

ATLANTIC GREY SEAL *HALICHOERUS GRYPUS* POPULATION AND PRODUCTIVITY STUDIES IN 2018

By

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Seals hauled-out at Brazen Ward. © Mike Deaton

The Atlantic Grey seal population has been monitored annually on Lundy since 2011 and to a varying degree beforehand. Previously, the surveys have been carried out by the Conservation Team throughout the breeding season in order to understand the distribution, population dynamics and productivity of this iconic Lundy mammal (Jones, 2017). In 2016 the survey method was reviewed to enable the data collected at Lundy to contribute to wider seal population assessments, such as the Sea Mammal Research Unit (SMRU) national seal surveys. It was not possible to undertake observations by boat in 2018 and the surveys were carried out via land-based observations. During October and November, at the times of relevant tides, the island was exposed to strong easterly winds making it difficult to carry-out the quantitative section of the project.

The highest count of seals within the survey period was 223 animals (179 females, 22 males, seven juveniles and 15 animals of unknown sex) on August 14th: 47 more animals than the highest count of 2017 on July 30th. This is the second highest count of seals ever recorded on the island from any of the Warden led surveys (the highest was 239 animals on one day in August 2011).

Similar to the surveys of 2017, the majority of animals around the island within each survey were females with some of those, from observational notes, showing obvious signs of pregnancy in some of the popular haul out areas, especially at the start of the land-based surveys. After these high counts (188 of the 223 animals counted on August 14th were females) the numbers of females seals dropped slightly, possibly due to some of the pregnant females moving into the island's inaccessible coastal caves to pup or to other areas in the SW after conditioning themselves in Lundy waters (e.g. 148 on September 10th). Again similar to 2017 there was

an obvious increase in males around the island by mid-September compared to mid-August possibly turning up later than the females to patrol beaches and females in order to conceive next year's pups.

Unsurprisingly, the distribution of seals around Lundy is heavily influenced by both weather and sea state. From observations at times when the winds came directly from either the north or south, animals seemed to disappear and move off from some of the more popular haul outs e.g. Rat and Mouse Island either to areas away from the island or to some of the caves or more sheltered bays on the island (e.g. Three-quarter Wall Bay). The highest number of animals recorded at one time from the 46 sub-sections within the survey period was from the area North of Gannets Rock on the September 13th – here 44 individuals were counted hauled out. On average however Three-Quarter Wall Bay and Brazen Ward were found to be the most popular throughout the study period (mean 48 animals throughout the survey period excluding the Knoll Pins).

A total of 28 pups were recorded within the 2018 season, 2 more pups than the 2017 totals. This however is an under-estimate of productivity as it total does not include other pups born in the inaccessible sea caves around Lundy's coast (e.g. Aztec Seal Hole north of St Mark's Stone). The first pup was seen on August 18th on Ladies Beach, 10 days earlier than the first recorded in 2017 (on White Beach). The last pup to be recorded within the survey period was



Photo identification match. LUN315 (originally photographed as LuF13) who gave birth to PUP03 on White Beach in 2018 was first recorded on 17/01/07 so has been visiting Lundy for a least 11 years.

from November 21st, 19 days after the last pup of 2017. The highest number of pups occurred on Ladies Beach this year – where 36% of the total numbers of pups seen were found (White Beach was more popular in 2017). Out of these 28 pups, we know that at least three of these animals did not survive to weaning.

Six records of entanglement were recorded during the 2018 season involving at least five different animals (four more animals than in 2017) being ensnared with discarded fishing equipment (one adult male and four juvenile animals).

Almost no disturbances were recorded during the land based surveys this year apart from one instance on September 19th when a number of seals were accidentally flushed off rocks by the surveyors whilst above the southern facing shore of Gannets Bay. This highlights that extra precaution must be taken when navigating this section of the coast, advised that the surveyors stay well clear of the edge of the cliff to avoid disturbance. There were other reports of disturbance resulting from visitors and boats getting too close to hauled-out seals.

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Reference

Jones, D.W. (2017) Atlantic Grey Seal (*Halichoerus grypus*) population and productivity studies, Lundy 2017. Published by the Landmark Trust and Natural England.