

# The Exmoor Non-Native Invasive Species Project

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Exmoor National Park Authority

**LAG Workshop February 2023**



# Background to project

**2005** Exmoor Knotweed Control Project

**2014** River Barle Signal Crayfish Control Project

**2019 – 2022** ENNIS project funded through Water Environment Grant

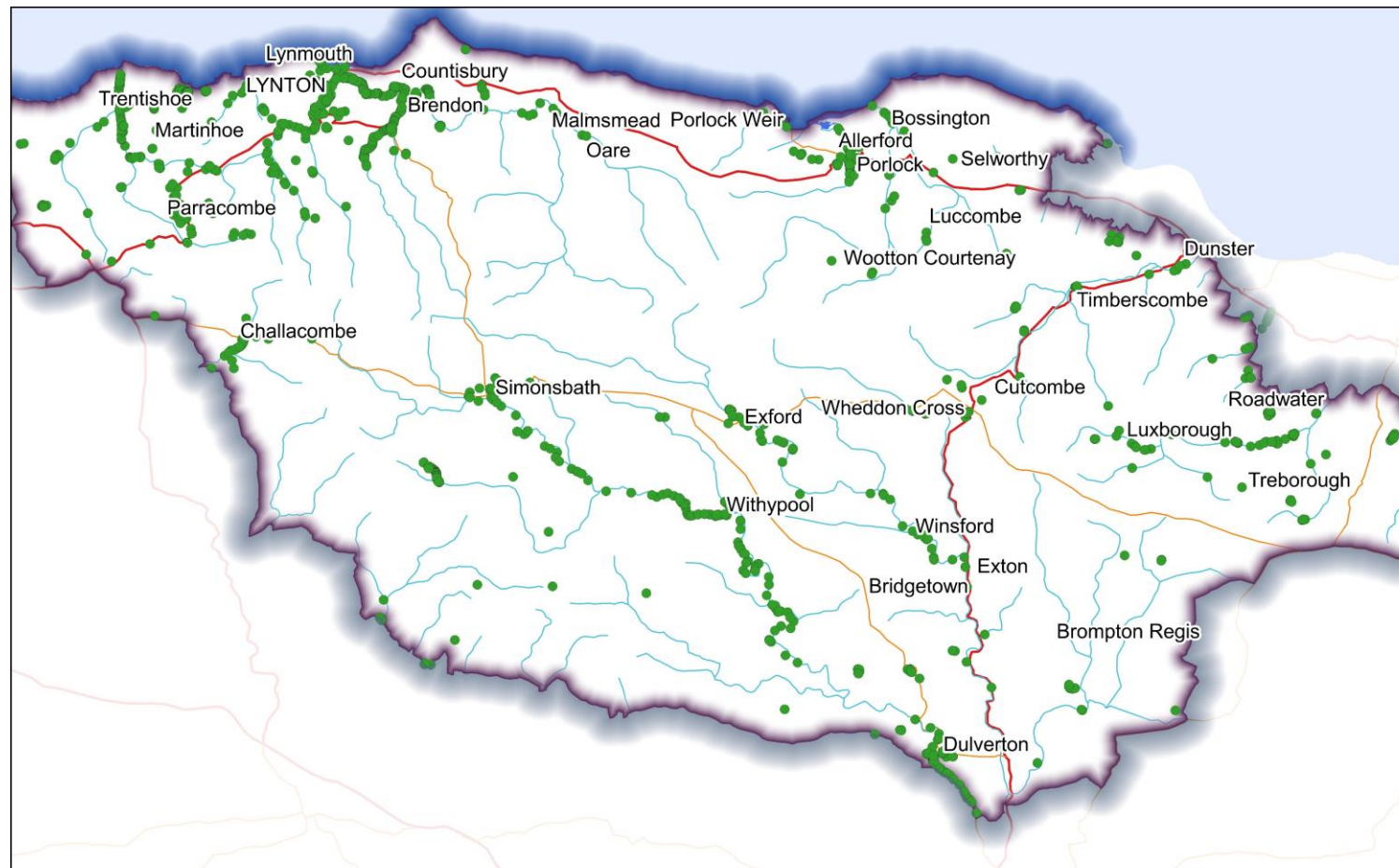
**2022 – 2024** ENNIS project funded through Farming in Protected Landscapes and partners



# ENNIS Film Trailer



# Exmoor Knotweed Control Project



Scale 1:150,000

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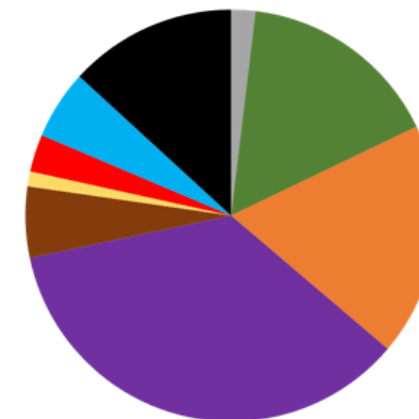
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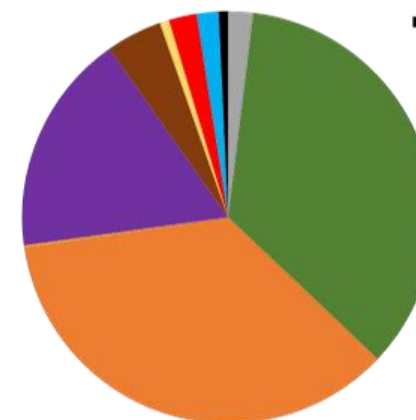
● Knotweed  
■ Exmoor National Park Boundary

Growth patterns 2013

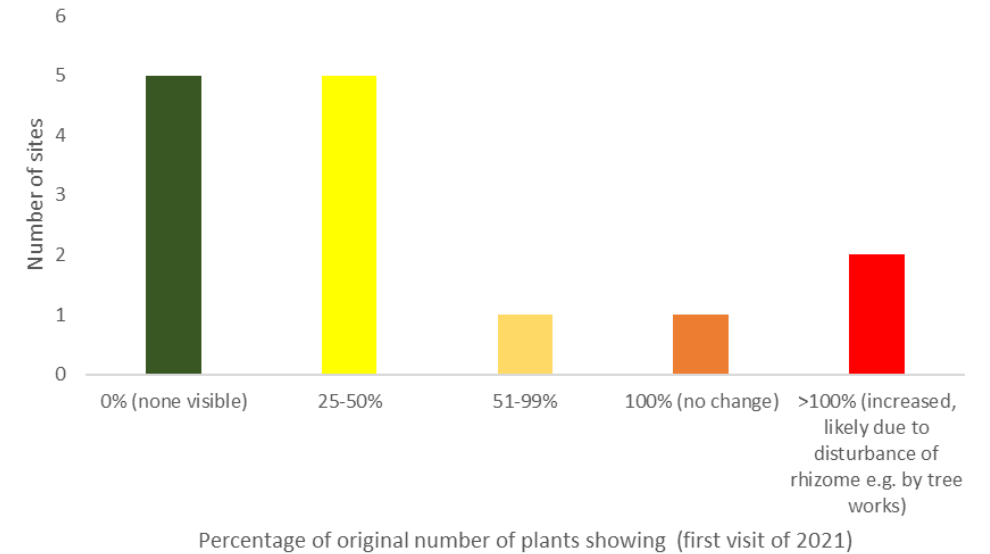


- Not stated due to disturbance/ cutting/ owner has treated
- Vigour and area unchanged
- Vigour and area reduced
- Vigour increased, area increased
- New sites treated in that year
- Sites with no visible growth
- Vigour unchanged, area reduced
- Vigour increased, area unchanged or reduced
- Not treated (permission granted)
- Not stated

Growth patterns 2021



# Exmoor Skunk Cabbage Control Programme



Scale 1:150,000

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- Skunk cabbage
- Exmoor National Park Boundary

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# Rootwave Pro Trials

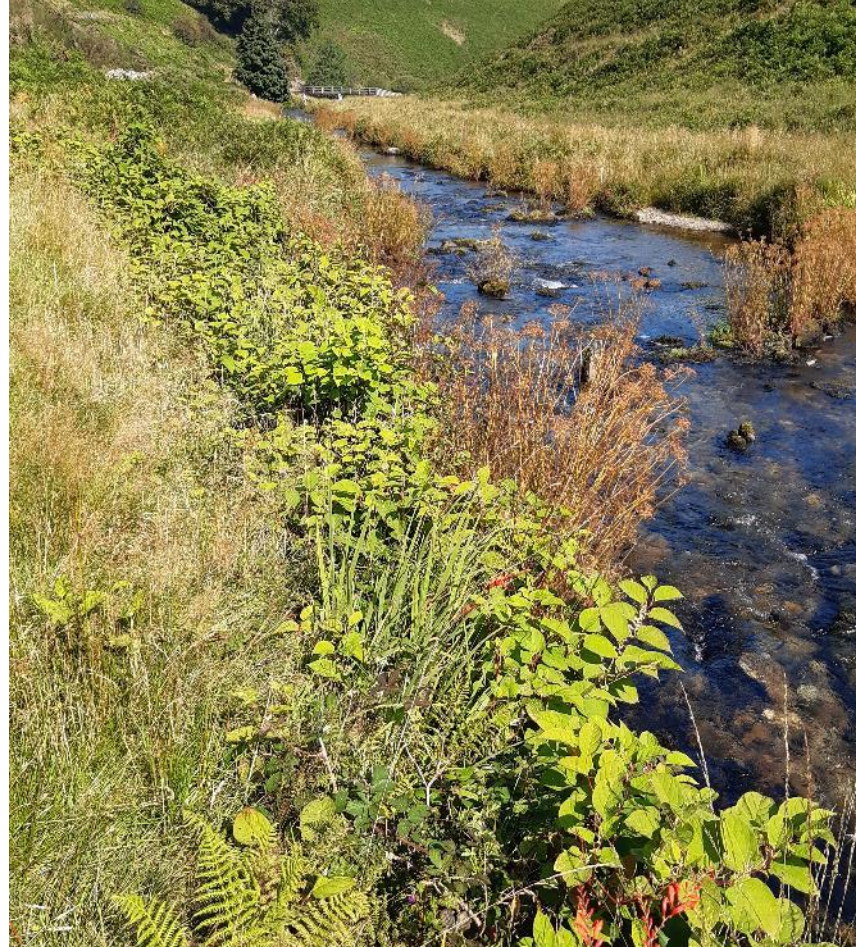
- An alternative to glyphosate for invasive species management on organically certified land.
- Rootwave Pro machine uses an electric current (up to 5000v) to raise the temperature of the plant.
- Trialled treatments for Japanese and Himalayan knotweed, skunk cabbage, montbretia, giant hogweed and fringe cups.
- Limitations include transporting machine and weather dependency.



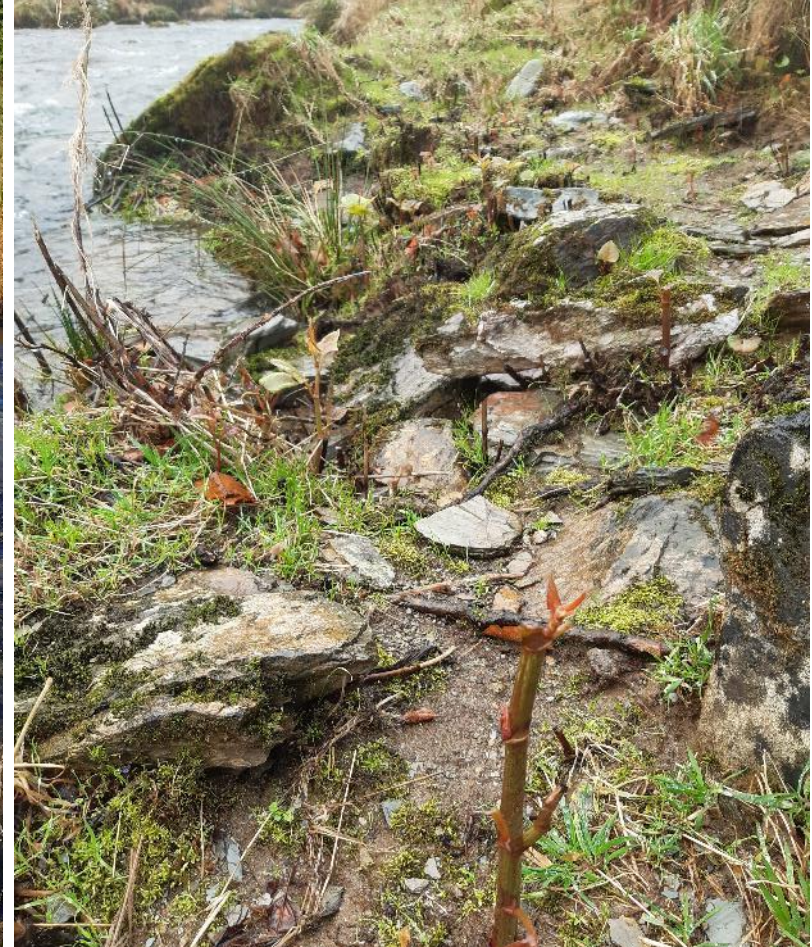
# Rootwave Trials – Knotweed



Sept 2017 pre Rootwave trial



Sept pre treatment in 2021



Nov two months after first treatment of 2021

# Rootwave Trials – Knotweed



October treatment 2022



November one month after  
treatment in 2022

# Rootwave Trials – Knotweed



September 2017 Pre Rootwave Trial



October pre treatment in 2022

# Rootwave Trials – Skunk Cabbage



**June 2020 pre treatment**



**September after two treatments  
in 2020**



**June pre treatments in 2021**



**Oct after one treatment in July  
2021**

# Rootwave Trials – Montbretia



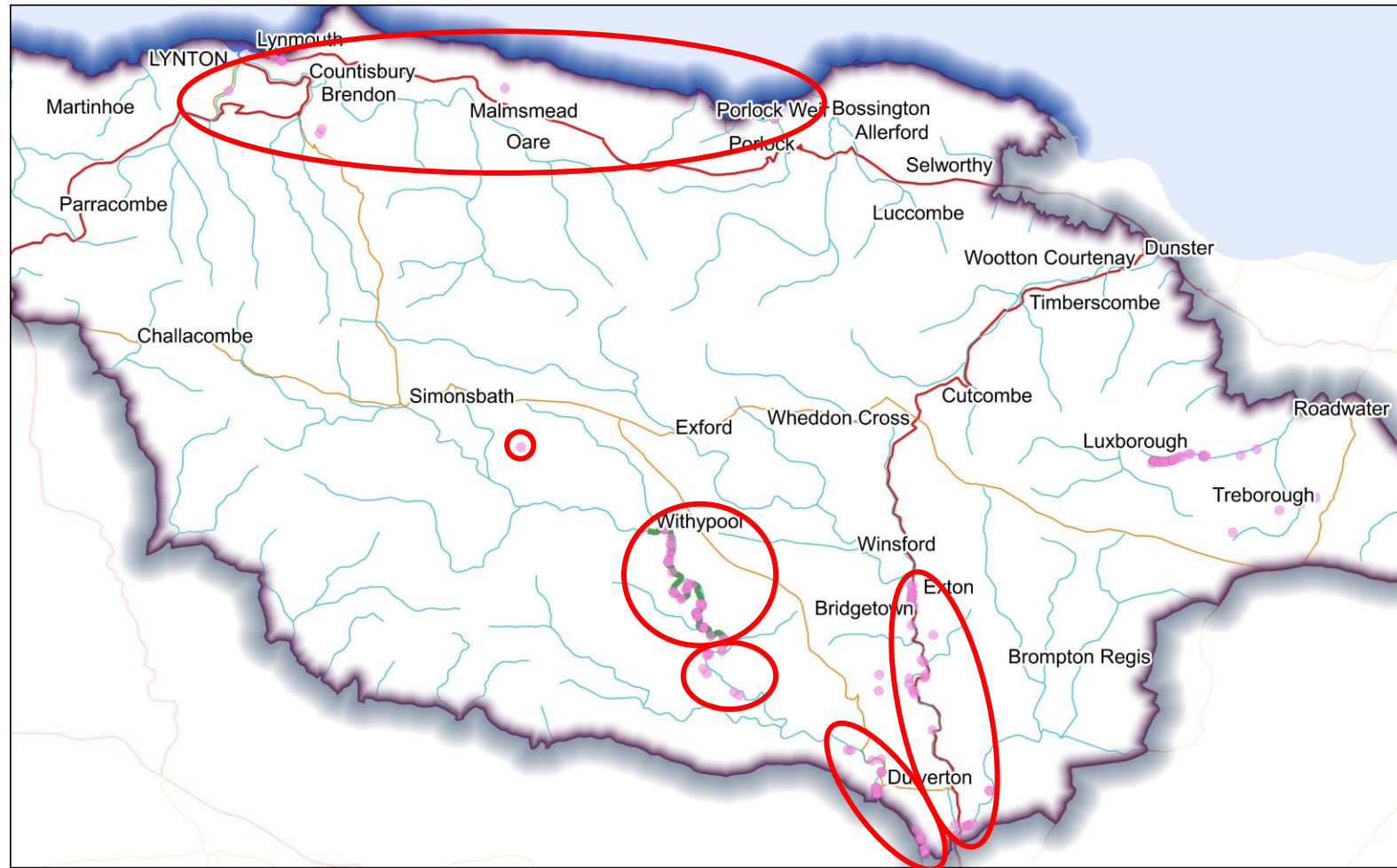
1 month after treatment

# River Barle Signal Crayfish Project

- Multi-method, long term approach using baited & artificial refuge traps, sterilisation & return of dominant males
- Weekly trapping of a 1.5km reach from April to October, 2015 - 2022, led by citizen scientists
- Results:
  - Artificial refuge traps more effective than baited traps
  - Consistent decrease in catch rates since 2017
- Current focus is to contain the upstream expansion on the River Barle and River Exe



# River Barle Himalayan Balsam Trial



- Low priority
  - Never found again
  - Coastal areas
- Medium priority
  - Trial area has very little left
  - Coming under control
- High priority
  - River Barle around Dulverton
  - River Exe

Scale 1:140,000

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• Himalayan balsam sites  
— Himalayan balsam pulling trial area  
■ Exmoor National Park Boundary

# Plans and Ambitions for 2023

- Continue our knotweed and skunk cabbage treatments
- Continue the Rootwave trial and evaluate the success of the treatments
- Large scale Himalayan balsam pulling and crayfish catching days
- Spreading awareness about biosecurity, targeting different audiences





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Visit Our Website <http://www.exmoor-nationalpark.gov.uk/Whats-Special/exmoor-non-native-invasive-species-ennis>

Or search online for 'ENNIS Exmoor'

Thank you to our project partners:

