

Northern England Raptor Forum



Annual Review 2009

Acknowledgements

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NERF would like to express its gratitude to Pam Warhurst for writing the Foreword and her continued support for birds of prey and Raptor Workers.

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We are particularly appreciative of the financial support from Natural England, RSPB and Pennine Prospects that has enabled the Forum to produce this report.

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Our gratitude also goes to Guy Shorrock, Stephen Murphy, George Smith, Mike McGrady and Geoff Saliba for their articles, which bring raptor monitoring to life.

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Calderdale Raptor Study Group
Durham Upland Bird Study Group
Northumbrian Ringing Group
North West Raptor Protection Group
North York Moors Upland Bird (Merlin) Study Group
Peak District Raptor Monitoring Group
South Peak Raptor Study Group
Yorkshire Dales Upland Bird Study Group

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Northern England Raptor Forum

Annual Review 2009

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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.

| | |
|--|---------------|
| Cheshire Constabulary | 0845 458 0000 |
| Cleveland Police | 01642 326326 |
| Cumbria Constabulary | 0845 330 0247 |
| Derbyshire Constabulary | 0345 123 3333 |
| Durham Constabulary | 0345 606 0365 |
| 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 |
| Crimestoppers | 0800 555111 |
| RSPB Investigations Dept. | 01767 680551 |
| Wildlife Incident Investigation Scheme | 0800 321600 |
| Please report Hen Harrier sightings to Stephen Murphy, Natural England HHRP. | 07932 662258 |



Foreword

AS CHAIR of Pennine Prospects I am delighted to introduce the first annual review of birds of prey by the Northern England Raptor Forum.

The uplands of northern England, often referred to as the 'backbone of England' is a truly inspiring place. Built into the very fabric of the countryside, our moorland landscape influences and nurtures each and every one of us, from the air we breathe to the water we drink. The hills and dales provide a home for tens of thousands of people who live and work in this beautiful and occasionally hostile environment. For millions of other people the fells not only offer a place into which they can escape the everyday stresses of urban life, the vast peat reserves are a major carbon store and the uplands supply 70% of our drinking water.

Of course mankind is not the only species to seek shelter and sustenance in the uplands. They are home to 22 bird of prey species; including Raven, the honorary raptor. The internationally rare raptors resident in the Pennines are one of the major reasons that our uplands receive the very highest of European designations for habitats.

Pennine Prospects and its partners across the public, private and voluntary sector have been working with the utility companies and major landowners in the South Pennines to conserve our upland heritage. Our work guided the initial designation of the Special Protection Area working alongside what was then English Nature. Proposals were outlined within an 'integrated'

approach to the uplands through the Integrated Management Strategy and Conservation Action Plan [1998]. Elsewhere along the Pennine spine, the National Park Authorities and Areas of Outstanding Natural Beauty have produced similar plans and are seeking to implement their proposals.

In 2010 Pennine Prospects secured a grant from the Heritage Lottery Fund for the three-year Watershed Landscape Project. This funding will assist landscape restoration, habitat management and access projects within the South Pennines. Funding from this grant has, together with financial assistance from Natural England and RSPB, enabled this report to be produced.

Working with the dedicated volunteers in the Northern England Raptor Forum, we hope to raise the profile of the raptors in general to ensure that the importance both of the habitats and species is understood not only by landowners and statutory authorities but takes this knowledge further to our urban residents and visitors.

Birds of prey are the top avian predators and as such they are valuable environmental indicators; when they prosper we are re-assured that the environment is in a stable and healthy condition and that nature is in balance. Consequently our future wellbeing is inextricably linked with their own.

Pam Warhurst CBE

Chair, Pennine Prospects





Chairman's Report

THE NORTHERN England Raptor Forum has come a long way since those first tentative discussions and the inaugural meeting in 2006. NERF represents birds of prey and the views of the majority of Raptor Workers operating in the North of England uplands. Regrettably at the present time Cumbria is not represented on the Forum and it is hoped that this situation can be rectified in the near future.

The uplands, along the Pennine Chain, in the North West and the North York Moors hold significant populations of some of our most iconic predatory birds and it is clear from the individual Group reports that they suffer mixed fortunes across our collective study area and we need to be vigilant in areas where persecution remains a continuing problem. The situation with regard to the Hen Harrier population continues to cause grave concern. Despite the continuing efforts of Natural England's Hen Harrier Recovery Project, the number of Hen Harriers found in England remains precariously low. The failure of the population to expand into the eminently suitable habitat found throughout the northern uplands is now widely attributed to human interference as a consequence of the perceived conflict with grouse moor management. This situation is absolutely intolerable and NERF calls on the statutory authorities to use all of their powers to reverse this situation.

The Forum is actively involved with the Environment Council's attempt to produce a 'Hen Harrier Conflict Resolution'. This process brings all interested parties, statutory authorities, conservationists, grouse moor owners and game managers together under Charter

House Rules in an attempt to resolve the very major differences of opinion on the subject. We will continue to speak on behalf of Hen Harriers and press for an end to persecution.

This, our first annual report, gives us an opportunity to take an in-depth look at the health of our raptor populations and will be of tremendous benefit to the Forum as we formulate our plans and priorities for the future.

In 2010, with assistance from Arjun Amar, RSPB, we will publish the Forum's first single species report. The Peregrine paper will analyse data collected by our members over a twenty year period, and provide us with a valuable overview of the species and how it has fared during that time. The results are certainly eagerly awaited.

Historically the North of England annual Raptor Conference was arranged independently by local Raptor Groups. The Conference is now arranged under the banner of NERF and although it will continue to be hosted by a local group the huge amount of work required to bring the conference from paper to platform is now undertaken by members from across the region; an excellent example of collaborative working.

There are many challenges ahead and NERF members will meet those challenges as they appear, for the benefit of raptors and Raptor Workers.

Paul Irving

Chairman. Northern England Raptor Forum



A brief history of the Northern England Raptor Forum

IN MANY upland areas of northern England, experienced Raptor Workers have been working together in local or county based raptor or bird study groups for many years. Within their respective areas these Groups have been extremely successful in dealing with numerous and varied bird of prey issues. Additionally the Groups have traditionally undertaken a wide range of research, surveying and monitoring projects, the co-ordination of work undertaken by Wildlife & Countryside Act Schedule 1 licence holders and the ringing activities of their members.

From informal discussions at events such as the annual North of England Raptor Conferences, it was obvious that many of the problems and issues faced by Raptor Workers and upland bird of prey populations were all generically very similar within each local Group.

During these discussions it was clear that there was a general consensus that we would be more effective if we worked collectively to raise awareness of raptor related issues and address problems at the regional or national level.

In February 2006 representatives from Raptor Study Groups, the Police, Natural England and the RSPB met to discuss ways of developing an umbrella organisation that could represent the collective views of the local Raptor Study Groups and also to develop closer working links with Statutory National Conservation Organisations [SNCOs], the Police, in particular Wildlife Crime Officers, and Non-Governmental Organisations [NGOs].

Following on from this inaugural meeting, the Northern England Raptor Forum [NERF] was established with an overall objective to provide one effective voice to represent the conservation interests of raptors [birds of prey, including owls and raven] in the uplands of northern England.

Under the constitution membership of the Forum is open to any formalised upland bird study group operating in the north of England. Currently the membership consists of the following groups:

- Calderdale Raptor Study Group
- Durham Upland Bird Study Group
- Northumbrian Ringing Group
- North West Raptor Protection Group
- North York Moors Upland Bird [Merlin] Study Group
- Peak District Raptor Monitoring Group
- South Peak Raptor Study Group
- Yorkshire Dales Upland Bird Study Group

In order to achieve our objectives the Forum acts, where appropriate, as the parent body co-ordinating surveying and monitoring work across all member Groups, developing centralised policies and methods of working that further enhance the high standard of work currently being undertaken.

Policy decisions are taken during bi-annual meetings by a committee consisting of two members from each of the affiliated Groups under a majority voting system that allows for one vote per Group. Whilst NERF is, and will, remain an independent voice, speaking on behalf of raptors, the Forum benefits from contributions made by invited representatives from North Yorkshire Police, representing regional Wildlife Crime Officers, RSPB Northern Region, RSPB Investigations and the Hen Harrier Recovery Project [HHRP].

Given the continuing threats to birds of prey in the uplands, it is imperative that the Forum maintains a good working relationship with all organisations that share similar aims, whilst maintaining an independent voice for Raptor Workers and the species they care so passionately about.

Since those early meetings of 2006 we have come a long way but there is yet much to achieve and we have, in many ways, only just begun.

For more information please contact the Chairman or Secretary of your local Raptor Study Group [see Appendix III] or email contact@raptorforum.org

Ian Court

Secretary, Northern England Raptor Forum

NERF geographical coverage

Calderdale Raptor Study Group

Extent of coverage: part uplands and part lowland areas

The Calderdale Raptor Study Group covers some, or all, of the following Ordnance Survey grid squares SD91:92:93, SE01:02:03 & SE11:12.

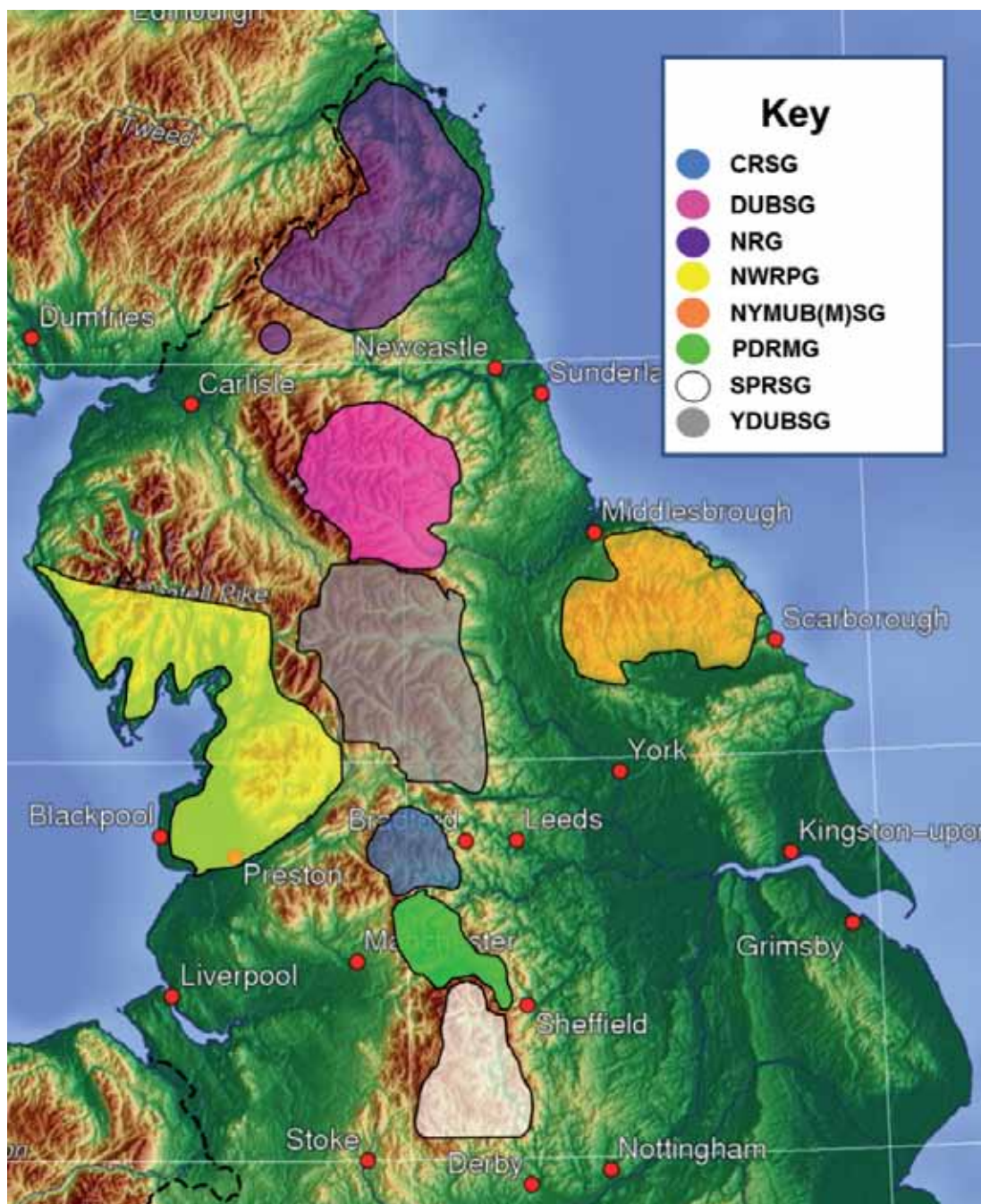
Effectively the M62 is the southern border, with the Worth Valley forming the northern border. In the east the Group covers Brighouse [between Bradford in the north and Huddersfield in the south]. The western border is the county boundary with Lancashire on the Pennine hills.

Durham Upland Bird Study Group

Extent of coverage: part uplands and part lowland areas

In this report the Durham Upland Bird Study Group comments refer principally to the Durham uplands [defined here as the North Pennine SPA and adjoining valley systems generally west of easting NZ10 to the county boundaries with Northumberland, Cumbria and North Yorkshire.

Where appropriate comments for some species will refer to 'all County' records.



Northumbrian Ringing Group

Extent of coverage: part uplands and part lowland areas

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

Where appropriate comments for some species will refer to 'all County' records.

North West Raptor Protection Group

Extent of coverage: part upland areas

The NWRPG covers the whole of the Forest of Bowland, including the Ribble and Lune Valleys. The Group also monitors specific species i.e. Red Kite, Goshawk and Peregrine where they are known to occur in South Cumbria west of the M6, as far north as Ambleside and across to Black Combe in the west of the county.

North York Moors Upland Bird (Merlin) Study Group

Extent of coverage: upland areas only

The area studied by the NYM Merlin Study Group covers the upland areas, gills, dales, forests and farmland within the boundaries of the North York Moors National Park.

Peak District Raptor Monitoring Group

Extent of coverage: part uplands and part lowland areas

The PDRMG covers the Derbyshire Peak District, the Goyt Valley and the Macclesfield Forest, including neighbouring low lying areas.

Glossop forms the western boundary and the north-east of the Peak Park is bound by Huddersfield, Sheffield, Barnsley and Wakefield.

The Group does not cover the limestone areas, within the Peak Park or Derwent Dale.

South Peak Raptor Study Group

Extent of coverage: whole county

The South Peak Raptor Study Group's recording area covers the following:

In the north of the area, National Trust land in the Upper Derwent Valley, west to the River Alport and east to the National Trust boundary.

In the south the Groups covers all of the White Peak, with the exception of the Goyt Valley; 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 for Hobby.

Yorkshire Dales Upland Bird Study Group

Extent of coverage: upland areas only

The Yorkshire Dales Upland Bird Study Group's recording area covers the central Pennine block from the southern boundary between Skipton, Harrogate and Otley, north to the Durham county boundary, and west to the Cumbria and Lancashire county boundaries.

Annual review

THE NORTHERN England Raptor Forum [NERF] was formed in 2006 with the specific objective of speaking on behalf of birds of prey, with one collective voice. Members of the Forum survey all of the species of raptor, including owls and raven, an honorary raptor, occurring in the northern uplands. Montagu's Harriers are not present every year: however there have been regular, if infrequent, sightings and a number of breeding attempts in the region. Historically White-tailed Eagle sightings have been very rare in the region. This situation may change if the proposed English re-introduction scheme goes ahead. The species has been included as base-line data, the significance of which will become apparent if the number of sightings increase.

The uplands of the North of England are wild, often inhospitable, the terrain can be difficult to negotiate and many bird of prey nests are, inevitably, in remote locations. Within each individual member Group resources are extremely limited and the time required to study all of the 22 species, in any depth, is very considerable. These problems are exacerbated by the fact that the majority of the monitoring takes place during the breeding season, which is a very small window of opportunity to complete a very large body of work.

Prior to the commissioning of this report each of the NERF Groups recorded their monitoring activities separately in a format that suited their own specific requirements and reflected individual interests within that Group. Consequently not all species were recorded fully, and in some cases they were not recorded at all. This, the first NERF Annual Review, combines all of the recorded data in one document. Understandably, because of the way the data was originally collected there are unavoidable gaps in the data published in this report.

Data gaps are shown as 'NR' [no records] in the NERF species tables. This notation merely indicates that no records were kept by the originating Group, or that the records are irretrievable for the purpose of this report. The notation should not be interpreted to conclude that the species does not occur in that study area. Where specific numbers are given they should not be interpreted as a definitive population count for the area.

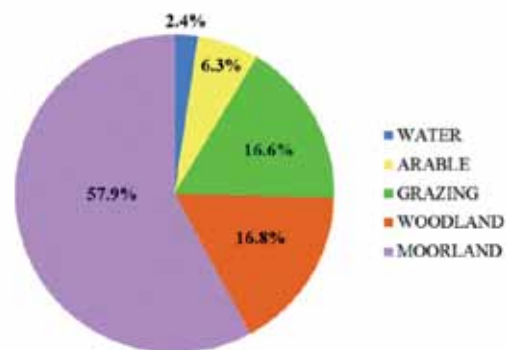
These same criteria also apply to persecution data. The numbers in the persecution bar-chart refer only to evidence-based cases recorded by the members, over time, in respect of species and persecution category. Once again the figures in each bar should not be seen as definitive, they simply reflect the number of Groups that have experienced each specific category of persecution. Nor should the fact that no persecution is recorded in some of the categories, or for some of the species, be interpreted that no persecution occurs in respect of that species; it merely indicates that none was discovered by NERF members.

NERF region habitat coverage

NERF members survey 22 raptor species across the northern uplands. It is perhaps not surprising therefore that almost 60% of the habitat monitored consists of moorland and that together moorland and woodland, often situated on the moorland fringe, account for 75% of the habitat monitored.

Although 16.6% of the monitored habitat has been categorised as grazing much of this habitat comprises of white moor, sheepwalk and 'in-bye' land. It is evident that very little of the monitored habitat is arable land, which together with water makes up less than 10% of the total.

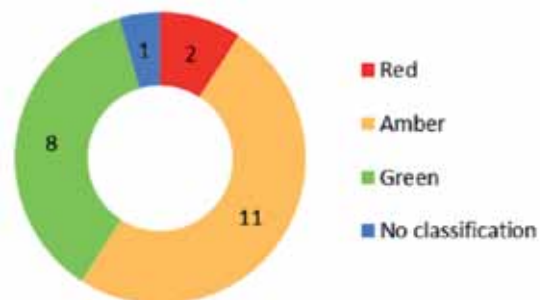
NERF habitat breakdown



From the data supplied by the individual Groups it is clear that if the species monitored by NERF are to prosper they are dependent on sensitive management of moorland, moorland fringe and forestry. Whilst many of the upland SSSIs are not in 'favourable' status, overall upland land management practices do provide vast areas of suitable habitat for raptors.

Conservation status of raptors in the NERF region

Conservation status of the 22 raptors surveyed by NERF members



Many of the raptors monitored by NERF are vulnerable and the conservation status of 13 of the 22 species is listed as red or amber, which emphasises the importance and benefit of the work being undertaken for raptor conservation by the Groups. Data collated by NERF is

situ decompose relatively quickly and the carcasses offer an attractive meal to scavengers. Raptor Workers working in the NERF region have many hundreds of years of experience between them and the general opinion is that persecution is widespread, in some areas, and could be responsible for local extinctions. Whilst every effort should be made to resolve the conflicts that result in persecution these discussions should take place under conditions that ensure everyone involved complies with the current legislation. Many people attempt to polarise the discussion about persecution into 'this side' and 'that side' arguments; this attitude is unhelpful and NERF does not take this view. Persecution of birds of prey is a criminal offence; it is the duty of the Police to investigate suspicious incidents and the duty of each and every one of us, both individuals and professional representative bodies, to assist them to fulfil that duty.

No matter how contentious these issues are, it is the responsibility of Raptor Workers to raise their concerns, in relation to persecution, in the public domain and to lobby for more effective enforcement action.

In the event that Raptor Workers discover a suspected case of persecution they should record the incident contemporaneously in their field note book and take

photographs, using an object of known size to indicate scale where necessary. The incident should be reported to the Police at the earliest opportunity and an incident number obtained. In addition to deploying an Officer to investigate the incident, request that details of the incident be brought to the attention of the Force Wildlife Crime Officer.

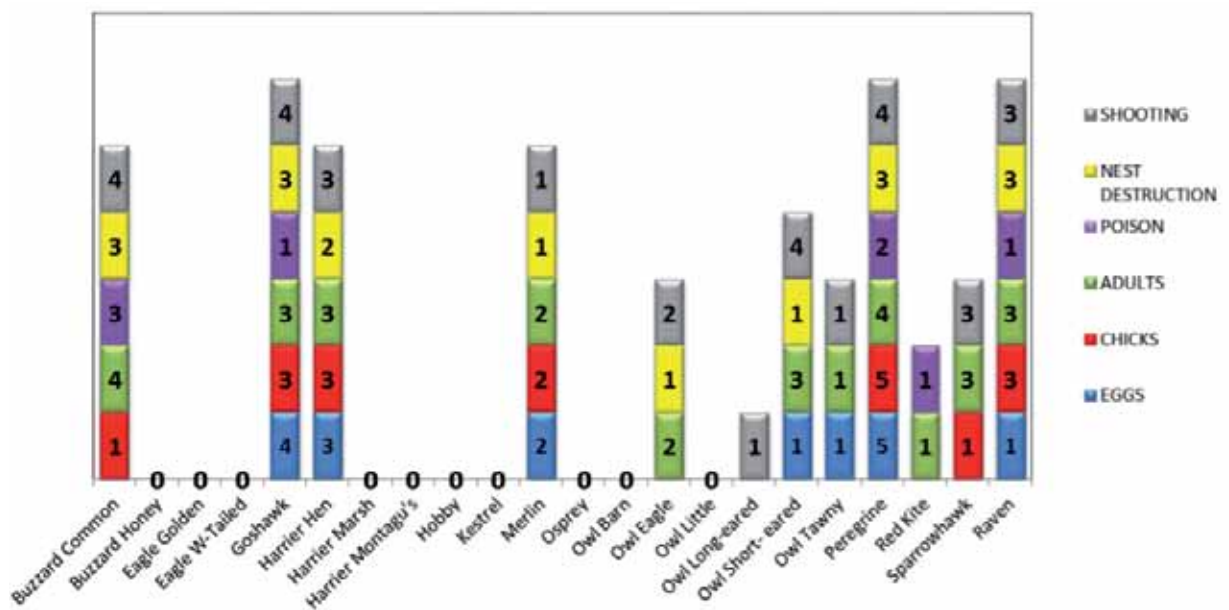
Please also report the incident to the RSPB Investigations Section, telephone: 01767 680551.

If a suspected poisoning incident is discovered it is imperative that it is reported to the Government Wildlife Incident Investigation Scheme [WIIS]. The Freephone telephone number for the scheme is 0800 321600.

WARNING:

Some poisons are highly toxic and extreme caution must be exercised. Do not handle the carcass or suspected baits; where possible cover them to prevent other animals coming into contact with the poison.

Number of NERF groups reporting persecution by species and category



Notes:

The persecution data recorded by NERF in relation to species / categories was collated over time and does not imply that persecution in each category was recorded in 2009.

The values shown in the bar chart indicate the number of individual NERF member

Groups reporting persecution within each separate category.

'0' values have been attributed to some species under circumstances where they either do not occur within the NERF area, or, where no persecution was detected by Group members. In this second classification readers should not infer that no persecution took place, merely that it went undetected.

Summary

The 2009 combined Groups data has been collated into a single table. See A I.

Within the NERF region 20 of the 22 raptor species were monitored by Group members during 2009, only White-tailed Eagle and Montagu's Harrier were recorded as being absent from all of the study areas.

Collectively NERF members checked in excess of 1,260 home ranges, finding that 945 were occupied by pairs of birds. Of these, 810 pairs [85.7%] were monitored throughout the season and 481 pairs are known to have fledged in excess of 1,362 young birds. The remaining 135 occupied sites received passing attention; however the final outcomes were not recorded.

Records also reveal that the overall breeding rates for the combined species for 2009 were:

- 617 pairs laid eggs and 82.2% [507 pairs] hatched eggs
- 507 pairs hatched eggs and 94.9% [481 pairs] fledged young
- the overall rate for pairs fledging young per pair laying is 78%
- the combined all-species fledging rate per pair monitored is 1.68

Using the recommended survey / monitoring guidelines, i.e. 3 visits per nest per season [4 visits if the birds are fitted with rings], the above data clearly indicates that NERF members made almost 3,000 individual nest visits during the 2009 breeding season. For some species, such as Short-eared Owls and Hen Harriers locating a nest may take several visits, each lasting many hours on the ground.

Taking into account travelling time and the distance to some of the remote locations, over rough terrain, it is estimated that each Raptor Worker commits 5 hours per nest visit. For health and safety reasons nest visits are invariably made by 2 Raptor Workers, which doubles the nest-visit time to 10 hours.

To achieve this number of nest visits NERF members committed in excess of 30,000 hours to monitoring and protecting raptors during 2009. This is a conservative estimate and does not take into account the number of hours of 'passing attention' spent on the other 135 nests

that were not fully monitored throughout the season.

Using an average of £130 per day for professional survey work, the voluntary contribution of NERF Group members during 2009 is valued in the region of £500,000.

Although NERF members completed an extraordinary amount of monitoring during 2009 there is more to do and anyone interested in joining one of the Groups should contact the relevant Chair. Contact details are produced in Appendix III.

Whilst some very interesting conclusions can tentatively be drawn from the 2009 data-set these figures are a base-line, which will aid the NERF Committee to make strategic decisions for future monitoring projects and the publication of single species reports.

When more data is available, via future annual reports, a more detailed analysis will be undertaken and comparisons and trended information will provide the Forum with a better overall understanding of the status of birds of prey in the region.

The main body of the Annual Review identifies each of the 22 species in alphabetical order, concluding with Raven. The sub-sections then examine the national perspective for each bird, including the UK population estimate, the species overview, the national threat assessment and the conservation status. The Review then outlines the monitoring activity undertaken by NERF, including individual Group reports, Group species summary and the NERF regional threat assessment.

Species reports

Buzzard, Common *Buteo buteo*



Managers ensured that their range was limited to the west of the mainland. The population saw an expansion during the first half of the 20th century as a result of reduced persecution during the two World Wars. Unfortunately this expansion was severely restricted during the 1950's and '60s. Myxomatosis decimated the rabbit population, a major food source for Buzzard. The widespread use of organochlorine pesticides caused secondary-poisoning resulting in a reduced ability to reproduce. Since that time the pesticide has been withdrawn, the rabbit numbers have dramatically increased and equally importantly many Game Managers have accepted that Buzzards actually pose little threat to game birds; as a consequence the number of cases of persecution has fallen sharply.

UK population estimate

In 2000 the UK population was estimated at approximately 14,200 pairs in 31,100 - 44,000 territories. ^(BTO)

Overview

The Common Buzzard is, as the name suggests, very common and is the most widespread of all raptors across the UK, once again breeding in every county. Regrettably this reversal in fortune has taken 200 years. At the beginning of the 19th century they could be found throughout the UK; 75 years later persecution by Game

National threat assessment

Persecution remains a threat to Buzzard populations in some areas of the UK with several cases of shooting and poisoning being reported annually.

Conservation status ^(BTO)

| | |
|----------|----------------|
| UK | Green ● |
| Europe | Not of concern |
| Globally | Least concern |

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|---------------------------|-------------------------------|--|
| CRSG | 4 | 4 | 0 | 2 | NR | 2(+) | 2(+) | 2 | NR | NR | NR |
| DUBSG | 34 | 34 | NR | 34 | NR | 17(+) | 17(+) | 17(+) | 33 | 1.94 ¹ | 0.97 |
| NRG | 91 | 91 | NR | 66 | NR | 38(+) | 38(+) | 38(+) | 33 | 0.87 ² | 0.50 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMMSG | 6 | 6 | NR | 6 | NR | 4 | 4 | 4 | NR | NR | NR |
| PDRSG | 14 | 14 | NR | 14 | NR | 14 | 14 | 14 | 32 | 2.28 | 2.28 |
| SPRSG | 100(+) | 100(+) | NR | 27 | NR | 27(+) | 27(+) | 27(+) | 41(+) ³ | 1.52 ⁴ | 1.52 |
| YDUBSG | 12(+) | 12(+) | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 261(+) | 261(+) | NR | 149 | NR | 102(+) | 102(+) | 102(+) | 139(+)⁵ | 1.36⁶ | 0.93 |

Notes:

1. to calculate the number of young fledged per pair laying n = 17
2. to calculate the number of young fledged per pair laying n = 38
3. to calculate the number of young fledged n = 41

4. to calculate the number of young fledged per pair laying n = 27
5. to calculate the number of young fledged n = 139
6. to calculate the number of young fledged per pair laying n = 102

Group Reports

Calderdale Raptor Study Group

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

Common Buzzard is not monitored in depth in this study area. However, food was noted being carried into 2 occupied territories on several occasions. Although juveniles were later seen over these territories the total number fledged at each site is unknown.

From anecdotal records it is believed that 1 or 2 other pairs may have bred unnoticed by the Group.

Durham Upland Bird Study Group

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

In 1991 re-colonisation of County Durham was confirmed when breeding was recorded in the south west of the county. Since then Common Buzzards have become established across the whole of County Durham and the total population is now in the range 70 – 100 pairs.

Northumbrian Ringing Group

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

Within the study area there were 66 sites occupied in the Border Forest; from these sites, a minimum of 38 pairs fledged 33 young.

In the northern Cheviots 25 territories were checked and found to be occupied; however no further monitoring took place.

Across the whole of the County the population is estimated to be between 300 and 500 pairs.

North West Raptor Protection Group

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

Common Buzzards occur across the study area. It is estimated that there are 60 – 70 pairs in the region; however they are not monitored by the Group.

North York Moors Upland Bird (Merlin) Study Group

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

Although 4 pairs were known to nest successfully within the National Park study area, it is believed that there were several other successful breeding pairs in the region.

Peak District Raptor Monitoring Group

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

Common Buzzard populations are increasing

throughout the study area, particularly in areas away from grouse moors. The majority of successful sites are in deciduous woodland and on mixed farmland.

South Peak Raptor Study Group

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

Common Buzzards are now present throughout Derbyshire. Regrettably within the study area breeding success is inconsistent, with unexplained failures noted, particularly in the Upper Derwent Valley. Elsewhere high breeding density was noted in several areas with nests as close as 500m from each other.

It is estimated that the total breeding population for the County could be in excess of 350 pairs.

Yorkshire Dales Upland Bird Study Group

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

The species is now widespread in the Yorkshire Dales but there is very little information on its breeding status. The YDUBSG figures are the results from a single study and do not represent the figure for the whole recording area. During the study in 2009 a minimum of 12 nesting pairs were located in the south-east of the Group's recording area.

NERF regional summary

This species occurs in all of the Study Group areas; however little formal monitoring is undertaken by some of the Groups.

The species continues to re-colonise former breeding areas lost through persecution in the 19th and 20th centuries. This is particularly evident in the east and south of the NERF region, but expansion is noted in the lowlands of all areas covered by this report. Away from the conurbations and major cities, Northern England contains habitat which appears eminently suitable for Common Buzzards and, although persecution is still evident in some areas, further expansion can be anticipated where vacant territories exist.

NERF regional threat assessment

Reports from some of the NERF members indicate that persecution of Common Buzzard continues to be a problem. Furthermore there are sections of the NERF study area where the absence of Common Buzzards is difficult to explain. Taking all other considerations into account such as suitable habitat and the availability of food, the inevitable conclusion is that this absence is as a result of human interference.

No Groups report potential threats from egg collectors at the present time.

Buzzard, Honey *Pernis apivorus*



of time on the ground excavating the larvae, which is the principle source of food for chicks. The birds return to Africa in September.

National threat assessment

The birds, particularly inexperienced juveniles, are at serious risk of being shot as they migrate over the Mediterranean. BirdLife Malta operates a Springwatch and Autumn Raptor Camp staffed by volunteers in an effort to reduce persecution as the birds cross the Maltese Islands. Once in the UK they are susceptible to disturbance during the breeding season. They are also vulnerable to egg collectors. To reduce this risk the location of nests is usually kept secret and monitored by volunteers.

UK population estimate

Due to the secretive nature of these birds it is difficult to give an accurate estimate of the numbers visiting the UK; however within naturally occurring fluctuations the overall population is stable across Europe.

In 2000 the UK population was estimated at c33 – 69 pairs. ^(BTO)

Overview

The name of this bird is somewhat of a misnomer in that it is not a Buzzard and it does not feed on honey! Honey Buzzards are summer visitors to the UK, returning from their over-wintering grounds in Africa in mid-May. Their arrival is timed to coincide with the breeding cycle of bees and wasps. The adults spend a large amount

Conservation status ^(BTO)

UK Amber ●
 Europe Not of concern
 Global Least concern
 Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Group Reports

Calderdale Raptor Study Group

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

During 2009 there was only one report of a passage migrant on the 1st September.

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMMSG | 3 | 1 | NR | 1 | NR | 1 | 1 | 1 | 2 | 2.00 | 2.00 |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 2 | 2.00 | 2.00 |

Durham Upland Bird Study Group

Level of monitoring: Occurs but no monitoring.

There has yet to be any confirmation of breeding in the county. With the exception of occasional strong autumn passage movement being apparent on the eastern seaboard, e.g. in 2008, the species is a scarce vagrant in most years to County Durham.

In 2009 a Honey Buzzard was seen in the uplands on a single date in late May. Over the last 5 years sightings in the uplands have been extremely limited with 2006 providing the only significant report when two birds were seen displaying in the north west on 12th June. They were not seen subsequently.

Northumbrian Ringing Group

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

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

A single pair is known to have been present in southern Cumbria for several seasons recently. Although this pair is not monitored by the Group it is believed to have bred successfully in 2009.

During the year several other migrant birds were seen in the Forest of Bowland.

North York Moors Upland Bird (Merlin) Study Group

Level of monitoring: Occurs but no monitoring.

One pair has traditionally occupied the same site for approximately 15 years; however it is believed that they did not return in 2009. A second pair was successful at

a different site.

This species has been monitored by a Raptor Worker who is not a member of the Study Group. He consistently declines to share data with the Group and although we can confidently predict that other pairs are active in the area the details are not available.

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

Yorkshire Dales Upland Bird Study Group

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

NERF regional summary

The Honey Buzzard is a scarce migrant passing through the lower elevations of the NERF study area, and sightings in the uplands are extremely rare. Proven breeding has only taken place in North Yorkshire, with a second pair rumoured to have bred in South Cumbria.

NERF regional threat assessment

The extremely low number of breeding pairs in the NERF region leaves this species particularly vulnerable. The loss of a single clutch of eggs to collectors or the abandonment of a clutch due to disturbance at the breeding site is likely to be locally catastrophic.

Eagle, Golden *Aquila chrysaetos*



UK population estimate

The UK population estimate was 442 pairs in 2003, all but one of which was located in Scotland. ^(BTO)

Overview

Whilst Golden Eagles are widespread throughout Europe and North America, in the UK these iconic birds are only found in relatively low numbers in the Scottish Highlands and at a single eyrie in the English Lake District. The UK population decline started when sheep farmers began killing the birds in the 1700's. The problem was exacerbated in the 1800's when Game Managers joined in the slaughter. By 1850 Golden Eagles were extinct in England and Wales and were only surviving in small numbers in Scotland.

Being carrion eaters, Golden Eagles were badly affected by secondary poisoning from organochlorine

pesticides during the 1950's and '60s. The pesticide compounds accumulated in the adults and led to either infertility or eggs with thinner shells. These thinner shelled eggs were frequently broken during incubation. Once these pesticides were banned the population was able to expand; however numbers remain relatively low and large areas in Scotland are still unoccupied.

National threat assessment

Golden Eagles are targeted by egg collectors. They are also shot and vulnerable to being poisoned; these illegal activities are serious problems in some areas. Habitat loss through upland afforestation and the loss of large tracts of open land for foraging increase the pressure on the species. The current drive to increase the amount of renewable energy generated by wind farms also poses a serious threat, if they are sited inappropriately.

If persecution of Golden Eagles, habitat loss and the threat of collision with wind turbines in Scotland are limiting the numbers and dispersal of juveniles then it is highly unlikely that they will re-colonise the North of England in significant numbers in the foreseeable future.

These factors are also likely to affect the numbers of Golden Eagles over-wintering in northern England.

Conservation status ^(BTO)

UK Amber ●
 Europe 3: concern, most not in Europe; rare
 Global Least concern
 Listed on Schedule 1 of the Wildlife and Countryside Act 1981

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Home ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|--------|---------------------|------------------------------|--------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NRG | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NWRPG | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NYMMSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |

Group Reports

Calderdale Raptor Study Group

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

Durham Upland Bird Study Group

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

All potential Golden Eagle territory was checked during surveys for other species and there are no records of Golden Eagles being present across the whole county during 2009.

This bird was last seen in County Durham in April 2002 and prior to that in 1984.

Northumbrian Ringing Group

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

For the first time in 30 years Golden Eagles were not recorded in the Border Forest, Northumberland.

North West Raptor Protection Group

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

One solitary bird was seen during 2009. However, in recent seasons other solitary migrants have been observed in the Langden and Whitendale Valleys, Forest of Bowland. In 1998 a single female was observed perched in a tree in the northern section of the Gisburn Forest.

North York Moors Upland Bird (Merlin) Study Group

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

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

Yorkshire Dales Upland Bird Study Group

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

NERF regional summary

Traditionally Golden Eagles were present annually in the Border Forest, Northumberland; however for the first time in 30 years they were absent. A solitary migrant was recorded in Lancashire. There have been no sightings of this species in Durham since 2002.

Persecution in the south-east of Scotland is limiting population growth north of the border; consequently the re-colonisation of the north of England by natural expansion is likely to be extremely slow.

NERF regional threat assessment

The virtual absence of birds in the NERF region ensures that the national threat assessment is largely inapplicable. The situation continues to be monitored and the threat assessment will be updated if and when the circumstances change.

Eagle, White-tailed *Haliaeetus albicilla*



UK population estimate

The White-tailed Eagle population was estimated to be 36 pairs in 2006. ^(BTO)

Overview

The White-tailed Eagle is the largest bird of prey in the UK. It was widespread across much of Scotland and Ireland in the 18th century and also known to breed in England and Wales. However by 1800 the species was extinct in England and by 1900 only a few remained in the UK. In 1916 the last UK breeding success was recorded on the Isle of Skye. The last known British bird was shot on Shetland in 1918. By the end of the First World War the UK population of White-tailed Eagles

had been persecuted to extinction by shepherds, game and fishery managers, and skin and egg collectors.

In 1975 a re-introduction program commenced in western Scotland and over the next 10 years 82 juvenile birds, donated by Norway, were released. A further round of the re-introductions took place in 1990 and the population is now self sustaining.

Note:

In 2009 Natural England and the RSPB commenced on-going research into the possibility of further re-introductions in the south-east of England.

National threat assessment

The population is still extremely small and any losses have a significant impact on this species. Egg collectors continue to be a major threat to the White-tailed Eagle population and the location of each nest is kept secret, then closely monitored and protected.

As carrion eaters they are also vulnerable to both deliberate and accidental poisoning.

These birds have a reputation for taking lambs and whilst the reputation is by and large unjustified it is true that individuals may present a localised problem. To reduce the threat to the birds from irate shepherds, as part of a positive management plan, on Mull and in parts of the Isle of Skye, Scottish Natural Heritage has introduced a compensation scheme for farmers with WTEs on their land.

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|--------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |

Conservation status ^(BTO)

UK Red ●
Europe 1 Global Conservation Concern; rare
Global Near threatened
Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Group Reports

Calderdale Raptor Study Group

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

Durham Upland Bird Study Group

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

Northumbrian Ringing Group

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

North West Raptor Protection Group

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

This species is a rare migrant to western parts of Cumbria.

North York Moors Upland Bird (Merlin) Study Group

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

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

The last sighting of this species in the South Peak recording area was made by Mick Taylor in 2005.

Yorkshire Dales Upland Bird Study Group

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

NERF regional summary

There are no records of White-tailed Eagles across the whole of the NERF area during 2009. If the re-introduction scheme, currently being considered, is undertaken in the south-east of England there is the possibility of future sightings in the north.

NERF regional threat assessment

The UK population is extremely small and restricted to Scotland at the present time. It is possible that this situation may change should the proposed re-introduction scheme planned for the south-east of England be initiated. In the interim there are no threats applicable to this bird within the NERF region.

Goshawk, Northern *Accipiter gentilis*



leased. It is quite likely that these re-introductions were part of a plan to allow the species to breed in the wild before the young were 'harvested' back into falconry. The re-introduction scheme was successful and together with the escaped birds small breeding populations were established and over the last 40 years these have increased and dispersed across the UK. Goshawks have a reputation for taking game birds and persecution continues to be a limiting factor on population growth and expansion in some areas.

National threat assessment

Nationally Goshawks continue to face persecution in some areas at levels that could lead to localised extinctions. Egg collectors also continue to threaten the species and their activities can also have a significant local impact.

UK population estimate

The population is now thought to be about 500 breeding pairs ^(BTO)

Overview

Goshawks were widespread throughout the UK until the end of the 19th century. Large scale clearance of forestry and ruthless and relentless persecution by Game Managers and specimen collectors led to the extinction of this species. Throughout the 1960's and '70s falconers imported birds from Scandinavia and Finland; some escaped into the wild and others were deliberately re-

Conservation status ^(BTO)

UK Green ●
 European Not of concern
 Global Least concern
 Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Group Reports

Calderdale Raptor Study Group

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

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 1 | 1 | 0 | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 36(+) | 36 | NR | 36 | 3 | 33 | 33 | 24 | 53 | 1.61 | 1.47 |
| NWRPG | 3 | 3 | 0 | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMMSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 15 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| SPRSG | 17 | 14 | 2 | 14 | 3 | 7(+) | 7(+) | 7(+) | 13 | 1.86 ¹ | 0.93 |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 72(+) | 55 | 2 | 51 | 7 | 40(+) | 40(+) | 31(+) | 66 | 1.65² | 1.29 |

Notes:

1. to calculate the number of young fledged per pair laying n = 7
2. to calculate the number of young fledged per pair laying n = 40

Whilst there are large areas of suitable habitat for Goshawks in the Calder Valley there were only 11 separate sightings between March and October. A male and female were present during the breeding season at one location. On one occasion the female was seen carrying large prey over 3 kilometres of moorland before she dropped into a steep sided valley, indicating that breeding may have taken place. The area covers approximately 10km² and therefore due to the size and heavily wooded nature of the valley the nest was not located.

Durham Upland Bird Study Group

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

Observations in the uplands are based mainly on early season pair-bonding flight displays over the larger Forestry Commission plantations. The suggested population in the uplands in 2009 is tentatively estimated at 7 to 8 pairs. There is no clear information in relation to breeding success.

A few more pairs are known to breed in the eastern lowlands.

Northumbrian Ringing Group

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

The Northumberland study area includes a small section of eastern Cumbria around Keshope, where the forested area straddles the county boundary.

Within this area the population is relatively stable and in 2009 66% of the occupied territories successfully fledged young. This fledging rate fits within the parameters of the annual average breeding success for the study area.

North West Raptor Protection Group

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

A minimum of 2 pairs are known to breed in the Dun-sop Valley. Whilst they are seen displaying annually during spring, no occupied nests have been located for several years.

During the year a further pair were observed in the upper section of Gisburn Forest, north of Stocks Reservoir; the outcome of this pair is unknown.

North York Moors Upland Bird (Merlin) Study Group

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

The individuals responsible for monitoring this species have declined to release their records other than to report that the species is 'doing well'.

Peak District Raptor Monitoring Group

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

2009 was a typical year in this Study Group area. Over the last 10 years approximately 15 previously occupied sites have been lost; however for completeness they are

still monitored by the Group because persecution is believed to be the sole reason for non-occupancy.

All of these 'lost' sites are adjacent to kept grouse moors.

South Peak Raptor Study Group

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

Overall 2009 was a poor year for productivity generally, mainly due to poor weather.

In the Upper Derwent Valley once again persecution was evident. Four pairs were located, however only 2 pairs bred, fledging 5 young. Two adult males 'disappeared' from 2 other sites, under suspicious circumstances, early in the season.

Yorkshire Dales Upland Bird Study Group

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

There is no formal monitoring of this species by the Group. However, there were casual records in relation to 2 pairs observed in the south-east of the study area.

NERF regional summary

There are three main Goshawk study areas; one in the South Peaks area, one in Northumberland [which includes part of eastern Cumbria] and one in North Yorkshire. In respect of the latter study area the Raptor Workers responsible for monitoring the birds have declined to share their data with the local Raptor Study Group, however they report that the population is 'doing well'.

The Northumberland population is relatively stable with 2009 being a fairly average year for breeding success. Two thirds of occupied territories in Northumberland successfully fledged young although in the South Peaks area only half of the occupied territories were successful.

Two sites in the South Peaks area failed early in the season when the breeding females disappeared from the sites.

Away from the main study areas, although no detailed monitoring was undertaken, records show that 2 pairs were reported in the Yorkshire Dales area, 7 or 8 pairs were recorded in County Durham together with a further 3 pairs in the north-west of England.

NERF regional threat assessment

There is ample suitable habitat and food availability across the whole of the NERF region to support healthier populations than we currently enjoy. They thrive in some areas and are absent from others with very similar habitat and food supply. Taking these and other factors into account it is difficult to find any cause, other than human interference, for these anomalies.

Harrier, Hen *Circus cyaneus*



UK population estimate

The UK population, including the Isle of Man, is thought to be about 800 breeding pairs ^(BTO)

Overview

The Hen Harrier is the most persecuted bird of prey in the UK and is facing extinction as a breeding bird in England. The majority of the English population is located in a tiny stronghold in the Forest of Bowland, Lancashire, predominantly on land owned by United Utilities.

It was persecution by grouse moor managers that led

to a marked decline during the 19th century and by the start of the 20th century the species was restricted to the Western Isles and Orkney. It took a further 70 years for Hen Harriers to re-colonise the mainland. Although the bird returned to the North of England in 1968 the number of annual breeding attempts is pitifully low despite the availability of large areas of suitable habitat.

Research indicates that the English uplands have a carrying capacity of c230 pairs [Potts 1998]; this figure represents the minimum figure only and the population should be allowed to expand to natural levels, whatever that number may be. However, the numbers very rarely exceed 15 breeding pairs and they seldom breed outside specific areas within the Forest of Bowland.

It is generally accepted that even this low population is only maintained because the principle landowner, United Utilities, is sympathetic to Hen Harriers and the birds generally succeed on the company's land. These nests benefit from a very high level of security and it is debatable whether the success level of these nests would continue without the added security and support from United Utilities, the RSPB and Natural England's Hen Harrier Recovery Project.

It is erroneous to imply from the success rates on the United Utilities Estate that this is the norm throughout the Forest of Bowland. This is not the case and when considering the productivity of the English population it is essential that the numbers fledging from United Utilities land are accounted for separately. Only then will a true picture for the whole of the Forest of Bowland be revealed.

Productivity rates for Hen Harriers are published an-

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|--------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 7 | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| NWRPG | 10 ¹ | 8 | 0 | 8 | 0 ² | 8 | 5 | 4 | 10 | 1.25 | 1.25 |
| NYMRS | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 18 | 10 | 2 | 10 | 2 | 8 | 5 | 4 | 10 | 1.25 | 1.00 |

Notes:

1 & 2 one pair of birds is believed to have built 2 unsuccessful nests before building

a third successful nest in the same area, therefore the 2 previous failed attempts are not reflected at (2) in the table.

nually. Even allowing for a first year mortality rate of 50% a substantial number of chicks have fledged from the area. The overall English population can at best be described as extremely low and this begs the question; if they have not been persecuted, where are they?

Productivity in the Forest of Bowland is such that, based on past research by Etheridge et al, the population should be increasing and colonising other adjacent estates, which hold approximately 60% of the suitable habitat in the area. There are only ever 1 or 2 successful nests on the private estates and Raptor Workers could perhaps be forgiven for asking why this is the case.

Hen Harrier persecution exists in the south and east of Scotland, therefore the potential for the population to expand from that region into Northern England is severely restricted.

Hen Harriers undoubtedly predate grouse; however their main food source consists of voles and meadow pipits and the actual impact that Hen Harriers have on the number of grouse available for shooting is a matter of continued contention.

National threat assessment

Whilst the weather and availability of prey undoubtedly have an impact on breeding success it is generally accepted, with the exception of many inside the shooting community, that the single most important limiting factor affecting Hen Harrier numbers in the North of England is persecution by individuals connected with driven grouse shooting. Between 2002 and 2008 29.1% of nest failures were caused by persecution, the largest single cause of failure [‘A future for the Hen Harrier in England’? - Natural England 2008]

During spring Hen Harriers are ‘moved on’ as they return to the breeding grounds by a variety of methods. There is anecdotal evidence to suggest that in some areas the adults are ‘flagged off’ to ensure that they don’t settle.

There is also proven evidence to show that in three cases between 2002 and 2008 their chosen heather patch was burnt out illegally and that territorial Hen Harriers have disappeared during breeding attempts; 12 of these were under suspicious circumstances [‘A future for the Hen Harrier in England’? - Natural England 2008]

During winter the birds are semi-colonial and information received from a variety of sources strongly indicates that the birds are killed in relatively large numbers whilst they are roosting. Evidence from Natural England’s radio tracking and satellite tracking projects reveal that birds tracked from the Bowland Fells enter the Northern Pennines, to areas managed as driven grouse shoots, and are never recorded again [‘A future for the Hen Harrier in England’? - Natural England 2008]

The scarcity of breeding birds in some areas makes them particularly vulnerable to persecution by egg collectors. Fortunately the number of cases of egg theft is extremely low. However, because the breeding population in the North of England is so small the theft of a single clutch of eggs will have a disproportionate effect than would otherwise be expected. Consequently nests

will need to be protected for the foreseeable future.

Until the Government and the Police take the issue of law enforcement seriously the problem of persecution is unlikely to be resolved in the near future.

Conservation status ^(BTO)

| | |
|----------|--|
| UK | Red ● |
| European | 3: Concern, most not in Europe; depleted |
| Global | Least concern |

Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Natural England Data

Natural England records data in a different format to that of the NWRPG and their records show that in the Forest of Bowland there were 7 breeding attempts on United Utilities land; 3 of which were successful fledging 5 young. On a neighbouring private estate another pair laid 6 eggs from which 5 chicks fledged.

The Natural England totals for the Forest of Bowland are therefore 8 breeding attempts, 4 of which were successful, fledging 10 young.

Natural England also report 2 other breeding attempts in 2009, 1 in Cumbria, details of which are recorded in this report in the section ‘regional reports from non-NERF members’ and 1 other in Gloucestershire, details of which are not reflected in this report.

Group Reports

Calderdale Raptor Study Group

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

Hen Harriers are primarily winter visitors to the north west of the study area. An adult male was present on the 13th and 17th September and a ringtail was sighted on the 18th.

In October an adult male and 2 ringtails were present on the 8th, and a first winter male was sighted on the 29th. In November there were between 1 and 3 ringtails in the roost on the 5th, 6th, 8th, 12th, 15th, 22nd and 26th.

Although monitoring continued throughout December, no birds were seen in the winter roosts.

Durham Upland Bird Study Group

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

There is no evidence of any breeding attempts in 2009. The last recorded breeding attempt [unsuccessful] was in 2005 and the last successful breeding was in 1999. There were late winter / spring sightings of individual birds at 6 locations in the uplands between February and early May. A 2nd calendar year male frequented a central moor for one week in June.

Autumn and early winter sightings were reported at 9 upland locations. These included 2 radio tagged birds

that moved through the DUBSG area in autumn from Cumbria and Lancashire respectively.

There is some coverage of traditional winter roost sites but none produced more than 2 birds on any 1 day and none were occupied on a consistent basis.

Northumbrian Ringing Group

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

One pair was monitored from a distance and although the nest was not located, from their behaviour it was evident that the breeding attempt had failed. A second pair built a nest and was monitored until the birds abandoned their breeding attempt. The nest was subsequently checked and found to be empty, the cause of failure was not determined.

A third site was occupied by a 1st year male. Although he failed to attract a mate he went on to build a 'cock' nest.

North West Raptor Protection Group

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

The Group checks all home ranges annually and locates all of the nests in the Forest of Bowland, on land owned by United Utilities. The Group does not monitor any other Hen Harrier ranges outside of the Forest of Bowland.

In 2009 the following breeding activity took place:

On United Utilities land there were 7 breeding attempts from which, 1 pair laid 4 eggs hatching 3 chicks, which were subsequently found dead in the nest. Three other pairs laid a total of 11 eggs, none of which hatched. Three further pairs laid a total of 15 eggs from which 5 chicks fledged. From the 30 eggs laid only 5 chicks fledged giving a poor success rate of 16.7%.

On a neighbouring private estate there was 1 breeding attempt, this pair laid 6 eggs from which 5 chicks fledged giving a success rate of 83.3%.

The total success rate for the Forest of Bowland is therefore 10 chicks fledged from a total of 36 eggs, giving an overall success rate of 27.8%.

North York Moors Upland Bird (Merlin) Study Group

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

Although a male held territory on a safe moor within the study area for over a month he failed to attract a mate. Other sightings of birds occurred elsewhere in the uplands over the spring months but no breeding success was detected.

The last known successful nesting occurred during the mid 1990s.

Peak District Raptor Monitoring Group

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

The study area consists of extensive suitable Hen Harrier habitat and a thorough search was undertaken across the area. None of the territories were found to be occupied.

South Peak Raptor Study Group

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

The study area contains large areas of suitable Hen Harrier habitat and an extensive search for breeding activity was undertaken across the area. Regrettably none of the territories were found to be occupied. However, a single male bird was noted in the Upper Derwent Valley during April.

Yorkshire Dales Upland Bird Study Group

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

No nesting attempts were identified within the study area although a female was present in an historical breeding area in late winter and early spring. Additionally there was an adult and a first year male displaying in the south east of the study area. Two, presumed passage birds, were observed in the north of the National Park on several dates.

NERF regional summary

Only 1 Group reports successful breeding during 2009.

Parts of the Forest of Bowland continue to hold the core English population with occasional additional pairs located in other areas in some years. Research indicates that there is sufficient suitable habitat to support an English upland population of c230 pairs, approximately 25 times greater than at present. If these numbers were realised a large proportion of these birds would be resident in every area monitored by NERF member Groups.

There are so few birds in the English population that when single birds are noted in an area their chances of finding a mate are very limited. These birds eventually move on to search in other areas, only to fail again.

NERF regional threat assessment

Natural England report that the biggest single factor limiting Hen Harrier numbers in northern England is persecution by individuals connected with driven grouse shooting.

The risk assessment for Hen Harriers in the NERF region mirrors that for the species at the national level. The future for this species in the northern uplands is bleak at the present time and the situation is unlikely to improve until persecution is ended.

Harrier, Marsh *Circus aeruginosus*



UK population estimate

In 2005 the population was estimated to contain 360 females. ^(BTO)

Overview

Prior to the 19th century all Harriers were recorded as a single species; therefore it is likely that Marsh Harriers bred in several regions of England and Wales and throughout the Island of Ireland. It is estimated that by 1870 habitat loss caused by draining reed beds and the all too familiar persecution had restricted the Marsh Harriers range to Norfolk and Northumberland. Although a small population remained in Eire the species was extinct in the six counties of Northern Ireland. By the turn of the century it had completely disappeared from the UK.

The first of the new generation of English Marsh Harriers was recorded in 1911 and sporadic nesting attempts were noted for the next 15 years. By the 1930's breeding success was recorded every year in eastern

England around The Wash. Ten years later 5 breeding pairs were recorded and 20 years later this number had risen to 15 pairs.

As with several other raptor species the Marsh Harrier suffered from pesticide poisoning and they benefitted significantly when these chemicals were withdrawn. The slow expansion continued, aided by an influx of birds from the near continent, the shift from reed bed breeding sites to arable land and a reduction in persecution. The species can now be found breeding in the eastern counties of Kent, Suffolk, Norfolk, Cambridgeshire and Yorkshire. They are also found on the Somerset Levels and on the Lancashire Nature Reserve of Leighton Moss.

In the past Marsh Harriers were also known as 'Moor Buzzards' and it is possible that some birds may have been misidentified leading to rumours that there may have been other, unrecorded breeding attempts in some years.

National threat assessment

The UK population is more secure now, than at any other time during the last 100 years. However significant habitat loss could reverse this trend. As with any small population the impact of egg collecting could be locally significant.

Conservation status ^(BTO)

UK Amber ●
 European Not of concern
 Global Least concern
 Listed on Schedule 1 of the Wildlife and Countryside Act 1981

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|--------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 4 | 4.00 | 4.00 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 4 | 4.00 | 4.00 |

Group Reports

Calderdale Raptor Study Group

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

This species only occurs as a passage migrant with only 1 record in the Pennines on the 8th October.

Durham Upland Bird Study Group

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

Marsh Harriers do not yet breed anywhere in County Durham. However, they do occur as a regular passage vagrant, mainly in the east but these movements do sporadically penetrate into the western uplands. Additionally occasional birds linger during the summer months.

The only isolated report in 2009, from the uplands, concerned a single bird at Waskerley Reservoir in August. Analysis of data over the last 5 years has shown that 2007 provided peak numbers of sightings at various locations in the uplands. These sightings consisted of one in late April, a first year male in mid June and three others in August.

Northumbrian Ringing Group

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

Marsh Harriers are rare breeders in Northumberland, however most potential breeding sites are checked annually. In 2009 1 pair successfully raised 4 young in the lowlands.

North West Raptor Protection Group

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

Single migrants are seen over the Forest of Bowland most years.

The species is known to breed on the RSPB Reserve at Leighton Moss; however these birds are not monitored by this Group.

North York Moors Upland Bird (Merlin) Study Group

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

Historically this species is only known to occur, in small numbers, as a passage migrant in both spring and autumn. This pattern was repeated during 2009.

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

Marsh Harriers are only recorded as passage birds during both spring and autumn. There were fewer sightings during 2009 than in previous years with only 3 birds being seen on the eastern moors, including a 1st year juvenile observed on the 31st July.

It is hoped that this low number of sightings is just an anomaly and that the numbers will return to normal levels in 2010.

Yorkshire Dales Upland Bird Study Group

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

Within this study area Marsh Harriers are recorded as passage birds only.

NERF regional summary

Only the Northumbrian Ringing Group reported a successful breeding attempt in 2009. The remaining Groups only observe these birds as passage migrants.

NERF regional threat assessment

The NERF regional assessment mirrors that of the national threat assessment.

Harrier, Montagu's *Circus pygargus*



UK population estimate

The population is estimated to contain 7 territorial females (summer).^(BTO)

Overview

The Montagu's Harrier is a rare breeding bird in England, migrating from Africa in summer and returning in autumn to overwinter. It is generally found in a band stretching from Dorset in the west through Hampshire and Oxfordshire to The Wash. However, in recent years a single pair is known to have attempted to breed in the North of England. Regrettably these attempts have so far failed.

National threat assessment

In Western Europe approximately 75% of Montagu's Harriers nest in cereal crops and whilst this generally allows them to produce more chicks per breeding pair it also leaves them vulnerable to unintentional disturbance. Consequently once located the nests have to be either safeguarded during the harvest season, by an exclusion zone agreed with the landowner, or the chicks need to be relocated to a safer area.

The eggs are especially vulnerable to egg thieves and the location of each nest must be kept a closely guarded secret. The nests may also require protection.

Conservation status ^(BTO)

UK Amber ●
 European Not of concern
 Global Least concern
 Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Group Reports

Calderdale Raptor Study Group

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

Durham Upland Bird Study Group

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

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|--------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMMSG | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |

Northumbrian Ringing Group

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

North West Raptor Protection Group

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

North York Moors Upland Bird (Merlin) Study Group

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

This species occurs as a scarce, mainly spring, passage migrant. An adult male was sighted during 2009 but breeding was not suspected.

One pair made an unsuccessful breeding attempt in 2007; the attempt failed when a clutch of 4 eggs was washed out by a torrential rain storm.

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

There were casual sighting of the species during 2009; however no breeding attempts were recorded.

The last known Montagu's Harrier successful breeding attempt took place in the South Peak in 1953.

Yorkshire Dales Upland Bird Study Group

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

NERF regional summary

Montagu's Harriers are rare visitors to the northern uplands and there were no sightings during 2009. However 2 Groups have reported historical breeding success within their areas.

NERF regional threat assessment

Breeding attempts within the NERF recording area are extremely unlikely to take place in cereal fields, with the exception of Durham and Northumberland where the Study Groups cover the whole county. Previous attempts have taken place in moorland habitat and given the high level of persecution of Hen Harriers in the North of England it is unlikely that any attempt, by this species, to colonise the northern uplands would be successful if their current habitat selection trend continues.

To counter the threats from egg collectors and excessive disturbance it is essential that the location of future breeding attempts is kept confidential and nest protection is activated where practically possible.

Hobby *Falco subbuteo*



Overview

The Hobby is a summer visitor to the UK arriving from late April onwards. In the mid 20th century the population was estimated at only 60 - 90 pairs. This number increased by almost a factor of 10 over the next 40 years and by 1990 the population was being estimated between 500 – 1000 pairs. This estimation doubled again over the next 10 years and in 2000 the population was believed to be 2,200. Along with this dramatic explosion in population has come an equally impressive increase in dispersal out of the traditional southern stronghold. The birds are now found as far north as Yorkshire and Lancashire and a few breeding pairs have been recorded in Scotland. The Hobby returns to Africa in late summer.

A colour ringing scheme has been in operation for this species since 2004 and sightings of colour ringed birds should be reported to www.ring.ac or alternately the information can be passed by email to lennons@shearwater50.fsnet.co.uk

National threat assessment

There are no specific threats associated with this species; however whilst the population has increased significantly it is still relatively low and Fieldworkers should be fully aware of the continuing threat posed by egg collectors.

UK population estimate

In 2000 the UK population was estimated to be 2,200 pairs. ^(BTO)

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NWRPG | 3 | 3 | 0 | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRS | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 42 | 34 | 1 | 34 | 6 | 28 | 28 | 28 | 64 | 2.29 | 1.89 |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 46 | 38 | 1 | 35 | 6 | 29 | 29 | 29 | 64 | 2.21 | 1.83 |

Conservation status (BTO)

| | |
|----------|----------------|
| UK | Green ● |
| European | Not of concern |
| Global | Least concern |

Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Group Reports

Calderdale Raptor Study Group

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

Hobby is known to occur in the Calder Valley; however sightings are relatively rare and only occur outside of the breeding season when birds visit the moorland hawking moths. The species is not formally monitored. During 2009 there were 12 separate sightings between 2nd July and 6th September. An adult and a first summer bird were present in one area between 2nd July and 2nd August. An independent juvenile was seen at another location on the 27th August. It is possible that breeding did take place although this cannot be confirmed.

Durham Upland Bird Study Group

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

There are no reliable records for this species in the Durham uplands.

Elsewhere in the county a pair was successful at a lowland site in 2009. This was the first confirmation of breeding in County Durham.

Northumbrian Ringing Group

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

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

The number of pairs of Hobby breeding in the Group's study area is increasing. Whilst the species is not formally monitored by members of NWRPG at least 3 pairs are believed to have bred successfully in 2009.

A pair can be seen regularly in the Ribble Valley adjacent to the M6 motorway.

North York Moors Upland Bird (Merlin) Study Group

Level of monitoring: Occurs but no monitoring.

This species is rapidly establishing itself in the study area. Successful breeding is known to have occurred at 1 site where fledged juveniles were seen.

Three other birds were observed regularly hunting / feeding over an area of clear-fell during a 4 week period.

Peak District Raptor Monitoring Group

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

Hobby's are seen in upland areas; however there was no proof of breeding in 2009.

The last confirmed breeding took place in 2001. There is ample suitable habitat within the study area and the Group can find no reason to explain why breeding does not occur here.

There are several small study areas in the lowlands adjacent to our study area, with similar habitat, containing c12 pairs in total.

South Peak Raptor Study Group

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

Ant Messenger and Mick Lacey covered an enormous amount of ground and spent many hours surveying and monitoring this species; despite this effort and considering the difficult nature of locating this species the Group believes that there are other sites to be located within the study area.

Yorkshire Dales Upland Bird Study Group

Level of monitoring: Occurs but no monitoring.

There has been a gradual increase in hobby sightings in recent years and it is suspected that some breeding attempts may have been made.

NERF regional summary

A tremendous amount of work is undertaken in relation to this species in the South Peak where 28 pairs successfully reared young during 2009. A further pair fledged a brood in Country Durham. The species was noted in every area, with the exception of Northumberland.

NERF regional threat assessment

There are no specific local threats associated with this species; however whilst the population has increased significantly it is still relatively low and Fieldworkers should be aware of the continuing threat posed by egg collectors.

Kestrel, Common *Falco tinnunculus*



UK population estimate

In 2007 the UK population was estimated to be between 53,000 and 58,000. ^(BTO)

Overview

Despite the fact that Kestrels rarely take the chicks of game birds, like many other birds of prey, they were extensively persecuted by gamekeepers at the turn of the 19th / 20th century. Persecution of all species by gamekeepers reduced during the Second World War and this allowed the number of Kestrels to increase. However this recovery was reversed during the 1950's and 1960's when the impact of organochlorine pesticides severely impacted this and other raptor species. Once the chemicals had been withdrawn from use the recovery recommenced. The numbers were affected once again during the 1970's and '80s when the species began to decline once more. The decline may be linked to changes in

farming practices, driven by the EEC Common Agricultural Policy, which invariably adversely affected their habitat and the availability of prey.

Despite these setbacks Kestrels are widespread and perhaps the species most readily identified by the general public.

National threat assessment

The Kestrel population fluctuates and is linked closely to the availability of voles, which is their main prey item. When vole numbers are low a significant percentage of Kestrels may not breed. However, the main threat to the species is associated with incompatible farming practices that adversely affect food supply. This situation is unlikely to change without intervention from the EU and UK Government.

The amber conservation status has been awarded because the species is in decline as evidenced by the 2009 British Bird Survey, which reported a 36% reduction in the Kestrel population. Ironically the ubiquitous presence of Kestrels seen hovering or perched above grass verges may induce Raptor Workers to take their eye of this species whilst concentrating on even more vulnerable species. Consequently a local decline may go unnoticed for some time.

Conservation status ^(BTO)

UK Amber ●
 European 3: Concern, most not in Europe; declining
 Global Least concern

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|-----------------|-------------------------------|--|
| CRSG | 3 | 3 | 0 | 3 | 0 | 3 | 3 | 3 | 6 | 2.00 | 2.00 |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 3 | 3 | NR | 3 | NR | 1(+) | 1(+) | 1(+) | NR | NR | NR |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSG | 16 | 6 | NR | 6 | 0 | 6 | 6 | 5 | 22 | 3.67 | 3.67 |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 9 | 9 | NR | 9 | 0 | 9 | 9 | 9 | 31 | 3.44 | 3.44 |
| YDUBSG | 8 | 8 | NR | 8 | 0 | 8 | 8 | 8 | 28 ¹ | 3.50 | 3.50 |
| Totals | 39 | 29 | NR | 29 | NR | 27(+) | 27(+) | 26(+) | 87 | 3.22 ² | 3.00 |

Notes:

1. each of the 8 nest boxes fledged 3 – 4 chicks, giving an average of 28 fledged young overall
2. to calculate the number of young fledged per pair laying $n = 27$

Group Reports

Calderdale Raptor Study Group

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

Although this species is widespread throughout the Calder Valley very limited monitoring is conducted. Three pairs are known to have fledged a total of 6 young and it is highly likely that there were successful breeding attempts elsewhere that went undetected.

Durham Upland Bird Study Group

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

The Group only casually monitors a few pairs each season. The species occurs widely in the uplands often hunting the highest ground throughout the year. There is only a limited amount of monitoring in the uplands.

Kestrels are widespread in the Durham lowlands to the east.

Northumbrian Ringing Group

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

Kestrels are now considered a scarce breeding species in the Kielder Forest area, where they suffer severely from Goshawk predation. Only 3 sites were occupied during 2009 of which only 1 pair fledged young.

The population is probably decreasing on the high ground, whilst remaining stable on the lower ground.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring

There is an estimated 70 - 90 breeding pairs in the Group's study area; however no monitoring takes place.

North York Moors Upland Bird (Merlin) Study Group

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

This species tends to favour farmland as the preferred breeding habitat but also breeds along forest edges, in the wooded gills which criss-cross the moorland plateau and on rock faces.

In other parts of the North Yorks Moors Kestrels often use the old nests of other species, principally crow nests. These birds are outside the study area and not included in this report.

The South Cleveland Ringing Group has been operating a long-term, on-going nest box scheme for both Kestrels and Tawny Owls. The nest boxes referred to in this report were specifically sited to encourage occupation by Kestrel rather than Tawny Owls.

Within the study, data-sets are calculated over 5-year band widths. The current data-set refers to 2007, 2008 and 2009. For comparative purposes it will not be possible to give an accurate assessment until the figures for 2010 and 2011 have been added. The 2009 data has been segregated for this report.

The 2009 figures give little cause for concern when examined in isolation; however the long-term trend appears to tell a different story. Historical data indicates that the species ap-

pears to be stable on the North York Moors with occupation / output fairly consistent until 2002. From that point onwards the data implies that productivity began to fall, a trend that has continued until 2009.

However, until 2010 / 11 data is incorporated into the 5-year data-set it would be unwise to assume that the trend will continue.

Peak District Raptor Monitoring Group

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

No formal monitoring of this species is undertaken.

Some upland sites have been lost due to the increase in the population of breeding Peregrines, during the mid 1990's, usurping traditional Kestrel sites.

The reasons for the decline of Kestrels are not being studied in depth and NERF may wish to target this species to establish a new base-line figure across the region.

South Peak Raptor Study Group

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

Although the numbers are apparently lower than the exceptional year of 2008, the population is considered to be stable.

Twenty young were ringed from 5 nests in the Peak District and a further 11 young were ringed from 4 nests in lowland areas.

Yorkshire Dales Upland Bird Study Group

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

There is only one nest box scheme in operation in the recording area. Eight boxes were occupied and all were successful with each nest producing 3 or 4 young.

This data represents a sample of the Yorkshire Dales population only and is not necessarily representative of the whole of the Group's study area.

NERF regional summary

Nationally the Kestrel is known to be declining. However, from the data collected across the NERF region it appears that the species is faring reasonably well, with the exception of the Kielder Forest, Northumberland.

The North York Moor data-set may well be indicating decreasing productivity but it is too early yet to determine this conclusively. It is difficult to assess the current status of this species without comparative quantitative data from all areas, and perhaps this is something which needs to be addressed by all NERF members. This situation is reflected in the NERF regional threat assessment.

NERF regional threat assessment

The population is in decline; the cause is as yet unknown. There are no specific threats associated with this species in the NERF region, other than those experienced at the national level.

Merlin *Falco columbarius*



UK population estimate

The current UK population is estimated to be 1,300 pairs. ^(BTO)

Overview

The number of Merlin has declined since the late 19th century and this decline is generally attributed to persecution and increased disturbance on their breeding grounds. In the past Merlin were regularly taken from the wild for use in falconry, primarily to hunt larks. It was not uncommon for these birds to be returned to the wild after they had been used for a season's hunting.

Merlin is yet another species that was adversely affected by the use of organochlorine pesticides during the 1950's and 1960's. By the mid '60s the population had crashed to an estimated 550 pairs. It took more than 20

years for the recovery to become evident.

The birds are present in the UK all year round, however they undergo a vertical migration in late summer from their upland breeding grounds to the warmer coastal areas. Over winter the population is supplemented by an influx of continental birds seeking respite from harsher winters in their home ranges.

National threat assessment

The loss of moorland habitat continues to pose a major threat and sympathetic land management in the uplands, including forestry, is of benefit to the species.

Egg collecting and illegal killing of these birds continues, but not at a level that is likely to affect the overall population.

Conservation status ^(BTO)

UK Amber ●
European Not of concern
Global Least concern

Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Group Reports

Calderdale Raptor Study Group

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

Although there are large areas of suitable Merlin habitat within the study area, on the Pennines, only small scale monitoring is undertaken by the Group. One pair

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Home ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|--------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 2 | 2 | NR | 2 | NR | 1 | 1 | 1 | 3(+) | 3.00 ¹ | 1.50 ² |
| DUBSG | 66 | 39 | NR | 39 | 6 | 33 | 30 | 28 | 102 | 3.09 | 2.61 |
| NRG | 40 | 20 | 0 | 20 | NR | NR | NR | NR | 39(+) | NR | 1.95 ³ |
| NWRPG | 8 | 4–8 ⁴ | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRS | 42 | 17 | 4 | 17 | 2 | 15 | 15 | 13 | 45 | 3.00 | 2.65 |
| PDRSG | 27 | 11 | 2 | 11 | 3 | 8 | 7 | 5 | 21 | 2.62 | 1.91 |
| SPRSG | 15 | 9 | NR | 9 | 2 | 7 | 6 | 6 | 24 | 3.43 | 2.67 |
| YDUBSG | 9 | 7 | 2 | 7 | 3 | 4 | 4 | 4 | 17 | 4.25 | 2.43 |
| Totals | 209 | 109 | 8 | 105 | 16 | 68 | 63 | 57 | 251(+) | 3.69⁵ | 2.39⁶ |

Notes:

1. & 2. to calculate the number of young fledged $n = 3$
3. to calculate the number of young fledged per pair monitored $n = 39$

4. home ranges occupied by NWRPG $n = 4$
5. & 6. to calculate the number of young fledged $n = 251$

was proven to have bred successfully. A second pair was recorded, on territory during the breeding season; however no breeding attempt took place. Taking into account the large areas of suitable habitat available to this species it is highly probable that other breeding attempts went undetected.

The Group is aware that an independent Raptor Worker has been operating for many years on a very large estate in the north west of the study area; unfortunately he does not share his data with the Group's species recorder.

Durham Upland Bird Study Group

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

Monitoring of this species is excellent and coverage during 2009 was very similar to the tremendous effort made by the Group during the 2008 national survey. This was another good year for Merlin breeding in the county. Only 6 nests were known to have failed and overall productivity per nest was high.

Northumbrian Ringing Group

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

Six study areas are covered within Northumberland. Most of the coverage is very thorough except for the south west of the county where monitoring is patchy.

Twenty nests were located and collectively they fledged in excess of 39 young.

North West Raptor Protection Group

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

Most of the known territories in the Forest of Bowland are checked annually. The Merlin population is estimated to be between 4 and 8 pairs; however no formal monitoring of this species takes place.

North York Moors Upland Bird (Merlin) Study Group

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

There is generally excellent coverage across the whole of the study area for this species, with the exception of the north-west of the region.

Of the 42 home ranges checked 17 were found to be occupied, and from these 13 pairs successfully fledged 45 young.

Peak District Raptor Monitoring Group

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

The Group has noted a long-term slow, gradual, decline in the study area since peak population levels during the 1990's. Suspected persecution and increased falconry interests give cause for concern.

South Peak Raptor Study Group

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

The Group checks every known site in the study area annually together with other suitable habitat and a new site was located in 2009.

Two pairs failed early for unknown reasons and 1 pair had their eggs taken by a crow 9 days prior to hatching.

The population appears to be declining, possibly due to habitat degradation.

Yorkshire Dales Upland Bird Study Group

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

Within the Group 4 discrete study areas are monitored.

In the first study 4 territories were checked and all 4 were found to be occupied. Regrettably 3 of these breeding attempts failed whilst 5 chicks fledged from the remaining nest.

In the second study 2 pairs each laid 4 eggs and each went on to fledge 4 young.

In the third study a single pair laid 4 eggs and fledged 4 young.

In the fourth study a single male and a single female were located; however no breeding attempts were recorded.

Overall the decline in the number of breeding pairs, noted in previous years, continued in 2009 in each of the studies.

NERF regional summary

There is excellent coverage of this species in most areas of the NERF region and populations are prospering. Several Groups have excellent working relationships with landowners who practice moorland management techniques which benefit this species.

Three of the Groups reveal concerns that populations are falling within their study areas. This species may be worthy of more intense surveying by NERF.

Forum members made a significant contribution to the 2008 national Merlin survey. They were heavily involved in the co-ordination of the survey and also undertook an enormous amount of fieldwork to collect the required data.

NERF regional threat assessment

There are no specific pressures that threaten this species throughout the NERF study area, although 3 Groups are concerned that the population is falling

Egg collecting and illegal killing of these birds is recorded occasionally and whilst these activities can be significant locally, they are not likely to affect the general population base.

Osprey *Pandion haliaetus*



UK population estimate

The current UK population is estimated to be c150 pairs.
(BTO)

Overview

The Osprey was once widespread throughout Europe; however the population suffered a dramatic decrease and local extinctions as a result of persistent persecution by egg collectors and skin collectors in the 19th and early 20th centuries. It was already extinct as a breeding bird in England by 1840. It managed to survive in Scotland until 1916 when it also became extinct as a breeding bird. Osprey continued to be recorded as a passage migrant before it was generally accepted to have re-colonised

Scotland some 40 years later, presumably by birds from Scandinavia. However a recent re-examination of historical records suggests that the birds may have bred in Scotland during the intervening years.

As soon as the birds began breeding again in Scotland, egg collectors resumed their illegal activities and from 1959 re-colonisation was slow. By 1976 the population consisted of just 14 pairs. Nest protection schemes were introduced and by 1990 the population had increased to 71 pairs. The first attempt to attract Ospreys to Rutland Water began in 1986. The project was not successful and in 1996 the first of a series of translocations of Scottish birds took place. By 2001 64 birds had been translocated to Rutland Water.

At the start of the 21st century the UK population had increased to more than 150 pairs. Whilst Scotland still holds the main population, in 2001 Osprey's bred in England for the first time, after a 160 year gap. The birds now breed in both the Lake District and Rutland Water in England and also in Wales.

National threat assessment

Historically the birds have been persecuted by shooting and by egg collectors and whilst these threats have been dramatically reduced, nests still need to be monitored closely and in some locations require protection.

Ospreys can be surprisingly tolerant of regular human activity close to the eyrie but they are extremely nervous of anything out of the ordinary and there is a threat from disturbance at their breeding sites. Organised watch points alleviate this problem.

Coastal and estuary management plans that fail to take into account the needs of Ospreys also have a detrimental impact on the species.

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 3.00 | 3.00 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 3.00 | 3.00 |

Conservation status (BTO)

UK Amber ●
European 3: Concern, most not in Europe; rare
Global Least concern
Listed on Schedule 1 of the Wildlife and Countryside Act 1981

Group Reports

Calderdale Raptor Study Group

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

This bird is a passage migrant in the Calderdale Study area and only 1 Osprey was sighted heading south during autumn.

Durham Upland Bird Study Group

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

Although Ospreys do not breed in the county birds are sometimes seen in the uplands during spring and autumn passage. In 2009 passage birds were recorded in the uplands on 25th March and 23rd May. They also occasionally linger on the larger reservoirs.

In the eastern lowlands a bird remained at Crookfoot Reservoir during the summer months.

This mirrors an overall pattern of increased sighting in recent years.

Northumbrian Ringing Group

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

The first breeding record for Northumberland was reported in 2009.

Several other birds were noted across the study area throughout the summer.

North West Raptor Protection Group

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

Ospreys are observed each spring, in late March, as they migrate over the study area.

North York Moors Upland Bird (Merlin) Study Group

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

The species is regularly recorded on the Scaling Dam and Lockwood Beck reservoirs during the migration periods.

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

Ospreys are only recorded as spring and autumn passage birds in the study area.

Yorkshire Dales Upland Bird Study Group

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

There has been an increase in the number of passage birds seen in the study area. This corresponds with the population increases elsewhere in the county. Occasionally, birds will summer in the area, with Bolton Abbey being a favoured location.

NERF regional summary

In 2008 a pair of Ospreys built a foundation nest in the Kielder Forest, Northumberland. They returned to the site in 2009 and fledged 3 young. This is the first breeding record for the county. Summering pairs were also recorded elsewhere in Northumberland and hopefully they will return to breed in future years.

Although passage birds are noted in several other areas as they migrate north, and birds are occasionally observed in County Durham and the Yorkshire Dales during summer, there were no records of attempted breeding outside of Cumbria and Northumberland during 2009.

NERF regional threat assessment

As the species extends its breeding range within the NERF area there will be an increased requirement for members to provide nest protection against both egg collectors and disturbance at their breeding sites.

Owl, Barn *Tyto alba*



UK population estimate

The current estimate is 4,000 birds (summer) ^(BTO)

Overview

Barn Owls are found throughout most of the UK. Anecdotal evidence suggests the species is believed to have suffered from a severe decline since the agricultural community developed and adopted mechanisation during the industrial revolution. These declines are believed to have been further exacerbated by intensive farming practices adopted over the last 50 years. Barn conversions into dwellings

may also have contributed to a reduction of suitable nesting opportunities.

Estimates of the size of the Barn Owl population were made during the 1930's and again in the 1980's. Comparison between these two estimates indicate that the population declined by 70% during this period. However the first reliable estimate was not produced until the late 1990's. Whatever the truth, it is highly likely that a significant reduction in the population occurred. This decline has been halted in many areas, often aided by the provision of nest boxes, and it is likely that the population is staging a recovery.

National threat assessment

Loss of habitat and food supply is the largest threat to these birds. Improved or more sensitive farming practices and the provision of nesting boxes in suitable areas may help to mitigate against these threats.

Conservation status ^(BTO)

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 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

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 77(+) | 77 | NR | 77 | 0 | 77 | NR ¹ | NR ² | 183 | 2.38 | 2.38 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRS | 22 | 12 | 2 | 12 | 1 | 11 | 11 | 11 | 33 | 3.00 | 2.75 |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 18 | 18 | 0 | 18 | 0 | 18 | 18 | 18 | 55(+) | 3.05 ³ | 3.05 ⁴ |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 117(+) | 107 | 2 | 107 | 1 | 106 | 29 | 29 | 271(+) | 2.56⁵ | 2.53⁶ |

Notes:

1 & 2 although 77 nest boxes were checked and found to contain eggs not all were revisited

3 & 4 to calculate the number of young fledged n = 55
 5 & 6 to calculate the number of young fledged n = 271

Group Reports

Calderdale Raptor Study Group

Level of monitoring: Occurs but no monitoring.

There are records of a pair breeding in both 2006 and 2007 and a pair re-appeared at the same site in 2008 but failed to breed. No birds were present in 2009.

There was a sighting of a single bird flying through the M62 corridor on the 9th January.

Durham Upland Bird Study Group

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

This species is only monitored on a casual basis in the uplands. Across the county there has been a steady increase in the number of breeding birds over the last 5 years. This has been reflected by an increase in the number of sightings in the upland valley systems from where they were once completely absent. In 2008 birds were reported at 11 locations in the Durham uplands during the breeding season. This figure compares favourably with the estimated population of c60 pairs for the whole county.

In 2009 the birds were seen as far west as Langdon Beck, at 420m above sea level, at Selsat Reservoir and at St John's Chapel.

The harsh winter of 2009 / 2010 is likely to have severely reversed this trend; consequently 2010 will undoubtedly prove to be an interesting year.

Northumbrian Ringing Group

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

There are several nest box schemes operating in Northumberland and success rates are very high.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

The total population is estimated to be 40 – 60 pairs.

There are c15 pairs resident in the Over Wyre area, along the Pilling March. The birds are monitored by independent Raptor Workers and the breeding / productivity details are unknown by the Group.

Birds are regularly observed in the Forest of Bowland and they are known to breed successfully in the area; however they are not monitored by the Group.

North York Moors Upland Bird (Merlin) Study Group

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

One long-term nest box scheme has been running on the National Park boundary for many years and a second scheme commenced in 2007 in the northern section of the National Park. There has been a resurgence of the species and the population is increasing.

Peak District Raptor Monitoring Group

Level of monitoring: Occurs but no monitoring.

South Peak Raptor Study Group

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

The local population of this species continues to grow, possibly assisted by the increase in nest box provision. Fifty-five pulli were ringed from 16 broods. It is known that 2 other pairs reared young however the total number fledged is unknown.

Yorkshire Dales Upland Bird Study Group

Level of monitoring: Occurs but no monitoring.

There are no specific studies undertaken by the Group, however 1 pair was known to be present in the north-west of the study area and there was possibly a 2nd pair in the same area. In the south-east another bird has been recorded roosting in a nest box.

NERF regional summary

The data for the NERF area is incomplete although there are several nest box study schemes in Northumberland, South Peaks and on the North York Moors. The population appears to be increasing in all of these monitored study areas.

The species appears to be relatively scarce in, Calderdale, County Durham and the Yorkshire Dales. Nest box schemes have proven to be helpful in other areas and may be successful at lower elevations in these areas.

NERF regional threat assessment

Other than habitat loss there are no specific regional threats to this species.

Owl, Eurasian Eagle *Bubo bubo*



UK population estimate

The current UK population is unknown, but is likely to be small.

Overview

Eurasian Eagle Owls occur widely throughout Europe, where the population is estimated to be in excess of 11,000 pairs [Hagemeijer & Blair 1997]. It occurs in 32 European countries, including our nearest continental neighbours.

There are records of the species breeding in England for many years; however it is at this point that conflicting opinions emerge. These opinions are generally based around the

questions ‘are Eagle Owls a native or non-native species; and if it is non-native, is it invasive? If it is non-native and invasive what, if anything should be done about it?’ There are archaeological / historical records suggesting that the birds did occur in the past; however the records are relatively sparse.

There is general agreement that many, and some say all, of the older breeding birds in the current ‘wild’ population were captive bred birds that either escaped or were released into the wild and did not make their own way to the UK. The results of stable isotope analysis of feathers from an Eagle Owl in Norfolk by Kelly et al. [2010] show that the bird may have originated from Scandinavia, north continental Europe or mid-continental Russia. Whilst not conclusive this research certainly questions the assumption that all Eagle Owls in the wild in the UK are of, or derived from, captive origin. What is not in dispute is that the species is protected in the UK under both European and domestic legislation. Nor is it disputed that several generations of the present population were born in the wild in the UK.

It is likely that the polarised arguments will rage on for some time and that these arguments will intensify before a solution is found. A long-term program of DNA testing may resolve some of the more technical questions but it is unlikely to counter the argument that they are here; and here to stay. DNA testing will also offer a solution to the arguments about the potential invasive nature of the species.

Reference:

Kelly, A., Leighton, K. and Newton, J. 2010

Using stable isotopes to investigate the provenance of an Eagle Owl found in Norfolk. *British Birds* 103: 312-223

National threat assessment

Eagle Owls are under the threat from persecution where they come into conflict with Game Managers. It is perhaps no coincidence that, in the uplands, it appears that Eagle Owls only breed regularly at sites that are not managed for grouse shooting.

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Home ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|--------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NWRPG | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1.00 | 1.00 |
| NYMRS | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1.00 | 1.00 |

However the biggest threat to the species in England is likely to come from the Government Departments and conservation groups who believe that these birds pose a threat to native species, principally the Hen Harrier, and should either be reduced into captivity or culled.

It is widely accepted that the Hen Harrier population is limited by illegal persecution associated with grouse moor management. [‘A future for the Hen Harrier in England?’ - Natural England 2008]

Whilst the majority of Hen Harrier nesting attempts, in northern England, are restricted to a relatively small area of the Forest of Bowland, managed by United Utilities, the population will always be at risk from localised threats, such as food shortages, bad weather or predation. That is the way of nature and Hen Harriers have evolved strategies to deal with them. The issue is that the population is so small and restricted to one area. Once persecution is halted and Hen Harriers expand their range predation by Eagle Owls, if it occurs, will be insignificant for the population as a whole.

There is evidence to show that an Eagle Owl was responsible for taking Hen Harriers in 2008 in the Forest of Bowland, although this is disputed by some Raptor Workers. There is a further claim that that they were responsible for causing a nest desertion in 2010. However in both of these years Hen Harriers still produced enough young to maintain the population. There is no evidence that Eagle Owls were responsible for poor Hen Harrier productivity in 2009.

Any threat to nesting Hen Harriers is of serious concern given the perilously low breeding population. However, the Forum believes that conservation efforts should be focused on increasing the breeding range and numbers of Hen Harriers away from United Utilities land, rather than considering capturing or culling another protected species. Removing Eagle Owls from the wild will not resolve the overriding problem limiting the number of Hen Harriers, i.e. persecution on grouse moors.

The alternative point of view to a cull is that the species should remain on Schedule 9 of the Wildlife and Countryside Act 1981 and it should also be added to Schedule 1. Eagle Owls are very vulnerable when rearing young and will abandon eggs or young chicks if disturbed. Adding the species to Schedule 1 would afford them special protection under the Act and enable Natural England to control research access, to what is a most sensitive species, during the breeding season.

Conservation status ^(BTO)

| | |
|----------|--------------------------------------|
| UK | Amber ● |
| European | 3: Concern, most not in Europe; rare |
| Global | Least concern |

Listed on Schedule 9 of the Wildlife and Countryside Act 1981 the Eagle Owl cannot be released into the wild without a licence from DEFRA.

Group Reports

Calderdale Raptor Study Group

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

Durham Upland Bird Study Group

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

This bird is not known to have occurred in Country Durham during 2009.

In the last 5 years there has been only 1 isolated report of a bird seen in the uplands on a single day, 26th May 2008. A bird was also seen on the lowland in the east of the county in January 2008.

Northumbrian Ringing Group

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

North West Raptor Protection Group

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

In 2009 a pair of Eagle Owls nested in the Forest of Bowland. The original scrape contained 3 eggs; unfortunately this nest was deserted after an inappropriate nest visit was made.

The pair re-laid 2 eggs; however only 1 chick fledged from this second nesting attempt.

Evidence has come to light that a second pair, that went unnoticed by the Group at the time, may also have bred in the Forest of Bowland area.

North York Moors Upland Bird (Merlin) Study Group

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

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

Yorkshire Dales Upland Bird Study Group

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

There are rumours of birds being seen in the area; however the information is unreliable.

NERF regional summary

There is ample habitat for Eagle Owls to prosper across the NERF region; however only the North West Raptor Protection Group has breeding records for this species.

NERF regional threat assessment

The threat assessment for Eagle Owls in the NERF region is identical to the national threat assessment.

Potentially the most significant threat to this species is the proposal to reduce all of the ‘wild’ birds into captivity or to cull them. These proposals are currently being considered by the Government on the grounds that they are a non-native invasive species. NERF members are monitoring the situation closely.

Owl, Little *Athene noctua*



UK population estimate

The current estimate is 8,700 pairs (summer) ^(BTO)

Overview

Fossil records found in Derbyshire dating from c0.5 million years ago reveal that the Little Owl was once a native species in the UK. From that point on it would appear that the native population died out. Records show that it was an occasional visitor prior to the mid-19th cen-

tury when the birds were re-introduced. The first two attempts to re-introduce Little Owls, in Yorkshire and Hampshire, both failed. In the 1870's a further attempt, this time in Kent, was successful, as were the later re-introductions in Northamptonshire during the 1880's. Since then the Little Owl has dispersed throughout England, Central Wales and South-East Scotland.

Overall by 1960 the population growth had slowed and by the mid '60s the cold winters and intensification in farming practices resulted in a decline in the population. It is suggested that the population has further declined by more than 30% since the mid 80s, especially in the South-West.

National threat assessment

It is clear that a prolonged series of cold winters will adversely affect the population. However, intensive and unsympathetic farming practices are more likely to form the largest threat to this species.

Conservation status ^(BTO)

| | |
|----------|---|
| UK | Not assessed |
| European | 3: Concern, most not in Europe; declining |
| Global | Least concern |

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Home ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|--------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 7 | 7 | 0 | 7 | 0 | 7 | 7 | 7 | NR | NR | NR |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 1 | 1 | NR | 1 | NR | 1 | 1 | 1 | 2 | 2.00 | 2.00 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMMSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 1(+) | 1(+) | 1 | 1(+) | NR | 1(+) | 1(+) | 1(+) | 4 | 4.00 ¹ | 4.00 ² |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 9(+) | 9(+) | 1 | 9(+) | NR | 9(+) | 9(+) | 9(+) | 6 | 0.67³ | 0.67⁴ |

Notes:

1. to calculate the number of young fledged per pair laying $n = 1$
2. to calculate the number of young fledged per pair monitored $n = 1$

3. to calculate the number of young fledged per pair laying $n = 9$
4. to calculate the number of young fledged per pair monitored $n = 9$

Group Reports

Calderdale Raptor Study Group

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

There is little monitoring of this species and from information passed to the Group we are aware that 7 pairs bred successfully in 2009. Details of the productivity from these sites were not relayed to the Group.

Additional birds were seen in suitable habitat during the breeding season indicating that other successful pairs may have gone undetected.

Durham Upland Bird Study Group

Level of monitoring: Occurs but no monitoring.

There are occasional records from the upper valleys fringing the Durham uplands; however no monitoring takes place.

Northumbrian Ringing Group

Level of monitoring: Occurs but no monitoring.

Little Owl is not common in Northumberland. Where it does occur it is mainly found on farmland and occasionally on the moorland fringe at lower elevations.

A brood of 2 chicks was discovered whilst ringing Barn Owls on Hadrian's Wall.

Although no formal monitoring takes place the Group's general impression is that the species is declining.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

There is ample suitable habitat for this owl and birds are frequently seen. The population is thought to contain 50 – 60 pairs; however there is no formal monitoring of the species.

North York Moors Upland Bird (Merlin) Study Group

Level of monitoring: Occurs but no monitoring.

Whilst no formal monitoring takes place Little Owls are known to occur in the study area in low densities, tending to favour farmland on the moorland fringe. The species is more regularly found nesting on lowland farms.

This species is thought to be declining within the study area.

Peak District Raptor Monitoring Group

Level of monitoring: Occurs but no monitoring.

No formal monitoring takes place with this species; however several pairs have been observed on the moorland fringe, typically nesting in dry-stone walls.

South Peak Raptor Study Group

Level of monitoring: Occurs but no monitoring.

Whilst birds are seen throughout the area no formal monitoring takes place. At least 1 site was occupied by a single bird and at another a pair raised 4 young.

Yorkshire Dales Upland Bird Study Group

Level of monitoring: Occurs but no monitoring.

Little Owls are noted throughout the study area; however no formal monitoring takes place.

NERF regional summary

Although these tiny owls are common throughout the NERF recording area no specific monitoring takes place.

NERF regional threat assessment

Habitat loss is the only significant threat to this species.

Owl, Long-eared *Asio otus*



UK population estimate

The current estimate is 2,400 pairs (summer) ^(BTO)

Overview

LEOs are widespread but they are a scarce breeding bird in the UK. During the first half of the 19th century it was probably under-recorded in the South of England and Wales. Long-eared Owls fair less well when they are in competition with Tawny Owls.

The LEO population increased during the latter half of the 19th century when, coincidentally, Tawny Owls were threatened by persecution. The species also increased in numbers and range during the late 1800's benefitting

from an increase in large scale planting of forestry. The population went into decline again in the south of England during the 20th century; however because of their shy nature they are often difficult to locate and therefore the rate of decline is difficult to quantify.

National threat assessment

The main threat to LEOs appears to be competition for habitat with Tawny Owls. Breeding attempts are affected by prey availability and in poor vole years large numbers do not breed and those that do produce smaller clutches.

Conservation status ^(BTO)

| | |
|----------|----------------|
| UK | Green ● |
| European | Not of concern |
| Global | Least concern |

Group Reports

Calderdale Raptor Study Group

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

There is excellent coverage of this species and all suitable LEO's habitat is checked and monitored annually.

Four pairs bred successfully, however productivity was low and they only raised 8 chicks.

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 7 | 4 | 2 | 4 | 0 | 4 | 4 | 4 | 8 | 2.00 | 2.00 |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 15 | 6 | NR | 6 | 2 | 4 | 2 | 2 | 5 | 1.25 | 0.83 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMMSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 15 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 5 | 3 | 0 | 3 | 3 | 1(+) | 1(+) | NR | NR | NR | NR |
| YDUBSG | 7 | 5 | 0 | 5 | NR | 3 | 3 | 1 | 3 | 1.00 | 0.60 |
| Totals | 49 | 18 | 2 | 18 | 5 | 12(+) | 10(+) | 7 | 16 | 1.33 ¹ | 0.89 |

Notes:

1 to calculate the number of chicks fledged per pair laying n = 12

Durham Upland Bird Study Group

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

There were no reports of this species in the uplands during 2009.

The Durham Bird Club has made an intensive study of LEOs in recent years. As a result of this work the peak population for the county is estimated to consist of between 75 and 95 pairs. These birds are predominantly found in the eastern lowlands, occupying wood plantations and mature hedgerows.

Northumbrian Ringing Group

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

2009 was a very poor year for this species in Northumberland as a result of low vole numbers.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

The local population is estimated to be 9 – 10 pairs within the study area; however no formal monitoring is undertaken.

North York Moors Upland Bird (Merlin) Study Group

Level of monitoring: Occurs but no monitoring.

A recent 'low-key' survey in late winter in parts of the forest failed to locate any birds. The species occurs in the National Park at a very low density. The last known breeding success occurred in 2002.

Peak District Raptor Monitoring Group

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

Limited formal monitoring of this species takes place; consequently the bird is probably under-recorded.

In 2009 c15 territories were checked intermittently. Although breeding success data was not recorded the overall view of the Group is that productivity was low.

South Peak Raptor Study Group

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

A very poor year for this highly nocturnal owl, with only 1 confirmed breeding record albeit from a site not previously known to the Group. At a site that suffered from disturbance during 2008 birds were present again during 2009 and displayed early in the year, but failed to breed.

Two sites, which have been fairly successful in recent years, were not occupied.

Hopefully 2009 was a cyclical low for this species and better site occupancy and breeding success will occur in 2010.

Yorkshire Dales Upland Bird Study Group

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

Several study areas are monitored by the Group. At the first study site 4 pairs were seen displaying, however only 2 nests were found and both of these nests failed. At the second site 2 pairs hatched eggs but both of these nests also failed. The pair at site 3 was successful and fledged 3 young. The Raptor Worker responsible for this study reports that 2009 was the worst year on record for the Group.

NERF regional summary

Although a notoriously difficult species to monitor there are several studies undertaken within the NERF region. Interestingly all of the Study Groups that collect data on Long-eared Owls report that 2009 was a particularly poor breeding year with productivity at just 1.33 chicks per egg laying pair and only 0.73 chicks per pair monitored.

NERF regional threat assessment

The threats faced by LEOs in the NERF region are the same as those faced by the species in the National Threat Assessment.

Owl, Short-eared *Asio flammeus*



UK population estimate

The current estimate is 2,300 pairs (summer) ^(BTO)

Overview

Short-eared Owls are widespread across the uplands of the UK but they have always been scarce and their breeding populations are prone to marked fluctuations, linked to vole numbers.

In the 19th century the bulk of the UK's population was resident in Scotland and the North of England

with fewer numbers breeding on the salt marshes and on other rough pastures in the east of England. During the first half of the 20th century the increase in areas of rough pasture, as a result of reduced grazing, and the increase in the amount of land being utilised for forestry particularly suited the species. Unfortunately this situation only lasted whilst the trees were young. After the trees matured the habitat was less favourable and the numbers declined once more. The resident population is supplemented by a large influx of winter migrants from Iceland, Scandinavia and Russia.

Short-eared Owls are very secretive birds and they are a notoriously difficult species to survey; however many Raptor Workers conduct extensive annual surveys for Merlin and in the course of this work discover that SEOs are also present. In these circumstances follow-up monitoring takes place. This method of surveying tends to create a bias with birds on heather moor being recorded whilst pairs occupying 'white moor' [upland rush and sheep-walk] are likely to go under-recorded.

National threat assessment

Short-eared Owls prey on rodents, small birds and some large insects. However, their primary food source is vole and breeding success fluctuates in tandem with vole abundance. The lack of SEOs as a breeding species on some grouse moors coupled with their occasional, unexplained disappearance from those areas may indicate that they are threatened by persecution.

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 6 | 4 | 0 | 4 | 0 | 4 | 4 | 4 | NR | NR | NR |
| DUBSG | 12 | 12 | NR | 4 | NR | 4 | 4 | 4 | 12 | 3.00 | 3.00 |
| NRG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 8 | 8 | 0 | 8 | NR | 8 | 4(+) | 4(+) | 6(+) | 0.75 ¹ | 0.75 ² |
| YDUBSG | 5 | 5 | 0 | 5 | NR | 5 | NR | NR | NR | NR | NR |
| Totals | 31 | 29 | NR | 21 | NR | 21 | 12(+) | 12(+) | 18(+) | 0.86³ | 0.86⁴ |

Notes:

1. & 2. to calculate the number of young fledged n = 6
3. & 4. to calculate the number of young fledged n = 18

Conservation status (BTO)

| | |
|----------|--|
| UK | Amber ● |
| European | 3: Concern, most not in Europe; depleted |
| Global | Least concern |

Group Reports

Calderdale Raptor Study Group

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

Birds were seen on several moors during the breeding season; however only 4 pairs were known to have bred successfully. Given that the average clutch size is 5 eggs it is possible that c20 young fledged.

Durham Upland Bird Study Group

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

The species is monitored as part of a widespread annual Merlin study, which covers the majority of heather moorland.

Breeding was confirmed at 4 locations. At one location up to 3 young had dispersed from the nest by 4th June and were still being fed in the area by the parents over the next 2-3 weeks.

Elsewhere a nest with 4 young and 2 eggs was found on 25th June and nearby, on the same date, another pair fledged at least 2 young.

At the 4th location a pair had 3 young in the nest [aged approximately 6 – 10 days] on the late date of 9th July. This nest was just 240m from the site of a successful nest in 2008 and only 100m away from an active Merlin nest in 2009.

Across the Durham uplands there were reports of birds in suitable breeding habitat in another 8 locations during the breeding season.

Over the last 5 years reports have fluctuated but records allow a tentative suggestion of a typical breeding population of 12 to 15 pairs, although in some years the numbers may be less than this.

There is no proven breeding in the lowland or coastal areas of the county.

Northumbrian Ringing Group

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

There were no confirmed breeding attempts reported during 2009.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

Short-eared Owls are frequently seen in the uplands. The population is believed to vary between 4 and 8 pairs annually; however no monitoring takes place.

North York Moors Upland Bird (Merlin) Study Group

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

Approximately 60% of potential nesting habitat for this species was covered during normal Merlin survey work. However there were no confirmed breeding records for 2009 which is a disappointing result, perhaps pointing to a low in fortunes for this species.

Peak District Raptor Monitoring Group

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

2009 was a poor vole year with very few successful breeding attempts being recorded.

South Peak Raptor Study Group

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

After the presence of at least 10 birds on the eastern moors during the preceding autumn / winter it was disappointing that only 1 pair remained to breed.

This pair is believed to have successfully reared young; however because of the site's vulnerable nature no nest visits were undertaken.

In another part of the study area 7 pairs were located during the breeding season and at least 3 of those were known to be successful. A single chick was ringed from one site and 5 young fledged from another.

These numbers included 2 pairs in the Upper Derwentdale where up to 7 pairs have been seen in recent breeding seasons.

Overall, 2009 proved to be a somewhat patchy year with success in some areas set against an absence from some traditional sites.

Yorkshire Dales Upland Bird Study Group

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

No detailed studies are undertaken but casual records indicate that 3 pairs were present on one moorland block and single pairs occupied 2 other sites. The Group did not monitor breeding success. This species appears to be very scarce in the Dales despite large areas of suitable habitat.

NERF regional summary

Only 2 Groups monitor this species in any depth, the remaining Groups make casual observations whilst monitoring other species in the same habitat. SEO productivity is directly linked to food availability and fluctuations in success rates are inextricably linked to vole numbers.

NERF regional threat assessment

The primary threat to this species appears to be fluctuations in vole numbers; however there is sufficient suitable habitat for this species across the region that inexplicably remains unoccupied. In some areas birds disappear during the breeding season without a satisfactory explanation unless human interference is a factor.

Owl, Tawny *Strix aluco*



UK population estimate

The current estimate is 19,000 pairs (summer) ^(BTO)

Overview

Ask the general public what they know about owls and they will invariably make the sound “too-whit, too-who” even though most people are unlikely to have ever seen one. The species is widespread on the UK mainland but is rarely found on the Isle of Man and is absent from Ireland. Tawny Owls are predominantly a woodland species, preferring broadleaved woods, but are also found in coniferous woodland. They are equally at home in urban areas and will take up residence in parks and large gardens containing mature trees.

During the latter half of the 19th century Tawny Owls were heavily persecuted and numbers were severely depleted. This reduction in the population left suitable

habitat free to be colonised by Long-eared Owls. Persecution reduced in the 20th century and the Tawny Owl made a recovery, to the detriment of LEOs, and the population appeared to have stabilised by 1950. Together with several other species the Tawny Owl was a victim of secondary poisoning during the 1960s only recovering after the organochlorine pesticides were banned. There is some evidence that this species is once again declining in some areas.

National threat assessment

Tawny Owls are very territorial and unlike other species they remain in their home range even when their food supply is scarce. During these ‘low prey’ years they remain on territory but do not breed. This tendency can have a detrimental impact on local populations.

There are no other threats to this species at the present time.

Conservation status ^(BTO)

UK Green ●
 European Not of concern
 Global Least concern

Group Reports

Calderdale Raptor Study Group

Level of monitoring: Occurs; but no monitoring.

Although the Group is aware that this bird breeds in the area no specific monitoring is undertaken. Breeding was noted at 1 site in 2009 fledging 3 young. Given that Calderdale contains many large wooded areas the Group feels confident that unrecorded breeding takes

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|----------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 3.00 | 3.00 |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 55 | 55 | NR | 55 | 10 | 45 | 45 | 45 | 82 | 1.82 | 1.49 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSRSG | 56 | 9 | 10 | 9 | 4 | 5 | 5 | 5 | 6 | 1.20 | 0.67 |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 5 | 5 | NR | 5 | 2 | 3 | 3 | 3 | NR | NR | NR |
| Totals | 117 | 70 | 10 | 70 | 16 | 54 | 54 | 54 | 91 | 1.69 | 1.30 |

place throughout the district.

Durham Upland Bird Study Group

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

Tawny Owls occur widely in upland valley systems and afforestation. These birds are not studied in any detail but the population is thought to be stable and the species relatively common.

These birds are found up to 350m above sea level and probably higher in some areas.

Ground nesting has been noted in the Stang Forest.

Northumbrian Ringing Group

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

Principal study areas cover Kielder Forest and Keshope, Cumbria. Over 300 owl boxes are checked most seasons. However, in 2009 only 55 boxes were examined, representing 18% of the nest boxes in the study area. From the 55 boxes checked 45 pairs are known to have raised 82 chicks. It is therefore reasonable to assume that a significant number of the unchecked nest boxes were occupied and that these pairs also fledged a substantial number of chicks.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

With the population estimated in the region of 100 – 200 pairs Tawny Owls are known to be widespread across the study area; however no monitoring takes place.

North York Moors Upland Bird (Merlin) Study Group

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

The South Cleveland Ringing Group has been operating a long-term, on-going nest box scheme for both Tawny Owls and Kestrels since 1977. The Group operates across c40 sites including nest boxes and natural sites, all of which are checked annually. All of the sites are located on farmland and in woodlands within The North York Moors National Park.

Forest Enterprise has been running a similar long-term study using boxes based in the south-east forest areas of the National Park.

Both data-sets have been combined for this report.

Within the studies data-sets are calculated over 5-year band widths from 1977 to 2011. The current data-set refers to 2007, 2008 and 2009. For comparative purposes it will not be possible to give an accurate assessment until the figures for 2010 and 2011 have been added.

The historical data reveals a steady and marked decrease in productivity of successful nests from the 1982 / 86 year period stabilising over the 1992 / 96 seasons. The data implies that successful pairs were producing c0.5 chicks less per brood in the band 1992 / 96 compared to the 1977 / 81 band.

The latest figures are however, based on only 3 year's data and thus possibly misleading. The true picture will not be known until the end of the 2011 breeding season.

The 2009 data has been isolated for this report and shows that the year was particularly poor with regard to productivity.

Peak District Raptor Monitoring Group

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

The Group carried out a long-term study of c100 sites until the early 1990's when the project was curtailed. No recent detailed work has been undertaken; however productively is not believed to have changed drastically.

South Peak Raptor Study Group

Level of monitoring: Occurs but no monitoring.

Tawny Owls are the most abundant owl species in the region. The bird was noted in most parts of the study area and sightings were plentiful throughout 2009.

The species was recorded in both rural and urban environments.

Yorkshire Dales Upland Bird Study Group

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

There is only 1 nest box scheme in the recording area. Five of the boxes are known to have been occupied, 3 of which were successful. However the number of fledglings is unknown.

NERF regional summary

Although the species is clearly regarded as common and widespread in the reported areas, giving little cause for concern, as the historical data from the North York Moors studies indicate, it is certainly not faring as well now as it was during the 1980's. Although still listed as a species of 'no concern' it is widely accepted that this information may be out of date and that nationally Tawny Owls may be experiencing some difficulty. They are extremely vulnerable to population fluctuations, linked to the abundance of voles. For example 2007 was a very good vole year and the South Cleveland Ringing Group ringed a record 28 chicks. In 2008 just 9 chicks were ringed and in 2009, clearly the nadir year in the cycle of vole productivity, only 5 chicks were ringed.

The low occupation rates in the Northumberland studies were also attributed to a paucity of voles.

NERF regional threat assessment

The national threat assessment is applicable in the NERF region.

Peregrine Falcon *Falco peregrinus*



late 1950's and early 1960's the effects of pesticides such as DDT had a devastating effect on this species. By 1963 it is thought that up to 80% of the population had been eliminated. Once the pesticides were banned the population began to slowly recover.

UK population estimate

The current estimate is 1,400 pairs (summer) ^(BTO)

Overview

The Peregrine Falcon is widespread and breeds throughout the UK with the highest densities found in the uplands of the north and west; particularly in Wales, northern England and southern Scotland, and on rocky coasts. In the south and south east of England the population is sporadic; however their range is slowly expanding. They nest on both natural crags and on quarry faces and are increasingly using man made structures in town centres. They also readily take to artificial platforms erected in areas of abundant food supply but where suitable nesting ledges are not available.

Historically Peregrines have suffered severely from persecution. The species is targeted by egg collectors, falconers, Game Managers and pigeon fanciers. In the

National threat assessment

The greatest threat to this species was undoubtedly the use of DDT in the 1950's. When this chemical was banned the threat was removed. Regrettably this is not the case with persecution, which is now the largest threat faced by Peregrines. They are targeted by egg collectors and eggs on the point of hatch and chicks continue to be taken from the wild for the falconry trade. Whilst research shows that racing pigeon losses to Peregrines are relatively low, in some parts of the country it is apparent that pigeon fanciers are responsible for persecuting Peregrines.

The threats faced by Peregrines on some grouse moors, in some areas, continues 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 on-going problems if the Peregrines are to go unmolested across the whole of their natural range.

Conservation status ^(BTO)

UK Green ●
 European Not of concern
 Global Least concern
 Listed on Schedule 1 of the Wildlife and Countryside Act 1981

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|--------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|-----------------|-------------------------------|--|
| CRSG | 7 | 7 | 0 | 7 | 3 | 4 | 3 | 3 | 6 | 1.50 | 0.86 |
| DUBSG | 6 | 2 | 0 | 2 | 1 | 1 | 1 | 1 | 1 | 1.00 | 0.50 |
| NRG | 34 | 24 | 0 | 24 | NR | NR | NR | NR | 36 ¹ | NR | 1.50 |
| NWRPG | 25 | 19 | 0 | 19 | 4 | 15 | 13 | 11 | 25 | 1.67 | 1.31 |
| NYMMSG | 3 | 1 | NR | 1 | NR | 1 | 1 | 1 | 3 | 3.00 | 3.00 |
| PDRSG | 11 | 6 | 2 | 6 | 1 | 5 | 4 | 3 | 7 | 1.40 | 1.17 |
| SPRSG | 29 | 29 | 0 | 29 | 6 | 23 | 17 ² | 17 ² | 35 ² | 1.52 | 1.21 |
| YDUBSG | 27 | 10 | 0 | 10 | 3 | 7 | 7 | 7 | 18 | 2.57 | 1.80 |
| Totals | 142 | 98 | 2 | 98 | 18 | 56 | 46(+) | 43(+) | 131 | 2.34 | 1.34 |

Notes:

1. the data refers to the whole County of Northumberland
2. one site is known to have had an incubating female in April; although the out-

come is unknown, it is believed to have been successful; however this pair is not included in these figures

Group Reports

Calderdale Raptor Study Group

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

2009 was a particularly poor year in the Calder Valley. The 7 home ranges that are traditionally occupied all had pairs in residence at the beginning of the breeding season. Of these 7 pairs, 3 raised a total of 3 young; 3 failed to breed and 1 pair are known to have been 'robbed' at egg stage.

Durham Upland Bird Study Group

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

There has been a truly appalling level of breeding success in the Durham upland SPA for some years. In 2009 just 1 bird fledged. Away from high ground, in the eastern lowlands of Durham, 5 sites were occupied by pairs and there was attempted breeding at 4 of these, all of which failed. Persecution, by poisoning, was proven at 1 site. At another site persecution was suspected and the cause of failure at the other 2 sites is unknown.

Northumbrian Ringing Group

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

Although data for some nesting attempts was not recorded, throughout the county virtually all nests in both the uplands and in lowland quarries were monitored.

North West Raptor Protection Group

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

Once again 2009 brought depressing news for the Forest of Bowland Peregrine population. One nest containing a partial clutch of 2 eggs was abandoned after the adult birds disappeared. Two 3-week old female chicks disappeared after the brood of 4 chicks had been ringed leaving 2 smaller male chicks in the nest.

In another breeding area both adults were present early in the season and there was evidence of 'kills' adjacent to the site; however both birds disappeared before members of the Group returned to check on progress. This is the thirteenth year in succession that this nest has failed in similar circumstances.

At two other sites each containing 3 eggs, all 6 eggs disappeared at the point of hatch. Of the 4 eggs laid by another pair, 3 eggs disappeared leaving just a single chick to fledge. Disaster struck another pair when the downdraft from a helicopter delivering fencing material blew 2 eggs from the scrape; both eggs were at the point of hatching.

It is inconceivable that the Peregrine failures in the Forest of Bowland are due to natural causes and therefore we conclude that human interference is the most likely cause.

The population is believed to contain an average of 25 pairs annually.

North York Moors Upland Bird (Merlin) Study Group

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

Only 1 pair was known to fledge young successfully on the

North York Moors although unconfirmed reports suggest a further pair may have fledged young at another site. The number of pairs continues to increase along adjacent areas of the Yorkshire coastline where they are much safer from persecution.

Peak District Raptor Monitoring Group

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

Successful sites tend to be located in areas of good public access or in working quarries. Conversely approximately 6 sites on or adjacent to privately owned grouse moors have been lost over the last 10 years.

These sites, which are no longer occupied, are not included in the figures above.

South Peak Raptor Study Group

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

The decline of raptor populations in the north of the study area, the Upper Derwent Valley, continues. Five sites were monitored in the Upper Derwent, all of which failed. This is the first time in 25 years that no Peregrines have fledged from this part of the study area. One pair failed early in the season and another pair was present early in the season but not seen on subsequent visits. Two traditional sites were unoccupied and only a single bird was seen occasionally at a third. It appears that human interference is the only feasible explanation for this breeding failure.

Despite some poor weather early in the season, in the lowland regions of the study area, the number of successful pairs increased.

Yorkshire Dales Upland Bird Study Group

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

2009 was a fairly average year for Peregrines in the Dales. The traditional Peregrine nest sites in grouse moor areas of the Dales continue to be devoid of breeding birds, although some did show signs of occupancy very early in the season. It is now well over a decade since any of the monitored Peregrine sites on grouse moors fledged any young. Away from these areas there were 3 non-breeding or early season failures. At one site an immature female was paired with an adult male. At another an adult pair were observed nest scraping in April but subsequently disappeared. At the third an immature male paired with an adult female.

NERF regional summary

A familiar picture of Peregrine breeding activity occurs across all of the NERF study areas with very low occupancy and poor breeding success at sites on or adjacent to grouse moors. Conversely in areas not managed for grouse, occupancy and breeding success remains relatively high. Taking into account the availability of food supply and suitable breeding habitat it would appear the only explanation for this difference in breeding success is human interference.

NERF regional threat assessment

Peregrines face the whole spectrum of threats from persecution. Eggs and chicks are stolen, poison and traps are used to kill birds, nests are occasionally destroyed and birds are shot. All of these persecution techniques have been used against this species in the NERF area.

Red Kite *Milvus milvus*



UK population estimate

The current estimate is c431 pairs (summer) ^(BTO)

Overview

Historically Red Kites were one of the UK's most widespread birds of prey and were a very familiar sight, in many of our cities and towns, where they scavenged on rubbish tips. By the start of the 20th century they had been persecuted to extinction in England and Scotland and only survived in a very small remnant population in mid-Wales. Ironically they survived in habitat that is not particularly suitable for the species. Low level persecution continued in Wales and although the population was slowly increasing, productivity was low and by the mid 1980's it had only risen to about 40 breeding pairs. In addition the population did not colonise suitable habitat outside of the mid-Wales area.

In the 1980's the bird was listed as 'globally threatened'.

The Red Kite fulfilled all of the IUCN criteria for re-introduction and action was instigated to re-introduce the species to suitable habitat in England and Scotland. The first releases of birds, taken from Spain and Scandinavia took place in the Chiltern Hills, England and on the Black Isle in northern Scotland, between 1989 and 1994. Further releases took place in the East Midlands in 1995, Central Scotland in 1996, in Yorkshire during 1999 and in southern Scotland in 2001. In 2004 the Northern Kites Project was commenced in the lower Derwent Valley, Gateshead. This was the first urban release scheme and between 2004 and 2006 94 kites were released.

National threat assessment

By far the biggest threat to Red Kites comes from illegal poisoning. Whilst they may not be the intended target they are scavengers and will consume poisoned baits placed out illegally to kill foxes or crows. They are susceptible to secondary poisoning from rodenticides intended to control rats and collisions with overhead power lines also pose a risk. They will always be targeted by egg collectors; however this risk is not likely to have any impact on the national population.

Conservation status ^(BTO)

UK Amber ●
 European 2: Concern, most not in Europe; declining
 Global Near threatened
 Listed on Schedule 1 of the Wildlife and Countryside Act 1981

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| DUBSG | 22 | 22 | 0 | 22 | 9 | 13 | 11 | 11 | 17 | 1.31 | 0.77 |
| NRG | 3 | 3 | 0 | 3 | 1 | 2 | 2 | 2 | 2 | 1.00 | 0.67 |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| SPRSG | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 26 | 25 | 1 | 25 | 10 | 15 | 13 | 13 | 19 | 1.27 | 0.76 |

Group Reports

Calderdale Raptor Study Group

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

There were only very occasional sighting of passage birds in the east of the study area during 2009. There are large areas of suitable habitat for the species and they are currently breeding on the northern border of the study area. It is felt that it is only a matter of time before breeding is recorded in Calderdale.

Durham Upland Bird Study Group

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

The data refers to the whole of the County Durham recording area and is not solely restricted to the uplands; in fact most territories were located away from upland areas.

The data represents the continued expansion of this species following the successful Northern Kites re-introduction program.

It is possible that some of the 9 non-breeding / failed pairs shown did go on to breed undetected and the breeding numbers quoted should be treated as a minimum. Five pairs fledged 1 young bird and 6 pairs fledged 2 young.

The Durham Upland Bird Study Group is grateful to the Friends of Red Kites [FoRK] Project Group for providing the data.

Northumbrian Ringing Group

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

The data refers to the whole of the Northumberland recording area and is not solely restricted to the uplands; in fact most territories were located away from upland areas.

The data represents the continued expansion of this species following the successful Northern Kites re-introduction program.

The Northumbrian Ringing Group is grateful to the Friends of Red Kites [FoRK] Project Group for providing the data.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

Red Kites are seen in the study area and there is a reasonable body of evidence to suggest that 2 pairs nest in the region.

North York Moors Upland Bird (Merlin) Study Group

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

Wanderers are regularly recorded throughout the uplands during winter. No breeding attempts have been recorded to date.

Peak District Raptor Monitoring Group

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

South Peak Raptor Study Group

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

Once again there were numerous sighting of this species during 2009, especially in the early part of the year. A heavily moulted female was seen at Ladybower Reservoir; however she failed to attract a mate.

With the continued success of the re-introduction schemes it is anticipated that the species will breed in the South Peak in the not too distant future.

Yorkshire Dales Upland Bird Study Group

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

Despite the relatively close proximity to the Yorkshire release site, this species remains a very scarce breeding species in the study area with only 3 or 4 nesting pairs. Whilst this is a similar pattern to other release schemes, the loss of 1 adult from a breeding pair and the illegal poisoning of several other birds in the study area in recent years may well be limiting further colonisation.

NERF regional summary

At the present time only Durham and Northumberland have access to reliable records for this species. They are known to have bred successfully in other parts of the NERF region areas and are also frequently recorded as passage birds.

NERF regional threat assessment

Red Kites are scavengers and are extremely susceptible to poisoning, either by secondary poisoning e.g. by rodenticides, or by poisons deliberately placed to target this or other species. Over recent years a number of birds have been found poisoned within the NERF study area.

WARNING:

Some poisons are exceptionally toxic and can be absorbed through the skin. Raptor Workers finding a dead Red Kite, or any other species suspected to have been poisoned, should exercise extreme caution before handling a carcass. Standard, thin, household gloves are not effective against many of the poisons found in dead Kites.

It is essential that all suspected poisoning incidents are reported to the Wildlife Incident Investigation Scheme [WIIS]. The Freephone number for the scheme is 0800 321600.

Sparrowhawk, Eurasian *Accipiter nisus*



rine pesticides took their toll during the late 1950's. Following the banning of these pesticides the population firstly stabilised and then began to recover. Unfortunately surveys in the mid 2000's indicate that the numbers may be declining once more in some areas.

National threat assessment

Sparrowhawk chicks are predated by both pine marten and Goshawks; however the threat is insignificant to the general population. Although prolonged cold winters can and do have an adverse effect on the species the effect is localised.

There are two further issues that result in localised threats; firstly there is a belief amongst some pigeon fanciers that Sparrowhawks are responsible for high mortality rates in some lofts, and secondly there is the erroneous belief, held by some people, that Sparrowhawks are responsible for declines in songbird populations. Extensive research has been carried out into both of these claims and the impact of Sparrowhawks in both cases has been shown to be inconsequential. Despite this, these beliefs persist and consequently localised small-scale persecution results.

UK population estimate

The 2000 estimate for this species was 39,000 pairs (summer) ^(BTO)

Overview

Sparrowhawks are found throughout the UK. The species was persecuted during the 1800's when they were targeted by game managers and trophy hunters. As with many other raptor species their numbers increased during the war years before falling dramatically, particularly in the east of England, when the effects of organochlo-

Conservation status ^(BTO)

UK Green ●
 European Not of concern
 Global Least concern

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| CRSG | 3 | 3 | 0 | 3 | 0 | 3 | 3 | 2 | 4(+) | 1.33 ¹ | 1.33 ² |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 10 | 10 | 0 | 10 | 0 | 9 | 7 | 7 | 12(+) | 1.33 ³ | 1.20 ⁴ |
| NWRPG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NYMRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 15 | 15 | NR | 15 | NR | 15 | 15 | 15 | 62 | 4.13 | 4.13 |
| SPRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| YDUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Totals | 28 | 28 | 0 | 28 | 0 | 27 | 25 | 24 | 78(+) | 2.89 ⁵ | 2.79 ⁶ |

Notes:

1 & 2 to calculate the number of young fledged n = 4

3 & 4 to calculate the number of young fledged n = 12

5 & 6 to calculate the number of young fledged n = 78

Group Reports

Calderdale Raptor Study Group

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

Calderdale is heavily wooded and it is likely that Sparrowhawks are under reported in the study area. At least 3 pairs bred, 1 pair fledged 3 young and a second pair fledged at least 1 chick, but probably more. Due to the large areas of suitable habitat the Group believes that many more pairs were successful during 2009.

Durham Upland Bird Study Group

Level of monitoring: Occurs but no monitoring.

This bird is widespread as a breeding species across the whole county. In the uplands it is confined to river valley systems and plantations but is still never-the-less quite common.

Sparrowhawks can be seen hunting over most upland areas including those devoid of trees.

Northumbrian Ringing Group

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

Sparrowhawk monitoring only takes place on an ad-hoc basis in conjunction with surveying for Goshawk in the Kielder Forest. Although no formal monitoring of this species takes place it is estimated that between 20 and 30 pairs nest in the study area.

North West Raptor Protection Group

Level of monitoring: Occurs but no monitoring.

The local population is estimated to contain between 20 and 30 pairs and is widespread across the study area; however no formal monitoring takes place.

North York Moors Upland Bird (Merlin) Study Group

Level of monitoring: Occurs but no monitoring.

This species has been driven out of the forests in the south east of the study area over the last decade.

The population levels are believed to be at reasonable densities within the National Park, predominantly in suitable habitat away from the large forests.

Peak District Raptor Monitoring Group

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

The Group undertook a study of this species over a period of 20 years which involved monitoring an average of 100 pairs per season. The study was scaled back in 2005 and now involves between 12 – 15 pairs annually, together with casual monitoring at some of the original traditional sites.

Contrary to popular opinion, which indicates that the population is stable, work carried out by the Group indicates that in this area the population trend is downwards.

South Peak Raptor Study Group

Level of monitoring: Occurs but no monitoring.

The Group does not undertake a detailed study of this common and somewhat secretive bird.

There were numerous sightings across the study area throughout the year and the population is believed to be stable.

Yorkshire Dales Upland Bird Study Group

Level of monitoring: Occurs but no monitoring.

There is no detailed study of this species, however they are observed throughout the Dales in low numbers.

NERF regional summary

Sparrowhawks occur as a breeding species throughout the NERF region but are not monitored in most areas. There is a small study in Northumberland [also covering a small area in eastern Cumbria] reporting that 2009 was a very successful year with high productivity. The South Peaks area reports a stable population whilst the North York Moors reports a reasonable density in areas away from the large forests.

A long-term study by the Peak District Raptor Monitoring Group was conducted between 1985 and 2005 and involved c100 pairs. Continuing work indicates that the population trend in that area is downward.

Although present in the Yorkshire Dales they are reported to be at a low density. Only 3 pairs were located in Calderdale, however there are large tracts of suitable habitat, leading the Study Group to believe that the species is under recorded.

NERF regional threat assessment

With the exception of pine martin the national threat assessment is applicable to the NERF region.

Note:

Studies by the Peak District Raptor Monitoring Group indicate a downtrend in the local population. Across the NERF area the species is not studied extensively and it is possible that similar trends may be underway in other areas. As with Kestrels it is conceivable that a population crash is going unnoticed. There is scope for a more robust survey of this species.

Raven, Common *Corvus corax*



UK population estimate

The current estimate is 12,000 pairs (summer) ^(BTO)

Overview

The Common Raven is almost universally granted the status 'honorary raptor' by Raptor Workers. They are the largest of the corvids and can weigh up to almost three times more than a crow. They are highly intelligent and sociable birds with young birds often forming large flocks. They are birds of myth and legend wherever they are found. Ravens were present in most counties in England until the end of the 19th and beginning of the 20th century when they were eliminated from lowland areas by gamekeepers and shepherds. Populations are recovering and they are now most abundant in the western half of the UK mainland predominantly in the uplands and on rugged coast lines. Persecution is now less of a

problem and there is some evidence that the population is expanding in both numbers and range.

National threat assessment

Whilst persecution of the Common Raven has reduced, this threat remains a clear and present danger in some areas, particularly where they come into conflict with the game shooting community. In some areas they are shot and poisoned.

In October 2009 the *British Mountaineering Council* [BMC] opened a discussion within the *Cave and Crag Access Advisory Group* to consider the BMC's position on voluntary climbing restrictions on crags with nesting Raven. Any withdrawal from the current voluntary restrictions, by the BMC, could open up crags with nesting Ravens to climbers and may lead to breeding birds abandoning nesting attempts.

Conservation status ^(BTO)

| | |
|----------|----------------|
| UK | Green ● |
| European | Not of concern |
| Global | Least concern |

Group Reports

Calderdale Raptor Study Group

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

Two pairs occupy traditional sites annually and are invariably successful in rearing young. They remain present throughout the year.

NERF Data

| RSG | Home ranges checked | Home ranges occupied (pairs) | Home ranges occupied (singles) | Territorial pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------|---------------------|------------------------------|--------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|---------------------|-------------------------------|--|
| CRSG | 2 | 2 | 0 | 2 | 0 | 2 | 2 | 2 | 8 | 4.00 | 4.00 |
| DUBSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| NRG | 15 | 15 | 0 | 15 | 0 | 15 | 15 | 15 | 29(+) | 1.93 ¹ | 1.93 ² |
| NWRPG | 2 | 2 | 0 | 2 | 1 | 2 | 2 | 1 | 4 | 2.00 | 2.00 |
| NYMRSG | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| PDRSG | 10 | 4 | 0 | 10 | 8 | 2 | 2 | 2 | NR | NR | NR |
| SPRSG | 37 | 37 | 0 | 14 | NR | 12(+) | 12(+) | 12(+) | 44(+) ³ | 3.67 ⁴ | 3.14 |
| YDUBSG | 18 | 8 | 0 | 8 | 2 | 6 | 6 | 5 | 20 | 3.33 | 2.50 |
| Totals | 84 | 68 | 0 | 51 | 11 | 39(+) | 39(+) | 37(+) | 105(+) ⁵ | 2.69 ⁶ | 2.06 |

Notes:

1. & 2. to calculate number of young fledged n = 29
3. to calculate the number of young fledged n = 44

4. to calculate the number of young fledged per pair laying n = 12
5. to calculate the number of young fledged n = 105
6. to calculate the number of young fledged per pair laying n = 39

Durham Upland Bird Study Group

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

Annual surveys of breeding habitat have shown that Raven remain very rare as a breeding species in the county's uplands. There were no instances of any breeding attempts in 2009.

Typical of recent years, birds were seen in small groups at a wide variety of upland locations from late winter, with some in tumbling display, through to May and again from autumn onwards.

The occasional summering bird was also reported.

There has been just 1 successful nest in the last decade.

Northumbrian Ringing Group

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

This species is extensively monitored across both the uplands and lowlands of Northumbria.

In the uplands it is known that 15 pairs raised a minimum of 29 young.

North West Raptor Protection Group

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

The population is estimated to consist of 3 to 6 pairs. Two sites are monitored annually and it is believed that a third pair nested successfully in 2009.

North York Moors Upland Bird (Merlin) Study Group

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

The eastward expansion of Raven into the study area appears to be mirroring that of the Common Buzzard. Sightings of single birds were recorded in the south east forested areas of the North Yorkshire Moors.

Peak District Raptor Monitoring Group

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

Traditional gritstone crags with good public access are the most successful sites.

Of the 10 sites monitored during 2009 only 2 pairs successfully reared young.

South Peak Raptor Study Group

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

Thirty seven sites were checked during 2009 and all were found to be occupied. Of these, 50% were found nesting in trees. The Group monitored 12 successful pairs which fledged an average of 3.67 per nest. If this success rate is extrapolated throughout the breeding population then it is possible that more than 100 chicks fledged.

The persecution of Ravens in the Upper Derwent Valley continued, with some nests destroyed on natural cliff sites during 2009.

Yorkshire Dales Upland Bird Study Group

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

The number of confirmed nesting pairs remains very low, whilst the number of non-breeders continues to increase in the Yorkshire Dales.

One pair failed at chick stage and at another site the breeding outcome is unknown.

NERF regional summary

There are mixed fortunes for Raven across the NERF recording area. In some areas they are prospering, in some they are slowly increasing whilst in others where there is suitable habitat the population is lower than would perhaps be anticipated.

The reasons for these regional variations are unknown at the present time and the species may be worthy of a more detailed study.

NERF regional threat assessment

The national threat assessment for this species is applicable in the NERF region.

Regional reports from non-NERF members

A considerable amount of bird of prey surveying, monitoring and ringing is undertaken by a number of Raptor Workers who are not affiliated to a Raptor Study Group or are members of bird clubs that are not affiliated to NERF.

Cumbria

Goshawk

Five home ranges were checked as part of the Borders Forest Goshawk study undertaken by the Northumbrian Ringing Group. Of these, 4 home ranges were occupied by breeding pairs and a further site was occupied by a single bird. All 4 pairs were monitored, 1 pair failed early and 3 pairs laid eggs. All 3 pairs hatched eggs and fledged young. However, the fledging rate was disappointingly low at 1 per pair.

Source: Martin Davison, NRG.

Harrier, Hen

There was 1 breeding attempt in the Lake District during 2009, the attempt was successful and the pair fledged 4 young.

Source: Natural England.

Merlin

In Cumbria 12 pairs of Merlin are known to have laid eggs, of which 7 pairs hatched chicks, fledging a minimum of 12 young. One pair nested in a tree, 1 on a crag, 9 on a heather moor and the location of the 12th pair was unrecorded.

Source: Dave Shackleton.

Owl, Eurasian Eagle

Three chicks were fledged from the RSPB Geltsdale Reserve during 2009.

Source: Terry Pickford.

Osprey

Three chicks fledged from 1 nest at Bassenthwaite, Cumbria.

Source: Dave Shackleton.

Sparrowhawk

Four home ranges were located by Northumbrian Ringing Group during survey work in the Kielder Forest, which straddles the border between Cumbria and Northumberland. Four pairs fledged a total of 13 young.

Source: Martin Davison.

Lancashire

Peregrine

On the Pennines adjacent to the Lancashire / West Yorkshire border 5 pairs of Peregrines fledged a total of 17 chicks. All of these young birds were fitted with a BTO ring and a red Darvic ring.

Source: Steve Downing & Craig Bell.

Articles

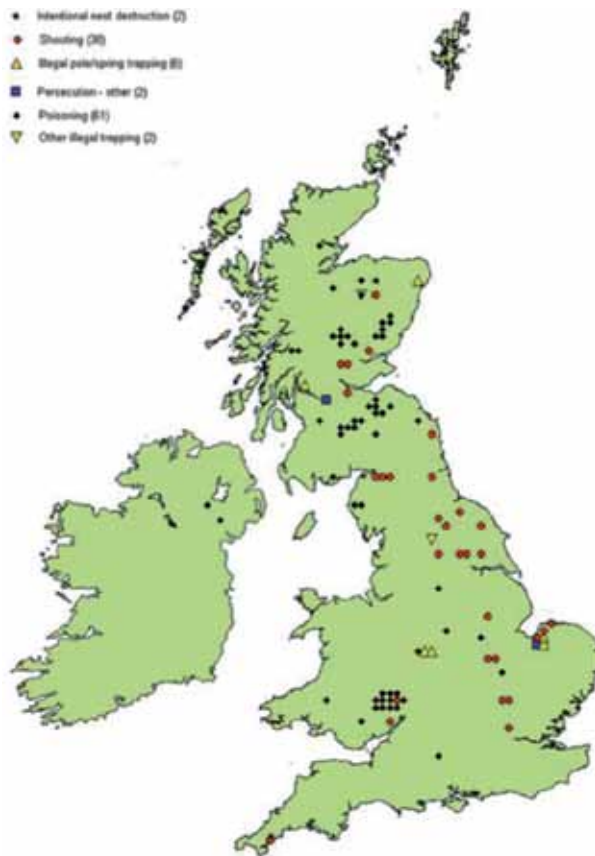
A review of the RSPB's latest annual Birdcrime report and the wider political issues affecting UK raptors.

Guy Shorrocks

Senior Investigations Officer, RSPB

IN SEPTEMBER 2010, the RSPB launched its 20th annual Birdcrime report in respect of offences against wild birds. Once again there was a heavy focus on bird of prey persecution and the continuing conservation problems this poses for a wide range of species.

Confirmed bird of prey and owl persecution incidents 2009



Unfortunately 2009 was another difficult year for birds of prey. Although it is generally accepted that only a small fraction of offences will ever be discovered and recorded, there were 384 reported incidents of bird of prey persecution in the UK. This included the confirmed shooting of at least 32 individual birds of prey and 85 confirmed incidents of pesticide abuse involving the poisoning of at least 81 individual birds or animals.

The report also reflects some of the changes in bird of prey populations over the last twenty years. There is highly encouraging news for several species, with huge expansions in both the numbers and distribution

of Buzzards and Red Kites; and significant progress for the populations of Ospreys and Marsh Harriers. However, persecution continues to have a profound impact in many areas, particularly the uplands of northern England and Scotland, on land managed for grouse shooting. Iconic species like Golden Eagle are greatly restricted across large areas of suitable habitat, and the re-introduced Red Kite population in the north of Scotland has been hugely affected by illegal poisoning. The comparison with the success of the Red Kite release project which was commenced at the same time in the Chilterns is startling.

Encouragingly, public support for raptors is clear and early in 2010 the former Wildlife Minister, Huw Irranca-Davies, was one of more than 210,000 people to sign a pledge demanding better protection for birds of prey.

The report includes a map of 'confirmed' incidents reported over the last 20 years, which emphasizes the widespread nature of these offences and that the uplands of Scotland and northern England remain the key areas of concern. During this period, three of the top five English counties for 'confirmed' incidents of raptor persecution include Cumbria, North Yorkshire, and Northumberland.

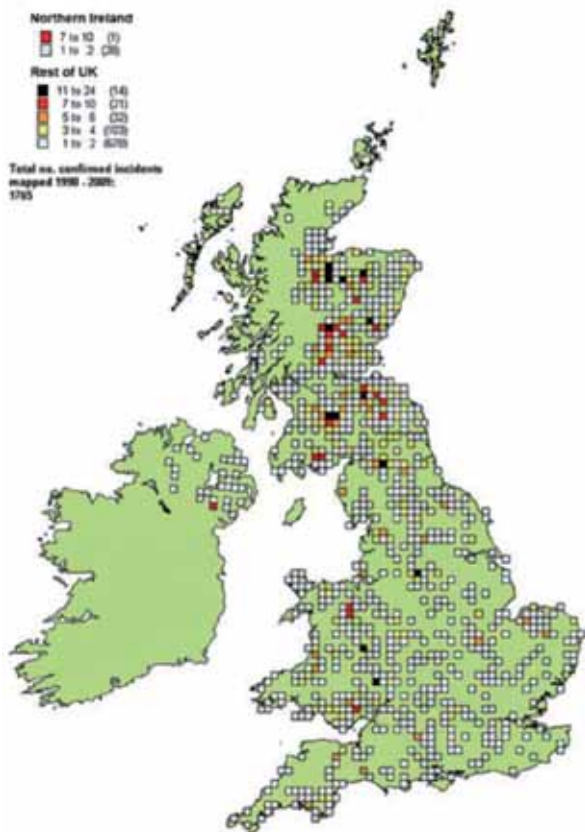
There are a number of species causing concern in the North of England. Hen Harriers remain restricted to just a few pairs, almost all of which are confined to the United Utilities Estate in the Forest of Bowland, Lancashire, where they benefit from sympathetic land management. Whilst Buzzards appear to be flourishing across much of lowland England, they remain at considerably lower densities across large parts of the uplands in northern England. The illegal killing of Red Kites from the Yorkshire re-introduction scheme continues to cause concern and recently recorded poisoning incidents suggest that more problems lie ahead for the Northumbrian population as it starts to expand its range. Additionally Goshawks appear to have been eradicated as a breeding species in parts of the 'Dark Peak' within the Peak District National Park.

In order to highlight these, and other issues, and to give organisations like the RSPB and the Northern England Raptor Forum [NERF] an effective voice, with which to lobby Government, the Statutory Conservation Organisations and other decision makers, reliable, unassailable information is essential. Raptors Study Group Workers [RSGWs] are at the forefront of the information gathering process and data recorded by Raptor Groups, often over many years, continues to prove invaluable.

Long-term population studies have proved to be critical in highlighting the impact of persecution for a range

of species. One such example of how these studies are utilised is demonstrated by the RSGW's invaluable contribution to the on-going work relating to peregrine breeding success rates in northern England. This work will be published in the near future and it is peer-reviewed scientific reports, such as this, that form a cornerstone of the work being undertaken to highlight the serious impact of persecution.

Total number of confirmed incidents 1990 - 2009



In addition to undertaking population studies the gathering of persecution data, by RSGWs, is equally essential in the fight against wildlife crime. This data can be used to both highlight on-going criminality in the broader sense and to provide the evidence needed to bring some of those responsible before the courts. Indeed, over the years several Raptor Workers have provided evidence to the courts, which has aided the Crown Prosecution Service [CPS] to secure a conviction in a number of high profile cases.

The RSPB remains the only agency with long-term data-sets of persecution incidents and requests that Raptor Workers, in addition to reporting criminal matters to the Police, also report them to the RSPB Investigations Section, telephone 01767 680551. All incidents and any other sensitive information can be reported in the strictest of confidence.

In 2009, the Government announced the six national wildlife crime priorities, which include 'Raptor Persecution'; with a focus on five species [Golden Eagle, White-tailed Eagle, Hen Harrier, Red Kite and Goshawk]. Richard Compton is the Association of Chief Police Officers' lead for wildlife crime and in the Birdcrime foreword he

states: "The illegal killing or persecution of birds of prey is totally unacceptable, the protection offered to birds of prey by the law is clear and the police will enforce that legislation."

If the persecution of birds of prey is to be tackled effectively by the Police, and other statutory enforcement authorities, support at a senior level is essential. However, current standards of enforcement by the statutory agencies remain generally poor and are often badly coordinated. Many of the criminal investigations, subsequently dealt with by the Police, are instigated by the RSPB Investigations Section. This fact is emphasised in Birdcrime 2009 noting that of the 95 gamekeepers convicted over the last 20 years, a quarter of those convictions were achieved as a direct result of surveillance work undertaken by the RSPB, often over protracted periods.

A newly formed, Police led Working Group has taken responsibility for delivering the objectives set out within the Raptor Persecution priority across England and Wales. As part of the process The Working Group is looking at ways to improve the gathering and sharing of intelligence, crime prevention and law enforcement. NERF and the RSPB are both represented within this Group. However, at the present time the RSPB believes that insufficient progress is being made and we encourage all of the Working Group members to work tirelessly to support this initiative. Despite the best intentions of the Working Group, the current economic climate may pose yet further restrictions on the Police Service and its ability to investigate wildlife crime. The assistance of the National Wildlife Crime Unit has been indispensable in the investigation of many crimes against birds of prey, yet further funding for this national resource has yet to be agreed beyond the financial year 2010 / 2011 and its future is therefore uncertain.

As Birdcrime 2009 highlights, those convicted of wildlife related offences are typically gamekeepers. However, as RSGWs are fully aware, the problem goes far deeper than this. The RSPB is concerned that the shooting industry appears unable to self-police and the Society believes that new legislation is required to make the managers and employers of those committing these crimes legally accountable. Options such as the introduction of vicarious liability, holding people accountable for crimes committed by their employees and the removal of the shooting rights from individuals and errant estates needs to be seriously considered. These measures would provide a significant deterrent for the individuals currently prepared to ignore the law, without imposing a burden on legitimate shooting interests.

The Scotland Wildlife and Natural Environment (Scotland) Bill is currently being debated by the Scottish Parliament and issues such as vicarious liability for managers and employers; and a registration scheme for sporting estates are being discussed. Following publication of Birdcrime 2009, the Telegraph On-line reported that the SNP Environment Minister, Roseanna Cunningham, is looking at the issues of making owners liable for the actions of their employees, including gamekeepers, who are found to have illegally disposed of raptors. She is also

said to be examining whether to lower the standard of proof in some cases making it no longer necessary to show that land managers meant to kill the bird; the presence of a carcass and the relevant poison on the estate may be enough to secure a conviction.

We will have to wait to see whether or not these measures will be brought into law; but hopefully, if they are, they will form a catalyst for the introduction of similar legislation elsewhere in the UK. It remains vitally important that when the opportunity arises we are in a position to provide the necessary data and arguments to advocate for these and any other beneficial changes

to the legislation. When that opportunity is presented there is no doubt that NERF, and its constituent Groups, will have a vital role to play in the process.

The RSPB is delighted that NERF has produced this, their first annual report, which is undoubtedly a valuable vehicle for raising awareness of both the status and the plight of raptors across the North of England.

The Birdcrime 2009 report can be downloaded at:
http://www.rspb.org.uk/Images/birdcrime_tcm9-260567.pdf

Breeding Hen Harriers in England: 2010 summary

Stephen Murphy

Natural England, Hen Harrier Recovery Project

Introduction

This document presents the breeding figures for Hen Harrier in England in 2010 and an events summary of the breeding season. Breeding data from 2002 has been included for comparison / trend purposes.

Abstract

Twenty three young fledged from 12 breeding attempts [there were 15 fledged young from 10 breeding attempts in 2009]. Breeding was confined to just two locations, in Bowland and at a confidential site in north Cumbria.

The first successful nest was recorded on a grouse moor in Bowland for approximately 19 years. The details of the site remain confidential at the landowner's request.

10 juveniles were fitted with satellite tags [including 3 at Langholm].

A nest containing 4 eggs failed due to an Eagle Owl attack filmed on CCTV.

A traditional HH site on the Abbeystead Estate was deserted for the first time since 2002; an Eagle Owl nest with 1 egg [subsequently deserted] was found in the vicinity.

There was low breeding productivity [1.3 young per nesting attempt], due to 50% of nests failing on United Utilities land and a low hatch rate. This was unusual as the optimal weather conditions during the chick rearing stage and the high vole density would normally mean a prolific year for Hen Harriers [last vole plague was in 2006 when 46 young fledged]. However, freak overnight frosts in May led to the death of a brood of young Peregrines and this could have caused some of the well-sat Hen Harrier eggs to chill during the time that the female

was away from the nest for food passes, nest material collection, occasional disturbance, etc.

Table 1. Breeding data for Hen Harrier in England 2010

| Location | Attempts | Successful | Fledged |
|--------------|-----------|------------|-----------|
| Bowland UU | 10 | 5 | 13 |
| Bowland GM | 1 | 1 | 5 |
| Cumbria | 1 | 1 | 5 |
| Total | 12 | 7 | 23 |

2010 Breeding season summary

February – March

There was a disappointing start to the season as female 90691 was tracked by satellite in the North Yorkshire Moors for approximately 3 weeks before her untimely death on the 11th February. Although we cannot be 100% sure, this was almost certainly an act of targeted persecution, corroborated several days later by the finding of a shot Goshawk in the same 1km² as 90691's last known fix. An early morning visit to the birds last known position revealed nothing but fresh boot and dog prints in the snow.

2010 was the National Hen Harrier Survey year and a seasonal fieldworker was employed by the RSPB and managed by HHRP staff. This allowed extra coverage of the peripheral breeding sites and other areas of suitable breeding habitat in the English uplands. Despite this extra effort no birds were observed attempting to breed outside of Bowland and north Cumbria.

April – May

See Table 2

Figure 1. Breeding data for Hen Harrier in England 2002 – 2010

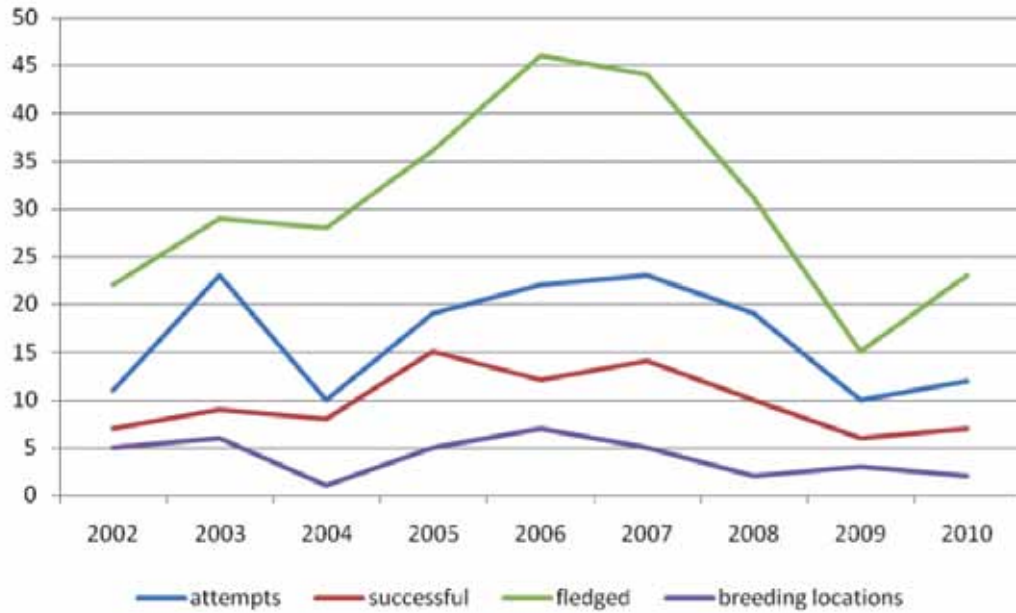
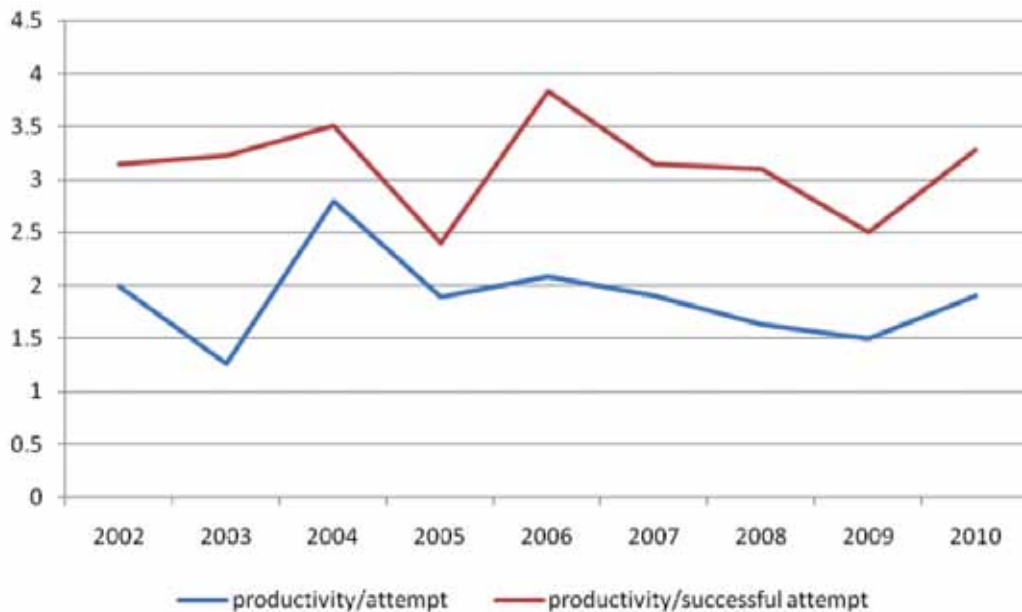


Figure 2. Breeding productivity for Hen Harrier in England 2002 – 2010



June – July

The adult birds at Bowland had evidently gained good pre-breeding condition as the majority of clutches consisted of 6 eggs. One female, fitted with a satellite tag, laid 7 eggs; this is only the second time that a clutch of 7 eggs has been recorded in Bowland since records began. However, the nests on United Utilities did not, for whatever reasons, have a good hatch rate and the majority of the 5 / 6 egg clutches produced only 2 young.

August – September

2010 satellite tracked juvenile birds, from the study, have set up home ranges in the following areas:

Lammermuirs, Moorfoot Hills, Wanlockhead, Caton,

Goodber, North Lakes, Garsdale, Semerwater, Ribbleshead and Brittany in northern France.

This work is on-going, the findings are exciting as dispersal corridors, foraging and roosting areas that were previously largely unknown to ornithologists have now been mapped.

Individually marked birds, sat tags and wing-tags

During June and July I observed the parents at several active nests in Bowland. 6 of approximately 16 breeding adults were wearing aerial backpacks that I had fitted in previous years, yet only 2 birds were present with wing-

Table 2. Locations and details of pre-breeding activity

| Site | Notes |
|----------------------------------|--|
| Bowland | Promising early signs. Most of the traditional breeding sites at Bowland were occupied. There were an estimated 18 adults in the SSSI by the end of April. Many of the adults are "old" individually marked birds of Bowland provenance. |
| N. Cumbria [Confidential] | 1 pair + 1 female. |
| Hepple Haugh [RSPB led] | 1 male and 1 female in general area on separate days. |
| Gloucestershire [Confidential] | Female Hen Harrier + displaying male Montagu's Harrier. A male Hen Harrier showed up days later and displayed alone. Pre-cursor of future breeding establishment? |
| Yorkshire | 1 female at Colsterdale, reported in the area for a week in mid-April, other intermittent records passed from YDNP staff. |
| Geltsdale | 1 male intermittently, no females seen. |
| Wessenden Moor, W. Pennine Moors | 1 pair displaying, no site establishment. |
| Goyt Valley | 1 male and 1 female seen on separate days. |
| Breckland, Thetford | Reports of 1 male and 1 female at same site on separate days. |

tags. This is noteworthy as less than one third of all the years juveniles are fitted with backpacks whilst approximately two thirds are fitted with wing-tags. Wing-tags detach over time but leave identifiable pins and washers in the wing patagium; these were not present on all but 1 of the Bowland breeding birds. This raises the question '*What is favouring birds with transmitters and / or adversely affecting birds with wing-tags?*'

Studies in Spain are showing that wing-tagged Hen Harriers and Montagu's Harriers are appearing in the prey remains of Peregrine falcons. I know of 5 cases in England where Peregrines have predated Hen Harriers and 4 of these had wing-tags fitted. I also strongly suspected intra-guild predation by Peregrine in June 2009 when a satellite tagged juvenile Hen Harrier was last 'fixed' near a Peregrine eyrie soon after fledging.

I am not inferring that the fitting of wing-tags is the reason why Hen Harriers are not doing well in England; we are quite sure that the low return rate from a small, but relatively productive population is due to persecution. However, Peregrine density has increased in England, and in Bowland almost all Hen Harrier sites are within 1 of a Peregrine territory.

In the more expansive areas of Spain where the study was focused, the Peregrine eyries with Hen Harrier remains were at least 20 km from the nearest known Hen Harrier nests i.e. the Spanish Peregrines were mostly predated wing-tagged Hen Harriers on passage. The diet of Peregrines has been well studied in Spain and it was only after the Hen Harrier wing-tagging programmes commenced in the late 90's that they started to appear as prey remains. Is this a case of trophic specialization? Is it happening here?

I have now been appointed as the wing-tag fitter / coordinator in England with effect from 2011. Following consultation, I propose to make the following changes to the guidelines, for precautionary purposes:

- only approximately 50% of each brood should be wing-tagged
- the tag size will be reduced, male tags smaller than female tags
- less high visibility colours will be used and the trailing edges will be feathered
- revert to using strimmer wire as tag fixing pins. When these detach they leave the wing clean, unlike the dental wire method which leaves a hard twist of wire and washers in place
- possibly trial coloured leg-rings or anklets
- contact will be maintained with researchers in Europe to ensure that there is communication and co-operation. The success of meta-population studies will depend on this joined-up approach

Eagle Owls

During April a 2nd Eagle Owl nest was located at Langden by the North West Raptor Protection Group [NWRPG]. In subsequent weeks the 3 chicks were ringed; two of them were later found dead in the vicinity of the nest and the remaining chick could not be located.

The 'original' EO site at Whitendale was successful and produced 3 young. Other birds were reported from at least 7 different locations within the Bowland Fells SSSI.

A CCTV fitted to a Hen Harrier nest in Bowland revealed an early morning attack from 1 of the Eagle Owls that were nesting within 500m of the harrier nest. It could not be concluded after reviewing the footage and searching the area whether the incubating Hen Harrier had been killed. The attack did, without question, cause the desertion of 4 Hen Harrier eggs.

EO's bred successfully at Geltsdale for the 2nd consecutive year. This is the 4th consecutive year that Geltsdale has not hosted a successful Hen Harrier nesting attempt.

Peregrines and PIT tags

George Smith & Mike McGrady



THERE IS no doubt that any long-term study demands a tremendous commitment from the participants. This is particularly the case with a species that often chooses remote upland areas as prime breeding habitat. Simply getting to the birds in the study poses serious logistical problems. They can be a long way from the nearest road and crossing rough terrain with a large array of kit can be both arduous and hazardous. Abseiling on to the nest ledge adds another dimension of difficulty that has to be overcome. Fitting PIT tags to Peregrines allows us access to detailed occupancy and productivity information that would otherwise be unavailable. Along with many Raptor Workers, prior to fitting PIT tags to Peregrines, we could often be heard saying things like “I think that there is a new male / female here this year”. With the PIT tags we can eliminate all doubt and say definitively “We know that.....” This information is crucial when evaluating the data gathered during our Peregrine study.

Since 2002 a study of Peregrine Falcon population dynamics has been undertaken in Scotland. This is a collaborative study between Natural Research, a wildlife charity based in Scotland, the Scottish Raptor Study Groups and individual ringers. In the study we capture and ring breeding adult falcons and ring nestlings in a classic capture-mark-release-recapture program, and since 2002, together with our collaborators, we have handled over 700 Peregrines.

In 2004 we started using PIT [Passive Integrated Transponder] tags that allowed us to ‘recapture’ individuals

electronically. These transponders, often referred to as microchips, are frequently used to identify pets and livestock. PIT tags have been used to study Merlin and tit species in the UK. They have also been used in another 10 year study in the North of England at Peregrine sites where the chicks are susceptible to being ‘robbed’.

The PIT tags are integrated into specially designed split rings, which are attached to the Peregrine’s leg along with the standard BTO ring. Each PIT tag is identified by a unique alpha-numeric code that can be ‘read’ automatically by a battery-powered ‘PIT tag reader’ placed adjacent to the scrape.

When the female returns to the scrape the signal being transmitted by the antenna attached to the reader electronically excites the PIT tag as it passes through the electromagnetic field. As soon as the PIT tag receives this signal it transmits the unique alpha-numeric code, which is then logged by the reader.

Once we recover the reader we record the PIT tag unique number and by cross-referencing the original ringing records data we are able to definitively identify the individual bird.

The PIT tag has no moving parts and requires no battery, so in theory it should last forever. We are currently using two readers. One is only capable of recording two separate tag numbers, which are simply stored in its memory. The second, more sophisticated model is a data logger, which records all of the tagged birds that approach the scrape and also logs changeovers. Analysis of this data provides us with information showing the length of periods of absence by the female and how much incubating the male undertakes.

In summary; data loggers provide information from which we can identify breeding individuals at each site. We also know when they visited the nest to incubate eggs, brood newly hatched young or to feed the chicks. This data would be exceptionally difficult and extremely time consuming to collect by observation alone.

Information from 1 reader revealed that a female hatched at one site returned to the same ledge, together with her mother, the following year. At another site we caught a 16 year old bird 226 km from its natal territory.

In addition to the volume of data collected there are other significant benefits associated with the use of PIT tags. Firstly it makes the requirement for recapturing birds redundant. Secondly it provides a larger window during which data can be collected i.e. from egg laying to almost fledging. Thirdly, and equally importantly, the use of PIT tags gives us the opportunity to collaborate with other ringers who do not participate in a capture-release capacity, thereby greatly expanding the study area.

The initial focus of the study was south of the central belt of Scotland into northern England. In these areas the eyries were already known and relatively easy to access. They were also already monitored by dedicated Raptor Workers who were engaged in studying the lo-



(L to R) BTO & PIT rings fitted to an adult female, Antennae in an active nest, Reading of female Peregrine PIT tag number from the nest in the previous picture. Photographs: courtesy of George Smith

cal Peregrine populations and prepared to commit both time and energy to our study.

In 2006 our efforts started to gain traction and we electronically 'recaptured' more than 10 breeding adults. By 2010 this number had tripled to 30 breeding adults 'recaptured' electronically. The total was augmented by trapping a further 10 breeding adults in 2010.

Following on from our initial success we are eager to get more people involved with the study and to broaden our geographic reach.

In the immediate future we are most interested in increasing our list of collaborators in the areas surrounding the core of the study area in southern Scotland. By adopting this strategy, rather than one in which PIT tagging efforts are made in disjunct areas, we are more likely to access new data, which is complimentary to the data already being collected by the project leaders. However, we will consider all offers of collaboration and hopefully we will be in a position to accept them in the future.

The PIT rings are very similar to the standard BTO ring, with the addition of a slight adaption to house the tag. They are fitted using the normal ringing pliers; however because the tag is encased in glass a little extra care has to be taken to perfectly align the ring in the pliers when the final closure is made.

Ringers wishing to participate in the scheme require the appropriate endorsement on their BTO ringing permit. Once this endorsement has been acquired we supply the PIT rings, free of charge. All that we require in return are details of chick dispersal at the end of the breeding season. In the event that we electronically recover a bird in subsequent years we will pass the details of that recovery back to the ringer.

At the present time ringers participating in the scheme are only fitting PIT tags to pulli; however if particular interest is shown in any geographic area we will offer to try to catch your breeding birds if you don't wish to do this yourself. Once the PIT tagged breeding population has been established we supply the local Raptor Study Group with a reader on permanent loan. To date we

have 9 readers in operation.

It must be emphasized that this is a long-term study and we do not foresee an end-date. Additional data received from a large pool of collaborating Raptor Workers is very beneficial to the study, and more importantly to the Peregrine population.

Early results

Turnover has been running at between 2% and 5% per year, with the exception of 2009 when we encountered a 33% loss of the adults from the previous year, and to date we have not identified the cause. We also noted that there were a number of 1st year birds taking over territories previously held by adults despite the fact that the adults appeared to be in prime condition.

One female first trapped in 2003, on a grouse moor, failed due to egg theft. Interestingly in 2004 she moved 50km to another grouse moor site and failed again due to egg theft. We then saw no more of her and assumed that she had died; however in 2009 she re-appeared at another site, on sheepwalk, and managed to rear 3 young. She was at the same site in 2010 and again reared 3 young.

We have 2 sites where persecution has been identified by our trapping efforts. At one of these sites there was a turnover of 5 females and four males in a 5 year period. At the other there has been a turnover of 6 females in a 5 year period, including 2 females in the same year, although the male has remained constant throughout the duration of the study.

At the first site we believe that the birds were persecuted by pigeon fanciers who were killing the adults. At the other site the birds are being persecuted by someone stealing the young, presumably for falconry. From our research it appears that the females realise that they are vulnerable and move to a new location. We have found 2 of these females breeding successfully at other sites in the study area. Regrettably the site is then back-filled by a new female and the cycle continues.

Sample of statistics analysed to date:

- male Mean Dispersal 48.4 km range: 0-209 km. [n = 8]
- female Mean Dispersal 79.9 km range: 11 - 104 km [n = 12]
- Mean Dispersal of Peregrines, found dead or sick, from the study area 1992 to 2006 is 150 km [range 44 – 318 km] n = 9
- 2006 was the first year we recorded birds, which we had originally ringed as nestlings as part of the study, entering the breeding population. These were two females aged 3 & 4 years respectively
- 1 territory was held by the same female in all years from 2002 to 2010
- 87 individuals captured consisting of sixty females and twenty seven males
- we have captured 20 birds previously ringed as pulli

- outside the project area
- 14 individuals ringed within this project that have been re-trapped
- Mean age of 'known age males' = 8.8 years +/- 4.2 (n = 8)
- Mean age of 'known age females' = 10.4 years +/- 2.3 (n = 12)
- few yearling birds breeding
- oldest bird recorded in the study is 16 years old [male]

You can read more about our use of PIT rings on Peregrines [and Goshawks] at <http://www.natural-research.org>

or you can contact:

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The battle against raptor persecution on the Maltese Islands

Geoffrey Saliba

BirdLife Malta Campaigns Co-ordinator



Red-footed Falcon

Global IUCN red-listed species are often recovered shot in Malta. Red-footed Falcon [listed as 'Vulnerable'] was recovered in Mizieb in April 2009 by BirdLife Malta. Photograph: courtesy of André Raine.

OF THE three main routes used by northern European birds to over-winter in Africa, the central Mediterranean flyway has the longest sea crossing. The Maltese Islands, an archipelago between Sicily and North Africa, serve as important resting spots for tired birds in both spring and autumn. Malta's location on the central Mediterranean flyway also ensures that a wide range of bird species visit the Islands and indeed 389 different species have been recorded. Regretta-

bly instead of food and a place to rest after their perilous sea crossing many birds find lead shot waiting for them.

The Islands consist of approximately 365 km² of heavily developed land, a population of just 405,165 (2010 census), and an estimated 15,000 hunters and trappers. Incredibly with just 1 km² [including the developed land] per 41 hunters and trappers Malta, the European Union's [EU] smallest member state, has the highest density of hunters in the EU.

BirdLife Malta is at the forefront of the fight against illegal hunting of game birds; predominately quail and turtle dove, out of season.

BirdLife Malta also combats the illegal trapping of song birds and waders and the ruthless and relentless slaughter of birds of prey, all of which are seriously threatened, when they visit Malta.

Lamentably this serious problem is not new, it has been happening for many years and it is not just migratory birds that are targeted; in the 1980's the resident populations of Peregrine Falcons and Barn Owls were shot to local extinction.

Every year BirdLife Malta recovers many protected birds that have been shot; the three most common species are Common Kestrel, Honey Buzzard and Marsh Harrier. We have recorded shot birds from more than 75 different protected species over the last three years alone. Within this total 17 different raptor species were recorded, representing just under half the total number of nesting raptor species in continental Europe. Criminal activity is widespread and over the two-week peak migration period in spring 2010, 1,236 illegalities were recorded at 48 separate locations by Birdlife staff and



Purple Heron

A species of Conservation Concern in Europe, was recovered in September 2010. X-rays revealed that the bird had been shot.

Photograph: courtesy of Nadja Tschovikov.

Springwatch Camp volunteers.

In 2010 the first successful breeding record for Little Egrets was confirmed on the Islands. Unfortunately, for the birds, their chosen nesting site was just outside a bird sanctuary on the hunting grounds regularly used by a group of wildlife criminals. Over the summer this group of criminals ensured that the Egrets were killed, one by one. Across the Islands Kestrels were recorded in many areas, setting up territories and displaying breeding behaviour; however many of these birds were also shot and killed as the season progressed.

This Purple Heron, a species of Conservation Concern in Europe, was recovered in September 2010. X-rays revealed that the bird had been shot.

The Maltese Government's response to this serious and persistent criminal activity is pitiful. The Police Unit with responsibility for dealing with hunting and trapping crimes, the Administrative Law Enforcement [ALE], consists of less than 25 Officers with access to only a handful of vehicles, is woefully under resourced.

During the two migration periods these few Officers are expected to deal with 15,000 hunters and trappers and more than 1,200 illegalities, committed during a very intense short time period, spread across both Malta and Gozo. The ALE is also responsible for additional duties such as beach and sea patrols. Whilst corruption within the ALE is not believed to be rife, the integrity of the entire Unit has recently been called into question. One Officer is awaiting sentencing on corruption charges for allegedly taking bribes from a hunter to ignore illegalities and action is also being taken against two further Officers in connection with the case.

In view of the lack of effective law enforcement by the statutory authorities BirdLife Malta has increasingly focused available resources on both overt and covert surveillance operations, gathering photographic and video evidence of illegalities.

Once the evidence has been gathered it is passed to the Police for further investigation and where necessary BirdLife staff and volunteers provide testimony to the courts.



Covert surveillance of two armed men

These two men were secreted in an area frequently used by roosting Marsh Harriers. The second man is just visible sitting by the building.

Photograph: courtesy of Steve Downing.

Twice yearly events, each supported by approximately 60 international volunteers, are organised to assist BirdLife staff record bird migration and deter illegalities during the Springwatch Camp in March and the Raptor Camp in September. The contribution made by the volunteers during these peak migration periods is invaluable. The increased human resources allow us to undertake large scale monitoring of the migrating birds and their roosting sites. We have also benefitted from the expertise of RSPB Investigations Officers and British Police Wildlife Crime Officers who have also attended the camps, shared their professional experience and provided support in combating the wildlife illegalities in Malta.

The surveillance undertaken by BirdLife has resulted in the exposure of numerous wildlife criminals, ranging from Ortolan bunting [*Emberiza hortulana*] trappers to individuals shooting the rare Short-toed Snake Eagle [*Circactus gallicus*]. The impact of our surveillance operations has been widely felt amongst the criminal elements within the shooting community. As a result of publicity following court cases, where BirdLife surveillance evidence has enabled the Police to secure a conviction, would-be criminals are now clearly wary of being caught breaking the law on camera. Regrettably the Police are not considered to be a deterrent by the criminals determined to kill raptors and when conservationists with their cameras are not visible in the countryside, illegal hunting is carried out almost with impunity.

The lack of interest shown by the Government in relation to wildlife crime issues and the inability of the ALE to adequately tackle the problem is compounded by an ineffectual court system. Sentences metered out by the courts rarely act as deterrents, further exacerbating the problem. At the present time the courts are not widely effective at imposing appropriate sentencing to deter wildlife crime. This is particularly apparent in the case of repeat-offenders whose firearms and hunting licenses are all too often not revoked or even suspended for a period of time. For some individuals the imposition of small fines by the courts is seen as an acceptable risk and they continue to commit crimes in complete disregard

of the law.

In an effort to improve the entire process BirdLife Malta has been working with the judiciary to ensure that appropriate sentencing options are made available to the courts and that sentences reflect the serious nature of the offences before them. Our hard work is beginning to bear fruit and recently several high profile cases have resulted in four figure fines being awarded by the courts.

In 2008 BirdLife Malta presented the Office of the Prime Minister, under whose portfolio environment issues fall, with a dossier containing recommendations drafted by wildlife crime experts, national and international Police Officers, army intelligence experts and lawyers. These recommendations outlined in precise detail how improvements to law enforcement and the justice system would benefit wildlife and the natural environment in general, and raptors in particular. These recommendations were both achievable and affordable. No reply was forthcoming, and in 2010 the recommenda-

tions were re-submitted. Once again no reply has been received to date.

Maltese celebrities have spoken out against the annual killing, the majority of the Maltese public have condemned it, and Maltese NGOs have united against it, yet Malta's Government continues to drag its feet. In the meantime statutory enforcement authorities remain under-resourced, thousands of criminal activities related to raptors take place every year and those found guilty of killing raptors and other species continue to receive inappropriate sentences.

The work to protect raptors migrating over Malta during spring and autumn is greatly enhanced by the dedicated international volunteers who join us at our organised camps. Further information about the work undertaken by BirdLife Malta and the volunteering opportunities and internships available can be obtained from the BirdLife Malta website at www.birdlifemalta.org.

Appendices

I. Combined NERF statistics

| Species | Home ranges checked | Home ranges occupied (pairs) | Homes ranges occupied (singles) | Territorial Pairs monitored | Pairs failing early / non breeding | Pairs laying eggs | Pairs hatching eggs | Pairs fledging young | Number fledged | Young fledged per pair laying | Young fledged per territorial pair monitored |
|---------------------|---------------------|------------------------------|---------------------------------|-----------------------------|------------------------------------|-------------------|---------------------|----------------------|----------------|-------------------------------|--|
| Buzzard, Common | 261(+) | 261(+) | NR | 149 | NR | 102(+) | 102(+) | 102(+) | 139(+) | 1.36 | 0.93 |
| Buzzard, Honey | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 2 | 2.00 | 2.00 |
| Eagle Golden | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| Eagle, White-tailed | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | NR | NR |
| Goshawk | 72(+) | 55 | 2 | 51 | 7 | 40(+) | 40(+) | 31(+) | 66 | 1.65 | 1.29 |
| Harrier, Hen | 18 | 10 | 2 | 10 | 2 | 8 | 5 | 4 | 10 | 1.25 | 1.00 |
| Harrier, Marsh | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 4 | 4.00 | 4.00 |
| Harrier, Montagu's | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.00 |
| Hobby | 46 | 38 | 1 | 35 | 6 | 29 | 29 | 29 | 64 | 2.21 | 1.83 |
| Kestrel | 39 | 29 | NR | 29 | NR | 27(+) | 27(+) | 26 | 87 | 3.22 | 3.00 |
| Merlin | 209 | 109 | 8 | 105 | 16 | 68 | 63 | 57 | 251(+) | 3.69 | 2.39 |
| Osprey | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 3.00 | 3.00 |
| Owl, Barn | 117(+) | 107 | 2 | 107 | 1 | 106 | 29 | 29 | 271 | 2.56 | 2.53 |
| Owl, Eurasian Eagle | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1.00 | 1.00 |
| Owl, Little | 9(+) | 9(+) | 1 | 9(+) | NR | 9(+) | 9(+) | 9(+) | 6 | 0.67 | 0.67 |
| Owl, Long Eared | 49 | 18 | 2 | 18 | 5 | 12(+) | 10(+) | 7 | 16 | 1.33 | 0.89 |
| Owl, Short Eared | 31 | 29 | NR | 21 | NR | 21 | 12(+) | 12(+) | 18(+) | 0.86 | 0.86 |
| Owl, Tawny | 117 | 70 | 10 | 70 | 16 | 54 | 54 | 54 | 91 | 1.69 | 1.30 |
| Peregrine | 142 | 98 | 2 | 98 | 18 | 56 | 46(+) | 43(+) | 131 | 2.34 | 1.34 |
| Red Kite | 26 | 25 | 1 | 25 | 10 | 15 | 13 | 13 | 19 | 1.27 | 0.76 |
| Sparrowhawk | 28 | 13 | 0 | 28 | 0 | 27 | 25 | 24 | 78 | 2.89 | 2.79 |
| Raven | 84 | 68 | 0 | 51 | 11 | 39(+) | 39(+) | 37(+) | 105(+) | 2.69 | 2.06 |
| Totals | 1260(+) | 945(+) | 33 | 810(+) | 92 | 617(+) | 507(+) | 481(+) | 1362(+) | | |

II. List of acronyms

| | | | |
|--------|--|------------|--|
| ALE | Administrative Law Enforcement [Malta] | NYMUB(M)SG | North York Moors Upland Bird (Merlin) Study Group |
| BMC | British Mountaineering Council | PIT [Tag] | Passive Integrated Transponder |
| BTO | British Trust for Ornithology | PDRMG | Peak District Raptor Monitoring Group |
| CCTV | Closed Circuit Television | RSG | Raptor Study Group |
| CPS | Crown Prosecution Service | RSGRW | Raptor Study Group Raptor Worker |
| CRSG | Calderdale Raptor Study Group | RSPB | Royal Society for the Protection of Birds |
| DEFRA | Department of the Environment, Farming and Rural Affairs | RW | Raptor Worker |
| DUBSG | Durham Upland Bird Study Group | SEO | Short-eared Owl |
| EO | Eagle Owl | SNCO | Statutory Nature Conservation Organisation |
| EU | European Union | SNP | Scottish National Party |
| FoRK | Friends of Red Kites | SPA | Special Protected Area, under EC Wild Birds Directive [79/409/EEC commonly referred to as The Birds Directive] |
| HHRP | Hen Harrier Recovery Project | SPRSG | South Peak Raptor Study Group |
| IUCN | International Union for Conservation | SSSI | Site of Special Scientific Interest |
| LEO | Long-eared Owl | UU | United Utilities |
| MA | Moorland Association | WCO | Wildlife Crime Officer [Police] |
| NE | Natural England | WIIS | Wildlife Incident Investigation Scheme |
| NERF | Northern England Raptor Forum | WLCA | Wildlife & Countryside Act 1981 |
| NGO | Non-Governmental Organisation | WTE | White-tailed Eagle |
| NR | Not Recorded [in the NERF Species Tables] | YDNP | Yorkshire Dales National Park |
| NRG | Northumbrian Ringing Group | YDUBSG | Yorkshire Dales Upland Bird Study Group |
| NWCU | National Wildlife Crime Unit | | |
| NWRPG | North West Raptor Protection Group | | |
| NYMRSG | Abbreviated acronym used in tables for NYMUB(M)SG | | |

III. Northern England Raptor Forum contact list

| Group | Name | email address |
|---|-----------------|-----------------------------------|
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