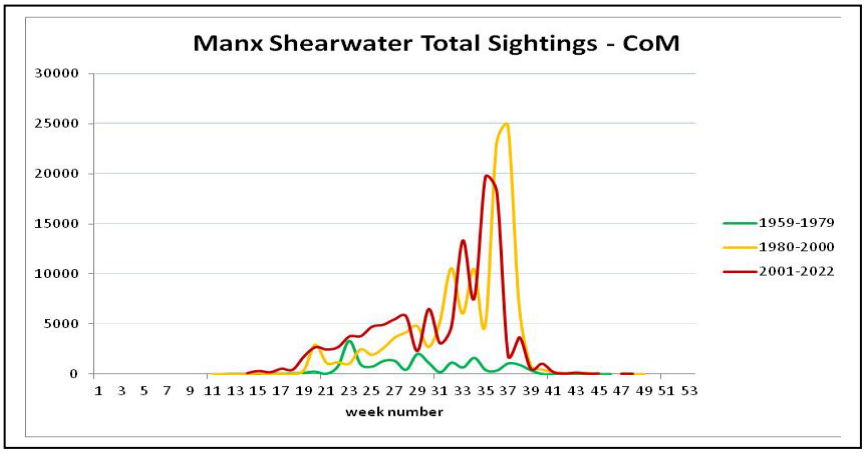
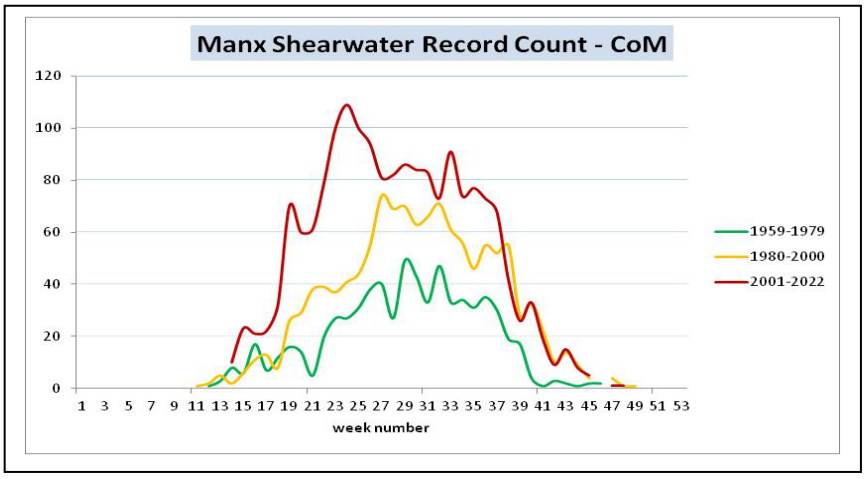
Common Name:	Manx Shearwater
Scientific Name:	*Puffinus puffinus*
Manx Name:	Scraayl
BoCC IoM 21 classification:	AMBER
IUCN 3.1 classification:	Least Concern
MBRC: Legal classification:	A Schedule 1

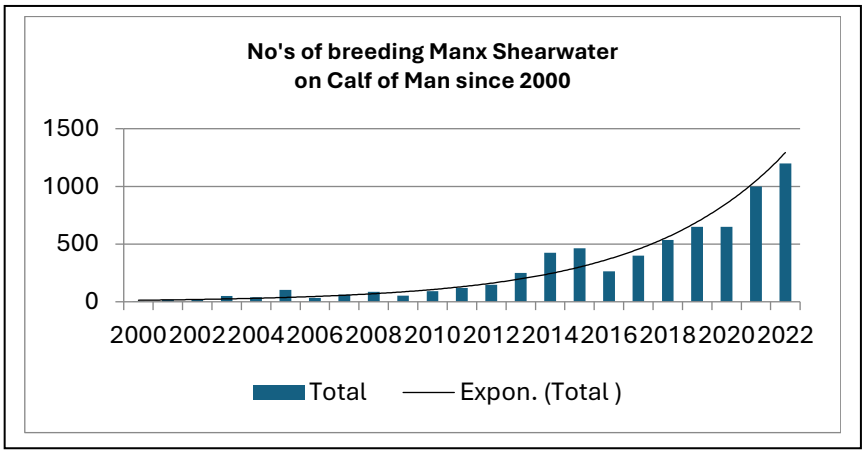
The Manx Shearwater was likely present in their tens of thousands on the Calf of Man prior to becoming locally extinct during the 18th century. After its natural recolonization, it is now a resident breeder and common passage migrant.

Historical Context

The Calf of Man once supported vast numbers of breeding Manx Shearwaters, with thousands of young birds being harvested from their burrows during the 17th and 18th centuries. Referred to as 'Mancks Puffins,' they were considered valuable assets for the Lord of Mann. However, the shipwreck of a Russian vessel in the 1780s brought Brown Rats to the islet, nearly wiping out the Shearwaters by the beginning of the 19th century (Cullen & Jennings, 1986). Efforts to reduce the rat population began in 1979 with varying effectiveness. A more systematic rat eradication approach was launched in 2012 after the discovery of three active Manx Shearwater burrows in 2000, involving the Isle of Man Government and NGOs like Manx National Heritage and Manx Wildlife Trust.



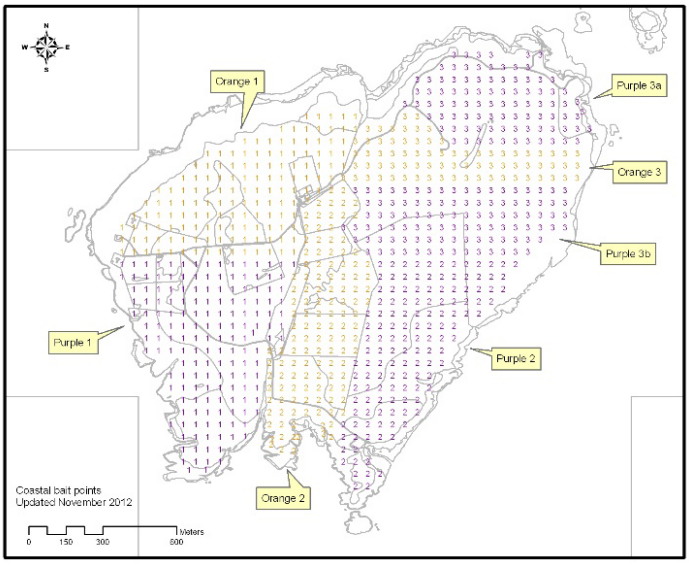




Recolonization and Breeding Evidence

Manx Shearwaters have been recorded annually since the Observatory began. In 1960, three birds were caught ashore at night, and another was heard calling from a burrow. By 1962, up to 10–12 pairs were thought to be present, and breeding was confirmed in 1967 with an estimated 20 pairs. By the early 1980s, breeding presence was consistent, and callback responses in 1982 and 1983 suggested about 20 pairs. The number of active burrows increased significantly over the next two decades, likely due to rat eradication efforts.

Rat Eradication Program



In 2012, the Manx Shearwater Recovery Project implemented a grid of about 1,020 bait points over the Calf and Kitterland at 50-meter intervals. Each bait point consisted of a one-meter length of corrugated drainage pipe, baited with rodenticide from November 2012 to February 2013. Inland bait points were checked 2–3 times weekly, while coastal points were checked once a week. Chocolate wax blocks were added and monitored after one month. The last confirmed rat bait take was on December 5, 2012. Phase 2 involved replacing rodenticides with non-toxic wax blocks, monitored monthly through 2022. While the program significantly reduced the rat population, the Calf cannot be declared rat-free due to the occasional presence of one or two rodents annually.

Population Monitoring

Various monitoring methods have been used over the past two decades. Initial monitoring involved labor-intensive burrow checking, replaced by quadrat sampling. Since 2018, a less labor-intensive sampling survey technique, initially devised for Lundy Island (Booker & Price, 2014), has been implemented. This method allows monitoring of 100 randomly selected burrows within the South Harbour and Kione ny Halby colonies each season since 2018 (except 2020 due to COVID-19 restrictions).

Population Growth

From 2000 to 2012, pre-rat eradication, the population grew gradually, with a mean increase of 11 Active Occupied Burrows (AOB) annually. Post-eradication, the mean growth increased to 105 AOB per annum, with an estimated population of 1,200 AOB in 2022.

Sightings and Trends

The total sightings graph illustrates the population increase, with a notable peak in records between the start of August and mid-September, coinciding with significant offshore autumn passage during periods of strong westerly winds. The top 16 counts (>2,500) all occurred during these weeks. The trend lines for the 1959–1979 period show no noticeable peak, whereas the latter periods show a steady increase through spring to a definite peak in autumn.

This extensive monitoring and conservation effort highlight the successful recolonization and growth of the Manx Shearwater population on the Calf of Man, emphasizing the importance of sustained conservation efforts.

Accumulative monthly total of records (1959 – 2022):

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	52	208	514	787	890	798	514	152	22	0

Monthly Presence and Extreme Dates:

Records of the Manx Shearwater have been noted from March through November between 1959 and 2022. However, sightings in March have occurred in only 13 years, while those in November have been noted in just 16 years. The earliest and latest recorded dates are 1st March 1979 and 30th November 1999, respectively.

Total Counts and Distribution:

A total of almost 295,000 individuals have been recorded over 3,937 records made during the period of 1959 to 2022. The distribution of these counts is as follows:

- Single birds represent 13% of all counts.
- Counts of 2 to 10 birds make up 36% of all sightings.
- Counts of 11 to 100 birds constitute another 34%.
- There were 285 counts (7.2%) of 101 to 500 birds.
- A further 88 counts (2.5%) ranged between 501 and 4,102 birds.

Highest Counts:

The six highest counts were 30,000 on 2nd September 2003, 10,150 on 24th August 2005, 10,000 on 4th September 1992, 6,400 on 7th September 1992, 5,915 on 29th August 2004 and 5,500 on 5th September 1997.

Summary

The Manx Shearwater has been recorded consistently during their migratory period between March and November. The detailed counts and high individual numbers observed during late summer and early autumn underscore the significance of the Calf of Man as an important site for this species. The data indicates that the population has seen significant fluctuations, with notable peaks in late August and early September, likely corresponding to migratory movements and favourable feeding conditions. The monitoring and conservation efforts have been instrumental in documenting and supporting the recovery and sustainability of the Manx Shearwater population on the Calf of Man.

There have been 1,951 Manx Shearwaters ringed on the Calf, which has resulted in 39 subsequent recoveries and 73 controls:

Manx Shearwater	BRAZIL	Isle of Man	Northern Ireland	Scotland	Wales	Grand Total
Recoveries (yellow)	1	3	15	2	18	39
Controls (red)	0	0	57	0	16	73

Remarkable Recovery:

One of the most notable recoveries of a Manx Shearwater was a bird found dead near São Paulo, Brazil, approximately 9,756 km west-southwest of its ringing location. This bird had been ringed just 51 days prior to its discovery, highlighting an extraordinary migration or dispersal event.

Breeding Colony Recoveries:

Many of the Manx Shearwaters recovered have been birds found at other breeding colonies. Specifically:

- Bardsey Island, Anglesey: 15 individuals were recovered here (147 km from the Calf).
- Copeland Island, Northern Ireland: 14 individuals were found here (85 km from the Calf). Notably, a bird from Copeland Island holds the longevity record of 25 years, 10 months, and 8 days.

Controls of Birds Ringed Elsewhere:

- Copeland Island: Out of 73 controls, 53 birds were originally ringed here. This suggests that the re-colonization of the Calf by Manx Shearwaters was largely influenced by birds from Northern Ireland. Among these 36 reports of birds ringed as nestlings on Copeland and later found as adults on the Calf, the minimum time between ringing and re-finding was just 1 year, 9 months, and 22 days. Most of these records involve birds at least five years old, indicating many are likely breeding on the Calf, supported by multiple re-trap histories.

Other Controls:

- Bardsey Island: 10 controls were reported (145 km from the Calf).
- Skomer Island: 1 control (260 km).
- Skokholm Island: 1 control (265 km), including an individual with a longevity record of 27 years, 8 months, and 19 days, ringed as a nestling in September 1960 and caught alive on 28th May 1988.

Summary

The data underscores the extensive movements and long lifespan of Manx Shearwaters. The remarkable recovery in Brazil demonstrates their impressive range and potential for long-distance travel. The high number of controls from Copeland Island reinforces the significance of this site in the recolonization and current population of the Calf's shearwater colony. Additionally, controls from other breeding colonies, such as Bardsey Island, Skomer, and Skokholm, provide valuable insights into the connectivity between different shearwater populations and their long-term monitoring and survival across various locations.

Reference:

Alexander, M. (1968). *The Calf of Man Bird Observatory Annual Report for 1966 / 1967*. The Manx Museum and National Trust.

Cullen, J.P. and Jennings, P.P. (1986). *Birds of the Isle of Man.* Bridgeen Publications, Douglas, Isle of Man.

Booker, H and Price, D (2014). *Manx Shearwater Recovery on Lundy: Population and Distribution Change from 2001 to 2013*. Journal of Lundy Field Society, 4, 2014