Northern England Raptor Forum



Annual Review 2021

Northern England Raptor Forum

Annual Review 2021



Speaking for Birds of Prey with One Voice

Acknowledgements

The production of this, the thirteenth Northern England Raptor Forum Annual Review, is the result of the collaborative efforts by the members of each of the constituent NERF Groups who have kindly shared their data with the Forum.

We would like to express our thanks to all the individuals who allowed us to use their photographs, and to Wilf Norman who again proof-read the Review and made many helpful suggestions.

Northern England Raptor Forum

Steve Downing, Chairman David Raw, Secretary Steve Davies, Treasurer Judith Smith , Editor

Members

Bowland Raptor Study Group Calderdale Raptor Study Group Cheshire Raptor Study Group Durham Upland Bird Study Group Friends of Red Kites Manchester Raptor Group Northumbria Ringing Group North York Moors Upland Bird (Merlin) Study Group Peak District Raptor Monitoring Group South Peak Raptor Study Group

General enquiries should be made to: Northern England Raptor Forum, c/o 25 Pinewood Crescent, Heighington, Co Durham, DL5 6RR

Website: www.raptorforum.co.uk



The Northern England Raptor Forum is supported by:

Northern England Raptor Forum - working in partnership with Operation Owl



This Report should be referenced as: Smith, A.J., Norman, W. & NERF et al. 2022.

© 2022 Northern England Raptor Forum [NERF]. No part of this document may be reproduced, stored or transmitted in any form, without permission from NERF.

The views expressed in the NERF 2021 Annual Review are not necessarily those of NERF.

Contents

Acknowledgements	3
Useful telephone numbers	5
Foreword	6
Chairman's Report	7
Secretary's Report	9
Geographical coverage	11
NERF 2021 Annual Review	14
Species monitoring	14
Persecution and Black Hole species	16
Combined statistics	18
Species Reports	
Editor's Note	19
Buzzard, Common Buteo buteo	58
Eagle, White-tailed Haliaeetus albicilla	49
Goshawk, Northern Accipiter gentilis	31
Harrier, Hen Circus cyaneus	42
Harrier, Marsh Circus aeruginosus	37
Hobby Falco subbuteo	95
Honey-buzzard Pernis apivorus	24
Kestrel, Common Falco tinnunculus	85
Kite, Red Milvus milvus	51
Merlin Falco columbarius	89
Osprey Pandion haliaetus	20
Owl, Barn Tyto alba	62
Owl, Eurasian Eagle Bubo bubo	82
Owl, Little Athene noctua	71
Owl, Long-eared Asio otus	74
Owl, Short-eared Asio flammeus	78
Owl, Tawny Strix aluco	67
Peregrine Falco peregrinus	100
Raven, Common Corvus corax	107
Sparrowhawk, Eurasian Accipiter nisus	28
Rarer species monitored by NERF in 2021	112
Summary of Raptor Monitoring in the Washburn Valley	113
Summary of Raptor Monitoring in Shropshire	115
Appendices	
1. Combined NERF monitoring data	120
2. Combined productivity graphs	121
3. Ring recoveries	123
Avian influenza advice	125
NERF Group contacts	127

Photographs:

Front cover – Goshawk *Paul Galloway* All other photographs - Acknowledgements are given with the photo.

Useful telephone numbers

If you discover a wildlife crime please report the details to the Police, obtain an incident number and ask that, in addition to sending an Officer to the scene, the report is brought to the attention of the Force Wildlife Crime Officer. If the incident is a 'crime in progress' dial 999. The national non-emergency telephone number is 101 and Crimestoppers 0800 555111 Cheshire Constabulary 0845 458 0000 Cleveland Police 01642 326326 Cumbria Constabulary 0845 330 0247 Derbyshire Constabulary 0345 123 3333 Durham Constabulary 0345 606 0365 Greater Manchester Police 0161 872 5050 (General Enquiries). Humberside Police 0845 125 3545 Lancashire Constabulary 0845 125 3545 Northumbria Police 0345 604 3043 North Yorkshire Police 0845 606 0247 South Yorkshire Police 0114 220 2020 West Yorkshire Police 0845 606 0606 **RSPB:** Investigations Dept. 01767 680551. Investigations Officer (Howard Jones) 07834534142. Hen Harrier sightings: RSPB hotline 0845 4600121 or henharriers@rspb.org.uk Wildlife Incident Investigation Scheme (Natural England) 0800 321600 **CEH Predatory Bird Monitoring Scheme** 01524 595830

WARNING: dealing with raptors which might have been poisoned

Some poisons are exceptionally toxic and can be absorbed directly through the skin. Raptor Workers finding a raptor suspected to have been poisoned, should exercise extreme caution before handling a carcass. Butyl gloves offer some protection and may be used. Note: The current Natural England practice is to wear two pairs. However standard, thin, household gloves are not effective against many of the poisons found and should not be used. If the carcass is recovered it should be dropped into a bin liner. This bin liner should be placed inside a second with the butyl gloves dropped into the space between the 2 bags. The bags should then be securely tied. In every event it is advisable to wash or sterilise hands immediately after contact with a dead animal and in all cases before eating or smoking. It is essential that all suspected poisoning incidents are reported to the local Police and that an incident number is obtained. The cause of death will be determined by either the Predatory Bird Monitoring Scheme [PBMS], telephone 01524 595830. Email <u>pbms@ceh.ac.uk</u> or the Wildlife Incident Investigation Scheme [WIIS] telephone 0800 321600. The information should also be passed on to the RSPB Investigations Team telephone 01767

680551 or email <u>crime@rspb.org.uk</u>. For confidential reports of raptor persecution call 0300 999 0101.

Sick or injured birds can be reported to the RSPCA, telephone 0300 1234 999

FOR AVIAN FLU ADVICE SEE page125

All information and telephone numbers correct at October 2022.

For Local Police 'Dial 101' and ask to speak urgently to a Wildlife Crime Officer - please also ask for a wildlife incident number.

Foreword

Craig Best, Peak District General Manager for the National Trust



I've been working in the outdoors managing places for over 20 years. At the start of my career working with communities in Newcastle upon Type transforming urban parks before moving on to West Durham in the North Pennines. More recently working for the National Trust in West Yorkshire developing and overseeing the delivery of large scale moorland restoration, woodland creation and natural flood management projects. Having a strong knowledge of landscape conservation I've recently been appointed to the role of General Manager for the NT in the Peak District. A big part of my role in the Peak District is working with partners including tenants to ensure we all play our part in dealing with the nature and climate emergency.

It would be wrong of me to give you the impression that I'm a bird of prey expert but given

the time I have spent in the Northern Uplands – moving from the North Pennines through the South Pennines and now in the Peak District, it has always been noticeable, the absence of these enigmatic species in many of the places I have lived and worked.

This year has seen some success especially with hen harriers in the High Peak. I'm pleased to say this is largely down to the work of the National Trust, tenants and the dedicated work undertaken by the volunteer raptor workers. At the time of writing this I'm pleased to report that the young birds are doing well. Clearly there should be significantly more breeding success of hen harriers and other birds of prey in the High Peak. Whilst we can quietly celebrate this year's success, what I'm most proud of is how the RSPB, Peak District Raptor Monitoring Group and the National Trust brought this story to a broader audience across the media.

This year the NT is releasing an updated vision for the High Peak, a plan that will help deal with the nature and climate crisis, ensuring our land is rich in nature and providing sustainable farm businesses that will help us deliver for a wide range of species including birds of prey.

I've been so impressed by the team of volunteer raptor workers working in the Peak District that I'm pulling out all the stops to look at how the NT resources the essential work this team delivers. As mentioned above we have seen some success in the Peaks but there is clearly a long way to go. I, like others, would like to reach a moment where visitors don't have to walk too far in the High Peak to experience a full complement of birds of prey.

Thank you for the work you all do across Northern England!

Chairman's Report: September 2021- August 2022



As I work on the final draft of the Chairman's Report for the 2021 Annual Review I reflect on the sad news that Queen Elizabeth II died peacefully at Balmoral. No matter what one's view is of the monarchy, for transparency I believe that we are better served as a country by a monarch rather than an ego driven elected Head of State There can be no doubt that she selflessly dedicated her entire adult life to the service of the United Kingdom and the Commonwealth. Throughout the world Queen Elizabeth II was respected as the ultimate symbol of stability and diplomacy. People across the world simply referred to Queen Elizabeth as 'The Queen'. On 8 September 2022 the world as we had known it for the past 70 years changed irrevocably and on behalf of NERF I offer our sincere condolences to King Charles III and his family. King Charles has a long history of publicly

expressing his views on the environment and we can only hope that he can influence the Government during his weekly meetings with Prime Minister Sunak.

As the Covid 19 pandemic raged across the country during 2020 and thousands of people were dying each week from the disease NERF fully supported the BTO's decision to suspend all monitoring and ringing activities when the Government imposed lockdown. As a consequence the amount of monitoring that we could undertake was understandably greatly reduced. Following the extensive rollout of the anti-Covid vaccines the Government restrictions were gradually lifted and our opportunities to undertake monitoring were increased to a near normal level during 2021.

Unfortunately, the impact of the pandemic led to the cancellation of our annual conference for the second year in succession. The NERF conference facilitates the largest gathering of raptor workers in the North of England providing us with an opportunity to hear about new developments in raptor research. Raptor monitoring is often a solitary activity undertaken in beautiful but remote areas, and the annual NERF gathering allows us a rare and invaluable opportunity to interact with colleagues from across the country and share our experiences.

Several of the individual NERF Groups are involved in the annual monitoring and the ringing of Hen Harriers. In addition the Groups participate in the 3 autumn and winter coordinated roost monitoring events and in 2021 we returned to pre-pandemic levels. Annually NERF members voluntarily commit several hundreds of hours protecting the Hen Harriers throughout the year, providing an invaluable service to protect this very vulnerable species.

In 2020 60 chicks fledged, largely from the United Utilities Estate in the Forest of Bowland and the Kielder Forest. This was heralded as a great success by sections of the shooting industry and indeed it was an improvement on previous years. However, once again the geographical spread of the successful nests was not a great success. Their absence from the vast tracts of heather-clad moors in the northern uplands, predominantly grouse shooting estates, was palpable.

The number of fledglings increased in 2021, from 60 to 84. Once again there was a great fanfare from the shooting industry hailing the number of chicks that fledged from grouse

moors a triumph. However, the industry failed to acknowledge that the illegal killing of Hen Harriers, primarily on or adjacent to grouse moors, remains the single most important determining factor limiting the spread of the English population.

In 2022 the number of fledglings increased further virtually doubling from the 60 recorded in 2020 to 119 from 34 nests. There is no doubt that this substantial increase is very welcome. However, as in previous years the numbers need to be put into perspective. The 2021-22 winter was very mild, as was the spring, the weather remained stable and dry throughout the breeding season and many of the breeding areas benefited from a vole plague. All of these factors contributed to a successful, productive breeding season with an average of 3.5 chicks fledging per nest. However, these beneficial factors may be reversed in subsequent years if the breeding seasons suffer from adverse weather and the lack of prey.

Of the 119 fledglings 39 [32.8%] fledged from safe areas in Bowland, 26 [21.8%] from the Kielder Forest and 13 [10.9%] were brood-managed making a total of 78 [65.5%]. In order for the brood management protocol to be implemented there has to be a second nest within 10 kilometres, which covers an area of 314 square kilometres. It is therefore self-evident that an unknown number of additional chicks were raised by their parents on the same moor and thereby 'protected' by the brood management scheme. These chicks should be added to those fledging from the 'safe' sites' along with the 7 chicks that fledged from the National Trust property in the Peak District and others that fledged from tenanted land used for grouse shooting. There is also an argument that any broods that receive supplementary feeding should be discounted as truly wild and deducted from the total number to accurately reflect the situation on the ground. Once all of these fledglings have been included in the 'safe' totals then the number fledging from privately-owned driven grouse moors does not look as promising as the shooting industry, or Natural England for that matter, would have us believe. Before any meaningful success can be celebrated we need to see many more young Hen Harriers that are not part of the brood management scheme, fledging from the driven grouse moors of Northern England.

Whilst the number of fledglings has increased each year over the last three years, which is welcomed by NERF, it is important to remember that persecution continues to significantly suppress the population:

in 2020 60 chicks fledged in Northern England however, 16 joined the 'disappeared', 10 in areas monitored by NERF members

in 2021 84 chicks fledged in Northern England however, 11 joined the 'disappeared', 7 in areas monitored by NERF members

in 2022 119 chicks fledged in Northern England however, 7 have already joined the 'disappeared', 6 in areas monitored by NERF members

We know that the 34 chicks, listed above, have joined the long list of the 'disappeared' because they were fitted with satellite tags. To put that into context, these 34 represent 20.8% of the total number of chicks fledged in the 3 years 2020, 2021 and 2022 and approximately 25% of fledglings are tagged each year. It is therefore not unreasonable to assume that a very significant number of untagged birds suffered the same fate in the northern uplands on or adjacent to land managed for driven grouse shooting.

The illegal killing of Hen Harriers remains the primary threat to their survival as a breeding species in England. Unfortunately it is not only Hen Harriers that are illegally killed on game shooting estates and the problem is equally prevalent on both upland and on lowland game

shooting estates. Buzzards and Red Kites are also shot and poisoned together with Peregrines and Goshawks. Regrettably the situation is unlikely to change until the Government takes meaningful action to curb the illegal killing of raptors on game shooting estates.

Thérèse Coffey MP, was appointed as the Secretary of State for Environment, Food and Rural Affairs [Defra] on 25th October 2022. It is within her gift to introduce the necessary legislation to enhance the protection of birds of prey and NERF would fully support the criminalisation of the possession of banned pesticides and the introduction of the licensing of all game shooting. Neither of these measures would have a negative impact on law abiding estates or their employees and should, therefore, be supported by the bodies representing the industry.

Since the last annual report was published, 2 of our Board members, Simon Bassindale [North York Moors Upland Bird Study Group] and Jimmi Hill [Cheshire Raptor Study Group] have moved on to develop their respective careers and we wish them well in their new endeavours.

We also bid farewell to Guy Shorrock, RSPB Senior Investigations Officer who retired on 13th May after more than 30 years in the role. I first met Guy in the mid-1990s when I was the Force Wildlife Crime Officer in the West Yorkshire Police and he came to assist when I executed a warrant in Leeds in search of a stolen Goshawk. We recovered the bird, found a hydroponics cannabis factory, left with a prisoner and I had made a friend for life. We worked on many cases together after that.

Guy is without doubt one of the finest detectives that I have had the privilege to work with. Throughout his long career Guy assisted Wildlife Crime Officers in every one of NERF study areas and was always available to advise raptor workers when the need arose. He was also a regular speaker at the NERF annual conferences.

Whilst Guy is no longer employed by the RSPB he will continue to work with the Investigations Team in a voluntary capacity as a trainer and consultant. We wish him well during his semi-retirement.

Steve Downing Chairman, NERF, October 2022

Secretary's Report: September 2021-August 2022



This, our 13th consecutive Annual Review, provides a testimony to the determined efforts of members in another challenging year. The collective outcome of their evidence-based fieldwork provides a comprehensive picture of the fortunes of breeding raptor species across the northern uplands, albeit that some access had to be limited in the first quarter of the year.

The core membership of NERF remained stable

with 10 raptor study groups covering the geographic areas that are explained in the section which follows. We also receive additional data contributions from the Shropshire RSG, the Yorkshire Dales National Park and an area of the Nidderdale AONB.

Our scheduled bi-annual meetings were again cancelled as a precaution against the pandemic and replaced by a series of Zoom calls and email exchanges which allowed business to continue thanks to the commitment of group representatives. Face to face meetings are scheduled to resume in early October 2022 and whilst unfortunately we've been unable to arrange a North of England Raptor Conference in 2022 we look forward with confidence to planning a conference for November 2023.

Amongst a range of agenda items and actions we have been able to gain funding and approval to fit satellite tags to Short-eared Owls (hopefully in 2023). We have opened discussions with BTO pointing out the apparent ambiguities and inconsistencies with the role of local Primary Contacts within the Schedule 1 Licensing system. Group members from Durham and the North York Moors have worked in cooperation with the GWCT Merlin Magic project, and we have been able to provide grant funding to assist with the replacement of storm-damaged owl nest boxes in Northumberland.

NERF members continue to monitor and report on Hen Harriers throughout the year and conducted a repeat series of co-ordinated roost counts over the late winter period in 2021 and early 2022. The completion of the 2022 Hen Harrier breeding season marks the end of the 5 year Brood Management Trial and NERF now urgently awaits the publication by the Scientific Advisory Group showing the analysis of the benefits, the operating costs and possible future options.

David Raw

Secretary to NERF, August 2022

NERF : geographical coverage

Bowland Raptor Study Group

Extent of coverage: Upland area of Bowland AONB.

The Bowland Raptor Study Group's area largely coincides with the boundary of the Forest of Bowland AONB, which in turn is roughly marked out by the M6 to the west, the Lune valley to the north, the A65 to the east and the A59 to the south. The group's main interests lie with the monitoring of upland birds of prey, including Hen Harrier, Merlin and Peregrine, with additional interest in Barn Owls on the low ground. To this end, much of the monitoring effort is focused on the moorland areas of Bowland.

Calderdale Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Covers some, or all, of the following grid squares: SD91, 92, 93; SE01, 02, 03 and SE11, 12. Effectively the southern border in the M62, with the Worth valley in the north. In the east the Group covers Brighouse (between Bradford in the north and Huddersfield in the south). The western border is the Pennine county boundary with Lancashire.

Cheshire Raptor Study Group

Extent of coverage: the county of Cheshire and Wirral, adjoining with PDRMG up to Macclesfield Forest in the east, and MRG in the north.

Durham Upland Bird Study Group

Extent of coverage: In this report the Durham Upland Bird Study Group's comments refer principally to the Durham uplands [defined here as the North Pennine SPA and adjoining valley systems all lying generally west of the Easting NZ10 up to the county boundaries with Northumberland, Cumbria and North Yorkshire]. Where appropriate, comments are also made on the status of species throughout the Durham recording area as determined by the county ornithological society, the Durham Bird Club.

Friends of Red Kites (FoRK) in the north east of England

Extent of coverage: FoRK monitors the continuing fortunes of the population of Red Kites originally released under the Northern Kites Project which was centred on Gateshead Borough, Tyne & Wear. This remains the core breeding and study area and present day FoRK activities therefore concentrate on this area which straddles the north-west portion of the historic vice-county of Durham and the south-west portion of Northumberland. FoRK also coordinates the monitoring of any Red Kites occurring more widely across County Durham and Northumberland as a whole.

Manchester Raptor Group

Extent of coverage: Whole county plus the rest of 10km squares SD50,51,61,71,81,91; SE00; SJ59,78,88,98 into which part of the county falls (with effect from 1st September 2016).

The area is bounded on the north and west by Lancashire and Merseyside, on the north-east by Calderdale, in the east by Kirklees, in the south-east by Derbyshire and by Cheshire in the south and south-west.

The group's main focus is on Peregrines and Barn Owls.

Northumbria Ringing Group

Extent of coverage: Part upland & part lowland areas.

The group is active throughout the county of Northumberland. The data in this report primarily refer to the Cheviot uplands, the Kielder Forest, the Border Forest, and a small section of eastern Cumbria around Kershope where the forested area straddles the county boundary.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Whole National Park area.

The area covered by the NYM Upland Bird (Merlin) Study Group includes the upland areas, gills, dales, forests, farmland and coastal stretch within the boundaries of the North York Moors National Park.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland & part lowland areas.

The PDRMG covers the Derbyshire Peak District, including the Goyt Valley and the Macclesfield Forest, including the low-lying areas. Glossop forms the western boundary, and the north-east of the Peak Park is bounded by Huddersfield, Sheffield, Barnsley and Wakefield. The Group does not cover the limestone areas within the Peak Park, nor Derwent Dale. Website: <u>www.pdrmg.co.uk</u>

South Peak Raptor Study Group

Extent of coverage:

In the north: National Trust land in the upper Derwent valley, west to the R. Alport and east to the National Trust boundary.

In the south: all of the White Peak, with the exception of the Goyt valley. Includes the Staffordshire Moors, Eastern Moors, North Lees Estate, Chatsworth Estate and the Haddon Estate. In addition the Group covers central Derbyshire as far as the Nottinghamshire border and south Derbyshire (mainly Hobby).

Yorkshire Dales & Nidderdale

Extent of coverage: No formal RSG exists but records of monitoring are gratefully received from several independent sources, especially the Yorkshire Dales National Park Authority. 2020 data (published 2022) can be seen on the following link:

https://www.yorkshiredales.org.uk/wp-content/uploads/sites/13/2022/03/YDNP-and-NAONB-Bird-of-Prey-Evidence-Report-2020-25_02_2022.pdf



NERF is very grateful to Robin Lyon Sinclair at the RSPB for compiling the revised map of the groups' areas.

Annual Review

The Northern England Raptor Forum was formed in 2006 to collate the results of fieldwork on raptors being undertaken across the northern uplands by member groups. We speak with one collective voice for the protection and conservation of birds of prey. Members survey all 23 species of raptors, owls and Raven (an honorary raptor) occurring in or on passage through our region.

Whilst the terrain may be sometimes challenging and often remote, the following species accounts show clearly that our volunteer fieldworkers manage to study the majority of key species in considerable depth. Many of these studies have been ongoing for decades and serve to provide valuable information on long-term population trends. Our focus is on Schedule 1 species where members operate under appropriate licences but we also recognise the need where possible to provide information on the other, more common species.

The breeding season really presents quite a small window of opportunity each season so resource and particularly time constraints mean that priority must be given to some species over others.

We attempt to provide as much detailed information as possible for Schedule 1 species and some others. The extent and area of coverage for each group's survey work should be read in conjunction with the figures presented in species account tables. A "0" (Zero) is shown where the column feature was known with confidence to be zero for the area surveyed having regard to the extent of coverage indicated. Examples include species that definitely did not occur, or perhaps where no pairs laid eggs or fledged young. "NC" (Not Counted) is shown in any column where the feature occurred but the number was not known – probably because it was not monitored in detail. The NC notation should not be interpreted to conclude that the species does not occur in the study area.

Similar criteria apply to the persecution data. The numbers in the persecution pie-chart refer only to evidence-based cases recorded by members in respect of both "species" and "type of persecution" categories. These figures are by no means absolute, they simply reflect the incidents that group members have experienced. Equally the absence of persecution incidents shouldn't be interpreted that no persecution occurred.

NERF regional species monitoring

Given that the membership of each constituent Group of NERF has historically consisted of a small number of dedicated volunteers the volume of monitoring undertaken across the NERF region is quite remarkable.

The chart on p.15 graphically indicates the level of monitoring undertaken by NERF. Analyses of the species 'breeding & monitored' /' breeding & not monitored' / 'absent' / 'passage' data, identify the areas in which NERF will be able to focus future monitoring efforts more effectively. This will provide an opportunity to expand the overall dataset in a more meaningful way. This improved dataset, when combined with the persecution dataset will be used to set and / or modify NERF's monitoring priorities over time. In 2011 the Rare Breeding Birds Panel [RBBP] added Long-eared Owl and Short-eared Owl to its list of species that are believed to have a population of less than 1500 breeding pairs in the UK and are therefore deserving of more extensive monitoring. With regard to the expanse of suitable habitat within the NERF region it is possible that these species are under-recorded; if not, they may be under threat. In either case both species merit increased attention by all upland raptor workers.

Further information and advice in relation to the criteria for categorising breeding evidence for both species can be found on the RBBP website at <u>www.rbbp.org.uk</u>



Species monitored by NERF

Breeding* and monitored
Breeding* but not monitored
Absent
Non- breeding; Passage movements monitored

Note: *Breeding attempted at least once in last 10 years

NERF regional persecution data

Of all the data gathered by raptor workers the number of persecution cases consistently invokes discussions in relation to the claims. Proven persecution is relatively easy to assert in cases where birds have been shot or poisoned or in cases where traps have been recovered adjacent to nests.

It is self-evident that claims of persecution would be contentious where birds are reported to have "disappeared" from a given location, perhaps during the breeding season. A similar situation arises when the absence of a particular species from a given area, where there is ample suitable habitat and prey, cannot be explained unless human interference is the cause. No matter how contentious these issues are, it is the responsibility of Raptor Workers to raise their concerns in the public domain. It is then a matter for others to make evidence-based challenges to the assertion that persecution is affecting several species, particularly in areas associated with game shooting rather than to simply state that it does not occur.

The total of incidents in 2021 was 10, a sizeable reduction on last year which was the highest since 2016. Increasing publicity in the press highlighting despicable incidents and the general opprobrium from the public may have been partly responsible for this decline. Since 2015 a decision was taken, in conjunction with the RSPB, to record incidents only where persecution was <u>known</u> to have taken place, rather than where it was strongly suspected but could not be proved. Therefore only incidents reported to the police or RSPB Investigations are included below, and probably represent the tip of the iceberg..



Persecution by type 2021 (figures in parentheses refer to number of incidents)

Black Hole species

During 2021 NERF members analysed the various habitats within their respective study areas with a view to identifying "Black Hole Species", i.e. those habitats where there is ample suitable habitat and food supply but where the relevant species are absent or occur at levels well below those experienced in similar habitats. The pie chart indicates the species and the number of NERF member Groups experiencing reduced populations. 2021 figures are the highest in the last 5 years at 38 and the trend was the same with Peregrine again heading the list, along with Raven.

Black Hole species in 2021 (figures in parentheses refer to number of groups listing species)



Summary

Within the NERF region 19 raptor species were monitored and / or recorded by Group members during 2021, with additional records for Montagu's Harrier and White-tailed Eagle. There was only one sighting of Montagu's Harrier in 2021 (see "Rarer Species monitored by NERF in 2021"). As a result of the Isle of Wight reintroduction scheme, there are increasing sightings of White-tailed Eagle, mostly if not all immatures, so this species is included in the Species Reports,

For quick reference the combined data for all of the species has been collated into a single table. See Appendix 1.

For ease of comparison the overall statistics for 2009 - 2021 are presented in the table following.

Combined statistics 2009-2021



The relaxation of Covid-19 restrictions, although mainly in the later part of the breeding season, meant that the number of *Home Ranges Checked* this year was 27.02% higher than in 2020. *Territorial Pairs Monitored* was back to 2019 levels after an all-time high in 2020, as were *Pairs Laying and Hatching Eggs, Pairs Fledging Young* and *Number Fledged*. Given that the dry and sunny 2020, with its Covid restrictions, had a much lower number of *Home Ranges Checked*, these figures illustrate the importance of weather in ensuring success.

Appendices 2(a) and 2(b) show *Young Fledged per Pair Laying* and *Territorial Pairs Monitored*.

There is always more work to do and lack of personnel prevents most groups from monitoring the commoner species. Anyone interested in joining one of the Groups should contact the relevant Group representative. Contact details are provided on the inside back cover.

Species reports

Editor's note:

Please note that the species are arranged in BOU order.

http://www.bou.org.uk/british-list/

The Contents List still arranges them alphabetically, for easy reference.

Rarer species which occurred but did not breed are included on a separate section at the end of the species reports.

COVID-19

To reflect the effect of Covid-19 restrictions on fieldwork, a Covid Impact Score was formulated and distributed to species editors, with rating of 1 to 4, and applied to each group's account. The explanations of the scores are as follows:

- 1. Normal or near normal monitoring, no significant impact.
- 2. Some impact on coverage (early season visits and/or area surveyed).
- 3. Significant impact (early season visits and/or area surveyed).
- 4. Covid prevented all monitoring.

The Rare Birds Breeding Panel's 2020 figures were also affected by the Covid pandemic, either by a moderate lockdown impact on monitoring (M) or a very low lockdown impact (VL). M or VL is shown in brackets where appropriate.

Osprey Pandion haliaetus



Forestry England

UK population estimate

200-235 breeding pairs (M) were estimated in the UK in 2020 by RBBP with a 207% increase over the last 25 years (Eaton, M. *et al.* 2022. *British Birds* in press). APEP 4 estimates 240 pairs, 2013-17 (Woodward I. *et al.* 2020. APEP 4: *British Birds* 113: 69-104) The Bird Atlas 2007-11 found an increase of 68% since the last atlas (1988-91) with expansion into northern England and Wales and a successful relocation programme at Rutland Water. A further scheme to expand the population into southern England, based at Poole harbour, was successful in 2022, when the first Yorkshire breeding was also confirmed.

Conservation status

UK: Amber
European: 3: Concern, most not in Europe; rare
Global: Least concern
Listed on Schedule 1 of the Wildlife and Countryside Act 1981.
Listed as Near Threatened (Stanbury, Andrew *et al.* 2017. The risk of extinction for birds in Great Britain, *British Birds* 110:502-517)

National and regional threat assessment

It seems at last that the English Osprey population is starting to colonise new areas away from the established nesting sites in Northumberland, Cumbria, and Rutland. As always, it's a slow thing with Ospreys, but with more and more nesting platforms being constructed and more and more land owners wanting birds to nest, the threats to the Osprey, at least in the British Isles, must be reduced.

There will be always of course be the odd "bad" apple among bailiffs and gamekeepers who might still resent the Osprey, but most people, and most especially fisherman, like to see them when they're out fishing

So with time, many more counties will experience the excitement provided by nesting Ospreys.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
NRG	9	8	0	0	8	8	7	7	16	2.00	2.00

Group Reports

Bowland Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Several Ospreys are seen in Bowland annually, usually passing through. Occasional individuals do linger for a few days at Stocks Reservoir, but so far always on their own. A pair successfully nested on the edge of Bowland in 2021, though this was not in the group's study area, and birds lingered for longer around Stocks Reservoir in 2021 than they normally do, so it is looking more likely that Bowland will see nesting Ospreys in the next few years.

Calderdale Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

In common with previous years Ospreys were recorded in small numbers as they transited across the study area on both their northern and southern migration during spring and autumn respectively.

The total number of sightings increased once again during 2021, albeit slightly from 11 to 12. It is somewhat ironic that the vast majority of these sightings were over, or adjacent to, large water bodies which dominate much of the western half of the study area. Unfortunately these water bodies are upland reservoirs, sterile habitat devoid of suitable prey. The first bird was observed overflying the Green Withens Reservoir on 28th March. The second sighting came from Lower Gorple Reservoir 2 weeks later on 7th April. The 2nd sighting came on the following day when a bird was recorded flying north, crossing the eastern end of Scammonden Reservoir. A 2nd bird was recorded at Green Withens Reservoir on 31st May. It is likely that the same bird was seen at Lower Gorple Reservoir 30 minutes later. This pattern of sightings

is repeated annually and it cannot be coincidental that they are drawn to these locations. Regrettably they will never be suitable for nesting.

Two other birds were recorded on the northern migration route; one was recorded on 13th April flying parallel to a long line of reservoirs, running south to north, including Ogden Water, which features in the southern migration report. The final sighting was made on 6th May when an adult was seen sitting in a tree adjacent to Hebden Water on the outskirts of Hebden Bridge. Again this location proved significant in autumn, as did Scammonden Reservoir.

During the autumn southern migration, a bird was recorded at Ogden Water on 28th August where it remained for 2 days. The next sighting was made on 5th September when a bird overflew Hebden Bridge. On 11th September a bird was recorded over Hunter Hill, south of Ogden Water. The final sighting of the season was made east of Scammonden Reservoir on 18th September.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Northward passage calling at various Cheshire meres commenced on 19th March, latest 5th May. Return sightings commenced from 16th August to 10th October.

Durham Upland Bird Study Group

Extent of coverage: Whole County.

Level of monitoring: Not known to occur as a breeding species.

Covid impact score: 2

The majority of records submitted to the Durham Bird Club involved sightings of coastal passage, with the first bird seen moving north on 27th March and the last southward on 30th August. Derwent Reservoir once again provided the majority of records during the summer months but the county still awaits its first-ever breeding record. There were 2 single-day records from reservoirs in Teesdale.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Just 16 sightings of passage birds; all except 3 of these were in the period 27th March to 30th May. The 3 remaining records were on 15th July, 17th August and 10th September. Two birds were seen at Lightshaw 27th March at 0816 and 1915, so unlikely to be the same bird. A satellite-tagged bird was tracked over Castleshaw Resrs at 1330, Hollingworth Lake 1400 and then at Swinden Reservoir, West Yorkshire at 1455.

Northumbria Ringing Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study.

Covid impact score: 1

The Border Forest Kielder population continues to do very well and 2021 was an outstanding year with a record number of nests and the highest-ever number of chicks fledging.

All adults from the previous year returned to breed, and the lone female from 2020, which spent the whole summer on her old nest in 2021, was part of a new pair, increasing the nesting population to 8 pairs.

Unlike 2020 there was little drama to report: no Ravens or Goshawks trying to take eggs or chicks and even the weather was kind at the hatching and early chick stage!

Unfortunately although the new pair laid eggs, they failed to hatch. But with all 7 of the other nests successful, a record 16 chicks fledged. Brood sizes were as follows: 3 nests with 3 chicks, 3 nests with 2 chicks, and one nest with one chick

Elsewhere in Northumberland, Ospreys were recorded on many rivers, lakes and loughs on passage and summering; hopefully this will lead to more pairs nesting away from Kielder in the future.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Still no signs of any prospecting for nest sites at either of the 2 main reservoirs, Scaling Dam and Lockwood Beck. Seven migrants were reported covering both spring and autumn passage periods, at Scaling Dam on 27th April, 19th May, 25th August and 19th September; at coastal Boulby on 15th April, Esk Valley Grosmont on 10th May and Blakey Topping on 16th June.

Both Peak District groups reported passage sightings only.

NERF regional summary

The Kielder Forest population continued to grow with 8 nests fledging a record 16 chicks in 2021; elsewhere in the county an unmated male "played" putting sticks on a tower. And with many migrants passing through, it's hard <u>not</u> to see an Osprey here!

Just over the border in Durham, the pair from 2020 which started a nest platform unfortunately never returned to continue their nesting attempt; if anything it was a quieter year but birds were recorded from 27th March-30th August, with as usual Derwent Reservoir the most regular area.

Excitement was evident in the Bowland area where a pair of Osprey returned to their 2020 nest just outside the recording area. Here, the male from this nest fished regularly at Stocks reservoir. It is hoped that a pair might breed in the recording area shortly.

Calderdale recorded 12 birds on passage, mostly at upland small reservoirs with few fish and no nesting sites. In the North Yorkshire area, Ospreys were recorded from the late date of 27th April with the last on10th September. Manchester had a healthy 16 sightings from the 27th March-10th September, including a bird with a satellite tracker which went to 3 areas.





Comparative data 2009-2021



Honey-Buzzard Pernis apivorus



Pete Clark

UK population estimate

Roberts, S.J. & Law, C., in their paper on Honey-buzzards in Britain (*British Birds* 2014 107: 668-691) estimated the national population to be in the region of between 100-150 pairs. 41-108 pairs were reported in 2020 (VL) with a population estimate of 108 breeding pairs, in the RBBP national survey (Eaton, M. *et al.*2022. British Birds *in press*).

Conservation status

UK:AmberEurope :Not of concernGlobal:Least concernListed on Schedule 1 of the Wildlife and Countryside Act 1981

National and regional threat assessment

The most serious threat to the welfare of this species in the UK arises from the attentions of egg collectors, clutches of these birds being highly prized. Direct persecution from gun or trap in Britain is of relatively rare incidence compared to that suffered by other large raptors. Honey-buzzards present no problem for gamekeepers as they feed principally on the larvae of bees and wasps excavated from their nests. Carrion-feeding by the species is virtually unheard of, therefore poisoning presents no threat to birds.

Extremely wet summers can have a catastrophic effect on breeding success if there is large scale wash-out of bee and wasp nests. UK birds migrate to Africa in relative safety from guns, overflying the Mediterranean via Gibraltar, unlike birds from Eastern Europe that cross via the island of Malta running the gauntlet of illegal hunting there.

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
NRG	1	1	0	0	1	0	0	0	0	0.00	0.00
NYMUBSG	9+	2	2	1	1	0	0	0	0	0.00	0.00
TOTAL	10	3	2	1	2	0	0	0	0	0.00	0.00

NERF Data

Group Reports

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

A single bird was photographed flying south along the coast at Blackhall on 18th September.

Northumbria Ringing Group

Extent of coverage: Upland areas only.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

The 2020 report unfortunately was not forwarded to the species account compiler until after the annual review was published. As it is of direct relevance to 2021, it is given below.

2020 Season

Given the suitability of the habitat in the study area and occasional confirmed and unconfirmed sightings of these raptors, there has always been the potential for the species to breed in the county. Additionally, recent publications from 2 UK study sites in North Yorkshire and Central Scotland, encouraged participation in the 2020 national Honeybuzzard survey.

A 6-hour watch in suitable weather conditions on 26th July produced no sightings. After discussions with experts on the species and some background research, a 2nd potentially "more suitable" site was surveyed. On 31st July, a 4 hour watch was carried out at the new location in superb weather conditions from 9am-1pm. A male Honey-buzzard with a distinctive moult pattern was seen circling over the area on 3 occasions as well as stooping into the canopy.

A further 10 watches were undertaken from 7th August to 14th September, with the aim of confirming breeding. Most watches were around 4 hours in length, targeting the peak activity period. Some watches were undertaken from as early as 6.00am, but none continued past 2:10pm.

There were 8 flights by the same adult male on 4 separate days between 31st July and 14th September, with the male regularly seen circling out of the wood. A total of 49 mins of flight time was recorded between 8:30am and 12:45pm, although no wing-clapping display was noted. There were 2 flights of the same adult female over 2 watches on 9th and 30th August, totalling 6 mins of flight time between 7:58am and 10:13am. There was also a record of an unidentified 'dark' individual on 24th August and a possible group of 3 birds together soaring very high in hazy conditions on 31st August.

Unfortunately, breeding was not confirmed, (e.g. no birds were seen carrying prey, no active nest was found, nor juveniles seen), but there was potentially enough activity plus the fact the male stayed on-site until mid-September, to suggest that the birds attempted to breed in the area. Predated wasp comb was found in the 'core activity area' and unusually the adult male was also seen perched in the crown of a dead Sitka spruce, preening for over 10 minutes out in the open, allowing for excellent views.

2021 Season

Several potential breeding areas were covered for the second year of the national survey, with at least 3 but probably at least 4 different individuals recorded.

Only one of these areas held a territorial pair, the same pair that was recorded here in 2020. The resident male, a barred intermediate type was regularly seen in the territory from mid-May through to early September but was only seen wing clapping once in response to an intruding male in July. The male was also recorded carrying an avian prey item into a probable nesting area on 28th May, with the unusual 'ticking call' heard from the site. The female, a barred dark- brown bird, was recorded regularly with her mate from 21st July to 20th August, but thereafter there were no records of her. Several freshly predated wasp nests were found in the study area including both Common and Red Wasps. Flight activity suggested that the core territory was around 8km², although the male was recorded covering an area of 20km square.

A 2nd male Honey-buzzard was also occasionally recorded in this territory between late May and August, wing-clapping over the probable 2020 nest site on 24th May (a moulted feather from the 2020 female was found in this area in early 2021).

Interestingly an adult Hobby was recorded in the area twice in late August, on one occasion aggressively mobbing the resident male Honey-buzzard.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. Covid impact score: 1

A national survey of this species took place this season. This had been planned originally to take place in 2020 but the project was spiked by the Covid-19 Lockdown. A large team of non-study group members was organised by the principal Honey-Buzzard fieldworkers and excellent coverage of the major NYM forests was achieved. Of the 8 areas monitored, returns were negative from 4 of them. At one regular forest a pair which bred in 2020 returned along with another male. Hopes were high the pair would breed again but the absence of preycarrying over July/August implied probable nest failure at some stage of the breeding cycle. Three birds were recorded at the other site where breeding was suspected in 2020, but no evidence was obtained to suggest breeding activity this season. At the other 2 sites a male was recorded at one on just the single occasion in June, and a female at the other site on one day in June and again in July.

South Peak Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Very occasional breeding species – nests monitored when found. **Covid impact score:** 1

No breeding records this year but 2 reports of brief sightings of individual birds in the study area were received.

There were no reports of birds from any of the other groups.

NERF regional summary

It is truly pleasing that such encouraging data from another study group area appears in this review. It has always been the case that progress and reward with this species requires no small degree of dedication to it in the way of time and observation. Clearly this has been the situation in Northumberland and as ever the North York Moors. With the same level of commitment in future seasons at the former surely it will only be a matter of time before breeding is finally confirmed there. It would represent success indeed if nesting success could be established regularly in seasons to come at all 3 above study group areas.

Comparative data 2009-2021







Eurasian Sparrowhawk Accipiter nisus



David Bretherton

UK population estimate

In 2016 the population was estimated at 30500 pairs (Woodward, I. *et al.* 2020. APEP 4: population estimates of birds in Great Britain and the UK. *British Birds* 113:69-104. February 2020). The BTO's Breeding Bird Survey in 2021 in England showed a 1% increase 2019-21, a 27% decrease 2010-20 and overall a 33% decrease in the period 1995-2020.

National and regional threat assessment

Sparrowhawk chicks can be predated by both Pine Marten and larger raptors such as Goshawk, Buzzard and Tawny Owl. The increase in Buzzard numbers may be having an

impact on Sparrowhawk populations at a localised level. Prolonged cold and wet weather also has an adverse effect on the species.

There are 2 further issues that result in localised threats; firstly, there is a belief amongst some pigeon fanciers that Sparrowhawks are responsible for high mortality rates at some lofts, and secondly there is the erroneous belief, held by some people, that the Sparrowhawk is responsible for long-term declines in songbird populations. As a result of these beliefs there are calls in some quarters for the Sparrowhawk population to be controlled, despite there being very little scientific evidence to support these allegations.

Conservation status

UK: Amber
European: Not of concern
Global: Least concern
Listed as Vulnerable (Stanbury, Andrew *et al.* 2021. The status of our bird populations: the fifth BOCC. *British Birds* 114:723-747 (December 2021)

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing early or non-breeding	Territorial pairs monitored known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
CaRSG	6	6	0	0	2	2	2	2	5	2.5	2.5
ChRSG	6	6	0	0	6	5	5	5	10	2.00	1.67
MRG	28	16	12	4	4	2	2	2	4	2.00	1.00
NRG	61	33	8	8	21	21	19	17	31	1.48	1.48
PDRMG	21	11	NC	2	9	9	8	5	16	1.78	1.78
TOTAL	122	72	20	14	42	39	36	31	66	1.69	1.57

Group Reports

Calderdale Raptor Study Group

Extent of coverage: Part upland and part lowland areas. **Level of monitoring:** Poor coverage; casual monitoring of a few pairs. **Covid impact score:** 3 During 2021 Covid continued to suppress our group's ability to monitor Sparrowhawk; as a result there were only 207 sightings recorded across the whole of the study area. This represents a 17.2% reduction of sightings from 2020.

Surveying was possible during spring and the group located 6 pairs occupying breeding territories; this is undoubtedly an underestimate of the actual local population. Of the 6 pairs, 2 pairs are known to have fledged a total of 5 young.

Other pairs were located early in the season at Elland, in the south-west and at Northowram, in the north-west of the study area. Additionally, one pair was in Callis Wood and a further pair was located in Knott Wood, both in the Upper Calder Valley. Unfortunately, these 4 pairs received no additional monitoring and the outcome at their nests is unknown.

Cheshire and Wirral Raptor Study Group

Extent of Coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

A fairly common widespread resident, although the group monitors only a few pairs.

Manchester Raptor Group

Extent of Coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

260 records were received for this species, (300 in 2020). Despite coverage of the usual sites by a small number of dedicated observers, results suggested a poor year, with only 2 confirmed nesting attempts, (10 in 2020), and one pair building but not proceeding to lay. Four previously regular breeding sites were unoccupied. Pairs were present in the breeding season at 6 sites and at a further 3 sites males carrying prey or fledged juveniles were seen. Single birds were seen in the period May to July at 12 other sites.

Northumbria Ringing Group

Extent of coverage: Part of upland Areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative study area.

Covid impact score: 1

The 2 long-term study areas in the Border Forests and in South Northumberland continued in 2021, with casual monitoring undertaken from 2 other areas of the county.

The cone crop of 2021 was very poor in comparison to the bumper year of 2020, and as a result finch productivity was low. This had a huge effect on the Border Forest's

Sparrowhawk breeding population in 2021. Only 17 home ranges were occupied in 2021, (33 in 2020) with a total of 9 chicks fledged, (47 in 2020). In 2020, at least 2 nests failed when the females were predated by Goshawks (with this also likely occurring at a 3rd site), but in 2021 there were no such records of predation. Given that such a high percentage of pairs failed early / failed to settle in 2021, it is difficult to ascertain whether this was linked to a shortage of prey or if it was a result of direct competition from Goshawks.

In the South Northumberland study area, 12 territories were checked, of which 9 were occupied. A total of 6 successful nests fledged a minimum of 14 young. Although some pairs have moved into denser timber compartments due to the presence of breeding Goshawks, many pairs continue to nest successfully in very mature, open stands of timber more suited to larger raptors such as Buzzard.

Casual monitoring in 2 other areas of the county covered a further 14 home ranges, 7 of which were occupied by pairs and 7 by single birds. Four of the pairs were monitored through the season, fledging a minimum of 8 young.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study Covid impact score: 1

Monitoring of this relatively common species is limited due to other commitments. Work continued as usual in the long-term study site in South Yorkshire, where 11 pairs were monitored. Nine pairs were successful, fledging 16 young. Two nests were abandoned prelaying.

Further work needs to be done on this species, as it is felt that Sparrowhawks continue to slowly decline from their peak numbers in the 1990s.

NERF regional summary

The Sparrowhawk remains widespread across the NERF region as a breeding species, but is not monitored as a matter of course by most of the NERF member groups.

Due to its being relatively common throughout the NERF region and limited manpower within the raptor groups, the Sparrowhawk has in recent years been rather overlooked, with regard to detailed monitoring. The apparent number of unoccupied home ranges and nationally reported decrease in abundance highlights that this species could be worthy of further investigation by NERF.

Northern Goshawk Accipiter gentiles



Paul Galloway

UK population estimate

581-864 breeding pairs (M) were estimated in the UK in 2020 by RBBP with a mean of 673 breeding pairs, based on the years 2015-2019. (Eaton, M. *et al.* 2022. British Birds *in press*). The latest APEP figure is 620 pairs, based on RBBP data 2013-2017. (Woodward, I. *et al* 2020, APEP 4: *British Birds* 113:69-104).

Conservation status

UK: Green

European: Not of concern Global: Least concern

Listed on Schedule 1 of the Wildlife and Countryside Act 1981. Listed as Near Threatened (Stanbury, Andrew *et al.* 2017.The risk of extinction for birds in Great Britain, *British Birds* 110: September 2017).

National and regional threat assessment

The Phantom of the Forest, the Northern Goshawk, is a notoriously elusive, generalist raptor. For such large birds they can be surprisingly elusive and secretive and can remain in an area for long periods without being detected by the casual observer. Patience is often a virtue when surveying; however, at certain times of the year they can be extremely noisy with callings echoing throughout forests and woodland in the spring when breeding birds are pairing up and establishing their nesting territories, and in particular in late summer when fledged young are calling for food.

Their reputation for taking gamebirds as prey has led them to be the victims of widespread persecution (Petty 2002, Marquiss *et al.* 2003). As a result, for decades now they have suffered from persistent disturbance and illegal interference with birds remaining absent from large areas of prey-rich and suitable breeding habitat as undertones of this archaic mentality linger on. Although Goshawks are fully protected by law, and hold a current UK Conservation status of "Green", they remain vulnerable and continue to face many threats nationwide. Sadly, to this day, disturbance and illegal persecution by humans remains the primary threat to the health and population of the species, particularly in the uplands. Annually, numerous incidents of persecution of the species are reported. Forestry operations and recreation are also of growing concern in some areas, but NERF Groups continue to show that through engagement with forest operators, unintentional disturbance can be managed and limited. On the European continent the Goshawk continues to show it can successfully colonise prey-rich urban areas such as Berlin.

Although largely dependent on mature forest, annual data, compiled from across the NERF study groups, continues to demonstrate prey availability is unlikely to be a major constraint and that settling down to breed and ultimately mere survival remains the species' main challenge. Population expansion, consistent with many of the raptor species studied by NERF, is restricted by persistent disturbance. Any 'stable populations' exist for the most part in the more inaccessible, heavily-forested areas and principally on the higher ground. As such the Goshawk remains a rare breeding bird in the more accessible lowland areas, which are naturally richer in prey and thus should be far more productive.

We continue to expand our knowledge of the species, in particular about local Goshawk movements in the uplands with long-term breeding studies, and camera and tracking technology now providing increasingly valuable data. DNA research into Goshawks is currently taking place in Scotland and this will allow us to build up a better picture of the species' population genetic structure, its dispersal from nesting areas and also the relationship between different birds within the population.

However, there remains an urgent need to better understand predator/environment interactions and the response to change as regrettably reports of illegal activity continue to grow. A collaborative approach from conservation-friendly organisations remains key to both tackling and helping mitigate ongoing disturbance and illegal persecution against the species which continues to restrict species productivity and range expansion.

References: Petty, S. Northern Goshawk *Accipiter gentiles*. In Wernham, C. *et al.* 2002. The Migration Atlas. Poyser, pp. 232-234.

Marquiss, M, *et al.* Contrasting population trends of the Northern Goshawk *Accipiter gentilis* in the Scottish/English borders and north-east Scotland. *In* Thompson, D.B.A. *et al.* 2003. Birds of prey in a changing environment. The Stationery Office Scotland pp 143-148.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home ranges occupied (pairs)	Home ranges occupied (singles)	Pairs failing early / non breeding	Territorial pairsmonitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum Number fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	1	0	0	0	0	0	0	0	0	0.00	0.00
CaRSG	1	1	0	1	0	0	0	0	0	0.00	0.00
CRG	0	0	0	0	0	0	0	0	0	0.00	0.00
DUBSG	5	2	3	1	1	1	1	1	1	1.00	1.00
NRG (N'land)	60	45	2	12	38	35	25	21	37	1.06	0.97
NRG (Cumbria)	6	5	1	1	4	4	2	2	5	1.25	1.25
PDRMG	16	7	1	2	5	5	4	4	10	2.00	2.00
SPRSG	29	24	2	2	20	18	15	15	21	1.17	1.05
TOTAL	118	84	9	19	68	63	47	43	74	1.17	1.09

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

Birds were again seen early in the season, but no evidence of breeding was found in 2021. There is plenty of suitable habitat in Bowland, and the continuing failure of this species to breed in many areas of Bowland is almost certainly down to persecution linked to game bird shooting. The Goshawk remains a 'black hole' species in Bowland.

Calderdale Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Not known to occur as a breeding species.

Covid impact score: 3

The 2021 breeding season followed the familiar pattern of birds being sighted in late winter/early spring at the same location annually. Despite the fact that they are always recorded in prime Goshawk habitat they disappear without trace annually.

A pair was seen on 11 occasions between 28th February and 15th April; unfortunately, no display flights were witnessed. The male was photographed in pursuit of a Curlew on 23rd March and the female was photographed on 30th March. The female had extensive damage to her tail feathers, and it is strongly suspected that the damage was the result of a gunshot. Neither bird was seen again after 23rd March. Taking into account that there is ample suitable Goshawk habitat in the area where the birds are seen annually at the start of the breeding season and they never settle to breed, together with the fact that the 2021 female had apparently been shot means that the Goshawk remains a 'black hole' species in Calderdale.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Very occasional breeding species, nests are monitored when found. Covid impact score: 1

The main sightings are noted from the upland forest in the east of the county; wider sightings coming from a shooting estate in the south west of the county. A 'black hole' species.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Reasonable coverage; at least one long-term study.

Covid impact score: 2

Breeding was again confirmed in the major long-term study area. Dedicated monitoring established that a pair in a traditional territory fledged one young whilst a settled pair in a 2nd territory appeared not to nest or perhaps failed early.Displaying birds were seen in 3 other locations during February, March and April but the status of breeding couldn't be ascertained. Elsewhere in County Durham an expanse of woodland in the south-east provided multiple sightings of display in early spring. For the county as whole the evidence tentatively suggests possibly 5-6 known breeding sites; an increase over recent years.

There were 2 unusual reports in March with a bird seen coming in off the sea at Ryhope being mobbed by gulls on 20th with it or another seen nearby on 31st.

Northumbria Ringing Group

Extent of coverage: Part of upland areas.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 2

Northumberland: Although the majority received full coverage, COVID-19 again impacted early-season access and monitoring at a few historic sites.

In the South Cheviots study site occupation was low and for the 3rd year running at one site birds were observed displaying and calling early season. Further signs of occupation (prey remains) were evident and a moulted tail feather was found in late July. However, despite multiple visits no active nest or young were seen or food calling heard, so a successful breeding attempt could not be confirmed. The pattern is consistent with the previous 2 years and human disturbance (not allowing birds to settle) cannot be ruled out at this site. In another part of county, there were 2 separate forest studies: in Study 1 a first-year pair

replaced a first-year pair from 2020, and successfully raised 2 young. This is the 2nd consecutive year of successful breeding in the study area where nesting was not known for the first 6 years of the study. The male of the pair was un-ringed. In Study 2, an adult female paired with a 2 year-old male but the nest failed at the egg stage. A predated Barn Owl was one of the more surprising kills found in this block.

In the Border Forest Kielder, 2021 was a poor year. With a very cold late spring many of the prey species the Goshawks rely on were late in arriving back to the forest. This undoubtedly affected many nests, with many pairs either failing early/not laying any eggs or late eggs not hatching. The pair which attempted to nest on the edge of a footpath in 2020 returned again but to nobody's surprise failed early!

At another site a satellite tag from a Hen Harrier was found. The tag went offline in July 2020 so must have been buried in the nest until this year.

Trail cameras used on Hen Harrier nests recorded a predation incident where an adult male Goshawk killed both chicks and ate them in the nest. Both the Hen Harrier chicks had left the nest but were returning to be fed when the Goshawk killed and ate first the female, returning the next day to kill and eat the male chick. Another nest nearby was also predated, probably by the same Goshawk.

Further to this, when looking at raptors and owls generally as Goshawk prey, in 2021 Barn Owls were taken much more regularly than normal in the forest. It is believed the late spring and low vole numbers were key factors which forced the owls to daylight-hunt more than usual. Seven Barn Owls were found along with 7 Tawny Owls, one Long-eared Owl, 4 Kestrels and 2 Sparrowhawks!

The NRG would again like to thank Forestry England for their ongoing support, particularly in timing forestry operations outside the nesting seasons.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. Covid impact score: 1

The fieldworkers who monitor this species do not wish to have the population figures published. Intensive felling of mature timber continued across the major forests in 2021 doing nothing to ease territory restrictions cramping the Goshawk population, pairs vying with each other and the increasing Buzzard population for nesting sites resulting in unavoidable stress all round. Sections of one particular forest are so denuded they appear to the eye as extensive plains sprinkled with shelter belts! It is almost certainly the case that occupied territories are now smaller and productivity will likely be adversely affected before too long. Not surprisingly perhaps, there is increasing evidence of expansion into suitable wooded habitat away from the core areas.

Peak District Raptor Monitoring Group

Extent of coverage: Whole County.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

The Goshawk population in the PDRMG study area is showing some improvements but in a very limited area. This species has limited success breeding in woodlands where the adjacent moorland is privately owned and managed for gamebird shooting.

One nest in South Yorkshire failed at the egg stage.

Four successful nests in Derbyshire fledged 10 young.

South Peak Raptor Study Group

Extent of coverage: Excellent coverage; all or most sites receive annual coverage.

Level of monitoring: Part upland and part lowland areas.

Covid impact score: 1

On one estate, 3 successful pairs fledged a minimum of 4 young. A further pair laid eggs which are suspected to have been robbed, while another pair failed at an unknown stage. In 2 territories nests were "freshened up" but no further sightings were noted.

On another estate, 2 pairs fledged a minimum of one young each (actual number unknown).

In the north-east of the monitoring area, 2 pairs fledged one young each, while a 3rd failed possibly due to robbery. A new pair was also found, successfully fledging one young.

In the Upper Derwent 5 territories were occupied, with 3 pairs successfully fledging at least 7 young. Two pairs failed at the egg/small young stage.

In South Derbyshire 5 territories were occupied, and 3 pairs fledged at least 1 young each (actual numbers unknown).

NERF regional summary

Despite an increase in monitoring in some areas, once again only Northumberland and the Peak District Groups have populations of any size. Across the NERF study areas, the number of young fledged per territorial pair monitored dropped from 1.48 in 2020 to 1.09 in 2021 - almost as low as 1.03 in 2019. The decrease was reflected in Northumberland, as the number of young fledged per nest dropped significantly from 1.48 in 2020 to less than 1 per nest (0.97), returning close to the 0.89 low in 2019. In Cumbria meanwhile, although down on 2020 numbers, birds were more successful with 4 pairs known to fledge a minimum of 5 young (7 young in 2020).

In the South Peaks, despite a minimum of 21 young fledged, the number of young fledged per nest also dropped significantly to 1.05 (1.67 in 2020). Across the study there were a number of failures noted; at least 2 nests were suspected to have been robbed at egg stage, some nests, although freshened up, failed to progress although a new pair were successful in fledging young.

The Peak District study area continues to show some improvement in productivity but only in a very limited area, with adjacent moorland managed for gamebird shooting.

In Calderdale birds are recorded each year in prime habitat but fail to settle and disappear without trace annually. Worryingly an adult female was observed with extensive damage to her tail feathers early in the season and it is strongly suspected that the damage was the result of a gunshot. Therefore, the group believes that Goshawk remains as a 'black hole species'. Encouragingly in Durham, with dedicated monitoring, evidence suggests the county as whole tentatively suggests 5-6 known breeding sites; an increase over recent years, although only one young per pair monitored could be confirmed and the exact status of breeding could not always be ascertained.

In the North York Moors intensive felling of mature timber and competition with the increasing Buzzard population for an increasingly limited nesting sites across the major forests means occupied territories are now smaller, and there is increasing evidence of expansion into suitable wooded habitat away from the core areas.

Across the NERF Study Groups, whilst it is recognised that detailed monitoring of this forest phantom is inherently difficult, confirmed young fledging from territorial pairs monitored is as low as 1.09 per nest. Annually, and as highlighted above, the Goshawk continues to face a variety of threats: loss of habitat, intentional human disturbance and illegal persecution remain of prime concern to the breeding status, population expansion and future prosperity of the species.








Marsh Harrier Circus aeruginosus



Phil Littler

UK population estimate

277-367 breeding pairs (M) were estimated in the UK in 2020 by RBBP with a mean of 391 breeding pairs, based on the years 2015-2019. (Eaton, M. *et al.* 2022. *British Birds* in press). The last national survey was in 2005, finding 429 pairs, and BBS data has been used to extrapolate from this, estimating a total of 590-695 pairs. (Woodward, I. *et al.*2020. APEP 4: *British Birds* 113:69-104).

Conservation status

UK:AmberEuropean:Least concernGlobal:Least concernListed on Schedule 1 of the Wildlife and Countryside Act 1981.

National and regional threat assessment

The UK population is more secure now than at any other time during the last 100 years and continues to expand its range. However, significant habitat loss could reverse this trend. As the species gradually moves into the northern uplands to breed it is likely to face an increase threat of persecution if birds attempt to breed on heather moorland, which is dominated by driven grouse shooting.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	1	1	0	0	1	1	1	1	3	3.00	3.00
ChRSG	4	4	1	0	4	4	4	4	6	1.50	1.50
MRG	1	1	NC	1	0	0	0	0	0	0.00	0.00
NRG	4	4	0	0	4	2	2	2	6	3.00	1.50
TOTAL	10	10	1	1	9	7	7	7	15	2.14	1.67

Group Reports

Bowland Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

For the first time in living memory a pair of Marsh Harriers nested successfully in Bowland. The nest was on the United Utilities estate and remarkably was within 400 metres of 2 Hen Harrier nests. All 3 nests fledged chicks successfully, with the Marsh Harriers fledging 3 chicks.

In previous years a few were seen each spring and summer with only the odd one lingering for a few days, so when 2 birds of the opposite sex started being seen regularly together it was a surprise when they settled to breed. This demonstrates what can happen when raptors find suitable habitat and food, and are not persecuted in the name of gamebird shooting.

Calderdale Raptor Study Group

Extent of coverage: Part upland areas.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 3

Marsh Harriers are only recorded on passage within the study area. In 2021 there were 9 sightings reported predominantly in late summer; however it is believed that these were likely to have involved just 5 or 6 individuals. Observations during the spring passage produced a male on 13th May, crossing moorland adjacent to Whiteholme Reservoir in the southern section of the study area. On 27th May a female was recorded at Walshaw Dean on the western fringe of the study area.

During the post-breeding season observers recorded a 'cream crown' at Whiteholme Reservoir on 22nd August and juveniles were recorded at Lower Gorple Reservoir on 28th-29th August. These 2 sightings are likely to have been of the same bird. On 6th September a juvenile was recorded at Walshaw Dean, close to Lower Gorple Reservoir. It is not known whether or not this was the same bird seen one week earlier or a different individual. There were 3 additional sightings before the end of the year. A 'cream crown' was recorded at Fly Flatts Reservoir on 8th September and a juvenile was reported at Lower Gorple Reservoir on both 26th September and 10th October.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

The Group received in excess of 700 records during 2021. In common with previous years these records were largely generated from the Dee and Mersey estuaries.

Breeding was confirmed at 4 sites from where a total of 6 young fledged. One of these sites was Woolston Eyes, near Warrington, where breeding was recorded for the first time. Outside of the breeding season a peak count of 20 birds were noted on the Wirral Peninsular at the Neston reed bed. The largest winter roost, containing a minimum of 10 birds, was recorded at Frodsham Marsh.

Durham Upland Bird Study Group

Extent of coverage: Whole County.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 2

The possibility of recording the expected light spring passage of birds across the moors of western Durham will have been impacted by the Covid restrictions applying at the time. Indeed the sole record for the year from the uplands involved a cream-crowned bird seen in an upper Weardale valley on 11th May. There has been no confirmation of breeding in the uplands in the modern era despite the availability of suitable habitat.

In the east, there was a year-round presence of Marsh Harrier at Teesmouth peaking at one male and 7 female types on 13th March. Reports in May here brought indications of breeding and 2 juvenile birds were seen in early September.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

This species consolidated its position as a potential breeder this year; of the 100 sightings recorded, only 6 were from areas away from the mosslands and related to migrants. A detailed investigation by David Steel, Dave Stewart and observers at the Woolston Eyes SSSI (Cheshire) 7 km to the south, concluded that a pair which bred for the first time there,

hatching 3 chicks and fledging one (possibly more) was the same 2cy male and his mate that were seen on the mosslands. Subsequent to the successful breeding at Woolston Eyes, the family was seen frequently at Little Woolden Moss, an area being managed for sphagnum regeneration. On 21st August, the pair was seen with 2 juveniles, but after that date only one was ever recorded.

From 27th October, a juvenile with a red wing-tag was noted and eventually the code was read as JP. Phil Littler, who has a long-running wing-tagging scheme in Norfolk, was able to supply details of this bird's natal site at Boughton Fen, a male ringed 19th June (see photo at beginning of this account). This bird stayed until 17th December and also ventured to Woolston Eyes and other sites in Cheshire.

Northumbria Ringing Group

Extent of coverage: Whole County.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 1

The Northumberland population of Marsh Harriers is slowly increasing, which is excellent news. During 2021 more birds were recorded on passage than previously. Several birds overwintered in the study area and were recorded both on the coast and in the uplands. Hopefully this all bodes well for the future.

The traditional area of East Chevington had a good year with what was thought to be a bigamous male provisioning 2 females. Whilst one nest fledged 3 chicks, the other is believed to have failed. A large nest was located; however, it was not visited during the breeding season, therefore it is not known if eggs were laid and no fledged chicks were recorded in the vicinity of the nest.

The reedbed in the north of the county again held a pair and this year fledged 3 chicks: great news for the group which monitors that pair.

Finally, a pair of birds was recorded in a new area throughout most of the summer. Unfortunately they did not attempt to breed, possibly as they were sub-adults.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 2

Marsh Harrier continues to be classifiable only as a scarce annual migrant. There were unverifiable reports from a few areas but the only reliable sightings were of a female in March from the western moors and several other individuals from the most regular NYM sites, Sleddale, (14th April and probably the same individual recorded over the period 10th - 13th August), and Scaling Dam Reservoir: 2 dates in April, one in May, July, August, 2 in September and one in December; a lone winter record.

In comparison a total of 158 acceptable sightings were submitted to the Teesmouth Bird Club of which 139 were from the Tees estuary. There were clearly multiple sightings of the same birds there over the course of the year but up to 6 birds were recorded attending a known roost in January, 4 in February, 8 in March, and 4 in April. With this level of presence adjacent to the NYMs it is inconceivable that recruitment of breeding stock into the National Park would not occur naturally, unless that development was in some way being deliberately prevented. Persecution would seem to be the most likely barrier.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

As in previous years Marsh Harriers were not known to have bred during 2021. Also in common with previous years the number of sightings of the species on passage continued to increase.

NERF regional summary

In 2021 there was a small but significant improvement in the breeding success across the NERF study area. During 2020 only the Cheshire and Northumberland RSGs reported breeding success with a minimum of 10 chicks known to have fledged; however this is likely to have been an under-estimate. For the first time in living memory breeding success was recorded on the United Utilities Estate in Bowland and the number of chicks known to have fledged in 2021 increased by 50%. In addition a pair was recorded by the Manchester RG; however, they failed to settle.

In common with previous years the majority of NERF Study Groups reported that birds had been seen on passage during spring, summer and autumn with some individuals remaining for short periods on potential breeding grounds during summer. It is evident from the data collected over many years by NERF members that Marsh Harriers are under-represented as a breeding species in the North of England. Taking into account the number of birds observed on passage crossing the region annually and the fact that there is ample suitable breeding habitat it is difficult to avoid the conclusion that the population is being illegally supressed. Several of the member Groups believe Marsh Harriers fit in to the category of a 'black hole' species within their Study Areas.

If Marsh Harriers do attempt to breed in other parts of the NERF Study Area all of the available evidence indicates that they will be vulnerable to persecution and Raptor Workers in general and our members in particular will be required to protect them on their breeding grounds.

Wing Tagging Marsh Harriers Circus aeruginosus, in Norfolk

Between 1990 and 2010 North West Norfolk Ringing Group had metal-ringed 213 Marsh Harrier nestlings. Only 7 were ever recovered, all were found dead.

According to the British Trust for Ornithology (BTO) between 1909 - 2012 a total of 2569 Marsh Harriers were ringed with metal rings, few were ever reported and most of these were recoveries of dead birds.

The wing tagging project began in 2011 and by the end of 2020 a total of 651 nestling Marsh Harriers had been ringed and wing tagged, 98 of these in 2020. This has resulted in a recovery/sighting rate of 37.75%, a result that could not have been anticipated. Individuals that have been marked in this project have been reported and photographed all over the LW. Many have involved multiple sightings of the same hird providing a faceinating.

over the UK. Many have involved multiple sightings of the same bird providing a fascinating snapshot of their 'life' history so far. Many of these birds that have been tagged in this project have been seen abroad in Belgium, Portugal, Germany, The Netherlands, Spain and Norway and the first confirmed sighting of a British ringed Marsh Harrier in Senegal and another in the Canary Isles.

Conventional metal ringing alone would never have produced such extraordinary results. Phil would welcome sightings of any birds seen in the NERF region. Sightings should be forwarded to Phil Littler at *harriermanphil@gmail.com* or by mobile on 07748 556758. Please include the tag number, letter and number, time and date, location, including the grid reference if possible, age and sex in the report.

For further information visit:

http://www.nwnrg.co.uk/research/marsh_harrier/Marsh%20Harrier%20homepage.htm

Comparative data 2009-2021



Hen Harrier Circus cyaneus



James Bray

UK population estimate

The most recent full national survey in 2016 provided a population estimate for the UK and Isle of Man at 575 territorial pairs. (Wotton, Simon *et al.* The status of the Hen Harrier in the UK and Isle of Man in 2016, *Bird Study* 65: Issue 2, Aug 2018). The majority of breeding pairs were in Scotland with 35 in Wales, 46 in Northern Ireland, 30 in the Isle of Man and at that time a mere 4 in England. The 2016 survey also took care to accurately survey Special Protection Areas (SPAs) in northern England for which the Hen Harrier features as a citation species in the original designations. In the Forest of Bowland SPA,

which is cited for 13 pairs, there were no pairs found in 2016 and in the North Pennine SPA, which is cited for 11 pairs, there was one territorial pair in that year. The breeding population in northern England has steadily increased since then but continues to fall well below the suggested carrying capacity of over 320 breeding pairs.

210-322 breeding pairs (M) were estimated in the UK in 2020 by RBBP with an estimate of 575 breeding pairs, based on the 2016 survey (Eaton, M. *et al.* 2022. *British Birds* in press)...

Conservation status

UK:RedEuropean:3; Concern, most not in Europe, depletedGlobal:Least concernListed as Vulnerable (Stanbury, Andrew *et al.* 2017. The risk of extinction for birds in GreatBritain, British Birds 110: September 2017)

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	20+	12	4+	0	12	12	12	11	38	3.16	3.16
CaRSG	2	0	0	0	0	0	0	0	0	-	-
ChRSG	0	0	0	0	0	0	0	0	0	-	-
DUBSG	8+	2	2	0	2	2	2	2	7	3.50	3.50
MRG	0	0	0	0	0	0	0	0	0	-	-
NRG	20+	8	2	0	8	8	8	5	18	2.25	2.25
NYMUBSG	4	0	0	0	0	0	0	0	0	-	-
PDRMG	7	2	0	1	1	1	1	1	4	4.00	4.00
SPRSG	6	1	0	0	1	1	1	1	4	4.00	4.00
TOTAL	67+	24	8	1	24	24	24	20	71	3.00	3.00

National and regional threat assessment

The report analysing Natural England's data from satellite tracked birds (2019 Murgatroyd, M. *et al.* Nature Communication, <u>http://go.nature.com/2JuoRfo</u>) highlighted the known issue of illegal persecution. A staggering 72% of 58 tagged birds in the study were confirmed or thought very likely to have been illegally killed. The likelihood of Hen Harriers dying or disappearing in unexplained circumstances over driven grouse moor estates was 10 times that of non-grouse moors. There were marked spatial clusters of missing tagged birds, fate unknown, within the NERF recording area including Yorkshire Dales NP and the North Pennines & Bowland SPAs. Cases of illegal persecution occur annually which must have a significant impact on the conservation status of the species. In 2021 Natural England believed "*illegal persecution continues to stifle recovery*".

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage, all or most sites receive annual coverage. **Covid impact score:** 1

There were 12 Hen Harrier nests in Bowland in 2021. Not only was this an increase on the previous year's total, but nests were also located in an area of Bowland that had not seen Hen Harriers nesting successfully in living memory.

Nine of these nests were on United Utilities' (UU) Bowland estate where the RSPB works in close cooperation, whilst the 3 others were on private estates. That compares to 8 nests in 2020 (7 on UU, one on a private estate), 5 in 2019 (all on UU), 3 in 2018 (all on UU), and zero in both 2017 and 2016. All of the 9 nests on the United Utilities estate were successful in 2021, with 31 juveniles fledging.

Two of the private estate nests were on the same estate, and were provisioned by the same male (which had been fitted with a satellite tag by the RSPB at a nest on the UU estate in 2019). One of these nests held 4 chicks and these were removed by Natural England under its brood management scheme; we believe that the juveniles were eventually released in southern Cumbria. The remaining nest fledged 2 juveniles. The figures for the number of fledged juveniles in the table <u>excludes</u> the brood-managed birds which did not fledge from their natural nest in Bowland. The 3rd nest on a private estate in 2021 successfully fledged 5 chicks. The male at this nest (another bird that had been fitted with a satellite tag by the RSPB at a nest on the UU estate in 2019), was also provisioning a nest on the United Utilities estate, with 4 chicks fledging from this nest. That male was therefore co-responsible for fledging more than 10% of England's juveniles in 2021.

It is important to note that the United Utilities estate only makes up around one third of the Bowland Fells SPA, yet since 1990 over 80% of known Hen Harrier nests in Bowland have been on the United Utilities estate. The private estate that held the 2 nests this year is not part of the Bowland Fells SPA, so the Forest of Bowland is still in the position where only one Hen Harrier nest was located on the two thirds of the SPA that is not United Utilities land. The private estates making up that two thirds, all of which are managed principally for grouse shooting, surely have questions to answer about why so few Hen Harriers are found on their land.

A number of juvenile Hen Harriers were fitted with satellite tags in 2021. Two of these disappeared in suspicious circumstances in the winter of 2021/22 on land managed for driven grouse shooting and are the subject of police investigations.

Numbers at the roosts in Bowland in the winter of 2020/21 were similar to the last few years. The satellite-tagged birds that stayed in Bowland over winter once again revealed some hunting areas and roost sites that we were not previously aware of.

Calderdale Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Very occasional breeder, nests monitored when found.

Covid impact score: 3

Hen Harriers are without doubt a 'black hole' species in Calderdale. They have occupied a traditional winter roost on the western fringe of the study area for decades during both autumn and winter; however, the only 2 known breeding attempts failed in 2019 after the polygamous male inexplicably 'disappeared' resulting in the 2 females abandoning their nests. During 2021 a total of 91 records were received on 61 separate dates covering every month except June- the primary month for young to fledge from their nests.

At the start of the year, the main winter roost within the study area was occupied sporadically from January through to the beginning of April. The majority of observations were of a single bird, but 2 birds, including an adult male, were recorded on 2nd April.

Cheshire Raptor Study Group

Extent of coverage: Whole county

Level of monitoring: Not known to occur as a breeding species.

Covid impact score: 1

All records received were outside of the breeding season, mainly on the Dee and Mersey estuaries.

Durham Upland Bird Study Group

Extent of coverage: Whole county.

Level of monitoring: Excellent coverage; nearly all suitable habitat is monitored annually. **Covid impact score:** 2

This proved to be a landmark year for the species in the county. Young successfully fledged from 2 nests, both of which were in heather beds on managed grouse moor estates. Four and 3 young fledged respectively. The importance of these events may be gauged against the last known nesting attempt in County Durham being in 2013 with the last known successful nest in 1998. Three of the 4 parent birds had been fitted with satellite tags as fledglings in 2020. They had originated from nests elsewhere in northern England which had been subject to the Brood Management scheme. The breeding birds of 2021 included an incestuous pair of siblings. As the pairs first settled they were located and then the nests subsequently overseen by Natural England staff who secured the full cooperation of the land owners. Such engagement and support ought to bode well for the future expansion of breeding Hen Harriers in the county. A chick from each nest was fitted with a satellite tag; a female wintered north into the Lammermuir Hills in Scotland and a male headed south and over-wintered on farmland in Oxfordshire.

There were very few casual reports in the first quarter with a ringtail at a traditional roost site during mid-March and more notably, away from the known breeding sites, short-lived sky dancing was reported at 2 locations in spring. An increase in reported sightings in the final quarter included a 1cy male (satellite tagged in the Forest of Bowland) roosting briefly alongside the R. Wear near Durham city on 24th October and an adult male at RSPB Saltholme on 9th November.

As part of a coordinated watch of traditional roost sites across northern England, group members participated in evening watches on designated weekends in early October and

December. Over a total of 60 hrs of observation, at 13 locations, single ringtails were recorded at just 2 sites during the October weekend. At other times, what was probably the same 2cy male was seen at two locations near to Middleton-in-Teesdale during late November and early December. Other observers reported 2-3 birds roosting on a moor in the SW in November and 2 ringtails were seen in Teesdale on 30th December. Meanwhile it is known that 5 Natural England-tagged birds (all 2cy) used several different roosts in the county throughout the first and final quarters with max roost counts of 3 birds in each quarter.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Passage birds recorded. Not known to occur as a breeding species. **Covid impact score:** 1

In contrast to 2020, when the great majority of the 22 sightings were in the spring, this year there were only 9 records in total and all were from late July onwards, with 6 in October. Given the proximity of dates at the same site on the mosslands, 3 of these probably referred to the same ringtail. The first of the year was a male seen on the mosslands on 20th July. There were 3 sightings from the Winter Hill visible migration watch site and 2 from Ludworth Moor in the south east.

Northumbria Ringing Group

Extent of coverage: Part upland areas.

Level of monitoring: Excellent coverage – all or most sites receive annual coverage.

Covid impact score: 1

With low vole numbers and few, if any, cones on the Sitka spruce, a more mixed year of outcomes was expected in the established breeding area and so it proved to be. Occupation was again excellent with 7 nests in the main area, an increase of one from 2020, and an important but overdue range expansion to the north. The new area fledged 4 chicks from one nest.

Clutch sizes were a little lower overall in 2021: there were 3 with 5 eggs, 3 with 4 eggs and 2 with 3 eggs. Brood sizes were 4 nests with 3 young and 3 with 2 young, in addition to the 4 young in the new area. Unlike 2020 when every nest fledged at least a single chick, 2021 had some nest failures. One nest failed on chicks at c.14 days old through fox predation. More unusual failures happened at 2 other nests. The first nest had a trail camera fitted but ultimately failed when the chicks were c.18 days old. Close examination of camera footage by a Natural England field worker revealed that both the chicks were struggling to swallow food. A physical check revealed the chicks had swollen pollocks in their throats which is caused by oral trichomoniasis, typically a racing pigeon disease and was most likely contracted through the young harriers being fed finches which can be a disease carrier. A licence to medically treat the young was urgently sought and both chicks recovered well after a few days.



Courtesy Pat Martin Natural England

Unfortunately events then took a new turn with the appearance of an adult male Goshawk, which killed the female chick and proceeded to eat it in the nest even though the adult female Hen Harrier was mobbing the Goshawk, inflicting several blows to the head. The next

morning the Goshawk returned at daybreak to kill the smaller male chick and again eat it on the harrier nest. A second nest just over the hill was also predated when the 2 chicks were c.14 days old. The remains of the legs and thighs of each chick were found in the nest - the same evidence of the culprit as was found in the first failed nest.

Despite these nest failures, 2021 was a very good season with a healthy 18 chicks fledging. Thanks go to all active members of the Northumberland Hen Harrier Protection Partnership whose collective efforts have now secured multiple breeding for the 7th successive year.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Occasional breeding species, nests monitored when found. Covid impact score: 1

Once again there was no evidence witnessed of any pair formation, territorial display or nesting behaviour anywhere in the NYMs. This species continues to inhabit the blackest of black holes!

A ringtail was observed on 1st March on Westerdale Moor and the following evening probably the same bird was seen settling to roost nearby. A ringtail was recorded crossing Sleights Moor on 8th April and an adult male was watched near Hartoft on 11th April. It or another male was seen on 31st May at Great Fryup Head and a ringtail was on Glaisdale Moor on 19th June. Another ringtail was seen on Danby Moor on 21st September. In vivid contrast to the plethora of reports of Marsh Harrier accepted by the Teesmouth Bird Club Records Sub-committee, (158), only 12 reports were accepted for Hen Harrier. Records were limited to the months August to December, possibly involving at best 10 individuals but more than likely just 6. Of these reports, 8 were from Sleddale and one from Scaling Dam with just 3 from Teesmouth. A sobering comparison of the present status of these 2 species.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Reasonable coverage; at least one long term monitoring study area. **Covid impact score:** 1

An adult pair of Hen Harriers looked intent on breeding on a private estate in South Yorkshire. After informing the estate of the imminent breeding attempt the adult birds disappeared and were never seen again. A successful immature pair of Hen Harrier did breed on a nearby National Trust estate and fledged 4 young.

South Peak Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Reasonable coverage; several long-term study areas are surveyed. Covid impact score: 1

Hen Harriers bred successfully; 5 eggs were laid, 4 hatched and all 4 young fledged (2 male and 2 female). The parent birds were both immatures, a 2cy female, and a 1cy male. One of the young was satellite-tagged and the Hen Harrier Species Champion, MP for Sheffield Hallam, Olivia Blake, accompanied the group when the birds were ringed and tagged.

NERF regional summary

The table above summarises the season's results from the NERF member groups recording areas. As explained in the text this includes data obtained through the considerable efforts of RSPB and Natural England staff as well as local partnerships. In addition, a nest at RSPB

Geltsdale fledged 4 young – the first success there since 2016, and there were 2 nests in North Yorkshire where 4 young from one nest were brood-managed. In total for England in 2021 there were 31 breeding attempts, 24 of which were successful and 84 chicks fledged. Annual increases from a low of 2016 offer genuine encouragement and are shown in the chart although we are still far below the assessment of 320 pairs for the region.



The trend is certainly positive but deserves analysis. The United Utilities land in the Forest of Bowland and the Northumberland Hen Harrier Protection Partnership land, neither of which are managed as driven grouse moor, remain the major areas of success and were responsible for two-thirds of all young fledged this year. The point is enforced by the dearth of breeding records from other large areas of the Forest of Bowland SPA, which are managed for driven grouse. The breeding records for County Durham at least show that new areas on grouse moors can be occupied and nests tolerated.

Whilst tracking data from satellite-tagged birds from this year and previous years is beginning to show improved survival rates and longevity, sadly, examples of illegal persecution continue to surface. The tag borne by "Asta" a bird fledged in Northumberland in 2020 was tampered with in the spring of 2021 and the certain death of the bird has been the subject of a police investigation, as has the unexplained disappearance of brood-managed birds from the 2021 cohort and 2 young birds from Bowland. Two adult males inexplicably disappeared from prospective nesting attempts in Geltsdale early in the breeding cycle. So in this, the 4th year of the Brood Management scheme, examples of illegal persecution remain prevalent. The 2022 season will mark the final year of the trial scheme and we await with interest the formal assessment by the appointed Scientific Advisory Group of its costs & benefits and future prospects. In particular, its analysis of whether "*the perceptions and behaviour of the moorland community*" have changed will be key.

Across the spectrum, the opportunity for field observations in the early part of the season, critically when pairs might begin to establish territory, was limited by Covid restrictions. Indeed the planned coordinated watch of possible late winter roosts across the whole NERF region had to be postponed. Watches were held in late October, when in 193 hrs of observation 11 grey males and 33 ringtails were recorded, and again in early December when in 158 hrs 6 grey males and 18 ringtails were seen. The totals will include some repeat sightings of the same bird(s) on consecutive days.

Comparative data 2009-2021



White-tailed Eagle Haliaeetus albicilla



Robert Kenworthy

UK population estimate

The White-tailed Eagle population was estimated to be 113 pairs in 2015, 123 pairs in 2017 and 130 pairs in 2020. The number of breeding pairs reported to RBBP in 2020 was 103-138 (VL), and the 2016-2020 mean was 122 pairs. (Eaton, M. *et al.* 2022. *British Birds* in press). It does not yet breed within the NERF study area, although immature birds have been observed over much of the recording area, including satellite tagged birds from the Isle of Wight re-introduction programme.

Conservation status

UK :Amber (downgraded from Red in the 5th edition of BoCC 2021)European:Least concernGlobal:Least concern

National threat assessment

Whilst the UK population is increasing, thanks to Scottish re-introduction programmes in 1975, 1990 and 2007, the population remains low and breeding still confined to Scotland. A proposed re-introduction programme for Suffolk was abandoned by Natural England in 2010. An Isle of Wight re-introduction scheme headed by Roy Dennis (<u>White-tailed Eagle</u> <u>Reintroduction on the Isle of Wight - Roy Dennis Wildlife Foundation</u>) was licensed in 2019, and 6 birds were translocated from western Scotland in June of that year and released into the wild in August 2019. A further 7 birds were translocated in 2020 and 12 more in 2021. The project aims to release up to 60 birds over 5 years. Each bird is fitted with a satellite tracker to monitor its movements.

In October 2021, a proposed re-introduction to Wild Ken Hill, Norfolk, was cancelled by the land owner at the last minute, allegedly after objections from neighbouring land owners. With only 130 pairs any losses continue to have significant impact on the expansion of the species. The species is carrion eating and therefore susceptible to accidental and deliberate poisoning. Egg collectors, farmers and gamekeepers continue to target the species and it is also known to be vulnerable in the proximity of wind farms. Satellite tagging of the species is helping to provide data as to the birds' ranging habits and demise.

Group Reports

Durham Upland Bird Study Group

Extent of coverage: Upland areas only

Level of monitoring: Not known here as a breeding species.

Covid impact score: 1

The sole report was of an immature bird was seen over Hamsterley Forest on 9th April. The last few years have brought a modest but notable increase in sightings of a species once absent for almost a century.

Manchester Raptor Group

Extent of coverage: Whole County **Level of monitoring:** Not known here as a breeding species. **Covid impact score:** 1

A map of routes taken by satellite-tagged G471 (born 2020) showed it to have passed over this editor's house on 15th April (i.e. Abram, south of Wigan).

North York Moors Upland Bird (Merlin) Study Group
Extent of coverage: Upland areas only.
Level of monitoring: Not known here as a breeding species.
Covid impact score: 1
A bird showing some wing moult was observed at Westerdale on 6th June. It was being harried by 3 Red Kites and 8 Buzzards!

Peak District Raptor Monitoring Group

Extent of coverage: Upland areas only.

Level of monitoring: Not known to occur as a breeding species.

Covid impact score: 1

One of the juvenile White-tailed Eagles from the Isle of Wight reintroduction, G318, arrived in the Peak District in July 2021. During her stay she remained largely unnoticed and left the Peak District in September 2021, having spent the majority of her time on the moors in the north-east of the National Park, close to Sheffield.

NERF regional summary

With more birds being released under Roy Dennis's scheme every year, and the known tendency of immatures to wander vast distances, it is hardly surprising that the number of groups recording this unmistakeable eagle rose from one to 4 in 2021.

Red Kite Milvus milvus



Ivan Ellison

UK and Ireland breeding population estimate

Full breeding monitoring is no longer feasible - particularly in major population regions such as Wales and The Chilterns. (The Southern England breeding population alone has been estimated at well in excess of 6000 pairs). 8500+ breeding pairs is, therefore, very much an estimate of the overall UK and Ireland breeding population. Information based on figures from the UK and Ireland Red Kite Co-ordination Group and compiled by Doug Simpson MBE – Yorkshire Red Kite Co-ordinator.

The BTO Breeding Bird Survey figures for England in 2021 show that Red Kites in the UK had increased by 7% in the period 2019-2021, 101% 2010-2020 and 25276% over the 25-year period 1995 to 2020. Reintroduction programmes, and the ability of this species to exploit a vacant niche, has no doubt been behind the increase.

Conservation status

UK: Green. Population increasing.

Listed on Schedule 1 of the Wildlife and CountrysideAct 1981. Global/European and EU regional assessments. Green. Increasing. Least concern. Source: The IUCN Red List of Threatened Species (Version 2020-3.1).

The 2019 Review referred to birds from northern Europe populations increasingly overwintering on their breeding grounds. They were generally increasing and it was considered possible that this trend could eventually reverse the overall decline of the species in Europe and could, if sustained, bring about a down-listing of its population status. The publication of the 2020 *IUCN Red List of Threatened Species* showed that this prophecy had become reality, it having been downgraded from 'Near Threatened' to 'Least Concern'. Although it had apparently been undergoing a moderately rapid population decline due to poisoning from pesticides, persecution and changes in land-use amongst other threats, these declines had been more than compensated for by increases in the majority of countries within its range such that the losses over the past 3 generations had been overcome. Notwithstanding this, poisoning (both deliberate and accidental) remained the greatest threat to continued population growth and threatened the presence of the species regionally, especially in southern Iberia. It has recently been lost as a breeding species in Morocco.

National and regional threat assessment

Although the IUCN criteria for the safe reintroduction of Red Kites into the UK were considered to be met (i.e. that the threats which caused their demise some 150 years earlier were no longer an issue) some areas – notably Yorkshire and North Scotland - have experienced significant losses due to shooting and poisoning. Yorkshire figures of known casualties from the respective causes since releases began in 1999 are shown in brackets in the text below. No doubt the true figures are considerably higher.

Illegal primary poisoning remains a considerable threat to Red Kites. Whilst they may not be the intended target, they are scavengers and will consume poisoned baits placed illegally in the open countryside – a practice which has been illegal for more than 100 years. (Yorkshire - 33 cases).

Kites are also susceptible to secondary poisoning from second-generation rodenticides, introduced to control rats which had become resistant to first-generation substances such as Warfarin and Coumatetralyl. The results of toxicological tests on kites which are suspected of having been poisoned regularly show background levels of at least 3, sometimes 4, rodenticides – an indication of their widespread presence and accessibility in the countryside. This strongly suggests that the guidelines for the proper use of these poisons are not being followed and that in consequence, they are getting into the food chains of scavenging species. Residues accumulate in the victims resulting in eventual death. (Yorkshire -18 cases). Several of these deaths have coincided with areas in which pheasants have been released, the food provided for them in the form of grain having attracted large numbers of rats. Similarly, rats may congregate in and around farm buildings and controlling them through the use of rodenticide poses an obvious risk to kites and other scavenging species.

No doubt a slowly moving kite presents a very tempting target to anyone with a gun who is not concerned about their legal protection status. (Yorkshire -15 cases). The figure shown relates to known victims and does not include those birds which had suffered non-fatal injuries, having been found to be carrying lead shot from old wounds when their remains were examined following subsequent mishaps. In 2 instances the victims were apparently shot whilst sitting on their nests, X-ray of one of them revealing at least 11 pieces of lead shot in its remains.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored throughout season to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
FoRK	>100	46	0	NC	26	24	21	20	44	1.83	1.69
SPRSG	9	9	0	0	5	5	5	5	10	2.00	2.00
TOTAL	>109	55	0	0	31	29	25	25	54	1.86	1.74

Group Reports

Bowland Raptor Study Group

Extent of coverage:Upland areas only.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Occasional birds are seen over the fells, but this species has still not managed to successfully settle to breed in Bowland. There is abundant suitable habitat, so it is likely that persecution linked to game bird shooting that is preventing them from settling to breed. This is the same story every year.

Calderdale Raptor Study Group

Extent of coverage: Part upland and part lowland areas

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Red Kite qualifies as a 'Black Hole Species' on the basis that they are seen annually throughout the study area in reasonable numbers in eminently suitable habitat. However, they never settle to breed.

During 2021 the Group noted the same pattern across the year. Individual birds were recorded during 7 months of the year and a trio was recorded 21st March. In total there were 42 records from 23 separate sites between March and October. However, as in previous years, despite extensive surveying no breeding attempts were recorded. Nonetheless the Group remains optimistic that there will be a successful nest in the future.

Cheshire Raptor Study Group

Extent of coverage: Whole County

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Lots of sightings across the county, with birds coming from Wales and Shropshire, including a small number of pairs noted together. Sightings peak in winter and early spring, and these may be possibly first year birds before they settle to breed.

Friends of Red Kites, NE England

Extent of coverage: Tyne & Wear, County Durham and Northumberland.

Covid impact score: 2

Level of monitoring: Good coverage: at least 2 monitoring studies or large representative studies.

All reports from Durham Upland Bird Study Group and Northumbria Ringing Group are now presented under the FoRK report as set out below.

Red Kite is a 'Black Hole' species. The 2020 annual report summarised the situation between 2004-2018 with 15 confirmed cases of persecution (10 poisonings and 5 shootings). In 2019 2 nestlings were fitted with satellite trackers in order to better understand the movements of the population. Within the first year there was a sudden, unexplained disappearance of both sat-tagged birds on or close to moorland managed for grouse. As both tagged birds spent a significant amount of time in the North Pennines it is a reasonable assumption that other young birds also regularly visit these areas. This was confirmed in 2021 when a ringed nestling from 2021 was found dead in the same area. This bird is subject to analysis to determine the cause of death. The death of 2 further kites in 2021 has been confirmed as a result of poisoning and is being investigated. One of these came from the edge of a grouse moor. The very slow rate of population growth and range expansion in the north-east population compared with other release populations is a great cause for concern. As outlined above persecution is seen as a major contributor and much of this taking place in upland areas.

Breeding:

The number of occupied territories recorded, 46, was slightly up from last year but was probably still on the low side as monitoring was not able to commence until March 29th, when Government Covid restrictions were eased. The focus then was on finding and monitoring nests of known territorial pairs. The number of young fledged per incubating females at 1.83 was slightly higher than last year. A record minimum number of 44 chicks fledged from 20 known successful nests. Two nests, which had been refurbished, failed before laying. The female from each nest was found dead and although there were no suspicious circumstances surrounding these deaths, they were sent away for toxicology testing .The male from one of these pairs immediately picked up with another female and successfully fledged young from a very late nest. Six nests failed in total, 3 of these nests failing during the incubation stage, with at least 2 of these failing due to heavy and repeated hailstorms in early May. Human disturbance could have been a significant factor with 2 of the other failures, as people spent more time on "staycation" venturing out into the local wood for leisure. In June 11 youngsters were ringed, with 9 of these being suitable to wing-tag. Red was the 2021 colour used for the tag on the right wing.

Breakdown of breeding pairs by county:

Northumberland: A total number of 3 successful breeding pairs fledged 8 young, identical figures to last year.

County Durham and Gateshead MBC (collectively the historic vice-county of Durham): Seventeen successful nests fledged 36 chicks, up by 2 from the previous year.

Kite sighting reports away from the breeding areas in Northumberland and Durham are increasing year on year. The majority of sightings are from the west of the counties, but more and more kites are ranging into central areas of Northumberland and southern parts of Co. Durham.

Roosting Red Kites:

The National Red Kite Roost Count, which was scheduled to take place on January 10th 2021 was cancelled due to Government Covid-19 restrictions and for the same reason no roost counts were made during the late winter period. Roosts formed in the autumn of the year as usual, and numbers built o 79 birds from 2 locations by the end of December. Sixty-two birds were counted at the same 2 locations in the Derwent Valley in December 2020. Roost numbers peak in January.

Manchester Raptor Group

Extent of coverage: Whole County

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Taking into account sightings where the same bird(s) were seen at nearby sites on the same day, 26 sightings related to 25 birds, with 2 records of 2 birds together on 16th June and 16th October. On this latter date a different single bird was also seen.

All months except January, August and December recorded sightings, but there was no discernible trend in area or date indicating possible territoriality, as in 2020.

North York Moors Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Although there were reports of regular sightings of potential pairs from 3 discrete areas in the NYMs, follow-up attempts failed to produce any firm evidence of possible breeding activity. The fact that the site of one reported "pair" was within shouting distance of a keeper's house rather inclined one to the opinion that any nesting attempt most probably would not have been successful anyway! Still, as the volume of sightings of birds across the area throughout the year continues to increase, success must surely arrive soon.

South Peak Raptor Study Group

Extent of coverage: Part upland and part lowland areas

Level of monitoring: Very occasional breeding species; nests monitored when found **Covid impact score:** 1

In south Derbyshire, 6 sites were occupied by breeding pairs, 4 of which were successful and fledged 8 young in total. A further 2 sites appeared to be occupied by pairs, but breeding was not confirmed. For nests where the tree species was recorded, 3 were in Scots Pine and one in Larch. Notably in one area, 3 nests were in a triangle, separated from each other by only 800m – one was unsuccessful, early enough for the pair to move, but they could not be relocated.

In a wooded part of the gritstone Peak District, one now-regular pair fledged 2 young.

Other Data

Yorkshire

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Moderate, covering most known breeding areas.

We are grateful to the Yorkshire Red Kite Group for the following report

AREA	TERR. PAIRS	PAIRS BRED	PAIRS SUCC.	YOUNG					
West Yorkshire	22 (17)	20 (14)	18(11)	27 (21)					
North Yorkshire	30 (26)	28 (25)	28 (22)	51 (35)					
East Yorkshire	8 (7)	8 (7)	8 (7)	14 (9)					
Totals	60 (50)	56 (46)	54 (40)	92 (65)					
Average young raised per successful pair (2020 figures in brackets): 1.70 (1.63)									

Breeding: Limited monitoring was undertaken in 2021 with confirmed results shown in the table below. As elsewhere, the overall figures were very much Covid-affected.

Sightings of kites continue to be reported from widespread areas, showing that they have become relatively commonplace just over 20 years since their reintroduction to Yorkshire. Persecution issues have been comprehensively covered in previous issues of the Review. Such a threat remains, particularly during times of Covid lockdown when it is known that persecution levels, generally, increased significantly.

Roost counts are normally held each January but did not take place in Yorkshire in 2021 due to Covid restrictions. The 2020 count over 9 locations is repeated here for information. It produced a total of 457 birds, as shown above. The peak figures, as was also the case in 2019, occurred at Harewood (125) and Nunburnholme (94).

West Yorkshire	162
North Yorkshire	201
East Yorkshire	94
Total	457

East Yorkshire Red Kites.

The following information has been submitted by an independent observer.

As in previous years we continue to remain confident about the long-term success of the East Yorkshire Red Kite population. Unfortunately, for various reasons, not least the impact of the Coronavirus, monitoring to the same level as in previous years was not achieved.

On the estate which is the 'heartland' of kites in East Yorkshire and where we have no access except monitoring from the public highway, the growth of hedges and trees has now made observing impossible

This, along with Covid, meant that the annual communal roost count in January 2021 didn't take place.

Kites have continued to move off the Wolds and we are still receiving sightings from further to the east of the county. We continue to receive sightings to the north of the county and have been given confidential information of 5 new nest sites, none of which we had access/permission to monitor.

Of interest, Yorkshire's oldest breeding male Red Kite known to us at 22 years old, raised yet another young, taking the total of his offspring to 40.

NERF regional summary

Considering the success this species has enjoyed over recent decades despite the significant threats to it posed by gamekeepers and environmental contaminants it is difficult to believe that nesting attempts have not occurred in those Group study areas still awaiting their first proof of breeding. It seems much more likely that nesting – successful or otherwise – has almost certainly taken place either unsuspected in some out-of-the-way spot, or has been known of but the facts suppressed by those aware, for commendable reasons of nest security. It would be no surprise to learn, following eventual confirmation of nesting at a particular location, that in fact nesting activity had occurred there for several previous seasons.





Common Buzzard Buteo buteo



UK population estimate

For more than a decade Common Buzzard has been our most abundant raptor. The latest population estimate puts this between 61,500 and 85,000 pairs in GB in 2016 (published in 2020 – Woodward, I. *et al.* APEP 4: *British Birds* 113:69 – 104). The BTO's Breeding Bird Survey data for 2021 shows a remarkable increase of 220% between 1995 and 2020, with the spread of the range into central and eastern England particularly strong over this period. During the period 2019-20 there was a slight decline of 3% but a 25% increase 2010-20.

Conservation status

UK:GreenEurope:Not of concernGlobally:Least concern

National and regional threat assessment

The healthy growth of the population and spread of the breeding range noted above is mirrored in all of the study areas covered by NERF member groups, to the extent that most groups now focus on less abundant or more vulnerable species. Consequently monitoring of Buzzards tends to be casual, if undertaken at all. The impact of the travel restrictions arising from the Covid pandemic regulations and guidance impacted the ability of most groups to monitor the start of the breeding season properly.

This growth continues despite the annual confirmation of Buzzards being found dead, through poisoning or shot within the NERF area and more widely, nationally. The rarity of such cases ever coming to prosecution undoubtedly encourages the almost carefree' attitude of some interests towards illegal persecution. The restrictions on travel noted by several groups lead to a reduced presence of raptor workers in many areas of study and therefore a reduced level of surveillance of such actions.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home ranges occupied (pairs)	Home ranges occupied (singles)	Pairs failing early / non breeding	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
CaRSG	9	6	NC	NC	3	3	3	3	9+	3.00	3.00
ChRSG	10	10	2	0	10	10	10	10	20	2.00	2.00
DUBSG	25	25	NC	NC	8	8	8	8	15+	1.88	1.88
MRG	68	11	NC	NC	11	11	11	11	16+	1.45	1.45
NRG	127	120	NC	0	60	60	55	43	66	1.10	1.10
NYMUBSG	5	5	0	0	2	2	2	2	4	2.00	2.00
TOTAL	244	177	2	0	94	94	89	77	130	1.38*	1.38*

*averages across those groups where the outcomes were known

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Occurs as a regular breeding species but no monitoring takes place. **Covid impact score:** 1

This species now occurs more commonly than in previous decades in Bowland, particularly in the farmland areas, due to the large number of woods and copses.

Calderdale Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 3

For very understandable reasons the Government once again imposed travel restrictions throughout spring 2021 in response to the ongoing Covid pandemic. Consequently, the ability of the Study Group to monitor this species was limited at the start of the breeding season and the results reflect that.

The only displaying birds noted during the spring were at Castle Carr on our northern border and from Northowram, east of Halifax. Six pairs were monitored but only 3 through to the end of the season. Nine chicks are known to have fledged; however the group is confident that more than this fledged across the study area. Once again the large very pale female was present in the Luddenden Valley, raising 3 young. Despite the Covid pandemic, as restrictions were eased 325 sightings were recorded from across Calderdale from 76 different locations by the end of the breeding season. These sightings typically consisted of one to 7 birds, however 8 were seen on 3 occasions at 3 different locations. The largest gathering this year was 10 birds at Walshaw Dean on 16th October.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 2

The species is common and widespread across the County. Up to 10 pairs are monitored in the Wirral as part of an ongoing wing-tagging project.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 2

Early year travel restrictions arising from the Covid pandemic impacted the monitoring of this species across the whole county, but especially in the western study area. However, within the area covered by the Group the number of nesting pairs that were located and followed through the season was an increase from the previous year at 8 pairs, up from 6. Productivity within these was significantly higher at 1.87 fledged young, perhaps reflecting abundance and diversity of prey within the mixed habitat generally favoured around the fringes of the upland area. Sightings of family parties post-breeding confirmed that significantly more pairs had escaped early season detection. It remains a low priority species. The major part of the population now lies in the east of the County where several double figure gatherings were noted but 27 birds over parkland in April was exceptional. Two Buzzards found dead from illegal poisoning in Teesdale in 2020 led to 2 local properties being searched in April 2021 by a multi-agency team, and 2 men being interviewed. The results of this are awaited.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 1

549 records compared with 560 in 2020 were analysed to produce 11 confirmed nests, with 16+ young, 30 probable sites and 27 locations where breeding was possible from the dates of sightings. These figures were down from 2020 when there were 18 confirmed breeding pairs, 50 sites with probable breeding and 21 possible locations. David Steel's map of the mosslands recorded 18 territories, compared with 14 in 2020. In common with other raptors, these figures suggest that 2021 was a poor breeding year.

Notable groups in both spring and autumn were also down on 2020, with 10 at Woodford on 25th February being the highest in spring, and 21 on 15th September at the Winter Hill 'vismig' point.

Northumbria Ringing Group

Extent of coverage: Whole County.

Level of monitoring: Good coverage; at least two monitoring studies or large representative study area.

Covid impact score: 1

The 3 long-term studies in the Border Forests, South Cheviots and in South Northumberland continued in 2021, with casual monitoring undertaken from 2 other areas of the county including the North Cheviots, where pairs are recorded but nests are not directly searched for. The main long-term study area of the Border Forests reported that 2021 was a better year than expected. Many nests were expected to fail, with reports of poor vole counts within the forest, so with 27 nests fledging 37 chicks, it was considered to be a good year. In comparison, in 2020, which was a high vole year, a total of 37 nests fledged 55 chicks.

In the South Cheviots, 51 home ranges were occupied. Only 11 pairs were monitored, fledging a total of 18 young.

The 3rd long-term study area in South Northumberland held 10 pairs (from 11 home ranges checked), which went on to fledge 11 young. Four of the successful nests in 2021 were recorded on low ground. At one of these nests prey items also included several Black-headed Gulls and a Lapwing. Although several pairs in the study area have been reported to take avian prey, the prevalence of birds in the diet may have been related to the poor vole year.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

In addition to the pairs noted in the table, there were reports received of successful breeding to the north of the study area with 4 pairs near Houlsyke and single pairs at Fryup Dale, Glaisdale, Hartoft and in forestry on Egton Moor. This is not a species which receives dedicated fieldwork attention from the study group. However, it is reasonable to conclude, based on general comments from birdwatchers and ordinary members of the public, that the total of breeding pairs across the NYMs now must be very substantial. To judge from conversations with moorland keepers the ever-increasing numbers are beginning to cause them very real concerns. Clearly they are struggling to contain the (as they see it) problem.

Peak District Raptor Monitoring Group

Extent of coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

We have seen a vast improvement in the breeding success and range of Common Buzzard in much of the Group's study area. However, this success has not been replicated on the east side of the Peak District National Park.

South Peak Raptor Study Group

Extent of coverage: Whole County

Level of monitoring: Occurs as a breeding species but no monitoring takes place.

Covid impact score: 1

The Group no longer systematically monitors the species as it is widespread and is well established across the whole of the study area.

NERF regional summary

The Covid-related travel restrictions again had an impact on the study groups' ability to monitor their respective Common Buzzard populations, particularly in the early breeding season. This is reflected in the reduced numbers recorded across the board, eg. 244 home ranges were checked compared to 312 in 2020, and known pairs fledging young was 77 down from 95 the previous year.

Productivity also varied considerably between the different study group areas, with the figures for *Young fledged per laying pair* varying from 2.00 in Cheshire and North Yorks Moors and only 1.10 in Northumberland, although the former two areas' figures are derived from much smaller totals. Much more detailed monitoring would be required to prove any causal relationships for such variation, and this is very unlikely to happen given the low priority to the species by most groups.

Persecution remains an issue across the whole of the NERF area with incidents coming to light every year. Those discovered, and subsequently reported by the RSPB, undoubtedly represent a fraction of the illegal poisoning and shooting which regrettably continues to occur and will endure until, particularly, game rearing interests comply with the law.



Barn Owl Tyto alba

Jonathan Coombes

UK population estimate

The Bird Atlas 2007-11 had suggested an expansion of 67% since the 1988-91 Atlas, due to nestbox schemes, mild winters and agro-environment schemes. Woodward, I. *et al.* APEP 4: Population estimates of birds in Great Britain and the United Kingdom (*British Birds* 113: February 2020:69-104) gives a figure of 4000-14000. The work done by the many Barn Owl groups around the country to increase the number of boxes, especially at higher altitudes where they were not thought to breed in any numbers, may have resulted in a considerably higher population today.

Conservation status

UK: Green
European: 3: Concern, most not in Europe; declining
Global: Least concern
Listed on Schedule 1 of the Wildlife and Countryside Act 1981
Listed on Schedule 9 of the Wildlife and Countryside Act 1981. Barn Owls cannot be released into the wild without a licence from DEFRA.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored throughout season	Known pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	5	1	0	0	1	1	1	0	0	0	0
CaRSG	11	11	NC	NC	8	8	8	8	23	2.88	2.88
ChRSG	950	156	6	3	156	153	153	151	394	2.58	2.53
MRG	139	56	5	11	56	56	48	48	120	2.14	2.14
PDRSG	7	7	NC	NC	7	7	7	7	28	4.00	4.00
SPRSG	8	8	0	0	7	7	7	7	19	2.71	2.71
NRG	215	83	15	6	77	63	57	53	112	1.78	1.45
NYMUBSG	33	25	3	1	25	24	20	20	52	2.17	2.08
TOTAL	1368	347	29	21	337	319	301	294	748	2.34	2.22

National and regional threat assessment

The usual ever-present threats of habitat destruction, barn conversions and reductions in agrienvironmental schemes, together with deaths due to traffic collisions and other accidents in the human environment.

Rodenticide use has increased as a threat, with buildings in the countryside becoming used for dwellings more and more, and the control of rodents being undertaken by pest control operators.

These anti-coagulants thin the blood and cause internal bleeding of organs. The use of second generation rodenticides is becoming a recognised issue for Barn Owls on a national scale. Poisoned rodents are easier to catch, therefore a higher percentage are consumed.

Group reports

Bowland Raptor Study Group Extent of coverage: Part upland and part lowland areas. **Level of monitoring:** Poor **Covid impact score:** 3 Various issues resulted in the group being able to monitor only a small proportion of territories in 2021, and of those only one nest was found. That nest failed after a single chick died at around 2 weeks old.

Barn Owls had a poor year in 2020 as well, so it is hoped that the numbers improve in 2022.

Calderdale Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Good

Covid impact score: 3

Traditionally Calderdale has held a small population of Barn Owls, and overall the situation did not change during 2021.

The double impact of Covid pandemic travel restrictions, imposed by the government and enforced by the police, and a vole crash, led to a 14% drop in annual sightings and a 21.4% fall in the number of home ranges checked during the breeding season. This in turn led to a 33% reduction in the number of fledglings compared to 2020.

In total, 141 records came from an impressive 56 sites, and in all months of the year. Eight pairs were proven to breed raising a minimum of 23 young, 7 of which were ringed.

Three other pairs were reported to have nested, but the outcome of these breeding attempts remained unknown. Pairs were also observed at a further 7 sites during the nesting season but no evidence of breeding was obtained for these; consequently this data is not included in the table.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

Broods recorded gave average output, but early breeders met with failure at egg or young chick age due to the weather impacts on feeding.

This led to some pairs not breeding, even in traditional sites, which are used by the older pairs in the population with a good history of producing broods.

Given the resilience of the population in the county it is unlikely that the failure of some nesting efforts will impact the long term population in the county.

Durham Upland Bird Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 2

No particular studies are undertaken. Reports from across the county suggest a slight reduction in breeding numbers compared to the high of 2020.

Manchester Raptor Group

Extent of coverage: Part upland and part lowland areas; whole county.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

A below average year due to a cold April and a wet May. 120 chicks fledged, compared with 195 in 2020; 88 of these were ringed. Additionally 11 chicks were known to have fledged in areas of the county not covered by our group. Eight sites are known to have failed with eggs or dead young found in nestboxes. Broods were smaller, with a brood of 6 the largest. These were ringed at the end of May but had supplementary feeding all year round. Otherwise, 2

broods of 5 were the biggest from naturally provisioned sites. Several regular sites that have never been known to fail had no owls or failed to breed this year.

Northumbria Ringing Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative study area.

Covid impact score: 2

After the exciting and very successful 2020 breeding season, 2021 was a tale of doom and gloom, with a very poor year recorded throughout all areas covered; only 112 chicks fledged this year compared with 440 in 2020.

Data was received from 8 areas and only the North Cheviots had any sizeable numbers at all, with 52 chicks compared with 176 in 2020.

Comments received from the MOD Otterburn study: - "a disastrous season; only half the sites checked were occupied, very small clutches, lots of unhatched eggs".

For the first time no owls attempted to nest on Holy Island where 2 pairs normally breed. In the Derwent valley a pair failed on 3 eggs after a kestrel which was nesting close by usurped the barn owls' nest site.

In Phil Hamner's large study area, mostly in lowland areas, it was the worst year since 2006 with only 15% occupancy, half the long-term average.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Good coverage; at least two monitoring studies or large representative study area.

Covid impact score: 1

The above data result from the nest box scheme operated for the species by the South Cleveland RG to the north of the NYMs.

A poor year productivity-wise – low vole population levels were presumed to be the cause, although a dreadfully cold April may well have been a contributing factor. Four pairs failing to hatch-off clutches and one pair not producing eggs at all tend to support the above conclusions.

The rather high total of 9 recoveries received, 8 of which involved fledglings of the season, revealed the usual of causes of death for inexperienced youngsters – starvation and road traffic collisions.

The number of chicks ringed was 52 compared to 78 in 2020. Returns from the East Cleveland Barn Owl Project, which operates mainly outside the NYMNP boundaries, were on a par with those above, with average brood size, based on birds ringed, falling from 3 to 2 In total 54 birds were ringed compared to 83 in 2020.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Poor; casual monitoring of a few pairs.

Covid impact score: 1

Limited resources meant many of the nest boxes we have erected in recent years were not checked in 2021. Seven sites within the study area were checked and found to be occupied. 2 nests in West Yorkshire fledged 6 young , 5 nests in Derbyshire fledged 22 young.

South Peak Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 1

On one estate, 3 broods totalling 10 chicks were ringed, while in a 4th box a female was still on eggs on 6th August (outcome unknown). Four further broods totalling 9 chicks were ringed in other areas of the limestone Peak District.

NERF regional summary

The breeding season was impacted on by early weather conditions which delayed some pairs with a cold April and wet May, forcing owls to delay or postpone breeding attempts. Following the usual trend, the birds in lowland farmland areas seem to be more successful than the pairs at the higher altitude; this may be linked to weather and temperature factors influencing timing of breeding rather than prey and nest site availability.

Some areas seem to have suffered from vole number crashes at a local level rather than wider regionally; this occurred at higher regions

Movements of owls submitted from ringing data tended to show short movements typically under 10km.

Barn Owl Trust UK Overview 2021

(Reproduced by kind permission of Dr Mateo Ruiz)

2021 showed a promising start for Barn Owls, with overall nesting occupancy 9% higher than average. After the peaks and troughs seen over the last 5 years, we were due a much-needed peak. While 2021 nesting occupancy was above average, unfortunately the increase wasn't as high as previous peaks. Nesting occupancy varied considerably across regions, with an extraordinary increase seen in Leicestershire (188%) and over 50% increases recorded in Cheshire, Gloucestershire, Powys, Shropshire, Staffordshire and Ulster. Noticeable decreases were seen in Galloway, Dorset, Northumberland and Suffolk, all of which reported a reduction of at least 30%. Despite the overall optimistic start of the breeding season, brood size was 7% below the average of all previous years and only showed a slight improvement upon the really poor year of 2020. Galloway saw the most catastrophic decrease with a drop in average brood size of 75%. Generally speaking, nesting occupancy and brood size usually follow the same pattern within a year, (i.e. they both increase or both decrease). This leads us to question why with an overall increase in nesting occupancy did we see a decrease in average brood size? Where did it go wrong for Barn Owls - can the weather explain the conflicting results? The winter of 2020/2021 was fairly normal, with rainfall and temperatures close to average for the season. This relatively normal winter was followed by a much warmer dry spell in the 2nd part of March, possibly allowing prospecting adults to get off to a good start, with females able to get into good breeding condition. However, the dry period that began in the 2nd half of March continued on for the whole of April, producing only 50% of average rainfall and resulting in the UK's 4th driest April seen in a series from 1862. Additionally, April was unseasonably cold (1.7°C colder than average) and provided the greatest number of air frosts seen in a series dating back to 1960. The very cold and dry April likely inhibited spring grass growth, which in turn reduced field vole numbers just as Barn Owls were incubating. This was then followed by an incredibly wet May (171% of average rainfall) which would have inhibited hunting when many Barn Owls were feeding nestlings or still incubating. Both these factors likely contributed to the limited brood sizes observed. While the weather in June was largely good for Barn Owls, July and August were very unsettled with spells of heavy rain and July saw a new high temperature record of

31.3°C in County Tyrone, Northern Ireland. September, October, November and December were all relatively mild months with temperatures higher than average, especially September which was 2.1°C warmer. Time will tell how dispersing juveniles have fared in this weather, but with climate change producing more and more extreme weather events, new records, and periods of unseasonable weather, this can only provide more challenges for the birds.

Tawny Owl Strix aluco



Wilf Norman

UK population estimate

In 2020 the population was estimated at 50000 pairs (Woodward *et al* 2020, APEP 4: *British Birds* 113, February 2020). The Bird Atlas 2007-11 suggests a shallow decline of 17% 1967-2010 but the reasons for this are unknown. The BTO's Breeding Bird Survey 2021 gives a 11% decline 2019-21, a 3% decrease 2010-20 and a 19% decrease 1995 to 2018 with the caveat that nocturnal species are covered poorly by the scheme; for example the 2014 BBS found a 71% increase 2013-14!

Conservation status

Amber
Not of concern
Least concern

National and regional threat assessment

The UK breeding population of Tawny Owls has fallen by almost a third over the last two and a half decades. This has resulted in the species being moved from Green to Amber in the list of Birds of Conservation Concern published in December 2015, and this status was retained on the 2021 list (Stanbury, Andrew *et al.* 2021. The status of our bird populations: the fifth Birds of Conservation Concern. *British Birds* 114, December 2021). Threats to the well-being of these birds these days stem principally from potential harmful effects of present generation rodenticides through consumption of poisoned prey, and the usual targeted persecution by gamekeepers of individuals visiting pheasant co-ops. Goshawks are likely to become an ever more significant predator of owl fledglings in coniferous forests and the increasing population of Buzzards may also make life hazardous for young owls raised in the species' preferred deciduous woodland habitat. Tawny Owls survive testing winter conditions well, probably through their ability to switch to feathered prey when small rodents are not accessible, for example by the plundering of thrush or finch roosts. Birds also feature as prey during the nesting season, when early passerine fledglings – particularly thrush species – can be heavily predated.

NERF Data

Raptor Study Group	Home ranges checked	Home ranges occupied (pairs)	Homes ranges occupied (singles)	Pairs failing early / non breeding	Territorial pairs monitored	Known Pairs laying eggs	Known pairs hatching eggs	Known Pairs fledging young	Known number fledged	Young fledged per pair laying	Young fledged per territorial pair monitored
CaRSG	20	3	NC	0	2	2	2	2	3	1.50	1.50
ChRSG	18	15	2	0	15	14	14	13	20	1.43	1.33
MRG	78	40	NC	NC	40	40	40	40	67+	1.68	1.68
NRG	293	50	2	5	45	45	31	21	29	0.64	0.64
NYMUBSG	19	3	0	0	3	3	3	3	5	1.67	1.67
TOTAL	428	111	4	5	105	104	90	79	124	1.19	1.18

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Occurs as a regular breeding species but no monitoring takes place. This species occurs in most of Bowland where there is suitable nesting habitat, but there is no systematic monitoring of this species.

Calderdale Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid Impact Score:** 2

The Study Group has a large suite of Tawny Owl nest boxes spread throughout Calderdale only 2 of which were occupied during 2021 producing 2 and one young respectively. At a 3rd site an adult was seen carrying prey back to a nest; however, no further monitoring took place and the outcome remains unknown. These are extremely disappointing numbers; however, the local vole population crashed, which undoubtedly had a negative impact on breeding success. Despite the poor breeding success the group did receive 54 individual reports from 29 different sites across the study area throughout the year. The largest gathering of 4 birds was recorded at Hardcastle Crags on 3rd December.

One bird was found dead and half eaten at Walshaw Dean on 16th February and another individual was found dead on railway lines at Salterhebble on 4th April.

Cheshire Raptor Study Group

Extent of coverage: Whole County

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

Work with Chester University looking at prey selection commenced this year – a 3 year study.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Occurs as a regular breeding species but no monitoring takes place. There are no studies undertaken of sample populations of Tawny Owl. It remains the commonest owl in the county with a largely stable population although 2021 is likely to have seen a fall in nest productivity as a result of a fall in short-tailed vole numbers.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study.

Covid impact score: 1

89 records were received (exactly the same as in 2020), relating to 78 sites. Confirmed breeding was recorded at 40 of these totalling 67 young, but this figure must be taken as a minimum as in many cases the actual number of chicks was not known.

Exceptional was a brood of 4 in the Bolton area (one branching chick was killed by a dog); elsewhere broods where known were small, just one or 2. Four orphaned chicks were added to 3 broods; these are not included in the figures above.

Northumbria Ringing Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative study area.

Covid impact score: 1

One word sums up the owl breeding season in 2021- catastrophe! It was one of the worst years ever in Northumberland, with vole numbers having crashed over the winter. That, combined with a late cold spring meant most owls did not attempt to breed.

In the South Cheviots/MoD Otterburn it was a terrible year. Three out of 4 boxes were unoccupied, significant numbers of eggs did not hatch, and dead chicks featured at many boxes. At numerous sites adults were heard calling during daytime hours, but boxes remained unoccupied. This situation was mirrored in the Border Forest Kielder study where only 10 boxes with nests were recorded, fledging just 8 chicks (99 in 2020). In the Slaley Forest area, now in its 3rd year, which produced 15 chicks in 2020, there was just one in 2021. At Gibside, on the Tyneside/Northumberland Border, it was first time in 32 years that no chicks fledged from this study!

In summary, 45 pairs fledged just 29 chicks in 2021; 122 pairs fledged 295 chicks in 2020!

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Whole National Park area.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 2

An appalling breeding season for the species - abysmal vole numbers assumed to be the reason. The impression gained in 2020 was that it was a bumper year for these rodents so perhaps a following crash in numbers was to be expected. Several very dependable pairs failed to breed and one of the pairs that did so, nested very late in the season, the young fledging well into June. A camera on this box revealed that the chicks were fed almost entirely on small birds. The table below would suggest that productivity has improved significantly over the 5 year period ending 2021. However, the much lower total of sites checked reflects concentration on mainly reliable regularly-occupied boxes which undoubtedly biases the figures positively to a potentially significant degree.

Year	No. of	Number	%	No.	Young	Avg per succ.	Avg all
Band	sites	occupied	occ	successful	ringed	nest	nests
1977-81	202	55	27.2	29	69	.38	1.25
1982-86	174	46	26.4	34	72	2.12	1.57
1987-91	169	54	31.9	41	83	2.02	1.54
1992-96	150	33	22.0	29	51	1.76	1.55
1997-01	109	24	22.0	18	32	1.78	1.33
2002-06	128	38	29.7	28	50	1.79	1.32
2007-11	154	44	28.6	40	68	1.70	1.55
2012-16	145	33	22.9	22	39	1.77	1.18
2017-21	117	31	26.5	28	55	1.96	1.77

Tawny Owl Annual Productivity Data – North York Moors Large Nestbox Scheme (South Cleveland Ringing Group)

Peak District Raptor Monitoring Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. No monitoring of Tawny Owls took place in 2021 due to a lack of resources.

South Peak Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Occurs as a breeding species but no monitoring takes place This species is not monitored on a regular basis by SPRSG.

NERF regional summary

One only has to read the above account for Northumberland to appreciate just how important field voles are as prey items for owls. Dependency on these rodents is probably greatest in conifer forests where alternative prey, (especially in winter), is at best, scarce. The cyclical nature of annual vole populations means an inevitable pattern of boom and bust applies in regard to owl productivity. Clearly 2020 was boom season and a 2021 crash in numbers was

anticipated. It is unfortunate that Covid restrictions prevented maximum exploitation of 2020 bounty in some Group areas. However, the 2021 Manchester RG figures if anything show an improvement over those for 2020, so clearly the vole cycle in that Group's area of operation is not in sync with cycles operating in Northumberland, Durham, Calderdale and the North York Moors. The same conclusion could arguably apply to Cheshire as well. It will be interesting to see the degree to which vole numbers recover in 2022.

Little Owl Athene noctua



Tucker Dore

UK population estimate

The current estimate is 3600 pairs (summer) as at 2016 (Woodward, I. *et al.* 2020, APEP 4: *British Birds* 113:69-104, February 2020). The 2021 BBS report shows a 19% increase 2019-21, a 42% decrease 2010-20 and a 67% decrease 1995-2020, which confirms the BTO Bird Trends findings of a rapid decline, particularly in this century.

Conservation status

UK:	Not assessed (introduced)
European:	Least Concern
Global:	Least concern

National and regional threat assessment

The BBS trend for Little Owl in the UK shows very wide variation, but a downturn in recent decades suggests that a rapid decline now lies behind the observed fluctuations. The UK's Little Owl population has declined by 65% in 25 years 1988 - 2013 (BTO BirdTrends). There is as yet little direct evidence to explain the losses in the UK but continental studies suggest poor survival rates for juveniles to be a primary driver linked to changes in farming practices and habitat.<u>https://www.bto.org/understanding-birds/species-focus/little-owl.</u> The BTO include Little Owl in its *Retrapping Adults for Survival (RAS)* scheme, and this showed most recently a slight upturn in survival rates, although not significant enough to change the population trend from being downward. Concern for Little Owl conservation has been aligned to the twin threads of changing agricultural practices possibly affecting seasonal prey availability and the consumption of contaminants, particularly heavy metals and pesticides.

NERF data

RAPTOR STUDY GROUP	Home ranges checked	Home ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
CaRSG	36	12	18	0	5	5	5	5	11	2.20	2.20
ChRG	15	12	1	1	11	11	11	11	23	2.09	2.09
MRG	29	5	NC	NC	5	5	5	5	8+	1.60	1.60
NRG	5	3	0	0	3	3	2	2	3	1.00	1.00
TOTAL	05	32	10	1	24	24	23	23	45	1.88	1.88

Group Reports

Bowland Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Occurs as a regular breeding species but no monitoring takes place. **Covid impact score:** 1

It appears that this species has declined significantly in Bowland, but without systematic monitoring it is unknown how many pairs remain. A newly-found site was found to have fledged at least 2 juveniles, but previously-used sites are still unoccupied.

Calderdale Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 2

Little Owls are both common and widespread throughout Calderdale nesting in drystone walls and small jumbled rock piles; however only casual monitoring is undertaken by the Group.

In excess of 100 records were submitted from 43 sites spread throughout the study area; breeding was confirmed at 3 locations producing 3, 2 and 3 chicks respectively. Initial observations also indicated that breeding took place at 3 additional locations; however, further monitoring was prevented by the Covid travel restrictions.

There are hundreds of kilometres of dry stone walls criss-crossing the countryside and piles of jumbled rocks are scattered across the region. Consequently it is believed that many other pairs will have bred, unrecorded, in the study area.
Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

Declining in occupied territories year on year! An interesting site found this year was a rock pile behind a farm; the pair fledged 2 young.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Occurs as a regular breeding species but no monitoring takes place. **Covid impact score:** 2

There are no systematic studies undertaken for Little Owl within the county. They remain quite sparsely distributed in the east of the county with an occasional presence in western upland valleys. A general decline in the population is suggested.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs

Covid impact score: 1

The 34 records related to 29 sites, with confirmed breeding at 5 of these, similar to 2020. Three young were ringed on Carrington Moss, with at least 8 young fledging over the 5 sites. It is likely that breeding took place at all or most of the other locations, given the sedentary nature of the species – several were described as traditional sites. At one mossland farm, a trail camera captured an adult taking a dead day-old chick put out for Barn Owl chicks and feeding it to an accompanying juvenile. There was a tentative hope of recovery by this attractive owl, which was badly hit in the cold winters either side of 2010, with records coming from sites in Bury and Wigan after many years of absence.

Northumbria Ringing Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 1

The study in south-east Northumberland continues with 2 boxes occupied in 2021. One nest failed on eggs, and the other fledged 2 chicks. In another coastal area, a nest in a farm building fledged a single chick.

Data collected from the Northumberland and Tyneside Bird club reported Little Owls at 24 localities in 2020.

South Peak Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Occurs as a regular breeding species but no monitoring takes place. Covid impact score: 1

The species is not monitored on a regular basis by the group, but is a fairly common resident within the area.

NERF regional summary

The Little Owl tends to be a species recorded as a by-product of fieldwork to record other species. Their preference is for lowland, open arable habitat with old trees, mature hedgerows

or farm out-buildings. However, dry stone walls, grouse butts and rabbit holes in the uplands can often provide nest sites, or, as noted this year, coarse rubble heaps. The species can be found in the NERF recording area at lower elevations though not at any great density, although the records from Cheshire suggest any refuge should be checked if time allows. For those sample areas studied, the relatively low yield of occupied home ranges is noticeable compared to the number of traditional territories checked by members. Fledging rates remain only modest, although slightly lower than 2020, but on a limited sample size. As a small bird it is likely to be more susceptible to external factors such as availability of nest sites, food and subject to severe weather affects.

It should be noted that most groups do not concentrate specifically on the monitoring of Little Owls and any breeding success tends to develop from *ad hoc* observations that may then be followed up, (depending on other commitments), by individual field workers. The species is extremely sedentary, with many traditional sites being used every year.

Long-eared Owl Asio otus



Robert Kenworthy

UK population estimate

The latest population estimate is 1800-6000 pairs (Woodward, I. *et al.* 2020, APEP 4: *British Birds* 113:69-104. It is certainly under-recorded, because of the wide range of habitats used. Where an intensive study is carried out, numbers found are always considerably higher than thought. The Bird Atlas 2007-11 found a decline of 19% since the 1968-72 atlas. 309-377 breeding pairs (VL) were reported to RBBP in 2020 but agreed with the APEP population estimate of 1800 pairs (Eaton, M. *et al.* 2022. *British Birds* in press).

Conservation status

UK:	Green. Added to the RBBP monitoring list from 2010.
European:	Not of concern
Global:	Least concern

National and local threat assessment

The main threat to Long-eared Owl appears to be competition for habitat with Tawny Owls and predation from larger raptors. Breeding attempts are affected by prey availability and in poor vole years large numbers of adults do not breed; those that do breed produce smaller clutches.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
CaRSG	15	11	2	2	7	7	7	7	17	2.43	2.43
ChRSG	2	2	NC	NC	2	2	2	2	2+*	1	1
MRG	24	19	NC	NC	19	19	17	17	37+	1.95	1.95
NRG	35	7	1	0	7	7	2	2	2	0.29	0.29
NYMUBSG	5	0	0	0	0	0	0	0	0	0	0
PDRMG	4	3	NC	0	3	3	3	3	9	3.00	3.00
SPRSG	3	3	NC	NC	3	3	3	3	9	3.00	3.00
TOTAL	88	45	3	2	41	41	34	34	76+	1.85	1.85

*Nests known to be successful but total number of chicks unknown

Group Reports

Calderdale Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative study area.

In 2020 the Group received 141 records from an impressive 56 sites in all months of the year. Due to the continuing Covid pandemic travel restrictions during 2021 the number of observations crashed to 53 from just 15 sites. All those observations were made between the 2nd January and 11th November. Whilst the Group are confident that 7 pairs successfully raised a minimum of 17 young, 2 additional nests were located during the breeding season. However, the observers failed to record if they produced chicks and therefore these 2 pairs are not included in the table. Nonetheless, it is highly likely that they did breed successfully.

Cheshire and Wirral Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Very occasional breeding species, nests monitored when found. **Covid impact score:** 2

Two successful breeding attempts were reported in the county, but unfortunately the full details of the breeding attempts are unavailable.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 1

Long-eared Owls were reported from 18 locations, with 12 of these having confirmed breeding. At 5 of these locations there were multiple nests, making a total of 19 nests and 37+ young, (18 nests produced 35+ young in 2020).

Two of the 19 nests failed, and display was recorded at another site.

Once again invaluable work was done by a dedicated fieldworker, Bob Kenworthy and his team.

There were 6 additional records from other sites, all of which were suitable for the species breeding, or where breeding has been recorded in the past. One site in the Wigan area hosted a roost of 5 in the in the early winter, and another a roost of 7 in the late winter. The latter group consisted of 4 adults and 3 juveniles and coincided with known breeding at the site.

Northumbria Ringing Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative study.

Covid impact score: 1

In contrast to 2020 when this species seemed to occupy every plantation or scrub area, 2021 was a huge contrast. A healthy 35 home ranges were checked, but only 7 were occupied and only 2 chicks were known to have fledged.

In the Border Forest Kielder, 20 home ranges were checked, and just 3 were occupied. In the Alnwick area of the county (where Dr Mark Eaton has a study started last year) 11 home ranges were checked, 3 were occupied (22 in 2020) and no chicks fledged (29 in 2020) No broods were reported from the Northumberland coast nesting areas.

North York Moors Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Very occasional breeding species – nests monitored when found. **Covid impact score:** 1

The 2019 NYM account for this species continues to be very relevant to both subsequent seasons and thus justifies repeating. Group members when engaged on forest work make a point of checking out any old nests encountered in the hope of flushing an owl from one. As a

result, the actual number of potential sites checked is substantially greater than the 5 recorded. The fact that this practice rarely meets with success implies this species is distributed across the study area at a very low density, which is the opinion held by Group members. This species desperately needs a dedicated survey in the NYMs to provide a baseline indication of the population range and numbers, but this is unlikely to take place in view of shrinking manpower resources in the ranks of the Merlin Study Group.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

Due to other commitments monitoring key species, resources to search for Long-eared Owls were limited. A few historic breeding sites were visited, and occupation appeared to be relatively good.

Of the 4 sites visited, 3 were found to be occupied. All 3 sites were successful fledging 9 young between them.

South Peak Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

At a regular site which has previously suffered from disturbance, 3 young successfully fledged (with a 4th predated post-branching). Increased surveillance and wardening by land managers was a likely contributing factor in the success. Another local site fledged at least 2 young.

In part of Staffordshire a single pair monitored by the Group fledged 4 young.

NERF regional summary

Although Long-eared Owls are notoriously difficult to monitor, there are several studies undertaken within the NERF region. Distribution is subject to under-recording owing to the low-profile behaviour of the species, the variety of habitats used and a lack of manpower. Moorland fringe conifer plantations appear to be an important habitat for this species, one that is being reduced significantly due to forestry work being undertaken in many of the study areas.

Short-eared Owl Asio flammeus



Austin Morley

UK population estimate

Short-eared Owls show significant annual variation in their breeding numbers. The variability is linked to cycles in the abundance of their principal prey, the Short-tailed Field Vole. Combining this with the well accepted challenges in effectively surveying this particular species leads to a degree of uncertainty being attached to any population estimates. Overall, a long-term decline in the UK breeding population has been apparent (BTO Bird Atlas 2007-11) and the estimate given is within a broad range of 620-2200 pairs (Woodward, I. *et al.* APEP 4: *British Birds* 113: 69-104). Nationally, the number of breeding pairs each year reported to RBBP is always seen as an under-estimate with 'confirmed' or "total possible" breeding shown in the 2020 report at just 129-248 pairs (M) but it is agreed with APEP 4 that a figure of 620+ pairs is more likely (Eaton, M. *et al.* 2022. *British Birds* in press).

Conservation status

UK: Amber
European: 3: Concern, most not in Europe; depleted
Global: Least concern
Listed as 'Endangered' in the UK by Stanbury, Andrew *et al.* 2017 (The risk of extinction for birds in Great Britain, *British Birds* 110:502-517) with a reported 60% reduction in range.

National and regional threat assessment

Accurate assessment of local breeding populations and their outcomes are difficult to achieve without exhaustive and focused fieldwork. However several NERF member groups do provide a largely consistent monitoring effort over suitable habitat each year which allows some simple but meaningful qualitative assessments of population trends to be obtained. Nevertheless the underlying reasons for the national long term declines and local variation beyond those explained by vole cycles remain unclear. Even in good vole years breeding outcomes can be uncertain. Late winter and early spring weather conditions may play a part. Sadly, examples of illegal persecution of this emblematic upland owl do still occur in parts of

our region (see NERF Annual Reviews of 2015 and 2017), which will impact on populations locally.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	20	7	0	NC	1	1	1	1	1	1.00*	1.00*
CaRSG	8	8	2	NC	6	6	6	6	17	2.83	2.83
ChRSG	2	0	0	0	0	0	0	0	0	-	-
DUBSG	20+	3	2	NC	3	3	3	1	4	1.33*	1.33*
MRG	4	1	NC	1	1	1	1	1	2	2.00	2.00
NRG	13	8	1	NC	2	2	1	1	2	1.00	1.00
NYMUBSG	3	0	0	0	0	0	0	0	0	-	-
PDRMG	24	24	NC	NC	6	6	6	6	21	3.50	3.50
SPRSG	7	7	NC	NC	4	4	4	4	4+	1.00*	1.00*
TOTAL	101	58	5	1	23	23	22	20	51+	2.22*	2.22*

*UNDERSTATED FIGURE – assumes a minimum of 1 young from some successful nests where the precise number of young could not be determined. See respective RSG text for productivity values from any nests with an accurately known number of young

Group Reports

Bowland Raptor Study Group

Extent of coverage: Part upland areas.

Level of monitoring: Reasonable coverage: at least 2 representative study areas.

Covid impact score: 4

Seven Short-eared Owl territories were identified in 2021 on the United Utilities estate. At least one chick fledged from one of the nests, but monitoring in the critical early part of the season was constrained by Covid restrictions and further monitoring proved difficult, leaving knowledge of outcomes uncertain in most cases.

Calderdale Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Reasonable coverage; at least 2 representative study areas.

Covid impact score: 3

Due to the ongoing Covid pandemic travel restrictions the number of sightings received by the group was significantly lower than we would have expected.

In 2021 the group received 105 reports from 27 discrete upland sites in every month. Six pairs were proven to have successfully raised young; however only one chick was ringed, the others were elusive and evaded capture! Displaying and wing clapping was noted at 2 other sites and although the observers made no attempt to locate the chicks it is highly likely that these nests were also successful.

The largest gathering of birds was recorded on the Group's western border when 5 individuals were observed on 3rd April and the same number was observed at the same location on 2nd August.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: A very rare breeder, nests monitored when found

Covid impact score: 1

The bird remains essentially a scarce winter visitor and migrant with most records from the Dee Estuary. There are very occasional sightings in the breeding season on the Cheshire uplands, mostly on calcareous grassland, but there were no reports this year and there has been no recent breeding.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Good coverage, several large representative areas are studied annually. **Covid impact score:** 2

Comparison between 2020 and 2021 provides a clear example of how rapidly changes in vole cycles can affect predator numbers. As reported previously, 2020 had produced an impressive peak of at least 16 breeding pairs. Spring and summer coverage in 2021, of the very same extensive tracts of moorland, by members of the Durham Upland Bird Study Group secured just one confirmed case of successful breeding, where 4 young fledged, probable breeding at 2 sites, where the outcome couldn't be determined, and single-day reports of adults at 2 other locations. The species was considered particularly scarce in the uplands during the final quarter.

Manchester Raptor Group

Extent of coverage: Upland areas only.

Level of monitoring: Very occasional breeder, nests monitored when found.

Covid impact score: 1

A pair bred in the eastern uplands fledging 2 young. This was the first confirmed breeding record in Greater Manchester since 2008, although there had been successful breeding in a part of the West Pennine moors in Lancashire covered by this report in 2020. Records of birds in the breeding season also came from 3 moorland sites in the north and east of the county.

There was just one record in the early winter - one at Kingsway Business Park 22nd February. Late winter records were only slightly better, with singles over Urmston 22nd August, at Belmont Resr 5th October, and Irlam Moss 12th November. Two were on Little Woolden Moss 6th December.

Northumbria Ringing Group

Extent of coverage: Upland areas only.

Level of monitoring: Poor coverage; casual monitoring of pairs.

Covid impact score: 1

With the vole population known to be low in the area, the Short-eared Owl population was consequently poor in Northumberland but a few nests were found by field workers. Eight home ranges were found to be occupied but only 2 nests were confirmed with one of these failing to fledge any chicks and the other fledging 2 young. It was thought that few of the other recorded pairs had nested as birds were few and far between on the moors during the spring and summer. On the Otterburn MoD ranges a single SEO held territory where it mobbed a Red Kite aggressively.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: An occasional breeding species, nests monitored when found. Covid impact score: 1

Extremely scarce as usual with only one sighting recorded in early May at the last known successful breeding site. It is possible breeding activity was depressed by low prey availability. Tawny Owls experienced a dreadful year and Barn Owl broods, even later-season ones, were almost entirely on the small side.

Theoretically, next season should be a good one for vole numbers so a nest or two then might well be found. Whether they would be successful or not will probably depend on location and intensity of keeper activity!

Peak District Raptor Monitoring Group

Extent of coverage: Upland areas.

Level of monitoring: Reasonable coverage, at least one long term study area.

Covid impact score: 1

In marked contrast to 2020 when no breeding was confirmed in the study area, Short-eared Owls were considered to be abundant in 2021. A total of at least 24 active pairs were seen; 6 of these pairs were fully monitored and showed excellent productivity by fledging 21 young.

South Peak Raptor Study Group

Extent of coverage: Upland and part lowland areas.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 1

At least 4 pairs bred successfully in the Upper Derwent, though numbers of young fledged couldn't be established with certainty.

Three sites on the Staffordshire Moors were occupied but the outcomes are not known. No breeding pairs were located on the eastern Peak District moors this year.

NERF regional summary

The results of Short-eared Owl monitoring in 2021 again served to highlight some of the marked anomalies often associated with this species as driven by the local availability of vole prey. In our more northerly study areas the Short-tailed Field Vole appeared to have experienced a crash in its numbers by early springtime and this resulted in a severe impact on breeding numbers and success of the owls. This contrasts with these same areas having enjoyed a far greater numbers of owls breeding in 2020. Further south, in Calderdale and the Peak District especially, the owl numbers were exceptionally high in 2021 where no breeding had been seen in the previous year earlier. The comparison shows that vole cycles are not at similar stages across our region at any one time. Overall, the number of sites occupied by

pairs, and those laying eggs, increased from 2020, thanks largely to the marked success in the southern areas. Access restrictions imposed by Covid in the early spring months will have meant some breeding attempts, specially the "pairs failing to settle" index, will be under-recorded. The species remains scarce and should be classed as 'vulnerable and threatened'. An overall scarcity was reported in the final quarter.

Eurasian Eagle Owl Bubo bubo



Bill Hesketh

UK population estimate

The UK population is unknown at the present time but is still likely to be small. At least 3000 are thought to be in captivity.

Conservation status

UK: Amber
European: 3: Concern most not in Europe; depleted
Global: Least concern
Listed on Schedule 9 of the Wildlife and Countryside Act 1981, Eagle Owls cannot be
released into the wild without a licence from DEFRA. Importation of wild-caught birds has
been banned since 2007.

National and regional threat assessment

The chief threat to Eagle Owls breeding in Bowland is human disturbance. Based on figures supplied by the Independent Bird Register and numbers registered under a CITES Article 10 certificate, it was estimated in 2008 that an average of 65 captive birds escape annually – many of these are not recaptured or relocated. (Melling,Tim *et al.* 2008.The Eagle Owl in Britain. *British Birds* 101:478-490).

This species is not a priority for RSPB protection as all breeding individuals are considered to be escapees. It is difficult for the 3 fieldworkers covering the Bowland area to protect nesting pairs as long as this species is not admitted to Category A of the British List where it would need to be listed as a Schedule 1 species under the Wildlife & Countryside Act 1981. Controversy still exists as to whether, historically, Eagle Owls existed in Britain after the Ice Age and whether records in the 19th century are accurate, (Melling *op. cit.*).

In an essay on the species, Roy Dennis, the respected conservationist, considers that vagrancy from Europe was likely in the past and, following conservation measures resulting in increased populations in the near continent, are likely to arrive in the future, crossing water being no deterrent. He makes the point that although they may prey on protected species, as well as on rats and crows, we should not condemn them for that if we are true to the principles of nature conservation. (Dennis, Roy. The assassin of the night. *In* Cottongrass summer: essays of a naturalist throughout the year. 2020. pp.152-156.) Within the UK there are many areas which could support this species where persecution would not be an issue and Eagle Owls seem to be very tolerant of humans working and using the area within their territory for recreation. They are however susceptible to disturbance in the early stages of the breeding cycle and later can become very aggressive in defence of young.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	2	1	0	1	0	0	0	0	0	0.00	0.00

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 2

For the 3rd year in a row birds were heard calling early in the year at a traditional site but no evidence was found of nesting attempts having taken place. Concerns around persecution and disturbance remain.

All other groups reported nil sightings.

NERF regional summary

There were no records of breeding by Eagle Owls from any other regional study area despite suitable habitat in forests such as Kielder. However, given the secretive nature of the species

and remoteness of habitat, pairs can easily be overlooked. This could also apply to other study areas. Persecution and disturbance are the main causes of failure for this species. It is likely that some captive birds are deliberately released into the wild by owners who find them too expensive to keep.

Barbara Royle from the Independent Bird Register feels that the number of Eagle Owls living in the wild has increased slightly in the last 2 years and some of these may have been deliberately released. Reasons for this may be difficulties in obtaining day-old chicks, and the longevity of the species which in some cases may mean that the bird outlives its owner. She is aware of birds which have been at large in the UK for a number of years and appear to have adapted to life in the wild.

2.5 1.2 2 1 1.5 0.8 1 0.6 0.5 0 0.4 Pr? 2015 2019 202 2017 0.2 Ŷ, 0 2013 Ph 2017 2019 202 2 Home ranges checked Home ranges occupied-pairs Territorial pairs monitored Pairs laying Pairs hatching Pairs fledging

Comparative data 2009-2021



Common Kestrel Falco tinnunculus



Jonathan Coombes

UK population estimate

The Kestrel is one of the most widespread and abundant raptors in Britain, although it is absent from areas of south-west and central Wales and some upland areas of western Scotland. Densities are highest in central and eastern England, although the Breeding Bird Survey 2021 for England reported a 9% increase 2019-21 and a 26% reduction in the Kestrel population between 1995 and 2020. Based on material from the BTO Bird Atlas 2007 – 2011, in Britain the Kestrel has lost its position as the most widespread raptor to the Buzzard which has increased by 233% 1995 - 2019. The most recent UK population estimate of the species, reported by Woodward, I. *et al.* 2020 (APEP 4: *British Birds* 113:69-104), was 31000 pairs. Despite these long-term setbacks the Kestrel remains widespread and is perhaps the raptor species most readily identified by the general public.

Conservation Status

UK:AmberEuropean:3: Least Concern, most not in Europe; decliningGlobal:Least ConcernListed as vulnerable (Stanbury, Andrew *et al.* 2017: The risk of extinction for birds in GreatBritain, British Birds 110: 502-517.

National and regional threat assessment

As stated above, the Kestrel population is in decline nationally. The reasons for this are unclear but are likely due to multiple factors such as changes in agricultural practice reducing available habitat of prey species. A study on the causes of death in raptors by Newton *et al*, 1999 showed that the majority of Kestrels had died from collision or starvation. On a local scale, intra-guild predation by Goshawk, particularly in afforested habitats may be an issue, though would be unlikely to impact the national population significantly (Petty *et al.* 2003). In Scotland the decline in Kestrels has been significantly larger than the rest of the UK, and efforts are being made by the Scottish Raptor Monitoring scheme to enhance coverage with the aim of collating local study area trends for the species. Clearly, more research is needed to establish the links between potential factors and the decline in population of the Kestrel.

Reference: Petty, S. *et al.* The decline of Common Kestrels *Falco tinnunculus* in a forested area of northern England: the role of predation by Northern Goshawks *Accipiter gentilis*. *Ibis* vol. 145 Issue 3 pp 472-483.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
CaRSG	8	2	NC	NC	2	2	2	2	3	1.50	1.50
ChRSG	20	17	1	1	16	16	16	16	58	3.62	3.62
MRG	139	44	NC	NC	44	44	42	42	118*	2.68	2.68
NRG	83	39	19	0	25	25	23	20	56	2.24	2.24
NYMUBSG	14	6	0	0	6	6	5	5	20	3.33	3.33
SPRSG	6	3	0	0	3	3	3	3	12	4	4
TOTAL	270	111	20	1	96	96	91	88	267*	2.78	2.78*

*UNDERSTATED FIGURE – assumes a minimum of 1 young from some successful nests where the precise number of young could not be determined.

Group Reports

Calderdale Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative area.

Covid impact score: 3

The travel restrictions resulting from the Covid pandemic severely impacted the Group's ability to survey Kestrel during 2021. Although the species is widespread throughout the study area, its productivity varies widely annually. In 2019, 4 young were known to have fledged. This increased to 15 in 2020 and collapsed again to 3 in 2021.

The causes of these fluctuations are no doubt complex and varied. Covid travel restrictions were obviously a restriction, as evidenced by the fact that the group only recorded 279 sightings, over 100 less than the previous year. There were no reports of birds displaying in the spring and perhaps this can be explained by a lack of prey, on the basis that the Group also noted falls in productivity of other species dependent on small mammals. Many of the sightings were recorded in late summer when 10 were at Walshaw Dean on the western fringe of the study area on 2nd August and 16th October.

Cheshire and Wirral Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage, at least one long-term monitoring study. Covid impact score: 1

As in previous years the majority of pairs were found within Barn Owl nest boxes.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only

Level of monitoring: Occurs as a regular breeding species but no active monitoring of a sample is undertaken by the group.

Covid impact score: 1

The species is not studied by members of DUBSG. Kestrels are, however, always extensively reported into the Durham Bird Club database; these records continue to show a widespread presence throughout the year with a catholic choice of habitat types between the coast and the high Pennines. Kestrels remain common in the county despite an overall national decline identified through Breeding Bird Surveys. Some pairs, which went on to successfully fledge young, appeared to be established in their home range as early as late January but April saw the peak of reports of pairs on territory. Fledged young were first recorded in the 2nd half of June with family parties seen more widely throughout July. The majority of reports were of 2-3 young. A single bird flew in off the sea at Whitburn Observatory on 13th September.

Manchester Raptor Group

Extent of coverage: Whole County

Level of monitoring: Reasonable coverage; at least one long term study.

Covid impact score: 1

381 records came from 139 sites, with confirmed breeding at 44 of these, which had 118+ fledged young. However, the true number of young is likely to be well in excess of this as in many cases pairs bred in recesses or cavities in buildings where there was only room for one young to appear at the entrance. Breeding was probable at 3 further sites, where the number of records in the breeding season, and/or of multiples in summer, indicated adults with fledged young. A minimum of 3+ young was associated with these records. An assessment of other records identified 20 further sites where breeding was possible.

Two pairs failed at egg stage, and another with 5 chicks too small to ring had only one left when re-visited – Magpies were thought to be a possible predator.

Northumbria Ringing Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative study area.

Covid impact score: 2

Although no nests were searched for in the North Cheviots area in the South Cheviots study, based on this year's observations across a large representative study area, encouragingly it would appear the decline in breeding pairs may have been halted, temporarily at least. Adult birds (many recorded here as singles) are now being seen hunting in and around historic sites. Although monitoring was not comprehensive, many historic nestbox sites remaining unoccupied, yet an encouraging number of fledged young were observed, probably from tree nests. This relative success was particularly interesting as breeding Barn and Tawny Owls suffered badly from a food shortage. Lowland pairs throughout the study area still appear to fare better than those in the uplands, possibly with less pressure from breeding Buzzards.

Once again a nestbox pair were successful in fledging young from a barn also occupied by breeding Barn Owls.

To further illustrate the comparative lowland 'success' at 5 sites on the Northumberland coast, 2 pairs occupied Barn Owl boxes, both successfully fledging young. Three other nests fledged 4,4 and 3 young respectively. In another lowland area 2 more pairs were noted but no nests were found or family parties recorded. Another pair failed on 3 eggs when the nest site was usurped by Barn Owls. They relocated 100m away and laid 3 eggs but unfortunately the pulli were all found dead in the nest.

In the Border Forest Kielder, although 3 pairs were successful, fledging 11 chicks, including a brood fledging on the edge of Kielder Water at the main vistor centre, 3 other pairs failed at least 2 of which were due to Goshawk predatation. At the first nest an adult was taken, at the 2nd the brood was predated when just about flying and at the 3rd, the nest was only 4 trees away from a nesting Osprey and although the reason it failed is unknown a 1st year male Goshawk was living in a block of trees only 500m away!

In Slaley Forest, at least 2 pairs were present until late May. Food carrying was noted at one site, although fledged young were never seen. In Dipton, 3 pairs were recorded in the area, with at least 2 pairs fledging young.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 3

The number of pairs nesting this season was the same as in 2020 but 2 new successful sites substituted for 2 regular boxes not occupied. Productivity not surprisingly was down on last season but at least this species fared a lot better than Tawny Owl. One nest failed at the egg stage. Perhaps for a later-nesting species, vole numbers were able to improve over the early spring situation enough to provide sufficient prey for the successful pairs.

As far as the wider national park picture is concerned the population is considered to be to be stable. Certainly the data for the 5 year band 2017/21 in the table below support that conclusion and suggest a significant improvement in the species' fortunes over previous year bands.

						Av. per	
	No. of	No.	%	No.	Young	successful	Average
Year Band	sites	occupied	occupancy	succeeded	ringed	nest	all nests
1977-81	202	10	4.95	8	32	4.00	3.20
1982-86	174	12	6.91	11	53	4.82	4.42
1987-91	169	22	13.0	21	90	4.28	4.09
1992-96	150	20	13.3	19	83	4.37	4.15
1997-2001	109	17	15.6	16	68	4.25	4.00
2002-06	128	19	14.8	15	62	4.13	3.26
2007-11	127	21	16.5	19	84	4.42	4.00
2012-16	120	18	15.0	12	49	4.08	2.72
2017-21	105	28	26.7	27	112	4.15	4.00

Kestrel Annual Productivity Data – North York Moors Large Nestbox Scheme

South Peak Raptor Study Group

Extent of coverage: Part upland and part lowland areas. Level of monitoring: Poor coverage; casual monitoring of a few pairs. Covid impact score: 1 The species is not monitored in a widespread way by SPRSG; however, 4 known 2020 territories on rock-climbing crags in the Eastern Moors area were checked. Only one of these was occupied, though this became 2, as 2 pairs bred successfully at this location,

approximately 50m apart. A 6th territory on another rock-climbing crag was monitored and successfully fledged young.

NERF regional summary

Reports from groups were mixed, with Covid-19 affecting some more than others in respect of monitoring. Overall, the minimum number of chicks fledged per pair was very similar to 2019 at 3.06 (3.09 in 2019). Given the concerns over this species' long-term decline, there is scope for prioritising studies into the reasons for this.

Merlin Falco columbarius



David Raw

UK population estimate

The UK population estimate from the last national survey of this species in 2008, (Ewing, S.R. *et al.* 2011. Breeding status of the Merlin in the UK in 2008. *Bird Study* 58:379-389), was 1162 pairs. This represented a 13% decrease overall from the previous survey carried out over 1993/94 with the decrease for England alone being 25%.

Woodward *et al.* 2020. APEP 4: *British Birds* 113, February 2020 estimated the population to be 1150 (890-1450) pairs, based on Ewing *et al.*

The 2020 RBBP report agreed with Ewing *et al.* that a figure of 1160 pairs was accurate as a low reporting rate of only 253-326 pairs was not representative (M) (Eaton, M. *et al.* 2022. *British Birds* in press).

Conservation status

UK: Red

The 5th review of *Birds of Conservation Concern* published in December 2021 retained this species on the UK Red List (returned there in 2015; the species was moved from the Red to Amber category following the 2nd Review in 2009) based on evidence from various monitoring schemes that indicate continuing worrying declines in breeding populations. European: Threatened.

Global: Least concern

Listed on Schedule 1 of the Wildlife and Countryside Act 1981.

National and regional threat assessment

Persecution of this species in all the usual ways by grouse moor gamekeepers is generally a thing of the past, most are on the whole happy to tolerate nesting pairs on their moors as they pose little threat to grouse stocks. Clutch and brood losses to foxes, mustelids, other larger raptors and humans do occur but have no significant impact on population levels. Currently absorption of toxic contaminates in the environment via prey consumption is potentially the most serious threat to the species' welfare and CEH constantly monitors levels through egg and corpse analyses.

Reduced prey availability during the breeding season is an increasing problem in many upland areas and in some is certainly causing pairs severe difficulties provisioning broods. An increasing man-made problem for the birds is that of excessive burning-out of old heather stands on some of the intensive commercial grouse moors, making it difficult for pairs to find suitable nest beds.

If predictions from scientific circles that extreme weather events are likely to become the norm in future prove correct, the probability of wildfires occurring with increasing frequency on tinder-dry moors is cause for real concern for moorland nesting species as is the likelihood of prolonged and excessive rainfall during the crucial brood-rearing phase of the Merlin nesting cycle.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home ranges occupied (pairs)	Home ranges occupied (singles)	Pairs failing early / non breeding	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	25	5	0	1	4	4	4	4	10	2.25	2.25
CaRSG	6	6	0	0	4	4	4	4	12	3.00	3.00
DUBSG	92	41	1	1	40	40	36	33	115	2.90	2.90
NRG	75	27	4	1	25	23	19	18	62	2.70	2.48
NYMUBSG	31	14	0	0	14	14	14	12	33	2.36	2.36
PDRSMG	34	13	3	1	12	12	11	9	32	2.67	2.67
SPRSG	4	4	0	0	3	3	3	3	13	4.33	4.33
TOTAL	267	110	8	4	102	100	9 1	83	277	2.77	2.72

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 2

2021 was yet another poor year for Merlin in Bowland, with fewer pairs present at the start of the season, and fewer pairs fledging chicks than in previous years.

Densities on the areas of Bowland that are intensively managed for grouse shooting remain much lower than in the past. It is likely that the Merlin population in Bowland is well below the level for which it was designated a Special Protection Area.

The population in Bowland is very much on a downward trajectory and is of real concern. It is not clear why Merlins are declining in Bowland; nesting habitat loss, less prey during the breeding season, inclement weather in mid to late June, and issues away from the breeding grounds are all possible explanations.

Calderdale Raptor Study Group

Extent of coverage : Upland areas only.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 3

The Government-imposed travel restrictions as a result of the Covid pandemic, continued to impact the Group's ability to survey this species. Nonetheless, as the restrictions were eased throughout the year 43 records were received from 12 discrete upland locations.

Pairs began returning to the breeding grounds by 10th February, which is rather earlier than normal and 6 sites were occupied by 6th May. Unfortunately, only 4 pairs were monitored throughout the season and are known to have fledged a minimum of 12 young, 10 of which were ringed. Interestingly, in one of the ringed broods all of the chicks were males.

The young began to disperse in late July and by early winter there was only a single sighting during November and a further record from December.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 1

Most records of Merlin occur around the estuaries with only a handful of inland records. As per 2020, birds were recorded hunting co-operatively at Danebower from Cheshire into Derbyshire!

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 1

The normal extensive coverage of the majority of traditional sites was achieved. The number of pairs laying eggs was marginally down on the recent average as was the number of nests that were successful. Mammal or avian predation of eggs or young was suspected in 4 cases and there was one infertile clutch. Adult birds will linger in the uplands throughout the year and December saw reports of single birds from 3 moorland locations.

Along the coast, Durham Bird Club records included a bird at Whitburn on 18th May which may well have been on passage to northern Europe. The expected autumn dispersal of young

birds of the year began with an isolated record at Teesmouth on 21st July, records increasing here and at Whitburn from the 1st week of August onwards until late September.

Manchester Raptor Group

Extent of coverage: Upland areas only.

Level of monitoring: Very occasional breeding species - nests monitored when found. Covid impact score: 1

Ten early winter records came from Chat Moss and its constituent mosslands, Elton and Belmont Resrs, Ludworth Moor, Pennington Flash and Higher Swineshaw in the period 12th January to 30th March. There was no proven breeding, but records from Smithills Moor and Saddleworth Moor, both 31st July, were suggestive. Thirty sightings, all of singles, were reported in the late winter period 5th August to 21st December and 18 of these were from the mosslands. The remainder came from regular areas: Smithills Moor, Ludworth Moor, Holcombe Moor, Swineshaw, Cutacre CP and Pennington Flash. Illness prevented the usual checking of moorland areas in Greater Manchester by the PDRMG.

Northumbria Ringing Group

Extent of coverage: Part of upland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies.

Covid impact score: 2

As usual NRG members covered all the territories north of the Tyne. Covid had a significant impact on early season monitoring in the North Cheviots study. However, 7 home ranges in the area were occupied with 6 pairs known to have fledged a healthy 24 young, making it the most productive area in the county.

Meanwhile it was again a poor year in the South Cheviots. Both site occupation by breeding pairs and productivity remained low. Notably however, one pair fledged 5 young from a ground nest on a re-wilding moor, with another fledging young from a ground nest less than 500m from one of 12 wind turbines. Another pair fledged 2 young from a nest in a solitary tree on a moor now bereft of suitable heather due to years of burning and over-grazing. After the exciting 2020 breeding season in the Border Forest Kielder, where the area fledged 16 chicks, the most in many years, 2021 came as a real shock and was the worst year ever! No chicks fledged from the same number of occupied home ranges as in 2020. One site held a single male only, and at another the female was thought to have been predated whilst incubating eggs. The other 3 occupied sites all failed for reasons unknown.

On the south-east Northumberland moors there was a promising start to the season with 3 pairs recorded and reports of a single bird from a keeper at another site, but these resulted in only 2 pairs laying eggs. A brood of 3 at one of these sites was predated when the young were 12-14 days, probably by a mustelid, which also predated a Ruddy Shelduck nest close by. At the 2nd site, 3 chicks fledged from a clutch of 5 eggs laid within 20 metres of a frequently used public footpath. Unfortunately 2 of the young were predated by a Common Buzzard a few days after fledging.

Contract fieldworker David Scott again covered the 4 grouse moor estates in south-west Northumberland and although fledging was down on 2020, 8 nests were recorded as fledging 24 chicks (37 in 2020).

So in summary, across Northumberland productivity was well down. Sixty-two young fledged (84 in 2020) with only 2.7 young fledged per pair laying (3.36 in 2020) from one additional occupied home range.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 2

On the face of it the data for 2021 would seem to indicate a welcome significant improvement in regard to numbers of pairs and performance over recent seasons. The situation would have been even better had one brood of 4 not died from no obvious cause, and another of 3 not been stolen; (see regional summary for details). However, 2020 monitoring was severely impacted by Covid restrictions and a fairer comparison would be with 2019 figures. Nonetheless, a doubling of nesting pairs over the 7 for 2020 and 4 more than in 2019 is still encouraging and as several sites were not checked until late in the nesting cycle, again due to Covid restrictions, this season's figures could potentially have been improved further. Additionally, minimum brood sizes were recorded at several sites based only on fledglings seen and heard so it is very likely that the figure of fledged young in the above table is appreciably understated. It is hoped that this possible evidence of recovery will continue in 2022.

Peak District Raptor Monitoring Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 2

The Merlin is a species of great concern to the group. 2021 saw an apparent continuation of its slow decline with fewer occupied sites and a lower success rate as a result of losses at the small young stage. One nest in Cheshire fledged 3 young; 4 nests in Derbyshire fledged 14 young (3 nests failed, one at the egg stage, and 2 at the small-young stage); 3 nests in South Yorkshire fledged 11 young and one nest in West Yorkshire fledged 4 young.

South Peak Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

A single pair on the eastern moors fledged 4 young, the 4th successful year in succession for this site. All young were ringed. In the Upper Derwent 3 pairs were recorded with 2 active nests found which fledged a total of 19 chicks – all were ringed. No pairs were confirmed as breeding on the Staffordshire moors for the 4th year in a row.

NERF regional summary

Most groups as usual appear to have experienced either a poor or, at best, moderate year of success. Covid restrictions clearly had a negative effect on fieldwork and shoulder some of the blame. Durham as usual had a reasonable season, Northumberland a poor one. North York Moors returns give some slight cause for optimism but Bowland and both Peak District groups continue to suffer worrying declines.

A very concerning situation arose in the North York Moors early season. On at least 4 moorland estates over several weeks, keepers challenged a group of 4 men carrying 6 foot poles walking through deep heather beds line abreast. They claimed to be doing survey work for the BTO which obviously did not fool anyone. One keeper recorded video footage of the group and this along with the number and model of their car were given to the local constabulary who did absolutely nothing about it. The men were clearly after eggs-presumed Merlin clutches. They claimed to know of 2 local nests one of which was genuine and unfortunately very close to a moorland road. The brood at this nest had disappeared by the day the ringing team arrived. There was no obvious evidence of predation (which there invariably is in such cases), and the conclusion was the brood had been taken, the pole-

wielding group being the obvious suspects. Belatedly a rather pedestrian and less than impressive police investigation was launched which resulted eventually in Teesside addresses being searched and although no trace was ever found of the Merlin chicks, a young caged Sparrowhawk was recovered. Had police response to this incident been more instant and vigorous there was every chance a prosecution could have arisen from it. That it wasn't, is very disappointing. Possibly one positive aspect of this situation is the fact that these men quickly attracted unwanted attention and challenge from keepers and eventually the police. Hopefully, they may sensibly have decided that the hassle they experienced this season will make any future similar efforts not worthwhile and unlikely to succeed. Nonetheless, keepers, National Park rangers and fieldworkers of all groups everywhere in the northern uplands should be alert to this potentially serious future problem and be on their guard from now on.

Comparative data 2009-2021



Hobby Falco subbuteo



Andy Butler

UK population estimate

In 2020 the UK population was estimated to be 2050 pairs. (Woodward, I. et al. 2020. APEP 4: British Birds 113:69-104). The BTO's BBS Report for 2021 shows a 1% decrease for England 2019-2021, a 21% decrease 2010-2020, and a 12% decrease from 1995-2020. Clements (2001) estimated the UK population to be in the region of 2200 breeding pairs. However, following the large-scale expansion in range from southern England to the north, west and east, and the species being widespread south of a line from the Humber to the Mersey, (with the exception of west Wales and Cornwall), and bearing in mind there is some evidence of breeding as far north as the Scottish highlands, despite some recent decreases, the current figure is probably considerably higher. Further research, based on a combined 60 years plus of fieldwork in 3 counties, (Kent, Hertfordshire and Derbyshire), and also evidence from many other counties, suggest that the current UK Hobby population may be best expressed as a broad estimate of around 5000 territorial pairs, but it is recognised that more data on breeding density is required from marginal areas for that figure to be widely accepted. (Clements, R. et al. 2016: The Hobby in Britain-A revised population estimate. British Birds 109, June 2016). RBBP gives a figure of 261-699 breeding pairs (VL) in the 2020 report, but based on a 2015-2019 a mean figure of 692 pairs is more representative.(Eaton, M. et al. 2022. British Birds in press).

Conservation status

UK:GreenEuropean:Not of concernGlobal:Least concernListed on Schedule 1 of the Wildlife and Countryside Act 1981

National and regional threat assessment

Formerly rare, and confined to southern heathland areas, Hobbies are now becoming widespread in farmland in lowland England, and in a few upland areas, especially moorland edges with scattered trees. Hobbies are secretive and breed later than most other species, and both these factors can lead to under recording. The easiest way to locate breeding pairs is to check for fledging success from mid-August, when the young are most vociferous and can be heard from a considerable distance, and this has proved a useful method of finding new pairs. When checking known breeding sites, returning birds can sometimes be seen perched on conspicuous dead trees in the area.

Fieldworkers studying this species should be reminded that a Schedule 1 Licence is required if nests are to be visited or if any other form of observation required for monitoring might cause disturbance of the nesting pairs.

There are no specific threats associated with this species at the present time. However, although the population has increased significantly in recent years it still remains relatively low, and fieldworkers should be mindful of the continuing threat posed by egg collectors. The number of pairs monitored and breeding was similar to 2020, but both the number of young per pair laying, and the number of young fledged per territorial pair were marginally down on 2020.

NERF data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
MRG	7	1	NC	NC	1	1	1	1	1	1.00	1.00
PDRMG	26	23	NC	NC	21	21	19	18	40	1.90	1.90
SPRSG	30	29	0	1	29	26	26	27	40	1.54	1.38
TOTAL	63	53	0	1	51	48	48	46	81	1.69	1.59

Group Reports

Bowland Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Occurs as a breeding species, but no monitoring takes place. **Covid impact score:** 1

As in previous years, several individuals were seen hawking insects over the fells from mid-June until mid-August, but it is thought that nests are confined to the farmland and we have been unable to locate breeding areas mainly due to the extensive habitat and access issues.

Calderdale Raptor Study Group

Extent of coverage: Part of upland areas.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 2

The Hobby has never been known to breed within the study area; however they are recorded in Calderdale every year in late summer.

Although this annual pattern was repeated in 2021 the travel restrictions imposed by the Government in response to the Covid pandemic severely impacted the Group's ability to undertake a thorough survey. Whether or not these circumstances affected the number of reported sightings is difficult to assess. The summer visiting population fluctuates annually; the 5 year data reveals just how variable the sightings are :-

2017-7 reports.

2018- 2 reports.

2019-14 reports.

2020- 18 reports.

2021-7 reports.

Whether or not these variations are caused by fewer birds hawking moths on the heather moors in late summer, a reduction of observer effort or the impact of Covid is unknown. It could be a combination of all 3. Observer effort has, by and large, remained stable over this 5 year period, which would indicate that something is at play. It could be that in 2017, 2018 and 2021 fewer birds were present; if that is correct it may have been weather related, however in reality we do not have the data to unpick this conundrum.

The first of the 2021 birds was noted flying south over the Group's nature reserve at Ringstone Edge on 7th July. Other reports came on 13th July, 24th July and 18th August. All these records came from the outskirts of Halifax, far from the uplands where they are usually observed in late-summer. During late-August a single bird was observed on heather moorland at Withens Clough on 27th. The final sighting was made on 9th September when a bird was seen to kill a Swallow.

Cheshire Raptor Study Group

Extent of coverage: Whole County,

Level of monitoring: Poor coverage, casual monitoring of a few pairs.

Covid impact score:2

Ad hoc monitoring only, but sightings from June to September suggest 6 confirmed breeding sites, 5 probable and 10 possible sites. The Meres and Mosses attract numbers on migration, especially in autumn.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Occurs as a regular breeding species, but no monitoring takes place. **Covid impact score:** 1

The first and only sighting of the year in the uplands came from an area of Weardale on 11th May; intriguingly the location was very close to where one was reported on 15th May 2020. Records across the county as a whole, as submitted to the Durham Bird Club, were fewer than in recent years with just 12 reports of single birds seen at 7 locations. There was no evidence of breeding, although singles were seen repeatedly at one reservoir in the east over a

3-week period in August. Whilst undetected breeding may well be occurring very rarely, it seems clear that the expected colonisation that seemed heralded by the first breeding records for the county between 2009-2011 has yet to materialise.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study.

Covid impact score: 1

Although no nests were found this year, 73 records from the mosslands, 59 of which came from Little Woolden Moss and included up to 4 birds in June, strongly suggested that at least one pair bred locally. On 6th June, a pair chased off a first-summer (2cy) bird which was present throughout the season and was seen with an adult in July. Studies suggest as few as 3 to 6% of first summer (2cy) birds will breed, but may act as "helpers" at nests of established pairs (Sale and Messenger 2021). There were sightings of a juvenile on 4 dates in September, the last date being the 16th when it was seen with the immature.

A Hobby territory may extend up to 6km from the nest, (*op.cit*), so the whole of the mosslands may be considered as one territory. Looking at the groupings of the remaining 58 sightings in 2021, it is likely that further territories could be assigned to the Pennington Flash/Bickershaw CP/ Abram Flashes area, Smithills Moor area and Elton Reservoir, with possible territories at Billinge, the Mersey Valley and north Rochdale.

Reference: Sale, R, and Messenger, A. 2021. The Eurasian Hobby, Snowfinch Publishing.

Northumbria Ringing Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Not known to occur here as a breeding species.

Covid impact score: 2

Disappointingly, after an increase in sightings of birds hunting the open heather moors for moths in the previous years, only a single first-summer (2cy) bird was seen in July in the South Cheviots study (cf. 4 in 2020). In another area an adult was seen mobbing a male Honey-buzzard on 27th August and one was seen hunting on 30th August, probably the same bird. There was no evidence of a pair.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Very occasional breeding species: nests monitored when found. **Covid impact score:** 3

Only a single report received for this species this year. This tends to support the strengthening feeling among local raptor workers that this species, never numerous, is, in fact decreasing in the North York Moors. However, it surely must at least still be thicker on the ground than one lone record suggests.

Some support for the belief Hobbies are occurring with less frequency in this part of the country is also provided by the Teesmouth Bird Club records for the species; only 6 individuals were reported for Cleveland in 2021, and just one from the Tees estuary.

Peak District Raptor Monitoring Group

Extent of coverage: Whole County.

Level of monitoring: Good coverage, at least two monitoring studies or large representative study areas.

Covid impact score: 1

Hobbies are studied in several counties by PDRMG.

In Yorkshire, 2021 was the most successful year in terms of occupied sites and fledged young.

Two young fledged from one nest in Cheshire; (2 active nests located, one nest failed at egg stage).

Six young fledged from 3 nests in North Yorkshire.

18 young fledged from 9 nests in South Yorkshire; one nest failed at egg stage.

14 young fledged from 7 nests in West Yorkshire; one nest failed at small young stage.

South Peak Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Excellent coverage; at least two monitoring studies or large representative study area.

Covid impact score: 1

In south Derbyshire, 23 sites were occupied, with 20 pairs successfully fledging 34 young, 17 of which were ringed. At 2 of the failed sites there was a disruptive extra male, and at the 3rd, the downy young were predated. In this area, the number of young fledged per pair was the lowest since 2019 and for only the 2nd time below 1.5. In north-east Derbyshire, 6 pairs bred successfully, although the number of young is not known. These are recorded as a minimum of one young per pair. A further pair was present in spring but breeding was not proven.

NERF regional summary

A considerable amount of work is undertaken by NERF Group members, particularly in the Peak District and South Peak Raptor Study Group areas. Hobbies were observed across the region and known to have bred successfully in 3 study areas, and are no doubt considerably overlooked in some other RSG areas.





Comparative data 2009-2021



Peregrine Falcon Falco peregrinus



John Dermott

UK population estimate

The BTO conducted the 6th national survey in 2014 and this gave a figure of 1769 pairs in the UK, Isle of Man and the Channel Islands (Wilson, M.W. *et al.* 2018. The breeding population of Peregrine Falcon *Falco peregrinus* in the United Kingdom, Isle of Man and Channel Islands in 2014. (*Bird Study* 65:1-19). This showed a 22% increase on the previous survey in 2002. The 2021 BBS figures for England showed an decrease of 11% in 2019-21, a decline of 18% 2010-20 and a 22% increase 1995-2020. RBBP, in its 2020 report, gives a figure of 770-1092 pairs, (M) but accepts that a figure of 1701 pairs , based on the 2014 survey, is more likely to be accurate. (Eaton, M. *et al.* 2022. *British Birds* in press).

Conservation status

UK:GreenEuropean:Not of concernGlobal:Least concernListed on Schedule 1 of the Wildlife and Countryside Act 1981.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Minimum number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	20	5	0	0	5	5	4	4	10	2.00	2.00
CaRSG	8	2	0	0	1	1	1	1	4	4.00	4.00
ChRSG	10	10	2	0	10	9	9	9	19	2.10	2.10
DUBSG	15	8	2	2	6	3	3	3	8	2.70	2.70
MRG	20	15	0	1	14	14	11	9	17	1.21	1.21
NRG	32	12	4	1	12	10	8	6	10	1.00	0.83
NYMUBSG	4	1	0	0	1	1	1	0	0	0	0
PDRMG	21	7	NC	1	4	4	4	4	12	3.00	3.00
SPRSG	37	32	2	0	27	21	18	17	40	1.90	1.48
YDNP	13	5	0	0	5	4	4	4	12	3	3
TOTAL	180	97	10	5	85	72	63	57	132	1.83	1.55

National and regional threat assessment

The greatest threat to this species was undoubtedly the use of DDT in the 1950s. When this chemical was banned that particular threat was removed. Regrettably this is not the case with persecution, which is now the most serious threat faced by Peregrines. They are targeted by 4 groups: egg collectors; gamekeepers; those taking eggs on the point of hatch or chicks, sometimes to be smuggled overseas, and pigeon fanciers. Over the past 2 years this last threat has been increasing at a significant rate. Although research shows that racing pigeon losses to Peregrines are extremely low, in some parts of the country, particularly at sites close to the urban fringe, it is apparent that pigeon fanciers are responsible for persecuting Peregrines.

The continuing increase in pairs nesting on high buildings in urban conurbations, and their good success rate, counter-balances losses on the moors. However, there can also be problems inherent in these situations. These include urgent roof repairs, window cleaning by specialist contractors, air conditioning malfunctions, and disturbance from fireworks, drones and other human activities at ground level. Health and Safety legislation and the need to employ a qualified steeplejack to check and renovate nest trays, which can easily develop drainage problems, are other considerations –all often require tact and diplomacy to overcome problems with managers unfamiliar with raptors and the law.

The threats faced by Peregrines on some grouse moors, in some NERF areas, continue unabated and it is clear that the large number of breeding attempt failures can only be attributed to human interference. Raptor workers must remain vigilant in the face of these ongoing problems if Peregrines are to go unmolested across the whole of their natural range.

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 3

As in 2020 there were 4 confirmed successful nests in Bowland in 2021. The site on a private estate that had a successful nest in 2020 was successful again in 2021.

However, many historically productive home ranges on estates managed principally for driven grouse shooting remain unoccupied, and it is thought that persecution linked to intensive driven grouse shooting remains the primary reason for the species' precarious status in Bowland.

Calderdale Raptor Study Group

Extent of coverage: Excellent coverage; all or most sites receive annual coverage.

Level of monitoring: Part upland and part lowland areas.

Covid impact score: 2

Historically Calderdale had 6 pairs of Peregrines, 5 of which occupied upland sites. The 6th site was on a 60m high cliff overlooking the valley bottom. All of these sites appear to have been abandoned. Two urban sites were occupied; one in Halifax town centre, and a 2nd in Brighouse. This was a repeat of the activity that was monitored during 2020.

In 2020 the male at the Brighouse site was shot and killed in the town centre. Whilst the female remained in the town she did not find a new mate. In 2021, 2 birds were present; however the female was a juvenile and they did not attempt to breed.

During 2021 the Halifax pair raised 4 young; unfortunately one of the chicks took a flight that left it on the ground below the building. It was subsequently picked up and taken into care by the RSPCA. Despite repeated requests the Group was not informed of the outcome.

Overall the Group received 150 individual reports from 31 discrete locations throughout Calderdale. Looking to the future the Group is hopeful that the upland territories are reoccupied, but at the moment this seems unlikely. The cause of the territory abandonment is unknown: however it may be as a result of a reduction in prey availability. Anecdotally the Group is observing fewer racing pigeons flying along the M62 corridor, which hosted 3 territories and through the Calder Valley, which historically hosted the remaining 3. The hypothesis that this is leading to a reduction in prey availability making the territories unviable will be tested in 2022.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Reasonable coverage; at least one long-term monitoring study. **Covid impact score:** 2

As in previous years, there were sightings throughout the year on the Dee and Mersey estuaries, with birds recorded hunting in all months, bur peaking during the winter months, coinciding with the increase in waders and wildfowl.

Durham Upland Bird Study Group

Extent of coverage: Whole County.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 3

The following comments and the data presented in the table refer to the whole of the county but exclude the north side of Teesmouth where a further 2-3 pairs may have bred. Restrictions due to Covid reduced coverage at some sites during the important early part of the breeding cycle, leaving it unclear why pairs initially seen at 3 locations apparently failed to settle. Potential upland sites were particularly poorly covered during the spring and a single bird was seen at just one site. Sites with pairs were all in the eastern lowlands with three territories fledging 3, 3 & 2 respectively. As previously noted, against the continuing and sad absence of success in the uplands, the productivity and number of lowland sites also now appears to have stalled.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 2

A combination of factors in 2021 resulted in a poor year for Peregrines. These were, principally, cold wet weather, especially in May when newly-hatched chicks were particularly vulnerable, and nest site problems, but Covid restrictions and illness also affected monitoring.

Two town halls were closed, at Manchester and Rochdale, for major reconstruction works. In the interests of the pair at Manchester, the clock tower quatrefoils were blocked off in advance of the breeding season, but the pair hung on there despite not being able to gain access, before eventually finding a recess in another building in the city centre. Because the site was enclosed and high, it could not be determined by observers whether any chicks hatched and fledged, but the general opinion was that any eggs failed due to lack of anchorage. This situation was further complicated by another male taking over the nest site, with the original male being found on the ground in Piccadilly 9th April, and taken into care (eventually released). However, a pair with a recently-fledged juvenile was seen twice at close quarters in late July on the nearby Arndale centre by our steeplejack, who was working on the building. At Rochdale, it was not possible to have the usual website operating, so the progress of the chicks could not be monitored other than from observers on the ground, but 2 were colour-ringed by our new ringer 21st May, at exactly the size expected. However, the clock tower will not be available in 2022-23 and has been sheeted off, with an alternative nest box placed on a nearby building. At Bolton town hall, also affected by works to the front facade, the usual pair was very late settling and perhaps tried first on the parish church, where they reside the rest of the year, but Covid restrictions there prevented checking. By early May they were back on the town hall, with a recently-fledged juvenile seen 7th July. At a new site in Trafford, where Peregrines have possibly nested on structures in the past, one chick was ringed but the nest site was on a metal mesh base, using an old Raven nest, and

other eggs may have been chilled - a purpose-made tray will be in place in 2022. Another new site in Chadderton was on a mill undergoing demolition, which was halted when the pair took up residence. They hatched 2 chicks but these did not survive, due to poor weather and an inexperienced female known to be a 2nd year bird.

The longstanding Wigan/Chorley pair chose to return to the Chorley chimney in 2021, after 2 successful years in their purpose-built Trencherfield Mill nest tray, and failed there at egg stage due to poor weather. Of the other 2 where our information only went as far as eggs being laid, one could not be fully monitored due to Covid restrictions and the outcome at the other site was not made known.

Broods at other regular sites were, on the whole, one less than normal so that the *Young fledged per pair laying* was 1.54 this year compared with 2.31 last year.

It was impossible to obtain information from Manchester Airport about any Peregrine activity there, due to Covid severely reducing personnel.

In late December, permission was at last obtained for a nest tray at Media City, Salford and it was delivered in early January 2022. A pair has been resident for several years and may have attempted breeding in the past, but without a secure base for eggs it is not thought they have ever succeeded.

Northumbria Ringing Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

A poor year, particularly in the upland Northumberland, with site occupation again generally low. From 12 home ranges occupied 10 pairs were known to have laid eggs, but only 10 young fledged; less than one young (0.83) per *Territorial pair monitored* across the county. This is a stark contrast to an average of over 2 in 2020 when a minimum of 27 young fledged during Covid lockdown.

It was an eventful season in the South Cheviots. Site occupation by breeding pairs was half that of 2020, which was the best breeding season in recent years in the study area. Three adults were present at one site on 24th April; including an adult female incubating and a 'brown' first year female. A silent male only was present on 19th June; but feathers/wings of the dead brown bird were found below the scraped ledge; a fatal fight between the females was suspected contributing to site failure, probably still at egg stage. Two young fledged from a lowland quarry and 2 sites were occupied by both breeding Ravens and a single adult Peregrine throughout the season.

In the North Cheviots only 2 of 8 homes ranges checked were occupied by pairs, fledging only 3 young between them with another site held only by a single bird.

It was also a poor year in Border Forest Kielder, with only 3 chicks fledged from 6 occupied home ranges. Two pairs scraped but never laid even though they had been in residence all winter. A fox predated the eggs at another, and at 2 further sites the chicks died while tiny in prolonged heavy rain.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Part upland, part lowland.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 2

Neither of the 2 regularly-checked upland sites was apparently occupied this year although a possible single bird was seen briefly at one of them. Yet again, the lack of any evidence of display or territorial behaviour from anywhere else in the NYMs simply emphasises the belief among raptor workers that the Peregrine is very much a persecuted black-hole species

here. The 2 lowland quarry sites, one occupied in 2019, the other 2020, were both checked this season but only the 2020 site was again occupied. It does seem probable that the same pair was involved over the 3 seasons. Only one chick was produced and all was going well until it disappeared around the middle of June. It seems pretty certain the site was raided and the chick stolen.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

Seven pairs of birds were recorded occupying territories; 5 pairs were recorded as settled and went on to breed and 4 of these pairs successfully fledged 12 young.

Three pairs in Derbyshire fledged 9 young and one pair in West Yorkshire fledged 3 young, on a repeated attempt.

At a site in West Yorkshire the first clutch of eggs disappeared from a first attempt; this pair went on to re-lay and fledged 3 young

There are several historic sites within the study area where birds are repeatedly failing to breed successfully despite sites being occupied each year.

PDRMG colour-ring Peregrine Falcons as part of a BTO project and we have started to see some results from this project. Two colour-ringed birds were reported holding territory away from our study area.

PDRMG also monitor and ring birds in several urban locations, they are not included in this data.

South Peak Raptor Study Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Good coverage; at least 2 monitoring studies or large representative study area.

Covid impact score: 1

A pair in the Upper Derwent area hatched 3 eggs, but the small young (and nest camera) were stolen shortly after hatching. Another previously successful site was checked but no birds were seen.

In the Peak District area south of Upper Derwentdale 17 pairs were present in quarry sites, 6 further pairs nested on natural crags in the limestone dales and a further pair was recorded to have nested on a gritstone edge for the first time. Twelve sites were successful, fledging a minimum of 25 young.

In the NE Derbyshire lowlands 4 pairs were present at quarry sites and 6 young were reared from 2 successful nests, although at one of these sites the original breeding attempt failed when rocks were dropped from above onto the nest containing eggs.

In the whole of the SPRSG recording area, a total of 14 natural and quarry sites were successful and a minimum of 31 young fledged. At 5 sites the eventual outcome was not known, although adult pairs were present and in 2 cases had been seen to be incubating. A further 8 quarry sites failed for reasons which were unclear: disturbance by individuals, robbery or massive quarry working may have been factors or failure may have been weather related.

In addition, and included in the results above, 4 urban sites were checked again this season, 3 of which were successful and a total of 9 young fledged.

Yorkshire Dales & Nidderdale

Extent of coverage: Upland areas only.

Level of monitoring: Good coverage.

Covid impact score: 2

Please note that the data refer only to the Yorkshire area of the YDNP and does not include any records from the Cumbrian or Lancashire sections of the National Park.

Monitoring is still below pre-Covid levels and not all regularly-occupied territories were able to be checked. One site was not checked where a territorial pair would have been expected to be present, and at another site that could not be monitored, reliable information was received indicating that a pair was present during the breeding season.

Of the monitored sites, only one was unsuccessful – an adult pair was present and the female was sitting for the 3rd year in succession, but no eggs were laid.

NERF regional summary

The number of fledged young (132) was lower this year after an increase to 165 in 2020. This was due to poor weather in May, which was very wet everywhere, and perhaps the easing of Covid restrictions which enabled malefactors to be out and about again. Groups with notable decreases were Manchester (-13) - also affected by building problems; Northumbria (-17) with a decline in occupied territories, and South Peak (-9) where human disturbance contributed to the decrease.

Urban sites where cameras have been installed continue to attract much public interest and provide opportunities for excellent PR which can only be beneficial for this species. With regard to thefts in used or disused quarries, it is important to liaise with the helpful British Mountaineering Council as well as the police and the Mineral Products Association's Biodiversity and Nature Conservation Group. A list of MPA members can be found at: http://www.mineralproducts.org/cont_members01.htm





Comparative data 2009-2021



Common Raven Corvus corax



Ivan Ellison

UK population estimate

In 2016 the summer population was estimated at 10000 pairs in the UK. (Woodward, I. *et al.* APEP 4. *British Birds* 113:69-104).

The 2021 BTO Breeding Bird Survey Report showed that numbers were stable 2019-2021, and there was a 32% increase 2010-2020, with a 35% increase in population between 1995 and 2020.

Conservation status

UK:	Green
European:	Least concern
Global:	Least concern

National and regional threat assessment

Nationally the Raven population has been slowly recovering in recent years, excluding a small dip in 2016 - 2017. However, persecution remains a serious problem in many areas, particularly where they come into perceived conflict with the game shooting industry and sheep farmers who assert that they can be a threat to new born lambs.

NERF Data

RAPTOR STUDY GROUP	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
BRSG	3	2	0	0	1	1	1	1	4	4.00	4.00
CRSG	2	2	NC	NC	1	1	1	1	3	3.00	3.00
ChRSG	12	11	2	0	10	10	10	10	23	2.30	2.30
DUBSG	4	0	1	0	0	0	0	0	0	0.00	0.00
MRG	30	16	NC	NC	6	6	6	6	13	2.17	2.17
NRG	38	24	3	1	23	19	18	17	41	2.16	1.78
NYMUBSG	1	0	0	0	0	0	0	0	0	0.00	0.00
PDRSG	16	13	NC	NC	10	10	9	9	28	2.80	2.80
YDNP	10	6	0	0	6	6	6	6	23	3.83	3.83
TOTAL	116	74	6	1	57	53	51	50	135	2.55	2.37

Group Reports

Bowland Raptor Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage.

Covid impact score: 1

The number of breeding pairs decreased to 2 pairs in 2021 from 3 in 2020. Four juveniles fledged from one pair, but it was not known how many young from the other nest.

This species is still absent as a breeding bird from large parts of the study area, a likely result of illegal persecution linked to game bird management.
Calderdale Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Good coverage; at least two monitoring studies or large representative study area.

Covid impact score: 3

The Covid pandemic had a significant impact on the Group's ability to monitor Raven during the early part of 2021. Travel restriction meant that only 2 of the traditional home ranges were checked and both were found to contain breeding pairs. One pair was observed carrying sticks towards the nesting cliff on 18th February; unfortunately the travel restrictions meant that no further monitoring was undertaken. A 2nd pair was monitored occasionally throughout the season and they are known to have fledged 3 young. As the travel restrictions were lifted post-season surveying was possible and 136 records came from 38 sites across Calderdale.

Despite the low breeding figures, flocks this year were the highest on record with an autumn roost in the west of the study area containing a maximum of 23 birds on 31st August. The number of birds in the roost reduced to 17 birds on 6th September and 12 on 12th October. No birds were recorded at that location subsequently.

Cheshire Raptor Study Group

Extent of coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

During the breeding season pairs used a variety of nest sites including trees, buildings, cliffs and electric pylons.

Overall the population is increasing and outside of the breeding season large groups continue to be reported from lowland farmland throughout autumn and winter.

Durham Upland Bird Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Good coverage; at least two monitoring studies or large representative Study Area.

Covid impact score: 3

Covid restrictions meant that important early season checks on traditional nesting sites were largely curtailed.

The species' breeding status nevertheless remains "stuck" on *'rare and occasional'*. A single bird was seen in springtime in the vicinity of one territory but there were no known nesting attempts at any location. Birds continue to be found widely during the autumn and winter months in groups typically of 2-6, and up to 10.

Manchester Raptor Group

Extent of coverage: Whole County.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 1

The 247 records received or garnered from *manchesterbirding.com* produced 6 pairs with confirmed breeding, producing 13 young; 10 pairs probably breeding and 14 sites with possible breeding. With most individuals not commencing breeding until their 4th or 5th year, there are inevitably many records of small groups wandering about the county, so strict criteria have been applied to produce these totals of probable and possible breeding. New sites for nests this year were Cutacre Country Park and Hale Moss.

Three sites provided double figure counts: 11 were at Burnt Edge in August, 12 were at Elton Reservoir 25th February with one remaining on a favoured pylon and 11 flew on. Seventeen were on sheep fields at Ernocroft 4th October and 16 on 6th October, attracted by a sheep carcass on which 4 were feeding, harassed by a Buzzard and a Sparrowhawk.

Northumbria Ringing Group

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 2

The Raven is a well-studied species in Northumberland with most nest sites covered. In 2021 some of the early visits were still restricted by the Covid rules, but by the season's end, with the lifting of the regulations, most Home Rangers were checked with the exception of 3 in central Northumberland.

It was a very similar nesting season to 2020 with 41 chicks fledging (37 chicks in 2020). In the south of the county a home range was re-occupied after being un-tenanted in 2020 when a nest fledged 2 chicks, and a pair nesting on the coast on a castle fledged 3 chicks. One nest in the Border Forest Kielder failed during the chick stage when the nest, in a large Norway Spruce, collapsed in a gale.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: Upland areas only.

Level of monitoring: Poor coverage; casual monitoring of a few pairs.

Covid impact score: 2

It is quite ridiculous that only one report of Raven has been received for 2021 - a presumed pair at Hartoft, Rosedale on 21^{st} April. There were no further sightings of these birds. The NYM uplands may not offer an abundance of suitable crags and cliff faces of appeal to this species as nesting habitat, but there are enough spread around the various estates to hold a reasonable number of breeding pairs.

The only explanation that such a situation does not exist is that these birds are not being allowed to create it. It is undoubtedly another black-hole species in the NYMs. Regrettably, the Ravenscar coastal cliff site was not occupied again.

Peak District Raptor Monitoring Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 2

Ten sites were found to be occupied; 9 of those pairs were successful, collectively fledging 28 young.

South Peak Raptor Study Group

Extent of coverage: Part upland & part lowland areas.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 1

Due to time constraints, monitoring of Raven was again significantly reduced compared to previous years. In South Derbyshire, sightings of family parties suggested Raven had a reasonable year here. In the White Peak and north-east Derbyshire, most quarries held pairs which generally appeared to be successful.

Yorkshire Dales & Nidderdale

Extent of coverage: Part upland and part lowland areas.

Level of monitoring: Excellent coverage; all or most sites receive annual coverage. **Covid impact score:** 3

Please note that the data refer only to the Yorkshire area of the YDNP and does not include any records from the Cumbrian or Lancashire sections of the National Park.

Monitoring Raven within the Park is still below pre-Covid levels and not all regularly occupied territories were able to be checked.

There was one site that was not checked where it would have expected that there would have been a territorial pair present.

NERF regional summary

The Covid-19 pandemic that restricted the monitoring of Raven during 2020 continued to have a similar impact during 2021, particularly because they nest early in the year. Raptor Workers in the NERF Study Area have long known that Raven populations have been suppressed year upon year in the northern uplands and 2021 was no exception. Examination of the summary of the table above reveals the true picture, replicating the situation recorded in 2020. Of the 135 fledglings recorded 128 were produced in 5 study areas; Northumberland [41], Dark Peak [28], Cheshire [23], Manchester [13] and Yorkshire Dales National Park [23].

Collectively all of the other NERF Study Group areas only produced 7 chicks, which was, once again, an extremely disappointing outcome.

In common with previous years, despite there being large tracts of eminently suitable habitat in both County Durham, geographical area 2576 km² [990 square miles], and on the North York Moors, geographical area 1136 km² [554 square miles], both of these areas have failed to produce any breeding birds. It is inconceivable that a combined land mass of 4012 km² [1544 square miles] of largely suitable habitat should be devoid of breeding Raven unless the population is being consistently, intentionally and systematically suppressed.

Where Ravens breed successfully the productivity is within the usual statistical norms [range 2 - 2.8; average 2.4 per successful nest]. This is a clear indication that it is not habitat or prey availability that is the cause of the variations across the combined NERF Study Area.

The NERF 13-year Raven data shown in the table below brings the issue into sharp focus once again. During this period NERF has recorded a total of 1561 fledglings, however the average productivity remains stubbornly low at 120.08 per year. Ravens are long-lived birds; the oldest known record is of a bird 17 years, 11 months and 15 days from the date of ringing [BTO data], and yet the breeding population is static, both geographically and numerically. As in previous years it is very clear that there are areas of the NERF Study Area that hold a sink population of Raven and this inevitability means that there is an inability for the species to expand from the core breeding areas to occupy eminently suitable territories. There is no doubt that some birds, both young and old, die naturally. There is no doubt that some are 'moved on' to prevent them from breeding and there is also no doubt that many are systematically killed illegally.

YEAR	Home ranges checked	Home Ranges occupied by pairs	Single birds	Pairs failing to settle	Territorial pairs monitored to known outcome	Known Pairs laying eggs	Known pairs hatching eggs	Known pairs fledging young	Known number of fledged young	Young fledged per pair laying	Young fledged per territorial pair monitored
2009	84	68	0	11	51	39	39	37	105	2.69	2.06
2010	111	85	0	6	49	43	40	39	122	2.84	2.49
2011	111	82	1	5	52	47	46	44	138	2.94	2.65
2012	91	65	1	4	51	50	50	46	132	2.64	2.59
2013	145	87	0	17	78	72	68	44	116	1.61	1.49
2014	96	62	1	19	50	41	35	34	97	2.36	1.94
2015	124	92	3	16	73	59	57	54	109	1.85	1.49
2016	153	95	3	17	55	52	45	45	144	2.77	2.62
2017	129	90	3	4	60	57	55	53	84	1.47	1.4
2018	116	84	3	8	52	44	44	44	132	3	2.54
2019	114	74	6	9	39	43	38	37	109	2.53	2.79
2020	116	77	2	27	62	61	53	51	138	2.26	2.23
2021	116	74	6	1	57	53	51	50	135	3.80	3.80
Totals	1506	1035	29	144	729	661	621	578	1561	2.36	2.14
Av. / year	115.85	79.62	2.23	11.08	56.08	50.85	47.77	44.46	120.08	2.36	2.14

NERF regional threat assessment

The national threat assessment for this species is applicable in the NERF region. There is no doubt that locally Raven populations are suppressed by persecution. It is essential that Raptor Workers remain vigilant when surveying Raven and all suspicious activities, including the use of gas guns and banger-ropes in close proximity to Raven nests should be reported to the local Police Wildlife Crime Officer. When doing so please ask for a Police incident number. In addition to reporting persecution and other suspicious incidents to the Police please report the cases to the RSPB Investigations Team.

Record the time, date and grid reference, there are several mobile phone apps available that provide this information and the majority of Police Forces also use the 'What3Words' app. Please also remember to take photographs. If you come across a suspected poisoning incident under no circumstances should you touch the potential victim or the bait. Several of the poisons used to kill birds of prey are highly toxic and can kill on contact with the skin. Cover both the bird and the bait with vegetation and contact the authorities as soon as possible.

RARER SPECIES MONITORIED BY NERF IN 2021

Montagu's Harrier

A wholly dark morph-plumaged bird was seen over a moor in SW Durham on 3rd June. This is only the second Montagu's Harrier recorded in the county in the last decade with the additional interest given its rare plumage form. About 10% of birds breeding in Iberia are thought to be dark phase types.

A Summary of Raptor Monitoring in the Washburn Valley, Southern Nidderdale AONB and adjacent areas in Yorkshire during 2021

The Washburn Valley, the southern section of the Nidderdale AONB, Ilkley Moor and nearby moors is currently monitored by a loose consortium of Raptor Workers and bird watchers, some of whom were members of the former Yorkshire Dales / Nidderdale RSG. The Washburn Group does not collate data in a formal manner at the moment, rather they share data on several species, collated as a result of informal observations. Whilst the data collected does not follow the standardised NERF format, they do give an overview of some of the species that occupy land on the eastern fringe of the Yorkshire Pennines. Regrettably North Yorkshire has, for many years, had the dubious 'honour' of being the English County with the highest recorded level of raptor persecution. In an attempt to ensure that the situation is not exacerbated further the locations of the nests monitored by the Washburn Group have been anonymised, recorded only by zone, in this report. However,

the complete dataset is held on a centralised confidential database and is available for comparative studies by both the Washburn Group and NERF.

The easing of the travel restrictions that were imposed by the Government in response to the tragic effects of the Covid pandemic enabled the Group to undertake more monitoring than in 2020. However, taking into account the way that the Group is formulated this account should be regarded as an under-representation of the actual population and breeding success.

Common Buzzard

In 2021, 16 pairs were located in 9 areas of woodland spread throughout the study area. Collectively they are known to have fledged 13 chicks from 8 of the nests. The outcome at the additional 8 nests is unknown; however, they are likely to have also produced young. A further 5 pairs were initially located in one large block of woodland, and 4 other pairs in a 2nd block of woodland. Unfortunately, once again the travel restrictions imposed by the Government during the Covid pandemic impeded the Group's ability monitor the species fully.

Goshawk

The Group checked 3 locations during 2021 that have historically held Goshawk. One of the locations held a pair of birds, however it is not known if they were successful. The pair was initially recorded on 27th March, then later the same day, 3 males were recorded. At a 2nd site a female was present on 9th March and an unsexed individual was recorded at another site on 30th March.

Hen Harrier

The first Hen Harrier, a male performing a display flight, was noted on 25th March. Unfortunately, despite his best efforts, his attempt to attract a mate was unsuccessful. Between 17th and 24th March a single bird was recorded on 2 adjacent moors on 3 separate occasions and it is likely that these sightings were of the same bird.

Another singleton was recorded hunting over moorland in the east of the study area. The majority of the monitoring was undertaken by the group between 9th April and 15th June on 3 contiguous blocks of high moorland in the west of the study area. The area has a recent history of successful breeding. These breeding attempts are also monitored by Natural England, and if 2 pairs breed successfully then one of the pairs has its chicks removed as part of the Hen Harrier brood management project. This was the case again in 2021 when 2 pairs were known to have laid eggs. Observations also suggested that a 3rd nest may have been located in the same area.

Marsh Harrier

Marsh Harriers were observed in 3 areas of the study area during 2021. One observation was of a singleton on the fells in the west of the study area on 15th April. A further singleton was recorded on 25th May in the uplands on the eastern fringe.

Between 24th April and 30th May a pair was resident in the central section of the study area. The birds were observed together on 11th and 30th May. Singletons were recorded in the same area on 4 other occasions. On one of those occasions the observer noted a food pass; therefore, whilst there is no direct evidence that breeding took place, it is very possible.

Merlin

Merlins were recorded at 3 discrete locations. Single birds were noted at 2 of those locations. At the 3rd a pair was present and was recorded displaying territorial behaviour when the birds interacted with both a Red Kite and a Buzzard. However, due to the travel restrictions imposed during the Covid pandemic no further observations were made and the outcome is unknown.

Osprey

At the present time Ospreys are usually monitored on passage. However, this year 2 individuals spent the summer in the area and in total birds were present at 4 locations. One of the summering birds was photographed and found to be wearing a colour ring, number 059, which was fitted at Rutland Water in 2019. Following the successful breeding of a pair in Yorkshire during 2022 nesting platforms are being installed at several locations within the study area.

Long-eared Owl

Eight territories were checked in 4 discrete areas within Nidderdale study area. Only one held a breeding pair and although young were heard hunger-calling the number of chicks raised at the site is unknown. One other site was occupied by a single bird.

Short-eared Owl

Between 17th April and 11th May the Group monitored 7 sites; 4 of which were occupied by pairs. A single bird was observed at a 4th location. Three pairs were observed feeding dispersed young at 3 sites, with one of those possibly hosting 2 successful pairs.

Red Kite

During 2021 the Group located 16 nests in 9 separate blocks of woodland across Lower Nidderdale, 3 of which were located just outside of the AONB. Collectively they are known to have fledged a minimum of 22 young.

In addition to the proven breeding pairs 2 other pairs were located at the beginning of the season; however, no further monitoring took place.

Sparrowhawk

Once again the travel restrictions imposed as a consequence of the Covid pandemic reduced the amount of time available to the Group to monitor this species. In total 2 nests were located and together they fledged a minimum of 7 young.

Data kindly supplied by Andy Jowett on behalf of the Washburn Valley Group

Summary of Raptor Monitoring in Shropshire during 2021

The historic county of Shropshire covers the current county of Shropshire, and the Borough of Telford and Wrekin. The Shropshire groups referred to here all cover the whole of the historic county.

The Shropshire Raptor Study Group monitoring work since 2010 has concentrated on breeding Goshawk, Hobby, Merlin, and Red Kite, with the small group of members trying to find the nest sites of these species. Kestrel was added in 2019, and a Honey-buzzard survey was undertaken in 2021.

The Shropshire Peregrine Group was established in 1997, and Shropshire Barn Owl Group in 2002, so these independent groups were well established before the formation of the Raptor Group, which co-operates with them, and does not duplicate their work. All three groups provide summaries of their results for publication in the annual Shropshire Bird Report, and further information can be found on the Shropshire Ornithological Society website <u>www.shropshirebirds.com</u>

www.shropshirebirds.com/bird-conservation/the-shropshire-raptor-study-group/ www.shropshirebarnowlgroup.org.uk/ www.shropshireperegrines.co.uk/

Raptor Group results 2021

The status of the target species, and the monitoring results in 2021, are summarised below, and in Table 1.

Goshawk

The population was estimated at 31-50 breeding pairs in 2014, but has increased since. Southwest and south-east Shropshire are national strongholds. However, some breeding sites have been lost recently, because the maturing conifers in Forestry Commission and other plantations have been felled and harvested. This is assisting the spread of the species, into privately owned woodland, and northwards.

Almost 50 previously occupied sites were visited, 14 of which were apparently unoccupied; nests were also found at 6 new sites. Including the new sites, 40 territories were occupied, and nests were found in 25 of them. Seven nests failed, and 18 were successful. At least 36 young are known to have fledged from these nests, and 13 were colour-ringed. Four of the successful nests were in the northern half of the County.

In addition, records submitted to SOS suggest an additional 3 pairs, one in the north (not included in Table 1).

Hobby

In 2014, the population was estimated "to exceed 70 breeding pairs in good years", but it is unlikely this number has been reached since. The number found annually fluctuates considerably.

Thirty-seven sites where breeding Hobbies have been found in the previous 12 years were checked, and 3 new nests were also located. Twelve breeding pairs were found or reported, including the 3 nests, and 3 (perhaps 4– a bird that was probably a juvenile was not definitely identified) other pairs had fledged young. Six pairs were in the south, and 6 in the north. Two pairs failed, 6-7 pairs fledged 14-15 young, and the outcome at 3-4 sites is unknown.

Merlin

There has been one traditional breeding site, with one, occasionally 2, pairs found there between 2010 and 2017, but none have been found since then, in spite of thorough searches.

Red Kite

Monitoring is carried out jointly with the Welsh Kite Trust. Forty-four nests, and confirmed breeding evidence for 6 additional pairs, were found, compared with 37 nests in 2020, and 28 in 2017. Thirty-two nests were successful, producing at least 50 fledged young, the highest annual totals yet. Probable breeding evidence was found for a further 9 pairs, and 78 previously occupied sites were checked, but no evidence of breeding Kites was found at them.

Given the increasing population and range, finding all the nests gets harder each year, and the 59 breeding pairs must be a decreasing proportion of the total number.

Over 430 young are known to have flown from Shropshire nests since 2006, and 207 have been wing-tagged. The tagging programme has finished, but 2 chicks in one nest were tagged. The oldest Shropshire Kite yet found, cerise/black 30, a 12-year-old male tagged in the nest in 2009, was found nesting again. Three white-tagged Kites from 2011, and 2 yellow-tagged in 2013, were found again, all at the same nest sites as last year. A black-tagged female from 2017 was again reported, but the nest was not found, and another green-tagged bird from 2015 was photographed before the breeding season.

Efforts are continuing to try and find all nests in the County, to locate tagged birds, and monitor the continued spread eastwards and northwards, since the first known successful breeding for more than 130 years, as recently as 2006. Kites have spread rapidly from the south-west, and might be found breeding anywhere now.

A full report, Red Kites in Shropshire 2021, can be found on the SOS website.

Kestrel

The Mid-Wales Ringing Group and the Shropshire Ringing Group have both been operating separate nest-box and colour-ringing projects for some years, the former including south-west Shropshire and the latter primarily in north-east Shropshire.

In 2019, the work of the Shropshire Ringing Group became a joint project with the Raptor Group, and it operates across the County, with the active support of Community Wildlife Groups. The project aims to find out the reasons for the population decline, partly utilising productivity and longevity data. The Mid-Wales Ringing Group continues to operate in south-west Shropshire, and submits its data to the joint project.

Progress has been limited, but in 2021 17 sites were checked, 13 nests were found, 11 were successful, and 44 young fledged, 34 of which were colour-ringed.

Kestrels have declined considerably in recent years, and numbers are less now than the 2014 estimate of 300-350 breeding pairs published in *The Birds of Shropshire*.

	Sites checked	Terr	itories	Outcome					
Species	(Previously occupied & new sites)	Nests found	Additional pairs	Success- ful	Failed	Unknown	Fledged young (minimum)		
Goshawk	50+	25	15	18	7	0	36		
Hobby	40	3	9	6 - 7	2	3 - 4	14 - 15		
Kestrel	17	13		11	2		44		
Merlin	1	0	0						
Red Kite	137	44	15	32	10	2	50		

Table 1. Summary of Shropshire Raptor Study Group results 2021

Peregrine

(Shropshire Peregrine Group results)

Peregrine has bred regularly only since 1987, increasing by about 1-2 pairs a year to 19 breeding attempts in 2003. Numbers were fairly stable for the next 11 years, then 20 breeding attempts were recorded for the first time in 2015. Twenty-two in 2019 and 2020 is the highest annual total yet. Over 30 sites have been used altogether, mostly in quarries. Less than 10 are natural sites, and old Crow or Magpie nests have been used occasionally. In 2021, 25 sites were monitored, and there were 20 breeding attempts. Success rates were once again high, and there were 43 fledged young (not as high as last year's record of at least 46, but equalling the previous record in 2011). Average brood size remained high, and all the signs show the population is continuing to do well. However, 2021 saw a recurrence of the poisoning of Peregrines at Clee Hill, which has been investigated by the police and RSPB, without result.

Records were received throughout the year, some of breeding birds and others of passage and wintering birds, which may or may not be part of the local breeding population. No reports were received of colour-ringed birds.

Barn Owl

(Shropshire Barn Owl Group results)

Largely as a result of the Barn Owl Group's nest-box scheme (around 430 boxes installed altogether, and over 2,000 chicks now produced in these boxes) and its other conservation work, the population has increased from an estimated 140 breeding pairs when the group was formed in 2002 to around 220 pairs now.

2021 was the most productive breeding season in SBOG's 20 years of conservation work, with 233 young Barn Owls produced in nest boxes and natural sites, surpassing the previous record of 225 in 2017: 203 nest boxes and natural sites were monitored. Breeding (at least one egg laid) occurred in 73 (35.9%) of the sites and 233 chicks were produced in 71 (34.9%) of those sites that successfully produced chicks, 218 in nest boxes and 15 in natural sites. Broods ranged from one to 6 chicks and averaged 3.2 (the highest average rate since 3.4 in 2014). Thirty-two dead chicks were noted in July, the age and condition of the owlets suggesting that they had probably succumbed to starvation following a period of heavy rain. Unusually in a productive breeding season, no 2nd broods were recorded. An additional 6 sites held a single adult. Eight new pairs were recorded.

The SBOG Annual Report, including comparative data since 2002, can be found on the website (see above).

Other Raptors in Shropshire

(Summaries taken from the Shropshire Bird Report 2021 (in prep).

Common Buzzard, Raven, Sparrowhawk

These species are not systematically monitored. No information was received in 2021 suggesting any change in their numbers or distribution.

Marsh Harrier

All except one record was of a single bird, and they probably relate to at least 9 different individuals. The estimated 8-9 different individuals seen in each of the 3 years 2019-21 have been the largest numbers by far: before that, the estimated maximum number of birds per year was 5, in 2010 and 2012. The increase reflects the rapid growth in the national population, particularly the productivity of the breeding population at Leighton Moss, and the 21st century colonisation of several other sites in Lancashire, Cheshire and Merseyside.

Sixteen of the 20 records came from Whixall Moss or Canal Floods. There was one record from the early winter period, 3 from the spring migration period in April, one on 22nd June was possibly an immature or early returning failed breeder, 2 were seen on autumn passage, both in August, and one, a female or immature on the few occasions that it was identified, was seen on 13 separate dates at various sites in the Whixall area between 14th October and 25th November, and a 2nd individual was seen on 21st November.

Hen Harrier

Rare passage migrant and winter visitor, with 26 records from 5 sites, 2 fewer than the 7 sites in 2020, all except one of single birds. At least 3 and perhaps as many as 9 individuals were involved, similar to numbers in recent years, but in general the number of records is declining. Whixall Moss was again the most frequented site, with records on 15 days, including the only record of 2. There were no breeding season records. Most records are believed to involve birds from the breeding population in north Wales, and the recent reduction in numbers here may reflect a decline in the Welsh population.

Montagu's Harrier

An adult male was photographed for the 3rd spring in 4 years on the Long Mynd in May 2020. All were seen on a single May day only but the likelihood of the 3 sightings all referring to one individual seems high. There were no records in 2021.

Honey-buzzard

There were no Honey-buzzard records in 2021.

The Shropshire Raptor Group and SOS undertook a survey, as part of the national survey organised by the Rare Breeding Bird Panel (RBBP) with support from the British Trust for Ornithology (BTO). Sixteen volunteers surveyed 16 different extensive woodlands, in accordance with the survey methodology, but no Honey-buzzards were seen. Not all the woodlands identified for survey were covered, so the remainder will be done in 2022. A report will be published in SBR 2021.

Osprey

Rare passage migrant, with all except 3 records from the Severn Valley. They probably relate to about 16 different individuals, an increase on the 11 or so in 2020 and 8-9 in 2019. Spring passage started on 28th March, and comprised an estimated 9 individuals plus 2 birds on 11th May, the last spring passage record.

There were 2 out-of-season sightings, in June, probably prospecting immatures returning to the UK for the first time, and 3 individuals in late August-early September were presumably heading south on autumn passage.

Long-eared Owl

Rare resident, but very elusive and status poorly understood. A pair bred successfully again at a confidential site in the north, with at least one young calling near the nest site in June. This is a regular site where they have bred each year since at least 2015. No other records.

Short-eared Owl

Rare winter visitor and passage migrant, mainly transient individual birds and tending to become increasingly scarce. No evidence of breeding.

Six records, all of single birds, comprised one in April, one on the unusual midsummer date of 29th July, which could perhaps have involved early post-breeding dispersal, 3 in the autumn and winter (on 15th October, 26th November and 2nd December), and an unseen

satellite-tracked individual that left its breeding site in Iceland in mid-October, crossed to Scotland, then drifted south, over the Telford area on 21st October on the way to the Elan Valley, then on to Devon and South Wales, where she perished.

Leo Smith Convenor Shropshire Raptor Study Group <u>leo@leosmith.org.uk</u>

Species	Home ranges checked	Home ranges occupied (pairs)	Home ranges occupied (singles)	² airs failing/non-breeding	Ferritorial pairs monitored	oairs laying eggs	airs hatching eggs	airs fledging young	Number fledged	<i>f</i> oung fledged per pair laying	foung fledged per pair monitorec
Osprey	9	8	0	0	8	8	7	7	16	2.00	2.00
Honey-buzzard	10	3	2	1	2	0	0	0	0	0.00	0.00
Sparrowhawk	122	72	20	14	42	39	36	31	66	1.69	1.57
Goshawk	118	84	9	19	68	63	47	43	74	1.17	1.09
Marsh Harrier	10	10	1	1	9	7	7	7	15	2.14	1.67
Hen Harrier	67	24	8	1	24	24	24	20	71	3.00	3.00
Red Kite	109	55	0	0	31	29	25	25	54	1.86	1.74
Buzzard	244	177	2	0	94	94	89	77	130	1.38	1.38
Barn Owl	1368	347	29	21	337	319	301	294	748	2.34	2.22
Tawny Owl	428	111	4	5	105	104	90	79	124	1.19	1.18
Little Owl	85	32	19	1	24	24	23	23	45	1.88	1.88
Long-eared Owl	88	45	3	2	41	41	34	34	76	1.85	1.85
Short-eared Owl	101	58	5	1	23	23	22	20	51	2.22	2.22
Eagle Owl	2	1	0	1	0	0	0	0	0	0.00	0.00
Kestrel	270	111	20	1	96	96	91	88	267	2.78	2.78
Merlin	267	110	8	4	102	100	91	83	277	2.77	2.72
Hobby	63	53	0	1	51	48	48	46	81	1.69	1.59
Peregrine	180	97	10	5	85	72	63	57	132	1.83	1.55
Raven	116	74	6	1	57	53	51	50	135	2.55	2.37
TOTAL	3657	1472	146	79	1199	1144	1049	984	2362	2.06	1.97

Appendix 1: Combined NERF data

Appendix 2: Combined productivity graphs a) young fledged per pair laying 2009-2020



Appendix 2: Combined productivity data b) young fledged per territorial pair monitored 2009-2020



Appendix 3: Ring recoveries and colour ring sightings

Group	Species	Ring No.	Date ringed	Location	Date recovered	Location	Age	Distance from ringing site (km)	Direction	Comment
MRG	Barn Owl	GC23927	20/06/19	Astley Moss, Wigan	14/02/21	Worsley, Salford	605 days	6km	E	Freshly dead; eaten
MRG	Barn Owl	GV99459	18/06/20	Hilton House, Westhoughton	02/06/21	Dunham Massey	349 days	22km	SE	Controlled; breeding
MRG	Barn Owl	GV11661	16/05/15	Site not disclosed but in GMC	19/06/21	Daisy Hill, Westhoughton	6yrs 34 days	10km		Controlled; breeding
MRG	Bam Owl	GY32254	16/07/21	Crankwood, Leigh	12/10/21	Hermitage Green, nr Warrington	88 days	8.5km	SW	Dead, tangled in farm machinery
MRG	Bam Owl	GR53444	12/06/18	Irlam Moss	01/05/21	Irlam Moss	2yrs 347 days	-	-	Found injured near breeding site; RTA; euthanised
MRG	Barn Owl	GR53443	12/06/18	Irlam Moss	03/11/21	Cadishead Moss	3yrs 144 days	1lm	SW	Found in ditch; into care but died
MRG	Barn Owl	GV36992	20/06/19	Abram, Wigan	19/12/21	Ashton-in- Makerfield	2yrs 183 days	3.5km	W	Killed by Buzzard
NRG	Barn Owl	GC09658	15/06/20	Burradon,N'land	14/02/21	Gilsland, N'land	244 days	52km	SW	Dead; starvation
NRG	Barn Owl	GR10757	06/08/13	Redesdale, N'land	22/03/21	Fallowden Hall, N'land	7yrs 6 months	50km	ENE	Controlled; breeding f.
NRG	Barn Owl	GR19757	06/08/12	Redesdale, N'land	13/04/21	Dunstanburgh Castle, N'land	7yrs 7 months	50km	ENE	Dead in stream with injury
NRG	Bam Owl	GR95241	21/07/16	Knock Hill, N'land	23/01/21	Alnmouth, N'land	4 yrs 5 months	30km	ESE	Found sick, cause not known
NRG	Barn Owl	GV38544	16/09/19	Slaley, N'land	21/06/21	Fenham, Newcastle-on- Tyne	1 yr, 9 months , 6 days	32km	ENE	Fractured wing (barbed wire); euthanised
NYMUBSG	Barn Owl	GY00459	16/06/20	Highville, nr Roxby	16/02/21	Easington	245 days	3km	NW	Freshly dead; poor condition
NYMUBSG	Barn Owl	GY00458	16/06/20	Highville, nr Roxby	19/02/21	Handale, Redcar & Cleveland	248 days	4km	WSW	Freshly dead; poor condition
NYMUBSG	Barn Owl	GY29625	21/06/21	Highville, nr Roxby	03/09/21	A171, Tranmire Whitby	74 days	4km	SE	RTA
NYMUBSG	Barn Owl	GY29661	12/08/21	Hinderwell, N Yorks	11/10/21	Staithes, N Yorks	60 days	5km	NW	Dead in field; not fresh

Group	Species	Ring No.	Date ringed	Location	Date recovered	Location	Age	Distance from ringing site (km)	Direction	Comment
NYMUBSG	Barn Owl	GY00494	26/06/20	Glaisdale,, N Yorks	21/01/21	A171, Ugthorpe, N Yorks	209 days	7km	NE	RTA
NYMUBSG	Barn Owl	GY00451	13/06/20	Dagmoor, Roxby, N Yorks	05/01/21	Low Tranmire, N Yorks	206 days	2km	S	Entered building,, fractured wing
NYMUBSG	Barn Owl	GV75319	23/06/20	Greenhowe,, Redcar & Cleveland	10/02/21	Hinderwell, N Yorks	232 days	4km	Е	Dead, no further info.
NYMUBSG	Barn Owl	GY29670	30/08/21	Egton Flats, N Yorks	05/11/21	NrEgton, N Yorks	67 days	5km	-	Dead under caravan with 3" wound
NYMUBSG	Barn Owl	GV00663	30/06/17	Highville, nr Roxby	19/11/21	Highville, nr Roxby	4 yrs 142 days	-	-	Skeletal remains found in barn
SPRSG & PDRMG	Barn Owl	GV25205	24/06/19	Elmton, Derbys	17/08/21	Epperstone, Notts	2 yrs 1 month 25 days	29km	SSE	Sight record by ringer
SPRSG & PDRMG	Barn Owl	GV83415	11/07/20	Robin Hood, Derbys	18/01/21	Kegworth, Leics	191 days	51km	SSE	Long dead
SPRSG & PDRMG	Gosha wk	HW9739 7	10/06/19	Site confidential, Derbys	27/01/21	Ewden Beck, S. Yorks	1 yr 7m 22 days	8km	ENE	Impaled on barbed wire
MRG	Kestrel	EA74004	09/06/21	Dunham, Trafford	08/08/21	Holyhead, Anglesey	60 days	150k m	W	Exhausted , died next day in care
MRG	Kestrel	EA06937	17/07/19	Little Woolden, Irlam	09/09/21	Pollington, N Yorks	2 yrs 1m 23 days	92km	ENE	Recovered dead
NYMUBSG	Kestrel	EX13324	09/06/20	NrGrosmount, N Yorks	07/03/21	Ugthorpe, N Yorks	271 days	6km	Ν	Possibly hit power line
SPRSG & PDRMG	Kestrel	EZ54420	23/09/19	RamsleyResrDerb ys	18/04/21	Baslow, Derbys	573 days	4km	SSW	Long dead
SPRSG & PDRMG	Kestrel	EZ54233	11/07/20	Hardwick Hall,, Derbys	23/01/21	Cuckney, Notts	196 days	14km	ENE	Long dead
SPRSG &PDRMG	Kestrel	EA12664	12/06/21	Throstle Nest, Derbys	01/12/21	Bickenhillnr Solihull	172 days	99km	S	Freshly dead
SPRSG & PDRMG	Kestrel	EA12666	14/08/21	Thirbycliff, Derbys	25/09/21	Famsfield, Notts	43 days	28km	S	Freshly dead
MRG	Marsh Harrier	FK14044	19/06/21	Boughton Fen, Norfolk	27/10/21 to 17/12/21	Little Woolden&Irlam Mosses Salford	133 days	220k m	WN W	Colour ring JP read in field
DUBSG	Merlin	DT58057	05/07/21	Middleton in Teesdale	13/08/21	CaldbecknrWigt on, Cumbria	39 days	65km	W	Found dead
NRG	Merlin	DT56768	08/06/20	Middleton in Teesdale	08/12/20	Darlington	6 months	34km	E	Male, dead, hit window
Group	Species	Ring No.	Date ringed	Location	Date recovered	Location	Age	Distance from ringing site (km)	Direction	Comment

NRG	Merlin	EA07480	22/06/21	Edmundbyers, Co. Durham	26/07/21	Retford, Notts	1 month 4 days	182k m	SSE	Female, dead, hit window
NRG	Merlin	EX47792	20/06/20	Cheviot Hills, N'land	18/11/20	Sutton Bridge, Lincolnshire	4 months 29 days	336k m	SSE	Dead

AVIAN FLU IN WILD BIRDS

Information taken from the DEFRA website, as at 1st November 2022.

Reporting dead wild birds

You should call the Defra helpline (03459 33 55 77) if you find:

- one or more dead bird of prey or owl
- 3 or more dead gulls or wild waterfowl (swans, geese and ducks)
- 5 or more dead birds of any species

Do not touch or pick up any dead or visibly sick birds that you find.

Advice for the public

Public health

The UK Health Security Agency (UKHSA) has said that avian influenza is primarily a disease of birds and the risk to the general public's health is very low.

Wild birds

Mitigation strategy for avian influenza in wild birds

Find out what Defra and the Welsh Government approach to avian influenza in wild birds is and what actions land managers, ornithologists and the general public can take to mitigate the impact of avian influenza on wild bird populations whilst protecting public health, the wider environment and the rural economy.

https://www.gov.uk/government/publications/mitigation-strategy-for-avian-influenza-in-wild-birds-in-england-and-wales

Wild bird surveillance in Great Britain

Defra and the Animal and Plant Health Agency (APHA) carry out routine surveillance of disease risks in the UK and around the world to help us anticipate future threats to animal health.

As part of this work APHA carry out year-round avian influenza surveillance of dead wild birds submitted via public reports and warden patrols from across Great Britain.

There have been multiple findings of HPAI H5N1 in wild birds from sites across Great Britain. This is in addition to a single finding of HPAI H5N8 in a wild bird.

For further details see the report (updated weekly) of findings of HPAI in wild birds in Great Britain.

https://www.gov.uk/government/publications/avian-influenza-in-wild-birds

How to spot avian influenza

There are 2 types of avian influenza.

Highly pathogenic avian influenza (HPAI) is the more serious type. It is often fatal in birds. The main clinical signs of HPAI in birds (which can include any or a combination of the following) are:

-sudden and rapid increase in the number of birds found dead

-several birds affected in the same shed or air space

-swollen head

-closed and excessively watery eyes

-lethargy and depression

-recumbency and unresponsiveness

-incoordination and loss of balance

-head and body tremoring

-drooping of the wings and/or dragging of legs

-twisting of the head and neck

-swelling and blue discolouration of comb and wattles

-haemorrhages on shanks of the legs and under the skin of the neck

-loss of appetite or marked decrease in feed consumption

-sudden increase or decrease in water consumption

-respiratory distress such as gaping (mouth breathing), nasal snicking (coughing sound),

sneezing, gurgling or rattling

-fever or noticeable increase in body temperature

-discoloured or loose watery droppings

-cessation or marked reduction in egg production

Clinical signs can vary between species of bird and some species (for example ducks and geese) may show minimal clinical signs.

Low pathogenic avian influenza (LPAI) is usually less serious and may show more vague clinical signs. It can cause mild breathing problems and reduction of egg production, but affected birds will not always show clear signs of infection.

The severity of LPAI depends on the type of bird and whether it has any other illnesses. Avian influenza spreads from bird to bird by direct contact or through contaminated body fluids and faeces. It can also be spread by contaminated feed and water or by dirty vehicles, clothing and footwear.

The avian influenza virus changes frequently, creating new strains, and there is a constant risk that one of the new strains may spread easily among people. Avian influenza isn't an airborne virus.

Editor's Note: at the time of writing (October 2022) Avian Influenza had been detected in Peregrines found dead in Leicester (2), Northamptonshire and the Isle of Man. One can speculate that the disease was contracted from feral or racing pigeons, these being a favourite

Northern England Raptor Forum contact list

prey. Woodpigeons have also been suspected of carrying the disease.

Bowland Raptor Study Group

Bill Murphy	murphybill70@yahoo.com
Bill Hesketh	bill.hesketh@blueyonder.co.uk

Calderdale Raptor Study Group

Steve Downing	throstlebower@hotmail.com
Tim Walker	tim@theoldbridgeinn.co.uk

Cheshire Raptor Study Group

Roy S. Leigh	roy@leighecology.co.uk
Jimmi Hill	jimmihill1@gmail.com

Durham Upland Bird Study Group

David Raw	davidrawdubsg@aol.com
Tony Armstrong	alpha39@btinternet.com

Friends of Red Kites

Ken Sanderson	kenandann.sanderson@talktalk.net
Allan Witherington	milvus2@outlook.com

Manchester Raptor Group

Judith Smith	ajudithsmith@gmail.com
Chris Sutton	chrissutton42@gmail.com

Northumbria Ringing Group

Martin Davison	martindavison3@gmail.com
Paul Galloway	<u>galloway.p@sky.com</u>

North York Moors Upland Bird (Merlin) Study Group

Wilf Norman	wilfgros@btinternet.com
Garry Marchant	garrymarchant@yahoo.co.uk

Peak District Raptor Monitoring Group

Steve Davies	stevedav56@icloud.com
Mike Price	mike.price2009@yahoo.com

South Peak Raptor Study Group

Mick Taylor	micktaylor@btinternet.com
Kim Leyland	kleyland@btinternet.com

Northern England Raptor Forum

Steve Downing, Chairman David Raw, Secretary

Northern England Raptor Forum, c/o 25 Pinewood Crescent, Heighington, Co. Durham DL5 6RR