



River Barle Signal Crayfish Project

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The **signal crayfish** is one of the most damaging invasive species both in the UK and worldwide. It has decimated native crayfish populations and can cause severe adverse effects on river ecosystems.

The River Barle Signal Crayfish Project is a volunteer-led, three year trial of a ground breaking sterilisation technique attempting to control these invasive crayfish on Exmoor.



Volunteers after a day on the river

International exposure: Project Manager and PhD student Nicky Green presented a poster on the project at the International Association of Astacology's 21st Symposium in Madrid. There was interest from crayfish scientists from around the world. After the conference was a field trip looking at the native white clawed crayfish in mountains near Granada and a visit to a red-swamp crayfish processing plant (photos below).

A successful season: Our second year of fieldwork has gone like clockwork, with superb volunteers and obliging weather. Once again we recruited and trained many volunteers and were delighted to see many of last year's recruits returning for more. We started early in 2016, using the same two trap method as last year, and managed to capture a large number of berried (egg bearing) females during April as a result. The weather was much better and we achieved 49 trapping days compared to 39 in 2015.



Diary Dates 2017

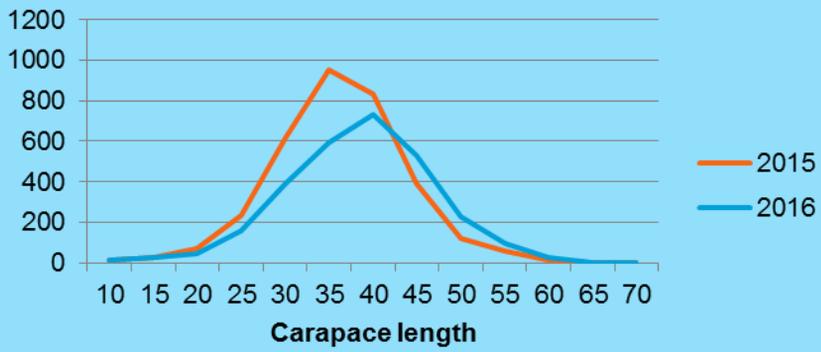
- 14th March – Training session#1. 21st March – Training session#2
- 28th March - Backup training
- w/b 3rd April – Site setup. w/b 10th April – Trapping starts
- “Weather permitting!!”





Results – looking good In 2016 we caught 3134 crayfish which is just 7% less than 2015, however average catch per day declined by a healthy 26%. Once again we found that artificial refuge traps (ARTs) are more successful at catching crayfish and catch a wider size range than baited traps. The number of smaller animals caught seems to have declined between 2015 and 2016 (right).

Size/frequency 2015/16



More research: Local BSc student Holly Moser has been doing research on trap efficiency and habitat use for her dissertation. A group of local volunteers have setup and trapped at a new site near Lanacre, trialling the self management approach. Nicky has been doing (crayfish!) mating experiments in the lab at Bournemouth University (right) and will be writing a scientific paper on ARTs this winter.



We found that sterilised males successfully survived the winter and are mating with females in the wild (see photo of misplaced spermatophore above). We sterilised 38% more males this year, making them 18% of total catch compared to 12% in 2015.



Distinguished guests
We have had many interested and interesting visitors to the project this year, including people from the Dorset Wildlife Trust, Severn Rivers Trust, National Trust and Environment Agency's National Wildlife Management Centre. In September we filmed a piece for 'Escape to the Country' with Nicky Chapman (left)

If you want to get involved please get in touch by contacting either Nicky Green, Project Manager: - ngreencrayfish@gmail.com 07816 512430 or Patrick Watts-Mabbott, ENPA Volunteer & Outreach Officer: - PWatts-Mabbott@exmoor-nationalpark.gov.uk 07973 727469

We ask volunteers to commit to a minimum of one morning per fortnight between April and October.

Check out our Facebook page: <https://www.facebook.com/groups/barlecrayfish/>

The project is steered a local partnership including Exmoor National Park Authority, Environment Agency, River Exe and Tributaries Association and the River Barle Fishing Club. It has received funding and in-kind support from the Exmoor National Park Partnership Fund, Natural England, Environment Agency, CEFAS and Heritage Lottery Funding through the Heart of Exmoor Scheme.

The Fish Health Inspectorate licences the return of sterilised crayfish to the river.