

RESEARCH GRANTS 2024

Jennifer George (Chair of the LFS Grants Subcommittee)

Grants awarded for research on Lundy in 2024

1. Funding was given to Ruben Mole (Imperial College MSC student) for study of the distribution of the Grey Waxcap fungus, *Cuphophyllus lacmus*. The relationship of this fungus with the roots of the Heather (*Calluna vulgaris*) which covers much of the North End where this fungus is found, is being determined. The project, which took place in April, involved sampling for the presence of Grey Waxcap DNA in the soil and roots of the Heather in selected areas of Lundy. Samples were frozen and transported to mainland laboratories for soil and DNA analysis (funding: £900). Further funding was provided for expert DNA analysis at the University of Aberystwyth.

Results have led to a paper being submitted to the next LFS Journal. Ruben also presented his research at the LFS AGM in Crediton in March 2025.

2. Nest building behaviour of Lundy Black-legged Kittiwakes (*Rissa tridactyla*) was studied by Amanda Mead (Middlesex University PhD student). The research follows on from research in 2023 which studied aspects of the nest building behaviour of pairs of kittiwakes. Film footage was taken of nest building by pairs of kittiwakes in Aztec Bay, and data were analysed to see if there is synchrony across the colony. Weather data, such as wind speed, air temperature and rainfall were also recorded to assess their effects on kittiwake nest building. A further visit was made to assess behaviour of adult birds and any chicks in the nests that were studied (funding: £800).

Previous research on sibling aggression in kittiwakes was published by Amanda Mead and Tom Dickins in the LFS Journal, volume 8, 2023.

3. Funding was awarded to Chenxi Zhang (Imperial College student) to investigate the vocalisation of Manx Shearwaters (*Puffinus puffinus*) on Lundy. Research has shown that these birds have individual distinct calls. In May, Chenxi and her co-workers used passive recorders and microphones to collect Manx Shearwater calls in different colonies on Lundy. Call features such as entropy and frequency were analysed to test for within-individual, between individual and between colony variation (funding: £460).

Publications resulting from past grants

The Lundy Field Society and the Warden recently received a large report entitled 'Bat Research on Lundy Island 2014-2018' from Geoff Billington, who was given a LFS Grant in 2014.



▲ Manx Shearwater
(photo: John Tyrer).



▲ Sampling heather roots at the North End (photo: Ruben Mole).



▲ Nesting Kittiwakes, West Coast
(photo: Shaun Barnes).