

From: [Lee, Simon](#)
To: [Jemima Parry-Jones \(jpp@icbp.org\)](#); [Teresa Dent](#); ["Redpath, Steve"](#); ["Philip Merricks"](#); ["Raeder, Alex"](#)
Cc: [Cooke, Rob](#); [Jowitt, Adrian \(NE\) \(Adrian.Jowitt@naturalengland.org.uk\)](#)
Subject: Brief Report on Study Visit to Spain and France
Date: 05 August 2019 10:18:00
Attachments: [Hen Harrier Reintroduction - Report on Study Visit 2019.docx](#)

Dear Steering Group,

Please find attached a brief report on the reintroduction team's recent study visit to Spain and France.

I hope the content is reasonably self-explanatory but obviously just come back to me if you have any questions or comments.

Best wishes,

Simon

Simon Lee

Project Manager

Hen Harrier Southern Reintroduction

Landscapes, Biodiversity and Designations Team

Strategy Implementation

07825 904742

Telecall Numbers - Freephone: 0800 0730694 Local Call: 03306 068753 Code: 6933854161

Local office: Sterling House, Dix's Field, Exeter, EX1 1QA

www.gov.uk/natural-england

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.

Attachment

Hen Harrier Reintroduction Project

Brief report on study visit to Spain and France 2019.

1. Background

The NE reintroduction team visited harrier conservation groups in the province of Salamanca, Spain and the County of Aube, France in late June 2019. We joined these groups to coincide with peak breeding and practical conservation activity in arable farmland. This document should be read in conjunction with the related reports from 2017 and 2018 (attached at the end of this document), which provide further details of the practical conservation measures mentioned below.

The main aims of the visit were to:

- Better understand local capacity and the logistics required for collection and transportation of hen harriers from Spain (and potentially other locations).
- Develop a detailed understanding of harrier breeding behaviour and protection measures applied in pseudo-steppe (cereal farmland) landscapes.
- Strengthen relationships and common understanding with Spanish and French collaborators.
- Deploy new technology GSM GPS satellite tags on a sample of adult and juvenile hen harriers in Spain and France as part of a collaborative study to increase our knowledge on the movement ecology and behaviour of both native populations and translocated birds.

2. Fieldwork

2.1 Conservation activity

In both countries, the team spent a considerable number of hours in the field helping the local conservation groups with their respective 'campaigns'. Activity focussed on detecting and recording locations of active (and failed) breeding attempts, and setting nest protection fences in advance of harvesting operations (see Figure 1 and reports from 2017/18). The team also visited the newly re-opened wildlife rehabilitation centre near Salamanca, which had closed in 2017 following financial cuts from Junta de Castilla y Leon. The centre now operates under the auspices of the local Milani School (agricultural college) with some reinstated funding from the Junta that covers a single part-time member of staff.

Key points:

- The team has considerably enhanced their knowledge of the breeding behaviour of hen harriers as well as the necessary field craft required to properly protect them in a UK arable farmland context. Furthermore the experience provided a sound knowledge of the geography of the Salamanca area and invaluable insights into the practicalities of future collection and transportation of harriers from these landscapes.
- Both financial and human resources are very limited in both countries, especially Spain. The group in Salamanca operates with a core of around 6-8 active volunteers, with fieldwork restricted to one day per week, usually at weekends. As a result, the group has to prioritise their harrier conservation activities to particular geographic areas and key stages in the breeding season only.

- It is estimated that at least 50% of active harrier nests are lost to harvesting operations in Spain. The figure in France is much lower due to later harvesting dates and generally more practical conservation coverage, both geographically and in terms of 'field' hours.
- Even in good 'vole' years where breeding numbers and productivity are high, as was the case France this year, the distance between nests at a similar developmental stage can be several miles.
- It was found that the older nestlings had often dispersed widely in the crop or indeed entirely fledged the nest earlier than expected, making the potential 'window' of collection for this age class very narrow. By this point, any remaining young chicks were either malnourished or more usually had perished. This finding calls into question the previously stated protocol for collection at 28-30 days as this may be impractical and could impact on the viability of remaining nestlings.

Figure 1. Spanish nest protection method (top), Salamanca rehabilitation centre (bottom)



2.2 Satellite tagging

This summer's work extends the trial started last year in France but instead of Lotek devices we deployed GSM GPS tags manufactured by Milsar (see figure 2). These loggers not generate higher volumes of GPS fixes and provide two-way communication but also have on-board sensors to record acceleration, orientation, tilt and temperature. Moreover, the Milsar tags have no external antennae, reducing the risks of mechanical failure and potential interaction with flight and behaviour.

Key points:

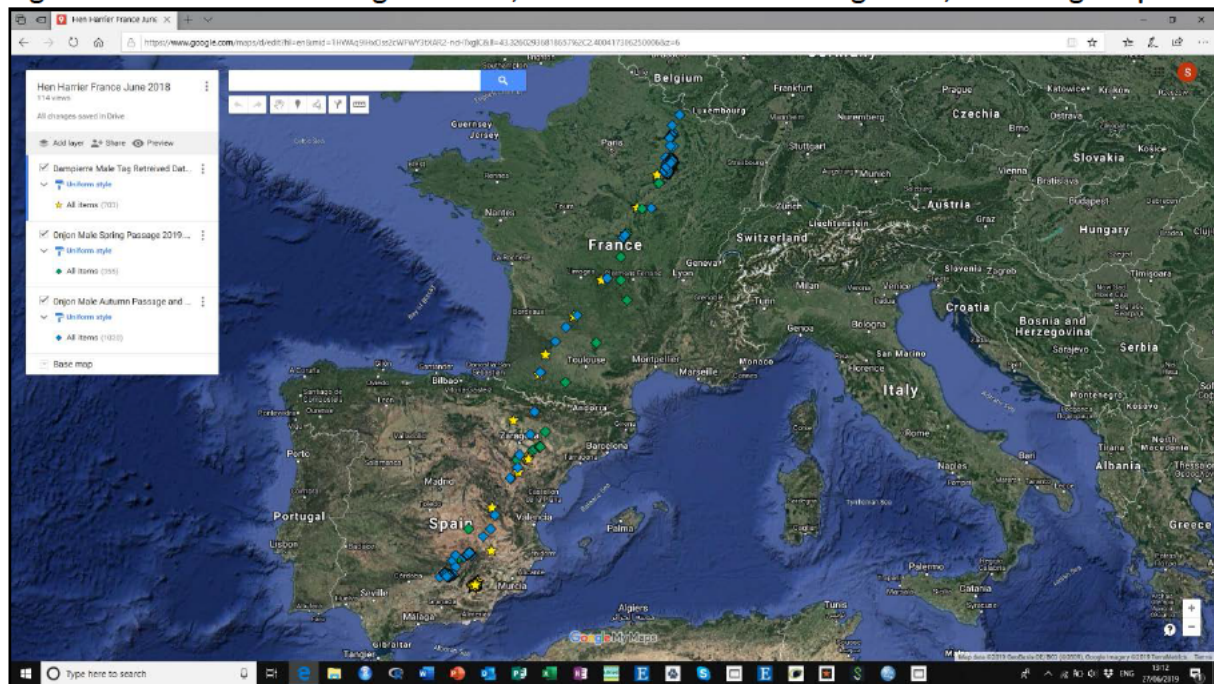
- A total of 26 tags were fitted to both sexes of adults and juveniles in both countries. In Spain, seven were deployed in the Basque region due to the number of failed nests in Salamanca.

- At the time of writing, all tags were performing well and already showing intriguing new patterns of behaviour. It is intended that the results of the study will be published in a series of co-authored papers and articles in academic journals and popular press.
- In Spain, the tags were fitted by [REDACTED] from SEO, Madrid with formal permission from senior officials in the organisation. [REDACTED] participation is noteworthy as SEO Madrid had previously objected to the reintroduction in their communication to the Junta de Castilla y Leon. Although their official position may be unchanged, the satellite tracking collaboration with the SEO Madrid is likely to be received well by the Junta.
- In France, two Lotek tags deployed in 2018 were recovered from recaptured adult males at the nest. Although the devices originally stopped transmitting Argos signals due to antenna damage, it was hoped they would continue to collect GPS fixes. Luckily this was the case, with one tag storing a whole year and the other 6 months' of data, revealing true migratory behaviour with both individuals wintering in southern Spain (see figure 3).

Figure 2. Adult male (left) and female (right) sporting the new Milsar solar GSM GPS tags



Figure 3. Retrieved Lotek tag GPS data; both males show true migration, wintering in Spain



3. Synthesis

- Experience from the 2017-19 study visits shows that harrier abundance and productivity in both countries is prone to considerable seasonal and geographic fluctuation. Therefore attaining a consistent supply of birds over time will most likely require multiple donor locations, within and/or across countries.
- Given the discovered issues of collecting older nestlings, we will need to put in place the measures and facilities to source younger chicks and/or eggs, in particular the services of a local facility in Spain for rearing and holding harriers until ready for transportation to England.
- The Salamanca Group is considering additional measures to counteract the heavy losses from harvesting operations. As part of a population reinforcement programme, akin to 'head-starting' the Group proposes to collect some chicks/eggs from larger clutches (leaving at least 3), where they will be reared at the local rehabilitation centre and hacked back into the wild, post harvesting. Closely aligned with our revised plans, this proposal poses an excellent opportunity for NE to share facilities and costs to support both the reintroduction and harrier conservation in the Salamanca area.
- NE will also need to input personnel to increase capacity within the Salamanca Group at the key times of nest finding and collection in each year. This extra capacity will have the additional local conservation benefit of increasing the geographical search area and the number of harrier nests located and protected.
- Transportation of harriers may also better conducted with younger birds, say at 15-20 days of age (or less). This scenario will only require a minor modification to the release pens at Parsonage Farm to accommodate a slightly longer period of captivity.

4. Progress and next steps

- The Project Team has held ongoing discussions with the Salamanca Group since the study visit, who remain committed to supporting the reintroduction project.
- We have since contacted the Junta advising them of the deployment of the satellite tags and the help received from SEO Madrid, and to expect a revised proposal from NE as a result of our study visit.
- Following an approach by the Salamanca Group, the Milani School have kindly offered the use of the rehabilitation centre to support the reintroduction project.
- Representatives of the Salamanca Group recently met with the Junta and the SEO to discuss general harrier conservation issues but specifically to propose the new 'head starting' approach and the related potential collaboration with NE. If approved, this could pave the way for support for the reintroduction.
- Subject to further feedback and discussions with the Salamanca Group, we will shortly write to the Junta with a revised project plan and proposal for sourcing harriers, highlighting the expected broader conservation benefits to harriers in the Region. We will also be able to share the early results from the satellite tracking programme.
- More generally, we will also step up approaches to other potential donors.



Report on Research
Visit to France 24-25



Report on Study
Visits to France and