

Biography: Originally from Co. Mayo on the west coast of Ireland, Hugh Feeley (pictured right) began his experience in ecology and freshwater science with a First-Class Honours BSc Degree in Environmental Biology at University College Dublin (UCD 2007), with his undergraduate thesis published in [Aquatic Insects](#). Hugh continued to develop his interest and experience in ecology and biodiversity with several studies examining the role of [constructed wetlands on regional diversity](#) in agricultural landscapes and understanding how rivers contribute to local and regional [macroinvertebrate biodiversity](#). He was also involved in several other studies during his time in UCD working on a wide range of ecological, environmental and freshwater sciences, including fish, invasive and native macrophytes and hyperheic invertebrates, across a range of freshwater habitats. In 2008, Hugh began his PhD studies with [Dr Mary Kelly-Quinn](#) at the Freshwater Biodiversity, Ecology and Fisheries Research Group in the [UCD School of Biology and Environmental Science](#) (Dublin, Ireland) focusing primarily on the impact of mature plantation forests on the [ecology](#) and [hydrochemistry](#) of headwater streams but also incorporated work on [climate change](#) and [sampling methodologies](#). He successfully completed his PhD studies in July 2012.



Oak litter bags were used to examine the regulation of decomposition in Welsh upland streams

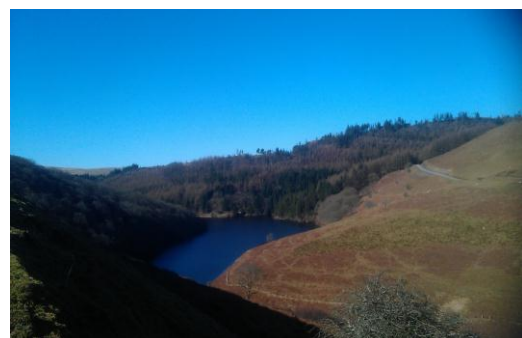
Current Research: Hugh is currently investigating the role of invertebrates in river ecosystem services sustainability in upland Wales for the NERC funded [DURESS project](#) and is based in the [Organisms and Environment](#) research division in the [School of Biosciences](#) at [Cardiff University](#) working with [Dr Isabelle Durance](#) and [Prof Steve Ormerod](#). His work involves investigating the relationship between river biodiversity and ecosystem services including the regulation of water quality and the regulation of decomposition; in order to determine how these services respond to change, most notably in land use.

The first large-scale DURESS experiment investigated the role of biodiversity in the regulation of decomposition (completed March 2013) and involved the addition of over 12,000 kg of Oak leaf to eight upland streams situated at Llyn Brianne and Plymlimon in mid-Wales. Hugh's primary work involved using leaf litter bags (pictured left) to quantify the role macroinvertebrates play in this essential ecosystem service and how planting tree species such as oak can enhance instream biodiversity and ecosystems services throughout Great Britain.

Future work will involve experiments examining the role of biodiversity in the regulation of nitrogen (summer 2013) and carbon (summer 2014) in upland streams.

Hugh is also examining several long-term datasets (e.g. [Llyn Brianne](#) pictured right) held at Cardiff University in order to assess the resilience of macroinvertebrate populations and associated ecosystem service provision over the past 30 years in upland Wales.

For more information about Hugh check out:
[Twitter](#) [Cardiff Uni](#) [Google Scholar](#) [Scopus](#) [LinkedIn](#)



Llyn Brianne reservoir in upland mid-Wales