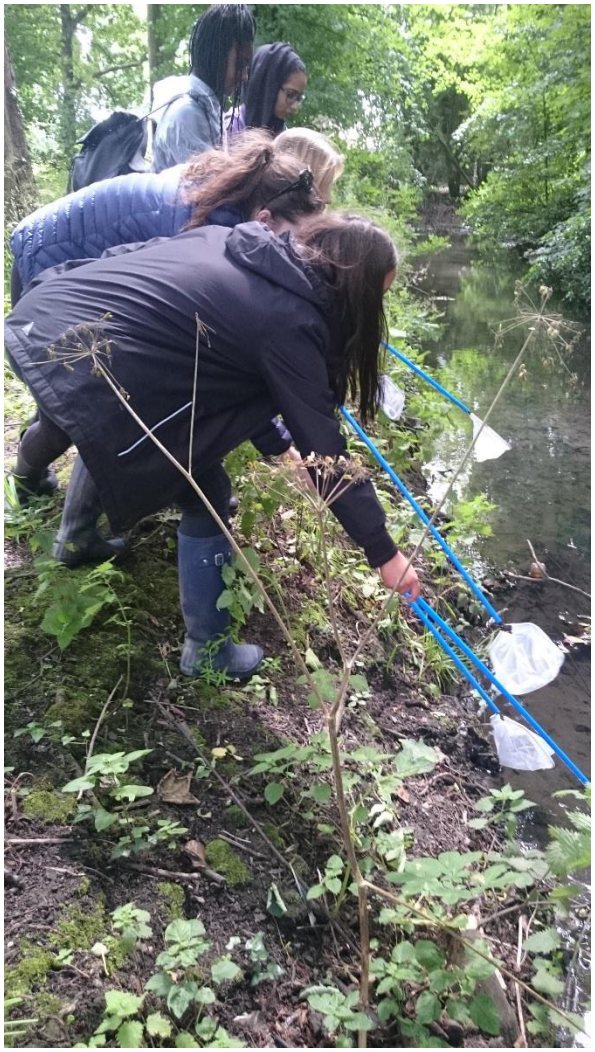
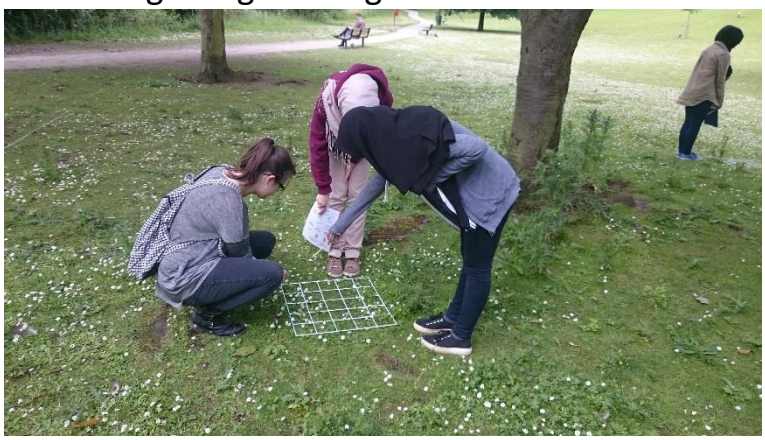
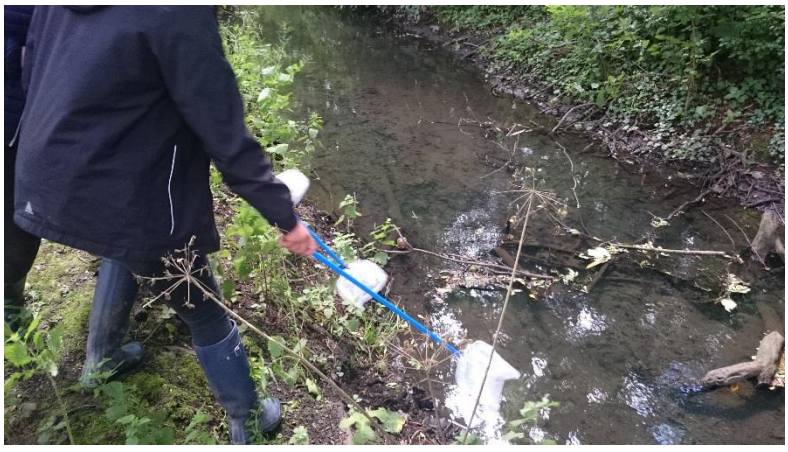
NUAST Biology Fieldwork July 2016

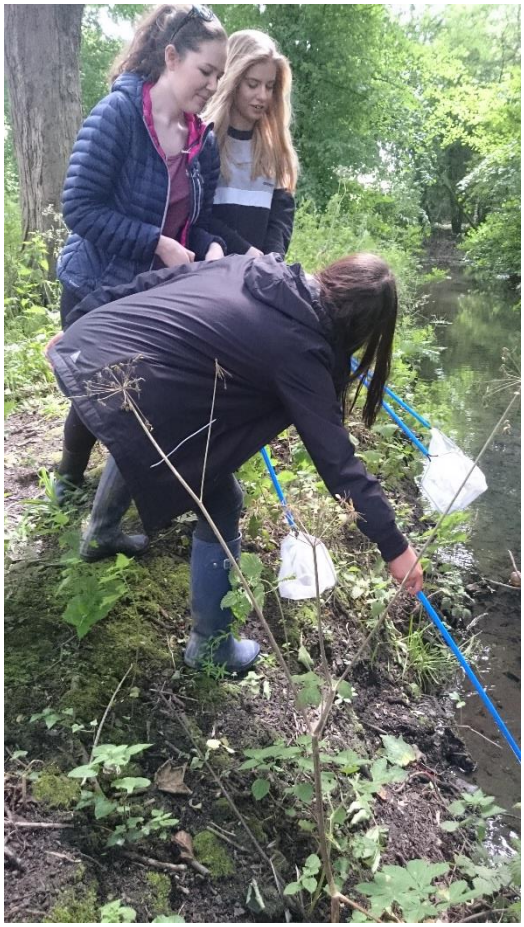


How did Charles Darwin come across his great idea of natural selection and evolution? Through exploration and observation. Year 12 biologists had an opportunity to follow in his footsteps through some excellent fieldwork. The nature of Biology requires contextualising the collection and then applying the principles and maths skills to understand the implications. Thankfully the weather held and we had an enjoyable but challenging time collecting and gathering data.

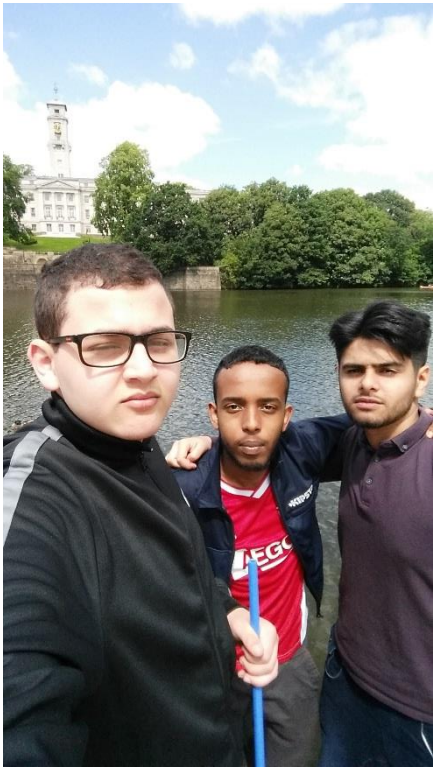


2 different waterside habitats were analysed for invertebrates and then sampled for pH and ion composition.

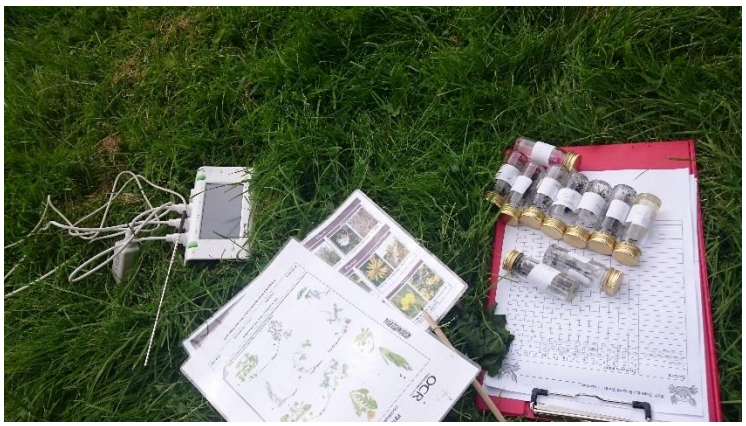


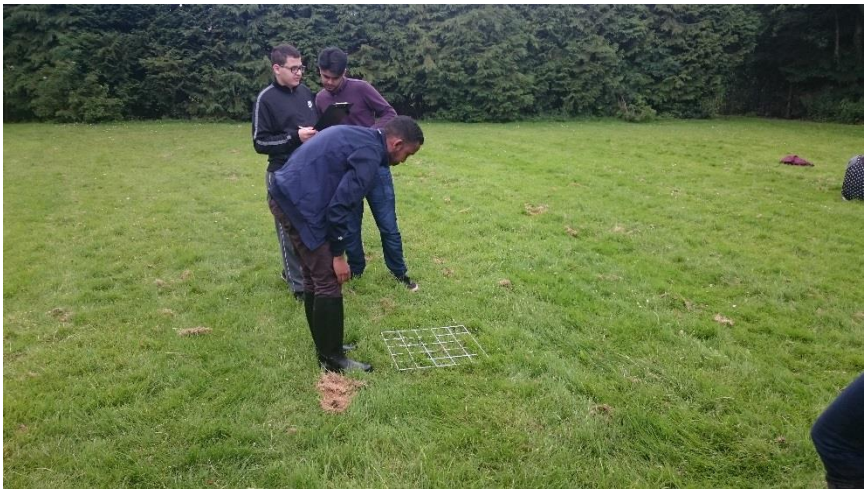


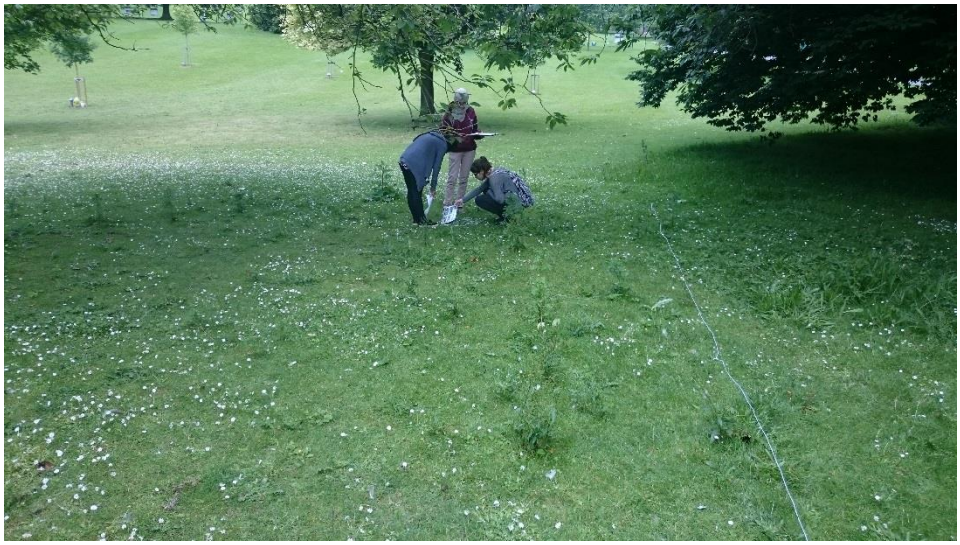
Identification was through using keys and dichrotomous branched paired statements. This method is based on their external morphology.



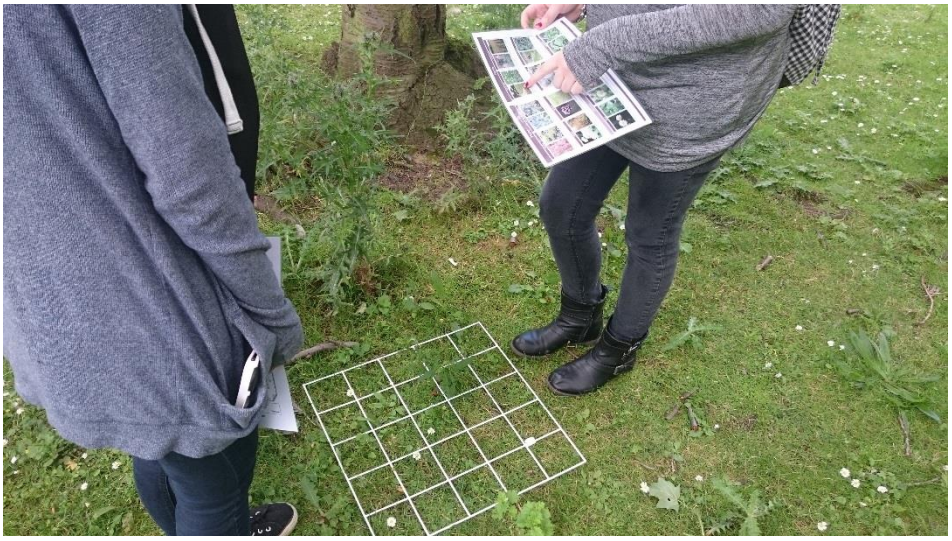
Fortunate to have fantastic data loggers – able to read humidity, light and temperature.

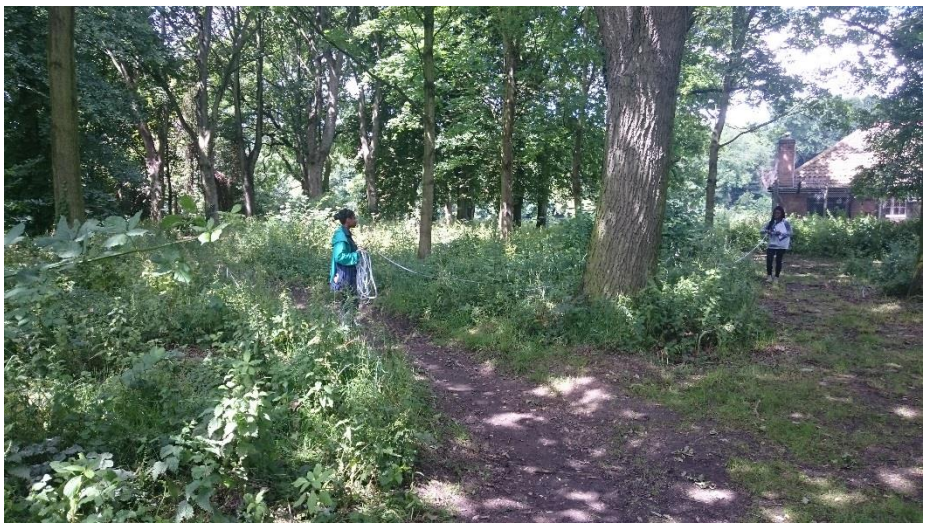






The bias nature of sampling was understood through the random sampling of two different habitats, hoping to examine whether there is any significant difference between the two areas.





Finally a transect line and sampling every meter was drawn across, we took soil samples, light, humidity and temperature readings and compiled percentage ground cover using the ACFOR scale.

Data and samples collected …. Going back to the lab for final testing and the statistics analysed through Chi Squared, Spearman's rank and Kites diagrams. Species biodiversity will also be calculated.