

What is DNA Metabarcoding?



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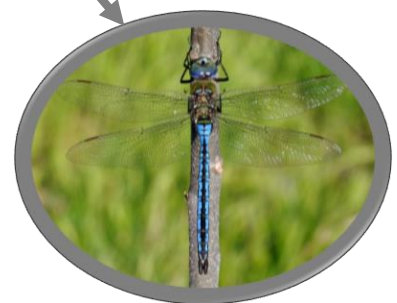
March Brown Mayfly
Rhithrogena germanica



Root-Maggot Fly
Hydrophoria linogrisea



Predaceous Diving Beetle
Colymbetes densus



Blue Emperor Dragonfly
Anax imperator

Riverbed sample collected by the CABIN kick net protocol. This sample is then sent back to the laboratory and blended into a single consistency resembling 'river soup', ready for the isolation of DNA

DNA is then separated from the 'river soup' using a series of washes with various buffers

DNA is then multiplied using a combination of different temperatures and short strands of DNA ('primers') which act as templates to make many bug DNA copies

Over 100,000 copies of bug DNA are then produced using a 'High-throughput sequencer', which also organises the DNA into sequences. We can then compare these DNA sequences to a known library of different bug species to determine which bugs were present in the river sample