

Natural England Board



Meeting:

Date: 18th January 2023

Paper No:

Title: Natural England Science Advisory Committee Update

Lead: [REDACTED]

1. Purpose

- 1.1 The paper highlights activity led by Natural England Science Advisory Committee (NESAC) comprising a joint meeting of NESAC and the Social Science Expert Panel (SSEP) held as a blended in person and virtual meeting on 22nd November 2022, chaired by [REDACTED]. A full note is given in Annex I.

2. Recommendations

- 2.1 The Board is asked to note and comment on the discussions and advice to Natural England from the joint NESAC and SSEP meeting on 22 November 2022. This includes formal advice from NESAC regarding the Hen Harrier brood management project.

3. Hen harrier brood management trial

- 3.1 [REDACTED], Senior Advisor and Project Manager on the Brood Management Project Board presented a summary of the data in the papers circulated. [REDACTED] highlighted that the brood management trial had been ongoing for 4 years and NE are now asking for advice from NESAC and SSEP on whether the trial continues.
- 3.2 The trial had two key objectives- to test captive rearing and to test persecution reduction. For captive rearing, results from the trial show that that brood managed chicks become independent from 60 days, similarly to wild chicks, and that brood managed birds survive better. Brood managed birds from 2020 have demonstrated successful breeding behaviour (the 2020 birds). The brood management trial has demonstrated a 97% survival rate for chicks to fledging. There has been no evidence of negative impact of captive rearing in the trial so far.
- 3.3 To test persecution reduction the trial looked for a reduction in deaths through persecution (including shooting of adults, nest destruction and disturbance) and improvements in survival and breeding success. Analysis of changes in survival rates

has not been completed, but clear improvements in breeding success have been seen. 75 wild and brood managed birds were tagged to track survival. Brood managed survival rates are better than wild reared birds, which might be attributed to awareness of the locations of brood managed birds and that they are being monitored in real time.

- 3.4 [REDACTED] highlighted that the acceptance of brood management is in a fragile state. There is evidence of positive engagements with trial and improved survival, but an exact cause and driver are not yet established. It was noted that the trial would need to be scaled up to see whether it could be delivered more widely.
- 3.5 [REDACTED], Senior Specialist for Social Science, then gave a summary of the social science evaluation of the project. [REDACTED] explained that the social science aspect of the trial evaluated the processes involved in brood management to date, and looked into impacts, including changing attitudes of gamekeepers, grouse moor landowners and the general public. Data was gathered using semi-structured interviews however only stakeholders from participating grouse moors were approached. Contributors included landowners, gamekeepers, Natural England staff, those in the wider shooting community and the Moorland Association. In addition, purposive sampling used “information power” to reach a more relevant audience.
- 3.6 The theory of change results show that brood management seems to be enabling or driving a wider attitude change. There is evidence of changes in both attitudes and behaviours, positive engagement with trial and idea of having hen harriers on their moors. The theory of change direct route appears valid. The indirect route around non-participants is not clear. There is anecdotal evidence of engaging in dialogue and debate.
- 3.7 [REDACTED], Senior Ornithologist then gave the views of the Brood Management Scientific Advisory Group (SAG), who endorse continuing the trial and continued monitoring. [REDACTED] noted that there were suggestions to improve the analysis however there was a headline message of endorsement from the group.
- 3.8 NESAC and SSEP members welcomed the discussion on this topic, recognising that it was contentious but welcoming how the decisions on continuation of the trial were to be made based on the evidence gathered. Members were pleased to see the research from the social science study presented but highlighted that there was additional research to be done to understand if there was a true change in attitude associated with the trial. Members highlighted that from a social psychology viewpoint, there is a complex interaction between behaviour as perceived behaviour control (enforcement) and social norms. The enforcement angle wasn't present in the theory of change model and could be explored in more detail.
- 3.9 Members noted that while the trial has been very contentious, it seems to have worked in terms of breeding success. However, the causes for this are not clear, and could be attributed to a number of factors. Understanding these factors could be answered through population modelling and social science and may be critical to future success. So far nests have been managed on a small number of estates, but with more estates becoming involved it will be interesting to continue the attitudinal

modelling and see if the trends persist. Another 5 years of research may be needed to show how well brood management is affecting attitudes and numbers.

- 3.10 Members asked if there were plans to do a more formal economic analysis, in terms of cost effectiveness or cost utility, and to understand the long-term viability. The Natural England team responded that there has been analysis showing at what point number of harriers has an economic impact on grouse. Licencing may also be affecting attitudes. Members agreed that cost-benefit analysis would be controversial but perhaps a cost-effectiveness analysis would work.
- 3.11 Members confirmed they agreed a five-year extension to the trial would be appropriate and would recommend this to the Natural England Board.