



Summary of Orkney's 2024 Wildlife Monitoring Report

The Key Points

- Lapwing and Curlew nest success rates reached their highest recorded levels in 2024 since the project began.
- Some wader population declines have stabilised since 2017-2019.
- Orkney vole activity in spring holds a 218% increase within the eradication area from 2019 to 2024.

Wading Birds

Population counts

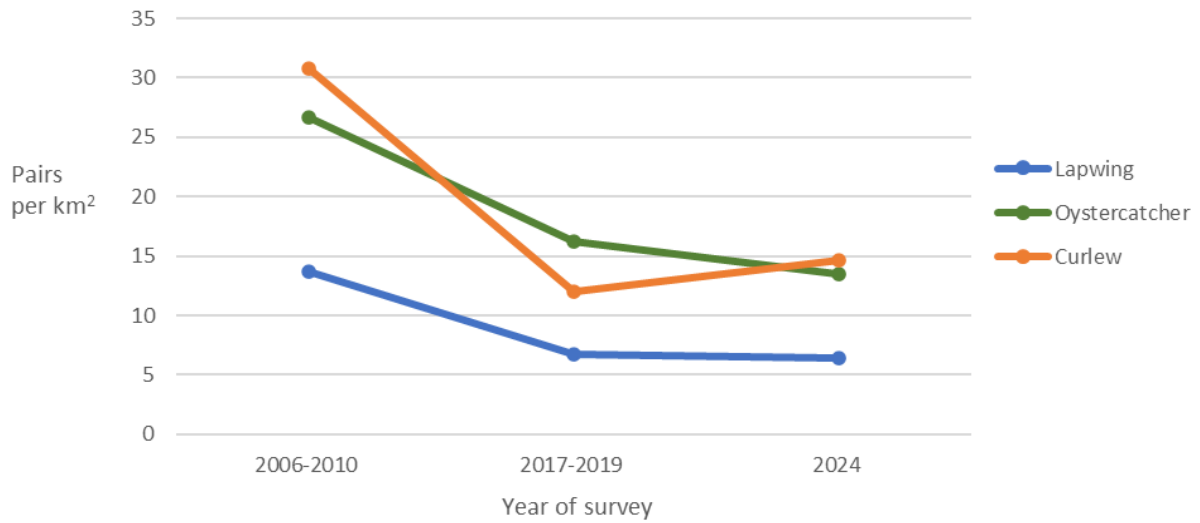
Population surveys were conducted in 2024 – the last time this work had been carried out was between 2017-2019. Researchers counted species at Local Nature Conservation Sites (LNCS) and recorded their breeding activity.

Curlew population trends are on the up, with an increase in pairs at surveyed sites. This contrasts to national Scotland figures, where Curlew populations have decreased by 13% between 2012 and 2022 (Heywood *et al.* 2024).

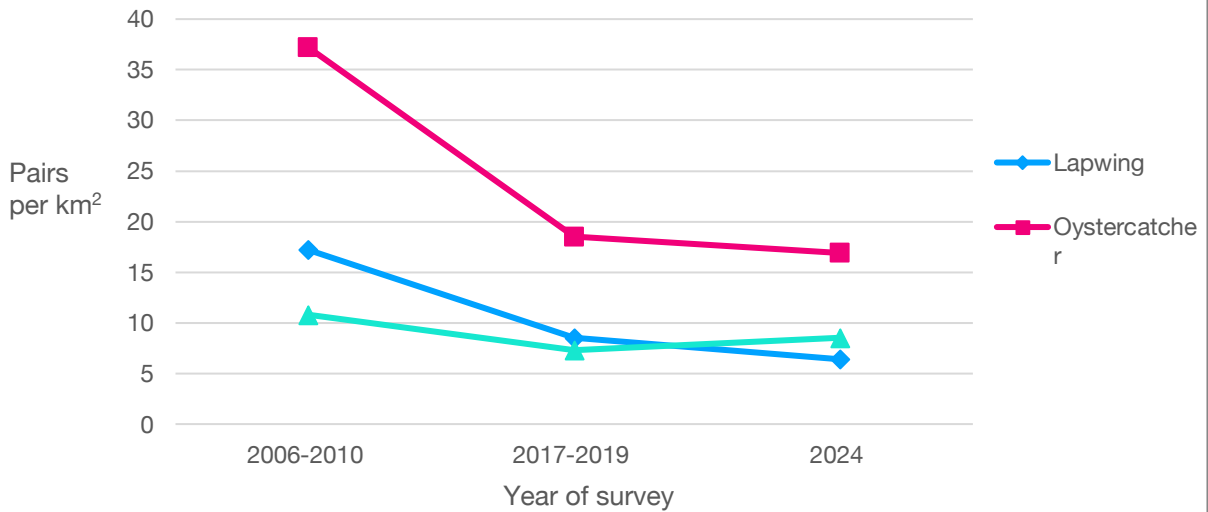
Other wader populations have been declining in Orkney since 2006-2010 (stoats were first reported in Orkney in 2010). However, some species appear to have stabilised since 2017-2019.

In 2024, 59 sites on Orkney's mainland (5,818ha) and 41 sites on islands (4,852ha) were surveyed. Each site was surveyed 2-3 times between mid-April and mid-June, mostly by ONWP fieldworkers but also involving local volunteers and RSPB staff. Overall, 2,338 wader pairs of five species were recorded (377 Lapwing, 736 Oystercatcher, 637 Curlew, 329 Redshank and 259 Snipe). The table below compares the breeding density of waders recorded within LNCS in 2024 with results from previous surveys during 2017-19 and 2006-10 that covered the same area of land.

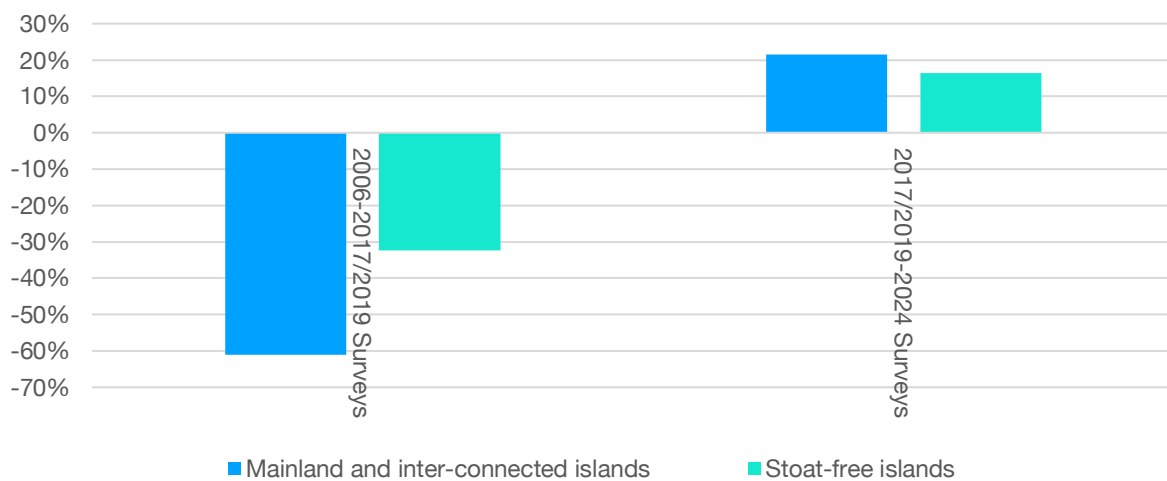
Wader population trends on Orkney Mainland and inter-connected isles



Wader population trends on Orkney's stoat free islands



Percentage change in Curlew populations within the eradication area compared with Orkney's stoat free islands



Wader breeding densities (pairs per 1km ²) at surveyed LNCS sites in Orkney				
		2006-2010	2017-2019	2024
Lapwing	Mainland/linked isles	13.7	6.7	6.4
	Stoat-free Islands	17.2	8.5	6.4
Oystercatcher	Mainland/linked isles	26.7	16.2	13.5
	Stoat-free Islands	37.2	18.5	16.9
Curlew	Mainland/linked isles	30.8	12.0	14.5
	Stoat-free Islands	10.8	7.3	8.5
Redshank	Mainland/linked isles	8.6	7.8	6.9
	Stoat-free Islands	10.3	9.4	6.4
Snipe	Mainland/linked isles	10.8	9.2	4.8
	Stoat-free Islands	17.7	17.8	8.9

Nest success rates

Nest success rate surveys explain how many nests were successful in hatching chicks. The study sites are visited approximately twice per week throughout the breeding season, and mostly involve the same sites each year. In 2024, 276 wader nests were found at 10 intensively monitored sites.

Average nest success rates for Lapwing and Curlew reached their highest recorded levels at Mainland sites in 2024. As in previous years, predation accounted for the greatest proportion of nest losses.

Nest success rates (%) on Orkney mainland and linked isles					
	2019	2021	2022	2023	2024
Lapwing	23%	36%	36%	28%	51%
Oystercatcher	25%	58%	79%	77%	64%
Curlew	6%	61%	63%	40%	82%

Due to slight differences in the sites monitored each year, our wader success rate model recalculates values across all years when new data are added. This means previous year's estimates may change slightly.

Chick Survival

After hatching, a new chick must survive long enough to fledge. From 2019 to 2022, there had been a steady increase in chick survival rates, but in 2023 this had fallen back to the levels recorded in 2020, and in 2024 dropped sharply due to widespread losses of small chicks. Poor weather likely played a role in the latter. With the removal of stoats, wader populations should become more resilient to withstand bad years like this.

Probability of chick survival to 30 days (%) on Orkney mainland and linked isles						
	2019	2020	2021	2022	2023	2024
Lapwing	13%	20%	20%	21%	12%	8%
Oystercatcher	11%	20%	36%	35%	24%	0%
Curlew	3%	8%	16%	28%	21%	0%

Redshank	41%	20%	29%	19%	20%	-
All waders combined	12%	19%	24%	25%	19%	3%

Hen Harriers (Raptors)

Nest success rates

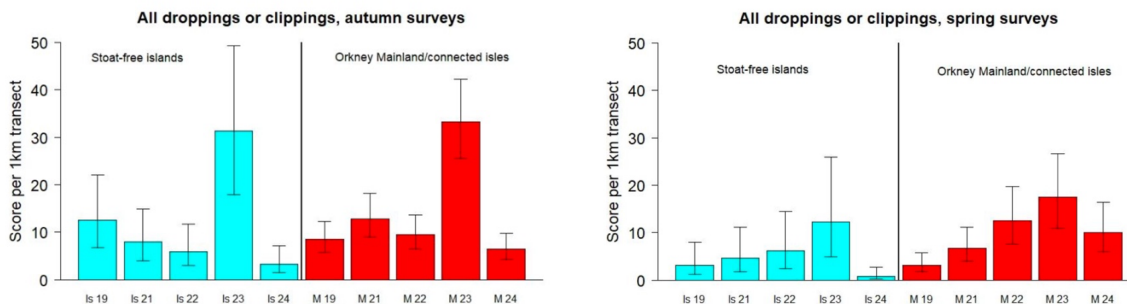
The Hen Harrier nest success rate dropped back to levels recorded in 2022 after an exceptional year in 2023. However, this is still higher than when the project began in 2019. 64 nests were found on Orkney’s mainland in 2024 (18 fewer nests found than in 2023).

This data was collected and provided to the ONWP by the Orkney Raptor Study Group.

Nest success rates (%) on Orkney mainland and linked isles						
	2019	2020	2021	2022	2023	2024
Hen Harrier	36%	61%	65%	61%	82%	59%

Orkney Voles

Recorded signs of Orkney Vole activity



After a strong climb, activity signs for the Orkney vole dropped in 2024. However, the report still finds an approximate 218% increase in signs of vole activity at Orkney mainland/linked isles sites during surveys taken in spring from 2019 to 2024.

The Orkney vole population isn’t easy to record, and it would be impossible to conduct a literal head count. They’re small and spend most of their time concealed in grass tunnels. To help us get a better picture, we record ‘signs of Orkney vole activity’ instead. We look for droppings and grass clippings within suitable habitat. Each location we record is scored on whether we find signs of vole activity, and their type and freshness. Most of the surveys are undertaken by volunteers, and in 2024 covered approximately 1,500 search locations along 61 1-km transects.

Wrap up

This report proves the value of long-term studies. While data from the report is varied, the overall trends are positive. Wader population declines have stabilised since 2017-2019, some nest success rates are the highest they've been since the project began, and vole activity remains higher than it was in 2019.

While there were severe declines across all the UK, Orkney continues to be an important breeding ground for vulnerable species. There are several factors that play into nest success and chick survival rates, one constant over the past six years has been the removal of invasive non-native stoats from the Orkney mainland and linked isles.

Looking at the overall trends from six years of data, we are confident that the ONWP's work is having a positive impact on the breeding success of native ground nesting birds and Orkney voles.

Reference

Heywood, J.J.N, Massimino, D., Balmer, D.E., Kelly, L., Marion, S., Noble, D.G., Pearce-Higgins, J.W., White, D.M., Woodcock, P., Wotton, S. & Gillings, S. 2024. *The Breeding Bird Survey 2023. BTO Research Report 765*. British Trust for Ornithology, Thetford.