

The UK lowland curlew recovery project

Curlew Country

Based in the Shropshire Hills and Welsh Marches

Summary of 2018 Nest Monitoring Report

Introduction

In 2018 the Curlew Country project shifted its focus from nest monitoring to headstarting. This is the process of removing eggs from wild nests, incubating them artificially and raising the resulting chicks for release into the wild. The project was granted a licence to take or hold 50 eggs or chicks at any one time. Some eggs were returned to nests where survival had been good in 2017, freeing up extra space for more eggs.

In 2017 initial trials resulted in 6 chicks being successfully reared and released. These were eggs that were meant to be returned to nests at pipping stage (point of hatch), but with a lack of active nests available were hatched and reared. It set precedence that headstarting could be achieved relatively cost-effectively and paved the way for this technique to be used at a greater scale in 2018.

Summary of Results

As the focus was primarily on headstarting, there were far fewer nests that were fenced. The following points outline the main findings from the 2018 season's work:

- 54 eggs were collected from wild nests.
- 7 of these were returned to wild nests at the point of hatch. Of these, 1 was infertile, 3 hatched successfully, 1 died shortly after hatching and 2 died in the shell.
- Of the 3 remaining chicks in wild nests, none survived for more than a fortnight.
- 30 chicks successfully hatched from the remaining 47 eggs.
- 21 chicks were reared and released into the wild at fledging stage.
- Some changes in pairings and territories were noted for the first time, possibly due to the harsh winter weather taking a toll during the migration period.

Nest Finding

Location of nests was carried out in much the same way as previous years. The project ornithologist located most of the nests, with assistance from the Curlew Country team and some trained volunteers. Some nests were reported to us by farmers or located using the help of reported sightings.

The nesting season was more condensed than usual, due to the late winter weather followed by very hot spring.

When nests were located the eggs would be collected and brought back for headstarting. The entire clutch would be taken, allowing the birds to fail and try again. If a nest was found at an incomplete stage, the real eggs would be swapped out for dummy eggs to mitigate against the effects of predation. This encouraged the bird to continue laying its complete clutch to be harvested, before removing the dummy eggs.



22
**Number of
Nests Found**



Egg Incubation

Incubation of the eggs lasted for approximately 30 days. Two types of incubator were trialled, and it was determined that the cradle design incubator worked better for curlew eggs. The other plated incubator did not consistently turn the eggs, which although are similar in size to duck eggs, are a more unusual shape. This was compensated for by hand turning the eggs.

The chicks could take anywhere between 1 and 4 days to fully emerge from the egg. Once out, the chicks were left in the incubator to dry off, which could take 24 to 48 hours. The chicks do not feed for the first 2 or 3 days, instead living off the remaining yolk sac.

Chick Rearing

It can take between 5 and 7 weeks for chicks to reach fledging stage once they have hatched.

30 chicks hatched out from 47 eggs in the Curlew Country incubators. Some of these eggs were infertile, a couple died whilst trying to get out of the egg (an issue which may be due to problems during incubation), whilst others failed in the early stages of development for unknown reasons.

Once hatched the chicks spent the first 2-3 weeks inside, with a brooder, food and water in a small enclosure. Chicks had to be checked regularly, with boxes cleaned, and food and water refreshed and topped up. After this they moved to a small outdoor enclosure, put into a small coop with the brooder at night for added safety.

After another week a much larger final enclosure was built. Measures were taken to ensure that it would be predator proof, and the chicks were released inside. They immediately took to the more open space and were soon seen testing out their wings and trying to get airborne.

9 chicks died from various causes between hatching and fledging. 3 died from unknown causes, 1 died after hatching late, 2 were born with deformities and had to be euthanised, 1 died of suspected trampling, and 2 point of fledge birds injured themselves on the side of the pen during transfer between rearing and release site.

Fledging and Release

The chicks were ready to fledge at about 5-6 weeks, however were not released until week 7. The decision was difficult due to the very dry preceding conditions and concerns that they would not be able to forage. Bilberries were introduced to the birds to feed on prior to their release, as they were a food readily available. A soft release was conducted, with food and water provided for a further 2 weeks which some of the juveniles returned to. 16 birds were released on the 21st July, with the remaining 5 chicks released 2 weeks later once they had also reached fledging stage.

Birds were caught on the trail camera returning to the feeding station 2 weeks following the release.



Natural Nest Success

Priorities and resources meant that less monitoring of wild nests was conducted this year.

One nest was located and fenced in Wales, with 4 chicks hatched and tagged. However, these were subsequently lost. Late reports reached the team of 3 pairs of curlews with possible chicks in the area. These were investigated by the team, and one pair was seen with 2 well fledged young. The others were not successfully located or were thought lost after finding evidence of unconcerned adults in nearby fields.

Two other wild nests had eggs returned to them at pipping stage, but sadly none of the chicks that hatched survived for more than 2 weeks. Two tags were found in a nearby field, with evidence suggesting avian predation.

Conclusions

The success of natural nests is still low, with avian and mammalian predators a high cause of failure. The unusual weather early in the year meant that unfortunately farming activities coincided with the nesting period. It is likely that because of this, nests were lost before they could be found by the project team.

Releasing 21 chicks is a great result for the area and should offer a well-needed boost to the resident population. However, there were several eggs that failed to hatch, and it is possible that with upgraded equipment and expertise the hatching rate could be increased.

Headstarting is only a short-term solution, providing a boost to the population whilst wider issues of habitat loss and predation can be addressed.