The battle for Martha's Field

How rare-breed sheep helped tame a two-acre patch on the Hudnalls, by **Alex Crawley**

On a cold December morning, and with some trepidation, the team – adults, children and sheepdog – led a small flock of hardy Shetland sheep down the ancient narrow stone-walled lanes of the Hudnalls. It felt more 1920s than 2020s, although the risk of an Amazon delivery driver upsetting the ewes was a modern hazard our forebears didn't have to contend with. For over six months we'd battled the bracken and bramble that ravaged Martha's field ready for this operation and now was the moment of truth.

We eventually approached the field gate and, to our relief, the ewes streamed passed our legs and hurtled into the field, tucking into the brambles with gusto. Come rain or snow we were there every day, checking. We needn't have worried there wouldn't be enough nutrition for them in the icy field. This band of hardy old girls was having the time of their lives doing what they do best – browsing through the scrub.

In the 1940s Martha's Field, like many of our fields here, was a glorious two-acre wild flower meadow, this one particularly well carpeted with orchids. Martha's field was grazed by Jersey cattle, the sound of their lowing reverberating through the woodlands. These cattle were more than bucolic charm though; their role as grazing ecosystem engineers was crucial to maintaining the open meadow land and all the species which depend upon it. This was the continuation of a millions-of-years-old process of grazing herds of auroch (wild cattle) keeping the natural grasslands open here in the British Isles (Google the Dutch biologist Frans Vera for more background).

As humans hunted out the deer and auroch they replaced them with domesticated cattle and sheep, which continued this ecosystem-engineer role for the last 10,000 years, keeping the meadow lands open and thriving. Where cattle and sheep didn't, people with scythes replaced the four-legged lawn mowers.

The Shetlands take stock of Martha's Field

Post-war, the need for national food sufficiency meant most meadows were ploughed over or fertilised, and the wild flowers retreating field by field. However, ask any farmer: a remote, unfertilised two-acre field is just not economically viable, so Martha's Field escaped agricultural improvement. Instead it was simply abandoned, and where once flowers bloomed every summer and the air hummed with insect life, chest high bracken and bramble took over. The tendrils strangled the other plants, the bracken shaded out large sections. Only small pockets of grassland survived the advancing tide.

Since summer 2020 we have been working to restore the field for Martha, who cares about her two acres but doesn't farm or have the machinery. She agreed to have it fenced and provide water and we would then cut back the growth and graze it for her, no mean feat after years of neglect. But after repeatedly cutting it (and a £600 bill for a burned out flail mower clutch – bramble is tough stuff) we had it in a state where we could begin to introduce the animals.

We used hardy native Shetland sheep, which seem to thrive on bramble and ivy, preferring it to lush grasses. Watching them in the icy conditions happily munching through acres of thicket was particularly rewarding. The point here is that commercial breeds just can't get enough nutrition for their bulk on a field like Martha's and the hardy native breeds you need for a project like this can't compete commercially, so understandably commercial farmers don't keep them. As they say – they are rare breeds for a reason.

We are nowhere near finished yet. It will be a three-year battle to get on top of the deep-rooted bramble and bracken. We fully expect it to make a fight back this summer, but we'll deploy our tenacious ewes. We've already made quite an impact and are now looking forward to the summer to see how the end of year one looks.

I hope we can show you the changes this summer and over the coming years. Eventually we should recover the glorious two-acre wild flower meadow waiting underneath. Who knows, you may even hear the sound of lowing cattle reverberating through the woodlands again down here. That is the story of a whole new chapter of the project.

If you are interested in learning more or getting involved please contact alexander.crawley@gmail.com

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St. Briavels Hewelsfield & Brockweir Parish Grasslands Project

N E W S L E T T E R

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C O M M I T T E E

C O N T E N T S

NATURE WATCH
Two to look for

Willow warbler

Wood anemone

Young Edward Banner, pictured hunting for grass-hoppers and bush-crickets, would like to survey members' fields this summer: see centre pages

Photo: Dr Steve Banner

Let's slow the flow to tackle flooding

Natural flood management expert will speak at AGM

After a frustrating 12 months because of the pandemic, we are optimistic that 2021 will see a return to something approaching normality. We are still having to organise meetings online, but with any luck by mid-May we will be able to gather in limited numbers outside.

During flooding in Brockweir this winter the main problem seemed to occur on the hillside, because of the sheer quantity of water running down towards the Wye. This made us wonder if collective action could be taken to slow the flow. We have arranged for Chris Uttley from the Environment Agency to be the speaker at our online AGM at 7.30pm on Monday April 22. Chris is a senior advisor on flood and coastal risk management with the agency and spent four years in the Stroud valleys leading the team using natural flood management to reduce flood risk. A link to join the meeting will be sent to members two days before the event.

Our fortnightly online Signs of Spring sessions got off to a good start in early March. In these Gemma Bode is taking us through the wild flowers and plants as they begin to put in an appearance locally after the period of winter dormancy. More than 40 people have already signed up; if you would like to join us just email parishgrasslands@gmail.com with the word "Spring" in the subject field and we will send you a link. And thanks to everyone who has sent in photos of their botanical finds!

Finally, a reminder that PGP subscriptions for 2021 are now due. These are still a modest £5 per household per annum. Here are the details for internet banking, currently the easiest way of paying: account name Parish Grasslands Project, sort code 40 33 11, account number 21444336.

MIKE TOPP

A hop in the grass

Edward Banner provides an introduction to grasshoppers and bush-crickets to look for in local meadows this summer

SOME people like birds or butterflies… but I am not one of those people, my interest is a bit more obscure. Orthoptera interest me. Since I was six years old (I am now 10) I have been engrossed in all things grasshopper. There are about 20,000 species worldwide and in the UK there are 26 native species, which is roughly half the number of native butterfly species. Of the 26, I have seen 19, and nine locally in St Briavel's and Brockweir. Back in November my sister and I attended he Royal Entomological Society meeting of the Orthoptera Special Interest Group and were described as the youngest people to attend.

As you probably know all species love to sing, they do this by stridulating which is essentially rubbing with their wings and/or hind legs together and this is the sound of summer that everyone knows.

Lots of people come to me claiming they have seen many crickets in the U.K. so I would like to explain the differences between grasshoppers, bush-crickets, groundhoppers and crickets, as they have probably never seen a cricket ever in the wild.

Firstly, I will talk about grasshoppers. They are long and thin, and have very short, stubby antennae, much shorter than a bush-cricket's. A bush-cricket is usually much more bulky and has long, very thin antennae. Groundhoppers are much, much smaller than a grasshopper or bush-cricket and they also have short antennae. A cricket has never been sighted anywhere around here and even where they have been seen they are only found rarely. I have seen them once in the UK. I will describe one anyway, they are black or brown and are found under rotten leaves and logs. They move quickly and have long, thin antennae like a bush-cricket's. So, if you find one let me know!

Local species

Let's have a look at what you might find in your meadows. We will start off with looking at the bush-crickets:

Speckled Bush-cricket. Characteristically bright green with black specks, they can be found mainly around field edges and in hedgerows.

Dark Bush-cricket. These are always dark brown and also like to hide in bushes.

Long-winged Conehead

Common Green Grasshopper

Oak Bush-cricket. A pale green bush-cricket that loves hiding among trees and so is quite hard to find.

Roesel's Bush-cricket. It looks just like a dark bush-cricket but has three lime green / yellow dots on each side of the abdomen and on the lower margin of the pronotum, the shield behind the head.

Long-winged Conehead. This has a triangle-shaped head with a green body and usually lives near water.

Short-winged Conehead. Almost exactly like a long-winged conehead but just has short wings. I have not seen one, but they should still be around here.

Now the groundhoppers.

There is only one species you are likely to find and it is called a **Common Groundhopper**. They are very small at about 1cm in length and live on rough ground. They do not fly.

Roesel's Bush-cricket in macropterous form

Meadow Grasshopper

Oak Bush-cricket

Finally, the grasshoppers:

Field Grasshopper. These come in all colours except blues. They are commonly brown. The shoulders of the pronotum are strongly indented and field grasshoppers have hairy undersides.

Meadow Grasshopper. Very common and usually greens, yellows and black. They often have a dark eye but can be told from other species as the shoulders of the pronotum are not indented but straight.

Common Green Grasshopper. Very similar to the meadow grasshopper and is also common. It can be distinguished by incurved shoulders of the pronotum that are outlined in black and white.

Now that you have an idea of the species around here and their preferred habitats, you need to know that the best time of the year for finding them is from April onwards. In April you might not recognise them as they will be in their nymph stages. Each time they go through a stage they shed their skin and get a bit bigger and at around their fourth or fifth stage they start to develop wing buds which will eventually become proper wings on an adult. You can expect to see adults from around June and they will be here until about September or October.

You may want to find out whether one is male or female (it can be difficult to identify male and female grasshoppers and almost impossible with groundhoppers). However, for bush-crickets it is quite simple as the female has a long, upward curving, pointed, spear-like blade at the end of the abdomen called the ovipositor and which is used for laying eggs. A male bush-cricket has two shorter spikes coming out of the end segment of the abdomen.

To get a good look at them I like to catch them and to do this I either use a sweep net or my hands, but this is more challenging. When I catch one it will often sit quietly on my open palm for some time before hopping back into the grass.

Having found and identified one there are several ways of recording findings. The first way is to send a record to Gloucestershire Centre for Environmental Records, GCER; the other ways are to record it via a phone app, either iGrasshopper, which currently only works on iPhones (or old Android versions); or iNaturalist which works on all smartphones. For confirmation of a record, it also helps to send side-view and top-view photos. All UK orthoptera records are collated at the Centre for Ecology and Hydrology as they are an important indicator species.

Helping Orthoptera

If you have an area of grassland or even the corner of a garden then the best way to help these insects is by cutting your grass later, perhaps even towards the end of August. This would mean fewer young Orthoptera killed by cutting or being taken by predators, but importantly it also leaves more time in the summer for adult females to lay eggs low down on grass stems or in the soil, ready for next year's hatching.

If possible, I would like to survey some of your grasslands in the parishes this next summer time for my favourite insects. Please get in touch via steve@wildlifewilderness.com.

Roesel's Bush-cricket (left) and the Speckled Bush-cricket ***Photos: Dr Steve Banner***