

## **CIRL BUNTING *Emberiza cirlus* REINTRODUCTION PROJECT**

by Jo Gregson

### **Overview**

The Cirl Bunting is a sedentary species that rarely strays more than a mile (1.6km) or so from its winter and summer territories. Changes in farming practises have caused small flocks of this species to become isolated along the south Devon coastline. There is other suitable habitat along the UK coastline but no corridors for the Cirl Bunting to move along. While the Cirl Bunting has maintained and in many cases increased in number there has been little expansion in its range.

During 2001 Paignton Zoo, the RSPB (Royal Society for the Protection of Birds), The National Trust and English Nature combined forces to set up the Cirl Bunting Reintroduction Project, with the aim of re-establishing the Cirl Bunting in other parts of southern England. The first phase of the project was to ascertain whether or not the Cirl Bunting could be hand-reared from a young age without becoming imprinted and, of course, to undertake research on the behaviour of the chicks in captivity. During 2001, 2003 and 2004 chicks were collected from the wild population (during 2002 the project was put on hold due to the outbreak in the UK of foot and mouth disease). Over those three years the partners finely tuned their nest finding and hand-rearing skills. They found that once independent the hand-reared Cirl Buntings behave like wild birds and are very alert and quick to react to any perceived threat.

Five donor sites were selected for the project. RSPB field workers closely monitored the wild population to ensure that the birds were not under any local pressures. Just one brood was taken from any one pair. Cirl Buntings lay up to three clutches and the first brood of the year is invariably lost due to heavy rainfall and lack of insect life, so this was the brood targeted. In total 22 broods were harvested from a possible 67 pairs and it is unlikely that the relocation had any effect on the south Devon population.

At the end of 2004 12 young Cirl Buntings were released in an area of south Devon from where they had previously been taken. Prior to release the birds were kept in an aviary and then soft-released, being fed at the site each day until they eventually dispersed. They were closely monitored over the winter and on into 2005. The birds mixed well with flocks of wild, wintering, Cirl Buntings. During 2005 four of the released birds paired with wild Cirl Buntings and three of those pairs produced young.

In 2006 the project really took off - 72 Cirl Buntings were reared and later released in an area of Cornwall. Two aviculturists were employed to

undertake the hand-rearing and to release the birds. Several RSPB field workers will continue to monitor the birds in the wild well into 2007. The project will continue for the next three years, with at least 60 birds being released annually. We hope the result will be that the Cirl Bunting once again becomes self-sustaining along the Cornish coast and adjacent farmland.

### **Hand-rearing**

We found that the ideal age to start hand-rearing the Cirl Bunting is at six to seven days. When taken at eight days or older the chicks are less confiding and more difficult to feed. Any younger than six days old the chicks are very small and difficult to manage in a practical sense, though chicks both older and younger have been reared successfully. The nestlings are kept in their birth broods and placed in a brooder set at 28°C (82.4°F). They are nestled in a round dish and bowled together using soft tissue paper which prevents their legs from splaying. The chicks are not fed for the first hour in order to allow them time to settle, after which they are fed every 1½-2 hours from 6.00am until midnight.

The chicks are weighed every day and kept to a weight gain of approximately 10%. Some older chicks have proved stubborn at feeding times and to overcome this we use a soft bristle paint brush to tease open their bills and place food in their mouths. Another trick we have used with stubborn feeders is to feed another brood at the same time. When this is done, the calls of the other brood of Cirl Buntings feeding is too much for the chick to bear and it automatically opens its bill albeit somewhat reluctantly.

The diet consists of 60% Mazuri Diet A pellets soaked until soft and then mixed with 35% grated boiled egg. The remaining 5% is banana which is added to the mix so that it can easily be formed into balls for feeding. A light sprinkling of SA37 vitamin/mineral supplement is added. Mealworms are offered throughout the day.

Baycox (Bayer) 2.5% Toltrazuril solution is added to the diet as a prophylactic. The oral dose for passerines is 12.5mg/kg body weight, once daily for two consecutive days each week. Throughout the rearing period all chicks undergo regular visual and faecal checks. From our experience during the 2004 release, when they showed many stress responses, we learned that Cirl Buntings do not cope well with being handled after they have fledged. Therefore, unless signs of disease are obvious, all checks are carried out without handling the birds.

### **Equipment**

Brinsea TLC 4 brooders were used for the rearing period. Fledging birds were weaned in standard sized wooden double breeding cages. Once



weaned the birds were placed in aviaries. These release aviaries are designed with a release door at the front and another in the roof. During the first trial it was noticed that some birds preferred to enter and leave the aviary via the roof. To prevent birds of prey entering the aviaries 2in (5cm) mesh is placed over both release doors. Fixed at the back of each aviary under a shelter is a wooden breeding cage. The weaned chicks are kept in this small cage for a couple of days before being let into the aviary. This gives them a chance to take in their new surroundings before being given flight space. Hopefully it has also reduced incidences of trauma. Each aviary is heavily perched and positioned facing a thick hedgerow beyond which is an open stubble field.

### **Fledging**

The chicks are kept in brooders for only a short while. At 12 days they start to show signs of fledging. At this time their appetite will drop and they will not gain as much weight. They become more observant and will sit on the edge of the nest bowl and even jump out if disturbed unexpectedly. Between days 12-14 they are moved into standard sized wooden breeding cages. As would be expected, on the first day of being moved the chicks become quiet and subdued. They are moved early in the morning and are watched closely throughout the day. If by the end of the day a bird is not relaxed, it is placed back in the brooder for another night. A lot of changes are made at this time. The cages are furnished with leafy branches to allow the birds to perch and hide. Wild seeds and millet are added to the diet and a dish of water is provided. Fledging is a very stressful time for all birds and great care is taken to ensure that they are kept in a comfortable routine. With stress can come disease, so this is a time when all birds can be at risk. They must be kept pristine clean, but it is also a time when they make the most mess, as they learn to feed themselves and jump in the food dishes. Mixed seeds are gradually added to make up half of the diet.

### **Weaning**

From about 16 days the chicks begin to pick up food. At first they will pick it up only from the hand, but after a few days of repeatedly having had the food dropped in front of them, they are eventually persuaded to pick up the food from the floor or a dish. Livefood is not picked up until a few days later, though dead livefood is taken. As they grow more independent they become hand shy and weighing is stopped. The birds remain in cages until all of them are feeding, bathing and preening efficiently. By day 25 they are moved to the release aviaries.

### Release

Once the birds have been released from the breeding cages into the aviaries they become noticeable to predatory animals in the area. Several methods were used to deter birds of prey and domestic cats. An electric fence was placed around all 10 aviaries. More usually used to keep domestic stock in, it worked very well at keeping cats out. A sonic sound device was also used, but its effectiveness could not be measured, as the electric fence was already in place. Several large balloons adorned with two large target eyes were tied to trees and shrubs around the aviaries to put off any Sparrowhawks *Accipiter nisus*.

Wild Cirl Buntings spend a lot of time foraging on the ground, so some of the seed and mealworms are placed on the floor of the aviary. Most of the food however is placed on the inside ledge of the escape hatch. During this time the rearing mix is slowly withdrawn and replaced with a mixture of millets and wild seeds. The birds spend about 12 days confined to the aviaries after which, provided they are fit and healthy, the release hatches are opened. All food is then placed on the outside ledge of the escape hatch and after one week the birds are shut out of the aviary, but continue to be fed on the ledge. As late as October some birds were still returning for food and for this reason one aviary was left standing and used as a feeding station. Seed is also scattered in the adjacent stubble field.

The project has been a great success thus far and all partners are eagerly waiting to see if the released birds pair up successfully this spring.

### Products mentioned in the text

Mazuri Diet A: zoo food pellet supplied by Mazuri Zoo Foods, Witham, Essex CM8 3AD, UK. Website: [www.mazuri.com](http://www.mazuri.com)

SA37: vitamin/mineral supplement supplied by Intervet UK Limited, Walton Manor, Milton Keynes MK7 7AJ, UK. Website: [www.intervet.com](http://www.intervet.com)

Brinsea Brooders: supplied by Brinsea, Station Road, Sandford, N. Somerset BS25 5RA, UK. Website: [www.brinsea.com](http://www.brinsea.com).

Mixed wild seeds: supplied by Rob Harvey Specialist Feeds, Kookaburra House, Gravel Hill Road, Holt Pound, Farnham, Surrey GU10 4LG, UK. Website: [www.robharvey.com](http://www.robharvey.com).

Mixed millet seed: supplied by John E. Haith, Park Street, Cleethorpes, Lincs., UK. Website: [www.haiths.com](http://www.haiths.com)

Aviaries: supplied by Grange Aviaries and Pet Centre, Woodhouse Lane, Botley, Southampton SO30 2EZ, UK. Tel: 01489 781260.

### Acknowledgements

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