

Summary of Orkney's 2025 Wildlife Monitoring Report

Key takeaways

- The spring of 2025 saw the highest level of Orkney vole activity since 2019, the year the Orkney Native Wildlife Project began.
- Hen harrier breeding attempts were at their highest in over a decade, though the number of chicks which successfully fledged was lower, due to poor weather.
- Short-eared owl numbers in the breeding season have recovered from a low point in 2019-20.
- Hen harrier breeding attempts and breeding since 2019 were both strongly correlated with vole abundance.

Orkney vole

The Orkney vole is found nowhere else in the world. Predation pressure by the introduced non-native stoat is expected to cause severe declines and suppress numbers. Orkney voles are small, elusive and live mostly underground. Therefore, to get an estimate of abundance, signs of vole activity – such as grass clippings and droppings – are searched for in suitable habitats and recorded.

Surveys were conducted across 31 sites. Using the same methodologies as in 2019, each site consists of two 1km transects each with 25 predefined points where the surveyor searches for signs of vole activity within a 25x25 cm survey square/quadrat. Most surveys are undertaken by volunteers.

For sites on islands with stoats, in spring 2025, the vole activity scores were the highest recorded in any year. The overall pattern in autumn is more complex, but the 2025 autumn vole scores were similar to those in 2021, and significantly higher than in 2019, 2022 and 2024.

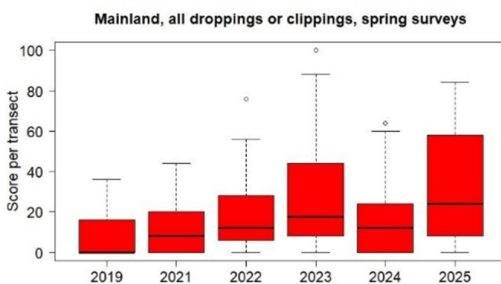


Figure 1: Mainland survey of vole signs in Spring, 2019-2025

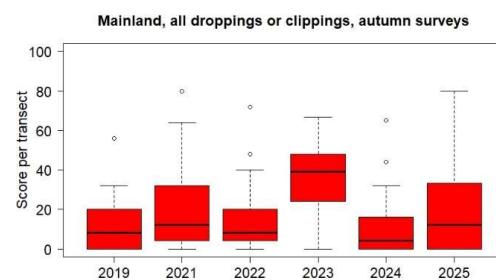


Figure 2: Mainland survey of vole signs in Autumn, 2019-2025

Hen harriers

The data for monitoring hen harriers is kindly provided by the Orkney Raptor Study Group (ORSG). They capture both evidence of hen harrier presence at breeding locations, or site occupancy, through sightings and signs of nest construction; and evidence of breeding success, through whether chicks survive to successfully leave the nest.

During 2025, in Mainland Orkney, 201 sites were checked, and the number of proven breeding sites and nests monitored were at their highest recorded since the 2012 season. However, the

proportion of nests with known outcomes that fledged at least one chick was the lowest since 2013. This is attributed to prolonged periods of rain at a critical time which likely increased chick mortality due to inability to be kept warm and reduced adult birds' ability to hunt.

Out of the 201 locations, breeding was proven at 74 and 59 nests were found. Of these, 25 were successful, two had an unknown outcome and 32 failed. A total of 57 chicks from these nests survived until they fledged or were close to fledging.

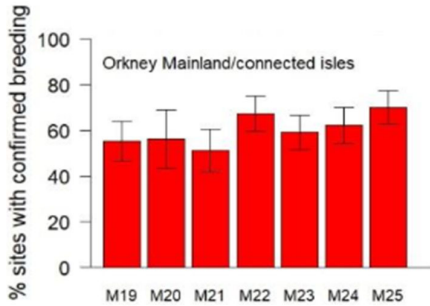


Figure 3: Confirmed hen harrier breeding attempts at sites with birds present, 2019-2025

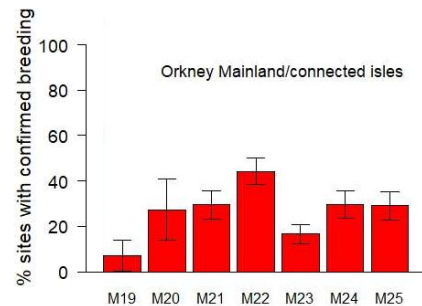


Figure 4: Confirmed Short-eared owl breeding attempts at sites checked, 2019-2025

Short-eared owls

Short-eared owls are very difficult to monitor and there is currently no standard method for doing so, and sample sizes for our monitoring figures are small. Consequently, these results must be treated more cautiously than for other species.

In Mainland Orkney and the causeway-linked South Isles, 130 sites were checked, with proven breeding at 16, and 6 nests were found. Of these, 3 were successful. Since 2019, there has been a pattern of increased occupancy at Mainland sites from c.15% to c.40-55% of sites checked, and approximately 100-140 sites have been checked each year.

Relationships Between Species

The Orkney vole is ecologically significant as a major prey species for birds of prey in Orkney, particularly for the breeding populations of Hen Harrier and Short-eared Owl, for which Orkney is nationally important. Food availability is crucial for the reproduction of any species. It was therefore predicted that restoring vole numbers – through reducing predation by invasive Stoats – would have positive consequences for these two native birds.

The data from six years of monitoring shows a positive correlation between annual estimates of vole abundance and hen harrier and short-eared owl site occupancy, confirmed breeding and productivity rates. This supports the idea that increasing the abundance of Orkney voles (through removing Stoats from Orkney) can have a positive effect on breeding populations of native birds of prey.

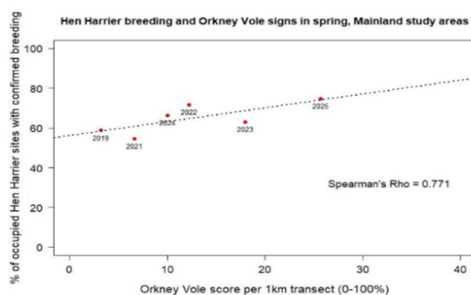


Figure 5: Hen Harrier breeding attempts plotted against Vole abundance

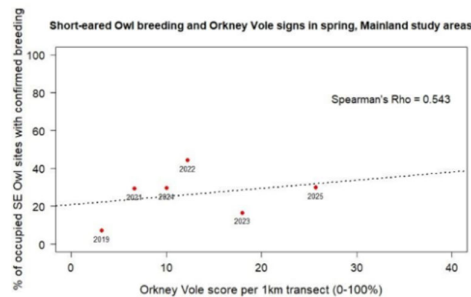


Figure 6: Short-eared Owl breeding attempts plotted against Vole abundance