

## PEAK DISTRICT BIRD OF PREY INITIATIVE - 2018 REPORT

### Project Overview

Five leading land management and conservation organisations in the Peak District National Park got together in 2011 to develop an initiative, initially for 5 years but subsequently extended, in a bid to boost birds of prey populations in the Dark Peak.

In 2011, the organisations involved - the Peak District National Park Authority, Moorland Association, the National Trust, Natural England and RSPB\* - set five-year targets for healthy sustainable breeding populations of three target species - Merlin, Peregrine Falcon and Short-eared Owl- based on population levels in the 1990s, and from 2016 extended to include Hen Harrier and Goshawk (without targets).

Together the five organisations funded an independent field worker to help ascertain accurate breeding data and to facilitate co-operation between raptor workers and shooting interests.

Also involved in the Initiative are Derbyshire Constabulary and the two raptor groups in the Peak District who work together to monitor and record the breeding success of raptors in the Peak District. The Peak District Raptor Monitoring Group (PDRM) and South Peak Raptor Study Group (SPRSG) are both committed to offering the field worker (and the funding organisations listed) their full support and co-operation in trying to achieve the described aims and objectives.

The survey methods being used are in line with those documented in *Raptors: A field guide for surveys and monitoring*, Jon Hardey, Humphrey Crick, Chris Wernham, Helen Riley, Brian Etheridge and Des Thompson - Section 2.2.1 Counts of occupied home ranges and active nests.

Several late reports of fledged birds in areas that had been surveyed throughout the season are not included in the totals but have been recorded. They are not included as we cannot rule out the possibility that these birds had fledged elsewhere and moved in to other areas as a part of their natural dispersal. Earlier reporting of such sightings next year would be welcome, to obtain more accurate figures for confirmed pairs. To be clear, the report data is therefore limited to verified nesting attempts and their outcomes based on the agreed best practice survey methods; however we are confident a very high percentage of nesting attempts are located, and that the data published is statistically robust, except for Short-eared Owls as discussed in the species summary.

It is acknowledged that in terms of the aim of increasing raptor populations in the Dark Peak, the Peak District Bird of Prey Initiative 2012-2017 has failed to make progress. This was reinforced by the fact that in 2017 there were no successful Peregrine Falcon nesting attempts in the Dark Peak area for the first time since they recolonised the Peak District in the early 1980's. The compiled breeding data, when considered alongside a catalogue of 12-15 confirmed raptor persecution incidents recorded in the study area during the Initiative's lifetime (Appendix 1), make it clear that persecution is one of the main factors limiting the populations of certain raptor species and consequently, the Initiative's progress.

\* The RSPB felt they had to end their involvement in the Initiative in January 2018, due to the lack of progress with bird of prey populations and the fact that one Initiative member did not acknowledge ongoing illegal persecution as the main reason for the continued low numbers. The remaining members cautiously agreed to continue with the project on the basis that there must be signs of continuing improvement going forward. Failure to meet this basic requirement will result in the Initiative being discontinued and support for alternative solutions to the issue of raptor persecution being sought by most of the membership.

## **Overview of Results 2018 Season**

This most recent season, 2018, has seen welcome improvements in the relationships between raptor fieldworkers and gamekeepers/shooting estates. In areas where cooperation has improved, we have seen a recovery in breeding success of some of the larger raptor species. The main improvements have been largely confined to land owned by the National Trust (on land let for grouse shooting) and the adjacent woodland belonging to Forestry Commission and Severn Trent Water. In addition, a much-welcomed small number of shooting estates have engaged more actively and positively with the project this year. We have for example seen several historic Merlin and Peregrine Falcon sites successful for the first time since before the project began in 2011. Some of these sites have been intermittently occupied in the intervening years but remained unsuccessful.

In terms of bird numbers and breeding success, 2018 was generally an improvement on 2017 results but remains fairly typical of the 7-year period of the Initiative, with numbers remaining well below the targets based on populations in the late 1990s. Of note were the large number of Short-eared Owls recorded (reflecting a “good vole year”); the lower than average breeding success of Merlin (thought to reflect the late cold spell in spring); and the low numbers of Goshawk that achieved a high rate of breeding success (albeit within a restricted geographical area). The successful nesting of a pair of Hen Harriers for the first time since 2014, on National Trust land, was welcome (notwithstanding subsequent events - see below). It remains to be seen whether this is a step towards recolonisation of the Peak District by this species or whether it is typical of the very sporadic nesting success since 1997.

Unfortunately we have been made aware of several incidents which continue to undermine the good intentions of the Initiative. These include:

- The disappearance of two satellite tagged juvenile Hen Harriers which fledged from a successful nest of 4 young on National Trust owned land in the Peak District earlier in the year. The circumstances of these disappearances have led to suspicions that the birds may have deliberately come to harm and the tags destroyed. Their last known fixes were recorded on private moorland in the east of the Dark Peak (see Fig. 7 below), and from the North York Moors National Park.
- An incident in June 2018 where a Red Kite was reported to be seen to be shot from the sky in the Greater Manchester/Saddleworth area of the Dark Peak in an area where a pair of Red Kite were seen prospecting in 2017.
- As this report was about to be published West Yorkshire Police issued an appeal for information concerning an incident where a Short-eared Owl was shot and killed on Wessenden Head Road at approximately 8.10pm on 11<sup>th</sup> September 2018 (followed by the shooting of a Tawny Owl nearby sometime around 1<sup>st</sup> October).

In May a paper was published in *British Birds* reviewing data between 1995-2016, the results of which “demonstrate strong associations between intensive grouse-moor management, persecution of raptors and negative population impacts on both Goshawk and Peregrine in the Dark Peak” (Melling T., Thomas M., Price M. and Roos S. (2018). Raptor persecution in the Peak District National Park. *British Birds* 111, pp. 275–290- <https://britishbirds.co.uk/raptor-persecution>).

The Initiative would like to thank the Peak District Raptor Monitoring Group and South Peak Raptor Study Group who work together voluntarily to monitor and record the breeding success of raptors in the Peak District. Their continuing commitment is gratefully acknowledged. The success of the Initiative also relies on all those who have reported their sightings to the RSPB, the National Trust or directly to the Bird of Prey Initiative/Raptor Groups. There are too many people to thank individually for their efforts but we would like to particularly acknowledge the gamekeepers and birdwatchers who report their sightings and the National Trust volunteers who have spent their time surveying the National Trust owned land and continue to report any raptor sightings.

## **2018 SEASON- OVERVIEW**

Species	Territories checked	Territories occupied by pairs	Territories occupied by single birds	Pairs known to have laid eggs	No. of pairs known to have fledged young	No. young fledged	Agreed Targets (based on figs. at SPA designation)*
Peregrine	23	9	1	4	3	8	17 prs
Short-eared Owl		Est. 15+	Unknown- please see the species summary below				5-yr ave. 25 prs
Merlin	48	24	1	16	13	45	37 prs
Goshawk	26	7	2	6	5	11	None set
Hen Harrier	Vast areas	2**	0	1	1	4	None set

\* Targets were originally set for 2015 for the Dark Peak only, but the figures here include an additional 2 pairs of Peregrine and 5 pairs of Merlin for the South West Peak, which was included from 2016 onwards.

\*\* One of the two pairs appeared not to settle and establish a firm territory

### **2018 Peregrine Falcon (*Falco peregrinus*)**

#### 2018 results

- Nine territories were found to be occupied by pairs and one by at least a single bird.
- Of the nine territories known to be occupied by pairs, four pairs are known to have laid eggs, three of which were successful and fledged a total of eight young.

#### Measurement against the Initiative's targets

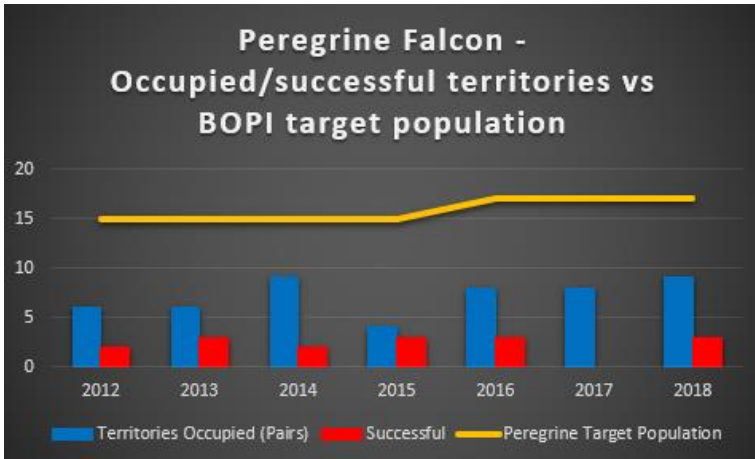
- The number of pairs (9 occupied territories) remains well below the target of 17 pairs.
- The success of those pairs that did establish territory is also well below target, with 8 young fledged. The target of 2.07 young fledged per occupied territory would give an expected total of 18-19 fledged young from the 9 territories.

Trend

During the lifetime of the Initiative the number of pairs peaked in 2014 with 9 pairs, but then fell to a low of 4 pairs the following year. Since then numbers have risen again to 9 pairs in 2018- slightly higher than the 7-year average of 7 pairs\* for 2012-18 (Fig. 1).

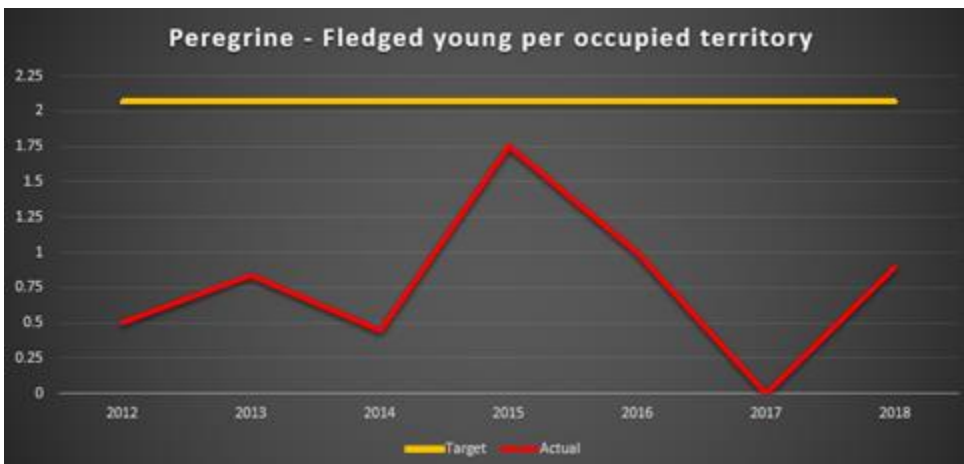
*\*But note this average excludes the SW Peak prior to 2015.*

Figure 1



The productivity peaked in 2015 with an average of 1.75 young per occupied territory (though this was from a low of only 4 territories), dropping to no successful nests in 2017. In 2018 this returned to 0.88 young per occupied territory, slightly higher than the 2012-18 average of 0.77 (Fig. 2)

Figure 2



Additional Notes

At one of the 9 occupied sites the male bird sustained, what appears from images seen to be a potentially fatal injury. Unfortunately, the finder was unable to recover the bird and it was several days before the raptor fieldworkers were made aware, by which time the injured bird could not be found.

## 2018 Short-eared Owl (*Asio flammeus*)

### 2018 results

- An estimated minimum of 15 pairs were thought to be occupying territory, but this figure may have been higher - see *Additional Notes*.
- No estimate of breeding success was possible.

### Measurement against the Initiative's targets

- The 2018 results (15+ pairs) and the 2012-18 average (6.4 pairs) both remain well below the target of 25 pairs. Even if "poor vole years" with no birds are disregarded, the average is only 11 pairs. However due to the difficulty of surveying for Short-eared Owl these should be regarded as minimum figures.

### Trend

Numbers of Short-eared Owls fluctuate considerably from year to year, with high numbers in "good vole years" and sometimes with no birds in "poor vole years", making it impossible to identify short-term trends. During the lifetime of the Initiative numbers appear to have followed this fluctuating pattern 2015 and 2018 good years, 2012 and 2014 moderate years and 2013, 2016 & 2017 were poor years.

### Additional Notes

Monitoring of Short-eared Owls continues to prove difficult as it has throughout the Bird of Prey Initiative due to the nocturnal habits and remote nesting locations. In addition breeding success is largely thought to be related to the wide annual fluctuations in the populations of short-tailed voles. The cyclical changes in vole populations and the nomadic behaviour of Short-eared Owls means they are less associated with traditional nesting sites than the other species. Establishing comparative population figures therefore relies more on comprehensive survey coverage of the entire open moorland area, which is beyond the scope of the Initiative.

Short-eared Owls were recorded breeding on several estates in the Peak District in 2018. On one area of the National Trust Dark Peak estate five pairs were recorded breeding in an area of around 5km<sup>2</sup>. A minimum of five successful breeding attempts were recorded on the Eastern Moors and several pairs were observed displaying breeding behaviour at RSPB Dove Stone, of which at least four pairs were successful. There was an additional pair in the Goyt Valley area.

There were reports from several areas late in the year, however we cannot be sure of the provenance of these birds and so we can only make mention of them. It is likely that some of these are the result of several additional successful nests, however dispersal of fledged young from previously known nests or even areas outside the Peak District cannot be ruled out.

It has been noted that several sites with historically successful outcomes continue to fail to produce any fledged young, despite birds being recorded displaying and showing breeding behaviour early in the season. Vole populations were reasonably good this year, so it is disappointing to note the lack of successful breeding at several occupied sites.

Update - On 6<sup>th</sup> December 2018 West Yorkshire Police issued an appeal for information about the shooting of a Short-eared Owl on 11<sup>th</sup> September 2018 near Wessenden Head. Details of the appeal

can be found at <https://www.westyorkshire.police.uk/news-appeals/appeal-animal-cruelty-incidents-holmfirth>.

## **2018 Merlin - (*Falco columbarius*)**

### 2018 results

- 24 territories were found to be occupied by pairs and one by at least a single bird.
- Of the 24 territories known to be occupied by pairs, a total of 45 young fledged from 13 successful nests.

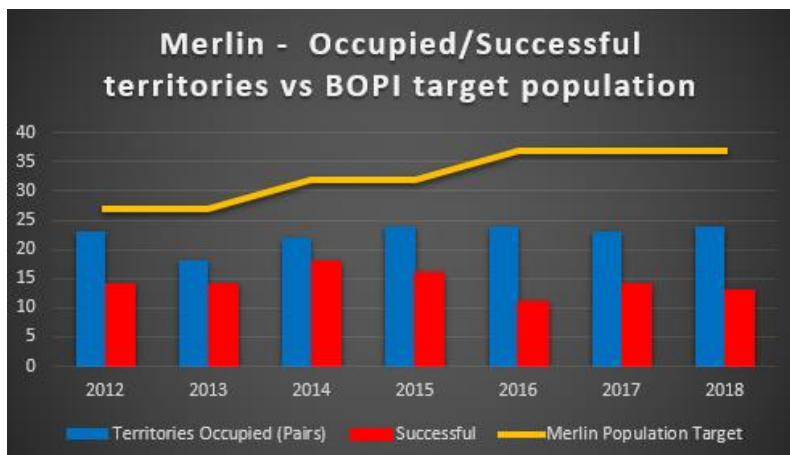
### Measurement against the Initiative's targets

- The number of pairs (24 occupied territories) remains well below the target of 37 pairs.
- The success of those pairs that did establish territory is also below target, with 45 young fledged. The target of 2.1-2.4 young fledged per occupied territory would give an expected total of 50-58 fledged young from the 24 territories.

### Trend

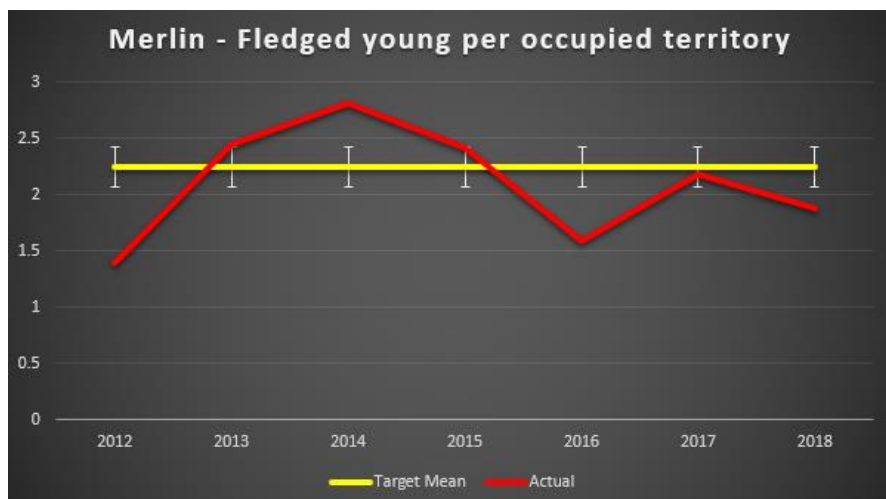
The number of occupied territories remained stable at around 24 pairs, slightly higher than the 2012-18 average of 22.6. This reflects a sharp drop to 18 territories in 2013 recovering to 24 pairs by 2015, since when numbers have remained more or less stable (Fig. 3).

Figure 3



The number of young per occupied site dropped from a project average of circa 2.3 to 1.88 in 2018. The number of young per successful site remains good with an average 3.46 young fledging per successful nest (Fig. 4).

*Figure 4*



\* The error bars denote the maximum and minimum target range agreed.

### Additional Notes

The late cold spell in April/early May 2018 appeared to affect productivity, thought to be a result of birds being unable to get into peak condition pre-laying.

At a site in the South West Peak, a fledged Merlin was reported, however as this was August it is uncertain whether this was a bird that had fledged there or elsewhere.

### 2018 Goshawk (*Accipiter gentilis*)

#### 2018 results

- Seven sites were occupied by pairs and two sites by at least a single bird.
- Six pairs were known to have laid eggs and five pairs successfully fledged 11 young.

#### Measurement against the Initiative's targets

No quantitative targets were set for Goshawk; however in 2016 the Initiative added Goshawk to its remit, and agreed that we wished to see “*sustainable breeding population of Goshawks present at traditional moorland-edge breeding sites, with no illegal persecution*”. It is difficult to assess progress against this ambition, other than to note the population and breeding trends, and the *Additional Notes* below.

#### Trend

The seven pairs in 2018 is the lowest number recorded in the three years the Initiative has included Goshawk in monitoring figures, and significantly less than the maximum of 13 pairs in 2017 (Fig. 5).

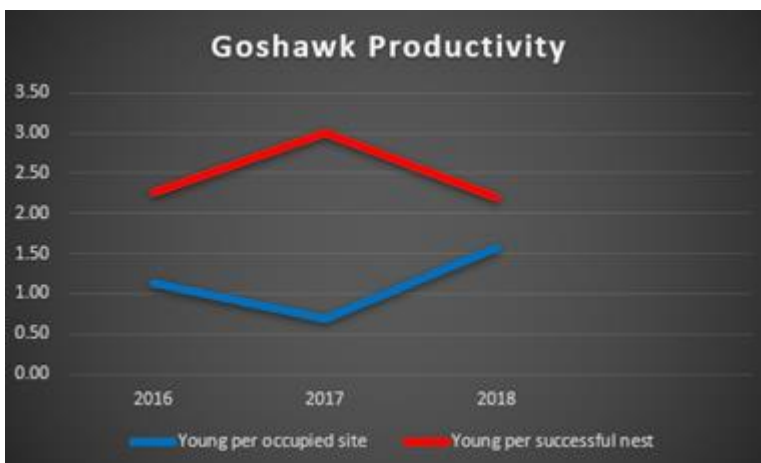


*Figure 5*



The higher productivity (1.57 young per occupied territory, compared to the 3-year average of 1.13) resulted in slightly more young fledged overall (11 in 2018, compared to 9 in each of the last 2 years) (Fig. 6).

*Figure 6*



*Additional Notes*

One of the six pairs which laid eggs failed after laying, with the apparent disappearance of the adult birds. Another pair, for the third consecutive year, despite exhibiting all the usual breeding behaviour could not be confirmed as laying eggs and no fledged young were seen.

For three consecutive years, all the successful breeding attempts have been in woodlands belonging to either Forestry Commission or Severn Trent Water, adjacent to National Trust owned moorland (let for grouse shooting). Within these woodlands there have been a total of 16 nesting attempts in the last three years, of which 12 were successful. Of the 12 attempts recorded elsewhere in the Dark Peak, none were successful.

## **2018 Hen Harrier (*Circus cyaneus*)**

### 2018 results

- Two pairs were present, of which only one pair appeared to settle on territory.
- The pair which settled fledged a total of four young.

### Measurement against the Initiative's targets

No quantitative targets were set for Hen Harrier; however in 2016 the Initiative added Hen Harrier to its remit, and agreed that we wished to see Hen Harrier “*return as a regular breeding species*”. As 2018 was the first year since 2014 that harriers have bred, it is too early to evaluate whether or not the 2018 season is a first step towards that ambition.

### Trend

Hen Harriers are regularly sighted in low numbers in the Peak District, but breeding remains sporadic with only five successful nesting attempts in the last 22 years since they returned to the Peak District. The 2018 results are in line with this trend of sporadic breeding in very small numbers

### Additional Notes

All Hen Harrier sightings reported during the spring, summer and autumn months are followed up as a matter of priority.

There were two pairs of Hen Harrier displaying breeding behaviour in the Dark Peak in 2018. One pair which appeared not to settle, ranged between the National Trust land in the Upper Derwent and the private estates on the eastern side of the Dark Peak and a second pair which bred successfully on National Trust land elsewhere.

Young from the successful pair (who fledged four young) were satellite tagged as a part of the RSPB “Hen Harrier Life+ Project”. The National Trust asked the public to suggest names for the birds via social media. Unfortunately, the tag from one of the young (‘Octavia’ - named after Octavia Hill, founder of the National Trust) stopped transmitting on the 26<sup>th</sup> August 2018, just 4-5 days after she dispersed from the nest site, and despite extensive fieldwork has not been seen since. Her last registered position was from moorland in the Peak District (Fig. 7).

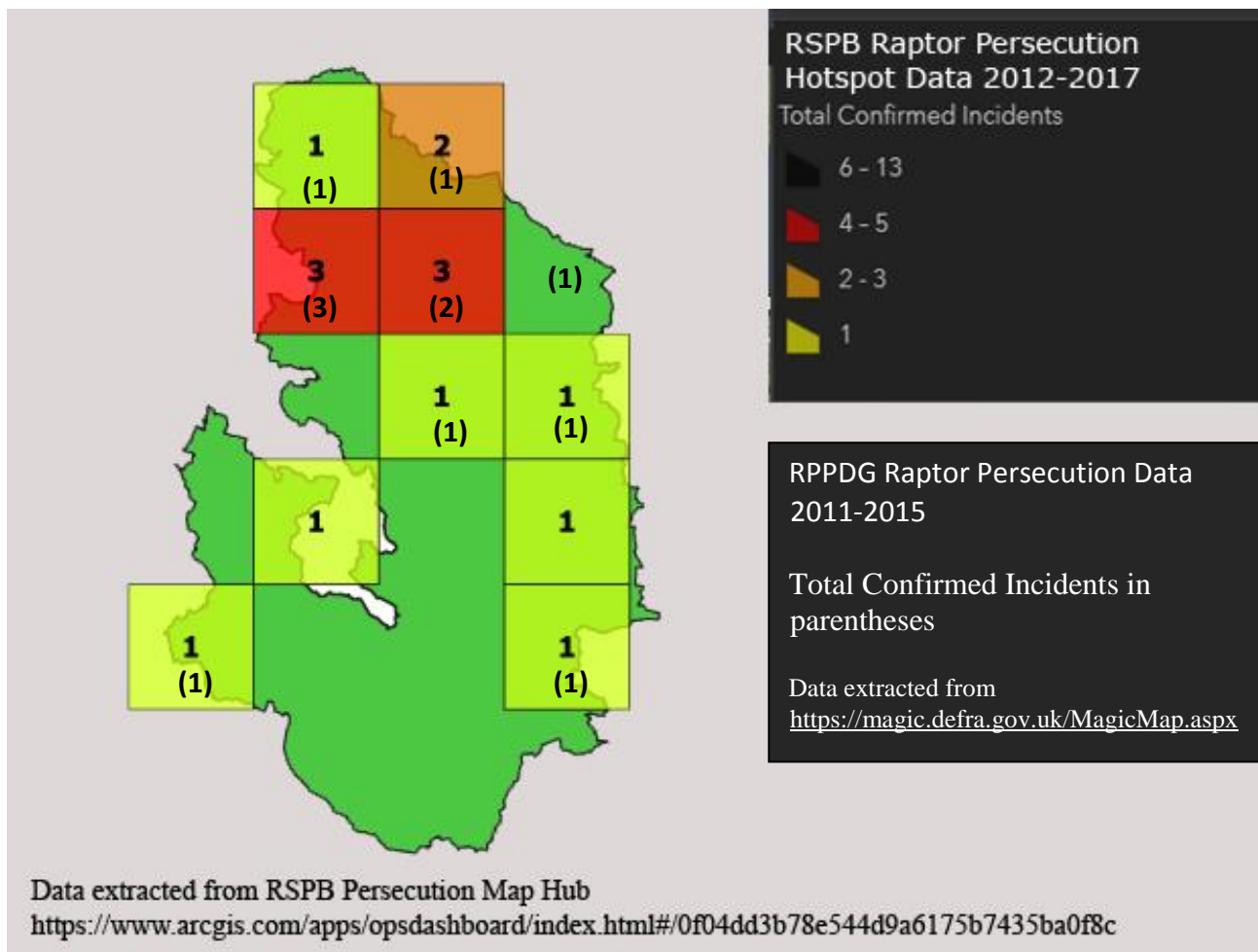
*Figure 7*



On the 12<sup>th</sup> November the RSPB reported that Octavia’s sibling ‘Arthur’ (named after Sir Arthur Hobhouse who proposed the National Parks Legislation Act) has become the 10<sup>th</sup> satellite tagged hen harrier to disappear in the UK during the autumn of 2018. After fledging, Arthur spent most of his time within the Peak District National Park, he briefly moved to the Brecon Beacons, South Wales before heading north to Nidderdale. On Friday 26<sup>th</sup> October Arthur flew to the North York Moors National Park and registered his last position at 09:55, he was just north of Lowna Bridge near Hutton-le-Hole. Further information can be found on the North Yorkshire Police website (<https://northyorkshire.police.uk/news/north-yorkshire-police-and-rspb-investigate-sudden-disappearance-of-hen-harrier-near-hutton-le-hole/>) and the National Trust website (<https://www.nationaltrust.org.uk/kinder-edale-and-the-dark-peak/features/skydancer-returns>).

English Nature’s report on the Hen Harrier in England stated that “Illegal persecution carried out primarily on moorland managed for grouse shooting is thought to be the main factor limiting the Hen Harrier breeding population in England” (*English Nature 2002. The Hen Harrier in England*). The welcome upturn in successful breeding attempts in 2018 across the English uplands, including the Peak District, will hopefully see the start of a sustainable recovery in the overall breeding population. It is clear that the uplands of Northern England have the capacity to accommodate far more pairs of Hen Harrier than we have currently.

APPENDIX 1- CONFIRMED INCIDENTS OF RAPTOR PERSECUTION IN THE PEAK DISTRICT, 2011-15/2012-17



Neither the RSPB nor Raptor Persecution Priority Delivery Group (RPPDG) datasets are fully acknowledged by all Peak District Bird of Prey Initiative partners\*. Both datasets are therefore included here.

- The RSPB dataset covers the 6-year period 2012-17 and records 15 confirmed persecution incidents (average 2.5/yr)
- The RPPDG dataset covers the 5-year period 2011-16 and records 12 confirmed persecution incidents (average 2.4/yr)

\*The Peak District Raptor Monitoring Group (PDRMG) and South Peak Raptor Study Group (SPRSG), who are members of the Northern England Raptor Forum (NERF), provided a statement further explaining that the current RPPDG collection does not comply with current legislation or Home Office Guidelines and so is not supported by the raptor groups. NERF position statement can be found at (<https://raptorforum.wordpress.com/paw-raptor-persecution-priority-delivery-group-persecution-maps-england-and-wales/>).