

Summer

2013

Duress Gazette

Up front...

Work-package 5 – on ecosystem service valuation – is now underway on schedule. A new PDRA will join Aberystwyth's Mike Christie in this work.

All the summer's sampling and survey work on birds, fish, invertebrates and water quality has been a huge success – aided by *genuine* summer weather: phew!

All 2013 samples from Llyn Brienne are now identified – giving Duress 34 years of data from these LTER streams in contrasting land use.

All samples from the resurvey of the Welsh Acid Waters sites – last surveyed in 1995 and 1985 – have also been identified giving us a geographically extensive view of long-term change across Wales.

BTO have resurveyed river birds species at the same 75 sites last surveyed in 1984 and 1995.



Fish surveying with Laura Evans (CU) and Dylan Roberts (GWCT)

Crystal balls...

- Following the scenario development workshop earlier this year, 10 key drivers of change (social, economic and technological) have been identified by Havard Prosser and the team, and these have been aggregated into specific scenarios for upland Wales to 2050
- The scenarios are now feeding into work packages 4 and 5, and we hope to make the drivers and scenarios available shortly.

Designed by experiment...

- The food web analysis is underway for our 20 intensively sampled sites. Quantitative samples are providing detailed data for biofilm, diatoms, invertebrates and fish.
- Molecular assessments of microbial communities are well underway and preliminary screenings show clear patterns across Wales.
- The microbial communities of sixty Welsh rivers across a range of Nitrate levels have been surveyed this summer to investigate nitrate-biota relationships in preparation for next summer N experiments.
- The water-quality stations continue to record data every 10 minutes from our 6 experimental streams at Brienne and Plynlimon

Going with the flow...

- Tim Jones (Lancaster) has begun modelling rainfall, flow and acidity using the short-term data.
- Data from the adjacent Irfon is now available to hindcast flows for Llyn Brianne to feed into WP3.
- A further £130,000 award from NERC is providing extra instrumentation for WP2 and 4.

A bit fishy...

- Laura Evans (Cardiff) has led this summer's fish survey alongside GWCT and NRW.
- In addition to fish density and biomass, samples were taken by the genetics team from Cardiff, and Guy Robinson (PHW) is looking at whether fish might carry *Cryptosporidium*.
- In contrast to last year, the main challenge this year was low flow, but all the surveying was completed on time at the end of July.
- Data from the 2012 fish survey is now processed and ready for storage.

The hits...

- The Duress website has had over 7000 hits and lots of new content, plus, there have been over 400 views of the decomposition experiment video and almost 1300 views of the DURESS video.
- For all the latest news, be sure to 'like' our Facebook page and join our 750 followers on Twitter!
- Welsh speakers - look out for our new video coming very soon...

Bells and whistles...

We have had two DURESS weddings to celebrate: Cardiff's Hugh Feeley married Eadoin in May and Imperial's Guy Woodward married his fiancé in July. Congratulations to you all!

Well done to Tim Jones who ran the London marathon in April for The Progressive Supranuclear Palsy Association. Please sponsor him if you can at: <http://www.justgiving.com/Tim-Jones02>

Cardiff's WP3 Lead, Steve Ormerod has been named chair of The Centre for Ecology & Hydrology (CEH) Science Development group - set up to advise CEH on its Science Strategy and on the quality of its science delivery.

Plus, a big thank you to our exceptional team of students and volunteers working with us over the summer on sample processing.

...stop press...

We've just heard that a joint €9 million bid to the EU – in which Cardiff is key partner – has been successful. The project will examine multiple stressor effects on river ecosystems and ecosystem services, and our contribution will use Duress as its main platform. More to follow...