

Cornish Field Crickets

Sutton and Beckmann (*BW* 35: 130–131) expressed legitimate concerns about our release of Field Crickets *Gryllus campestris* into a meadow in Cornwall. We are a research team from the University of Exeter who have been studying Field Crickets in the wild in north Spain for 20 years. We use Field Crickets to ask questions about the way animals and their behaviour evolve and how this is influenced by their environment.

Each year we tag all the crickets in our Spanish meadow with a unique ID. We observe adults remotely with 140 video cameras aimed at individual cricket burrows, recording and analysing their life histories, courtship, fights, and reproductive behaviour. We have analysed millions of hours of cricket behaviour (see www.wildcrickets.org) watching natural selection in action. We have released crickets into our Spanish meadow from different habitats in Spain and failed to find evidence that crickets from radically different environments (>1,000m vs sea level) are locally adapted.

Field Crickets in Spain are the same species as those in the UK, but they live mainly in densely vegetated meadows. We wanted to test the idea that the UK population is not restricted by a shortage of habitat, but by the fact that these flightless insects cannot



Counting Field Cricket burrows in Cornwall.

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recolonise areas where they have been driven extinct by intensive agriculture. Our release site is a south-facing lowland meadow superficially indistinguishable from the grasslands of healthy populations in Spain. It is 200 miles away from existing UK Field Cricket populations,

making inadvertent contact between these groups very unlikely.

The experimental population in Cornwall was founded by 64 nymphs reared in isolation in controlled laboratory conditions from the eggs of parents collected in Asturias, Spain. Our pioneer crickets were released (with the kind support of the landowner, Charlie Pugh) in April 2022 and bred without any intervention, producing hundreds of nymphs that spread through the Cornish meadow to form a population of around 1,000 adults in the summer of 2023. The Cornish colony is now in its third generation and continues to thrive and expand from the release site. We recently surveyed the population and estimate that there are currently at least 1,500 breeding adults.

We have been monitoring nymph activity in Cornwall through the winter, locating and measuring burrows and collecting data to compare physical and biological parameters between areas varying in burrow density. The UK's long-standing Field Crickets have been through a severe population bottleneck which will have led to the loss of genetic diversity that might reduce their capacity to adapt to a changing habitat. Our view is that the risks of our reintroduction are small compared with the potential benefits of a better understanding of the evolutionary ecology of this species and its habitats. If readers would like to visit the site, search for 'Scott's Quay, Falmouth' and follow the footpath down to the Helford river. You cannot miss hearing the crickets between May and early July.

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