

# Research and analysis: Developing DNA techniques to identify freshwater invertebrates for environmental monitoring

A PhD student at Bangor University, co-funded by the Environment Agency, has taken us closer to using DNA analysis for routine monitoring of freshwater macroinvertebrates (animals a few millimetres long such as insect larvae). The project successfully used new techniques to analyse environmental DNA (eDNA) released by organisms into water, for example in skin or faeces, to identify invertebrate species that are used as indicators of water quality.

With further developments this approach should offer a quicker, cheaper and more effective way to carry out this important part of our environmental monitoring work. The project was part of a wider programme of research by UK agencies to develop DNA-based methods for environmental monitoring.