

Can lasers be used to discover life?

Located on our school grounds is a balancing pond which is home to a population of great crested newts – which are an endangered species. Our research intends to analyse the ecosystem around the balancing pond to investigate the conditions which make this a suitable habitat for the newts, enabling us to monitor and help an endangered species to thrive.



Fig 1 – Great crested newts caught by an ecologist using bottle traps. The identifiable orange belly is visible in the second photo.

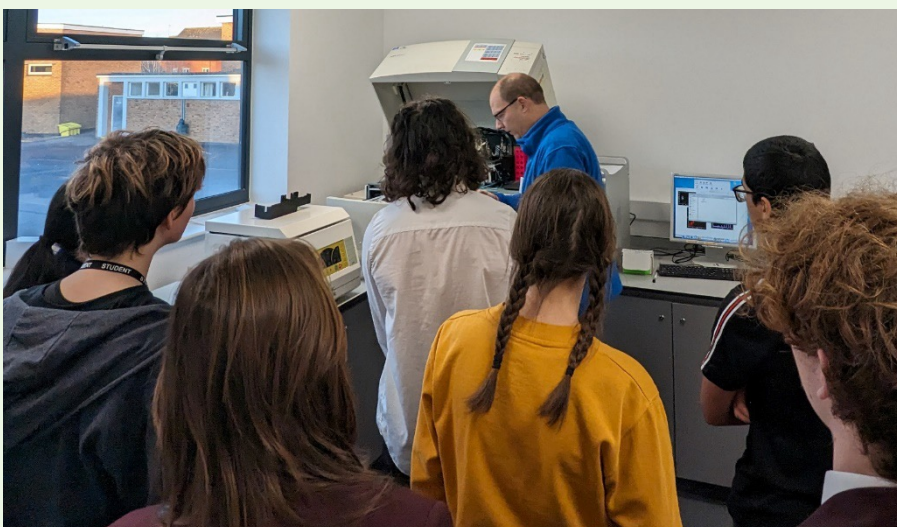


Fig 2 – Dr Reiner Schulte demonstrating how to run flow cytometer samples.

We are using a variety of techniques, including microscopy and flow cytometry, to get a detailed analysis of the pond ecosystem. Flow cytometry has been used to analyse and identify organisms in the pond that may be too small to identify via other means. Our plan is to monitor the ecosystem over a long period of time, which will enable us to see how still-water populations in the UK will change as the climate changes.