

## HIGH RISK CASEWORK PANEL: CASE SUBMISSION

### NAME OF CASE: Hen Harrier Brood Management Renewal

Date of booked HRCP slot: 17/04/2023

**Is this a New case?** No. There have been three previous licences issued in January 2018, April 2020 and April 2022 which were discussed at the HRCP on 24 April 2017, 2 May 2017, 27 April 2020 and 21 March 2022. This HRCP submission relates to the 2023 application for a further two-year research licence (2022-62941-SCI-SCI).

### BACKGROUND

#### 1. Background

Hen harrier numbers in England have been low for many years, in large part due to illegal persecution on land managed for grouse shooting. Conservation methods such as criminal enforcement and diversionary feeding have met with limited success. In that context, several scientists/academics have theorised that "brood management" may affect attitudinal and behavioural changes amongst the grouse shooting community, leading to reduced persecution and improving the conservation status of hen harriers. Under brood management, if the density of nesting hen harriers near grouse moors increases above a defined threshold, a proportion of eggs/chicks are taken to be reared in captivity and released once fledged. This reduces the predation of grouse chicks by adult hen harriers provisioning their chicks, and it is theorised that this will encourage grouse moor managers to coexist with an increasing English hen harrier population.

In 2015, Natural England's Science Advisory Committee (NESAC) advised that there should be a scientific trial to develop the evidence to inform a future decision as to whether brood management was an effective conservation technique. In 2016, DEFRA established a group that published a Joint Action Plan for hen harriers which included a trial of brood management, licensed under section 16(1)(a) of the Wildlife and Countryside Act 1981, "to assess whether Brood Management as an intervention, is likely to improve the number of harriers present in the uplands while protecting the economic viability of the moor".

#### 2. Previous licences and legal challenge

A two year science and conservation licence was granted in January 2018, permitting brood management to be trialled in the uplands of north England above the Moorland Line. Brood management was only permitted if the trial intervention threshold of two hen harrier nests within 10km was met, together with all other licence conditions. A Scientific Advisory Group (SAG) was subsequently established by the project to oversee the research, which includes several independent experts/academics. A detailed Monitoring and Evaluation Plan was also produced by the applicant and approved by Natural England licensing. Brood management was undertaken in the 2019 breeding season under the licence. All five chicks removed from the grouse moor were reared to become healthy fledglings and then released back onto moorland approximately 14km from the original nest.

Both [REDACTED] and the RSPB challenged Natural England's decision to grant that licence by way of an application for judicial review. The cases were heard jointly, and NE was successful on all grounds in the High Court. Both claimants appealed this decision; however, the Court of Appeal dismissed the appeal. It is our understanding that further legal action with regards to this trial is unlikely, although we can expect this application to continue the trial to be closely scrutinised.

During the legal challenge, a renewed licence was issued in May 2020 (and post-challenge a renewed licence was issued in April 2022) resulting in three further years of brood management in the 2020, 2021 and 2022 breeding seasons, with a total of eight broods taken and released. All but one of the chicks brood managed to date have been reared to become healthy fledglings. The deceased chick appears to have died of natural causes. The post-release monitoring and evaluation is ongoing, but to date, there has been no evidence of any behavioural or health issues for the brood managed birds. Some of the released birds have since gone on to breed successfully themselves.

In each case, the licensee/applicant has been the [REDACTED]. The Moorland Association is closely involved as a project partner, including in the submission of the renewal application. Natural England sit on the Brood Management Project Board and act as Brood Management Project

Board chair. A clear separation has been maintained throughout between Natural England's employees sitting on the Brood Management Project Board and those who are part of the Technical Assessment Group assessing the licence renewal..

### **3. Application for a renewed licence– 2023 - 24**

The trial had been originally envisaged as running for 5 – 10 years. In October 2022, following an assessment of progress to date, the Brood Management Project Board applied for a further two year licence so as to enable the trial to fully answer the research questions. Since that date, three Requests for Further Information (RFI) have been sent and responses have been received for all except the latest one. The Technical Assessment Group has robustly assessed the application, supported by specialist advice from Natural England colleagues where necessary. Much of technical assessment has been completed, the main exception being ongoing discussions around biosecurity at a proposed new captive rearing facility. We will not grant a licence unless we are satisfied that the disease risk is manageable, however there is the option to require the use of the original captive rearing facility which has previously been deemed appropriate. Any 'minded to' decision will be sent to the Natural England legal team for advice before making a final decision.

## **KEY ISSUES**

The key issue in this HRCP submission is to determine whether NE should be content to grant a further two-year licence under the research purpose to allow the trial to continue, in line with the original aims of the trial. As the trial has progressed, a number of issues and constraints have been identified, and as a result the applicant has requested some changes to the renewed licence to accommodate the lessons learned. Before turning to these, some further preliminary comments are made to develop the context.

### **1. Reputational & legal risk**

The concept of brood management has been controversial. NE's decision on the renewal licence application is likely to come under considerable external scrutiny, whatever the decision. Certain stakeholders often perceive it to be 'Natural England's' trial and there are consequent reputational risks associated with any decision made.

A refusal would come under scrutiny from NE project partners such as the Moorland Association and potentially others. Refusal to grant a licence could also hinder the ability of the project to collect sufficient data to inform a robust evaluation of the trial and the effectiveness of brood management as a technique. The granting of a licence will also come under scrutiny from conservation groups. A key statement within the legal challenge was that the trial was "time limited" and therefore the proposal to extend the trial further will likely be particularly contentious. However, the likelihood of further legal challenge is lower than previously, given the successful High Court and Court of Appeal Judgements, and the fact that we are not deviating from our previous position. The Technical Assessment Group have been guided by the evidence from the trial to date, and if we issue a licence we will ensure that the HRA and determination record are robustly drafted to demonstrate this evidence, thereby reducing the reputational and legal risk from both sides and giving us confidence that a legal challenge could be robustly defended.

### **2. HRA**

The previous HRAs concluded that there are risks associated with the research but with appropriate conditioning of the licence, they can be managed in a manner that would be considered compatible with site conservation objectives. Evidence from previous years is reassuring e.g. findings from the trial of birds surviving through to post-natal dispersal and subsequent breeding; Special Protection Area (SPA) recolonisation.

### **3. Two-year renewal**

In 2017 the applicant identified a clear and limited timeframe for the research for licensing purposes (five years). This five year timeframe was proposed by the applicant within the original project plan as being sufficient to answer the original research aims. However, in this application the Brood Management Project Board has put forward the view that further data is required to test updated research aims, outlined in a revised Monitoring and Evaluation Plan. The Brood Management Project Board have presented the progress of the trial to date to the independent Scientific Advisory Group (SAG), the Natural England Scientific Advisory Committee (NESAC) and the Social Science Expert Panel (SSEP). The trial has shown the following progress against the original aims of the trial:



- The captive rearing aspects of the trial had been delivered successfully, with more chicks surviving to fledging than would be expected for wild birds. The post-release monitoring had shown that the welfare and behaviour of brood managed birds had not been negatively impacted. The SAG, NESAC and SSEP agreed with the conclusion that the trial had shown that hen harriers could be captive reared and released back into the wild with no negative impacts upon survival or behaviour i.e. sufficient information to answer the first aim of the research.
- There was evidence of correlations between the availability of brood management, signs of changing attitudes amongst the trial participants, increased breeding success of hen harriers on English grouse moors and increasing numbers of breeding hen harriers in England. Brood managed bird survival rates are greater than the wild birds. However, the SAG, NESAC and SSEP all noted that although the breeding success of hen harrier has increased it was not clear how the availability of brood management had affected this increase i.e. there was insufficient information to answer the second aim of the research.

The recommendation of the above groups was that the trial be extended to further investigate and answer the second aim of the research i.e. to ascertain what has driven the increase in hen harrier breeding numbers, and to understand whether changes in attitude are found in members of the community not directly associated with the trial, and what factors might be influencing any wider changes in attitudes. The Natural England board approved a trial extension in January 2023. However, from a licensing perspective Natural England needs to be satisfied that the licensable activities requested in an application are necessary to obtain data that will advance a valid research project towards answering its aims for that specific application.

The applicant has provided an updated Monitoring and Evaluation Plan which details how the trial will investigate these questions. The expert advice of the Natural England's Chief Scientist is that this is sufficient to meet the research aims and it is the view of the Technical Assessment Group that this adequately demonstrates that the extended trial has a valid research purpose and a licence can be granted on this basis. An extension of the trial is likely to have some reputational risk, however this does not affect the licensing decision and initial public communications have been issued with respect a trial extension by the Brood Management Project Board via the Natural England blog.

#### **4. Satellite tagging a sample of birds**

The previous licences have required that all brood managed birds be fitted with satellite tags in order to ensure that the project was gathering the necessary data to inform the trial; particularly to answer the first research aim i.e., did brood management affect the welfare, behaviour or survival of the birds. In this application, the Brood Management Project Board have stated that this aim has been satisfactorily answered and are proposing that only a sample of the birds taken be fitted with tags within the extended trial, as satellite data from all birds is not necessary to continue population comparisons and answer the social science questions.

The reasoning provided is that satellite tagging is an expensive survey technique and, under an increased hen harrier population, would limit the number of broods which could be managed. To investigate whether changes in attitude are found in members of the moorland community not directly associated with the trial, and what factors might be influencing any wider changes in attitudes, brood management must be seen as being "available if requested" by the community. A limit on the number of broods that can be managed in any year would compromise this research.

Natural England licensing have assessed the justification and are satisfied that the reasoning for the change is valid. Some birds would still need to be satellite tagged to ensure comparable population data can be gathered and the Brood Management Project Board have provided the minimum sample size and random sampling process that would be needed to achieve this; at least 10 birds per annum up to a maximum of 20 birds (all subsequent birds brood managed would be released untagged). This protocol has been reviewed by the SAG who are of the view that tagging a representative sample of birds will not compromise the trial and will be comparable with previously obtained data. Birds that are not fitted with a satellite tag will have to be fitted with a individually identifiable colour ring/alpha-numeric ring to allow released birds to be identified at monitored nests/roosts.

We are awaiting specific details from the applicant about the random sampling but the Technical Assessment Group are provisionally satisfied that this approach will not compromise a research purpose subject to licence conditions to secure compliance with the sampling protocols.

## 5. Biosecurity and Highly Pathogenic Avian Influenza (HPAI)

On previous licences the captive rearing has always been carried out at the International Centre for Birds of Prey (ICBP). The biosecurity and disease risk assessment for this facility were assessed and found to be satisfactory, as is evidenced by the successful rearing of birds to date. In this application the Brood Management Project Board are proposing to use a new remote captive rearing facility near [REDACTED] remaining available as a backup. [REDACTED] has the principal advantage of being located much closer to the trial area, thereby decreasing travel distance for the birds and reducing stress, which has been identified as a key welfare consideration. However, Natural England can only approve a captive rearing facility if we are satisfied the disease risks are manageable and this is particularly critical given the current situation with regard HPAI.

The expert advice of Natural England specialists is that, unless the risk from HPAI increases, it is not proportionate to halt bird licensing (including brood management) as HPAI is a national situation and unlikely to change for a long time. Furthermore, brood management is likely to reduce the overall risk to most brood managed birds as they are usually returned to the same general area as where they were taken, so the environmental risk to them in the wild remains the same whilst the risk of infection during rearing is reduced whilst they are in captivity. However, brood management could feasibly increase the risk of infection via the following pathways:

1. Chicks with HPAI could be taken from the wild and then mixed with healthy birds, transmitting the disease to otherwise healthy chicks
2. Transmission of disease between the brood managed birds and any other birds at the captive rearing facility
3. Some brood managed birds may be released away from the general area where they were taken and, if so could potentially be moved from an area with lower risk of contracting HPAI to an area of higher risk.

Risk pathways 1 and 2 are matters of biosecurity and as of the time of writing Natural England are awaiting further details from the applicant about the proposed remote captive rearing facility to assess whether biosecurity measures are appropriate, with expert advice being provided by Natural England's Chief Specialist in Animal Health. However, the expert advice is that the current facility at ICBP should be suitable (pending receipt of some further details about the facilities), and it has an existing track record of rearing healthy birds with no biosecurity issues. This provides confidence that a suitable captive rearing facility will be available if the new facilities are not appropriate.

Natural England licensing receive a weekly update from APHA on the locations and species of wild birds where carcasses have tested positive for HPAI. To address pathway 3 we considered applying the data to brood management. However, the expert advice of Natural England specialists is that it would not be proportionate or effective for Natural England to use the data in this manner. Most birds would be transported back to the same general area as where they were taken and thus be at generally lower risk. There is also a significant time lag between taking birds into the captive rearing facility and transport to a release site (c. 2 – 3 weeks) and a further time lag between arriving at the release site and the actual release (c.3 – 4 weeks). This means that any wild bird data checked at the time of intervention would be unlikely to reflect the actual risk of HPAI at the release site at the time the birds are released. The uncertainty is further exacerbated by other uncertainties in the APHA data e.g. the fact that a carcass may have been infected in a different location to where it was found, and a time lag between testing the wild bird and receiving a result.

The APHA data is used to suspend wild bird species management licences, however these are licenses where the licensed action could change the risk to wild birds in protected sites by changing distribution of the target species (e.g. shooting to reinforce scaring) and suspension is generally reassessed after 30 days. Brood management shouldn't have this effect and it would be inappropriate to apply the same process given the different mechanisms, impacts and time lags between the licence types. Natural England licensing considered undertaking checks of the data whilst the birds were in captivity, however these would serve no useful purpose due to the uncertainties in the data detailed above, and the fact that the birds should not be held in captivity or transferred between release sites in order to avoid significant welfare and/or imprinting issues.

There is an increased risk of infection if the captive rearing facility is located in a APHA AI zone, however the applicant intends to check for this prior to intervention and would not intervene if this was the case. To further reinforce this Natural England licensing also intend to require that the applicant and authorised personnel report any findings of dead birds (other than by licensed action) to Natural England so that we are made aware of any site relevant findings and, if deemed appropriate by Natural England specialists, can require changes to the licensed actions. When assessing whether a release site is appropriate Natural England will also consider

proximity to breeding waterbird/gull colonies and will not approve sites where the risk of infection is greater due to the proximity to such colonies.

Provided the Technical Assessment Group are satisfied with the biosecurity measures at the captive rearing facilities, NEWLS are minded to approve the use of this facility, subject to the additional precautions above.

## **6. HRA – Repeated interventions**

On previous licences there has been a condition that prevents successive brood management of a pair that was subject to brood management in their previous nesting attempt. This condition was originally produced in 2018 and its purpose was to mitigate the risk of a hen harrier pair abandoning an area of the SPA due to them experiencing consecutive nesting failure. At the time the population of hen harriers within the SPA was very low/zero and abandonment of an area because of brood management would have had an adverse effect on distribution; especially if the pair were the only birds within that area of the SPA i.e. the non-intervention nest was beyond the SPA boundary.

The applicant has proposed changing this condition so that intervention would be permitted on the first two breeding attempts by the pair but would not occur on the third attempt. Regardless of the success of the third attempt brood management would be permitted on the fourth attempt. This is to address concerns that, under the current increased hen harrier population, the condition would prevent brood management despite densities well above the proposed intervention threshold, with associated implications for the perceived 'availability' of brood management which would compromise the research as discussed above.

The advice of Natural England senior ornithologists is that the risk of an adverse effect upon SPA site integrity occurring because of this change is very low within the licence period now that the population of hen harriers within the relevant SPAs remains much higher than when the condition was originally drafted. However, there is still a risk of adverse effect if the local density of pairs is very low e.g. if hen harriers are recolonising an area of the SPA which previously didn't support successful nests, or if all pairs within an area were unsuccessful on successive years.

Therefore, the Technical Assessment Group are minded to change the condition to permit interventions in the first two attempts as outlined above, but subsequent interventions would only be permitted if the pair were successful in their third attempt, or if a non-intervention nest within the SPA and within 10km was successful in the previous year. This will ensure that a nucleus of successful nests is maintained to attract in further breeding attempts and thereby ensure that brood management does not cause change the population distribution or cause hen harriers to abandon an area where they have been nesting.

## **7. HRA – Release site locations**

On previous licences there have been conditions requiring that the same number of birds taken from a SPA are released back into the SPA, and that in the case of the large North Pennine Moors SPA that the release sites are located within the same "zone" – with the "zones" designed to ensure release sites are within 50km (hen harrier natal dispersal distance) of intervention. The purpose of these conditions was to ensure brood management did not have an adverse effect upon the SPA population or distribution of hen harriers.

In the renewal, the applicant sought to remove these conditions. To date the birds returned to the SPA have nested within 50km of the release site, and therefore in the absence of evidence to the contrary, we are not intending on altering the condition that requires birds be returned to the SPA as to do so could have an adverse effect on the SPA population.

However, the distribution of birds within the North Pennine Moors SPA specifically is concentrated in the southern zone. The expert advice from Natural England ornithologists is that the release of birds from the southern zone within other areas of the SPA is highly unlikely to have an adverse effect upon distribution over the course of the licence provided the non-intervention nest is within the SPA Southern Zone and a nest was successful in the Southern Zone on a breeding attempt in the previous year. This mitigates the risk of brood management depleting the hen harrier productivity in an area. By contrast it would not be appropriate to release birds taken from other zones outside those zones as in those areas the local density is much lower and brood management could feasibly discourage colonisation of new areas in the absence of such a restriction.

Therefore, the Technical Assessment Group are proposing changing the condition to permit the release of birds taken from the North Pennine Moors SPA Southern Zone into other areas of the same SPA, provided certain conditions were met to avoid an adverse effect on distribution. Outside of the North Pennine Moors SPA, the

same overall number of birds taken from a SPA will continue to be returned to the same SPA to avoid any loss to population.

## CONSIDERATIONS / OPTIONS

Based on the renewal licence application and the responses to the RFIs, it is likely that Natural England will have 2 options from a licensing perspective:

- a) Issue the renewal with conditions;
- b) Do not issue a renewal licence.

Whilst the technical assessment is still ongoing, and no final decision has been taken, it is considered that option (a), to issue the renewal licence with conditions, is likely to be the outcome of the assessment (provided that the final HRA concludes no adverse effect on integrity, as has been the case for the previous two licence assessments).

In deciding to grant a licence, we are seeking a view from the HRCP on any issues/consideration in the decision to renew the licence or not:

- Has the team adequately addressed the issues and constraints identified in this paper
- Are there any gaps/ other issues that have not been considered
- Any advice on handling – further steps to manage risks/take opportunities? The relationship with key stakeholders is managed by the Natural England hen harrier project team and external communications in relation to the trial progress to date have been issued via the blog (most recently on 16 March 2023). We intend to publish a further blog entry as to the outcome of the licence assessment.

## RECOMMENDATION

Assuming that satisfactory responses are received to outstanding queries and the HRA concludes no adverse effect on site integrity then a renewal licence should be issued under the research purpose. NE should condition that the proposed protocols for satellite tagging and release site locations in relation to the SPA be followed. NE should also condition that agreed biosecurity arrangements are followed.

The full responsibility of meeting these licence conditions lies with the applicant. NE may choose to undertake compliance checks to ensure that the conditions are being complied with. If found to be in breach of these conditions, then NE would undertake appropriate enforcement actions.

This approach is consistent with the changes that the applicant has suggested in light of lessons learned over the course of the previous licences.

**Area Manager/Director approving submission:** [REDACTED]

**Case Submitted by:** [REDACTED]

**Date:** 12 April 2023

## PANEL SECRETARY's MINUTES

**HRCP Date:**

**Attendees:**

**Apologies:**

<b>HRCP Digest summary</b>
<b>Panel Secretary Name:</b> <b>Minutes approved by Director/Area Manager for the case:</b> (Name & date) <b>Minutes approved by HRCP meeting Chair for the case:</b> (Name & date) <b>Date finalised minutes sent to HRCP Secretariat:</b>