



YORKSHIRE DALES
National Park Authority



Nidderdale
National
Landscape

YORKSHIRE DALES NATIONAL PARK AND NIDDERDALE NATIONAL LANDSCAPE

BIRD OF PREY EVIDENCE REPORT 2022 and 2023

This report has been agreed and published by the Steering Group, which includes representatives from British Association for Shooting & Conservation, Country Land & Business Association, Cumbria Constabulary, Moorland Association, Natural England, National Gamekeepers Organisation, Nidderdale National Landscape, North Yorkshire Police, Northern England Raptor Forum and Yorkshire Dales National Park Authority.

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EXECUTIVE SUMMARY

This Evidence Report has been produced by the Yorkshire Dales Bird of Prey Partnership to help assess progress towards delivery of the Yorkshire Dales National Park (YDNP) and Nidderdale National Landscape (NNL), a recent re-branding of the Area of Outstanding Natural Beauty, Management Plan objectives to tackle the illegal persecution of birds of prey and owls. It details the best available information on the status of bird of prey populations and confirmed persecution incidents that occurred in the area in 2022 and 2023, that are used to inform a Steering Group of key stakeholders.

In order to try and make this report as comprehensive as possible, all of the stakeholders have been asked to provide summary information. Although some details were submitted for 2022, only Hen Harrier productivity data have been provided for 2023.

For most of the raptor and owl species there was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined. Given differences in monitoring effort between years, for many species it is not possible to make direct comparisons with data from previous decades.

Hen Harrier is the notable exception with nest monitoring work undertaken by Natural England (NE) and gamekeepers. In 2022 there were six nesting attempts in the NNL and four in the YDNP, with a total of six successful nesting attempts. In 2023 there were a total of 15 nesting attempts in the YDNP and NNL with 12 successfully fledging 47 young. This represents the highest number of nesting attempts recorded in the area.

No additional details on the brood management scheme were received for either 2022 or 2023. Although the number of nesting attempts has increased during the course of the trial, Natural England have concluded that it is not yet possible to assess the effectiveness of the scheme and that any link between brood management, the increase in Hen Harrier numbers and ongoing persecution, is not clear (Holmes, 2023). Natural England are committed to a full scientific investigation into the complex effects of the availability of this technique. The scheme will continue in 2024.

Some monitoring of Hen Harrier winter roosts was undertaken by volunteer raptor workers primarily within the NNL in 2022 and 2023 but with no other information supplied, it is not possible to make an accurate assessment of the wintering population.

There were two confirmed persecution incidents relating to Hen Harriers in 2022. A brood of four young were found dead with the post-mortem concluding that they had died after suffering severe trauma. North Yorkshire Police (2022) have considered all the evidence, and strongly suspect that someone approached the nest after dark and deliberately killed the chicks. In addition, a Natural England satellite-tagged was recovered with the expert veterinary assessment concluding the bird has been killed through traumatic removal of its head and leg whilst alive that was consistent with persecution.

There were four Hen Harriers that were satellite-tagged that were 'missing fate unknown' in 2022 where the last transmission was in the YDNP and one bird where the last transmission was in the NNL, where the bird was retrieved and found to have died from natural causes. In 2023 there were six NE-tagged Hen Harriers that were 'missing fate unknown' in the YDNP and one in the NNL. In addition, at least two birds satellite-tagged by the RSPB (2023) were also 'missing fate unknown' during the period.

There was the first successful breeding record of Marsh Harrier in the area in 2022, with at least two pairs observed nest building in Nidderdale with at least one brood of young fledged. At least one territorial pair were also present in 2023 but the outcome is not known.

In the absence of nationally recognised criteria for recording confirmed persecution cases, the Steering Group agreed to use details published in the RSPB BirdCrime report that are cross referenced against national standards used by the Police to record all incidents and crimes. The most up-to-date report was published in November 2023 detailing a total of six confirmed persecution incidents that were recorded in 2022, all in the YDNP. This compares to ten confirmed incidents within both protected landscapes in 2020 and seven in 2021.

There was a reduction in shooting and poisoning cases in 2022 compared to 2020 and 2021, but it should be noted that there may have been fewer cases sent for testing compared to previous years. This is because many of the dead birds of prey that were collected by Department for Environment, Food and Rural Affairs (Defra) in 2022 and tested for Highly Pathogenic Avian Influenza (HPAI) did not undergo any further analysis to identify their cause of death, but were incinerated regardless of whether they tested positive or not. In addition, RSPB (2023b) also report that fewer birds of prey were tested by the Wildlife Incident Investigation Scheme (WIIS), with 46% fewer cases examined nationally in 2022 than in the previous year. As such, the overall persecution figures in the YDNP and NNL for 2022 may not directly be comparable to those for previous years

INTRODUCTION

There have been two previous annual Evidence Reports published by the Yorkshire Dales Bird of Prey Partnership covering 2020 and 2021. The partnership was established in 2020 to deliver targets in the Yorkshire Dales National Park (YDNP) and Nidderdale National Landscape, formerly the Area of Outstanding Natural Beauty (hereafter referred to as the NNL) Management Plans.

The Yorkshire Dales National Park Management Plan (NPMP) [Objective C5](#) has the aim to:

‘Work with moorland managers and other key stakeholders to devise and implement a local approach to end illegal persecution of raptors, including independent and scientifically robust monitoring, and co-ordinated Hen Harrier nest and winter roost site protection’.

The NNL Management Plan has [Aim W2](#) - ‘Improve the condition of the NNL’s priority habitats and species:

Objective 2. Work with land owners, moorland managers, the Police and others to safeguard birds of prey and prevent their illegal persecution in the NNL.’

The Yorkshire Dales Bird of Prey Partnership Steering Group was established in April 2020 to oversee the delivery of these objectives. It comprises representatives from British Association for Shooting & Conservation (BASC), Country Land & Business Association (CLA), Cumbria Constabulary, Moorland Association (MA), National Gamekeepers Organisation (NGO), Natural England (NE), Nidderdale National Landscape (NNL), North Yorkshire Police, Northern England Raptor Forum (NERF) and Yorkshire Dales National Park Authority (YDNPA). The Royal Society for the Protection of Birds (RSPB) were members from the inception until their resignation in May 2023. NE are the lead organisation for the delivery of the NPMP objective, with YDNPA providing the Chair and Secretariat for the Partnership.

The aim of this report is to publish the relevant data for both the YDNP and NNL so that the Partnership can measure progress in delivering the management plan objectives and assess any progress in reducing persecution. In order to do this, it is crucial that accurate information on the status of bird of prey, owls and Raven populations and the number of confirmed persecution incidents within the two protected landscapes can be assessed. The Partnership has agreed that this information needs to be collated and published in an annual evidence report. Many of the organisations represented on the Partnership undertake survey and monitoring work and are in a position to provide the relevant information, with the comprehensiveness of this report dependent on the data supplied by the relevant stakeholders.

The purpose of this report is to publish the 2022 and 2023 data for the YDNP and NNL, so that the main Steering Group can assess the current status of birds of prey populations and any progress in reducing persecution. In order to be as up-to date as possible, this report includes results from the 2022 and 2023 bird breeding seasons and the confirmed persecution incidents in 2022 published in the BirdCrime report in late November 2023.

This report has been written by members of the Monitoring Sub-Group that includes representatives from MA, NE, NGO, NERF and YDNPA that has subsequently been agreed and published by the full Steering Group membership.

DATA COLLECTION METHODOLOGY AND SOURCES

It is crucial to ensure that all the data are robust and so only survey work that has been undertaken following recognised standardised methodologies will be published. Unless otherwise stated, survey methodologies for breeding birds will follow those outlined in Hardey *et al.* (2013), and listed on the Scottish Raptor Monitoring Group website [here](#).

The main exception relates to Hen Harriers, as the location fixes from satellite-tagged birds can be visited to determine the presence of territorial birds and/or any nesting attempts. Gamekeepers have also reported Hen Harrier sightings to NE fieldworkers so that any nesting attempts can be monitored. Independent raptor workers have also sent information of territorial and nesting behaviour of birds in Nidderdale to NE. The records of Golden and White-tailed Eagles are primarily derived from satellite-tag information rather than visual observations.

All members of the Steering Group have been encouraged to submit data, provided that methods conformed to recognised recording standards and/or criteria. The sensitivities of publishing fine-scale locations of breeding or roosting birds are fully recognised and are therefore avoided, however, accurate summary information on the breeding and wintering status of key species is essential to inform the work of the Partnership. In addition, requests for information have been made to local and county recording groups.

Where appropriate, fieldwork was undertaken by individuals with the relevant licence under Schedule 1 of the Wildlife & Countryside Act (as amended). In many cases, observations of nest territories or potential nesting areas were done at distance to observe bird behaviour and determine breeding status without causing any disturbance. Where nest visits were not made, records were attributed to either possible, probable or confirmed breeding status using criteria recommended by the Rare Breeding Birds Panel, with details shown in *Appendix 1*.

Information has been extracted or requested from the following:

- Details of breeding birds within the YDNP have been extracted from BirdTrack online bird recording system <https://www.bto.org/our-science/projects/birdtrack>
- Cumbria Bird Club were contacted for any additional records not available in BirdTrack.
- Records for Nidderdale have been collated by Independent Raptor Workers from the Nidderdale Raptor Study Group with additional information from Harrogate & District Naturalists' Society.
- Independent Raptor Workers have also supplied records within the YDNP.
- Natural England Hen Harrier Project (Hen Harrier breeding data).
- Nidderdale and Yorkshire Dales Moorland Groups.

- Lancaster & District Birdwatching Society were contacted for any additional records not available in BirdTrack.
- Yorkshire Game Management Cluster.
- Moorland Association.
- YDNPA.
- The RSPB have extracted any confirmed persecution incidents from the 2022 BlrdCrime report and supplied associated information.

Any new datasets (including potential citizen science projects) can be utilised within future reports, provided that they meet nationally recognised recording standards and provide robust quantitative data. It is the intention to publish an Evidence Report annually.

SPECIES ACCOUNTS

All information detailed in these accounts has been provided by independent raptor fieldworkers unless otherwise stated.

OSPREY *Pandion haliaetus*

Overview: With an increase in the breeding population elsewhere in the country, particularly in Northern England, there has been a corresponding increase in the number of passage birds in the area. In recent years one or more birds have remained throughout the summer, some at specific sites with others ranging across a larger area. A pair nested just outside the area in 2022 and fledged two young, the first breeding in the county since records began in 1800.

2022 RECORDS

NNL: at least one was seen in the Washburn Valley in May, June and July.

YDNP Cumbria: only a single record was submitted on BirdTrack.

YDNP Yorkshire: five records were submitted on BirdTrack.

2023 RECORDS

NNL: there were three sightings in the Ilkley area in May and June with a similar number of sightings at Gouthwaite during the same period. The lack of records from the Washburn area may be as a result of reduced observer coverage, rather than the absence of any birds.

YDNP Cumbria: no records were reported on BirdTrack.

YDNP Yorkshire: six records were submitted to BirdTrack.

HONEY BUZZARD *Pernis apivorus*

Overview: A rare passage migrant that is not known to have bred in the area.

A single passage bird was reported in the YDNP in 2023.

GOLDEN EAGLE *Aquila chrysaetos*

Overview: There were records of wintering birds, primarily in the Gouthwaite and Colsterdale areas, intermittently from the late 1970s until the late 1990s, that were thought to be offspring from the resident pair in the Lake District prior to their last breeding attempt in 2001. A juvenile from this pair that was found dead under power lines at Hebden Gill on 31 December 1986 support this theory. However, a bird at Gouthwaite in the early 1980s was present when there had been no successful breeding in the Lake District and so may have been from the population in south-west Scotland. Any further records in the Yorkshire Dales are likely to be from the South of Scotland Golden Eagle Project that began their translocation programme in 2018.

There were no records in 2022.

2023 RECORDS

There were two records of satellite-tagged Golden Eagles re-introduced as part of the South of Scotland Golden Eagle Project visiting the Yorkshire Dales during the year (Dr Catherine Barlow pers. comm.).

- i) A two-year-old male 'Hecla' K04 (a translocated sub-adult taken under licence from the Outer Hebrides in January 2022) named after a mountain on the Isle of Harris, was present for a few days around 11 April in the Shap area, on the edge of the YDNP.
- ii) A two-year-old Female F43 'Merrick' named by the host charity Southern Uplands partnership after the highest peak in Southern Uplands, was present between mid-July to mid-August ranging between Shap and the northern end of Nidderdale NNL, spending several weeks in the latter area. It was this bird that was recorded on a NE camera searching, unsuccessfully, for the just-fledged Hen Harrier chicks in a nest on a grouse moor in the Yorkshire Dales and being mobbed by their mother (NE, 2023).

SPARROWHAWK *Accipiter nisus*

Overview: Only a few casual records of breeding birds are reported that are not representative of the actual breeding population. Population trends and status are not known but casual records suggest that this species is widespread in the Yorkshire Dales but occurs at low density.

2022 RECORDS

NNL: no breeding pairs were reported.

YDNP Cumbria: no breeding records were submitted on BirdTrack.

YDNP Yorkshire: there was one possible, two probable and two confirmed breeding pairs submitted on BirdTrack.

2023 RECORDS

NNL: three confirmed pairs were reported.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: four possible, one probable and two confirmed breeding pairs were submitted on BirdTrack.

There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined.

GOSHAWK *Accipiter gentilis*

Overview: There is no coordinated survey work during the breeding season, although some formerly occupied and potentially suitable sites are checked for evidence of territorial birds in spring. This species was formerly much more widespread in the area during the 1990s, with territorial birds present at a number of sites in the NNL and YDNP annually. There are now very few confirmed records.

2022 RECORDS

NNL: pairs were seen displaying at two sites in the Washburn Valley with singles at two different sites in Nidderdale.

YDNP Cumbria: no records were submitted to BirdTrack.

YDNP Yorkshire: Two birds were seen displaying at two adjacent sites in the southern Dales.

2023 RECORDS

NNL: there were up to three birds (female, adult male and immature male) at one site seen between 12 March and 17 April. Most of the sites where birds had been recorded in 2022 were not checked at the right time of year and so it is not known if any territorial birds were present.

YDNP Cumbria: no records were submitted to BirdTrack.

YDNP Yorkshire: there was only a single record from the southern Dales but there were much lower levels of observer coverage than in previous years.

There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined.

MARSH HARRIER *Circus aeruginosus*

Overview: This species is now a regular passage migrant with a small number of birds summering. There have been two recent breeding attempts in the NNL both in 2017. One on the West Nidderdale Moors in the southern part of the NNL which failed when the nest was destroyed, and another on East Nidderdale Moors in the northern part of the NNL which failed through unknown causes (Nidderdale NNL, 2019).

2022 RECORDS

NNL: in the core Hen Harrier breeding area, independent raptor fieldworkers recorded up to five birds all seen displaying at one time. Although monitoring work was undertaken from suitable vantage points that were at considerable distance from the territories, at least two pairs were observed nest building. No nest visits were made but subsequent watches revealed that at least one brood of young fledged. This represents the first successful breeding in the area. They were seen between the two nest sites and so it is not clear if these were birds from either of these nests, or an additional unrecorded nest site.

YDNP Cumbria: no potential breeding or summering birds were reported on BirdTrack.

YDNP Yorkshire: no potential breeding or summering birds were reported on BirdTrack.

2023 RECORDS

NNL: there were at least two females and one male in the same general area as 2022 with the behaviour of the adult birds indicative of at least one nesting attempt. There were no observations in the latter part of the breeding season and so the outcome is not known. A single female(s) were seen on a number of dates at a different location in late April and twice in early June.

YDNP Cumbria: no potential breeding or summering birds were reported on BirdTrack.

YDNP Yorkshire: at one site a pair were seen on one date only with some territorial display noted. It was a second calendar year male that was seen to fly off and there were no further sightings.

HEN HARRIER *Circus cyaneus*

Overview: Monitoring work undertaken since the early 1990s showed that a few pairs attempted to nest annually, although breeding success was generally poor. It was lost as a breeding species in the area from the late 2000s, with a small number of pairs attempting to nest from 2017 onwards. The Yorkshire Dales are known to be an important wintering area for this species.

Nest monitoring work was, once again, undertaken by Natural England staff and gamekeepers from the relevant Estates.

2022 BREEDING RECORDS

The information supplied by NE shows that there were there were a total of ten nesting attempts, with six successfully fledging 23 young, with the details as submitted by NE shown in in table 1.

From the information supplied it would appear that there were six nesting attempts in the NNL and four in the YDNP. No information has been provided indicating the likely cause of any of the four nest failures.

Table 1. *The Breeding Productivity of Hen Harriers nesting in the Yorkshire Dales National Park and Nidderdale Area of Outstanding Natural Beauty in 2022.*

Area	Nest Location	Primary land use	No. eggs laid	No. eggs hatched	No. young fledged
Yorkshire Dales	Swinton	Driven Grouse Moor	6	5	5
Yorkshire Dales	Swinton	Driven Grouse Moor	6	1	1
Yorkshire Dales	Caldbergh	Driven Grouse Moor	6	4	4
Cumbria	Whernside	Driven Grouse Moor	5	0	0
Yorkshire	Whernside	Driven Grouse Moor	6	3	0
Cumbria	Whernside	Driven Grouse Moor	5	4	4
Yorkshire Dales	Swinton	Driven Grouse Moor	5	4	4
Yorkshire Dales	Swinton	Driven Grouse Moor	5	Not known	0
Cumbria	Whernside	Driven Grouse Moor	5	5	5
Yorkshire Dales	Jervaux Estate	Driven Grouse Moor	Not known	2	0

No additional details on brood managed birds were received for either 2022 or 2023.

2023 BREEDING RECORDS

The information supplied by NE shows that there were there were a total of 15 nesting attempts in the YDNP and NNL with 12 successfully fledging 47 young.

Table 2. *The Breeding Productivity of Hen Harriers nesting in the Yorkshire Dales National Park and Nidderdale Area of Outstanding Natural Beauty in 2022.*

Area	No. of breeding attempts	No. of successful nests	No. of young fledged
Yorkshire Dales	11	9	33
Nidderdale	3	2	9
Other	1	1	5
Total	15	12	47

The 2023 total is the highest number of nesting attempts that have ever been recorded in the Yorkshire Dales. This compares to the combined totals for the two protected landscapes of seven nesting attempts that were all successful and fledged 26 young in 2020 and four confirmed nesting attempts, with two successfully fledging nine young in 2021.

This increase is replicated across northern England with Holmes (2023) reporting a total of 54 nests (36 successful) in 2023, up from 49 (34 successful) in 2022. There was an associated increase in the number of chicks fledged with 141 in 2023 (an average of 3.9 chicks per successful nest) and 119 in 2022 (an average of 3.5 chicks per successful nest).

For context, the Conservation Framework for Hen Harriers in the United Kingdom estimated that the English uplands could potentially support between 323 and 340 breeding pairs (Fielding *et al.* 2011).

The increases in the number of nesting pairs in the YDNP and NNL, and elsewhere in northern England have occurred during the Brood Management Trial. This is currently being undertaken to test whether removing Hen Harrier chicks from nests on grouse moors to be captive reared and later released, reduces conflict sufficiently to allow the harrier populations to recover. NE have stated that it is not yet possible to assess the effectiveness of the trial as any link between brood management, the increase in Hen Harrier numbers and ongoing persecution, is not clear (Holmes, 2023). That is why NE are committed to undertaking a full scientific investigation into the complex effects of the availability of this technique, and have made it clear that the trial will not influence, or detract from, any work to tackle illegal persecution, by either them or the Police.

Although there have been recent increases in the breeding population of Hen Harriers, peer-reviewed research published in 2023 has shown that there are unusually low annual survival rates. Ewing *et al.* (2023) found that illegal killing accounted for 27-43% mortality of Hen Harriers under one year of age, and 75% aged between one and two years old. Ewing *et al.* (2023) also concluded that is likely to be attributable to grouse moor management because i) a 10% increase in grouse moor use resulted in a 43% increase in mortality risk; ii) a strong overlap existed between mortality and grouse moor extent in 20 km squares, identifying hotspots of illegal killing in northern England and northeast Scotland; iii) death due to natural causes showed different

spatial and temporal patterns; and iv) timing of mortality peaked around the shooting season and during breeding territory establishment.

Some monitoring of winter roosts was undertaken by volunteer raptor workers in both 2022 and 2023, primarily in with the NNL, but with no other information supplied, it is not possible to make an accurate assessment of the numbers wintering or roosting within the are

‘Missing Fate Unknown’ Satellite Tagged Hen Harriers

The Natural England (2023) criteria for ‘Missing Fate Unknown’ includes:

- Satellite tagged birds that were recorded after the battery ran out or transmissions had stopped.
- Satellite tagged birds that died in such a position as to render the transmitter hard to locate and recover. The satellite transmitters depend on light to recharge, and operate on a 10hour on 48 hour off duty cycle. Therefore, when a bird dies there is only a small chance that it would happen whilst the transmitter is transmitting with enough charge to enable transmission of coordinates and a signal to enable retrieval. If the bird dies in the off cycle of the transmitter, then it could have travelled many kilometers to its final resting place from the last transmitted coordinates. If this final resting place is in long vegetation, and/or the bird is lying on its back with little or no light available to the solar panel it will never transmit again and the bird would fall into the Missing Fate Unknown category.

It is fully acknowledged that given the cycle of the satellite tag transmissions, the last location transmitted is not necessarily the location that the bird died. However, there are an increasing number of satellite tagged Hen Harriers that have gone ‘missing’ in the north of England including the Yorkshire Dales where there have been no bodies or tags located, or any further sightings or reports of the birds. Murgatroyd *et al.* (2019) concluded that illegal killing of the birds and destruction of the tags was the most likely explanation when tags suddenly stopped transmitting without any prior evidence of malfunction, where no remains of the birds or tag could be found and where the birds were not seen again.

The number of missing fate unknown NE satellite tagged Hen Harriers where the last transmission was in the YDNP or NNL are shown in *Table 3*. In 2022 in the YDNP there were four tagged Hen Harriers that were ‘missing fate unknown’ and one that had died as a result of persecution, with one bird found in the Nidderdale NL that was found to have died from natural causes.

In 2023 there were six tagged Hen Harriers that were ‘missing fate unknown’ in the YDNP and one in the NNL.

In addition, two tagged Hen Harriers that were ‘missing fate unknown’ where the location of the last known fix has been withheld as it is near a confidential nest site that are listed as being in Yorkshire, and so may well relate to a site within the YDNP or NNL. The location of another ‘missing fate unknown’ bird is listed as being in the Yorkshire Dales with the location withheld at the date of the publication of this report

publication as it was still an active Police investigation. The details of these three birds are shown in Table 4.

Details published by RSPB (2023a) indicated that at least one of their satellite-tagged birds last transmitted in 2022 with another on an unpublished date.

This compares to the five satellite tagged Hen Harriers that went 'missing fate unknown' during 2020 where the last known fix occurred within the YDNP or NNL and one that went 'missing fate unknown' during 2021.

Table 3. Details of Satellite tagged Hen Harriers that Died of Natural Causes or Were Missing Fate Unknown Where the Last Known Fix was in the Yorkshire Dales National Park or Nidderdale Area of Outstanding Natural Beauty in 2022 and 2023 (details published [here](#) by Natural England on 1 January 2024).

Tag Type	Tag ID	Sex	Nest	Tag code or Name	Date fitted	Date last contact	Location of last contact	OS Reference	Status	Notes on loss
MT	201121	M	Cumbria	Free	19 June 2020	12 April 2022	Cumbria	NY795013	Dead	Recovered - persecution. Bird found decapitated and with ringed leg removed.
MT	55145a	M	BM R1 Yorkshire	R1-M1-21	8 July 2021	1 Dec 2022	Yorks Dales	SD917620	Missing Fate Unknown ^	
MT	55155	M	BM R1 Yorkshire	R1-M2-21	8 July 2021	6 March 2022	Yorks Dales, Nidd NL	SE136717	Dead	Natural death, Avian Influenza. Recovered 06/03/22
MT	232637	M	BM R1 Yorkshire	R1-M1-22	14 July 2022	17 Aug 2022	Yorks	SD804893	Missing Fate Unknown ^	
MT	213920a	M	BM R3 Yorkshire	R3-M2-22	4 Aug 2022	5 Oct 2022	Cumbria	NY791016	Missing Fate Unknown ^	
MT	213931	F	BM R2 Cumbria	R2-F1-22	20 July 2022	15 Dec 2022	Yorks Dales	SD847831	Missing Fate Unknown ^	
MT	232639	F	BM R1 Yorkshire	R1-F3-22	14 July 2022	30 March 2023	Yorks	NY823039	Missing Fate Unknown ^	Previously listed as transmitting May 2023 in due to intermittent transmissions.

Tag Type	Tag ID	Sex	Nest	Tag code or Name	Date fitted	Date last contact	Location of last contact	OS Reference	Status	Notes on loss
MT	232636	F	BM R1 Yorkshire	R1-F4-22	14 July 2022	25 Sept 2023	Yorks Dales, Nidd NL	SE077699	Missing Fate Unknown ^	
MT	213926	M	BM R2 Cumbria	R2-M1-22	20 July 2022	1 April 2023	Yorks	NY846027	Missing Fate Unknown ^	
MT GPS	234078	F	Cumbria	Nicola	22 July 2022	3 April 2023	Yorks	SD831860	Missing Fate Unknown ^	
MT GPS	240293	F	Cumbria 2	Hope	21 July 2023	26 Sept 2023	Yorks Dales	SD801926	Missing Fate Unknown ^	
MT	213847a	M	Cumbria 3	Rhys	1 Aug 2023	15 Sept 2023	Yorks Dales	SD798896	Missing Fate Unknown ^	
MT	213925a	F	BM R4 Cumbria	R4-F1-23	8 Aug 2023	4 Oct 2023	Cumbria	SE003981	Missing Fate Unknown ^	

Notes

"a" suffix on ID = Tag recovered and re-used. *** = Privately funded tag. ^ = Missing Fate Unknown includes:

(i) Satellite tagged birds that were recorded after the battery ran out or transmissions had stopped.

(ii) Satellite tagged bird that died in such a position as to render the transmitter hard to locate and recover. The satellite transmitters depend on light to recharge, and operate on a 10hr on 48 hr off cycle. Therefore, when a bird dies there is only a small chance that it would happen whilst the transmitter is transmitting with enough charge to enable transmission of coordinates and a signal to enable retrieval. If the bird dies in the off cycle of the transmitter then it could have travelled

many kms to its final resting place from the last transmitted coordinates. If this final resting place is in long vegetation, and/or the bird is lying on its back with little or no light available to the solar panel it will never transmit again and the bird would fall into the Missing Fate Unknown category.

Table 4. Details of Satellite tagged Hen Harriers that Died of Natural Causes or Were Missing Fate Unknown Where the Last Known Fix was either Withheld by the Police or not Published as it was near a sensitive nest site, where the site is likely to be in the Yorkshire Dales National Park or Nidderdale National Landscape in 2022 and 2023 (details published [here](#) by Natural England on 1 January 2024).

Tag Type	Tag ID	Sex	Nest	Tag code or Name	Date fitted	Date last contact	Location of last contact	OS Reference	Status	Notes on loss
MT	213922	M	BM R2 Cumbria	R2-M1-21	20 July 2021	11 June 2023	Yorks Dales	Site confidential - ongoing investigation	Missing Fate Unknown ^	Final transmission location temporarily withheld at Police request.
MT	232640	F	BM R1 Yorkshire	R1-F1-22	14 July 2022	30 April 2023	Yorks	Site confidential hen harrier breeding site	Missing Fate Unknown ^	Bird killed at or near nest with 5 eggs, flight feathers found in and around nest no sign of bird or tag, likely predation. Final transmission location withheld; sensitive nest site.
MT	232638	F	BM R1 Yorkshire	R1-F2-22	14 July 2022	29 April 2023	Yorks	Site confidential hen harrier breeding site	Missing Fate Unknown ^	Presumed tag failure. Bird breeding and photographed into mid-May at breeding site with damaged aerial, aerial almost detached from transmitter hanging at side of bird, transmitter and harness in place. Bird alive after last transmission. Final transmission location withheld; sensitive nest site.

RED KITE *Milvus milvus*

Overview: Despite the success of Yorkshire Red Kite Project site and the proximity of the re-introduction site at Harewood, there have been very few confirmed breeding records in the YDNP and northern area of the NNL. There are, however, two areas in the south of the NNL where a number of pairs regular breed. The spread of Red Kites into the National Park and NNL has previously been restricted by illegal persecution (YDNPA, 2018; Nidderdale NNL, 2019).

2022 RECORDS

NNL: there were widespread reports from Lower Washburn up to Upper Nidderdale and although several pairs were confirmed to have bred in the Washburn Valley, no quantitative data on breeding population are available.

YDNP Cumbria: no potential breeding or summering birds were reported to BirdTrack.

YDNP Yorkshire: no potential breeding or summering birds were reported to BirdTrack.

2023 RECORDS:

NNL: in the southern part of the NNL 14 nesting pairs were located but not all sites where nests have previously been located were checked. From local knowledge of where birds have previously nested, it is estimated that there could be an additional 10 to 15 pairs present. No breeding records were received for the north of the NNL.

YDNP Cumbria: no potential breeding or summering birds were reported on BirdTrack.

YDNP Yorkshire: three possible and one probable breeding pair were reported on BirdTrack.

Anecdotal records suggest that the number and distribution of non-breeding birds is increasing across the area however, there are still very few, if any, confirmed nesting attempts in the YDNP or northern NNL.

WHITE-TAILED EAGLE *Haliaeetus albicilla*

Overview: The recent records relate to birds moving through the area from reintroduction sites in south east Scotland and the Isle of Wight.

There were no records in 2022.

2023 RECORDS

A small number of satellite-tagged birds released as part of the Isle of Wight White-tailed Eagle Project have been recorded in the area. All the records have been immature birds in their second or third calendar year that are incredibly nomadic and

often move great distances, with none settling in the Dales for any length of time (Stephen Egerton-Read pers. comm.).

The last known fix of a second-calendar year female (G814) that was released in 2021, was received from a location north of Skipton at 11:59 hrs on 15 March 2022. There have been no further transmissions or credible sightings of the bird and although the disappearance remains unexplained, it is presumed to be dead (Stephen Egerton-Read pers. comm.).

BUZZARD *Buteo buteo*

Overview: There is no systematic monitoring of nesting attempts although population trends have been determined for the YDNP using British Trust for Ornithology Breeding Bird Survey data. Only a few casual records of breeding birds are reported that are not representative of the actual breeding population. Population trends and status are not known but casual records suggest that this species is widespread in the Yorkshire Dales but occurs at low density.

The only quantitative data are from the British Trust for Ornithology Breeding Bird Survey, with the results for just the YDNP area up to and including 2019 when the analysis was last undertaken showing that had been a statistically significant increase in the Buzzard population since the survey began in 1994 (Harris *et al.*, 2021). The population has increased from very low numbers, initially restricted to the Cumbria area of the YDNP.

2022 RECORDS

NNL: there were widespread reports from Lower Washburn up to Upper Nidderdale and although several pairs were confirmed to have bred in the Washburn Valley, no quantitative data for the breeding population is available.

YDNP Cumbria: nine possible, six probable and a single confirmed pair were reported on BirdTrack.

YDNP Yorkshire: nine possible, ten probable and a single confirmed pair were reported on BirdTrack.

2023 RECORDS

NNL: There were eight confirmed nesting attempts in southern NNL that were located but as no coordinated survey work was undertaken, the actual number of breeding pairs is likely to be much higher. Elsewhere there were six territorial pairs in one area and three at another.

YDNP Cumbria: three possible and two probable pairs were reported on BirdTrack.

YDNP Yorkshire: five possible, four probable and three confirmed breeding pairs were reported on Bird Track.

The actual breeding population will be higher than the number of breeding attempts reported. There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined.

BARN OWL *Tyto alba*

Overview: There is no systematic monitoring undertaken of breeding populations. Only a small number of records are reported from nest box monitoring projects and are not representative of the actual breeding population. Population trends and status are not known but casual records suggest that the population has increased significantly over the last two decades, with this species now widely distributed across the area.

2022 RECORDS

NNL: A nest box monitoring programme was, once again, coordinated by the Nidderdale Moorland Group but with much earlier nesting, only 12 chicks were able to be ringed from three occupied nest boxes. In addition, 22 chicks fledged from seven occupied nest boxes but were not ringed (Tracey Johnson pers. com.). To date, the Moorland Group have put up 25 Barn Owl boxes within around Nidderdale.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: there were two nest box monitoring programmes undertaken by independent raptor fieldworkers:

1. In Malhamdale and Wharfedale a total of five boxes were checked, only a single one was occupied but no young were fledged (Jon Middleton pers com.)
2. 21 nest boxes were checked in the Wensleydale and Swaledale area with six occupied by pairs, with five fledging 23 young (Roger Foreman pers.com).

A further three possible, two probable and a single confirmed pair were reported on BirdTrack.

2023 RECORDS

NNL: No breeding records were received.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: the details from two nest box monitoring programmes undertaken by independent raptor fieldworkers were as follows:

1. in Malhamdale and Wharfedale a total of seven boxes were checked, three were occupied with a single bird in one box, with two pairs hatching young and seven young fledged (Jon Middleton pers com.)

2. In the northern Dales 26 nest boxes were monitored by independent raptor fieldworkers. A total of 18 boxes were occupied with 17 pairs successfully fledging 72 young (Roger Foreman pers com).

In addition, four possible, one probable and two confirmed breeding pairs were submitted on BirdTrack. A further three confirmed breeding pairs were reported by independent raptor fieldworkers.

The number of records outside the breeding season would suggest that this species remains widely distributed within the area with the actual breeding population highly likely to be higher than the totals that are reported.

LITTLE OWL *Athene noctua*

Overview: There is no systematic monitoring undertaken of breeding populations. Only a few casual records of breeding birds are reported that are not representative of the actual breeding population.

2022 RECORDS

NNL: no details were received.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNPA Yorkshire: five possible, four probable and a single confirmed breeding pair were reported on BirdTrack.

2023 RECORDS

NNL: no details were received.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNPA Yorkshire: three possible, four probable and a single confirmed breeding pair were reported on BirdTrack.

There were insufficient records for any assessment of population trends or status to be determined. The number of records outside the breeding season would suggest that this species remains relatively widely distributed within the area with the actual breeding population highly likely to be higher than the totals that are reported.

LONG-EARED OWL *Asio otus*

Overview: There is no systematic monitoring undertaken of breeding populations. Only a few casual records of breeding birds are reported that are not representative of the actual breeding population.

2022 RECORDS

NNL: There were four confirmed breeding pairs at one site, with each pair having three chicks, with two confirmed pairs and another site that successfully bred.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: no breeding records were reported on BirdTrack.

2023 RECORDS

NNL: there were five confirmed pairs located, all in the south of the NNL.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: one confirmed breeding record was reported on BirdTrack with details of an additional confirmed breeding pair received.

It is likely this species is more widespread than records suggest. There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined

SHORT-EARED OWL *Asio flammeus*

Overview: There is no systematic monitoring undertaken of breeding populations. Only a few casual records of breeding birds are reported that are not representative of the actual breeding population. This is a difficult species to monitor as birds don't tend to return to traditional territories, and are affected by cyclic vole populations.

2022 RECORDS

NNL: independent raptor fieldworkers confirmed breeding at two sites where there were a total of three pairs, with a further five probable pairs recorded.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: three possible and one confirmed breeding pair were reported on BirdTrack.

2023 RECORDS

NNL: there were two sites each with a single confirmed pair, with single probable pairs at a further four sites.

YDNP Cumbria: one confirmed breeding pair were reported on BirdTrack.

YDNP Yorkshire: 12 possible, nine probable and one confirmed breeding pair were reported on BirdTrack and from independent raptor workers.

It is likely this species is more widespread than records suggest. There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined.

TAWNY OWL *Strix aluco*

Overview: There is no systematic monitoring undertaken of breeding populations. Only a few casual records of breeding birds are reported that are not representative of the actual breeding population.

2022 RECORDS

NNL: no records were received.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: six possible, five probable and a single confirmed breeding pair were submitted on BirdTrack.

2023 RECORDS

NNL: no records were received.

YDNP Cumbria: one confirmed breeding pair were reported on BirdTrack.

YDNP Yorkshire: six possible, three probable and a single confirmed breeding pair were submitted on BirdTrack.

In addition, four nest boxes were monitored by independent raptor workers in the northern Dales but only one young bird was ringed (Roger Foreman pers com.)

There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined

KESTREL *Falco tinnunculus*

Overview: There is no systematic monitoring undertaken of breeding populations. Only a few casual records of breeding birds are reported that are not representative of the actual breeding population.

2022 RECORDS

NNL: a total of 16 chicks were ringed from three nest boxes put up the Nidderdale Moorland Group (Tracey Johnson, pers. com.)

YDNP Cumbria: one possible breeding pair were reported on BirdTrack.

YDNP Yorkshire: ten possible, three probable and a single confirmed breeding pair were reported on BirdTrack.

2023 RECORDS

NNL: the only breeding report from independent raptor fieldworkers was a single pair in a nest box fledging four young.

YDNP Cumbria: a single possible breeding pair was reported.

YDNP Yorkshire: five nest boxes were checked by independent raptor fieldworkers in the north of the area, all successfully fledging a total on 22 young (Roger Foreman pers. comm.) In addition, ten possible, five probable and six confirmed breeding pairs were reported on BirdTrack.

There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined

MERLIN *Falco columbarius*

Overview: The Yorkshire Game Management Cluster is a long-term collaborative study being undertaken by moorland owners and their gamekeepers that commenced in 2016, with gamekeepers working under a Schedule 1 licence on more than a dozen estates to monitor Merlin breeding performance. They report that the data will be analysed by a raptor specialist with the aim to provide landscape-scale guidance on habitat management, with more detailed annual reports published on a website dedicated to this ongoing raptor research and conservation project in due course.

2022 RECORDS

During the season the Yorkshire Dales Merlin Project monitored 29 nesting areas with 19 pairs located, fledging 62 young from 18 nesting attempts (Orchel, 2023). The productivity of 3.4 young per nesting pair was the highest number that had been recorded during the seven years of the study. Since the start of the project a total of 108 nesting attempts have been monitored with 310+ young fledged from 101 successful attempts (Orchel, 2023).

A monitoring programme involving the Bolton Abbey Estate, Northern England Raptor Forum and YDNPA located six pairs, with five successfully fledging 19 young. One pair failed on young after c. 8-10 days.

2023 RECORDS

No information was received from the Yorkshire Dales Merlin Project.

A monitoring programme involving the Bolton Abbey Estate, Northern England Raptor Forum and YDNPA located five nesting pairs, with a male seen carrying prey at an additional site indicative of breeding although no nest was located. Four nesting attempts were successful with nine young fledged. In one nest there was a

single live chick and a recently dead sibling about 16 days old, with evidence that there had been a larger brood.

HOBBY *Falco subbuteo*

Overview: A species that is spreading northwards with a few pairs potentially nesting each year.

2022 RECORDS

NNL: no breeding records were reported.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: no breeding records were reported on BirdTrack.

2023 RECORDS

NNL: a pair successfully fledged two chicks at one site in the south of NNL with another pair nesting at a second site. There were several sightings at the end of June at a third site but these may relate to birds from the latter confirmed nest site.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: no breeding records were reported on BirdTrack.

There was no systematic monitoring undertaken of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined.

PEREGRINE *Falco peregrinus*

Overview: Systematic monitoring has been undertaken across the area since the late 1970s, although monitoring effort has decreased in recent years. Previous analysis that has included data from the YDNP and NNL has shown differences in productivity between nest sites on and away from grouse moor sites (Amar *et al.*, 2011).

2022 RECORDS

NNL: a pair apparently fledged three chicks at one site. Single birds were present at a further five traditionally used sites, including one where an immature bird was present, but it is not known if any nesting attempts were made.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: monitoring work coordinated by YDNPA resulted in 12 traditional nest sites being checked, with five found to be occupied with three pairs successfully fledging ten young.

2023 RECORDS

NNL: there was no formal monitoring work undertaken; the only reports were of birds seen at two traditional sites in April.

YDNP Cumbria: no breeding records were reported on BirdTrack.

YDNP Yorkshire: monitoring work coordinated by YDNPA resulted in ten traditional nest checked, with five found to be occupied with three pairs successfully fledging six young. There was one additional site reported on BirdTrack with at least one young present.

Not all of the traditionally occupied sites in both protected landscapes were checked in 2022 or 2023 and so it is not possible to make any comparisons with previously published data or determine any population trend.

RAVEN *Corvus corax*

Overview: The breeding population in the YDNP has remained relatively stable over recent years. The increase in casual records indicates an increase in the non-breeding population, presumably as a result of an increase in the number of breeding pairs elsewhere in Northern England, particularly in Cumbria.

2022 RECORDS

NNL: no breeding records were received.

YDNP Cumbria: one possible, two probable and a single confirmed breeding pair were reported on BirdTrack.

YDNP Yorkshire: a total of seven sites were monitored by YDNPA with two occupied sites that were both successful fledging a total on nine young. A number of traditional nest sites were not checked. In addition to these sites, two possible, four probable and a single confirmed breeding pairs were reported on BirdTrack.

2023 RECORDS

NNL: there was no systematic monitoring although confirmed breeding at one sites and probable breeding at another. None of the known sites in the Lower Washburn were checked.

YDNP Cumbria: two possible and three confirmed breeding pairs were reported on BirdTrack.

YDNP Yorkshire: a total of ten sites were checked with three occupied; all were successful with a total of ten young fledged. An additional three possible and six probable breeding pairs were reported on BirdTrack. Not all of the traditionally known nest sites were checked.

Not all of the traditionally occupied sites in both protected landscapes were checked in 2022 or 2023 and so it is not possible to make any comparisons with previously published data or determine any population trend.

PERSECUTION DATA

Raptor persecution is one of the UK government's seven wildlife crime priorities, with an emphasis on Hen Harrier, Peregrine Falcon, Goshawk, Golden Eagle and White-tailed Eagle. The data detailing all raptor persecution incidents in England and Wales that is published by the Raptor Persecution Priority Delivery Group (RPPDG) for England and Wales is available on the Defra MAGIC website. At present, only the details of confirmed incidents recorded between 2011 and 2015 are available.

In the context of the delivery of the Management Plan objectives it is important that there is a complete picture of all offences, so that there is a wider understanding of the issues, what drives them to take place and measures to try and determine who is responsible. In addition, what existing action is underway to prevent offences taking place. This will enable the Stakeholder Group to devise and implement appropriate actions to address the problem.

At present there is no requirement for the Police to record raptor crime because it is not defined as notifiable by the Home Office. In the absence of nationally recognised criteria for recording confirmed persecution cases, all members of the Steering Group agreed that details of the incidents supplied by RSPB and published in the annual BirdCrime reports will be used. These data are cross referenced against national standards that are used by the Police to record all incidents and crimes.

The National Wildlife Crime Unit (NWCU) recommend that offences within the Wildlife and Countryside Act including shooting, trapping, killing, poisoning, disturbing or taking (bird or egg) should be considered for inclusion in the report. There may well be some instances where an illegal act (for example, shooting at a raptor or illegally using a decoy) has been committed but may not result in, for example, the actual offender being identified, a bird being killed or the body of a bird being recovered. Whilst there may not be sufficient evidence for a conviction, it is still criminal behaviour irrespective of who has committed the offence. Recording the location of these incidents will help to determine any spatial or temporal patterns of offences and assist any subsequent incident or crime reports from the Police. These will include the following:

- Confirmed raptor persecution incident - where circumstances indicate that an illegal act against a wild bird of prey has taken place. These incidents are typically substantiated by evidence such as post-mortem or toxicological analysis, or reliable eyewitness evidence.
- Shooting – where an X-ray, vet or expert opinion has confirmed that shot killed the bird.
- Poisoning – where toxicology tests confirm the likely cause of death
- Trapping, disturbance or attempt of any offence – where there is evidence provided by a witness, video or similar.

The most up-to-date details of confirmed raptor persecution incidents were published by the RSPB in late November 2023 in their annual BirdCrime report, detailing incidents recorded in 2022.

RSPB BirdCrime Information Included Within the Evidence Report

The 2022 incidents have been extracted from the RSPB Species Protection Data Base (SPDB) system, and include any that occurred within or intersecting with Geographical Information System (GIS) shapefiles for the YDNP and National Landscape boundaries. Any 'officially sensitive' information within the extracted data has been removed so that the information can be shared openly in the public domain.

All the data were accurate at the date of extraction, but may be incomplete and subject to change. This is due to COVID and Avian Influenza related backlogs from the data sources, and includes delays in laboratory analyses and/or results. In addition, there may be some data that may be required to be withheld to protect any ongoing investigation and/or pending permission from an enforcement partner. Any changes or amendments to previously listed incidents will be published in future Evidence Reports and where appropriate, any totals will be revised.

The criteria used by RSPB for recording offences against wild birds have been in place for several decades using a consistent recording format. Only confirmed incidents are published in this report where the circumstances indicate an illegal act has taken place with a high degree of certainty (95% and above). These incidents are typically substantiated by evidence such as post mortem or toxicological analysis (e.g. shooting and poisoning cases).

It should be noted that for any incident (i.e. per RSPB ID or reference.) there can be multiple victims of more than one species within one incident. Incidents are separated on the basis that any bait, victim, group of baits, victims etc. that are found on a different date; found sufficiently far apart to be represented by a different six-figure grid reference; found at the same grid reference and on the same date but in circumstances that otherwise separate them (for example a poison victim that is very decomposed beside a fresh bait - so the bait could not have been responsible for the death of the victim); are classified as separate incidents.

The following criteria are used in the assessment:

- Species Number: "U" or "0" indicates victim number is not known but the known target species is listed.
- Species Involved or Targeted: Involved: Species victim number is known. Targeted: Used when the species or species group listed is clearly targeted but the victim number is not known e.g. illegally set traps or poisoned baits.
- Persecution 'Other': Captures confirmed persecution incidents that do not fall clearly to the other categories of shooting, trapping, nest destruction or poisoning. For example, this could include: killing or attempted killing using other means; possession of equipment capable of being used to commit an offence (where there is supporting evidence or intelligence of sufficient standard to substantiate that birds of prey are the intended target) e.g.

possession of a banned pesticide for use in poisoned baits where intelligence/evidence substantiates persecution occurred with >95% certainty).

It must be made clear that where the incident data provided are assigned to a geographical location this does not imply or assign blame to the custodians, landowner, land managers or their operatives.

The persecution of birds of prey can take place in remote locations, where detection and the probability of coming across evidence of a crime are very low. There is no consistent effort undertaken annually to try and locate any potential incidents and so the number of reports, and consequently the number of confirmed incidents, will vary between years and will not be directly comparable and may not accurately reflect the number of offences that have occurred in specific locations in specific time frame

A total of six confirmed persecution incidents were recorded in 2022, all in the YDNP with the details shown in Table 5. This compares to ten confirmed incidents within both protected landscapes in 2020 and seven in 2021. The RSPB (2023b) highlight that North Yorkshire remains one of the worst counties in the country for persecution with 12 incidents (19.67%) in 2023 and well over double the next highest number over the period 2013 to 2022.

There was a reduction in the number of confirmed shooting and poisoning cases in 2022 compared to 2021 but it should be noted that there may have been fewer cases sent for testing in 2022 compared to previous years. Highly Pathogenic Avian Influenza (HPAI) continued to have a significant impact on wild bird populations in 2022, including some raptor species. RSPB (2023b) report that many of the dead birds of prey that were collected by Department for Environment, Food and Rural Affairs (Defra) for avian influenza testing did not undergo any further analysis to identify their cause of death, but were incinerated regardless of whether they tested positive or not.

In addition, RSPB (2023b) also report that fewer birds of prey were tested by the Wildlife Incident Investigation Scheme (WIIS), with 46% fewer cases examined in 2022 than in the previous year. This, combined with a lack of information gathered when dead raptors were recovered may have resulted in a number of persecution incidents across the country, and possibly within the two protected landscapes, being unreported and not investigated. As such, the overall persecution figures for 2022 may not be directly comparable to data from previous years.

Table 4. The Confirmed Incidents in the Yorkshire Dales National Park and Nidderdale National Landscape in 2022 Extracted from the RSPB Species Protection Database (RSPB DR-39-23, provided 18/12/2023).

RSPB ID	RSPB Ref	DD	MM	YYYY	Area	10km Grid Ref	Constabulary	Status	Species	Species No.	Offence Type	Notes / Intel Summary
103654	SDBP /93/22		4	2022	YDNP	NY70	North Yorkshire Police	Confirmed	Hen Harrier	1	Persecution - Type of Persecution Unknown	NE tagged Hen Harrier "Free"
103862	SDBP /149/22	25	8	2022	YDNP	SD96	North Yorkshire Police	Confirmed	Red Kite	1	Bird Shot - Dead/Alive	Police Ref: NYP-17082022-0112
104070	SDBP /178/22	15	6	2022	YDNP	SD78	North Yorkshire Police	Confirmed	Hen Harrier	1	Wanton Destruction of a Wild Bird	NE monitored nest where well grown chicks were stamped to death
104485	SDBP /215/22	15	6	2022	YDNP	SD78	North Yorkshire Police	Confirmed	Hen Harrier	1	Wanton Destruction of a Wild Bird	NE monitored nest where well grown chicks were stamped to death
104486	SDBP /216/22	15	6	2022	YDNP	SD78	North Yorkshire Police	Confirmed	Hen Harrier	1	Wanton Destruction of a Wild Bird	NE monitored nest where well grown chicks were stamped to death
104487	SDBP /217/22	15	6	2022	YDNP	SD78	North Yorkshire Police	Confirmed	Hen Harrier	1	Wanton Destruction of a Wild Bird	NE monitored nest where well grown chicks were stamped to death

These figures include two confirmed persecution incidents involving Hen Harriers. North Yorkshire Police (2022) reported details of a nest of Hen Harrier chicks that were found dead, deliberately destroyed by human activity. The details published in their press release ([here](#)) were as follows:

“The Hen Harrier nest, near Whernside in the Yorkshire Dales National Park, was being monitored by Natural England fieldworkers as part of their routine Hen Harrier monitoring. The nest was progressing well, and by 10 May 2022 there were four chicks, aged approximately 8 to 12 days old. The parent female was satellite-tagged “Susie”, who was tagged in Cumbria in 2020.

Natural England staff became concerned on 20 June when “Susie” was unexpectedly and abruptly shown tracking approximately 35km away from her nest. An adult female should be attentive and close to her nest during this period. Her sudden exit from the nest area was worrying.

For this reason, on 21 June, Natural England field staff acting under licence checked the nest - and made the grim discovery of three dead Hen Harrier chicks. There were no clear signs that the chicks had been killed by a predator. The situation was suspicious and so the Police were informed.

Natural England staff retrieved nest camera footage which confirmed that there were four chicks in the nest before the incident, that they were well fed and provisioned by the parents, and looked fit and well. After dark, at 9.54pm on 15 June, the camera showed the nest site appeared normal with “Susie” settled in the nest with chicks. However, at 9.59pm a sudden irregular ‘whiteout’ of the camera occurred, blinding the camera.

The camera used is movement-activated, and it was not triggered again until the following morning when footage captured apparently dead chicks in the nest and “Susie” attempting to feed them. She can then be seen removing her dead chicks from the nest. Three of these were found just outside the nest, and it is not known where she deposited the fourth.

A ‘whiteout’ has not occurred with a Natural England nest camera before, and the camera itself continued to operate normally since then, and once “Susie” returned to her nest the following morning her movement triggered further recording of images.

There was no trace on the ground that a vehicle had driven over the nest, nor did the nest camera footage indicate that this had happened. There was, however, a footmark impression in the vegetation at the nest site, strongly indicating that a person had approached the nest. Natural England staff are careful to approach using known routes - the footprint observed was believed to be recent, and not made by Natural England staff.

Post-mortem examinations of the three chicks were subsequently conducted and showed that each suffered with multiple fractured bones including humerus in one chick, both femurs in the second chick, and in the third chick, the humerus and a crushed skull. The fractures were complete and showed a considerable trauma had taken place for each chick.

Although avian flu H5N1 virus was detected in one of the chicks, the post-mortem examinations also showed that the birds had been eating up until their deaths. This implies that deaths were sudden rather than a result of a chronic disease process.

North Yorkshire Police have considered all the evidence, and strongly suspect that someone approached the nest after dark and deliberately killed the chicks. A predator would normally be expected to return and remove the dead chicks. Stoats can kill without rendering much obvious damage, but as the chicks were within the nest, it would be reasonable to expect nest camera footage of a predation or other event.

The living status of the chicks, followed by a 'whiteout' of the nest camera (possibly by a bright lamp, or something placed in front of the camera) – followed by all chicks being lifeless on the next footage – together with the post-mortem results showing broken bones in all the chicks and a crushed skull, suggests human illegal persecution activity.

The second incident relates to a Natural England tagged bird called Free found dead along Mallerstang Edge, to the west of Birkdale Common (Grid Reference NY795013) (NE, 2023). Bird-Halton (2023) reported that NE staff raised concerns when the tag transmitted a signal late at night on 11 April 2022, indicating he was away from his normal roosting area. After informing the Police, the bird and transmitter were recovered and found to be missing its head and a leg but with no other indication of either being eaten or scavenged by a predator.

NE state that the post-mortem examination concluded that Free's leg had been torn off while he was alive, and that the cause of death was the head being twisted and pulled off while the body was held tightly. These injuries would be consistent with Free being killed by human hands. There were no other signs of damage from any animal, and Free had not been shot (Bird-Halton, 2023). The incident was investigated by the Police but there was not sufficient information to identify a suspect.

In an associated press release, the RSPB (2023a) highlight that a month later, another NE tagged Hen Harrier, named Harvey, vanished in the same area. The Police carried out a search warrant in connection with the incidents, but the ensuing investigation did not lead to any charges.

The RSPB (2023a) also report prior to this incident 'Pegasus', another bird that they had tagged, vanished whilst on in the adjacent Birkdale area and that since the investigation ended, there have been another four satellite-tagged Hen Harriers (one from a RSPB project and three from a Natural England) that have disappeared in this same relatively small area. NERF (2023) have also highlighted that since September 2020, a total of ten satellite-tagged birds have gone missing in this same general area.

The January 2024 NE Hen Harrier tracking programme update states that that despite the increase in the number of breeding pairs in England in recent years, their recovery remains threatened by ongoing illegal persecution. In the January 2024

update it is reported that in 2023 only around 35% of tagged birds across northern England were still alive and being tracked after 150 days, compared to recent years when 50%–70% were still alive and being tracked after 150 days. It also highlights that although natural mortality is expected to be high for young Hen Harriers, especially during their first winter, when a tag stops transmitting NE always consider the possibility that the bird could have been illegally killed with the high numbers of birds going missing in 2023 that are not found despite intensive searches, heightening concerns about illegal persecution. The survival rates of brood managed birds, and Hen Harriers generally, will be considered under the evaluation of the brood management trial due in 2024 (Bird-Halton, 2024)

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REFERENCES

Amar, A., Court, I.R, Davison, M., Downing, S., Grimshaw, T., Pickford, T. and Raw, D. 2011. Linking nest histories, remotely sensed land use data and wildlife crime records to explore the impact of grouse moor management on peregrine falcon populations. *Biol. Conserv.* [Online]. 145 (1), pp. 86-94. [Accessed 24 November 2017]. Available from

<http://www.sciencedirect.com/science/article/pii/S0006320711003831?via%3Dihub>

Bird-Halton, S. 2023. The death of Free, a Natural England tagged hen harrier. <https://naturalengland.blog.gov.uk/2023/05/05/the-death-of-free-a-natural-england-tagged-hen-harrier/> Accessed 5 December 2023.

Bird-Halton, S. 2024. Losses of tagged hen harriers higher than normal. <https://naturalengland.blog.gov.uk/2024/01/30/losses-of-tagged-hen-harriers-higher-than-normal/> Accessed 31 January 2024.

Ewing, S.R., Thomas, C.E., Butcher, N., Denman, B., Douglas, D.J.T., Anderson, D.I.K., Anderson, G.Q.A. Anderson, Bray, J., Downing, S., Dugan, R., Etheridge, B., Hayward, W., Howie, F., Roos, S, Thomas, M., Weston, J., Smart, J. and Wilson, J.D. 2023. Illegal killing associated with gamebird management accounts for up to three-quarters of annual mortality in Hen Harriers *Circus cyaneus*.

<https://www.sciencedirect.com/science/article/pii/S0006320723001738> Accessed 27 November 2023.

Fielding, A., Haworth, P., Whitfield, P., McLeod, D. & Riley, H. 2011. A Conservation Framework for Hen Harriers in the United Kingdom. JNCC Report 441. Joint Nature Conservation Committee, Peterborough.

Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. (2013). *Raptors: a field guide to survey and monitoring (3rd Edition)*. The Stationery Office, Edinburgh.

Harris, S., Court, I. and Massimino, D. 2021. *Wild Bird Population Trends in the Yorkshire Dales National Park: The Results of the Breeding Bird Survey 1994 and 2019*. British Trust for Ornithology. Thetford.

Holmes, J. Further increase in English Hen Harrier numbers recorded in 2023.

<https://naturalengland.blog.gov.uk/2023/09/16/further-increase-in-english-hen-harrier-numbers-recorded-in-2023/> Accessed 24 October 2023.

Murgatroyd, M., Redpath, S.M., Murphy, S.G., Douglas, D.J.T., Saunders, R and Amar, A. 2019. Patterns of satellite tagged hen harrier disappearances suggest widespread illegal killing on British grouse moors.

<https://www.nature.com/articles/s41467-019-09044-w.pdf> Accessed 9 August 2021

Natural England. 2023. Hen harrier tracking update. Updated 14 September 2023.

<https://www.gov.uk/government/publications/hen-harriers-tracking-programme-update/hen-harrier-tracking-update> Accessed 6 November 2023.

NERF. 2023. Three more Hen Harriers join the 'disappeared' on grouse moors in Yorkshire at the start of the grouse shooting season. Coincidence or part of the plan?

<https://raptorforum.wordpress.com/2023/08/20/three-more-hen-harriers-join-the-disappeared-on-grouse-moors-in-yorkshire-at-the-start-of-the-grouse-shooting-season-coincidence-or-part-of-the-plan/> Accessed 2 Nov 2023.

North Yorkshire Police. 2022. Hen harrier nest investigation - Police appeal for information.

<https://www.northyorkshire.Police.uk/news/northyorkshire/news/appeals/2022/12-december/hen-harrier-nest-investigation---Police-appeal-for-information/> Accessed 27 November 2023.

Orchel, J. 2023. Yorkshire Dales Merlin Project: Summary of Findings 2022. Yorkshire Dales Merlin Project.

RSPB. 2023a. Rare Bird Of Prey Found Mutilated As 20 Other Individuals Go Missing.

<https://www.rspb.org.uk/media-centre/rare-bird-of-prey-found-mutilated> Accessed 1 October 2023.

RSPB. 2023b. BirdCrime 2022.

<file:///C:/Users/ianc.001/Downloads/Birdcrime%20Report%202022.pdf> Accessed 27 November 2023.

Appendix 1

RARE BREEDING BIRDS PANEL (<https://rbbp.org.uk/>)

Information from the Rare Breeding Birds Panel includes:

“From the evidence before you, for each species, the number of pairs (or territories) at each site needs to be worked out, and each record which represents a breeding or potentially breeding “pair” needs to be assigned to one of the breeding evidence categories (confirmed, probable, possible; note the special category of “singing males” used for some species traditionally counted by this method). Thus for each site you could have up to four different numbers for a species”

EUROPEAN BIRD CENSUS COUNCIL BREEDING CATEGORIES

Always use these – see the comments to help interpretation.

POSSIBLE BREEDING

H. Species observed in breeding season in suitable nesting habitat. This can be a problematic category, and relies on significant judgement by observers and local recorders. We suggest the following guidelines:

- a. Consider carefully what is likely to be ‘suitable’ or ‘possible’ breeding habitat. In many cases this will be clear, but for some, especially non-native birds, it may not be. Be cautious rather than optimistic.
- b. ‘Suitable’ habitat may vary according to where in the country a record comes from.
- c. Historical breeding records in the area may guide this judgement, but range expansions should also be considered.
- d. Discussions with the local recorder can help agree whether habitat is suitable, so good communication is desirable.

S. Singing male present (or breeding calls heard) in breeding season:

- a. This must include an assessment of whether the habitat is suitable for breeding.
- b. Consider the most probable situation, and be cautious. Is the bird likely to be a migrant? Even a singing male may well not breed. However, if song persists for over 7 days, see 'T – Permanent territory presumed' below. Many potential rare breeders are also scarce migrants. If they are reported through local recording channels, it will be possible retrospectively to extract records from bird reports if at some stage breeding, or a colonisation, takes place.

PROBABLE BREEDING

P. Pair observed in suitable nesting habitat in breeding season

T. Permanent territory presumed through registration of territorial behaviour (song etc.) at the same place, on at least two dates separated by at least one week. Consider possibility of an unpaired male when recording 'probable' breeding using this criterion.

D. Courtship/display (judged to be in or near potential breeding habitat; be cautious with wildfowl.)

N. Visiting probable nest site

A. Agitated behaviour or anxiety calls from adults

I. Brood patch on adult examined in the hand

B. Nest building or excavating nest-hole

CONFIRMED BREEDING

DD. Distraction-display or injury feigning (make sure no confusion with courtship display or low-levels of agitation).

UN. Used nest or eggshells found (occupied or laid within period of survey).

FL. Recently fledged young (nidicolous species) or downy young (nidifugous species).

Careful consideration should be given to the likely provenance of any fledged juvenile capable of significant geographical movement. Evidence of dependency on adults (e.g. feeding) is helpful. Be cautious, even if the record comes from suitable habitat.

ON. Adults entering or leaving nest-site in circumstances indicating occupied nest (including high nests or nest holes, the contents of which cannot be seen) or adults seen incubating

FF. Adult carrying faecal sac or food for young

NE. Nest containing eggs

NY. Nest with young seen or heard