YORKSHIRE DALES NATIONAL PARK AND NIDDERDALE NATIONAL LANDSCAPE

BIRD OF PREY EVIDENCE REPORT 2024

This report has been published by the Nidderdale National Landscape and Yorkshire Dales National Park Authority

September 2025

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EXECUTIVE SUMMARY

This Evidence Report has been published by the Nidderdale National Landscape (NNL) and Yorkshire Dales National Park Authority (YDNPA) to help assess progress towards delivery of the Yorkshire Dales National Park (YDNP) and Nidderdale National Landscape Management Plan objectives, to tackle the illegal persecution of birds of prey and owls. It collates the best available information on the status of bird of prey populations and confirmed persecution incidents that occurred in the protected landscapes in 2024.

Although the aim is to try and make this report as comprehensive as possible, there has been minimal systematic monitoring of breeding populations of more widely distributed species and so for most of these, there are insufficient records for any assessment of population status or trends to be determined. This is because there are large areas of potentially suitable breeding habitat within both protected landscapes with few experienced fieldworkers. Many areas are remote from where potential observers live and are therefore time-consuming to access. These problems are compounded by a lack of an appropriate recording framework or regional monitoring programme.

The lack of annual comparable survey data means that determining the status of most species is difficult and because of small sample sizes, determining population trends is problematic. Hen Harrier is the notable exception with nest monitoring work undertaken by Natural England (NE) and gamekeepers. In 2024, there were four nesting attempts, all in the NNL, with three successfully fledging 12 young. This is down from 16 nesting pairs in both protected landscapes in 2023, with NE and partners reporting that it was generally a poor year with declines recorded across the whole of northern England in 2024. None of the nesting attempts in the NNL were brood managed in 2024.

There were two satellite tagged hen harriers that were reported ‘missing fate unknown’ in the combined area in 2024.

Some monitoring of Hen Harrier winter roosts was undertaken by volunteer raptor workers primarily within the NNL in 2024 but with no other information supplied, it is not possible to make an accurate assessment of the wintering population.

In addition, there were territorial Marsh Harriers noted at three upland sites within the NNL, indicating a small but continued increase in the number of displaying birds in the area.

In the absence of nationally recognised criteria for recording confirmed persecution cases, the Yorkshire Dales Bird of Prey Partnership had previously 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 and this approach is maintained in this report. The most up-to-date RSPB Birdcrime report was published in November 2024 detailing a single poisoning incident and two incidents relating to satellite tagged Hen Harriers where analysis of the data showed that the tags had been tampered with and so were due to human interference. In addition, there were five instances of ‘tagged, sudden stop, no malfunction’ in 2023 where contact with the tagged birds was lost but where no bird or tag could be located following ground searches.

INTRODUCTION

The Yorkshire Dales Bird of Prey Partnership was established in April 2020 to work towards the delivery of targets in the Yorkshire Dales National Park (YDNP) and Nidderdale National Landscape (NNL) management plans for the years 2020-2025 and 2019-2024 respectively. The Yorkshire Dales National Park Management Plan (NPMP) Objective C5 had 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 landowners, moorland managers, the police and others to safeguard birds of prey and prevent their illegal persecution in the NNL.'*

The Partnership comprised 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 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. Similarly, the Northern England Raptor Forum (NERF) were members from the start of their partnership until their resignation in August 2024. NE are the lead organisation for the delivery of the NPMP objective, with YDNPA providing the Chair and Secretariat for the Partnership. The partnership concluded in August 2025 when the 2020-2025 Yorkshire Dales National Park Management Plan expired. There is now a new Yorkshire Dales National Park Management Plan 2025—2030 with an updated objective in relation to birds of prey (see here) A new Nidderdale National Landscape Management Plan is also being developed.

The partnership needed to be able to measure progress towards delivering the management plan objectives that include working towards reducing persecution. To do this, the aim was to provide the best available information on the status of bird of prey, owls and raven populations, along with the number of confirmed persecution incidents within the two protected landscapes. The partnership agreed this information needed to be collated and published in an annual evidence report. Many of the organisations represented on the partnership undertake survey and monitoring work so the comprehensiveness of these reports is entirely dependent on data supplied by the relevant stakeholders. In addition, information has been sought from other organisations who are not members of the partnership.

The purpose of this report is to publish the most up-to-date information on the status of birds of prey populations in the two protected landscapes and any progress towards reducing persecution. It includes results from the 2024 breeding seasons and the confirmed persecution incidents for 2023 that were published in the RSPB Birdcrime report in November 2024. There is also a summary of the status of each species for the years 2020-2024 covering the respective management plan periods.

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 Sottish Raptor Monitoring Group website here.

The main exception relates to Hen Harrier monitoring, 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. Requests have been made to determine if there have been any additional records of Golden and White-tailed Eagles that are taken from satellite-tag information, rather than visual observations.

All members of the Partnership were 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, the 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 requested from Harrogate & District Naturalists' Society.
- Independent Raptor Workers have also supplied records within the YDNP.
- Natural England Hen Harrier Project (Hen Harrier breeding data).
- YDNPA.
- Although no longer on the partnership, the RSPB have extracted any confirmed persecution incidents from the 2023 Birdcrime report and supplied associated information.

From the start of the partnership, there was the potential to use any datasets (including potential citizen science projects), provided they meet nationally recognised recording standards and provide robust quantitative data.

2024 SPECIES ACCOUNTS

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

OSPREY *Pandion haliaetus*

2024 Records

NNL: Between one and three birds were seen regularly throughout the breeding season at Gouthwaite Reservoir.

YDNP Cumbria: No records submitted to BirdTrack.

YDNP Yorkshire: One lingered at Malham tarn from late July until at least 27 August with two present on a number of dates.

2020-2024 Overview

Following an increase in the breeding population elsewhere in the country, there has been a corresponding increase in the number of passage and summering birds in the Yorkshire Dales in recent years. Following positive conservation measures undertaken by the Bolton Castle Estate, a pair nested just outside the National Park boundary area in 2022 and fledged two young, the first breeding in the county since records began in 1800.

HONEY BUZZARD *Pernis apivorus*

2024 Records

No records were received.

2020-2024 Overview

There have been no breeding records, just a very small number of passage birds reported.

GOLDEN EAGLE *Aquila chrysaetos*

2024 Records

No records were received.

2020-2024 Overview

There have been two recent records of satellite-tagged Golden Eagles from the South of Scotland Golden Eagle Project in the Yorkshire Dales, both in 2023.

SPARROWHAWK *Accipiter nisus*

2024 Records

NNL: No monitoring work was undertaken but two confirmed breeding pairs were located.

YDNP Cumbria: One possible breeding pair was submitted on BirdTrack.

YDNP Yorkshire: One probable breeding pair submitted on BirdTrack.

2020-2024 Overview
Population trends and status are not known as 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. Only a few casual records of breeding birds are reported that are not representative of the actual breeding population. Casual records suggest that this species is widespread in the Yorkshire Dales but occurs at low density.

GOSHAWK Accipiter *gentilis*

2024 Records

NNL: There were up to four birds reported at one site during the spring, with singles noted at five other sites during the spring.

YDNP Cumbria: One was present at a site in the southeast in July at least.

YDNP Yorkshire: Very few potential or historical sites were checked however, a single was present at one site in the southeast of the area.

2020-2024 Overview
There has been no systematic monitoring undertaken of breeding populations, with some formerly occupied and potentially suitable sites visited to look for evidence of displaying or territorial birds in spring. As a result, there are insufficient records for any assessment of population status or trends to be determined.

MARSH HARRIER *Circus aeruginosus*

2024 Records

NNL: Independent raptor workers reported displaying birds at three upland sites:

i) at least three birds were observed displaying in the core Hen Harrier breeding area.
ii) a pair were regularly seen during the summer but there was no evidence of breeding.
iii) three birds were seen displaying and nest prospecting.

YDNP Cumbria: There were no records in the breeding season.

YDNP Yorkshire: There were records at several sites during the breeding season that were considered most likely to be wide-ranging non-breeding birds.

2020-2024 Overview
There has been a continued increase in passage birds with displaying birds and territorial pairs now present annually, primarily in NNL. As all monitoring by raptor fieldworkers is done from a distance without any attempt to locate nests, it has not been possible to determine breeding status. In 2022, at least two pairs were observed nest building in one upland area of NNL, with at least one brood of young fledged.

This represented the first successful breeding in the area. There were at least two females and one male in the same general area in 2023, with the behaviour of the adult birds indicative of at least one nesting attempt.

HEN HARRIER Circus *cyaneus*

2024 Records

Nest monitoring work was, once again, undertaken by NE staff and gamekeepers from the relevant estates.

The information published by NE shows that there were there were a total of four nesting attempts in Nidderdale NL in 2024 but none in the YDNP. Three of these attempts were successful, with 12 young fledged (Stephen Murphy pers. comm.) as shown in Table 1.

One of the birds that bred again was 'Frank' (tag number 34345). He was satellite-tagged in a nest in Cumbria on 24 August 2018 and bred successfully in the Yorkshire Dales in polygynous pairings in 2019, 2020 and 2021. He also bred successfully in 2022, was again polygynous in 2023 with a single successful nesting attempt in 2024 (Natural England, 2025).

NE and partners also recorded declines across the whole of northern England in 2024, with a total of 34 breeding attempts, down from 54 in 2023. Of these 25 were successful compared to 36 in 2023, fledging 80 chicks compared to 141 in 2023. This gives an average of 3.2 chicks per successful nest compared to 3.9 in 2023 (Bird-Halton, 2024).

NE also highlighted that the English Hen Harrier population is small, and numbers may naturally fluctuate year-to-year, concluding that possible explanations for the decline might be due to poor weather in spring 2024, and low numbers of small mammals and birds which the harriers feed on. As there was also a reduction in the numbers of chicks fledged per successful nest from 3.9 in 2023 to 3.2 in 2024, this suggested that parent birds may have been finding it harder to feed their chicks (Bird-Halton, 2024).

Despite the poor weather, there were some regional differences in the number of nesting attempts, with numbers remaining steady in Bowland and Northumberland, and declines were most noticeable in parts of the North Pennines and the Yorkshire Dales, regions where Hen Harriers tend to nest in areas managed for grouse shooting (Bird-Halton, 2024).

No nests were brood managed in either protected landscape in 2024.

Table 1. *The Breeding Productivity of Hen Harriers Nesting in the Nidderdale National Landscape in 2024.*

Area	Primary land use	No. eggs laid	No. eggs hatched	No. young fledged
Nidderdale NL	Driven Grouse Moor	5	4	4
Nidderdale NL	Driven Grouse Moor	6	4	4
Nidderdale NL	Driven Grouse Moor	5	4	4
Nidderdale NL	Driven Grouse Moor	3	0	0

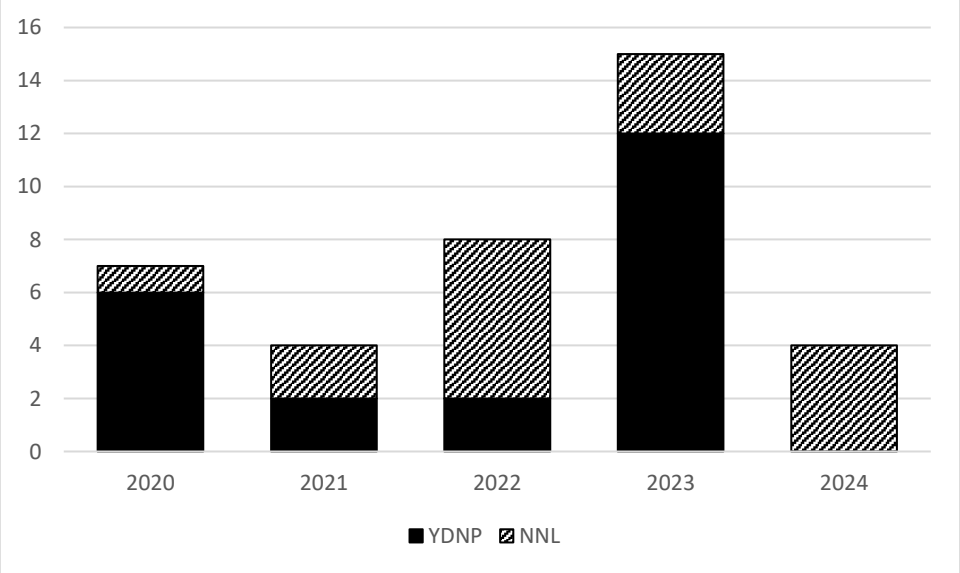
Some monitoring of winter roosts was undertaken by volunteer raptor workers in 2024 primarily in NNL, but with no other information supplied, it is not possible to make an accurate assessment of the numbers wintering or roosting within the area.

2020-2024 Overview

The number of Hen Harrier nesting attempts in the YDNP and NNL Protected Landscapes between 2020 and 2024 were as follows:

The number of Hen Harrier nesting attempts in each protected landscape is shown in Figure 1 below.

Figure 1. The Number of Hen Harrier Nesting Attempts in the Yorkshire Dales National Park (YDNP) and Nidderdale Natural Landscape (NNL) between 2020 and 2024.



The number of fledged young per successful nest the in the YDNP and NNL Protected Landscapes between 2020 and 2024 were as follows:

2020 – 3.7 fledged young per successful nest

2021 – 4.5 fledged young per successful nest

2022 – 4.6 fledged young per successful nest

2023 – 3.9 fledged young per successful nest

2024 – 4 fledged young per successful nest

The brood management trial, which ran between 2018 and 2024, was instigated by NE to test whether the availability of this technique would lead to changes in the attitudes of grouse moor managers towards Hen Harriers, would reduce levels of illegal killing, and lead a sustained increase/recovery in the number of Hen Harriers nesting successfully in the uplands of northern England (Bird-Halton, 2024).

In March 2025 NE published the conclusions of the Hen Harrier brood management trial. In summary, "this activity has contributed to increased numbers of nesting hen harriers on some grouse moors. However, illegal killing of Hen Harriers has continued, and a range of approaches may continue to be required to maintain and build on the progress we have seen in recent years" (Holmes, 2025).

The results and evaluation have been reviewed by Natural England's Science Advisory Committee. They concluded that "brood management, during the trial, is likely to have contributed to an increase in the hen harrier population, but noted uncertainty over the underlying mechanism, and commented on the role of the active surveillance of hen harriers that happened at the same time" (Holmes, 2025).

NE are in the process of producing research reports that will detail population modelling, social science, and an overall evaluation. The evidence that will be published will inform decisions on whether to issue any future licences for brood management of Hen Harriers (Holmes, 2025).

At time of publication of this YDNP and NNL report, there had been no publication of these additional NE reports. Following the recent licence application for brood management, Natural England concluded in a blog published on 14 April 2025 that "*While we saw some promising results from the brood management trial, all brood management licence applications are assessed based on their individual merits, considering all available evidence. After the detailed assessment of this specific application, and taking into account the results of the trial, Natural England has made the decision not to issue a licence in this instance*". Holmes, (2025a). The full details published by NE can be found in Appendix 2.

There have been two confirmed persecution incidents involving Hen Harriers, both in 2022. North Yorkshire Police reported details of a nest of Hen Harrier chicks that were found dead, deliberately destroyed by human activity in the Whernside area. A second incident related to a Natural England tagged bird was found dead along Mallerstang Edge, to the west of Birkdale Common. The cause of death was as a result of the head being twisted and pulled off while the body was held tightly, with the injuries consistent with it being killed by human hands.

'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 10 hour 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 where 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 2. In 2024 there was one 'Missing, fate unknown' Hen Harrier in the YDNP and one in the NNL. It should be noted that the grid reference of the last known fix of bird Tag ID 213923 was within the YDNP, not the North Pennines as detailed in the NE spreadsheet (accessed 16 December 2024).

Additionally, the BBC (2025) have reported an incident in the National Park that is currently subject to criminal proceedings. Footage allegedly showing an offence taking place at Grassington Moor on 2 October 2024, was subsequently shown on Channel 4 News.

2020-2024 Overview

The number of 'Missing, fate unknown' Hen Harrier in the YDNP and NNL Protected Landscapes between 2020 and 2024 were as follows:

2020 – five

2021 – one

2022 – four

2023 – seven

2024 – two

The total number of satellite tags fitted by NE (2025) in northern England has varied annually with eight deployed in 2024, 17 in 2023, 18 in 2020, 17 in 2021 and 23 in 2020. As such, the number of 'Missing, fate unknown' birds within the YDNP and NNL should be considered relative to the total number of birds that are tagged, meaning that annual losses may not be directly comparable.

Table 2. *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 2024 (details published here by Natural England on 28 January 2025).*

Tag Type	Tag ID	Sex	Nest	Tag code or Name	Date fitted	Date last contact	Location of last contact	OS Reference	Status	Additional Notes Not on published NE Spreadsheet
MT	213923	F	BM R2 Cumbria	R2-F1-23	19/07/2023	25/06/2024	N. Pennines	NY985082	Missing Fate Unknown^	Last known fix in the YDNP, not N Pennines as detailed in NE spreadsheet.
MT	213928	M	BM R2 Cumbria	R2-M2-23	19/07/2023	17/05/2024	Yorkshire Dales	SE043754	Missing Fate Unknown^	Last known fix in the NNL

Notes

= ‘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 48hr 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 kilometres 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.

RED KITE *Milvus milvus*

2024 RECORDS

NNL: There were 15 confirmed nests in the southern area of the NL, but the actual total is likely to be much higher, as a number of sites where breeding has occurred in recent years were not checked. It was estimated that there could have been an additional 10-15 additional nesting pairs.

YDNP Cumbria: There were no breeding records submitted on BirdTrack.

YDNP Yorkshire: There was one possible breeding pair submitted on BirdTrack.

2020-2024 Overview

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. There is a lack of survey coverage in the latter areas that may explain the lack of breeding records.

WHITE-TAILED EAGLE *Haliaeetus albicilla*

2024 Records

No records were received.

2020-2024 Overview

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

BUZZARD *Buteo buteo*

2024 Records

NNL: There were 18 confirmed nesting attempts in southern area of the NL although survey coverage was incomplete. In the north, at least two territorial two pairs were present at one site with three territorial pairs at another.

YDNP Cumbria: Single possible and probable breeding pairs were submitted on BirdTrack.

YDNP Yorkshire: There were seven possible, six probable and probable and two confirmed breeding pairs submitted on BirdTrack.

2020-2024 Overview

There is no systematic monitoring of nesting attempts with only a few casual records of breeding birds 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.

BARN OWL *Tyto alba*

2024 RECORDS

NNL: One possible breeding pair were reported on BirdTrack.

YDNP Cumbria: One possible breeding pair were reported on BirdTrack

YDNP Yorkshire: In Malhamdale and Wharfedale a total of eight boxes were checked, only two were occupied but no young were fledged. (Jon Middleton pers. comm.). In the Wensleydale and Swaledale area 24 nest boxes were checked in with 14 occupied by breeding pairs, with 32 young ringed. A further seven boxes were occupied by adult birds only (Roger Foreman pers.comm.).

A further seven possible, three probable and three confirmed breeding pairs were submitted on BirdTrack.

2020-2024 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. Casual records suggest that this species is widely distributed across both protected landscapes.

LITTLE OWL *Athene noctua*

2024 RECORDS

NNL: No details were received**.**

YDNP Cumbria: No breeding records were reported on BirdTrack.

YDNPA Yorkshire: Two possible, one probable and one confirmed breeding pairs submitted on BirdTrack.

2020-2024 Overview

There have been insufficient records for any assessment of population trends or status to be determined. The small 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*

2024 RECORDS

NNL: Monitoring works was restricted to just a few areas in the south of the NL with five confirmed nests, and one probable pair present.

YDNP Cumbria: No breeding records were reported on BirdTrack.

YDNP Yorkshire: One possible breeding pair was reported on BirdTrack

2020-2024 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.

SHORT-EARED OWL *Asio flammeus*

2024 Records

NNL: There were three confirmed pairs with two pairs at one site and a site pair at a second location. Single possible breeding pairs were recorded at two other sites.

YDNP Cumbria: One possible breeding pair submitted on BirdTrack.

YDNP Yorkshire: Ten possible and three probable breeding pairs submitted on BirdTrack.

2020-2024 Overview
There is no systematic monitoring undertaken of breeding populations, with only a few casual records of breeding birds are reported. It is likely this species is more widespread than records suggest with insufficient records for any assessment of population status or trends to be determined. This is a difficult species to monitor as birds do not always return to traditional territories and are also affected by cyclic vole populations.

TAWNY OWL *Strix aluco*

2024 Records

NNL: No records were received.

YDNP Cumbria: One possible breeding records was reported on BirdTrack.

YDNP Yorkshire: Ten possible one probable breeding pairs were submitted on BirdTrack. In addition, there were two occupied nest boxes monitored in the northern Dales with only a single young bird in each. Numbers were reported to be very low this year with abandoned eggs, a number occupied by birds that did not lay and very poor survival. (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.

2020-2024 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.

KESTREL *Falco tinnunculus*

2024 Records

NNL: There was no coordinated monitoring undertaken but two confirmed pairs were in nest boxes in south of the NL.

YDNP Cumbria: Two possible breeding pairs were reported on BirdTrack.

YDNP Yorkshire: Four nest boxes were checked with three, three and four young ringed respectively from three successful nest attempts (Roger Foreman pers com.). In addition, there were seven possible, two probable and three breeding pairs reported on BirdTrack.

2020-2024 Overview
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*

2024 RECORDS

NNL: Single territorial birds were recorded at four sites during the breeding season.

YDNP Cumbria: One possible pair at one site reported on BirdTrack.

YDNP Yorkshire: 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 pairs, the same number as the number found in 2023. Four pairs were successful, fledging 11 young (nine young fledged from four successful nests in 2023. One pair failed at chick stage when approximately two weeks old when a freshly dead chick was present in the nest that was still being visited by the male. As there were clear signs of more young having been present in the nest, the failure was indicative of predation.

One possible pair was recorded at another site.

2020-2024 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. Data were only reported for 2022

and so it is not possible to make any assessment of population status or trends to be determined from the large-scale study. There is only one other area where systematic monitoring is undertaken and so determining any trend is difficult.

HOBBY *Falco subbuteo*

2024 Records

NNL: There were two confirmed nesting pairs, both in the same areas as in 2023.

YDNP Cumbria: No breeding records were reported on BirdTrack.

YDNP Yorkshire: No breeding records were reported on BirdTrack although single birds were noted on several dates at one extensive site.

2020-2024 Overview

This is a species that continues to spread northwards with a few pairs potentially nesting each year but where there is insufficient monitoring to enable any trend to be determined.

PEREGRINE *Falco peregrinus*

2024 Records

NNL: Two traditional sites were checked but no birds were recorded.

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

YDNP Yorkshire: Not all traditionally occupied sites were checked and so it is not possible to make any comparisons with previously published data or determine any population trend. A total of eight known sites were checked with five occupied and two young fledged from two successful sites. Two sites were occupied by Peregrines, but both were an adult male with a second calendar year female, and it was not thought that any nesting was attempted. A further site failed at chick stage, most likely to be because of heavy rain at what was a very exposed nest ledge.

2020-2024 Overview

Systematic monitoring has previously been undertaken across the area since the late 1970s, but with fewer active fieldworkers the monitoring effort has decreased in recent years. As a result, the number of traditionally occupied sites that have been has decreased, and so it is not possible to determine any long-term population trends.

RAVEN *Corvus corax*

2024 Records

NNL: No breeding records were received.

YDNP Cumbria: Two confirmed breeding pairs were submitted on BirdTrack.

YDNP Yorkshire: A total of seven sites were monitored with 11+ young fledged from four successful sites.

2020-2024 Overview
As with Peregrine, not all of the traditionally occupied sites were checked and so it is not possible to make any comparisons with previously published data or determine any population trend. There has been an increase in casual records indicative of an increase in the non-breeding population, presumable because of an increase in the number of breeding pairs elsewhere in northern England, particularly in Cumbria.

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, there is a need to assess what existing action is underway to prevent offences taking place to inform potential future work of the stakeholder group.

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 have previously 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 1981, 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.

In October 2024 the RSPB (2025) published the most up-to-date details of confirmed raptor persecution incidents in the Birdcrime report, detailing incidents recorded in 2023.

RSPB Birdcrime Information Included Within the Evidence Report

The 2023 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 provided can be shared openly in the public domain and published in this report.

All the data were accurate at the date of extraction, but may be incomplete and subject to change, possibly because of backlogs from other data sources, 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 postmortem 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 (for example, 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.

There were three confirmed persecution incidents recorded in the YDNP and Nidderdale NL in 2023, with the details shown in Table 3. There was a single poisoning incident and two incidents relating to tagged birds where analysis of the data showed that the tags hand been tampered with and so must have been due to human interference.

In addition, there were five instances of ‘tagged, sudden stop, no malfunction’ where contact with the tagged birds was lost but where no bird or tag could be located following ground searches. These are shown in Table 4.

Table 3. *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).*

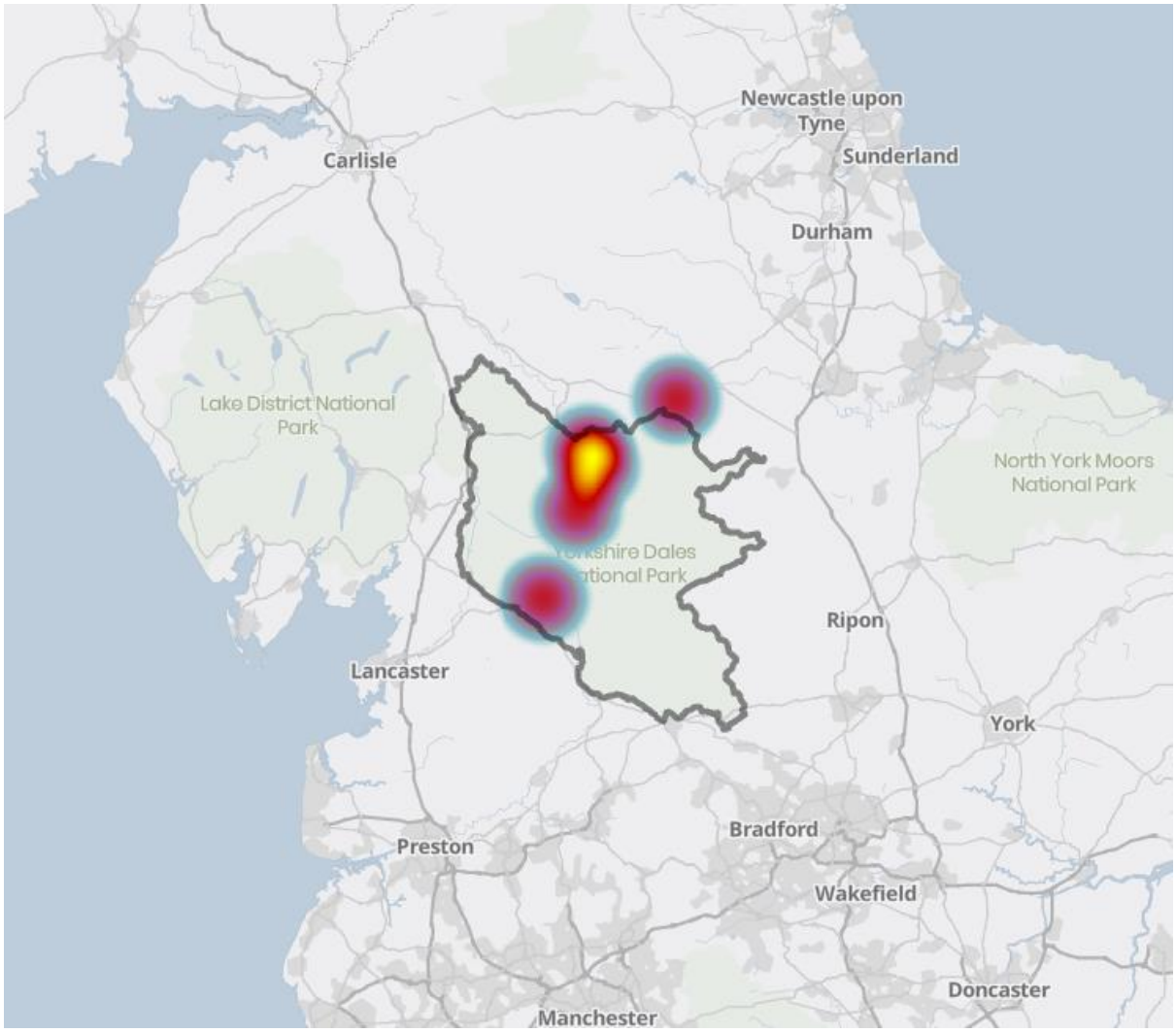
RSPB ID	RSPB Ref	DD	MM	YYYY	10 km Grid Ref	Constabulary	County	Status	Species	Species No.	Offence Type	Notes / Intel Summary
104640	P/36/23		4	2023	NZ10	North Yorkshire	North Yorkshire	Confirmed	Buzzard	1	Poisoning	Buzzard confirmed poisoned, Bendiocarb
104579	SDBP/85/23	6	4	2023	SD89	North Yorkshire	North Yorkshire	Confirmed	Hen Harrier	1	Persecution other	Tagged, sudden stop, no malfunction. Tag reset.
104823	SDBP/152/23	3	10	2023	NY80	North Yorkshire	North Yorkshire	Confirmed	Hen Harrier	1	Persecution other	Tagged, sudden stop, no malfunction. Tag reset.

Table 4. *The Number of 'tagged, sudden stop, no malfunction' Hen Harriers Where Contact with the Tagged Birds Was Lost but Where No Bird or Tag Could Be Located Following Ground Searches in the Yorkshire Dales National Park and Nidderdale National Landscape in 2023. (Extracted from the RSPB Species Protection Database (RSPB DR-39-23, provided 18/12/2023).*

RSPB ID	RSPB Ref	DD	MM	YYYY	10 km Grid Ref	Constabulary	County	Status	Species	Species No.	Offence Type	Notes / Intel Summary
104442	SDBP/51/23	15	8	2023	NY80	North Yorkshire	North Yorkshire	Probable	Hen Harrier	1	Persecution other	Tagged, sudden stop, no malfunction.
104461	SDBP/54/23	21	8	2023	SD89	North Yorkshire	North Yorkshire	Probable	Hen Harrier	1	Persecution other	Tagged, sudden stop, no malfunction.
104663	SDBP/98/23	29	9	2023	NY91	North Yorkshire	North Yorkshire	Probable	Hen Harrier	1	Persecution other	Tagged, sudden stop, no malfunction.
104664	SDBP/99/23	11	8	2023	SD89	North Yorkshire	North Yorkshire	Unconfirmed	Hen Harrier	1	Persecution other	Tagged, sudden stop, no malfunction.
104666	SDBP/101/23	17	5	2023	SD77	North Yorkshire	North Yorkshire	Unconfirmed	Hen Harrier	1	Shot	Tagged, sudden stop, no malfunction.

A heat map showing the suspicious disappearances of RSPB tagged Hen Harriers, with the outcomes reduced to a 10km radius in order to protect potential roost or nest locations has been produced and is shown in Figure 2. The heat map shows 10km radius points for each satellite satellite-tagged Hen Harrier provided in Table 4. Yellow shows a higher concentration and blue shows a lower concentration of Hen Harrier outcomes in a given area,.

Figure 2. A Heat Map Showing Suspicious Disappearances of RSPB Tagged Hen Harriers in 2023 Reduced to a 10km Radius in Order to Protect Potential Roost or Nest Locations (Yellow shows a higher concentration and blue shows a lower concentration of Hen Harrier outcomes in a given area).



2020-2024 Overview

The number of confirmed incidents within the YDNP and NNL Protected landscapes between 2020 and 2023 was as follows, noting that data for 2024 have not yet been published:

2020 – ten

2021 – seven

2022 – six

2023 – three, plus five Hen Harrier ‘tagged, sudden stop, no malfunction’ incidents.

In 2022 RSPB (2023) highlighted that many of the dead birds of prey that had been collected by Department for Environment, Food and Rural Affairs (Defra) to test 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 (2023) also reported that in 2022, 46% fewer cases were tested by the Wildlife Incident Investigation Scheme (WIIS) than in the previous year. Therefore, there may have been some cases where the cause of death may have been shooting or poisoning but testing was not undertaken. It is not clear if this was still the case in 2023. Therefore, the number of birds tested for poisons or evidence of being shot has not necessarily been comparable between years and so care should be taken when looking at any difference in the number of confirmed incidents each year.

In the review of the illegal persecution of birds of prey in the UK between 2009 and 2023, North Yorkshire is the UK county with the highest number of confirmed bird of prey persecution incidents (RSPB, 2025).

OVERVIEW

The aim of these annual evidence reports has been to provide the best available information on the status of bird of prey populations in the YDNP and NNL. This information is clearly crucial in enable the status of birds of prey populations to be assessed and to be able to measure progress towards reducing criminal activity.

For most of the raptor and owl species there has been no systematic monitoring of breeding populations and so there are insufficient records for any assessment of population status or trends to be determined. This is because there are only a small number of active fieldworkers who have either the time or experience to undertake comprehensive monitoring on scarcer species such as Peregrine. It is also compounded by the large areas of potential suitable breeding habitat within the two protected landscapes, that are a long distance from where fieldworkers live, with most remote that without suitable off-road vehicles, take a considerable amount of time to reach on foot.

It is also apparent that determining the status and population trends of more widespread species such as Buzzard and Kestrel is not possible using existing local recording networks. In addition to areas being difficult and time consuming to reach and access, and potentially hard to monitor given constraints on fieldworker time, need for different survey methods to be used for different species exacerbates the problem. Without any coordinated national or regional recording scheme or framework, collation and assessment of records from more widely available recording schemes such as BirdTrack is limited by the low number of records that are submitted. This is likely to be compounded by the relatively low number of people recording and submitting records from within the area. If robust population trends are going to be determined for areas like the Yorkshire Dales and Nidderdale, there needs to be a standardised monitoring programme developed for more

widespread and regularly occurring species that more people may be able to contribute to.

There are other species, notably Merlin, where there appear to be more widespread monitoring being undertaken but where summary data are not being made available. Monitoring of Hen Harrier roosts is also an important indicator of population status, but other than information supplied by raptor workers, no summary data are available. There are fully justified sensitivities relating to nest and roost site locations however, a more coordinated approach that would enable summary information to be collated and published would help to gain a better understanding of the status of some species.

ACKNOWLEDGEMENTS

The YDNPA and NNL would like to thank all the individuals, fieldworkers and organisations that have contributed to the survey and monitoring work that are included within this report. In addition, we would like to thank: Matt Bruce (RSPB Investigations) for provision of the BirdCrime data, Roger Foreman, (Independent Raptor Fieldworker), Chris Hind (Cumbria Bird Club), Andy Jowett (Nidderdale Raptor Study Group), Jon Middleton, (Independent Raptor Fieldworker), Stephen Murphy (Natural England Hen Harrier Project). Tabby McNicolas has kindly proof-read this report.

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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.

Appendix 2

Natural England Conclusion of the Hen Harrier Brood Management Trail

The blog was published here on 14 April 2025 and shown below.

The experimental trial of hen harrier 'brood management' has ended, concluding that this activity has contributed to increased numbers of nesting hen harriers on some grouse moors. However, illegal killing of hen harriers has continued, and a range of approaches may continue to be required to maintain and build on the progress we have seen in recent years.

Hen harriers are rare birds of prey, and their numbers have long been suppressed by illegal killing and nest disturbance associated with grouse moor management. Investigation and enforcement of wildlife crime is the responsibility of the police, and Natural England works closely with the police and the National Wildlife Crime Unit to support their investigations. However, law enforcement alone has, to date, failed to stop the illegal killing of hen harriers, and ways of encouraging coexistence of hen harriers and grouse shooting interests have been explored, in partnership with game shooting organisations.

One way of promoting coexistence, brood management, involves maintaining the density of hen harrier nests on grouse moors at a set level, by removing the eggs and/or chicks from hen harrier nests under licence, rearing the birds in captivity, and releasing them back into the wild at a suitable location once able to fly and disperse. This was predicted to increase the confidence of moorland managers that the predation and disturbance of grouse by nesting hen harriers could be legally managed at levels compatible with grouse shooting, and in turn lead to changes in attitudes and reduced illegal killing of hen harriers.

A plan to experimentally trial brood management was set out in the 2016 Hen Harrier Action Plan. Research licences to carry out brood management of hen harriers were issued from 2018 to 2024, with brood management carried out during 2019 to 2023 by a partnership of the Moorland Association, the International Centre for Birds of Prey, the Game and Wildlife Conservation Trust, the Hawk and Owl Trust and Natural England. Over that period, 15 broods were taken from the wild, with the young birds later released, many carrying satellite tags. Records were kept of numbers and habitat of nesting hen harriers in England, survival rates of tagged birds (both wild and brood managed), and incidents of illegal killing. Two social science studies and a population modelling analysis were carried out.
Key results from the trial were:

- A substantial increase in nesting hen harriers in England was seen during the trial. In the initial years of the trial, the numbers of hen harriers nesting in areas managed for grouse shooting increased significantly. This increase was mainly seen in grouse shooting areas where brood management was available.
- Illegal killing of hen harriers has continued throughout the trial. However, crime 'hotspot' areas are not the same areas where brood management has been used. It is unclear whether this was because of the effects of brood

management, or because those less likely to be involved in illegal killing were more likely to take part in the trial.

- The technique of captive rearing and releasing hen harriers was found to be technically possible with no negative effects on birds.
- While the act of rearing some chicks safely in captivity (sometimes called 'headstarting') is likely to have caused a slight increase in the numbers of birds that successfully fledged, the numbers reared in this way were too small to explain the substantial increase in wild nesting pairs seen. Instead, the increase is thought to be due to wild birds being either more likely to survive or more likely to settle and breed, according to commissioned research carried out by the British Trust for Ornithology.
- Satellite-tagged birds have not shown first-year survival rates at levels that would be expected from populations with no illegal killing. However, this does not rule out some improvement in survival rates, potentially of specific age classes.
- One social science study of moorland managers indicated that the availability of brood management allays concerns about hen harriers increasing so much that they 'overrun' grouse moors, i.e. increasing to the extent that the grouse moor becomes unprofitable.
- In a wider survey, carried out by the National Centre for Social Research in 2024, moorland managers generally agreed that brood management had contributed to the observed increase in numbers of hen harriers. Two broad and differing explanations were given for this increase. Many expressed beliefs that hen harrier numbers had increased due to direct benefits of captive rearing. However, as outlined above, this was not supported by commissioned research (population modelling). The other explanation was that brood management had led to increased acceptance of hen harriers and confidence that their impacts on grouse could be effectively managed.
- This survey also revealed that around half of moorland managers thought that the trial had led to increased predation and disturbance of grouse by hen harriers on participating estates. Many said that a wider roll-out of brood management would be impractical.
- Moorland managers reported that the benefits of brood management included that it provided an opportunity to demonstrate their support for grouse shooting as a sport and their commitment to wildlife conservation.

A Natural England-led evaluation of the evidence has concluded that it is likely that the availability of brood management has led to more hen harriers successfully breeding on grouse moors. The social science research suggests that this is unlikely to be due solely to an increase in moorland managers' confidence that the impacts of hen harriers on grouse can be effectively managed. Instead, motivations to increase hen harrier numbers could be attributed to moorland managers' desire to demonstrate a commitment to wildlife conservation and to grouse shooting as a sport more widely, despite a cost to business, with brood management working as a 'safety net' to allay concerns about hen harrier numbers increasing to levels at which grouse shooting would be uneconomical.

While it appears likely that illegal killing and disturbance of nesting hen harriers has reduced in some areas, resulting in increased nesting success on some grouse moors, these increases have been seen alongside unacceptable ongoing illegal

killing. It is likely that these observations reflect substantial variation in attitudes and behaviours across different shooting estates.

It follows that a range of approaches may be required to reduce illegal killing on grouse moors and increase hen harrier numbers in future, potentially ranging from co-operative approaches to mitigate the impacts of hen harriers on grouse and support responsible grouse moor management, to monitoring and enforcement activities designed to tackle illegal killing and disturbance, depending on location and situation.

The commissioned reports and evaluation were reviewed by the trial's Scientific Advisory Group and Natural England's Science Advisory Committee. These groups agreed that brood management, during the trial, is likely to have contributed to an increase in the hen harrier population, but noted uncertainty over the underlying mechanism, and commented on the role of the active surveillance of hen harriers that happened at the same time.

The results and conclusions summarised above are detailed in four research reports, covering population modelling, social science, and evaluation. These are in the process of publication, and this blog will be updated with links to the full documents when they are published.

This evidence will be available to inform decisions on whether to issue any future licences for brood management of hen harriers. At time of publication, no decisions have been made on any future licences.

Update: Outcome of recent licence application

While we saw some promising results from the brood management trial, all brood management licence applications are assessed based on their individual merits, considering all available evidence.

After the detailed assessment of this specific application, and taking into account the results of the trial, Natural England has made the decision not to issue a licence in this instance.

We remain committed to working with partners and stakeholders on a range of approaches to support the recovery of hen harrier populations alongside responsible grouse moor management.

Acknowledgements

The Brood Management Trial was a partnership project between the Moorland Association, the International Centre for Birds of Prey, Natural England, the Game and Wildlife Conservation Trust and the Hawk and Owl Trust. With the conclusion of the trial, this partnership has now closed. We thank the members of the trial's Scientific Advisory Group, and we are grateful to the partners, organisations, landowners and land managers who have worked closely with us throughout the trial, supported our social and ornithological research, welcomed our fieldwork and

monitoring staff, and demonstrated commitment to the goal of hen harrier conservation and human-wildlife coexistence.