expressed their thanks for the Society's significant contribution to conservation work. If you wish to attend a working party and can step in at short notice to replace late withdrawals, send an enquiry to Trevor Dobie at **lundyworkingparty@gmail.com**, and your details will be noted and placed on the reserve list. Further details can be found on our website **www.lundy.org.uk** under 'What We Do'.

The LFS has continued to give small grants to support work on Lundy. These included £200 for working party equipment during the year. Financial support was also provided to renew the island's weather station. You can now monitor current meteorological observations on Lundy through our website. Two research grants were awarded in 2023. Yeng Sen received £312 to present her 2022 Lundy Manx Shearwaters research at a conference in Scotland and in the summer of 2023 Tara McEvoy-Wilding received £289 to develop a new method for sampling seabed invertebrates, using several loofah sponges held in a weighted frame.

In terms of LFS business, the committee has been busy with a range of topics. We considered the role and person specification for a future LFS President by drawing up a role description – we are now seeking the right person to fulfil this role. As a charity, we have a duty as members, committee members, and officers to act in the best interests of the Society, so codes of conduct were drawn up, following good practice in the sector, and ensuring we had appropriate governance mechanisms in place to manage grievances or inappropriate behaviour. A planned LFS Day Trip to Lundy in June was unfortunately cancelled due to poor ticket sales, but on a positive note, plans are progressing for a Field Studies Course in April 2024 to develop the next generation of observers and recorders of Lundy's natural history.

Publications remain a core activity of the Society in delivering its objectives. The eighth volume of the LFS Journal was published during the year with Keith Hiscock editing for the first time. John Hedger edited the 2022 Annual Report and Bee Cox produced the Discovering Lundy bulletin. These are considerable undertakings with many hours invested in their production, so we record our thanks to Keith, John, and Bee. Chris Webster authored our new history and field guide, Lundy's Archaeology, with support from André Coutanche, Alan Rowland, and Mandy Yates. It provides a description of the sites on Lundy, the story of the archaeologists who investigated them, and a modern interpretation of how they fit into Lundy's story and the wider world.



▲ *LFS Field Studies courses will start in 2024 (photo: Michael Williams).*

There have been several changes in the Lundy Conservation Team. The Society records its tremendous gratitude to Rosie Ellis and Stuart Cossey, Warden and Assistant Warden respectively, who left Lundy during the course of the year. Our relationship with the team grows stronger every year and we wish both Rosie and Stuart all the very best for their futures. Within the LFS Chris Dee indicated last year that he wished to step down as LFS Treasurer due to his increased involvement in the Lundy Bird Observatory. Chris has been ably managing our finances for four years. Our thanks to Chris and welcome to John Shelley who has agreed to succeed him. Bill Williams has been trying to step back from the role of Honorary Independent Examiner for the past couple of years and he has now been able to do so. Thank you, Bill, for your contribution over the past seven years.

▲ *Rosie Ellis, Lundy Warden (photographer unknown).*

In the autumn, Sandra Rowland told us that she wished to stand down as Membership Secretary for personal reasons. Sandra joined the committee in 2007, taking over the role from Maggie Shaw, and has held the position for 17 years in total. Through Sandra's efforts, diligence, and perseverance the Society membership has grown by more than 50% during her tenure. Our enormous thanks to Sandra for her service. Lucy Lo-Vel is taking on the role, reconnecting her family with the Society's administration as her grandfather, John Dyke, was Honorary Secretary between 1959 and 1965.

My final thank you is to you, our members, for your support.

MEMBERSHIP SECRETARY'S REPORT

Sandra Rowland

I took over the membership role in 2007 from Maggie Shaw, but this will be my last membership report as I have not sought re-election at this year's AGM. I have thoroughly enjoyed my time as Membership Secretary, and I have enrolled over 750 members into the Society during that period. I am sure the new 'Memb. Sec.' Lucy Lo-Vel will do a splendid job and look after you all.

Thank You

As always, I would like to thank everyone for continuing to support the Society, whether it is by paying an annual subscription or making a donation; large or small your donations are always appreciated by the Society, and go towards our objectives.

Subscriptions

Membership subscription rates have remained the same for a number of years now, £25 for individuals, £28 for family membership, and a very reasonable £15 for students of any age. An additional £10 each year is required from our growing number of overseas members. I should also remind members that all annual subscriptions become due on 2nd January, and that our preferred method of payment is by standing order. I sent out over 70 subscription reminders in 2023. Sadly 27 did not respond and have had their details deleted from the database to comply with GDPR.

Membership News

Sadly, seven of our members passed away in 2023.
They are: -

Dr Ann Allen
Mrs Patricia Thompson
Mrs Margaret Marsh
Mr William Ingles
Mr Michael Fry
Mr Anthony John
Mr Eddy Stanbrook

Membership Count

At the end of 2023 the membership count showed 486 addresses on the database, equating to **647 members** (counting only 2 for each family membership). The breakdown is follows: -

Individual	265
Family	161
Student	5
Organisations	4
Corporate	1
Life	39
Ex Officio	7
Honorary	4
Total	**486 (647)**

New Members

Membership continues to increase, with 61 new members joining the Society in 2023; we welcome them all and hope they will remain members for many years to come. To comply with GDPR I can only list those who have given me permission to print their names and main interest. New members 2023 in order of joining are: -

Name(s)	Interests
Zachariah Wait	Bugs and birds
Marie Thomas	Conservation Breaks
Emma Trevena	Conservation Breaks
Richard & Christine Penny	Mushrooms and birds
Sue Zollinger	Shearwaters and Starlings
Sheila Matthews	Flora and moths
Chantal Coady & James Booth	Puffins
Melanie Cullen	Birds, wildlife, archaeology
L Glazier & T Rawcliffe	History, art, composing, walking
Louisa Oldfield	Lundy
Simon & Katrina Roberts	Philately and wildlife
Nicola Melling	Lundy
Ben Holdstock	History of the island
David & Emma Jones	Archaeology & natural history
Kathie Hoskins	Birds
Mark Todd & Justyna Todd-Frankowska	Wildlife and birds
Ian and Tina Harley	Birds and butterflies
Kathryn Martin	Puffins
Rick & Sharon Morris	Wildlife
Kay & Stewart Langston	Bird watching, walking
Rohan & Sophie Harris	Lundy
Michael Shoulder	Conservation Breaks and birds
Neil Thompson	Wildlife and volunteering
Hugh Wheeler & Ms Sam Vessey	Heritage and nature conservation
Philip & Rufus Russell	Everything
Anna Lenz	Conservation Breaks
Lara Winsloe	Birds! All of them!
Neil Barnes	All Lundy
Michael Lenz	Conservation Breaks
Clive Weston and Robert Throw	Conservation Breaks
Jon & Rita Stephens	Lundy
Katherine Sugg	Conservation Breaks
Alex Gould	Birds and bird ringing
John & Mary Bassendine	Birds and plants

Change of Address

Please do let the Membership Secretary know if you have changed your postal or email address so that you do not miss any of our publications or emails from the secretary. The email address remains the same and is **membership@lundy.org.uk**

TREASURER'S REPORT AND ACCOUNTS

Chris W Dee, Honorary Treasurer

The accounts presented here show a deficit for the year of £1,355. This is not a concern in a year when we published the eighth volume of the LFS Journal and are seeking to support activities on the island with the project fund established from the Rodley legacy and donations.

Without increasing subscription rates, membership income has grown by 4.6% and donations have increased, largely as a result of Conservation Break withdrawals. We also continue to benefit from generous monthly donations from the Jennetts Trust, which the donor is happy for us to use to support general running costs, for which we are grateful. To help ensure that our day-to-day operation is covered by subscription income all other donations are added to the project fund, which at the end of the year stood at £10,583. The opportunity was taken to align the Gift Aid claim with our accounting year, so the increase to £2,357 this year is temporary and represents Gift Aid on subscriptions and other qualifying donations from April 2021 to December 2022.

With a further £35,200 from the Rodley legacy set aside for investment, in consultation with our investment advisors, we diversified our portfolio in 2023 and added that sum to our investment. The capital invested is now £79,300 which at the end of the year had a market value of £84,735. After a lean period, this fund is now starting to grow once again.

Sales of *The Harman Family's Lundy* and *Protecting Lundy's Marine Life* in 2023 have been included in Sundry sales, along with sales of past Annual Reports and other donated publications and Lundy ephemera. Sales and auction proceeds from the AGM contributed more than £750, more than offsetting the cost of holding an in-person meeting. We continue to sell *Lundy Fungi* through the website and Lundy General Stores, which is also our primary outlet for the *Colouring Book*. The publication of *Lundy's Archaeology* in July prompted a flurry of sales which have already covered its printing costs. The stock shown as assets includes the value at cost of these three publications at the end of the year.

Two research grants were claimed this year with a small amount being carried over from 2021 for sample analysis. Assistance was provided from the project fund for the publication of a report on the 2022 Marine Festival and awards were also made towards the purchase of additional equipment for terrestrial and seabird bird monitoring and for fitting out the Bird Observatory shed. The Society provided start-up funding to the Lundy Bird Observatory - which was re-accredited in February - in the form of the donation of bird ring stock to the value of £1,800 and other bird ringing equipment. It is worth noting that the observatory has also received funding from RSPB and Natural England in 2023. Although the administration of the bird ringing on Lundy has transferred to the Lundy Bird Observatory, the LFS continues to subsidise this monitoring effort by donating £25 for each LFS member ringer operating on the island during the year.

Funding of Conservation Breaks has returned to more normal levels, with four breaks being run. However, we continue to see a high number of withdrawals, the result of which was that £720 of forfeited deposits were treated as donations.

The 2023 expenditure shown for our regular publications – Bulletin, Annual Report, and Journal – includes typesetting, printing, and distribution costs.

Although MS Oldenburg was back in service in time for the planned LFS day trip in June, insufficient ticket sales forced us to cancel. We incurred a small loss of £91 in online transaction fees but were grateful to the Lundy Company for fully refunding the booking deposit. Ironically, given the sea conditions on the day, there is a high chance the sailing would have been cancelled, or at best, would have been a very uncomfortable experience.

Income and Expenditure for the year ended 31 December 2023

Income	**2023**	**2022**
	£	£
Subscriptions	11,477	10,973
Donations	2,187	1,777
Jennetts Trust	2,040	2,040
Legacies	-	13,974
Gift Aid	2,357	1,445
Conservation break deposits	3,000	820
Day trip ticket sales	2,420	-
Book sales – *Lundy Fungi*	460	403
Book sales – *Colouring Book*	161	201
Book sales – *Lundy's Archaeology*	281	-
Sundry sales	1,277	1,573
Postage	28	17
Bird ringing	-	311
Interest	136	26
Total income	**25,824**	**33,560**
Deduct expenditure	27,179	16,770
Surplus/Deficit for the year	**-1,355**	**16,790**

Expenditure	**2023**	**2022**
	£	£
Bulletin	1,157	946
Report	5,113	3,507
Journal	3,979	-
Books – *Lundy's Archaeology*	258	-
Website	45	43
Bird ringing	375	164
Grants	599	3,529
Conservation breaks	6,534	4,629
Day trip ticket refunds	2,511	-
Field courses	106	-
Projects	2,637	1,682
AGM expenses	607	490
Committee expenses	114	-
Postage	169	131
Stationery	3	40
LFS Library	217	226
Stock value reduction	2,419	1,293
Sundries	336	90
Total expenditure	**27,179**	**16,770**

Balance sheet as at 31 December 2023

	2023	2022
Current Assets	£	£
Stock – books	2,181	2,797
Stock – bird rings	-	1,803
2023 day trip charter deposit	-	435
2024 field course accommodation booking	2,054	2,054
2025 field course accommodation booking	712	-
NS&I account	384	384
Current account	25,916	59,846
Reserve account (project fund)	10,583	11,242
Subtotal	**41,830**	**78,561**
Less		
Advance subscriptions	625	761
Advance conservation break deposits	2,200	2,240
Net current assets	**39,005**	**75,560**
Other assets		
LionTrust Sustainable Fund	-	44,100
7iM Investment Fund	79,300	-
Total assets	**118,305**	**119,660**
Reserves		
Brought forward	75,560	58,770
Transfer to specific reserve	-35,200	-
Surplus/Deficit for the year	-1,355	16,790
General Reserves	**39,005**	**75,560**
Specific reserve	79,300	44,100
Total reserves	**118,305**	**119,660**

Note: In 2019 an Ethical Fund was established as an endowment in which income and capital would be accumulated to meet the costs of future major projects. This is shown above as a specific reserve. At the balance sheet date, the investment had a market value of £84,735.

Lundy Field Society Accounts Examination for 2023

'I have examined the accounts of the Lundy Field Society for the year 1st January to 31st December 2023 as presented to me by the Honorary Treasurer. I have confirmed the accuracy of the accounting statements and that they properly reflect the underlying accounting records. My examination provided me with no evidence that these financial statements do not provide a true and fair view of the Income and Expenditure, and Assets and Liabilities, of the Lundy Field Society for the year ended 31st December 2023.'

Robin O Hall
Honorary Independent Examiner
21 January 2024

RESEARCH GRANTS 2023

Jennifer George (Chair of the LFS Grants Subcommittee)

Two research grants were funded in 2023.

1. Funding was given to Yuheng Sun (University of Groningen, The Netherlands, previously at Imperial College, London) to present her 2022 research on the Lundy Manx Shearwaters at a conference in Scotland. The research has recently been published in the Journal of Avian Biology in a paper entitled: *Calls of Manx Shearwaters (Puffinus puffinus) contain individual signatures* by Yuheng Sun *et. al*. (Funding: £312).

2. In the summer (July and August) of 2023 Tara McEnvoy-Wilding developed a new method for sampling the Lundy benthic marine invertebrates using several loofah sponges held in a weighted frame. The research took place on the East coast of Lundy in the No Take zone. Habitats surveyed included those with rocky boulders and muddy sediment habitats. Species found and their relative abundance were recorded, and when identification was completed, they were put back on the loofahs and returned to their bottom location (Funding: £289).

The COVID lockdown and Lundy travel restrictions have affected the awards and the carrying out of research on Lundy. As a result, no grants were made in 2019. However, in the last four years (2020-2023), six grants have been awarded, totalling £2552.
The projects supported were: -

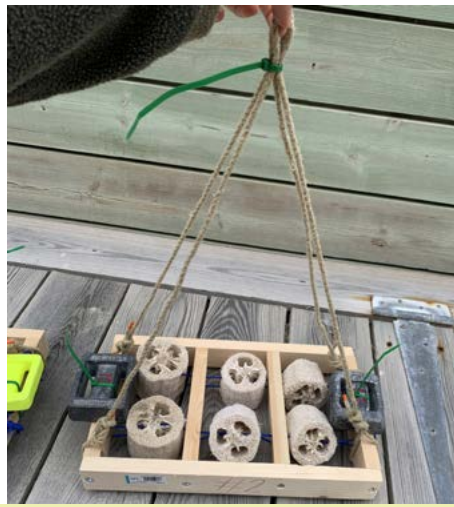
- The effect of tidal currents and weather on Cetacean presence around Lundy.
- Sparrow nest box production and colour rings.
- Behaviour of Lundy Kittiwake chicks.
- Study of lead isotopes in Lundy rocks.
- Manx Shearwater calls (see above).
- Sampling marine benthic communities (see above).

Outcomes from the research so far have led to the publication of two research papers. A paper by Amanda-River Mead (the grant recipient) with Thomas E. Dickins entitled 'Sibling aggression between Black-legged Kittiwake (*Rissa tridactyla*) chicks' was published in the Lundy Field Society Journal. Vol. 8 2023, and the paper on Manx Shearwater calls by Yuheng Sun *et.al*. in the Journal of Avian Biology (cited above).

► *Weighted Loofah frame (photo: Tara McEvoy-Wilding).*

▲ *Manx Shearwater* Puffinus puffinus *off Lundy (photo: Richard Campey).*

▲ *Loofah frame being recovered at the study site (photo: Nao Szulc).*



▲ *Paul Gyurgyak and James Williams below the Oldenburg in Sharpness Dry Dock (photo: Derek Green).*

ISLAND REPORT 2023

Derek Green (General Manager, The Lundy Company)

The beginning of the year was overshadowed by the ongoing repair works to M.S. Oldenburg following the flooding incident at Sharpness Dry Dock in November 2022. A combination of extending the helicopter service for staying passengers, finding, and chartering in vessels for supplies, along with a range of other challenges, were handled with good spirit and determination by the shore office and wider Lundy team and kept the operation running smoothly during the ship's absence.

Following the flooding and subsequent extended dry dock, and with the impending season beckoning, we began the search for a temporary replacement vessel. Any vessel had to be capable of carrying passengers, freight, and fuel whilst also being able to negotiate the shallow berths at Lundy and sit on the mud in the river Torridge and Ilfracombe. The search was a poignant reminder of how challenging it is to find a ship to 'fit' Lundy, and how well John Puddy and Barty Smith had chosen when opting for the Oldenburg back in 1985. The search for a vessel stretched from Norway to the Orkney Isles, the South Coast of England, and around the UK. The tight criteria required led us to only one potential vessel: the MV Pentalina, which was currently in the dry dock in Belfast awaiting return to service. However, a discussion with Pentland Ferries, who own and manage the Pentalina, quickly discounted her since Caledonian MacBrayne Ferries in Scotland had just contracted her to assist them with their own shortage of vessels. It turned out to be a blessing in disguise as two weeks into the contract, the Pentalina suffered engine failure and ran aground on Orkney, which resulted in over 60 passengers having to be rescued by the RNLI.

It became quickly apparent that there were no suitable passenger/freight vessels available at short notice and so we took the decision to extend the winter helicopter service until the Oldenburg might return to Lundy. Local work boats, the "Severn Scimitar" and laterally, the "Grima," were contracted to keep the supply chain open to the island and began a regular weekly service. The Helicopter service continued until June, with all staying visitors flying to and from Hartland, with Helicopter ticket supplements subsidised by The Lundy Company to avoid passing the burden of the extra cost onto our already displaced visitors.

The ship finally returned with a nearly newly fitted engine room, large areas of the afterdeck replaced, and having completed our class renewal with DNV GL. This leaves just both gearboxes as the only major components to be replaced in the engine room, having survived the flooding. Plans are in place for their replacement in February 2024. Due to the complexity of events and subsequent damage, it will take some time to conclude the settlement with insurers. The 'Oldie' is now in much better condition than when she entered the dock, so every cloud has a silver lining. Once back in service, Oldenburg had a relatively good summer with average cancellations or delays. Of 70 scheduled sailings, seven were cancelled altogether, and two were delayed due to inclement weather. The helicopter scheme was used on one occasion. The ship additionally hosted three private river cruises. Day trip numbers for the year were low (7225) compared to 2022 (11417) because of the delay in the start of sailings and bad weather. Staying visitor numbers remained high due to strong property bookings; 5624 against 5889 for 2022. The overall footfall was 13774 (2022– 18244). At the beginning of 2023, most indicators were expecting the UK to fall back into recession, and we firmly expected Lundy to be affected. However contrary to an expected downturn in property bookings, occupancy for the year remained excellent at 91%. (2022 -91.2%).

Staff retention in 2023 was high but Assistant Warden Stuart Cossey and partner Megan Hollywood-Harry left early in the year, followed by the departure of Warden Rosie Ellis in the autumn. Joe Parker joined us early in the year as Assistant Warden and was the natural fit for Warden after Rosie's departure. Joe will soon be joined by Assistant Warden Tara McEvoy-Wilding in April 2024. On the mainland, there was little change with Vicky Reynolds joining the Ilfracombe booking office as a summer seasonal assistant. On board Oldenburg, James Williams took up the challenge of the Information Officer role after Rob Connor left the ship to pursue a career ashore.

On Lundy, we tackled several projects to continue a programme of improvements, notably the installation of a new pair of water tanks adjacent to the existing reservoir. The two new tanks will hold an additional 300,000 litres of water and help alleviate the summer droughts that we have suffered over the past few years. The General Store had a makeover with a new roof and repointing works to the stone wall

▲ *Joe Parker, the newly appointed Lundy Warden in front of the Marisco Tavern, (photo: Derek Green).*

▲ *The new Bird Observatory Hub, located behind The Lodge (photo: Derek Green).*

▲ *Scaffolding enshrouding the General Store during renovation work (photo: Derek Green).*

▲ *Lars Liwendahl at the launch of the John Dyke 100th Anniversary issue of stamps in May (photo: Derek Green)..*

in the campsite. The Bird Observatory found a permanent home in the newly constructed wooden building behind The Lodge, thanks to generous donations from several funders including the LFS. The Bird Observatory "Hub" will be used as a base for all bird-related work as well as housing the island's bio security security measures. It also offers bench facilities for visiting field workers. Our sincere thanks go out to everyone who helped bring the Bird Observatory back to life.

To help improve communication we were pleased to have bid and be accepted for the DCMS broadband for remote communities' project. As a result, the island has a new 'One Web' satellite system on trial for two years which so far has proved successful. The system has been installed specifically for the business side of the island and is not openly available to the public. The public Wi-Fi in the St. Helen's Centre continues to prove popular and available to anyone visiting the island.

Several properties had internal work completed over the year, including Castle Keep South, which had extensive work to the lounge along with a new kitchen. Old House North had remedial work completed in the kitchen. Both Millcombe, The Vestry, and Old Light Cottage had an internal makeover in the lounge. Several properties also had the benefit of new windows, including Castle Cottage, Bramble Villas East and West, Paradise Row, and the Lodge. On the island, the bridge down to the Lundy North Light was refurbished. Work began in St. John's Valley underneath Brambles to shore up the bank, and the island clean-up operation continued with the removal of the old rock crusher from Helicopter Field.

2023 would have been the 100th birthday of Lundy's well-known illustrator, John Dyke. To mark the anniversary, the Lundy Postal Service re-issued a new set of definitive stamps featuring his iconic 'Puffin on a rock'. The island also took the opportunity to issue a new edition of the 'Illustrated Lundy News' to mark the occasion. The colour edition was produced in partnership with John's granddaughter Lucy Lo-Vel, along with his son-in-law Reg Lovel, Lundy librarian Michael Williams, and Andre´ Coutanche from the LFS. In addition to the Island stamp issue, Lundy also marked the coronation of King Charles and Queen Camilla with a special cover featuring one of John Dykes iconic stamps.

The Shore office team had a busy year dealing with the delay to the return of the Oldenburg early in the season but were also out and about at the local county shores and events around the region. With the decline of many of our regular ticket agents (mostly tourist information centres), we took the opportunity to develop and launch a new online ticketing application in September. Initially, the application just allows trip tickets to be booked online, but we are expecting to expand the facility to include period return tickets in 2024, making it easier to book your trip on the Oldenburg or Helicopter.

▲ *Andre´Coutanche, Lucy Lo-Vel, Derek Green and Michael Williams with the 2023 Edition of the 'Illustrated Lundy News'in May (photo: Lars Liwendahl).*

Behind the scenes, we continued to develop and improve the power system on the island with the renewal of engines and alternators for the existing generator sets along with the recently installed "Blue Thunder" backup generator. The next phase of the power project is to replace the aged PLC logic control system, which currently looks after the power phase balancing and heating across the island. Installed in 1999, we have plans to upgrade the logic controller in 2024 allowing remote access and diagnosis of any fault. It will allow us to add renewable power sources to the existing system in due course.

To explore future possibilities, I took a trip to Fair Isle on a fact-finding mission, as they have a well-tested and proven renewable power system that may work well on Lundy. They have a mixture of wind and solar generators, which charge a large bank of batteries, all backed up by diesel generators in the event of little wind or sunshine. The Fair Isle is very similar to Lundy in many respects and the island faces similar challenges, so it has provided a good model upon which we might be able to base a future renewable system for Lundy. Work continues in partnership with the National Trust to develop possibilities and improve the existing system.

In summary, 2023 was a challenging year, and I would like to pay tribute to the Lundy team for handling every challenge with good spirit and dogged determination, particularly the ship's crew, who spent so much time away from families to bring the ship home. However, we have persevered, and there have been many improvements across the island, the ship, and the shore offices. We can look forward to 2024 with renewed confidence now that the ship is in much better shape, and hopefully we will have a good season.

Thank you very much for your continued support and I wish the Field Society a successful year ahead.

▲ *A training day for the Lundy Conservation Team 16 November (photo: Joe Parker).*

CONSERVATION TEAM REPORT

Joe Parker (Lundy Warden)

It was another great year on Lundy with plenty of remarkable achievements. I am delighted to be compiling this Conservation Team report following my appointment as Warden in November 2023. Staffing changes always bring along tough goodbyes, and I am sure everyone involved with the LFS will join the island in recognising the great contributions of Rosie Ellis (Warden) and Stuart Cossey (Assistant Warden) and wish them both the very best for the future, continuing their excellent contributions to wildlife conservation beyond Lundy! As always, our success would not have been possible without the invaluable support of our residential volunteers. Everyone really did go above and beyond the call of duty, and the Lundy team wishes them all the very best of luck with their future endeavours. Matt White (known as Roger to avoid confusion with all the other Matts on the island) hit the ground running as our Assistant Ranger, helping with the ongoing estate and conservation programme, and will return to the island in 2024! Both Meaghan Kendall and Nicola Dunkin did splendid work monitoring our breeding seabirds and seals respectively, with the invaluable assistance of Nao Szulc with marine matters though the summer.

Atlantic Grey Seals did well, closing the year off with 66 pups born and hitting a maximum island count of 235 individuals on the 15th of August. Overall, it was a successful season, with an abundance of seals, seal pups, and low witnessed mortality. More details of the Seal survey can be found on page 47 of this Annual Report.

The recently re-accredited Lundy Bird Observatory enjoyed a good first year, and we thank the LFS for helping by donating rings and equipment previously held by the society. I would also like to take this opportunity to acknowledge the funds received from RSPB and Natural England for the purchase of a thermal imaging device, biosecurity equipment, and seabird rings. The Observatory celebrated its first anniversary in style, thanks to the efforts of Luke Marriner, who was our first-ever Bird Observatory Volunteer Assistant Warden. Angus Croudace also provided extra support in the autumn, returning to volunteer for a second season following his stint as Volunteer Seal Warden the previous year.

The survey season was filled by our seabird productivity studies, coupled with all-island censuses of cliff-nesting seabirds, gulls, Manx Shearwaters, and Storm Petrels. This is the first time these surveys have been conducted simultaneously, so no wonder it felt busy! The result was positive news about our breeding seabirds, with population increases and excellent productivity across the cliff-nesting assemblage. Twenty years after the successful rat eradication, the total breeding seabird population now stands at over 40,000 individuals, the likes of which have not been seen since the late 1930s. The upward trend for most seabirds on Lundy continues, with considerable increases in Manx Shearwater and auks, highlighting how the importance of Lundy has increased significantly in recent years. The seabird assemblage population on Lundy now exceeds the qualifying figure for SPA status, with Manx Shearwater and Razorbill populations also qualifying individually.The recent colonisation and rapid rise in Storm Petrels further add to the island's diversity, and it will be fascinating to follow this species in the coming years. Unfortunately, these large-scale increases are masking a decline in our *Larus* gull colonies, which is in line with national trends.

▼ *Fieldworker participating in the RSPB Storm Petrel Census, The Quarries 15 July (photo: Rosie Ellis).*

▲ *Conservation Team Volunteer Angus Croudace in Millcombe 10 November (photo: Joe Parker).*

▲ *Luke Marriner, the Lundy Bird Observatory Volunteer Warden, monitoring seabirds 30 May (photo: Joe Parker).*

► *A Barolo Shearwater captured at night while studying a Manx Shearwater colony 13 June (photo: Luke Marriner).*

On land, birding highlights included eye-opening nocturnal surveys, renovation of the Terrace Heligoland trap, two new species records for the island, and some of the best migration numbers on record. This was the first season passerine mist nets were permanently stationed in Millcombe through the spring and autumn. Autumn also saw a significant increase in the use of 'dazzling', to look for and capture birds at night using a thermal imaging device and an LED torch. The technique yielded new data. Overall, 4,745 birds were ringed. All-time ringing totals were exceeded for Common Snipe, Jack Snipe, Golden Plover, and Storm Petrel, while Redshank, Barolo Shearwater, and Waxwing were all added to the island's ringed species list.

Despite the curtailed sailing season, engagement opportunities with visitors were plentiful thanks to the valued support of the Lundy Ambassadors. All told, 78 Ambassador visits were logged, with almost 600 visitors attending guided walks. The 'A Team' also helped deliver 11 outreach visits and 16 school visits, which included key stage two, key stage three, and A-level students. Warden-led snorkel safari events continued to be in high demand, interpreting the MPA (Marine Protected Area) and connecting visitors with the marine world. At the same time, pop-up seabird stations at Jenny's Cove highlighted the island's thriving seabird colonies for visitors.

▲ *Positive Lundy conservation news on BBC Radio Devon.*

Still, on the engagement theme, Lundy's marine life reached a national audience when celebrated in a special documentary inspired by BBC's 'Wild Isles'. Commissioned by the RSPB, WWF, and National Trust, 'Saving Our Wild Isles' featured the richness of the underwater natural world around Lundy. The island hit the national press again in the autumn, with a press release celebrating the recoveries in populations of ground-nesting seabirds such as the Puffins which have happened after rat eradication, resulting in reports in the Guardian, Telegraph, and BBC, as well as other regional and national news outlets. The interpretation panels in the Beach Building and Hartland heliport received a very welcome refresh thanks to the Rachel Penny Legacy. Be sure to check them out when visiting in 2024! In April, we hosted a young naturalist's weekend for the first time with great success. Fourteen 18 to 30-year-olds were offered discounted rates to stay in hostel-style accommodation and experience the full range of island conservation activities, including bird ringing, rock pooling, dry stone walling, and seabird surveying. The weekend received excellent feedback and hopefully inspired a few new 'Lundyites'.

► *A Lundy Puffin at the North End 4 June (photo: Joe Parker).*

I am delighted to report that the island remains rodent-free for another season. Many thanks to Biosecurity for England for restocking the island's biosecurity monitoring supplies. The new Bird Observatory and Biosecurity Hub building (featured in Derek Green's Report on page 16) is now well-fitted, a project funded by the Rachel Penny legacy, Lundy Sparrow Project, and the LFS. It is in 'The Lodge' garden and features a laboratory table with stools, a fridge freezer, and storage cupboards. The new island Weather Station is now live and online, also funded by the LFS; readings feature on the LFS, Landmark Trust, and Lundy Bird Observatory websites.

The recent highly pathogenic avian influenza (HPAI) outbreak has been a cause for concern. A record number of cases were reported nationally through the summer of 2022, and it has remained a constant worry ever since. To help safeguard the island's wildlife, the RSPB funded a biosecurity disinfectant mat, which was used by all island guests through the breeding season to disinfect footwear. HPAI swab tests, provided by the Animal and Plant Health Agency, with an agreement with Natural England, were used to check any fresh carcasses found on Lundy. Fortunately, the results showed that the incidence appeared to be very low. Two dead Herring Gulls tested positive: a chick from the Needle Rock colony on 23rd June and a non-breeding adult found at Christie's Quay on 26th June.

Feral stock management resumed this season after the 'Covid years' prevented culling. This ongoing management of the collective grazing regime is essential to protect the island's grassland and heath communities, which are important features within the Site of Special Scientific Interest (SSSI). Control of non-native invasive plant species received a welcome boost with support from the Bannister Trust, which is funding rhododendron management, spanning rope access work, training, and surveys.

The annual Lundy Cabbage survey conducted by Alan and Sandra Rowland yielded positive results, with plants appearing to be doing well both in abundance and distribution. The counts increased by 77% from a low of 2,792 in 2022 to 4,959 in 2023.

Looking ahead to 2024, we are pleased to welcome Tara McEvoy-Wilding as our new Assistant Warden, especially as she brings complementary expertise in all things marine into the team. We look forward to again working closely with the LFS and will be glad to welcome you all to the island in 2024.

▲ *Alan and Sandra Rowland carrying out the annual survey of the Lundy Cabbage along the East Side from a boat skippered by Laura Proudfoot, an Oldenburg crew member (photo: Rosie Ellis).*

▲ *Flowers of Lundy* Cabbage Coincya wrightii *photographed in May near to Smelly Gully (photo: Paul Dean).*

▲ *Tony and Jane pictured by the gate to Big St John's in October 2022 in what was to be their last time together on Lundy (photo: Tim Davis).*

Anthony ('Tony') John, 1941–2023

Tony John, a long-standing member of the LFS, first visiting Lundy in 1975, died on 11th August 2023 after a twenty-month battle with cancer.

One didn't have to spend much time with Tony to realise what a fine all-round naturalist he was. His natural history library was all-encompassing and a joy to dip into. Tony's wife Jane relates how hours were spent in second-hand bookshops, on one occasion between home and Scotland, looking for a copy of *Fair Isle and its Birds* – which was triumphantly found, eventually! He was an avid lepidopterist, trapping and releasing moths both in his garden and on his visits to Lundy, entering his wildlife records in the LFS logbook and compiling the moth and butterfly reports in LFS Annual Reports. Lichens too featured high among his many interests. He loved islands, with visits to Bardsey, Fair Isle and the Inner Hebrides as well as Lundy. Annual trips with family and friends to North and South Wales and later also to Scotland to climb the Munros became a summer ritual.

Tony was born in Guildford on 29th September 1941. In 1946, the family moved to Melton Mowbray, Leicestershire, where his father worked as a GP. Educated at Ampleforth College, Yorkshire, Tony excelled in long-distance running, setting new school records. Accountancy was quite unable to hold him, and a variety of jobs followed, including steel fixing in the construction of tall buildings. Realising his real interest lay in science, he studied for an honours degree in Botany and Zoology at Nottingham University, graduating in 1965.

In 1968, he met and married Jane, with whom he raised two daughters, Frances and Emily. By this time, he was based in Edinburgh as a Marine Biologist at the Sir Alistair Hardy Foundation, specialising in plankton, work which took him to West Africa, India and Australia, where he trained analysts. In 1976, the Foundation was transferred to Plymouth, where Tony remained until retirement in 2009.

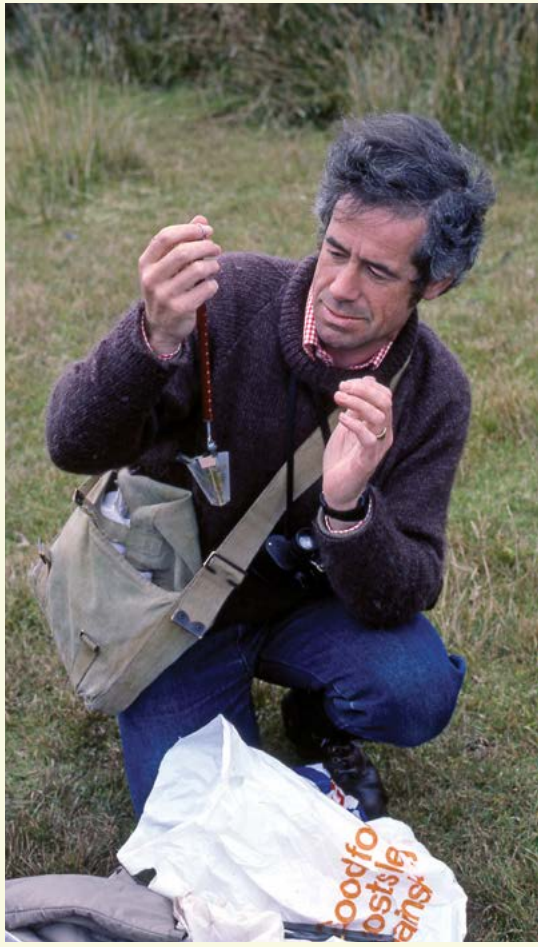
It was during a holiday with Jane in Glen Prosen, Angus, that an encounter with an Oystercatcher feeding near their rented cottage sparked an interest in ornithology. This quickly developed into a passion and – based in their Dartmoor cottage home and having gained a ringing permit – Tony began a long-term study of Dippers on the Rivers Tavy and Plym.

From the mid-1970s into the 1990s, Tony was the inspirational editor of *Devon Birds*, the quarterly newsletter of the Devon Bird Watching & Preservation Society (now Devon Birds). He was a member of the editorial team that produced the *Tetrad Atlas of the Breeding Birds of Devon*, the first survey of its kind in Britain, carried out between 1977 and 1985. Tony contributed thirteen flawless species accounts to that first 'Atlas' and nine to the follow-up *Devon Bird Atlas 2007–2013*. He also wrote numerous 'Nature Notes' for various local journals.

Tony's last visit to Lundy with Jane came in October 2022, during which, despite failing health, he attended every evening logbook call-over during their stay.

His ever-present sharp sense of humour and ready smile made him a delightful companion. Simon John, giving the eulogy at Tony's funeral in Yelverton, aptly described his brother as, "inspirational, a good friend, kind, gentle, patient, a holy man, principled, spirited, determined, with an infectious enthusiasm, a sense of adventure, an encyclopaedic font of knowledge of all aspects of the natural world, and very generous in sharing it." Those who were fortunate enough to know Tony will miss him greatly and remember him always.

Tim Davis
with thanks to Jane John and Simon John.



▲ *A gleeful Tony John weighing a Firecrest, the first he had ever ringed, captured in the now defunct Quarter Wall Heligoland Trap in October 1986 (photo: Tim Davis).*

LUNDY MARINE PROTECTED AREA ADVISORY GROUP REPORT

Robert Irving (LMPAAG Secretary)

The Lundy Marine Protected Area Advisory Group (LMPAAG) provides a forum for discussion of all matters relating to the island's waters and shores. The Group includes representatives from the island (the Lundy Company/Landmark Trust), Natural England, the Devon and Severn Inshore Fisheries and Conservation Authority (D&SIFCA), Historic England, the Lundy Field Society, the Marine Biological Association, MARINElife, local nature conservation groups, commercial fishing interests, dive charter boat skippers and local dive clubs.

The Group holds two meetings each year. In 2023, the spring meeting took place on the evening of 3rd May at the Clubhouse of the Ilfracombe Sub-Aqua Club in Ropery Road, Ilfracombe. The autumn meeting was held on 17th October on board the MS *Oldenburg*, tied up alongside the quay in Bideford. This meeting was the 18th for the Advisory Group in its present guise and the 75th since its first meeting as the Lundy Marine Consultation Group back in 1985. In my role as Secretary to the Group, I report the key points raised at these two meetings to the Lundy Management Forum (consisting of all organisations with responsibility for the overall management of the island), which takes place soon after each of the Advisory Group meetings.

Below is a summary of topics that were raised during both Advisory Group meetings.

Accreditation Scheme for charter boat skippers

A Marine Wildlife Aware Accreditation Scheme, aimed at the skippers and crews of charter boats bringing divers, snorkellers, and visitors to the island, was initiated by former Warden Beccy MacDonald-Lofts in 2015. Since then, there have been single training days held on the mainland each spring, though these were not held during the years of the Covid pandemic. The scheme, which is overseen by the North Devon Biosphere Reserve, encompasses a day of training covering marine wildlife identification, how to behave when close to seabirds and grey seals, how to record and report sightings, and how to follow the MPA's Code of Conduct. Once skippers have attended a training day, they can advertise they are an Accredited Operator and are included on a list of certified skippers recommended to be used for visiting the island. (see:**www.northdevonbiosphere.org.uk/accreditation-scheme**).

An online version of the course was developed during the pandemic, and 2023 saw the resurrection of the in-person version of the scheme with a training day held on 9th March. About 30 charter boat skippers and crew members (as well as some other interested parties) attended the course which was conducted by Beccy MacDonald-Lofts. The Warden, Rosie Ellis, later commented that it was good to see so many taking part as it shows that the scheme is being taken seriously.

◄ *Logo of the North Devon Marine Wildlife-Aware Accreditation Scheme.*

University Research Projects

There were three student MSc studies relating to the MPA carried out during 2023. These were undertaken by Tara McEvoy-Wildling (University of Exeter) who investigated the effectiveness of a new non-invasive sampling method for surveying benthic infauna; Lara Winsloe (University of Exeter) who studied the parental care of the Herring gull; and Theodora Stephens-Manassieva (University College London) who investigated how the island's Marine Protected Area is managed. Natural England has confirmed they do not plan to supervise any Lundy-related student studies during 2024, due to their limited in-house team capacity only now allowing just one student project to be supervised per year.

Keith Hiscock, Chair of the Advisory Group, pointed out during the October meeting that in his lectures to Masters' students at the Marine Biological Association in Plymouth, he used the example of Lundy and of this Advisory Group as part of how the management of MPAs should be done. He used the Lundy MPA Management Plan as the only example he could find in England of a structured marine management plan with goals, objectives, and tasks. Lundy certainly ranks highly in setting a good example in this field. Robert Irving believes that there is a lot more that could be done, with potential projects having to be 'put on hold' by a lack of funding.

The appointment of Marine Wardens

Following the success of having two volunteer wardens specifically appointed to help with the Marine Festival during the summer of 2022, it was pleasing to note the appointment of a volunteer assistant marine warden to the island's Conservation Team for the summer of 2023. Nao Szulc, a marine biology student from Exeter University (Penryn campus), was present on the island during the main family holiday period, from 13th July until 27th August, undertaking snorkel safaris, rockpool rambles, and filling diving cylinders. Another student volunteer, Nicola Dunkin, acted as a seal warden from 1st August until 7th October, coinciding with the grey seal pupping season. Towards the end of 2023, Tara McEvoy-Wilding was appointed as the new Lundy Assistant Warden and will take up her post in spring 2024. Tara was one of the two volunteer Marine Festival wardens during the summer of 2022 and her marine biological expertise will be greatly welcomed by LFS members.

Scaffolding poles at Brazen Ward

Back in February 2018, whilst repairs were being undertaken on the stone platform at Brazen Ward (a Scheduled Monument dating from the Civil War period), a particularly strong storm occurred which popularly became known as the 'Beast from the East'. As a result of the exceptionally strong wind, some steps made from scaffolding poles were blown away from their supporting structure and strewn over the surrounding rocks. Some of the twisted wreckage was later recovered from rockpools in the intertidal whilst other sections had become wedged in amongst large rocks below the low water mark.

This incident was first reported to the Group by Derek Green at the meeting in April 2018 (see Irving, 2019). He pointed out that the removal of the wreckage from the subtidal areas would not be a straightforward procedure as several had become wedged into crevices and their overall weight was considerable. However, it was agreed that the removal of the wreckage should be attempted whenever a suitable opportunity arose.

At the 2023 meeting in October, it was asked if the wreckage had since been removed. The answer came back that it had not, and it was now the considered opinion that it should not be. The cost of doing so would be prohibitive (amounting to over £7,000), requiring a commercial diving team to be on-site for several days, together with heavy lifting equipment which was likely to cause further damage to marine life which had now grown over the buckled poles. It was agreed that the

wreckage should be treated in the same way as any other shipwreck, i.e. left to decay naturally, forming an additional habitat to be colonised by marine life over time.

A short documentary film about Lundy's No Take Zone

As part of the Marine Festival in 2022, a film was produced about the MPA's No Take Zone, which covers an area of 3.3 km^2 off the island's east coast. The film was sponsored by the Blue Marine Foundation (who intend to use it to support their campaign to promote Highly Protected Marine Areas) and was filmed and directed by Gareth Alvarez and Rob Whitney of North Devon Moving Image. At the Group's May meeting it was reported that the film was in the final stages of editing and at the October meeting it was announced that a preview screening of the finished film would take place in Ilfracombe in November. Consequently, on the evening of 28th November, an invited audience of 60 (all of whom had had some input into the film in one way or another) were invited to the screening at the Limekiln Café close to the harbourside in Ilfracombe. The intention is to have a public screening of the film at the South-West Marine Ecosystems Conference in Plymouth in April 2024, after which Blue intends to make it freely available for all to see via YouTube.

A request to use the Lundy MPA name to help promote a cosmetic product

Following an article I had written in early 2022 for the Marine Conservation Society's magazine about celebrating the 50th anniversary of the establishment of the MPA at Lundy, I was contacted towards the end of 2023 by a Corporate Partnerships Manager at MCS asking if I could assist one of their corporate supporters to do some filming at Lundy. The party in question turned out to be a UK-based international cosmetics company who were developing a new skincare product based on the culture of planktonic diatoms. The company was keen to use diatoms netted from the waters of the country's longest-established MPA, and to feature the name of the Lundy MPA on the product's containers.

Unbeknown to me at the time, it turned out that the filming in question had already taken place but that a second visit was being sought. The intention would be to emphasise the conservation ethos of the island. Several plankton samples, found to contain suitable diatom species for 'growing on', had also already been collected from within the MPA. I agreed to present the request of the company to the October meetings of both the Advisory Group and the Management Forum and to inform them of the outcome.

A conversation with the Lundy General Manager Derek Green revealed that this was the fourth time in the past year that a cosmetics company had wanted to use the Lundy 'brand' to endorse their products. All of these requests had been turned down on the basis that it smacked of 'greenwashing' by the companies and that this latest approach should be viewed as trying the enhance the company's green (or perhaps blue) credentials. Following due consideration, representatives of both the Advisory Group and the Management Forum agreed that the request to make a promotional film at Lundy be denied and that it be made clear the name of the Lundy MPA should not be used to help promote any product.

News from Natural England

Following a short, weather-curtailed field visit (two days) in September 2022 by Natural England marine biologists to assess the condition of the habitat features of the Lundy Special Area of Conservation (SAC), each stipulated feature and sub-feature was determined to be in favourable condition, with 'varying degrees of confidence'. The habitat features in question are the intertidal and subtidal rocky reefs (level of confidence: low); submerged or partially submerged sea caves (level of confidence: low); and 'sandbanks which are slightly covered by seawater all the time' which, in the case of Lundy, are taken to include the muddy sediments off the island's east coast (level of confidence: medium). Note that Grey Seals, the fourth named feature of the SAC, were not included in this assessment.

Despite the levels of confidence in these assessments as being low or medium, each of these three habitat features was allocated '100% favourable condition' status by Natural England (Natural England, 2023). However, the two marine biologists who sit on the Advisory Group, Dr Keith Hiscock and Robert Irving, queried these assessments as they appeared to be both misleading and inaccurate. Indeed, Keith wanted to point out that, in his role as editor of the marine life sections of the SW Marine Ecosystems report for 2022 (Hiscock & Earll 2023), he concluded that: 'overall, Lundy's shore and seabed marine life is in poor condition', reflecting a reduction in the number of species and their overall condition and/or abundance.

The condition assessments of the SAC's listed features must be undertaken at least once every six years. In this latest assessment round, the cut-off date for assimilating data relating to each feature/sub-feature was 31st December 2022. This meant that the study of the populations of the Sunset Cup Coral at the Knoll Pins, undertaken during the summer of 2022 and reported on in mid-January 2023 and which showed a continuing decline in the numbers of individual corals, was not considered. Neither was the assessment of the condition of Pink Sea Fans carried out during the Marine Festival, as well as anecdotal evidence of a decline in various anthozoan species, including other corals and colonies of Red Sea Fingers. Representatives of the Ilfracombe Dive Club were also disappointed not to have been asked for their views about the overall condition of the SAC at the time of the field visit. Natural England responded by saying the results of other surveys would be taken into account during the next round of condition assessments.

News from D&S IFCA

D&S IFCA byelaws allow bottom trawling to take place on an area of subtidal sand in the northeast corner of the MPA. The Group was informed that two vessels completed four trawls in that area between 23rd June and 23rd August 2023. The longest trawl was for 29 minutes. This level of activity was below the baseline level set in 2019, so no check of the impact of the trawling activity was required under the Habitat Regulations.

A Belgian trawler, the *Windroos* registered in Zeebrugge, was reported to the IFCA by the island's Warden on 3rd July 2023 as being present within the No Take Zone with its net gear in the water over the side of the vessel. Being underway, it could have been actively fishing although the skipper later explained his crew were washing the net, that it was well clear of the seabed, and that it was not fishing at all. Whilst this explanation was eventually accepted by the IFCA's enforcement team, 'gear-streaming', as it is known, is still an offence (the relevant bylaw states that all gear should be lashed down or stowed when a vessel is within a Marine Protected Area). However, the enforcement team was unable to obtain sufficient circumstantial evidence (such as date, time, location etc.) to enable prosecution proceedings to be taken forward, even though photographs and video recordings had been made at the time. As it was, the vessel in question was too large to be granted a licence to fish within the D&S IFCA's waters and would require a licence from the Marine Management Organisation. It was thought to have been at Lundy whilst sheltering from rough weather. It was reassuring to know however

▲ *The Belgian trawler Windroos under way within the No Take Zone, with a net (hidden) lowered over its starboard side, photographed from the island. (Photo: Joe Parker).*

that not only did members of the Conservation Team spot this activity at the time but that several members of the public reported it to the Warden as well.

News from Historic England

Following some misunderstandings last year regarding permissions for individuals to dive on either of the two protected wrecks within the MPA, the Warden had prepared a spreadsheet which she had sent out to the local dive clubs and charter skippers for those intending to undertake dives under the Lundy Company's licence. This had been done in agreement with Terry Newman (Maritime Archaeologist at Historic England) and should help streamline the way the system works. The Nautical Archaeology Society (under the guidance of their Education Manager Peta Knott) held a Protected Wreck Day (PWD) in June, following on from four successful inaugural PWDs held during the Marine Festival in 2022. The plan had been for divers to undertake 'guided' dives (i.e. with laminated labelled diagrams) on the SS *Iona II* protected wreck and the HMS *Montagu* scheduled monument. Unfortunately, south-westerly winds meant that it was not possible to dive on the *Montagu*, so an alternative dive on the MV *Robert* off the east coast was undertaken instead. It is hoped these Protected Wreck Days will become an annual occurrence in the future.

Use of an underwater fluorescent marker by Historic England to deter thefts from Protected Wreck sites

Terry Newman informed the Group at the October meeting of a plan by Historic England to add forensic marking to valuable underwater artifacts associated with the country's 57 protected wrecks. The project has been 7-8 years in the making, most of that time being spent creating a suitable gunk-like substance that will work underwater. What has been created is similar to 'smart water' used to deter thieves from stealing items above water. The new product will be invisible underwater but will show up under ultra-violet light. It remains stuck to anything that touches it. Its chemical signature also makes the product site-specific, meaning it can tie the theft of an object (or even just of someone's presence at a site if they get gunk on themselves) to that site.

Terry explained that the product had been developed by the marine archaeology company MSDS (partly run by Alison James who used to represent Historic England on Lundy's MPA Advisory Group). He added that the Gull Rock protected site at Lundy could well be suitable for the use of this product, as several artifacts from that site had already gone missing since it was first discovered in 1968. It is likely that sites where the product will be applied over the coming years will be kept secret so that would-be thieves would be unaware of which sites have been treated and which have not.

Your input

If there are any matters which LFS members would wish to have addressed at the Advisory Group meetings, I would be happy to raise them on your behalf: **robert@sea-scope.co.uk**.

References

Hiscock, K. & Earll, R. (eds) 2023. *South-west Marine Ecosystems Report for 2022*. Marine Biological Association of the UK, Plymouth. DOI: 10.17031/7kfv-tq71.

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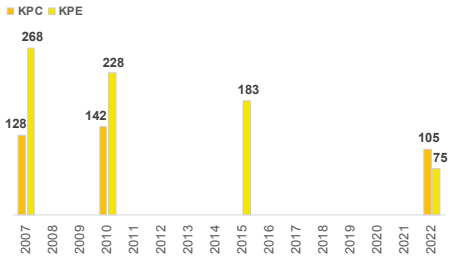
Natural England Report 2023:
https://designatedsites.naturalengland.org.uk/Marine/MarineFeatureConditionDirect.aspx?SiteCode=UK0013114&SiteName=Lundy&SiteNameDisplay=Lundy%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=1.

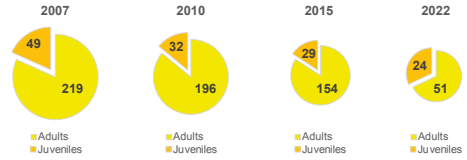
▲ *Two Sunset Cup Corals* Leptopsammia pruvoti *joined at their bases, Knoll Pins, Lundy (Photo: Paul Kay).*

THE LUNDY MARINE FESTIVAL 2022 - a correction.

In the account of the 2022 Lundy Marine Festival written by Robert Irving in the 2022 Annual Report, one of the figures was reproduced with part of it missing, for which the editor apologises. Robert has kindly supplied a correction, which appears below.



▲ *Figure A. Total no. of Sunset Cup Corals by year (2007-2022) and by site.*
[KPC = Knoll Pins Cave; KPE = Knoll Pins East.]



▲ *Figure B. Number of individual cup corals (adults and juveniles) from the Knoll Pins East site, 2007-2022.*

'The figure in question (on p. 29 of the 2022 AR) related to the number of Sunset Cup Corals (*Leptopsammia pruvoti*) present at two monitoring sites at the Knoll Pins from 2007 until 2022. Unfortunately, the numbers for 2022 were missed from the histogram. The complete figure (Fig. A) is reprinted left. A second figure (Fig. B) is also included here which provides a clearer explanation of the study's conclusion'.

'Figure A shows that populations of the Sunset Cup Coral have continued to decline at both monitoring sites at the Knoll Pins. The Knoll Pins East site is most dramatic in its decline. Figure B separates out the 'adults' from the 'juveniles' at the Knoll Pins East site. The total number (as indicated by the size of the pie charts) drops over the years but note that the proportion of juveniles is higher in 2022 (at about 33%). It is hoped this might indicate the downward trend in numbers is starting to level off'.

Robert Irving
12th March 2024

▼ *Fulmar (photo: Paul Dean).*

▲ *Purple Sandpiper at Brazen Ward 19 March (photo: Stuart Cossey).*

BIRDS ON LUNDY 2023

Joe Parker, Warden, Lundy Bird Observatory

INTRODUCTION

In previous Annual Reports of the LFS the account of the birds recorded on the island during the year was divided into two sections: The **Review of the Birding Year**, which gave a month-by-month summary of the key or interesting species seen, and the **Systematic List** which summarised data for every species seen for the year. The latter was much the longer section and was the result of systematic daily recording of birds, the data from which eventually allowed Lundy to re-join the UK **Bird Observatory Network**. The full list of birds recorded in the year can now be found on the **Lundy Bird Observatory Website** (**https://lundybirdobs.org.uk/**). However, the Review of the Birding Year will continue in the Annual Report and the 2023 account follows below.

Review of the Birding Year

January

During January an overwintering **Sparrowhawk** (an unusual island record) and **Merlin** made the few remaining passerines wary, and an adult **Iceland Gull** took centre stage on the 22nd. By the end of the month, auks began returning in greater numbers to their ledges, with four figures logged by the 31st. **Purple Sandpiper** numbers gradually increased through the month, peaking at 11 on the 1st of February (a new record count). The first confirmed signs of breeding **Raven** were logged on the 16th and large gulls started to congregate at breeding sites. A female **Shoveler** appeared on the 5th and lingered until the 13th, marking the fourteenth island record. By the end of the month, Jenny's Cove, the island's largest auk colony, featured 5,100 **Guillemot**, 700 **Razorbill**. There were also three **Puffin**, the island's second earliest return date.

▲ *Iceland Gull on High Street Field 22 January (photo: Stuart Cossey).*

March

We welcomed the first **Wheatear** touch down on the 5th and the first notable **Meadow Pipit** passage got underway on the 3rd. **Hooded Crow** were seen from the 10th to the 14th. Movements started to gain some momentum when light winds welcomed the first **Swallow** (16th), **Sand Martin** (17th), and **House Martin** (19th). A mini arrival of 33 **Chiffchaff** were grounded on the 18th, a day after the first **Blackcap** of the year. The first **Willow Warbler** appeared on the 21st Nine **Purple Sandpiper** lingered through the month and hirundine passage intensified.

April

The month opened with moderate winds from the east and southeast, switching to rain showers and strong southwesterlies by the 10th. Easterly winds crept in again by the 14th and set in for a week from the 17th which saw the flood-gates of migration open. Totals quickly racked up to over 500 **Willow Warbler**, 74 **Chiffchaff**, four **Reed Warbler**, 12 **Grasshopper Warbler**, five **Sedge Warbler**, 300 **Blackcap**, three **Whitethroat**, a **Firecrest** and six **Goldcrest**. A respectable effort from the ringers present closed the nets at the end of play on the 17th having processed 402 birds! A big clear-out followed but a **Siberian Chiffchaff** was ringed on the 23rd. The 'big day' coincided with our Young Naturalists Weekend which was hosted for the first time with huge success and introduced fourteen 18–30-year-olds to the world of bird ringing.

On the 17th the 'Pondsbury **Great White Egret'** marked the third island record. The 20th welcomed the island's seventh **Little Ringed Plover,** which was also seen the following evening. Light wader passage continued through the month and a **Sandwich Tern** graced the Landing Bay on the 12th as the **Kestrel** pair began setting up territory and a **Redshank** was grounded during a storm.

◄ *Little Ringed Plover on Lighthouse Field 20 April (photo: Luke Marriner).*

May

The month started well with a fleeting sighting of **Hoopoe** on the 3rd. It was followed by a long-staying **Purple Heron** which arrived on the 5th and hung around Pondsury until the 21st. While only the fifth island record, it was not entirely unexpected given the spring influx across the southwest and east coast of England. Other long stayers included the overwintering **Purple Sandpiper** flock which lingered through spring until a lone individual on the 23rd marked the latest spring record for the island. A **Hooded Crow** frequented a flock of **Carrion Crow** counterparts from the 30th of April to the 24th of May. A **Wood Warbler** appeared briefly on the 5th while the first half of the month enjoyed a strong hirundine passage, peaking at 17,000 Swallow on the 7th.

Then a nice run of birds began with a stunning male **Serin** which played hard to get on the 21st. Two male **Crossbill** and a fall of 42 **Spotted Flycatcher** on the 22nd sparked the island into life again as the bulk of the passerine migration began to wane. The following day did not disappoint, as the Spotted Flycatcher count rose to 64 individuals. The 24th opened with the strident song of a first-summer male **Common Rosefinch** singing in Millcombe to the backdrop of migrant **Willow Warbler** and **Cuckoo** song. A **Dotterel** on the 25th made way for a **Red-throated Pipit** and **Grey-headed Wagtail** the following day. The island Common Rosefinch population doubled on the 27th as two singing birds were logged in Millcombe and St John's Valley.

▲ *A Purple Heron flying over Pondsbury 19 May (photo: Richard Campey).*

▲ *A male Serin near Benjamin's Chair 18 May (photo: Richard Campey).*

▼ *A Grey-Headed Wagtail on St. Helen's Field 26 May (photo: Richard Campey).*

▲ *The first summer male Rosefinch in Millcombe 24 May (photo: Richard Campey).*

June

The Common Rosefinch lingered but remained elusive, with brief bouts of song heard on four occasions from the 4th to the 18th of **June**. A **Quail** was seen on the west coast on the 7th before a singing male **Barolo Shearwater** was heard whilst conducting a ringing session at a Manx Shearwater colony! This is the third island record , the previous two being of a different male who visited the island for several weeks in 2010 and 2011.The Barolo story continued through the month as the bird was eventually caught and ringed on the 13th. It was last heard calling on the 24th.

July

After a remarkable record of a singing **Tree Pipit** on the 21st of June, July kick-started with excellent sea watching even by Lundy standards. A big **Manx Shearwater** movement along the Bristol Channel involved a remarkable 13,360 individuals passing Lundy's shores in a single hour on the 3rd of July! As huge numbers of **Cory's Shearwater** invaded southern Ireland and south-west England. Lundy finally joined in on the action on the 31st when a single bird passed Dead Cow Point in late evening (marking the second island record!).

August

A **Sooty Shearwater** joined the action on the 5th of August, marking the first record since 2019. Strong winds resulted in a delayed start to any autumn passerine ringing and nets were finally opened on the 7th of August. A **Ruff** on the 10th trumped a **Green Sandpiper** the previous day. 173 **Willow Warbler** arrived on the 13th but quickly cleared out after which the first passage **Tree Pipit** was recorded on the 16th. The second half of August built momentum with a double *Hippolais* warbler day and plenty of common migrants filtering through. A change of pace came on the 23rd when a **Melodious Warbler** was trapped and ringed in Millcombe. A second 'Melody' then popped up along the lower east coast on the 27th while an **Icterine Warbler** graced Millcombe between the 27 th and the 28th and a **Common Nightingale** (a scarce migrant on Lundy - only the seventh record this century!) skulked around on the 28th.

September

Clear skies and bright, dry days meant that, despite consistent easterlies, the first two days were subdued, with common migrants trickling through and the morning census thin on the ground. A **Pintail** was present between the 1st-to the 7th, initially favouring Millcombe Pond and the Landing Bay before relocating to Pondsbury. Incredibly, the duck ended up in the top shelf of a passerine mist net, but frustratingly did not remain pocketed long enough to extract!

A ringtail **Hen Harrier** graced Quarter Wall briefly on the 2nd, and migrants dropped in throughout the day on the 3rd, with a final total of 82 **Willow Warblers**. Working the east that afternoon was very memorable, featuring a **Western Bonelli's Warbler**, **Melodious Warbler** and **Wryneck**, later accompanied by a long-staying juvenile **Rose-Coloured Starling** in the village in early evening, which hung around until the 20th.

A period of settled light easterlies brought further excitement, a first-year **Woodchat Shrike** on the 6th was matched by ringing four **Wryneck** in five days. A fifth unringed bird showed on the 12th, along with a **Nightingale** below the Terrace and a second calendar-year **Hoopoe** was dazzled the evening before. After a slow early autumn on the raptor front, passage picked up with a first-year **Marsh Harrier** arriving off the sea on the 10th, followed by a first-year **Ospre**y and a brief **Hobby** appearance on the 11th. A **Bonelli's Warbler** showed very nicely on the Terrace on the 10th - although no calls were heard; it is likely it was the same individual logged seven days earlier.

▲ *Melodius Warbler in Millcombe 31 August (photo: Luke Marriner).*

▲ *A Rose-coloured Starling near the village 3 September (photo: Luke Marriner).*

▲ *Woodchat Shrike in Millcombe 6 September (photo: Angus Croudace).*

▲ *A Hoopoe caught by dazzling at night (photo: Adam Day).*

A mini fall of 76 **Blackcap** occurred during a period of northerly winds overnight on the 13th. However, clear skies and low winds quickly beckoned them onwards and a mass exodus left the island quiet. Strong easterlies over the following weekend brought a few new birds in, but most sensibly hunkered down. During a short-lived break in the weather, the 17th saw feeding activity resume and a stunning first-year **Barred Warbler** drop into the Millcombe mist nets, staying on the island into the following day.

On the 15th, a first-year **Dotterel** was dazzled on the North End Plateau whilst a **Storm Petrel** ringing session took place further down the cliffs. Following the smart **Grey-headed Wagtail** in spring, a first-year individual was found associated with two *flavissima* on the 15th. A couple of **Wryneck**

◄ *Barred Warbler in hand having been caught in the mist net in Millcombe, 17 September (photo: Anna Sutcliffe).*

continued their tenure along the east and around Millcombe, with one unringed individual also newly-in at Rocket Pole on the 14th.

Hurricane Lee arrived at pace during the middle of the month, displacing large numbers of North America land birds. With unprecedented numbers of vagrants crossing the Atlantic, Lundy joined the west coast action from the 20th, logging the first of three **Red-eyed Vireo** to grace the island.

▲ *A first year Dotterel photographed during a 'dazzling' survey at night on the North End plateau 15 September (photo: Joe Parker).*

After this period of strong westerlies, the weather calmed by the 21st resulting in a fall of 350 **Blackcap** across the island. Other records of note included a **Sandwich Tern** on the 23rd, a first-year **Osprey** on the 18th, a **Wood Warbler** trapped and ringed on the 21st and a **Little Bunting** feeding alongside **Linnet** on the 23rd. Later in the month Storm Agnes delivered the first **Balearic Shearwater** of the year during a sea watch on the 27th, and the 29th featured a push of hirundines accompanied by a juvenile **American Cliff Swallow** (a first for the island).

▼ *Red-eyed Vireo a North American vagrant caught in Millcombe 9 October (photo: Angus Croudace).*

▲ *A Wood Warbler trapped in Millcombe on 21 September (photo: Britanny Maxted).*

▼ *Merlin at Jenny's Cove 14 October (photo: Richard Campey).*

▲*Ortolan Bunting in Millcombe 7 October (photo: Angus Croudace).*

Four bunting species made the island's year list in just over a week in September, with a **Little Bunting** on the 23rd, followed by an **Ortolan Bunting** on the 30th and regular **Reed Bunting** sightings from the 2nd of October. But most bizarrely, as a dominant westerly system stalled passage, a first-year **Yellow-breasted Bunting** bucked the trend on the 25th, becoming only the third island record; previous sightings date back to the 1980's.

October

Golden Plover featured daily, peaking at 29 on the 12th and a sea watch on the 2nd came up with two **Arctic Skua** and a **Great Northern Diver**. After a notable absence, the first autumn **Merlin** finally arrived on the 4th, followed by the first **Black Redstart** of the season on the 8th. Mist nets were opened more frequently in response to the light winds and the most productive session came on the 9th, processing 51 **Siskin,** and a new **Red-eyed Vireo** as the first winter thrushes arrived overhead.

The first **Snow Bunting** was picked up on the 4th before the second **Ortolan Bunting** of the autumn was found in Millcombe on the 7th. A single **Redshank** grounded during a storm was subsequently dazzled on the 16th and hung around until the 18th. By mid-October, **Common Snipe** were being recorded across the island, with a maximum day count of 26 logged on the 12th and they were quickly joined by the first **Jack Snipe** which arrived on the 13th. However, a fascinating dazzling session on the 14th hinted at the true extent of Snipe passage. Fifty-five Common Snipe, five **Golden Plover** and a single Jack Snipe were ringed.

Raptor representation improved from the 12th as four **Merlin** arrived, accompanied by **Redwing** and two **Short-eared Owl.** A ringtail **Hen Harrier** quartered the island from the 13th to the 19th, trumped by a stunning juvenile **Pallid Harrier** which arrived on the 19th, the first record for Lundy. Enjoyed by many at locations across the length and breadth of the island, it was watched carrying away a Common Snipe and later roosted by Pondsbury. It was observed leaving the island shortly after dawn on the 20th.

The first **Yellow-browed Warbler** of the autumn was very elusive in Millcombe on the 15th , while a single **Chough** pushed along the west coast. A first-winter **Yellow-Legged Gull** was found feeding on a carcass of an Atlantic Blue-fin Tuna on the 17th, both good Lundy records. At least two **Yellow-browed Warbler** occupied the east coast on the 20th, with one bird continuing on the island until the 27th, typically being found in Quarter Wall Copse. A **Red-breasted Flycatcher** joined the action on the 20th.

A late **Tree Pipit** lingered between the 19th and the 20th and a **Richard's Pipit** was flushed south over the Castle on the 20th. A **Treecreeper** on the 21st represented only the second appearance of the year. After the first initial push of 1,500 **Chaffinch** on the 16th, the passage peaked at 4,031 on the 23rd and another 3,114 the following day. A **Lapland Bunting** toured the island from the 20 th to the 22nd and the second **Snow Bunting** of the autumn was elusive on the 23rd.After only one previous record dating back to November 1956, a female-type **Surf Scoter** briefly featured off the east coast on the 27th before being spooked by a resurfacing **Great Northern Diver**. Several weeks ahead of the big national influx, an adult male **Waxwing** brightened up Millcombe on the 28th, becoming the first to be ringed on Lundy on the 31st and continued on the island until the 3rd of November.

▲ *Common Snipe photographed during a 'dazzling' survey at night 2 Oct (photo: Luke Marriner).*

▲ *A Pallid Harrier photographed flying over Lundy on 19 October (photo: Eden Davis).*

▲ *A Yellow-browed Warbler in Quarter Wall Copse on 17 October (photo Angus Croudace).*

▲ *A male Waxwing caught in Millcombe on 31 November (photo: Luke Marriner).*

November

The eleventh month opened with a late **Osprey** on the 1st, the fourth record of the autumn and the latest recorded for Lundy by five days. In Millcombe a **Woodlark** sheltered on the 2nd and a small **Woodcock** roost started to form. It was a quiet month for waders but included four **Golden Plover** passing west over the helipad on the 13th (between passenger flights). Barton's Field had been a magnet for **Jack Snipe**, but nocturnal surveys stalled owing to inclement weather or full moon phases. Feeding parties of 60 **Gannet** were a common feature off Lundy, sometimes accompanying a pod of 20 **Common Dolphin**. **Merlin** became a regular (if fleeting) sight over the village, along with an overwintering **Kestrel** and a **Peregrine**.

December

A **Great Northern Diver** frequented the Landing Bay through the month, although appearances were sporadic. Further offshore, movements of auks peaked at 500 **Guillemot** and 200 **Razorbill** logged on Boxing Day. A big clear-out of passerines left Millcombe feeling like a ghost town, only the calls of squealing **Water Rail** and ever-present **Robin** song broke the silence. Two **Woodpigeon** remained faithful to the valley, as well as the small **Woodcock** day-time roost. Pondsbury remained quiet, acting as a day-time roost for **Snipe** and peaking at 11 **Teal** on the 13th. Island coverage waned but a late push of nocturnal surveys in late December ringed an additional seven Woodcock, eight **Jack Snipe**, four **Common Snipe** and a **Snow Bunting**.

OTHER BIOLOGICAL RECORDS FROM LUNDY

The following reports have been compiled by the recorders for each group of organisms. Most of the records have been taken from the pages of the LFS Logbook not devoted to birds, and we thank all those who have taken the time and trouble to enter their observations of animals, plants, bryophytes, lichens, and fungi whilst on Lundy. We have not attempted to verify all the records, but unusual or interesting observations will have been checked with the originators. Most of the information will also eventually appear on the LFS website and on the various national databases.

Please keep entering your 2024 sightings and sending us photographs that can be used to illustrate the 2024 AR!

MARINE SPECIES

Compiled by Keith Hiscock

There were no formal surveys of marine species in 2023 and so records are gleaned from the LFS Logbook (including Warden's records) and from observations made by the compiler. Records of commonly occurring species are not included unless there are unusual numbers or observations of breeding. Most records entered to the LFS logbook in 2023 were of cetaceans. A few records appear on iNaturalist. MARINElife survey reports (**https://www.marine-life.org.uk/survey-reports**) include records of cetaceans on the passages to/from Lundy which are summarised here but are not strictly from Lundy waters.

Names of taxa given here are the most recent (at March 2024). For authorities for each species and to check against changes to names, go to **www.marinespecies.org**.

ALGAE

OCHROPHYTA

Wireweed *Sargassum muticum*
A non-native species recorded at Lundy for the first time in 1999. Recorded in 2023 around Rat Island and in the Landing Bay and in pools south of the Lametor peninsula. Amounts seemed less than in some years generally but pools in Devil's Kitchen had a higher infestation, most likely because clearing plants from the pools stopped after 2021. (Keith Hiscock).

MARINE INVERTEBRATES

GELATINOUS PLANKTON

The very few records of gelatinous plankton ('jellyfish' from various phyla) suggest that Lundy continues to attract 'oceanic' species. However, scyphozoan jellyfish were sparse in 2023 in south-west England in general and likely at Lundy. Especially notable is that there were no observations from Lundy of **Barrel Jellyfish** (*Rhizostoma pulmo*) that usually attract logbook entries.

▲ Pandea conica, *one of the gelatinous plankton species to look-out for (photo: Nao Szulk).*

◄ *A small Portuguese Man O'War* Physalia physalia *at Devil's Kitchen on 21st January (photo: Stuart Cossey).*

CNIDARIA: HYDROZOA

Portuguese Man O'War *Physalia physalia*
One small colony washed-up at Devil's Kitchen on 21 January (Stuart Cossey). Records have been very sparse throughout south-west England in 2023 and many were small colonies (Keith Hiscock).

Rocket Jelly *Pandea conica*
Recorded in the Landing Bay on 21 and 24 July (Nao Szulk).

CNIDARIA: ANTHOZOA

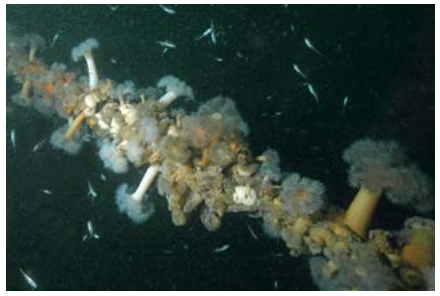
Scarlet and Gold Star Coral *Balanophyllia regia*
A (new location) cluster of five in a crevice at the eastern end of Mermaid's Pool on 8th August (Nao Szulk).

Sunset Cup Coral *Leptopsammia pruvoti*
Maggs Ashton reports (possibly 1st May) high numbers of very small *Leptopsammia pruvoti* corals on the Knoll Pins monitoring sites: significant because of the stark decline in abundance of this southern,and nationally rare,species at Lundy since the mid-1980s. An observation of small individuals in early May would likely reflect recruitment in 2022.

Plumose Anemone *Metridium senile*
The abundance of Plumose Anemones on the wreck of the MV Robert off Tibbetts Point has declined greatly in recent years although images of the jetty piles in the Landing Bay in 2022 show strong growths. The species has shown reduced abundance at many locations inshore along the south-west England mainland (to be summarised in the www.swmecosystems.co.uk annual report for 2023). Observations from the MV Robert were confirmed by Maggs Ashton (Ilfracombe & North Devon Sub-Aqua Club) and from south-west England generally by Keith Hiscock.

NEMERTEA

A parasitic nematode worm ?*Anisakis* sp.
Anisakid worms are parasitic in fish and appear to be an increasing problem in Bass at least. The worm was identified in a bass caught by Rob Waterfield in August. The identification is tentative.



► *Railings on the MV Robert dominated by Plumose Anemones on 27th July 2008 (photo: Keith Hiscock).*

▲ Onchidella celtica*: a pulmonate gastropod found at new locations in 2023 (photo: Keith Hiscock).*

MOLLUSCA: GASTROPODA

Celtic sea slug *Onchidella celtica*.
There were 35 individuals counted at the Devil's Kitchen site (where they were first found on Lundy in 2020) on 17 April (Rosie Ellis). A further (new) location was found in 2023 at Mermaid's Pool south of the South Light where nine were counted on 11 June (Tara McEvoy-Wilding) and more were found along that coast on 31 July including below 'the rope' (Matthew White).

MOLLUSCA: BIVALVIA

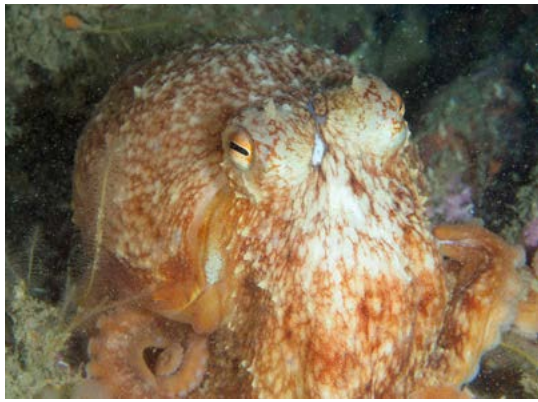
Pacific Oyster *Magallana gigas*
A non-native species first recorded at Lundy in 2020 and destroyed where found at Rat Island. A further single large individual was found on the wall of Christie's Quay on 25 August and destroyed (Nao Szulk).

MOLLUSCA: CEPHALOPODA

Curled Octopus *Eledone cirrhosa*
One seen and photographed off the west coast on 30 April. An infrequently recorded species at Lundy (Maggs Ashton).

BRYOZOA

Red Ripple Bryozoan *Watersipora subatra*
A non-native species first found at Lundy in May 2021 in the cave behind the arch on the north side of Rat Island. In 2022, it was found in extensive patches at 'Anemone Cave' about 20 m west of the 2021 location where it continued to be present and had expanded further in abundance and extent in 2023.



▲ *A Curled Octopus* Elodone cirrhosa *off the west coast (photo: Maggs Ashton).*

◄ *Red Ripple Bryozoan* Watersipora subatra *(the dark red patches) extending into 'Anemone Cave' at Rat Island on 3rd August 2023. The transect line is re-established between two stainless steel screws placed in 1986. (photo: Keith Hiscock).*

CRUSTACEA: DECAPODA

Montagu's or Furrowed Crab *Xantho hydrophilus* Reported as more than usual. Some berried females. Noted on 17th April and 5th May (Rosie Ellis).

Risso's Crab *Xantho pilipes* Reported on 17th April including berried females (Rosie Ellis).

CHORDATA: PISCES

Basking shark *Cetorhinus maximus*
One seen between the Sugar Loaf and Landing Bay on 8 August (the Mellowdew Family, Shaun Barnes, Darren Dowding). Basking Shark sightings have declined enormously throughout south-west England since about 2011.

Sunfish *Mola mola*
One off Gull Rock on 11 September (Gary and Donna Dexter).

Atlantic Bluefin Tuna *Thunnus thynnus*
One observed leaping out of the water off Battery Point on 22 August (Anon.) and another photographed by Barry Edwards on 25 September off the North End. The carcass of a Bluefin Tuna was photographed in the Landing Bay on 17 October by Tim Jones. Atlantic Bluefin Tuna have steadily returned to south-west waters and in large numbers in some areas since about 2015.

▼ *An Atlantic Bluefin Tuna hunting garfish off the North End on 25th Sept 2023 (photo: Barry Edwards).*

CHORDATA: MAMMALIA
WHALES, DOLPHINS AND PORPOISES (CETACEANS)

Overall, the number of records and of individuals seen of **Harbour Porpoise** and **Short-beaked Common Dolphin** were smaller than in 2022. There was one sighting of a Bottlenose Dolphin in 2023 (one in 2022, none in 2021 and one in 2020). There were no recorded sightings of **Minke Whales** on the passage to/from the island (MARINElife surveys) compared with one in 2022, two in 2021 and one in 2020.

MARINELife record sightings of cetaceans on ferry trips between Ilfracombe/Bideford and Lundy. The number of sightings are reported on their website - **https://www.marine-life.org.uk/survey-reports/categories/ilfracombe-bideford-lundy**.

Bottlenose Dolphin *Tursiops truncatus*
One in the Landing Bay on 30th April (maybe: 'Ocean Nova crew')

Short-beaked Common Dolphin *Delphinus delphis*
There were four days on which there were logbook entries for Common Dolphin including two that were for 'dolphin sp.': many less and in fewer numbers per sighting than in 2022. Notably, at least six were seen off Quarter Wall on the east coast in a 'feeding frenzy' accompanied by diving Gannets on 13 September (Anon.) and a large pod was reported off Quarry Bay broken into groups of three or four and many breaching (Joanne Wilby). MARINElife report up to 10 (including sightings of 'dolphin') individuals on eight of 61 crossings where observations were made.

Harbour Porpoise *Phocoena phocoena*
There were 15 days on which there were logbook entries for Harbour Porpoise, mostly single or two individuals. A dead porpoise was washed-up near the jetty on 13 May (Jackie Watt).

Thanks to all of those that reported sightings.

CHORDATA: PINNIPEDIA

Atlantic Grey Seals *Halichoerus grypus*
A full account is given later in this Report.

▲ *Common Dolphin (photo: Paul Dean).*

▲ *Grey Seal North Light May (photo: Paul Dean)*

▼ *Grey Seal pup Christie's Quay September (photo: Paul Dean).*

ATLANTIC GREY SEAL *HALICHOERUS GRYPUS* POPULATION AND PRODUCTIVITY STUDIES IN 2023

Nicola Dunkin and the Lundy Conservation Team

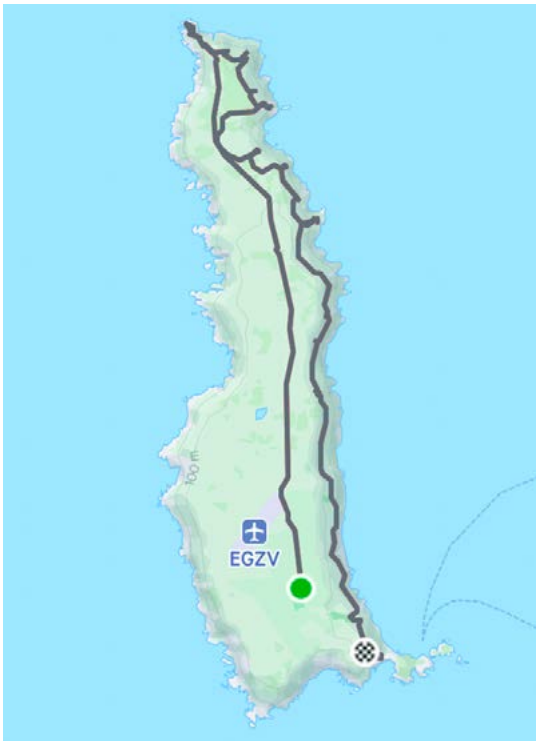
Introduction

The Atlantic Grey Seal population has been monitored consistently on Lundy since 2001, with evidence of *ad hoc* counts and monitoring before that date. This monitoring has historically been carried out by the Conservation Team, archiving the data within the Island's records. The surveys were carried out during the breeding season to understand distribution, population dynamics and productivity. In 2016 the survey method was reviewed to enable the data collected on Lundy to contribute to wider seal population assessments, such as the Sea Mammal Research Unit (SMRU) national seal surveys. (Jones, *et al*., 2020).

In 2023 we were able to conduct two at-sea surveys: one on the *Obsession II*; the other using the Oldenburg's safety boat, with Rosie Ellis (Warden)as the skipper. These were the only boat surveys conducted in 2023 due to the island rib being out of action. They were not however the only full-island surveys carried out, there was also a land-based, island-wide census on 4th October 2023. In addition, regular counts were carried out at least once a week along the East Side of Lundy.

Results

The island was separated into 54 sub-sections, of which 39 were on the East Side. The timing of the surveys depended on the tides and wind conditions. The results are affected by the relative effort put into the survey, the person or persons carrying it out, weather conditions and the amount of public recreation taking place. When conditions of heavy rain or wind gusts over 20mph occurred, risk assessment deemed it too unsafe to proceed, due to the dangerous cliffside locations of some of the survey points. Figure 1 shows the route taken from the North End to the south, using the Lower East Side Path Path. The route includes the walk at the start of the survey from my accommodation in the Lodge (located in the village) to the North End. This example survey was carried out between 07:00 am and 12 noon, on the 11th of September 2023.



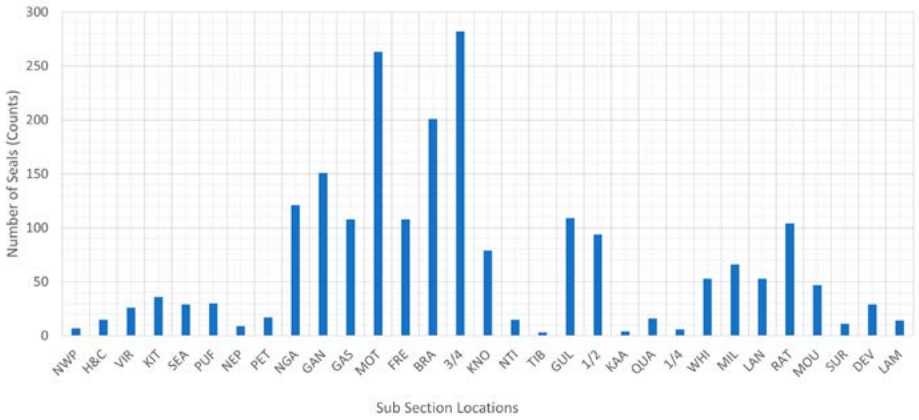
► *Figure 1. Route of the count of Grey Seals carried out on 11th September by Nicola Dunkin.*

Seal Counts

The highest count over the breeding season was 235 seals (142 females, 54 males, 0 juveniles, 0 weaners, 1 white-coat pups and 37 unknown adults) on the 15th of August 2023.

This is 28 more than in 2022 and 11 more than 2018. As in the surveys of 2018 & 2017; most animals around the island were females, with some showing obvious signs of pregnancy, especially in some of the popular haul-out areas, White Beach and Miller's Cake. This year there were also significant haul-outs on the Landing Beach and the Jetty. The first pup was seen on the 15 of August 2023 on the Lower East Side path by Nicola Dunkin at Miller's Cake. The pup was a stage 2 with its umbilical cord detached. This year the pups have stayed around the Landing Bay and the space between Rat Island and the Jetty. The increase in the number of pups on the Landing Bay Beach and near Rat Island meant that for most of September and October they were closed to the public. A considerable number of adult males also hauled out on the Jetty.

Unsurprisingly, the distribution of seals around Lundy is heavily influenced by both weather and sea state. During easterly harsh weather, numbers were lower in the surveys, as fewer hauled out on the east side of the island and more had probably moved to more sheltered caves on the western side.

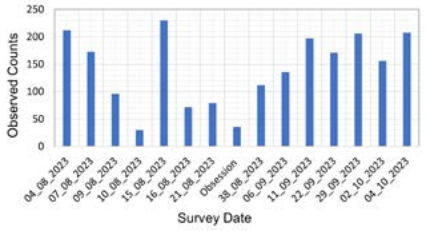


▲ *Figure 2. Totals of seals counted for each subsection along the east side of the Island in 2023.*

Key to abbreviations used for subsections used in surveys along the east side of Lundy:
Hen & Chickens (H&C), Virgin's Spring (VIR), Kittiwake Gully (KIT), Seal's Rock (SEA), Puffin Gully (PUF), North East Point (NEP), Pet (PET), North Gannet's Rock (NGA), Gannet's Bay (GAN), Gas (GAS), Mousehole & Trap (MOT), Frenchman's Landing (FRE), Brazen Ward, Battery (BRA), Threequarter Wall Bay (3/4), Knoll Pins (KNO), NTI (NTI), Tibbetts Point (TIB), Gull Rock (GUL), Halfway Wall Bay (1/2), Kaa (KAA), Quarry beach (QUA), Quarter Wall Bay (1/4), White Beach (WHI), Miller's Cake (MIL), Landing beach (LAN), Rat Island (RAT), Mouse Island (MOU), Surf Point (SUR).

Figure 2 shows the total number of seals counted over the whole of the 2023 season for each of the survey sub-sections (abbreviations for the sub-sections are explained below the figure). The counts include females, males, juveniles, weaners and white coat pups. Over the season the areas where most seals were recorded were Brazen Ward, Threequarter Wall Bay and Mousehole and Trap. These areas are less subjected to harsh conditions and have multiple haul-out areas at both spring and neap tides and cave areas to shelter. There was also an increase in the number of seals hauling-out and having pups on the Landing Beach.

Figure 3 shows the total counts of Grey Seals on Lundy Island during the main pupping season, from the 15th of August to the 24th of October 2023. The figures are all from sites on the east side with one from the south, Lamentry Bay and none from the west. Pup checks were carried out when possible (almost every day). 66 pups were seen, with an 8% mortality rate. This is a very successful rate of survival. Fewer pups were born at Quarries than in previous years. Most pups were found at White Beach, Miller's Cake and Landing Beach.



▲ *Figure 3 Total counts of seals by date, 2023 survey.*

Disturbance

Disturbances were seldom seen during the weekly island surveys. However, during pup surveys, general work tasks and public engagement walk-arounds, multiple disturbances were witnessed and recorded. Some female seals were disturbed by males wanting to mate; this was more frequent and apparent during the later stages of the peak breeding season. Most of the disturbances were caused by recreational activities. For example, on 6th September a recreational tourist boat disturbed two adults, one male and one female, who both flushed off the rocks into the water from a shallow haul-out on the south side of Gannet's Bay. It was thankfully a small drop in height. When seals are flushed from height it can cause significant harm, especially if the individual is female and pregnant. Another incident was witnessed during a survey, where a dive-boat was seen to disturb a female hauled out on a medium-height rock at Rat Island during low tide. Due to concern for the female, it was monitored. It was unable to haul out again due to the low tide, leaving her unable to get the rest she needed.

Other disturbances by recreational activities included snorkelling, where two examples were witnessed. On 10th August at 14:17 one 'bottling' male was disturbed by snorkelers and snorkelling at Rat Island disturbed seals on 18th September at 14:51.

Most of the disturbances observed were within the Marine Conservation Zone (MCZ) recreational area. This is where the Oldenburg is also moored to bring passengers to and from the Island. The jetty is between Landing Beach and Rat Island. This area was used more for pupping this year. This could have been due to the previous year's pupping season being quieter because of less tourism due to COVID-19. The beaches were also very popular with the weaners. Seventeen were hauled on the beach between the jetty and Rat Island one day. The increase in pup numbers and the perceived 'cuteness' of white-coated pups also posed an increased threat of disturbance. Signs were put up and visitors were monitored. However, during a very busy island change-over day some visitors ignored the signage and the conservation team's efforts. They went close to the seals and a mass herd flush occurred back into the sea.

Entanglements

This year, sadly, there were five sightings of entangled seals. The first entanglement sighting was on 3rd August at 14:47(see photo). The transparent fishing line had broken the skin producing an open wound leaving the seal more vulnerable to infection. The second sighting was of a female entangled in a plastic ring which was cutting into her neck. She was seen on multiple occasions, firstly at Mouse Hole & Trap by Nicola Dunkin during a survey on 15th August 2023 at 11:30 (see photo). The female was later seen by recreational boats who reported her swimming near caved areas. One report came from the west side of the island on a windy day and the other from the dive-boats on the East Side near Threequarter Wall Bay. Later, after a period of absence (this did

▲ *Female Grey Seal with transparent fishing line constricting its neck, August 3rd (photo: Nicola Dunkin).*

coincide with strong easterly winds) the female was once again witnessed during a seal survey, swimming off the North end far out at sea.

The next entangled seal to be sighted was on 4th August 2023, at 13:21, of an adult entangled in fishing line around its neck (see photo). It was hauled out alone by the Knoll Pins in calm but cloudy conditions. Nao, one of the marine volunteers, sighted a juvenile entrapped in fishing gear, during a pup check on 27th August 2023. The fifth and final sighting was on 28th August 2023 of a male entangled just above its right front flipper with a fishing line.

◄ *Female Seal with a plastic ring constricting its neck at Mouse Hole & Trap, 15th August (photo: Nicola Dunkin).*

Sightings of tagged seals

The first tagged seal sighted was 80518, a seal seen by Luke Marriner (volunteer Assistant Warden – birds) at Brazen Ward on the 6th of July at 13:42. Luke provided photographic evidence of the sighting (see photo). Once I arrived on the island this information was passed onto the RSPCA who have been able to tell us more about the individual and where it was tagged. The tagged seal (80518) is known as Adobo and was rescued from Porth Joke in Cornwall by BDMLR and treated for respiratory problems and minor wounds. He weighed 15kg on admission to the RSPCA, which is a low weight compared to what the pup should have been (40kg). Adobo was treated

▲ *Male seal with tag (number 80518) at Brazen Ward, 6th July (photo: Luke Marriner).*

and then released at a healthy weight of 43.4kg. The release happened in Combe Martins in North Devon on 20th April 2021.

The season continued with another tagged seal sighting at 15:01 on the 3rd of August by Nicola Dunkin (Volunteer assistant warden – Seals). Nicola provided photographic evidence of the sighting, showing the individual hauled out on Rat Island with the tag number readable (80664, see photo). The RSPCA has been able to tell us more about the individual and where it was tagged. Bobbinet was rescued in Cornwall by BDMLR and treated for an infected wound on her muzzle. She was also underweight, at 17.3kg on admission to the RSPCA, lower than the 40kg considered a healthy weight for a pup of her age. Bobbinet was cared for and then released weighing 37.9kg in Combe Martin, North Devon on 11th January 2022.

Photo identification

Photo identification is carried out by the Cornwall seal group. This identification process is done to make sure that we can keep an up-to-date record of the seals and any new seals on Lundy. This helps to monitor the population and distribution on Lundy Island.

The process includes the use of photographic images capturing three sides (if possible, of each seal). On Lundy, this is a challenge due to the amount of rough terrain to get to the viewing points, the distance that needs to be covered and the limited time to achieve the photographic evidence (due to tide limitations).

Engagement with the public

This year there have been additional presentation talks once a week, specifically on the Atlantic Grey seals on Lundy. These talks have been very popular and a very good way to engage with the public, encouraging visitors to be involved in 'watching seals' on the island.

Engagement was also positive and well received when conducting seal surveys, through conversations with ramblers, birders, and post box seekers. Interest increased after implementing the weekly seal talks. Most engagement was with adults, ranging from 20 to 80 years old!

As the season progressed the Conservation Team conducted a logbook meeting every night in the Tavern. I went along as well and engaged with birders about seals and how they can watch them and record any disturbance/sightings. Making myself known and available for open conversations in the tavern on my lunches and afternoons also increased engagement and awareness. Lastly, engagement this year also came via blogs, social media, Facebook, Instagram.

Conclusions

It is important to say that seal counts do not represent the total population. Some seals may have been concealed by the topography of the island shores. The surveys have been consistent and accompanied by regular checks for pups this year. It has been a very successful year, with record numbers of seals recorded. This could, in part, be due to more surveys being carried out compared to previous years. Another factor is that the easterly storms hit the island later in 2023, allowing the pups to become stronger, better swimmers and more able to survive the bad weather.

Overall, the workload and effort have been sizable. I would say that it is a large task for one member of staff bearing in mind the general responsibilities in addition to the seal surveys. Much more could potentially be achieved if the effort was shared. However overall, a very productive season, with an abundance of seals, seal pups and low witnessed mortality.

Acknowledgements

A huge thank you to all who submitted seal counts and disturbance records in 2023. Special thanks to Rosie (Lundy Warden) for her guidance and support during the start of my volunteering journey on Lundy and Joe Parker for his ongoing support throughout the season. Thank you also to the following volunteers for assistance with fieldwork: Luke Marriner, Nao Szulc, Angus Croudace and Meghan. I would like to extend a huge thanks to the SMRU for their direction and guidance in identifying tagged seals. I would like to thank the RSPCA team for all their help with identifying tagged seals as well as providing the history of each seal. I would also like to thank Nikki and Paul for all their care and detail in sighting observations and reporting. Their skilled photographic evidence of individuals has been amazing, thank you. I would like to thank the Conservation Team for helping with the national seal census conducted on the 4th of October 2023. I would also like to thank Carol for all her seal work and her help and insight into Lundy Seals, I leave knowing they are in good care.

Finally, a thank you to Sue Sayer, Kate Williams, Marion Beaulieu, Sarah and all the volunteers from the Cornwall Seal Group and Research Trust for all their work with regards to training volunteers, taking and processing masses of photographs for the island's identification catalogue and for their general and endless kindness and passion for these wonderful marine mammals.

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FRESHWATER FISHES

Jennifer George

SPECIES PRESENT

The three main fish species found in the Lundy ponds are the **Mirror Carp** (*Cyprinus carpio*) in the Rocket Pole Pond, the **Golden Orfe** (*Leuciscus idus*) in Quarry Pond, and the **Crucian Carp** (*Carassius carassius*) in Pondsbury and the Quarry Pond. Other fish have been recorded e.g. **Rudd** *(Scardinius erythrophthalamus).* In September 2006, The Quarterwall Pond was drying up in the drought of that year, and Roger Fursdon (Lundy Water Engineer) removed about 100 of the stranded fish and transferred them to the Rocket Pole Pond. The fate of these fish is unknown as there has been no detailed survey of the fish in Lundy ponds.

The **Mirror Carp** is a strain of the Common Carp but has characteristic reduced mirror-like scales along the body (see photo). Its length varies from 25-75cm with a weight of 10 -12kg. It can live for up to 30 years. It feeds on invertebrates and plant material and the larger ones often eat small fish. Spawning occurs in June and July amongst weeds in shallow water. It can hybridise with Crucian Carp. Spawning was observed and photographed by Dean Jones (Warden) in June 2021 in the Rocket Pole Pond. (See LFS Annual Report 2021).

The **Crucian Carp** has over 30 equally spaced scales along the body and a convex dorsal fin. It is olive green on the dorsal surface and dull brown ventrally (see photo). Its length varies from 25-45cm and has a maximum weight of 5kg. It can live for up to 15 years. As with the Mirror Carp, it feeds on bottom-living invertebrates and plant material. Spawning occurs in May and June. It is an exceptionally hardy species and can withstand very low temperatures and anoxic conditions. The **Golden Orfe,** the golden variety of the Orfe (see photo) has more than 50 scales along the side of its body. Its length varies from 25-50cm and it can live for 10 years. It is very popular with aquarists and garden pond owners. It feeds mainly on invertebrates, especially molluscs, crustaceans, insect larvae, and, when young, some plant material. It breeds in April and May and adults mature in 5-7 years.

2023 OBSERVATIONS

In 2023, Mirror Carp were observed in the Rocket Pole Pond in January, February (11 fish), April, May, and June. In February a very large carp approaching 45cm (18") in length was recorded with up to ten smaller fish. Maybe this large carp had been feeding on the smaller fish that had been transferred in earlier years or had consumed a surfeit of the bread often thrown into the pond by Lundy visitors.

Golden Orfe are very obvious in Quarry Pond (see photo) and were seen in many months of the year. In May, observers recorded 27-32 fish on four different days, with two observers listing 19 adults and 12 juvenile fish.

Crucian Carp were observed in large numbers in Quarry Pond particularly in May when numbers ranged from 20-100 fish.

► *Crucian Carp* Carassius carassius *(photo: Alan Rowland).*

▲ *Mirror Carp* Cyprinus carpio *(photo: Mandy Dee).*

In conclusion, the fish in the three ponds seem to be doing well, with the presence of juveniles showing that breeding is successful. A detailed survey of the fish in these ponds, as well as Pondsbury and Quarterwall Pond, is required.

(*Thanks to the fish observers in 2023: Chris Baillie, Chris Dee, Tim Davis, Tim Jones, Dean Jones, Alan and Sandra Rowland, Steve Rosser, Tim Smith, Richard Ware).*

◄ *Quarry Pond with reflections and Golden Orfe* Leuciscus idus *swimming around in May 2023. (photo: Alan Rowland).*

AMPHIBIA (Frogs and Toads)

Jennifer George

Is the Common Toad (*Bufo bufo*) living on Lundy?

Although there have been some unverified records of the Common Toad being heard on Lundy by visitors in 2000, 2001, and 2003 (see the Report on Exotic Animals on Lundy by Alan Rowland, which follows this text), it has long been thought that Amphibia do not occur on Lundy. Amphibia are not often found on small islands as they are not good travellers.

However, on 7th May 2023, toad calls were heard near Quarry Pond by Stuart Cossey, and again on 11th May.

On 13th May, the toad was still calling in Quarry Pond, and a recording of the calls was made by Chris Baillie.

On 15th May, the toad was still calling in Quarry Pond and was heard by Jackie Watt and John Hedger, who had been seeking fungi in that area. Calls were also heard by Chris Dee and other Lundy visitors. In the afternoon, quiet calls from presumably a second toad were heard by Paul Dean and later on by Chris Dee. These calls came from the Quarry Beach footpath where a stream trickle meets the footpath.

The **Common Toad** (*Bufo bufo*), with a body length of 8-13cm, can reach a weight of 80gm. It feeds on earthworms, snails, and other invertebrates. Larger ones can eat small Slow –worms, mice and shrews.

Toads usually hibernate from October to March and breed from April onwards. They prefer the larger deeper ponds than the shallower ponds used by the Common Frog. Eggs are laid in long strings around water plants. Toad tadpoles possess toxins that make them very unpleasant for predators, and they can live in ponds with fish that often eat frog tadpoles. Adult toads also contain these toxins in their skin glands.

Toads are known for their mass migrations when seeking their breeding ponds and many are killed by cars on UK roads each year.

The Common Toad is not found on many UK islands, e.g., Scottish islands, Scilly Isles, Isle of Man, and many of the Channel Islands.

So, is Lundy unique in having a Common Toad? The Warden and Conservation Team are hoping to verify their existence now that toad calls have been heard and Alan Rowland, who is currently surveying the Lundy ponds and streams, will be looking for eggs and Toad tadpoles in the Quarry Pond.

▲ *Common Toad* Bufo bufo *photographed in Cornwall (photo: Alan Rowland).*

‘Exotic’ species of British vertebrates on Lundy

Alan Rowland

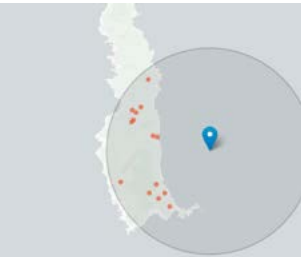
Introduction

A major find occurred in late spring of 2023, when a Common Toad, *Bufo bufo*, was heard calling around Quarry Pond. Many people heard and recorded the calls but despite much time spent no-one managed to see the toad. ‘Amphibia’ by Jennifer George in this Annual Report details the reports made of toad presence, by call but without sightings.

Finding past records of ‘exotic’ vertebrates

The find was mentioned at the Lundy Management Forum (LMF), which I attend, in September of that year. After much discussion, centred around this event and the previous discovery of the Slow-worm on the island I investigated other possible sightings of which the LFS and Lundy Conservation team were unaware. I visited the National Biodiversity Network (NBN) web site and used their facility to search based on location – “Explore by address, postcode or location”. I selected SS14 then selected Reptiles from the ALL species list to produce the distribution map shown in Figure 1.

The result shows records of three species of Reptile; 44 of Slow-worm *Anguis fragilis*, three of Common Lizard *Zootoca vivipara* and two of Adder *Viper berus*. Repeating the exercise for Amphibia produced a similar result with four records of Common Toad. I do not have the specialist knowledge to check all the species listed, but I did check the 18 species of mammals to be found in the UK. Surprisingly amongst those recorded from Lundy were Stoat *Mustela ermine* and Red Fox *Vulpes vulpes*. This last result is very hard to believe and, had it not for previous experience with Slow-worms it would be easy to dismiss all of these records as mistaken sightings



▲ *Figure 1. Distribution of NBN records of ‘exotic’ animals on Lundy.*

The story of how Slow-worms were added to the Lundy species list has been recounted before (Rowland 2012) but essentially a verified photographic record was made on Discover Lundy 2012. Subsequently unconfirmed sightings from 2010 were added to our records. When it was queried the Amphibian and Reptile Conservation Trust (ARC) pointed out even earlier records from April 2000. The more recent records reveal a general spread of sightings from Millcombe Gardens, along the eastern sidelands and the length of the central path to the north of Pondsbury

Looking at the NBN records for Common Toad, apart from the 9 May 2023 sighting, which has been submitted by ARC, there were three earlier records. The first was on 16 June 2000, followed by another on 3rdMay 2001 and one on 3rd July 2003 when two were recorded as being ‘in a pond’. All three were made by National Trust visitors. As was found when investigating the early Slow-worm records, National Trust sightings are always recorded at the centre point of the property, which in the case of Lundy, is not helpful. The map in Figure 1 shows a cluster around Pondsbury – the centre of Lundy. Later sightings reported in the LFS Annual Report which made their way to NBN give more accurate, and useful locations. Again, as with the Slow-worm records, there is no further information. No named surveyor, no description no pictures. It can be assumed that all these common species did not arouse any surprise when recorded. Certainly, they are common on the mainland and if they were seen by people unaware of Lundy’s unique flora and fauna they would not be seen to be unique sightings. None were reported to the LFS none were reported to the Lundy Warden. Despite best efforts National Trust are unable to give any more information than that which exists on the NBN website.

Turning to reptiles, two records exist for the Adder, one from 4th July 2003 when two were reported followed by one on the 12th February 2008.Three reports of Common Lizard were made. The first dates from 1958 but no further details, not even of the person who reported it, were given. The remaining two sightings were on 30th April 2000 when two were reported and 11th September 2000, all originating from the National Trust. Both of these reptile records are located at the centre point of Lundy.

Turning to the two previously unreported mammals, the Stoat was record on 27th July 2008 in “Lundy Car Park” by National Trust and the Red Fox on 9th June 2001 when two were seen! Given that the Stoat was seen in a car park it is possible that some or all of these exotic Lundy species were seen by a party on the mainland prior to embarking for Lundy and were included in their visit list in error.

Conclusions

Either the National Trust visitors, who do visit every year, are extraordinarily good at finding unusual species or they were mistaken. Table 1 shows that during the years 2000, 2001 and to some extent 2003, they were able to find four species that, although common on the mainland, are extremely rare on Lundy. Give that the Slow-worm, and probably the Common Toad, have now been recorded, some of the other sightings might be genuine. The solution must be to deploy amphibian and reptile refugia in suitable habitats such as Quarry Pond and Pondsbury to enable accurate and verifiable records to be made.

References

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Citation of Records

- *NBN Atlas occurrence download at* **https://nbnatlas.org** *accessed on 23 January 2024.* Data provided by the following providers:
  - Records provided by Amphibian and Reptile Conservation, accessed through NBN Atlas website. (2024). For more information: email **enquiries@arc-trust.org**, or **https://registry.nbnatlas.org/public/show/dp58**
  - National Trust (2024) National Trust Species Records. Occurrence dataset on the NBN Atlas (Creative Commons Zero v1.0 (CC0) CC0). For more information: **https://registry.nbnatlas.org/public/show/dr1236**
  - Records provided by Biological Records Centre, accessed through NBN Atlas website. (2024). For more information: email **brc@ceh.ac.uk**, or **https://registry.nbnatlas.org/public/show/dp77**
  - Amphibian and Reptile Conservation and Biological Records Centre. [Date of download] Records verified via iRecord. (Creative Commons with Attribution 4.0 (CC-BY) CC BY Creative Commons Attribution). For more information: **https://registry.nbnatlas.org/public/show/dr2769**
  - Records provided by National Trust, accessed through NBN Atlas website. (2024). For more information: **https://registry.nbnatlas.org/public/show/dp116**
  - Biological Records Centre ([Insert download year]). Reptiles and Amphibians Dataset. Occurrence dataset on the NBN Atlas (Creative Commons with Attribution 4.0 (CC-BY) CC-BY). For more information: email **brc@ceh.ac.uk**, or **https://registry.nbnatlas.org/public/show/dr1385**

Date	Species	Recorder
1958	Common Lizard	anon
30 April 2000	Slow-worm	NT
11 May 2000	Slow-worm	NT
13 May 2000	Slow-worm	NT
30 May 2000	Common Lizard	NT
16 June 2000	Common Toad	NT
11 September 2000	Common Lizard	NT
20 September 2000	Slow-worm	NT
05 April 2001	Slow-worm	NT
03 May 2001	Common Toad	NT
03 July 2003	Common Toad	NT
04 July 2003	Adder	NT
12 February 2008	Adder	NT

▲ Table 1 Unusual terrestrial vertebrate species reported by National Trust (NT) visiting teams

▲ *Sika stag and a pricket on Acklands's Moor, April (photo: Mandy Dee).*

REPTILES, LAND MAMMALS AND BATS

Chris Dee

Amphibians
There are no native amphibians on Lundy, so it was a surprise when Stuart Cossey, the Assistant Warden, heard a **Common Toad** calling at Quarry Pond on 7th May. It was reported in the same area until 16th May (J Parker, C & C Baillie, and others), and possibly a second individual was heard below the Terrace on 14th May (P Dean). It is not currently known how this species arrived on the island. This question is addressed by Alan Rowland and Jenny George on page 55.

Introduced Reptiles
There are no native reptiles on Lundy but **Slow-worms** *Anguis fragilis* of uncertain origin are present. Although previously thought to have been accidentally introduced in compost imported from the mainland in November 2010, there are suggestions that they were present as early as 2000.

In 2023, there were records between 30th April and 5th September, from Millcombe, where the initial introduction was thought to have occurred, as far north as Halfway Wall. A dead specimen was found in Millcombe on 13th October and one was active on the East Side as late as 30th December.

To help track the spread of this species across Lundy, members are encouraged to note all sightings in the LFS Logbook kept in the Marisco Tavern.

Native Land Mammals
Lundy has just one native terrestrial mammal, the **Pygmy Shrew** *Sorex minutus* which is widely distributed across the island and can be found throughout the year. It is probably associated with most properties, but there have been fewer reports this year. It has been reported from Castle Cottage, the Tavern, Square Cottage, Old Light Cottage and Tibbetts. The species is also found away from human habitation, and this year, there have been sightings from Millcombe, Southwest Field, Lower East Side Path, and Pilot's Quay.

Bats
Bats are occasionally observed on Lundy and are usually assumed to be one of the native pipistrelle species; **Common Pipistrelle** *Pipistrellus pipistrellus* or **Soprano Pipistrelle** *P. pygmaeus*. Sightings of pipistrelle species were reported around the village on 28 Apr (S Cossey), at an undisclosed location on 27 Jun, and in Millcombe on 24 Aug (L Tardivel). There were sightings of unknown bat species in the village on 15 Apr, near St Helen's Church on 16 Apr (J Hess), and at the Quarries on 2 Jul (S Evans). On 15 Aug, a bat near Bramble Villa was described as larger than a pipistrelle but smaller than a Noctule (R & R Taylor, T Taylor). There was a late record of an unknown species at Benson's Cave on 18 Oct.

Feral Land Mammals
The populations of feral ungulates continue to be monitored and numbers controlled according to the terrestrial management plan. Scheduled culls were carried out in March, September and October. The early spring surveys normally provide the best estimation of numbers, but extra counts by visitors are useful for the record, particularly if some assessment if completeness of coverage is included.

Sika *Cervus nippon*
The stock count in late March estimated a population of 100 individuals, comprising 82 hinds and 18 stags (P Hamlyn). Other significant counts were 69 across the whole island on 15 May (C Dee), 29 on 7 Jun (anon), 40 in Tillage Field on 20 Aug (C & S Blackmore), and 30 on the East Side on 6 Nov (T, K & L Dobie). A cull in mid-March reduced the population by 9 (7 hinds and 2 stags), and two prickets were culled in October.

Soay Sheep *Ovis aries*
The stock count in mid-March estimated a population of 327 comprising 257 ewes, 66 rams, and 4 early lambs (P Hamlyn). Apart from three reported on the Beach Road on 25 Mar (B Cox) and an island count of 146 on 15 May (C Dee), there were no other counts received. Thirty-one rams and 51 ewes were culled in September, and a further 27 rams and 52 ewes were removed in October.

▲ *Soay lamb near Halfway Wall, May (photo: Paul Dean).*

▲ *Billy Goat near Pondsbury, May (photo: Paul Dean).*

Goat *Capra aegagrus*
The mid-March stock count found 43 individuals, comprising 19 nannies, 8 billies, and 16 kids (P Hamlyn). The only other double-figure counts were of 15 in the Quarries on 25 Mar (anon) and 22 on the West Side near Jenny's Cove on 16 Aug (M Williams). Goats continue to be actively discouraged south of Quarter Wall to reduce grazing pressure on the slow-growing woody vegetation in Millcombe and St John's Valley. One nanny was culled in September and 2 billies in October, although it is possible that the main herd was not located by the stock management team.

Rabbit *Oryctolagus cuniculus*
The slow recovery in Rabbit numbers appears to be continuing, with no significant outbreaks of disease (Rabbit Viral Haemorrhagic Disease or Myxomatosis), although a few carcasses were reported. Individuals or small groups were reported from 21 locations across the island; from Castle Hill to the North End and on both the east and west coasts. The highest counts were of 10 in Southwest Field on 25 Apr (K Waterfall) and 14 across the island on 29 Apr (S Cossey). All records of this formerly common species are welcomed to allow its status to be assessed.

▲ *Rabbit by the Lower East Side path,May (photo: Paul Dean).*

FRESHWATER INVERTEBRATES

Jennifer George

Introduction

In 2023, the freshwater records are, as in previous years, mainly from the research of Alan Rowland, who has been continuing with his detailed study of the Lundy streams and several ponds. The organisms discussed are from St John's Stream, Millcombe Stream and Cascade, Brambles Pond, Quarry Pond, and Pondsbury. 31 different species were identified in these freshwater habitats.

Platyhelminthes (Flat Worms)

The white **Flatworm**, (*Phagocata vitta)* which occurred in St John's and Millcombe streams is typically found in cold fast flowing streams in Europe and the UK. It feeds particularly on small oligochaete worms and Chironomid larvae. The black flatworm, (*Polycelis nigra)* with similar feeding habits, also occurred in St John's Stream.

Oligochaeta (Segmented Worms)

The Millcombe Stream, as in previous years, contained the **Square-tailed Worm**, (*Eiseniella tetrahedral)* and the **Sludge Worm**, (*Tubifex* sp.). The latter species, which was also found in St John's Stream and Brambles Pond, lives in mud tubes from which their posterior ends function as gills when protruded into the water.

Hirudinea (Leeches)

The **Horse Leech**, (*Haemopis sanguisuga)*, which has body length of up to 60mm, was found in Millcombe stream above the confluence. This leech has been found in several areas of Lundy and in October 2023 it was observed in a puddle by Quarter Wall gate by Maggie Bowden where it has been frequently seen in previous years. Despite its name, it does not attack horses but feeds on other invertebrates, both freshwater and terrestrial, which it swallows whole (see photo).

▲ *Horse Leech,* Haemopis sanguisuga *collected from Millcombe stream (photo: Alan Rowland).*

Mollusca (Snails, Limpets, Mussels etc)

The **Jenkins Spire snail**, (*Potamopyrgus antipodarum)*, occurred again as in previous years in Millcombe Stream and in St John's Stream where it was found in large numbers near Square Cottage (500) in March 2023. This small black snail was originally confined to brackish water but since the late 19th Century has successfully colonized freshwater habitats throughout Europe and the UK. The **Wandering Pond Snail** (*Peregriana peregra)*, was found in the two streams and also in Brambles Pond.

Crustacea (Shrimps, crabs, crayfish, water fleas, copepods, ostracods)

Crustacea were represented by the small **Seed Shrimps** (*Ostracoda)* and the ubiquitous **Water Slater**, (*Proasellus meridianus)*. Ostracods (size 0.5 – 3mm) which occurred in Brambles Pond and St John's Stream near Square Cottage are typically found amongst vegetation or in the upper layers of the sediments. *P. meridianus*, the slater species which commonly occurs on offshore islands, is found in many of the Lundy ponds and streams, where it crawls amongst dead leaves and debris on the bottom sediments. It cannot swim in open water.

▲ *Crane fly* Dicranota sp. *larva, Millcombe stream (photo Alan Rowland).*

Insecta (Insects)

Fly & Midge Larvae

Insect fly larvae were well represented in the streams in 2023. Several **Midg**e species of the Families *Ceratopogonidae* and *Chironomidae* (**Biting Midges**) and *Dixidae* (**Meniscus Midge**) were found in large numbers in March. **Mosquito** larvae (*Culicidae*) occurred in St John's Stream above Brambles and at Square Cottage. These larvae spend much of their lives at the surface, where they filter-feed with their brush-like mouthparts. Other fly larvae e.g. **Crane fly** *Dicranota* (see photo) and a species of *Dolichopodidae*, the **Long-legged Fly**, were found in the Millcombe Stream. The Crane fly larva, which can grow to a length of 20mm, lives in the mud and feeds mainly on the Sludge worm (Tubifex), which occurs in the same habitat. The **Trickle Midge** larva (*Thaumaleidae*) was found in Brambles Pond; this little-known family of midges has larvae similar to those of the more common Chironomid larvae but lack the paired thoracic prolegs. They have snout-like beaks and spiracles on the thorax. Larvae occur mainly on wet rock faces where they feed on diatoms in the surface film.

▲ *Mayfly larva,* Cloeon dipterum *from Pondsbury (photo: Alan Rowland).*

Ephemeroptera (Mayflies)

A mayfly nymph (larva), the **Pond Olive Mayfly** (*Cloeon dipterum*) was found in Pondsbury in July (see photo). This species is typical of small lowland waters and has previously been recorded in Pondsbury by Clabburn in 1993 and by George & McHardy in 2003. This nymph is very active and exhibits very good swimming movements by means of its abdomen and hairy cerci (tails). Adult mayflies which often emerge from the water in swarms can be seen between April and September. They only live for a few days and mating takes place on the wing.

▲ *Emperor Dragonfly* Anax imperator *nymph from Pondsbury (photo: Alan Rowland).*

▲ *Blue-tailed Damselfly* Ischnura elegans *nymph from Quarry Pond (photo: Alan Rowland).*

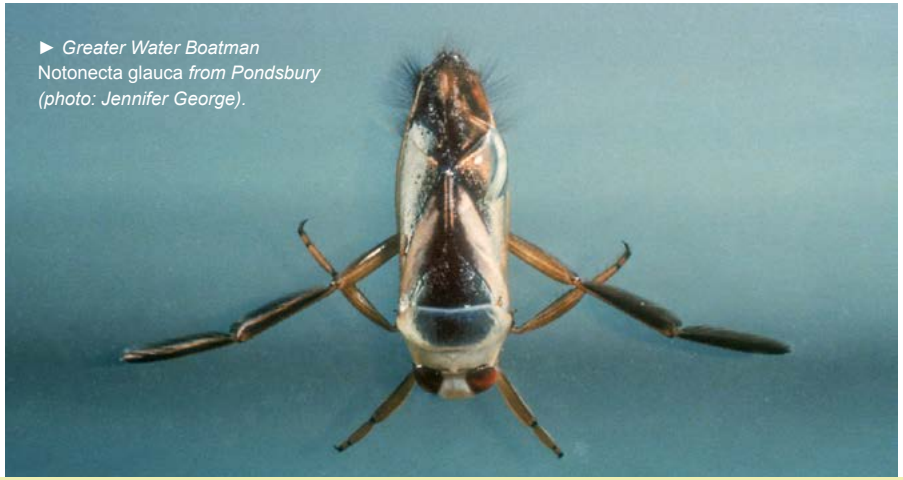
Odonata (Dragon and Damselflies)

In July. the nymphs (larvae) of the **Emperor Dragonfly** (*Anax imperator*) and nymphs of the **Blue-tailed Damselfly** (*Ischnura elegans)* were found in Pondsbury, with the latter species also occurring in Quarry Pond. (see photos). The *Anax* nymph has internal gills in the abdominal cavity. Water is passed into the cavity, and the nymph moves by jet propulsion, passing the water out backwards through the anus by contractions of the abdomen. They are active predators feeding on other invertebrates, tadpoles, and small fish. The *Ischnura* nymph has three leaf-like lamellae that function as gills and as fins for swimming. It is usually found amongst water plants.

Adults of *Ischnura* were seen in May and early June flying around both Pondsbury and the Quarry Pond areas. Adult *Anax* were observed in various Lundy areas and details are given in the Terrestrial Invertebrates Report by Alan Rowland.

Hemiptera (Water Bugs)

Water Bugs were seen in the same two ponds as in previous years. The Pond Skater (*Gerris lacustris*) was seen on the surface of Quarry Pond, and the large Greater Water Boatman (*Notonecta glauca*) was seen swimming in Pondsbury. This Water Boatman (up to 16mm long) swims vigorously on its back using large hair-fringed back legs as paddles. (see photo). It comes up to the surface regularly to renew its air supply that is carried between hairs on the abdomen. This voracious predator which feeds on other invertebrates and even small fish, is a good flier and can move easily between ponds.



► *Greater Water Boatman* Notonecta glauca *from Pondsbury (photo: Jennifer George).*

▲ *Caddis* Tinodes assimilis *larva from Millcombe Stream (photo: Alan Rowland).*

Trichoptera (Caddis flies)

The larva of the cased caddis *Micropterna sequax* occurred in St John's Stream above Brambles living in a vegetation case, where also a pupal case of *Limnophilus vittatus* was found. The caseless caddis larva *Tinodes assimilis* was found in the Millcombe Stream above the confluence (see photo). *Tinodes* larva is small (up to 11mm in length) and has short strong legs and the last abdominal segment has a pair of jointed appendages. This larva lives in a narrow tubular gallery of silk, often covered in debris, which is attached to stones.

Coleoptera (Water Beetles)

Two species were seen in Brambles Pond in March: the adult Dytiscid, *Hydroperus* sp., and a Dytiscid larva as yet unidentified.

Conclusions

The freshwater invertebrates in 2023 appear to have recovered well from the severe drought of 2022 when many of the ponds and streams dried up. Many species survive dry conditions by burrowing into the sediments or aestivating amongst the roots of aquatic plants. It is likely that the UK will face more droughts in the future due to climate change, and aquatic animals will have to adapt or become extinct.

Alan Rowland would like to thank Dr Ian Wallace who confirmed the identification of the Caddis species Tinodes assimilis.

TERRESTRIAL INVERTEBRATES

Alan Rowland

▲ *A Silverfish* Lepisma saccharina *found in the Dairy in May (photo: Alan Rowland).*

Unless otherwise stated, all sections were compiled by Alan Rowland. The majority of these records have been extracted from the LFS Logbook stored in the Marisco Tavern where those visiting Lundy have shared their findings. Some sightings were not used as the recorder left neither name nor contact information to enable us to verify them. These records are supplemented by observations submitted to iRecord by other visitors to Lundy. Additional records have been sent to me directly by those who left their properties on their last day and made observations but did not return to the Tavern to record them. Not all records can be verified without descriptions or photographs. However, some photographed species have been shared with national or regional experts who have verified or determined them.

Thysanura (Silverfish)

A single **Silverfish** (*Lepisma saccharina*) was reported by Alan and Sandra Rowland when they were staying in the Dairy on 31st May.

Mollusca (Slugs and Snails)

2023 was a good year for records of slugs and snails. The larger species were most obvious, but diligent searching for other species is made more difficult by their quite small size. Eight species of terrestrial snails have been recorded.

▲ *Brown-lipped Snail* Cepaea nemoralis *in St.John's Valley, September (photo: Mandy Dee).*

Brown-lipped (*Cepaea nemoralis*) and **White-lipped** (*C. hortensis*) **Snails** were recorded between March and September in Millcombe, St John's Valley, around Rocket Pole, the Village, Upper East Side Path and the Castle area with up to 12 Brown-lipped snails being seen In Millcombe by Alan and Sandra Rowland and Mandy Dee. The other large species, the **Garden Snail** (*Cornu aspersum*) was recorded from March to September in Millcombe and around Hanmers by the same people with up to six in Millcombe.

▲ *White-lipped Snail* Cepaea hortensis *on Castle Hill, September (photo: Mandy Dee).*

A single *Balea heydeni* was recorded in the walls of the Nook in May. A **Glass Snail** (*Vitrina pellucida*) was seen on 21st March at Government House. This was last reported in 2011. The walls around Millcombe House were good hunting grounds

in May with 11 **Hairy Snails** (*Trochulus hispidus*), a **Heath Snail** (*Helicella itala*) – both new for Lundy -and up to 24 **Two-toothed Door Snails** (*Clausilia bidentata*) being recorded there by Alan and Sandra Rowland on 13th May, and a single specimen by Richard Bashford on 12th February. Mandy Dee recorded another in St Helen's Copse on 18th September. Whilst there, Mandy also recorded a **Rounded Snail** (*Discus rotundatus*) not recorded since 1983. Two **Wrinkled Snails** (*Candidula intersecta*) were found in the barrack block ruins near the Old Hospital on 4th June by Alan and Sandra Rowland. This species is previously unreported on Lundy.

▲ *Hairy Snail* Trochulus hispidus *on the walls behind Government House, May (photo: Alan Rowland).*

▲ Balea heydeni *on the wall of The Nook, May (photo: Alan Rowland).*

▲ *Two-toothed Door Snail* Clausila bidentata *St.Helen's Copse, September (photo: Mandy Dee).*

▲ *Glass Snail* Vitrina pellucida *near Government House, March (photo: Alan Rowland).*

▲ *Rounded Snail* Discus rotundatus *St.Helen's Copse, September (photo: Mandy Dee).*

▲ *Wrinkled Snail* Candidula intersecta *Old Hospital, June (photo: Alan Rowland).*

Two records of **Tree Slugs** (Lehmannia marginata) were made; the first by Tim Jones on 21st June at Lametor, the second by Paul Dean on 4th September at Hanmers.

Records of freshwater molluscs can be found in the Freshwater Invertebrates section of the report.

▼ *Tree Slug* Lehmannia marginata *near Hanmers, September (photo: Paul Dean).*

Arachnida (Spiders, Harvestmen, Mites and Ticks)

Compiled by Mark West

Mites

Starting with some of the smallest arachnids, a species new to the Lundy list was found by David Botcherby, who photographed Gorse Spider Mites and an area of Gorse covered by their webs near Rocket Pole in September. A follow-up literature search uncovered an academic paper - *The impact of the Gorse Spider Mite, Tetranychus lintearius, on the growth and development of Gorse, Ulex europaeus (Davies, Ireson, Allen, 2006)*, which examined their possible use with other biological agents to control European Gorse in Tasmania.

The potential for damage to Gorse on Lundy and possible effects on other species prompted further investigation with members of the British Arachnological Society. Feedback was received not only from the UK but also from Holland, France, and the Channel Islands. The general view was that sporadic outbreaks occur locally, with sightings reported on the North Cornwall coast, Dartmoor, and East Devon, as well as further afield, including Hounslow Heath, the cliffs of Jersey, and an area on the Brittany coast with a remarkably similar shape to Lundy. The reasons for the outbreaks are unclear, but unfavourable weather conditions or a locally impoverished ecosystem, e.g., poor soil conditions were suggested as factors. Reassuringly, the consensus was that while the mites might be detrimental, they are not very effective as a means of Gorse control in the UK, so we are not going to suddenly see Lundy denuded, although it could be worth keeping a watch for any lasting effects.

Other mites reported were an *Anystis* sp. found in a bait box on Beach Road by Stuart Cossey in March and Red Velvet Mites (*Trombidiidae*) seen on rocks at the Landing Bay, around the North Light and on my dessert plate in the Tavern in June!

▲ *Webs formed by the Gorse Spider Mite* Tetranychus lintearius *on Gorse bushes near Rocket Pole, September (photo: David Botcherby).*

▲ *A group of Gorse Spider Mites in their web on Gorse near Rocket Pole (photo: David Botcherby).*

Harvestmen

On to Harvestmen, long-legged arachnids that, unlike true spiders, have a single fused body and no waist. Mandy Dee found a *Leiobunum rotundum* in Millcombe in May and a Common Harvestman (*Paroligolophus agrestis*) at the Ugly in November.

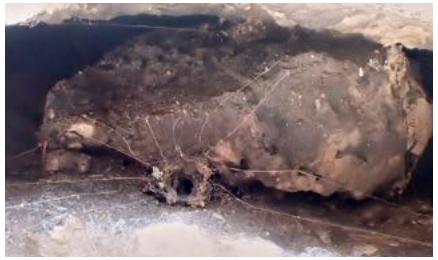
Spiders

Neil Barnes found a fast-moving Sac Spider, possibly *Clubiona terrestris*, on the Quarries path in the July rain and a Toothed Weaver, *Textrix denticulata* in Old Light Cottage in October.

▲ *Sac Spider* Clubiona sp., *Quarries Path, July (photo: Neil Barnes).*

▲ *Wolf Spider* Pardosa sp. *with one leg missing, carrying an egg sac, June (photo: Mark West).*

▲ *Cave Spider* Meta menardi *in the Beach Road cave, June (photo: Mark West).*



▲ *Tube web of* Segestria sp., *complete with trip wires, June (photo: Mark West).*

▲ *Egg sac of the Cave Spider in the Beach Road cave, June (photo: Mark West).*

▲ *Toothed Weaver* Textrix denticulata *in wall behind St Helen's Church, June (photo: Mark West).*

▲ *Comb-footed Cellar Spider* Nesticid sp. *in the Beach Road cave, June (photo: Mark West).*

Family		Species		Where	When
Funnelweb spider	*Agelenidae*	*Tegenaria/Eratigena sp.*	House Spider	Timekeeper's Hut	Jun-23
Funnelweb spider	*Agelenidae*	*Tegenaria/Eratigena sp.*	House Spider	Old Light Cottage	Oct-23
Funnelweb spider	*Agelenidae*	*Textrix denticulata*	Toothed Weaver	Dry stone wall behind Church	Jun-23
Funnelweb spider	*Agelenidae*	*Textrix denticulata*	Toothed Weaver	Old Light Cottage	Oct-23
Orbweb spider	*Araneidae*	*Araneus diadematus*	Garden Spider	North Light	Jun-23
Orbweb spider	*Araneidae*	*Araneus diadematus*	Garden Spider	Earthquake	Jun-23
Orbweb spider	*Araneidae*	*Zygiella x-notata*	Missing Sector Orb Weaver	North Light (many)	Jun-23
Sac spider	*Clubionidae*	*Clubiona sp. possibly terrestris*		Quarries path	Jul-23
Wolf spider	*Lycosidae*	*Pardosa nigriceps*		West side path ½way to ¾ wall	Jun-23
Wolf spider	*Lycosidae*	*Pardosa sp.*		Lower East Side Path	Jun-23
Wolf spider	*Lycosidae*	*Pardosa sp. probably pullata*		Lower East Side Path	Jun-23
Comb-footed cellar spider	*Nesticidae*	*Nesticid sp.*		Beach Road cave	Jun-23
Cellar spider	*Pholcidae*	*Pholcus phalangioides*	Daddy Long-legs Spider	Dairy (6)	May-23
Cellar spider	*Pholcidae*	*Pholcus phalangioides*	Daddy Long-legs Spider	Vestry (3)	Jun-23
Jumping spider	*Salticidae*	*Salticus scenicus*	Zebra Spider	Dry stone wall behind Church	Jun-23
Tubeweb spider	*Segestriidae*	*Segestria sp. possibly senoculata*	Snake's-back Tubeweb Spider	North of quarries (web only)	Jun-23
Long-jawed orbweb spider	*Tetragnathidae*	*Meta menardi*	Cave Spider	Beach Road cave	Jun-23
Long-jawed orbweb spider	*Tetragnathidae*	*Metellina merianae*		Beach Road cave	Jun-23
Tangle-web spider	*Theridiidae*	*Theridion melanurum or mystaceum*		Below ¾ wall east side	Jun-23

Other spiders photographed or entered into the logbook are listed in the table including the Cave Spider *Meta menardi*, found with several egg sacs in the cave near the jetty end of Beach Road in June (many thanks to Andrew Cleave for the tip). A Long-jawed Orbweb Spider, *Metellina merianae* and, excitingly, a Comb-footed Cellar Spider (*Nesticid* sp.) were also found in the cave at the same time. There are only two *Nesticid* species in the UK. While indistinguishable without a microscope, either would be a good find; one particularly so. The more likely *Nesticus cellulanus* is relatively widespread but not on the list of spiders previously seen on Lundy, and *Kryptonesticus eremita* is extremely rare and (so far) only found on Flat Holm island, not too far away up the Bristol Channel.

The table (left) lists the spider records for 2023,19 in total. Other than the *Nesticid* all have been recorded before. The current Lundy list of all Arachnids (156 spp.) can be found on the LFS Website. Spider identification can be challenging, and for some genera, for example, the *Pardosa* Wolf Spiders, confirmation of many of the species is not possible without microscopic examination. Needless to say, good photographs of body and leg conformation, showing shape, colouration, and size, are helpful, as are macro shots showing the eye arrangement if the spider stays still for long enough! *Please keep entering records in the logbook and sending in photographs*.

Isopoda (Woodlice)

Species were very sparsely recorded this year, with only four Pill Woodlouse (*Armadillidium vulgare*) being recorded by Alan and Sandra Rowland, who found two outside and one inside the Dairy on 1st June. Rob Skinner also recorded one on 5th May at Quarter Wall.

Myriapoda (Centipedes and Millipedes)

Pill Millipedes (*Glomeris marginata)* were recorded between 29th April and 16th September in Millcombe and St John's Valleys by Dave Jones, Bee Cox and Mandy Dee who all recorded single sightings.

▲ *Pill Woodlouse* Armadillidium vulgare *The Dairy, June (photo: Alan Rowland).*

A False Flat-backed Millipede (*Nanogona polydesmoides*) was seen by Mandy Dee in St Helen's Copse on 18th September. This is only the third record for Lundy and the first sighting since 2013, when our resident expert, Keith Lugg, moved to his new home in Mid Yell on the Shetlands. Although superficially looking like a Flat-backed Millipede, the common name gives it away. Having up to 30 segments, as opposed to around 20 in Polydesmus sp., is what separates them.

▼ *False Flat-backed Millipede* Nanogona polydesmoides *St.Helen's Copse, September (photo: Mandy Dee).*

Hemiptera/Heteroptera (True Bugs)

There were seven sightings of **Gorse Shieldbug** (*Piezodorus lituratus*) between 23rd March and 5th July all either on the Upper East Side Path between Millcombe and along the field edges where Gorse grows. In all, 23 individuals were recorded, which included five instars on the last date. All records were by Alan and Sandra Rowland.

Coleoptera (Beetles)

All the usual large and easily identified beetles were reported this year.In total 22 different species were recorded. *Chrysolina banksii* was recorded for the third time by Rogerand Matt White – this could be a gradual colonisation.

Carabidae (Ground Beetles)

A **Green Tiger Beetle** (*Cicindela campestris)* was recorded only once, on 21st May by Tim Dave, Tim Jones, Ella Berry and Joe Parker at the North End. A **Bronze Carabid Beetle**, (*Carabus nemoralis)* was recorded on 16th May by Alan and Sandra Rowland in the Tavern. **Three Black Clock Beetles** *(Pterostichus madigus)* were recorded by Alan and Sandra Rowland at the Old Hospital on 19th May.

Silphidae (Carrion beetles)

Neil Barnes found a beetle larva on the Upper East Side Path on 21st July, which on examination proved to be another sighting of a Carrion Beetle larve (*Silpha tristis*).

Staphylinidae (Rove beetles)

Single sightings of Devil's Coach Horse (*Ocypus olens)* were made three times, Mandy and Chris Dee saw one on 14th April near Hanmers, and Karen Cole and Alan Henshaw saw one there

▲ *Devil's Coach Horse* Ocypus olens *Lower East Side Path, November (photo: John Hedger).*

▲ *Gorse Shieldbug* Piezodorus lituratus *instar on Gorse in Millcombe, September (photo: Alan Rowland).*

▲ *Bronze Carabid Beetle* Carabus nemoralis *found in the Tavern, May (photo: Alan Rowland).*

▲ *Black Cock Beetle* Pterostichus *madigus Old Hospital,May (photo: Alan Rowland).*

▲ *Larva of the Carrion Beetle* Silpha tristis *Upper East Side Path, July (photo: Neil Barnes).*

▲ *Earth-boring Dung Beetle* Geotrupes stercorosus *Upper East Side Path, June (photo: Alan Rowland).*

▲ *Rosechafer* Cetonia aurata *(photo: Alan Rowland).*

▲ *Lined Click Beetle* Agriotes lineatus *on Gorse at Rocket Pole, May (photo: Alan Rowland).*

on 12th November. John Hedger reported one on the Lower East Side Path on 6th November. The final sighting was by Trudy Shees at the Earthquake on 14th December. C Laine queried a distinctive beetle above the Battery on 16th April. It was *Staphylinius erythropterus*, frequently confused with *S. caesareus* which does not occur on Lundy.

Geotrupidae (Dor beetles)

Four species of our usual Dor beetles were recorded again this year. **Minotaur Beetles** (*Typhaeus typhoeus)* were seen early in the year on 24th March by an anonymous recorder, on 14th April by Mandy and Chris Dee at the Old Light, on the 3rd May by Duncan Greenhill at the Battery, and lastly on 15th May a female was recorded at Jenny's Cove by Alan and Sandra Rowland. Unidentified formally, but probably the common **Woodland Dor Beetle**, (*Anaploptrupes stercororius)* featured in 12 records of 19 individuals between April and October. It was found all over the island by many visitors. The **Earth-boring Dung beetle** (*Geotrupes stercorosus)* was only seen twice. Alan and Sandra Rowland saw two on the 25th and one on the 29th of June, all on the Upper East Side Path. Finally, Rob Skinner recorded *Geotrupes spiniger* on 3rd May in the Camping Field.

Scarbaeidae (Scarab beetles)

The most common and easily seen of all our beetles, **Rosechafer** (*Cetonia aurata)*, featured in 25 records of 60 individuals all over the island between May and August. Recorders were Tim Davis, Tim Jones, Ella Barry and Joe Parker, Alan and Sandra Rowland, Jane and Nick Taylor, Sally Wadsworth, Carol Lee and Rebecca and Richard Taylor.

Two sightings of **Cockchafer** (*Melolontha melolontha*) were made by Tim Davis and Tim Jones. This species has never before been recorded on Lundy, but they saw one on 23rd May at the North End and another on 25th May at Pondsbury. This is an exciting new species but until we have photographic evidence, it will have to be a probable sighting.

Elateridae (Click Beetles)

A beetle new to Lundy, the **Lined Click Beetle** (*Agriotes lineatus*) was found by Alan and Sandra Rowland on Gorse near Rocket Pole Pond on 21st May 2023.

Cantharidae (Soldier beetles)

Common Red Soldier Beetle (*Rhagonycha fulva)* was prolific this year along the Upper East Side Path where it was recorded on six occasions by Sandra and Alan Rowland. Eight individuals on 25th June, 13 on 26th, 20 on 29th, 24 on 1st June, 56 on the 2nd and 9 on the 5th. A total of 213 individuals were recorded.

Tenebrionidae (Darkling beetles)

Single sightings of **Sulphur Beetles** (*Cteniopus sulphureus)* were made on 24th June at Government House and 1st July on the Upper East Side Path by Alan and Sandra Rowland. One other was recorded in the same location by crypticww on the 8th July.

Meloidae (Blister beetles)

A **Black Oil Beetle** (*Meloe proscarabaeus)* was recorded by A Powell Chandler on the Beach Road on 23rd February and two unattributed Oil beetles (*Meloe* sp) by Shaun Barnes on Montagu Steps on 10th April and at the Castle by Ann and Tony Taylor on 17th April. The South End of the island in early Spring is the place and time to look for this large beetle.

Coccinellidae (Ladybirds)

Neil Barnes found a **Hieroglyphic Ladybird** *(Coccinella hieroglyphica)* around Pondsbury on the 21st June. Ladybirds are poorly reported on Lundy. The last record of this species was on the BENHS trip in 2014.

Chrysomelidae (Seed and Leaf beetles)

The third record of *Chrysolina banksii* was made by Roger and Matt Whiter on 18th Jun in the Village area. This is a common species on the mainland and seems to be colonising Lundy. The **Heather Beetle** (*Lochmaea suturalis)* was recorded in Millcombe by Alan and Sandra Rowland on 13th May and they also recorded a **Willow Leaf Beetle** (*L. caprea*) on the same day. The minute **Lundy Cabbage Weevil** (*Psylliodes luridipennis*) ever present on Lundy Cabbage but not often reported was recorded by Samuel Gray on 4th September and the **Lundy Cabbage Leaf Weevil** (*Ceutorhynchus contractus* var. *pallipes)* by Alan and Sandra Rowland in Millcombe on 15th May.

▲ *Sulphur Beetle* Cteniopus sulphureus *Upper East Side Path, June (photo: Alan Rowland).*

▲ *Hieroglyphic Ladybird* Coccinella hieroglyphica *near Pondsbury, June (photo: Neil Barnes).*

▲ *Willow Leaf Beetle* Lochmaea caprea *Millcombe, May (photo: Alan Rowland).*

▲ *Greenbottle Fly* Lucilia sericata *Rocket Pole September (photo: Mandy Dee).*

▲ *Semaphore* Flies Poecilobathus nobilitatus *Millcombe Pond, June (photo: Tim Jones).*

Diptera (True Flies)

Sam Bosanquet

As usual, there was little Diptera recording on Lundy in 2023, with just 23 records of 13 species. Most records were of Hoverflies (Syrphidae; six common species) and *Tachina grossa* (Tachinidae; four records). Notable species for the island in 2023 were: *Lucilia sericata* (Calliphoridae): photographed at Rocket Pole on 15/9 by Mandy Dee, representing the first confirmed record of this common Greenbottle from the island since 1997; **Rondaniola bursaria* (Cecidomyidae): galls photographed on Ground-Ivy by the Lower East Side Path on 19/8 (SB) representing the first Lundy record and one of very few in south-west England judging by the NBN. Tim Jones photographed a group of Semaphore Flies (*Poecilobathus nobilitatus*) signalling with their wings on the surface of Millcombe Pond-in June. The island Diptera total now stands at 484 species.

Thanks to the following observers who recorded Diptera on Lundy in 2023: Sam Bosanquet, Mandy Dee, Tim Jones, Alan Rowland.

▲ *Hornet* Vespa crabro *Montagu Steps, October (photo: Neil Barnes).*

Hymenoptera (Bees, Wasps & Ants)

Sam Bosanquet

Just five records of Bees, Wasps, and Ants were made on the island in 2023: two of bumblebees, two of Heather Bee *Colletes succinctus*, and one of a Hornet *Vespa crabro*. The Hornet was basking in the autumn sunshine on a granite rock near Montagu Steps on 21/10 (NB) and is one of very few Lundy records. The island Hymenoptera total remains at 255 species.

The following observers recorded Hymenoptera on Lundy in 2023: Neil Barnes, Sam Bosanquet, and Alan Rowland.

Odonata (Dragonflies and Damselflies)

Nine species of Odonata comprising the usual two damselfly species and seven dragonfly species were recorded over the year. Records of Odonata nymphs can be found in the Freshwater Invertebrates section.

Dragonflies

Single Common Darters (*Sympetrum striolatum)* were again seen at both Pondsbury and Quarter Wall Pond by Darin Dowding and Elinor Kerson, respectively, in July and August. Seventeen sightings of Emperor Dragonflies *(Anax imperator)*, mainly single specimens of both sexes, were noted from the Castle through to Pondsbury. Emperor dragonflies have been recorded with increasing frequency over the last few years with a first record of ovipositing at

▲ *Common Darter* Sympetrum striolatum, July *(photo: Neil Barnes).*

▲ *Black-tailed Skimmer* Orthetrum cancellatum *Pondsbury, June (photo: Tim Jones).*

▲ *Four-Spotted Chaser* Libellula quadrimaculata *Pondsbury May (photo: Tim Jones)*

Rocket Pole Pond in 2018. This was repeated in 2021 at Quarterwall Pond confirming attempted breeding. However, the exciting sighting this year of a nymph in Pondsbury by Alan Rowland confirms successful breeding. Whether nymphs will survive the depredations of the birds that use Pondsbury is another matter which will be resolved in one or two years when exuvia may be found in the spring.

Black-tailed Skimmer (*Orthetrum cancellatum*) was again present, and Tim Davis and Tim Jones counted five individuals at Pondsbury on 17th June. An unidentified duo of Hawker sp. were seen by Steve Wing, Carol Baillie and Richard Campey at Pondsbury on 18th May. Tim Smith identified a Southern Hawker (*Aeshna cyanea*) at Quarry Pond on 11th June. Two sightings of Vagrant Emperor (*Anax ephippiger*) were made by Tim Davis and Tim Jones on 25th May at Pondsbury when they saw two and again in 19th October by James Diamond. There are only two previous sightings of the species in 2015 and again in 2020. Tim Smith identified a Southern Hawker (*Aeshna cyanea*) at Quarry Pond on 11th June. Two sightings of Vagrant Emperor (*Anax ephippiger*) were made by Tim Davis and Tim Jones on 25th May at Pondsbury when they saw two, repeated on 19th October by James Diamond. There are only two previous sightings of the species in 2015 and again in 2020. Tim Davis and Tim Jones reported and photographed a Four-spotted Chaser *(Libellula quadrimaculata*) on 26th May at Pondsbury. When last reported in 1963 and 1964, there was a mass emergence at Pondsbury, this is the first record since then.

Damselflies

Four sightings totalling 14 individuals of Common Blue (*Enallagma cyathigerum)* and eight totalling 30 individuals of Blue-tailed (*Ischnura elegans)* Damselflies were made at Pondsbury, Quarter Wall, Quarry and Rocket Pole Ponds by Alan and Sandra Rowland, Tim Davis and Tim Jones, Rebecca and Richard Taylor and Tim Smith between May and August.

▲ *Blue-tailed Damselfly* Ischnura elegans *Pondsbury,June (photo: Tim Jones).*

Trichoptera (Caddisflies)

There were no reports of moth trap intruders this year, but two possible records of adult caddis were made during the year. Elinor Kersman found a large specimen at Brambles on 22nd August but it wasn't identified. A micro caddis (wing length 4-5mm) was taken from the vegetation around Quarry Pond on 28th June by Alan Rowland during routine sampling. This specimen was sent for determination by the country's species expert who identified it as *Beraea maurus*. Thanks are expressed to Stuart Croft for his expert identification.

Further records of caddis larvae can be found in the Freshwater Invertebrates section.

► *An adult* Beraea maurus *(micro caddis fly) Quarry Pond, June (photo: Alan Rowland).*

▲ *Common Blue Damselfly* Enallagma cyathigerum Pondsbury July *(photo: Alan Rowland).*

▲ *Speckled Bush Cricket* Leptophyes punctatissima *near Little St.Johns July (photo: Alan Rowland).*

Orthoptera (Bush Crickets, Grasshoppers, and their allies)

Malcom Lee

Bush Crickets and Grasshoppers

I can rarely visit Lundy in the summer, but in 2022 & 2023, I was able to get over for a few short visits between July and September. This enabled detailed monitoring of the orthoptera of the island, using a bat detector to pick up their distinctive calls, the majority of which have output in the ultrasound range. Bat detectors have been used for recording grasshoppers and bush crickets for around 20 years (Lee 2004) and have several advantages. As we get over 50, our ability to hear high-frequency sounds naturally diminishes, so a bat detector with its volume control is a real boon. It also has a range of 15 metres or more, so you can hear their calls before they detect your presence and dive into the foliage. It can also be pointed down steep slopes where plain common sense would tell you not to venture. Each species has a different call so the type of grasshopper or bush-cricket can be recorded even if they are not actually seen. The Speckled Bush-cricket *Leptophyes punctatissima*, which occurs on Lundy, is well camouflaged among the brambles on which it primarily lives, so is not often spotted by casual observers. Its distinctive 'tick' as males briefly flick their wing cases against each other, together with the fainter response from an interested female, comes over very loud on the bat detector and calls can be heard into November.

Methodology

Bush crickets were checked with the bat detector by stopping every 50 metres or so with the frequency set to around 40kHz. Panning speed means it takes about 10 seconds to do a 180-degree sweep. Grasshoppers were detected by walking just alongside the main paths, as far as possible, and extending the search into suitable adjoining areas to see if any were disturbed. The summer of 2022 was one of the hottest and driest on record, and grasshopper species whose life cycle would normally extend well into September were disappearing quickly, which affected numbers when I visited in early September 2022. There was only desiccated grass around by late summer, and for grass-eating species, this would have had a knock-on effect on numbers emerging to begin the 2023 generation.

Speckled Bush-cricket
(Leptophyes punctatissima)

The survey confirmed this is the only bush-cricket species present on Lundy. The Speckled Bush-cricket has an extensive colony all over the eastern slopes, from the harbour right up to above Gannets Combe. It was not detected anywhere on the western side or on the top of the island west of the main track to the north end. On the lower east side path, insects were heard calling on the slopes both above and below the path. From the harbour up to the Quarries, every stop detected their calls. On the upper east side path going up to Quarter Wall Cottages, none were heard after leaving Millcombe valley. North of the Quarries numbers decreased, with the most northerly insect detected being just above Gannets Rock. On the day I checked above Three-Quarter Wall, the weather closed in past Gannet's Rock, and it began to drizzle. This causes males to stop calling, so they may be present right up to the north end. A specific survey for this species in the earliest years of the Lundy Field Society (LFS Fourth Annual Report) found a similar east-side distribution up to Gannets Rock but noted its absence from the dense Rhododendron thickets then present.

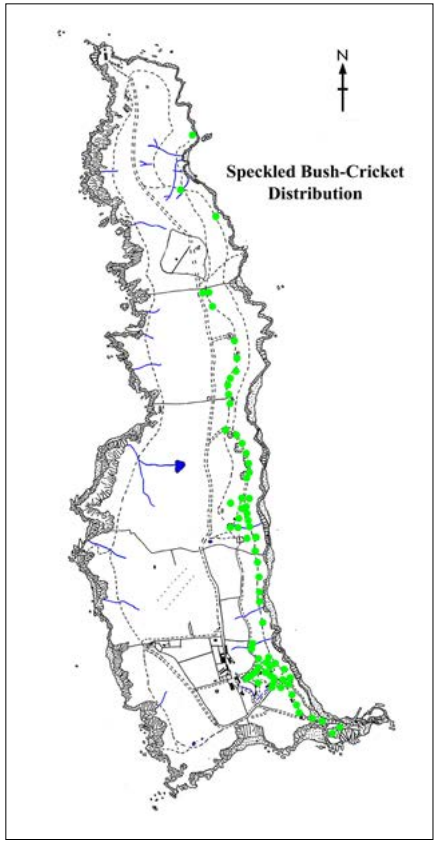
The only significant section of path not surveyed was the lower east side path above The Quarries to just below Brazen Ward, which will have to wait for another year, but there is no reason to doubt its presence there. A check of plants within the village confirmed its absence there, with the closest heard calling being those on the brambles as you go through the Blue Gate to Government House. Although the bat detector must have picked up many hundreds of calling insects, one was never actually seen during my survey. Their green speckled body is very cryptic amongst the foliage, and they typically call from deep inside a bramble patch, so searching for the actual insect without gloves can be a painful business, and not necessary for the purposes of this survey. The photo was taken by Alan Rowland on 2nd July 2023 of a male near Little St Johns.

How did the Speckled Bush Cricket get to Lundy? This species is flightless and generally sluggish in its movement, so populations have little ability to spread. It is surprising that it is found on many offshore islands around the southern half of the UK, which may suggest a natural distribution. Marshall and Haes (1988) speculated that they could have been transported to those islands as eggs on ornamental trees and shrubs, but confirmed they had no evidence and suggested such isolated populations merited further study. At the beginning of the 21st century, evidence for transport with plant material imported onto islands came in the form of a recently discovered population on St Marys, Isles of Scilly. This island group has been well studied for its flora and fauna, certainly since the era of Victorian naturalists, yet the first ever record for this distinctive species was in 1991 when a singleton was spotted near the Garrison on St Marys. In 2000, a small colony was found there, and checking with a bat detector in 2002 and 2003 established there was an extensive population right across the Garrison and eastwards to Hugh Town, especially near tipped garden rubbish. The fact that it is not present on any other of the islands also weighs against this being a long-established but overlooked natural population (Haes 2004). Perhaps the presence of this delightful bush cricket on Lundy is a legacy of the Reverend William Hudson Heaven's plantings.

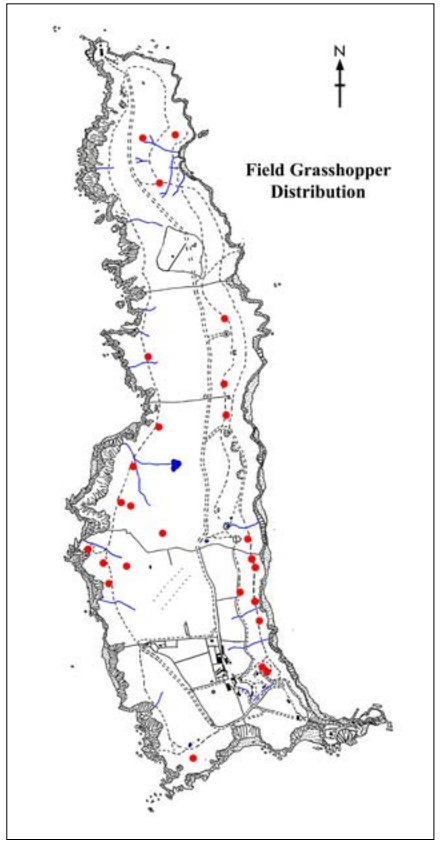
Field Grasshopper
(Chorthippus brunneus)

This was the only grasshopper species found during the survey and is most likely the only one now present on the island. It favours a warmer microclimate having some bare earth and rock, so it is primarily found in two areas of Lundy: along the western clifftops from just south of the Battery up to Three Quarter Wall and along the lower east side path where there are sheltered open spots. The Rhododendron clearance on the eastern slopes will have created much more

habitat for this species, but these steep slopes were not inspected. There were also a few Field Grasshoppers found around Gannets Combe and the area just south of Rocket Pole Pond. The damper grassland on the top of the island would not be suitable for the Field Grasshopper, and the two singletons located in thicker grass on Ackland's Moor and Pondsbury Field were probably just strays. I did not find this species abundant anywhere on the island, although the very hot summers undoubtedly reduced numbers. This is supported by Steve Banner finding large numbers by Quarter Wall cottages in August 2021, but none were seen by me in September 2022, and just one late instar nymph in August 2023. A total of some 20km of island paths were walked, some more than once, yet Grasshoppers were observed in just 25 locations. Outside of my survey, Alan and Sandra Rowland noted them on the upper east side path on 2nd July 2023, Michael Williams found one further up the east side path on the north side of Halfway Wall, and Tim Davis recorded the uncommon green variety along the lower east side path on 15th October 2023.



▲ *Distribution of the Speckled Bush Cricket* Leptophyes punctatissima *on Lundy, summer 2023.*



▲ *Distribution of the Field Grasshopper* Chorthippus brunneus *on Lundy, summer 2023.*

▲ *Field Grasshopper* Chorthippus brunneus *(photo: Malcom Lee).*

▲ *Meadow Grasshopper* Chorthippus parallelus *(photo: Malcom Lee).*

▲ *Mottled Grasshopper* Myrmeleotettix maculatus *(photo:Malcom Lee).*

Mottled Grasshopper
(Myrmeleotettix maculatus)

This smaller grasshopper (typically 12mm length) has rarely been recorded on Lundy, the most recent being over 25 years ago when Dr Roger Key reported them on 2nd August 1997, with the note 'A welcome return - the first record of the mottled grasshopper on Lundy for over 40 years'. The location was given as simply 'Millcombe'. It is not clear if Roger Key thought this 40-year absence was for want of looking or whether it had somehow just turned up, which would be most unusual for a sedentary species. It may not have been his own record, so the possibility of misidentification cannot be ruled out. The Mottled Grasshopper will be found in the warmest parts of any habitat, and in Millcombe valley, the area around Hangman's Hill has many patches of short turf interspersed with bare earth and rock and would be the area in which it would most likely be found. This is one of the earliest grasshoppers to go over, and in the hot summer of 2022, it was not too surprising to find nothing at that location in early September. This species comes over well on the bat detector, with a call rising in volume before abruptly stopping. so would have been heard were it present and calling. The search in early August 2023 also failed to see or hear this species in almost perfect weather, so I conclude that this species is most likely lost to the Lundy fauna.

Meadow Grasshopper
(Chorthippus parallelus)

There have been some reports of this species in the last few years, but no historic records. I am sure these were simple misidentifications. Grasshoppers are not the easiest to identify in a brief second or two before they plunge into the foliage, so the three images below may assist. It is the head and the segment immediately behind it, known as the pronotum, which are the key features to check (arrowed in all three photographs). The sides to the pronotum are indented in the Field Grasshopper, whereas the sides of the pronotum in the Meadow Grasshopper are almost parallel (hence *C. parallelus*). The Mottled Grasshopper is a smaller species, with deeply indented sides to the pronotum. Males also have clubbed antennae (arrowed) which are bent at the tip, with females having thickened tips.

Great Green Bush-Cricket
(Tettigonia viridissima)

This species does not breed on Lundy, and the single record is a vagrant transported to the island on the Oldenburg on 18th August 2018. This was seen by Alan and Sandra Rowland on the boat, who noted that it subsequently flew off while the Oldenburg was tied up at the jetty. It is not uncommon around Bideford and probably flew on board there, or as it sailed along the river.

▲ *Common Earwig* Forficula dentata *(photo: Neil Barnes).*

Other Orthoptera species

Lesser Cockroach

Capraiellus (=Ectobius) panzeri

This is a small (6mm long) species intermittently seen on Lundy. The last record was in 2020 when one landed on Dean Jones at Aztec Bay by Three-Quarter Wall, the previous record being in 1983. Alan Rowland drew my attention to a wartime report by G D Hale Carpenter who visited the island in September 1942. He reported finding a female with ootheca (egg case) under a block of stone among very short scanty grass and other vegetation on the bare northern granite plateau. It is always an elusive species. Only males have wings and fly readily. The alert females spend their lives amongst litter beneath low vegetation like gorse and heather and will quickly disappear if disturbed. During my survey I checked beneath dozens of heather clumps alongside the path at the north end and around Gannets Combe, all with negative results. Whilst adults are elusive, the less cautious nymphs can often be seen feeding on pollen of Thrift, Cinquefoils, or Buttercups etc in early summer. This is the best time to detect the presence of the Lesser Cockroach.

Common Earwig

Forficula dentata **(formerly** *F. auricularia***)**

This is a common species, much under-recorded but easily found inside the dead stems of Hogweed on Lundy. Neil Barnes recorded a singleton between Rocket Pole Pond and Benjamin's chair on 21st October 2023.

Identification of Lundy Orthoptera.

For anyone with a bat detector who would like to try it out for recording orthoptera, I have a set of MP3 recordings of all the species found in Cornwall to accompany my 2004 article. If you would like a copy of the article together with recordings to have them handy on your mobile phone, please send your request to my email address (**gullrockportgaverne@btinternet.com**).

I would also be happy to identify photographs of Orthoptera taken on Lundy.

Thanks to Michael Williams for providing the map of Lundy used in the text.

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▲ *Painted Lady* Vanessa cardui *Millcombe September (photo: Paul Dean)*

BUTTERFLIES

Compiled by Kristin Reed

Nineteen species of butterfly were seen on Lundy in 2023 with only **Gatekeeper** and **Brimstone** absent compared to recordings made in previous years. It was a good year for **Red Admiral** as it was the first butterfly noted on Lundy in March and the last to be recorded in November. An exciting southern migration along the length of the Island of 73 + Red Admirals was seen by D. Price and S. Gray in early September. Another southern migration was seen on the 12th of October with numbers reaching 135+ before the fog came in and stopped play. **Meadow Brown** and **Small Heath** were present in large numbers in June and July with 74 Small Heath recorded on the 22nd of June and Meadow Brown being recorded at 250+ on several

► *Clouded Yellow* Colias croceus *(photo: Shaun Barnes).*

▲ *Speckled Wood* Pararge aegeria *Millcombe May (photo: Mandy Yates).*

occasions in July. **Grayling** were present this year, with the first sighting on 21st June and the last on the 18th of July, with 13 individuals seen on the 13th of July**. Painted Lady** were present in low numbers throughout, but were regularly recorded from April to October.

Of the scarcer species, individuals of **Clouded Yellow** were first seen on the 25th of May, followed by the next sighting, again of one, on the 11th of September. Two were seen later in the year, between the 8th and 15th October. Other butterflies which are normally scarce on Lundy, **Ringlet**, **Wall-brown**, **Orange-tip**, **Speckled Wood**, and **Comma** were noted but were characteristically infrequent.

◄ *Small Copper* Lycaena phlaeas *Farmyard, May (photo: Mandy Dee).*

Moths Lepidoptera

David Rowe

In 2023, 132 species of moths were recorded on Lundy (220 were recorded in 2022), including eight new for the island (seven micro and one macro). The Heath Trap was used on 11 occasions, usually in Millcombe but occasionally at The Old Light. The lower moth counts can be clearly explained by the reduced use of the Heath trap: 95 sessions in 2022 against 11 in 2023.

Moths new to Lundy, in checklist order
Micro-moths
Speckled Broom Buff *Agonopterix assimilella,* **Large Pale Masoner** *Blastobasis lacticolella,* **Common Plume** *Emmelina monodactyla,* **Birch Tortix** *Epinotia immundana,* **Heather Knothorn** *Pempelia palumbella,* **Garden Pebble** *Evergestis forficalis,* **Water Veneer** *Acentria ephemerella,* **Meadow Grass** *Crambus lathoniellus* and **Narrow-winged Grey** *Eudonia angustea.*2023 gave only the second Lundy record of the Micro-moth **Light-brown Apple Moth** *Epiphyas postvittana* the first was in 2022. This moth was first found in 1936 in Cornwall, an adventive, originally from Australia. It is possibly the most widespread and abundant micro-moth in the UK and it has taken 86 years to reach Lundy; this confirms that Lundy is truly an island!

Macro-moths
Dotted Border *Agriopis marginaria,* **Mullein Wave** *Scopula marginepunctata* and **Lunar Yellow Underwing** *Noctua orbona,* which was also a first record for Devon.

◄ *Clockwise from top left: Lunar Yellow Underwing* Noctua orbona, *Millcombe (photo: David Rowe). Fox Moth* Macrothylacia rubi *(photo: David Rowe). Cream-spot Tiger* Arctia villica *(photo: David Rowe). Hummingbird Hawkmoth* Macroglossum stellatarum *July (photo: Neil Barnes).*

All the new micro-moths were recorded between August 7th and 9th, except **Garden Pebble** seen on June 3rd. The **Common Plume** was recorded at the Old Light and the remainder in Millcombe. The macro-moth, **Dotted Border,** was recorded on April 5th outside the Tavern, **the Mullien Wave** on June 3rd**,** and **Lunar Yellow Underwing on** June 9th, both at Millcombe.

First and Last Observations
The first active moth to be observed in 2023 was a **Twenty-plume** *Alucita hexadactyla* in the Carpenter's Workshop on February 3rd. The last was a **Dark Arches** *Apamea monoglypha* ovipositing on rocks on 20th October on the East Side between Mouse and Trap and Gannet's Combe. The final record was a hibernating **Humming-bird Hawkmoth** *Macroglossum stellatarum* on the 22nd of November in St Helena's Bell Tower, just preceded on the 20th of November by a **Herald** *Scoliopteryx libatrix* in a cave by the Landing Bay.

Records of Moths as caterpillars (larvae), larval cases and leaf mines

2023 Day Flying Moth Data from LFS Log Book Check List

Moth Species	Recorded on (Days)	First Date	Last Date	Maximum & Date	Total
6 Spot Burnet	9	12 Jun	11 July	8 on July 8	27
5 Spot Burnet	12	12 Jun	13 July	109 on Jul 1	151
Fox (Caterpillar)	41	14 May	7 Nov	23 on 4 Oct	154
Emperor	8	4 May	23 May	4 on May 6	12
Humming Bird Hawk	67	2 April	28 Oct	6 on July 16	119
Silver Y	63	3 May	27 Oct	23 on 4 Oct	143

Caterpillars (larvae)

Although most moths are night flying, many species are recorded as caterpillars, with regular records in 2023 of nine different species. Four macros: **Lacky** *Malacosoma neustria* **Garden Tiger** *Arctic caja*, **Scarlet Tiger** *Callimorpha dominula,* and **Knot Grass** *Acronicta rumicis* were not recorded as adults.

This was also the case for a Lundy favourite, the micro-moth **Cornish Snout** *Nothris congressariela,* not seen as an adult in 2023, but the diminutive larvae were, both in February and in late August, found feeding on the food plant **Balm-leaved Figwort** *Scrophularia scorodonia.* The plant itself is uncommon, restricted to coastal habitats in Devon, Cornwall, and the Isles of Scilly. **Balm-leaved Figwort** is a Neophyte, a non-native plant that was introduced to the UK after 1550, probably due to its herbal properties. The moth similarly has a very limited UK range. It begs the question as to whether the moth was introduced along with the plant. **Cornish Snout** larvae were also observed feeding on **Common Figwort** *Scrophularia nodosa.* and may be the first time this moth species has been found on Lundy (observed by Samuel Gray).

◄ *Larva of the Pale Tussock* Calliteara pudibunda *Lower East Side September (photo: Mandy Dee*).
◄◄ *Larva of Ruby Tiger* Phragmatobia fuliginosa *on the door frame of Little St. John's September (photo: Tim Jones).*

Larval Cases
The presence of three species of Bagworm micro-moths, **Common Bagworm** *Psyche casta,* **Ramshorn Bagworm** *Luffa lapidella* and **Lichen Case-bearer** *Dahlica lichenella* were detected from their distinctive larval cases. The Lichen Case-bearer on May 23rd (Eamonn O'Donnell) was indeed a special find, not only a first for Lundy but only the second record in Devon since 2010.

▲ *Common Bagworm* Psyche casta*, larval case (photo: Alan Rowland).*

Leaf Mines:
Evidence of another secretive Lundy micro-moth **Golden Dot** *Stigmella aurella* was seen in the form of leaf mines on Bramble leaves (*Rubus fruticosus*), recorded both in February and August in Millcombe.. A variety of insects, such as **Flies** *Diptera,* **Sawflies** *Hymenoptera,* **Beetles** *Coleoptera,* and many micro-moths share this strategy. After eggs are laid on leaves the emerging larvae burrow within the leaves to feed, leaving sinuous trails 'mines' that can be seen through the leaf surface. In the case of **Golden Dot** the mines are unique enough to give a positive identification.

▲ *Leaf mines of Golden Dot* Stigmella aurella *on Bramble leaf (photo: David Rowe).*

Moth Eruptions
Single species of moths occasionally appear in vast numbers. In 2022 hundreds of day-flying **Burnet** *Zygaena sp.* adults and caterpillars were seen near the South Light. This phenomenon was not recorded in 2023. High numbers of **Flounced Rustic** *Luperina testacea* were observed in the light trap at Millcombe, 151 on 2nd September, over 50% of the total catch reported by Samuel Gray. Additionally on May 18th, 40 **Brown Silver-lines** *Petrophora chlorosata,* a day-flying moth that is unusual in that its food plant is **Bracken** Pteridium aquilinum, were seen near Tibbets.

Migrants
Seven migrants were recorded in 2023 (11 in 2022): **Diamond Back** *Plutella xylostella,* **Rusty Dot Pearl** *Udea ferrugalis*, **Rush Veneer** *Nomophila noctuella,* **Humming Bird Hawk-moth, Vestal** *Rhodometra sacraria,* **Silver Y** *Autographa gamma*, **Dark Sword Grass** *Agrostis ipsilon.*

Terrestrial Invertebrate Reports: Thanks

All the species compilers wish to record their thanks to the submitters of records for making available their observations, in particular: -

Eleanor and Mark Allen, Carol Baillie, Neil Barnes, Shaun Barnes, Richard Bashford, Isobel Bender and Connie Evans, Ella Berry, Maggie Bowden, Richard Campey, A Powell Chandler, Karen Cole and Alan Henshaw, Stuart Cossey, Bee Cox, Tim Davis and Tim Jones, Darrin Dowding, Paul Dean, Chris and Mandy Dee, James Diamond, EM Grover, Peter Heslip, Mike and Helen Jackson, Dave Jones, Elinor Kersman, C Laine, Carol Lee, Joe Parker, Alan and Sandra Rowland, Trudy Shees, Tim Smith, Paul St Pierre, Ann and Tony Taylor, Jane and Nick Taylor, Rebecca and Richard Taylor, Sally Wadsworth, Roger and Matt White, Steve Wing, and all those who wrote their sightings in the log book but omitted to give their names.

Plants and Ferns

Andrew Cleave

Flowering Plants

The New Year Plant Hunt on Lundy:

The year got off to a good start when Assistant Warden Stuart Cossey carried out the Botanical Society of the British Isles (BSBI) New Year Plant Hunt on January 1st and recorded 14 species in flower. This event takes place nationwide every year with hundreds of observers recording plants actually in flower (not just leaves or buds), but this is the first time we have had records from Lundy. Hopefully, this can become an annual event. The most obvious flowering plant on Lundy on New Year's Day is always Common Gorse, but Stuart managed to find many far less conspicuous species like Petty Spurge, Early Dog-violet, and Tall Ramping Fumitory. The results are added to a national database and help us to understand how wild and naturalised plants are responding to a changing climate.

Full list for the 2023 New Year Plant Hunt on Lundy (Stuart Cossey)

Daisy	*Bellis perennis*	flowering early or late	native
Red Valerian	*Centranthus ruber*	flowering late	neophyte
Ivy-leaved Toadflax	*Cymbalaria muralis*	flowering late	neophyte
Bell Heather	*Erica cinerea*	flowering late	native
Petty Spurge	*Euphorbia peplus*	flowering expected	archaeophyte
Tall Ramping-fumitory	*Fumaria bastardii*	flowering late	native
Creeping Buttercup	*Ranunculus repens*	flowering early or late	native
Groundsel	*Senecio vulgaris*	flowering expected	native
Red Campion	*Silene dioica*	flowering early	native
Sea Campion	*Silene uniflora*	flowering late	native
Smooth Sow-thistle	*Sonchus oleraceus*	flowering late	native
Dandelion	*Taraxacum sp*	flowering early	native
Gorse	*Ulex europaeus*	flowering early	native
Early Dog-violet	*Viola reichenbechiana*	flowering early	native

In line with the national trend, five of these species feature in the "top ten" list of most frequently recorded plants nationwide – Daisy, Dandelion, Petty Spurge, Groundsel, and Gorse, but some of the others, such as Tall Ramping-Fumitory, are far less frequent with only a handful of scattered records elsewhere. Some of these species might be expected to be in flower on this date in a mild winter, but for others, flowering is either late or early.

Notes: *Archaeophyte - a plant which is not native to a region but was an introduced species in ancient times.*
Neophyte – a plant which is not native to a region and was introduced in recent history.

Other flowering plant records during 2023

Two species of Milkwort occur on Lundy and the flowers are very similar at first glance, so it is necessary to examine the arrangement of the lower leaves to be sure of the correct identification. **Common Milkwort** *Polygala vulgaris* has alternate leaves but the very similar **Heath Milkwort** *P. serpyllifolia* has opposite lower leaves. The flowers of both species are very much alike, usually an intense blue, but can sometimes be pale blue, and in Common Milkwort they could sometimes be pink or very pale. Heath Milkwort usually has a shorter inflorescence and is also

◄ *Skullcap* Scutellaria galericulata *near Tibbets August (photo: Tracey Eden).*

▲ *Heath Milkwort* Polygala serpyllifolia *April (Photo:Mandy Dee).*

a smaller, more prostrate plant. Records of Heath Milkwort this year have come from the steep slopes near the south end and around the top of Gannet's Coombe, although both species are quite widespread in grassy areas.

Thanks to Tracey Eden for spotting **Skullcap** *Scutellaria galericulata* in a damp gulley on the east side beyond Tibbets on August 9th. Skullcap is easily overlooked until the deep blue paired flowers open. It is most common on Lundy in the Gannet's Coombe area and sometimes flowers quite close to the main track, but always in very damp locations and usually under other vegetation. There were many reports of **Sheep's-bit** *Jasione montana* which is another of the blue-flowered species on Lundy. It is very tolerant of drought conditions and often grows on almost bare rock. It is a good source of nectar and attracts many insects including the **Sulphur Beetle** *Cteniopus sulphureus*.

The tops of walls and gaps between cobble stones are good habitats for small, low-growing species that are unable to compete with more aggressive plants. **Lesser Trefoil** *Trifolium dubium* and **Slender Trefoil** *T. micranthum* are both small, creeping annuals which can be found in the village area, the paths around Millcombe House and in frequently mown grassy areas. Both species did well this year with the peak of flowering in mid-summer, but some persisted until mid-October.

Swine-cress *Lepidium coronopus* is quite widespread on Lundy on paths, tracks, gateways and well-trodden stony areas. It forms small compact patches and, on closer examination, can be seen

Plants of wall tops and stony paths on Lundy.

▲ *Ivy-leaved Toadflax* Cymbalaria muralis *on the top of the wall by Stoneycroft, May (photo: John Hedger).*

▲ *Soft Brome Grass* Bromus hordeaceus *on the top the wall by Barton Field, May (photo: John Hedger).*

▲ *Wall Pennywort* Umbilicus rupestris *and Ivy-leaved Toadflax* Cymbalaria muralis *on Barton Field Wall (photo: Tim Davis).*

▲ *Lesser Trefoil* Trifolium dubium *amongst stones, The Village May (photo: Andrew Cleave).*

to have dense clusters of small flowers with 2mm-long white petals. However, **Lesser Swine-cress** *L. didymium* is also present and very similar at a glance. A quick way of distinguishing the two species is by scent, as Lesser Swine-cress has a pungent aroma when the leaves are crushed. The flowers are small with minute, or sometimes absent petals. Both species are found in the village area, around the Stone Crusher, and in some gateways. **Sea Storksbill** *Erodium maritimum* is another often overlooked species that grows in similar locations and has small flowers with tiny petals which are shed almost as soon as the flower opens. It also forms distinctive leaf rosettes on bare and stony ground. A later-flowering species which did well this year, especially in the disturbed ground around the Stone Crusher is **Black Nightshade** *Solanum nigrum,* an annual which produces small clusters of black fruits by late summer.

Grasses & Sedges- the May survey by Steven Sylvester and Natural England

A visit was made to Lundy by a team from Fera, principally Steven Sylvester, and Natural England in May 2023 and recorded a number of grass and sedge species, some of which have not been noted in recent years – presumably because they have been overlooked in previous surveys.

Under recorded grass species found in the May 2023

Brown Bent	*Agrostis vinealis*	Gannet's Coombe
Squirrel-tail Fescue	*Vulpia bromoides*	nr Millcombe Pond
Spreading Meadow-grass	*Poa pratensis* ssp *irrigata*	Gannet's Coombe
Crested Dog's-tail	*Cynosurus cristatus*	NW of Old Hospital

Other grass species recorded

(Including several more common and frequently seen species on Lundy):

Early Hair-grass	*Aira praecox*
Silver Hair-grass	*Aira caryophyllea*
Creeping Bent	*Agrostis stolonifera*
Common Bent	*Agrostis capillaris*
Soft Brome	*Bromus hordeaceous ssp ferronii*
Sea Fern-grass	*Catapodium marinum*
Purple Moor-grass	*Molinia caerulea*
Sheep's-fescue	*Festuca ovina*
Sweet Vernal-grass	*Anthoxanthum odoratum*
Smooth Meadow-grass	*Poa pratensis subs pratensis*
Spreading Meadow-grass	*Poa pratensis subs irrigata*
Perennial Rye-grass	*Lolium perenne*

Sedge species recorded

Sand Sedge	*Carex arenaria*
Common Sedge	*Carex nigra*
Greater Tussock Sedge	*Carex paniculata*
Common Yellow Sedge	*Carex demissa*

Ferns

Thanks to all those who entered records of ferns in the Logbook. They included **Hay-Scented Buckler Fern** (*Dryopteris aemula*) a small but elegant tripinnate (three times branched) leaved fern clinging to the banks found along the Lower East Side Path north of the Quarries by Sheena Duller. She also recorded **Sea Spleenwort** *Asplenium marinum*. It is a robust fern able to tolerate salt spray, so is often found closer to the sea than other ferns. It is also able to grow in rock crevices and on walls where it does not suffer competition from other larger species. It is quite common on the walls at the Fog Battery and has also colonised the south-facing wall of the Castle. Some quite large specimens can be found in the Earthquake, apparently growing out of bare rock. Another species of *Asplenium*, recorded on Lundy in the past, but not seen in recent years, is **Lanceolate Spleenwort** *Asplenium obovatum ssp billotii*. This is also likely to occur on walls, but in more sheltered locations than Sea Spleenwort as it is a far less robust species. There have been occasional possible sightings of this species recently, so it will be well worth checking likely locations, such as the walls around Millcombe, in case this lost Lundy fern is still present.

Contributors: Many thanks to everyone who made notes in the LFS Logbook of plants and ferns they spotted this year. Your help is much appreciated.

▲ *Sea Spleenwort* Asplenium marinum *on rocks within the Earthquake (photo: Sheena Duller).*

▲ *Hay-Scented Buckler Fern* Dryopteris aemula *Lower East Side Path nr.Brazen Ward (photo: Sheena Duller).*

▲ *The moss* Bryum alpinum *growing by Punchbowl Stream August (photo: Sam Bosanquet).*

Bryophytes (Mosses, Liverworts & Hornworts)

Sam Bosanquet

Fourteen liverwort species and 18 moss species were recorded during a visit by Sam Bosanquet in August, mostly in the Quarries and the Punchbowl Stream. The fourth island site for the Nationally Scarce liverwort *Kurzia sylvatica* was discovered in the little cave by North Quarry, following previous records from Earthquake, Pondsbury, and Gannet's Coombe. *Platyhypnidium riparioides* was noted new for the west coast in a base-enriched stream by Jenny's Cove, having only been seen around Millcombe, St John's, and the Quarter Wall Stream. No new species were found, and the island's tally of bryophytes remains at 226 taxa (two hornworts, 64 liverworts, and 160 mosses).

◄ *Blinks,* Montia fontana*, a flowering plant, growing through the aquatic moss* Fontinalis antipyretica *in the Punchbowl Stream August (photo: Sam Bosanquet).*

Lichens

Sam Bosanquet

Short lichen lists were made by Sam Bosanquet in August for a few localities resulting in records of 18 species. Nine of these were on a wall top at Benjamin's Chair, including *Lecanora gangaleoide, Flavoparmelia caperata* and *Xanthoparmelia loxodes*, both common saxicolous species especially near the coast, whilst four *Cladonia* were identified from heathy coastal slopes near Jenny's Cove. Spectacularly long, pendulous *Ramalina cuspidata* was photographed on a tor near Jenny's Cove. There was also a record of *Teloschistes flavicans* from above Long Roost submitted by 'crypticww' via the iRecord app.

Thanks to all those who entered Lichen records in the Logbook and to Sheena Duller for sending in photographs of lichens taken in previous years on Lundy.

► Flavoparmelia caperata *on the field wall near Benjamin's Chair, August (photo: Sam Bosanquet).*

▲ Lecanora gangaleoides *on a granite wall near Benjamin's Chair, August (photo: Sam Bosanquet).*

▲ Ramalina cuspidata *growing on a granite tor, Jenny's Cove, August (photo: Sam Bosanquet).*

▲ *Orange Milkcap* Lactarius aurantiacus *in Millcombe, November (photo: Mandy Dee).*

FUNGI AND SLIME MOULDS

Species found in 2023

Mandy Dee

2023 was another excellent year for fungi recording on Lundy with 430 individual records of 262 species, of which 61 are new, including two Slime Moulds. This takes the total for Fungi and Slime Moulds to 860. The 2023 list of records can be found on the LFS Website, along with the Master List of all records.

The spring is always a lean period for fungi, but Louise Cookson contributed the first logbook record of the year on 27th March, with an aged specimen of **Giant Puffball** *Calvatia gigantea* found in Brick Field. The photo is of a newer group later in November on the old dung heap in Brickfield. Dung fungi are present all year round, and Mandy Dee added a handful of records in April. May saw John Hedger and myself on the island for a weekend, recording 39 species, including rusts and smuts on plants, of which 12 were new. Of greatest interest was a first record of **Wood Oysterling** *Deconica horizontalis* on a Sycamore log in St Helen's Copse. This is a tiny, brown-capped bracket-like gill fungus with a short stalk, a bit like a miniature Oyster Mushroom. John Hedger returned in November to the same log and found another bracket-like gill fungus but without stalks (sessile) and with 'shell like' purplish caps with widely spaced gills inside (see photo). This proved to be ***Hohenbuhelia unguicularis***, a new record and the second member of its genus to be found on Lundy (***H.mastrucata*** in Quarter Wall Copse was featured in last year's report). Both are rare in the UK.

Plenty of summer rain should have meant plenty of fungi during the summer months, but sadly none were recorded. *Occasional records from visitors during July and August would be most welcome*! David Botcherby and Zoe Roberts from the Sorby Natural History Society kicked off the autumn with a September record of **Persistent Waxcap** *Hygrocybe acutoconica* from the North End. This is an early waxcap species we only find occasionally, so a great record to see in the logbook.

By late September, a spell of warm dry weather had interrupted the season, with many species stopping fruiting. Two weeks of recording by Mandy eventually amassed some records, including the nationally rare ***Perenniporia ochroleuca***, a small buff bracket fungus which fruits reliably every year on the blackthorn trunks beside the path from Government House to Blue Bung. The rough grass slope below the tavern, above the path to the blue door was studded with the tiny caps of **Hairy Parachute** *Crinipellis scabella,* each one a tiny pale cap with a dark centre (see photo). The Creeping Willow around Pondsbury contributed plenty of the early autumn species usually found there: **Orange Milkcap** *Lactarius aurantiacus,*which we also found in November under Pines in Millcombe (see photo); **Fleecy Milkcap** *Lactarius vellereus;* **Winecork Brittlegill**

▲ *Wood Oysterling* Deconica horizontalis *on a Sycomore log in St.Helen's Copse May (photo; John Hedger).*

▲ Hohenbuehelia unguicularis *on a dead Sycamore branch in St.Helen's Copse November (photo: John Hedger).*

▲ *Giant Puffball* Calvatia gigantea *old and young fruit bodies on the manure heap in Brickfield November (photo: John Hedger).*

▲ *Hairy Parachute* Crinipellis scabella *on dead grass stems near the tavern September (photo: Mandy Dee).*

▲ *Fairy Spindles* Clavulinopsis fusiformis *in grass near the Punchbowl November (photo: John Hedger).*

▲ *Smokey Spindles* Clavaria fumosa *Lighthouse Field October (photo: Mandy Dee).*

▲ *Hairy Earthtongue* Trichoglossum hirsutum *in the lawn by Square Cottage November (photo: John Hedger).*

▲ *Sordid Blewit* Lepista sordida *var.* obscurata *in turf by Government House November (photo: Mandy Dee)*

Russula adusta; **Coral Brittlegill** *Russula velenovskyi;* **Cep** *Boletus edulis* and a Bog Brownie ***Hypholoma ericaeum.*** Finally, some autumn rain triggered the fruiting of waxcaps, starting with a lovely clump of **Blackening Waxcaps** *Hygrocybe conica* in the Upper Aerogenerator Field (Upper Lighthouse Field). Once the soil is moist enough, the Waxcaps usually fruit in waves though the autumn, and another record of **Blackening Waxcap** by Tim Davis on 19th October, in a regular spot alongside the track near Pondsbury, supports this.

By 25th October when Mandy Dee and Louise Cookson arrived for a few days foraying, there were Waxcaps popping up everywhere, including **Snowy Waxcap** *Cuphophyllus virgineus*, **Butter Waxcap** *Hygrocybe ceracea*, **Heath Waxcap** *Gliophorus laetus*, **Parrot Waxcap** *Gliophorus psittacinus*, **Golden Waxcap** *Hygrocybe chlorophana,* **Oily Waxcap** *Hygrocybe quieta* and **Scarlet Waxcap** *Hygrocybe coccinea.* The Clubs and Corals are another group of grassland fungi, and records were made of **Meadow Coral** *Clavulinopsis corniculata*, **Fairy Spindles** *Clavulinopsis fusiformis (see photo)*, **Yellow Club** *Clavulinopsis helvola,* **White Spindles** *Clavaria fragilis,* **Smoky Spindles** *Clavaria fumosa* (see photo), and **Apricot Club** *Clavulinopsis luteoalba.* These are commonly found in areas of short grass such as the Airfield, Lighthouse Field, beyond Quarter Wall around the ruins, and around Rocket Pole, but they can pop up anywhere. One similar-looking species which has been on our 'hope to find' list for many years was finally discovered by Mandy growing beside the track in St Johns Valley. The **Scarlet Caterpillar Club** *Cordyceps militaris* appears to be an orangey red, short club with a distinctive pockmarked surface. It is not related to the clubs and is actually an insect parasitising species in the ascomycete fungi, and grows from an infected moth pupa buried in the soil. A great first! Another new record of a striking purple mushroom, a variety of the **Sordid Blewit** *Lepista sordida var. obscurata* was made on the grass just outside Millcombe (see photo). Another lawn-find, but later in November, was of the black fruit bodies of the **Hairy Earthtongue** *Trichoglossum hirsutum* between Square Cottage and Old House. It differs from other black Earthtongues by having a distinctly stiff-haired stem shown well in the photograph. 2023 was one of our best autumns for Earthtongues on Lundy and we also found four species of the smooth-stemmed **Black Earthtongues** *Geoglossum cookeianum, G.fallax,G.starbaeckii,G.umbratile* as well as the **Slimy Earthtongue** *Glutinoglossum glutinosum.* Distinguishing the species of Black Earthtongues even with microscopy is difficult and we await the results of DNA sequencing of our finds by Gareth Griffith at Aberystwyth University to see how accurate our identifications have been.

▲▲ *Scarlet Caterpillar Club* Cordyceps militaris *in short turf St.John's Valley (left) and excavated (right) to show the moth pupa to which it was attached in the soil (Photo: Mandy Dee).*

November saw the start of the main island fungus survey by John and me and saw the arrival of some new and much needed Fungi reference books, kindly purchased by the LFS as additions to the library. There were already quite a few fungi books in the LFS library– you may ask why we needed more. There are around 15000 species in the UK, so no one book can cover them all. Every new book means more species that we can try to find on the island. One book covers just the genus *Agaricus*, which includes the cultivated mushroom. We found eight species of *Agaricus* this year, one of which, the **Coastal Mushroom** *Agaricus litoralis*, is a new record. A new book on the genus *Cortinarius* added two new species: **Granulated Webcap** *Cortinarius balaustinus*, and ***Cortinarius famatus.*** The excellent set of four guides by Geoffrey Kibby also purchased by the LFS are proving very useful for the genus *Entoloma*, or Pinkgills; a very tricky group which occur alongside the Waxcaps. They can be dull in colour but sometimes have unusual blue hues, such as ***Entoloma huijsmanii*** (a new record) shown in the photo. We recorded 20 Pinkgills this year, including an astonishing seven new to Lundy.

▲ Entoloma huijsmanii*, a Pinkgill, in grass near Rocket Pole and found on the LFS Foray November (photo: John Hedger).*

▲ Typhula micans *fruiting on a dead Stinging Nettle stem collected near Government House Pond November (photo: John Hedger).*

▲ *Common Stem Brittlegill* Psathyrella piluliformis *in the ringing chamber St.Helen's Church November (photo: John Hedger).*

▲ *Cups of* Pseudaleuria fibrillosa *on the path down to the Battery November (photo: John Hedger).*

Over the course of two weeks in November a total of 44 new records were added to the island total, 19 of which were gilled fungi. These included **Dark Navel** *Arrhenia obscurata,* **Angel's Bonnet** *Mycena arcangelica*, **Split Fibrecap** *Inocybe rimosa*, **Pierced funnel** *Clitocybe diatreta* and **Floury Funnel** *Clitocybe augeana*. John spent many hours examining rotten logs and dead branches in the wooded combes, as well as the dead stems of plants, adding another 16 species. They included a minute pink Club Fungus **Typhula micans** (see photo) found on Stinging Nettle stems collected next to Government House Pond. Many only have scientific names, but some of the excellent common names include **Birch Blackhead** *Diatrypella favacea,* **Pink Crust** *Corticium roseum,* **Rusty Porecrust** *Fuscoporia ferruginosa* and **Bruising Porecrust** *Ceriporia purpurea.* The final nine new records were rusts and smuts growing on green vegetation. Sharyn Wallace aided us with plenty of good records added to the Logbook in the tavern.

Two successful fungus forays introduced many of the visitors staying on the island to the delights of grassland fungi. On 1st November, 17 visitors and staff joined John and Mandy wandering around Lighthouse Field, SouthWest Field, and up to Old Light Lawn. A total of 33 species were seen, and a great time was had by all. The second foray on 9th November were determined to beat that total, and John, with a team of 20, including the bell-ringing party, extended the route to include the Rocket Pole area, and saw a magnificent 58 species! The bell ringers continued to find interesting fungi, with Alastair Donaldson and Vicky LeFevre discovering a cluster of **Common Stump Brittlestem** *Psathyrella piluliformis* growing from the window frame in the ringing chamber of St Helens Church! If you look carefully at the photograph a **Cellar Spider** *Pholcus phalangioides* can be seen suspended in its web over one of the fruit bodies (thanks to Alan Rowland and Mark West for the identification). When not ringing, Richard Sales and Vicky LeFevre also found the orange cup fungus ***Pseudaleuria fibrillosa*** growing on bare soil at the top of the path to the Battery. This is uncommon in the UK but steadily recorded on Lundy paths though sometimes crushed by footfall, as in the photograph.

Also in November, the visiting group of Imperial College M.Sc students contributed plenty of records in the logbook . The most unusual was by Isobel Bender of the tiny and elusive **Garlic Waxcap** *Hygrocybe helobia* in the short grass around the foundations of Quarter Wall cottages, only the third record for Lundy and in the same site where it was first found in 2010. Catalina Estrada recorded a **Giant Puffball** *Calvatia gigantea* on the 'manure heap' in Brickfield. This year there were over twenty very large fruitbodies in amongst the Nettles on the heap together with troops of the handsome **Shaggy Parasol** *Chlorophyllum rhacodes* (featured as the cover picture). This resembles the more familiar **Parasol Mushroom** *Macrolepiota procera* but has a very scaly cap and the flesh of the stem surface turns pink when scratched (and it can cause stomach upsets if eaten!). Both Giant Puffball and the Shaggy Parasol were very rarely seen on Lundy until recent years and have probably benefitted from the manure and silage dumps, as has the **Horse Mushroom** *Agaricus arvensis* which can be regularly found on the old silage at the back of the farm.

Lucy Lo-Vel finished the year nicely with records on 30th December of **Oak Mazegill** *Daedalea quercina,* and **Common Earthball** *Scleroderma citrinum.*

More Records please

The additional entries in the logbook in the Tavern are very useful in rounding out our records, so please do keep your eye open, check your sightings in Lundy Fungi and/or other field guides available in the tavern, and write your records in the logbook, along with where they were seen, and what they were growing on. Don't forget to add your name so we can acknowledge you! Many thanks to this year's recorders: John Hedger, Mandy Dee, Louise Cookson, Dave Botcherby, Zoe Roberts, Carol Baillie, Tim Davis, Sharyn Wallace, Richard Sales, Vicky LeFevre, Alastair Donald, Catalina Estrada, Julia Schroeder, Isobel Bender, and Lucy Lo-Vel.

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▼ *Table 1. New records of fungi on Lundy in 2023*

Latin name	Common name	Where found	Lundy locality	Date
Agaricaceae	**Gill Fungi**			
Agaricus litoralis	Coastal Mushroom	Grass	Upper Lighthouse Field	31/10/2023
Arrhenia obscurata	Dark Navel	Short turf	Quarter Wall Cottages	03/11/2023
Clitocybe augeana	Floury Funnel	Old silage/manure dump	Brick Field	22/11/2023
Clitocybe diatreta	Pierced Funnel	Short turf	Roadside near Golden Well	21/11/2023
Cortinarius balaustinus	Granulated Webcap	Amongst Creeping Willow	Pondsbury	03/11/2023
Cortinarius famatus		Under Alder trees	Lower Millcombe by pond	01/11/2023
Crepidotus variabilis	Variable Oysterling	Dead twig of Acer	Secret Garden, Millcombe	01/11/2023
Deconica horizontalis		Sycamore log	St.Helen's Copse	16/05/2023
Deconica pratensis		Short turf	Lower East side path nr QWC	08/11/2023
Entoloma bisporigerum syn. *E. caccabus*		Medium height grass	Rocket Pole	09/11/2023
Entoloma huijsmanii		Short turf	Rocket Pole	01/11/2023
Entoloma infula		Short turf	Quarter Wall Cottages	03/11/2023
Entoloma minutum		Short turf	QW Mediaeval Wall	30/10/2023
Entoloma ortonii		Short turf	QW Mediaeval Wall	30/10/2023
Entoloma turbidum var. *pachylamellatum*		Short Heather	by John O'Groats House, North End	07/11/2023
Entoloma vindobonense		Short turf	Near Earthquake	30/10/2023
Galerina jaapii		Moss on a boulder	Lower East Side Path	09/11/2023
Hohenbuehelia unguicularis		Dead Sycamore branch	St.Helen's Copse	09/11/2023
Inocybe rimosa	Split Fibrecap	Under Birch	Quarter Wall Copse	06/11/2023
Lepista sordida var. *obscurata*	Sordid Blewit	Grass	Outside Millcombe back gate	26/10/2023
Mycena arcangeliana	Angel's Bonnet	Sycamore wood	Lower Millcombe	04/11/2023
Mycena metata		Short grass	Walled Garden, Millcombe	01/11/2023
Clavariaceae	**Club Fungi**			
Typhula micans		Dead stem of Nettle	Government House Pond	09/11/2023
Typhula uncialis		Dead leaf of Field Thistle	Back of St John's wall	09/11/2023
Polyporales	**Shelf Fungi**			
Ceriporia purpurea	Bruising Porecrust	Decorticated Sycamore branch	St.Helen's Copse	09/11/2023
Corticium roseum	Pink Crust	Dead Gorse branch	Near Acklands Moor Pond	21/11/2023
Fuscoporia ferruginosa	Rusty Porecrust	Dead Alder branch	Quarter Wall Copse	09/11/2023
Ascomycota	**Cup and Flask Fungi**			
Alternaria solani		Leaf of Woody Nightshade	Millcombe South side woods	31/10/2023
Ceratocystis sp.		Fallen Birch leaf	Quarter Wall Copse	09/11/2023
Chaetomella acutiseta		Petiole of Sycamore	Lower Millcombe	09/11/2023
Cordyceps militaris	Scarlet Caterpillar Club	Grass verge beside main track	St Johns valley	25/10/2023
Diatrypella favacea	Birch Blackhead	Dead Birch branch	Quarter Wall Copse	08/11/2023
Diplosporonema delastrei		Red Campion leaf	Lower Millcombe	04/11/2023
Discosia artocreas		Dead Hawthorn leaf	Upper Millcombe	09/11/2023
Exosporiella fungorum syn. *Anomalemma epochnii*		Fruitbody of Xylaria longipes	Lower Millcombe	09/11/2023
Hypoderma hederae		Bleached Ivy leaf	Lower Millcombe	04/11/2023
Lachnum carneolum syn. *Dasyscyphus carneolus*		Dead Bromus mollis	Lower Millcombe	10/11/2023
Mycosphaerella superflua		Leaf of Stinging Nettle	Lower Millcombe	13/05/2023
Nectria inventa		Dead grass and leaves	Lower Millcombe	04/11/2023
Pezicula carnea		Decorticated Sycamore wood	Lower Millcombe	09/11/2023
Phomopsis salicina		Leaf of Grey Willow	Lower Millcombe	04/11/2023
Phyllachora sylvatica		Leaf of Red Fescue	Jetty Road	13/05/2023
Pilidium acerinum		Dead leaf of Turkey Oak	Quarter Wall Copse	09/11/2023
Propolis farinosa syn. *P. versicolor*		Dead Turkey Oak branch	Quarter Wall Copse	09/11/2023
Ramularia centranthi		Leaf of Red Valerian	Lower Millcombe	04/11/2023
Ramularia geranii		Leaf of Herb Robert	Upper Millcombe	13/05/2023

Latin name	Common name	Where found	Lundy locality	Date
Ramularia pratensis	Sorrel Felt	Leaf of Sheep's Sorrell	Lower Millcombe	04/11/2023
Ramularia primulae		Leaf of Primrose	Millcombe	13/05/2023
Ramularia scolopendrii		Leaf of Balm-leaved Figwort	Lower Millcombe	13/05/2023
Ramularia taraxaci		Leaf of Dandelion	Farm Buildings	13/05/2023
Rhynchosporium orthosporum syn. *Rhynchobrunnera orthospora*		Leaf of Cocksfoot	Stoneycroft garden	13/05/2023
Sarcopodium tortuosum		Dead Pine twig	Upper Millcombe	04/11/2023
Scutellinia crinita syn. *S scutellata var cervorum*	Eyelash Cup	Rotted Turkey Oak wood	Quarter Wall Copse	09/11/2023
Septoria stellariae		Leaf of Chickweed	Stoneycroft garden	13/05/2023
Sporidesmum tetracoilum		Sycamore branch	Lower Millcombe	09/11/2023
Ustilaginales	**Smuts**			
Entyloma ficariae	Celandine Smut	Leaf of Lesser Celandine	Lower Millcombe	13/05/2023
Ustilago striiformis	Striped Smut	Leaf of Cocksfoot	Lower Millcombe	13/05/2023
Uredinales	**Rusts**			
Puccinia heraclei		Leaf of Hogweed	Stoneycroft walled garden	13/05/2023
Puccinia recondita f.sp.*bromalis*		Leaf of Bromus hordaceus ssp. Ferranii	Jetty Road	13/05/2023
Myxomycetes	**Slime Moulds**			
Cribraria intricata		Rotten wood	Lower Millcombe	21/11/2023
Cribraria violacea		Very rotten soft wood	Lower Millcombe	21/11/2023

▲ *Eyelash Cup* Scutellinia crinita *on rotten wood Quarter Wall Copse November (photo: John Hedger).*

▲ *Scarlet Waxcap* Hygrocybe coccinea *on the Airfield November (photo: Mandy Dee).*

Surveys of fungi on Lundy

John Hedger

▲ *A group of Imperial College M.Sc. students and staff counting fungal fruiting bodies on SW Field on the 22nd November (photo: John Hedger).*

The preceding account by Mandy Dee summarises the records of species of fungi new to Lundy and found in 2023. In addition, surveys of the abundance of fruit bodies of macrofungi (mushrooms and toadstools) were made at two sites: the **Airfield** and at the **North End**, both in November These counts add to those from previous years, stretching back to 2006.

Counts of fruiting bodies of fungi on the Airfield

The Airfield counts were made by the visiting group of Imperial College M.Sc (Environmental Studies) students led by Dr Julia Schroeder who come to Lundy in November to study the Sparrow population but who also diversified in 2022 to counting the fungi on the Airfield, giving rise to the intriguingly titled 'Sparrows and Fungi' public lecture given in the St. Helen's Centre at the end of their week on the island. This exercise was repeated on 21st November 2023. Groups of students were spread across the width (50m) of the eastern end of the Airfield and progressed down its length (529m) to the western end, recording numbers of fruit bodies of the different species of grassland fungi as they went, using the LFS publication 'Lundy Fungi' to check the identities. A calculation shows they checked 26450 square metres of turf! *

*thanks to Alan Rowland for these measurements

▲ *Immature sporangia of the Egg Shell Slime Mould* Leocarpus fragilis *in turf lower SW Field near Rocket Pole November (photo: John Hedger).*

The table shows the counts made in 2023 compared to the 2022 figures. The total number of species found, and their abundance, was greater in 2023 than 2022 with almost three times more fruit bodies found and double the number of species. The iconic Waxcap species, for example the Scarlet and Crimson Waxcaps, make up part of a system for assessing grassland fungal diversity (the 'CHEGD' score) and this is given below the table, 20 for 2022 ,27 for 2023, both high scores, confirming Lundy's important grassland fungal population. **H** in the score stands for Hygrocybe, the 'old' name for all Waxcaps,and this is used in the table rather than confusing the score by including the 'new' genera like *Cuphophyllus* and *Gliophorus* into which some Waxcaps have been moved by the taxonomists.

A second group of students did a similar count extending up Southwest field from Rocket Pole on the 22nd of November. Counts were high and with intriguing differences in species abundance to the Airfield data. One difference was the presence of shiny bright yellow or orange-red groups of the sporangia of the **Egg Shell Slime Mould** *Leocarpus fragilis* clinging to the plant stems (see photo). This species prefers acid heathy areas on Lundy and lower SW Field has indeed many more heathland plants like Heather than on the Airfield.

Hopefully this is the start of a second grassland fungi monitoring site on Lundy which will continue in future years. *Well done the Imperial students, it was hard work in trying conditions of cold winds and rain on both days.*

Counts of the Grey Waxcap at the North End

A November count of fruit bodies of fungi by LFS volunteers has now been going on for many years over the heathland (Waved Heath) at the North End, mostly recently by John Hedger, Mandy Dee and Alan and Sandra Rowland, and has confirmed the peculiarly local confinement of the **Grey Waxcap** (*Cuphophyllus lacmus*) to this area. In November 2023 a count was made by John Hedger and Angus Croudace (Voluntary Lundy Warden). Only one fruit body occurred west of the central path though more (175) were found around John O'Groats House and along the northern and eastern edge of the North End. This was more than the total count in 2022 (82) but much less than 2021 (981).

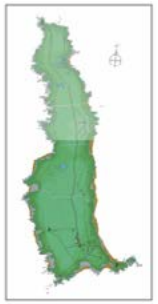
▲ *Fruit bodies of the Grey Waxcap* Cuphophyllus lacmus *amongst Heather and Cladonia cf arbuscula lichen near John O'Groats House, North End, in November (photo: John Hedger).*

Whether a symbiotic (mycorrhizal) relationship exists between Heather at the North End and this Waxcap remains a mystery. 2024 may see it resolved by an LFS funded research project by Aberystwyth University and Imperial College which will investigate the presence of DNA of this fungus in the roots of Heather from the North End, and elsewhere on Lundy.

▼ *Table 2. Numbers of fruit bodies of species of slime moulds and fungi found on the Airfield in 2022 and 2023.*

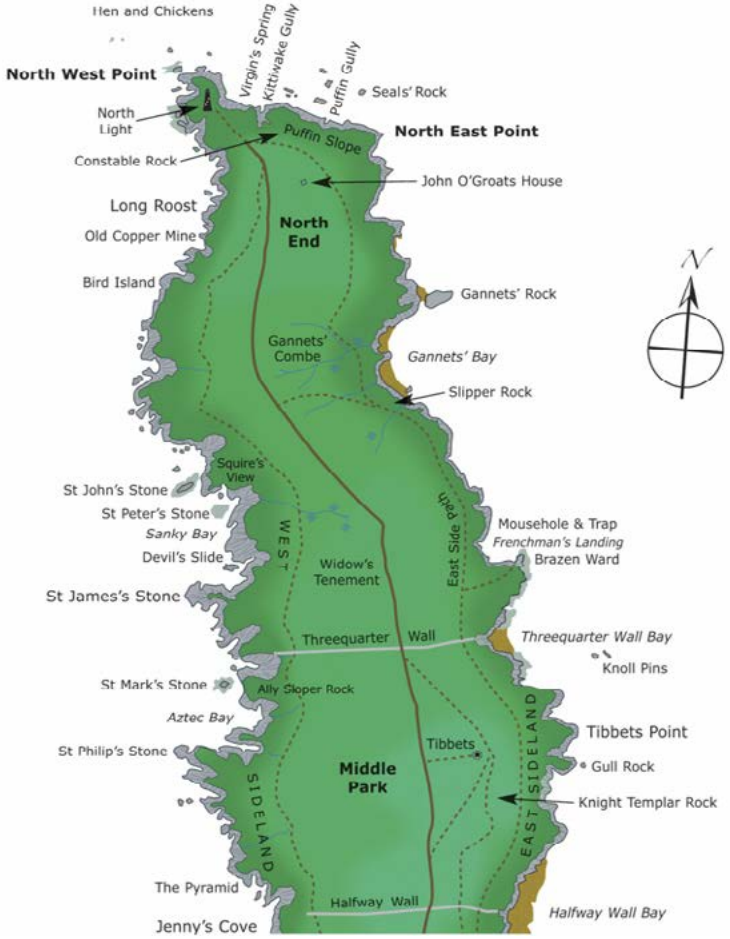
Species of Fungi		Counts 2022	Counts 2023
Cheilymenia granulata	Cowpat Gem	9	0
Clavaria acuta	Pointed Club	0	2
Clavulinopsis helvola	Yellow Club	0	41
Clavulinopsis corniculata	Meadow Coral	0	2
Clavulinopsis fusiformis	Golden Spindles	0	2
Clavulinopsis luteoalba	Apricot Club	0	3
Clitocybe rivulosa	Fool's funnel	0	14
Conocybe tenera	Common Conecap	1	0
Crinipellis stipitaria	Hairy parachute	1	0
Entoloma ameides		13	1
Entoloma hebes		0	1
Entoloma papillatum		0	2
Entoloma sericellum	Cream Pinkgill	5	0
Entoloma sericeum	Silky Pinkgill	1	0
Mucilago crustacea		0	2
Galerina peudomycenopsis		0	2
Gamundia pseudoclusilis		0	2
Glutinoglossum glutinosum	Slimy Earthtongue	0	6
Hygrocybe aurantiosplendens	Orange Waxcap	2	14
Hygrocybe caliptriformis	Pink Waxcap	2	1
Hygrocybe cantherellus	Goblet Waxcap	2	14
Hygrocybe ceracea	Butter Waxcap	8	83
Hygrocybe chlorophana	Golden Waxcap	3	139
Hygrocybe coccinea	Scarlet waxcap	3	47
Hygrocybe colemanniana	Toasted Waxcap	0	2
Hygrocybe conica	Blackening Waxcap	1	5
Hygrocybe glutinipes	Glutinous Waxcap	0	14
Hygrocybe insipida	Spangle Waxcap	0	107
Hygrocybe irrigatus	Slimy Waxcap	0	1
Hygrocybe laeta	Heath Waxcap	16	148
Hygrocybe marchii		0	4
Hygrocybe pratensis	Field Waxcap	0	10
Hygrocybe psittacina	Parrot Waxcup	22	62
Hygrocybe punicea	Crimson Waxcap	68	29
Hygrocybe russocoriacea	Cedarwood Waxcap	3	2
Hygrocybe splendidissima	Splendid Waxcap	39	14
Hygrocybe substrangulata		6	5
Hygrocybe virginea	Snowy Waxcap	19	58
Lepiota oreadiformis		0	2
Lycoperdon pratense	Meadow puffball	1	0
Mycena aetites	Drab Bonnet	1	2
Mycena pura	Lilac Bonnet	0	1
Mycena olivaceomarginata	Brownedge Bonnet	2	
Mycena sp.	Bonnet sp.	0	1
Panaeolus acuminatus	Dewdrop Mottlegill	0	3
Panaeolus foenisecii	Brown Mottlegill	176	250
Panaeolus papilionaceus	Petticoat Mottlegill	0	23
Psilocybe fimetaria		0	2
Psilocybe coprophila		0	5
Psilocybe semilanceata	Liberty Cap	0	64
Rickenella fibula	Orange Mosscap	0	1
Stropharia caerulea	Blue Roundhead	0	1
Stropharia pseudocyanea	Peppery Roundhead	0	12
Stropharia semi-globata	Dung Roundhead	0	1
Totals of fruit bodies found		**404**	**1207**
Totals of species recorded		**23**	**46**
CHEG species totals			
Club Fungi (C)		0	5
Waxcaps (H)		14	20
Pink Gills (E)		3	3
Earthtongues (G)		0	1
CHEG score		**17**	**29**

Lundy South



Map reproduced from 'The Birds of Lundy' (2007) courtesy of Tim Davis & Tim Jones.

Lundy North



Number key

1 Marisco Castle
2 Hanmer's
3 St John's Valley, Old School & Big & Little St John's
4 Brambles Villa
5 The Ugly
6 Millcombe House
7 Government House
8 St Helen's Church
9 Old House & Marisco Tavern
10 Black Shed
11 Campsite, Quarters (Pig's Paradise) & Quarters Pond
12 Shop, Museum & High Street
13 Barton Cottages
14 Rocket Pole, Rocket Pole Pond & Rocket Pole Marsh
15 Stoneycroft & Cemetery
16 Water Tanks
17 Quarter Wall Cottages
18 Quarter Wall Pond
19 Quarry Pond
20 Terrace Trap
21 Old Hospital
22 VC Quarry
23 North Quarry
24 Punchbowl Valley
25 Logan Stone

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- For information about the Lundy Field Society, our work (including conservation breaks) and about the island itself (including a virtual tour), visit the Society's website at:
  www.lundy.org.uk

- For information about visiting Lundy, including accommodation, and general information about the island, visit the Landmark Trust's Lundy website at:
  www.lundyisland.co.uk

- For information about Lundy's birds visit: **www.birdsoflundy.org.uk**

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The envelope you send should be at least 20 cm long to avoid having to fold the car-sticker.

Cannon at the Battery (photo: Michael Williams).

Back cover:
Clouded Yellow butterfly (*Colias croceus*), October (photo: Shaun Barnes).
Pale Tussock (*Calliteara pudibunda*) caterpillar, Lower East Side Path, September (photo: Mandy Dee).

Front cover:
Shaggy Parasol Mushroom (*Chlorophyllum rhacodes*) in November, Upper Millcombe (photo Mandy Dee).

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