

Summer

Edition 6 – June 2014

Duress Gazette

Headlines – in full flow!

Duress is now in the last of its 3 years and the team are starting to integrate the rich data sets collected over the past two years (and more) to address our overarching hypothesis: *Biodiversity is central to the sustainable delivery of upland river ecosystem services under changing land-use and climate.*

Our new experimental streams – possibly the first such cascading streams in the world - are now up and flowing - thanks to brilliant work by the contractors, goodwill from the land owners and land managers, and huge help from NRW. Experiments are already in progress, and NRW Chief Emyr Roberts dropped by to see the 'Cascades' in May.



The Llyn Brianne 'Cascades' : The Davies, Hanwell, and Carpenter

Almost all the Duress team attended the second annual BESS meeting was in York in April for an excellent couple of days catching up with the other consortia, despite coming a valiant second in the 'Battle of the Bands' (<http://goo.gl/n8WhFL>)! There was lots of eNeRGy from the NRG group – our Next Generation Researchers – who are planning a conference in the Autumn: <http://www.nrgbess.net/>.

What's up DOC...?

- It was a huge job but three of our four planned cascading experimental streams are now built, flowing and ready for next phase of experiments in July. We'll be manipulating DOC concentrations to mimic land use and climate change effects of peat discharge to assess how stream biofilms might modify and reduce downstream export. The fourth channel is planned for constructing in the autumn.
- The Davies, Hanwell and Carpenter cascades - named after local people who were crucial to their construction - were unveiled on the 23rd May as part of a launch event attended by our Brianne friends and neighbours.

Getting the best value...

- WP5, our valuation package, has now opened its account. In it, we'll be assessing the values attributed to the ecosystem services by different public groups. Using results from work packages 1-4, a questionnaire has been drafted for these focus group studies and covers all the key aspects of the

project (river birds; recreational fishing; protected fish; inverts; water clarity and colour; and health quality).

- Prof Mike Christie's WP5 team in Aberystwyth now includes Kyriaki Remoundou, Laura Evans and Ewa Siwicka – who will have more to report next quarter.

Que sera, sera...

- Work is currently taking place to downscale the four Duress scenarios of possible future land use to catchment level. Natalie Small (Cardiff) is using a filtering system incorporating expert knowledge and land cover maps to links the data to other work packages.
- A 'report card' is soon to be published showing the results of WP1 giving details of each of the scenarios and their impacts on Ecosystems and Services. Visualisations of each scenario are also being created for use in the valuation studies.

Spreading the word



We were delighted to welcome Dr Emyr Roberts, Chief of NRW, and colleagues to see the Cascades on May 23rd – shown here with Duress PI Isabelle Durance (centre). Emyr's visit coincided with our local launch and 'at home' event at the Tywi Bridge Inn.

The team has been busy presenting Duress including Hugh Feeley's Seminal Lecture at GMIT, Galway, Ireland, while Sian Griffiths and Mike Christie gave presentation at Institute of Fisheries Management annual conference in Cardiff.

Cardiff PhD students Marian Pye and Ifan Jams presented posters at Cardiff University's Welsh Language Scheme launch, where Sian Griffiths also gave a talk on the "Impact of climate change on valuable fish in Welsh rivers".



Steve Ormerod (Cardiff) appeared on BBC Countryfile to discuss dippers as urban pollutant indicators following he and Isabelle's important paper with Christy Morissey and colleagues: <http://onlinelibrary.wiley.com/doi/10.1002/etc.2555/abstract>

Steve and Ian Vaughan also had excellent coverage, including the BBC, HTV and Financial Times, for their co-paper showing how the clean up of urban river has increased resilience to climate change <http://onlinelibrary.wiley.com/doi/10.1111/gcb.12616/abstract>

We are still getting an amazing response online with our twitter account still growing at over 1160 followers and we have now had 14,357 views of our website! See www.nerc-duress.org or @duress_hq for all the latest Duress news.

In other news....

Congratulations to Project PI Isabelle Durance on her new position as Senior Lecturer at Cardiff University!