The UK lowland curlew recovery project

Curlew Country

Based in the Shropshire Hills and Welsh Marches

# Summary of 2017 Nest Monitoring Report

# The following is a summarised version of the 2017 nest monitoring report. The full version will be made available at a later date, after publishing in a scientific journal.

# Introduction

Curlew Country is a project within the wider Stiperstones and Corndon Hill Country Landscape Partnership Scheme (LPS). This scheme is funded by the Heritage Lottery Fund for a 5-year period, and operates across the border, in the Shropshire Hills and Welsh Marches. Following on from 2016 and 15, where predation was identified as the greatest threat to breeding curlew, 2017 saw the implementation of interventions such as predation control, temporary electric fencing and headstarting.

It is suggested that between 0.45 and .62 fledging's per pair per year would be needed to sustain the Curlew population at its current level. That is approximately 1 chick every 2 years per pair of curlews. Although obviously a far greater rate of fledging success would be needed to reverse the population decline over the last 30 years.

# **Nest Finding**

Nests were located in a variety of ways:

The consulting ornithologist, aided by the Curlew Country team, would check habitual breeding areas. Other sightings of Curlew displaying territorial behaviour would be reported by landowners and local Community Wildlife Group volunteers, which would then be followed up by the team. Similarly, any casual sightings from the public, either through direct reporting or through the online iRecord platform, would be followed up by the team.

It was noted that the preferred nesting habitat had a sward height of 20-30cm and was away from the field edge.

To demonstrate best practice and assist in nest finding a DVD of territorial and nesting behaviour has been produced in conjunction with the British Trust for Ornithology.



### **Monitoring Nests and Adults**

Once nests were located they were protected by a temporary electric fence (with agreement from the landowner) and biometric data was gathered. The fences were erected as quickly as possible to ensure the least disturbance, and birds were watched after to ensure they accepted the fence. The results of monitoring are summarised below:

• 18 nests were protected by temporary electric fencing. Two nests were predated before a fence could be placed, and one nest was considered safer un-fenced.

- 73 eggs were laid, and 30 chicks hatched successfully.
- 24 chicks were radio tagged so that they could be tracked, and 26 chicks were ringed.
- Of the 30 chicks hatched, between 1 and 3 are believed to have fledged successfully.

• A licence was granted to incubate eggs and return them at the point of hatch, 6 chicks left with no nests to return them to at the end of the season were successfully reared and released.



#### Nest failure and protection

Studies in the first 2 years of the project showed that 50% of eggs 'in the nest' were predated by foxes and 25% by badger. A combination of avian predators, stock disturbance and unknown factors accounting for the remainder.

It was therefore decided to undertake both nest protection measures and predator control.

# **Predation control**

Initially 6 fox control operatives were contracted to work over 3000Ha of land split into three blocks. As nests failed, control was targeted towards the surviving chick bearing nests. Control operatives were all offered training to ensure best practice, and to ensure the timing would correctly link with the nesting season for greatest effectiveness.

The sites from which three chicks are believed to have fledged from natural nests were all within the areas where predation control was carried out.

#### Fencing

When a nest was located an area of 20mx 20m was fenced off with an electric fence, 3 strands of wire to keep predators at bay and 4 strands to keep both livestock and predators away.

The grass along the fence line needed to cut so as not to short out the lower fence wire.

Fencing work was only undertaken once a full clutch of eggs had been laid as the Curlew tends to sit more tightly at this stage. All curlews were watched back onto the nest after this potential disturbance and no nests were abandoned as a result of the work.

## **Cutting Regime**

During the inception of the project it was advised that changes in mowing methods, such as mowing in a t shape or from the middle of the field outwards would push the chicks out of the field being harvested. This has previously been successful for species such as corncrake.

This methodology appears not to work with chicks in the Curlew Country area, with them either 'hunkering down' to hide from the threat or being reluctant to cross into more open habitat such as grazed pasture or recently mowed fields.

The act of 'Hunkering down' would be apparently futile when the threat is a tractor mounted mower, although a chick has been seen to pass through a mower and fly away unharmed, presumably cushioned from damage by the volume of grass.



#### Conclusions

Although only a small number, the 1-3 chicks estimated to have hatched from the project area in 2017 is an increase from no chicks the previous 2 years. The additional 6 chicks reared and released bring the number of fledglings for the year up to 6-9, which offers a small boost to the population.

The fencing proved a useful temporary tool to increase the numbers of eggs that hatched, however once out of the nest the chicks were once again at high risk of predation. Predation control across the trial areas saw mixed success. The most success was seen in areas where extra voluntary efforts were made, with more careful targeting around known nest sites. However, if predation control were to be rolled out across the whole project area, considerable additional funding would be required.

Current agri-environment schemes do not adequately compensate farmers for losses sustained when supporting curlew. Chicks can fledge as late as mid-August, which is well beyond the most used cutting date of 15<sup>th</sup> July. Early indications are that the costs of replacing grass crops for a single species would be prohibitive. However environmental management using curlew as an indicator species would produce many other additional benefits.

In order to continue to progress with curlew recovery, it is vital that we continue interventions and work with farmers for a sustainable solution.