

NEWS FROM THE ECT

SEPTEMBER 2018

New ECT Webpages Published!

ECT has just published three new webpages for long-term experiments on its register which include the very latest publications information. Check out the following new links and let us know what you think!

Moor House

Elan Valley Meadows

Lady Park Wood

Please get in contact if you have new information for the website or newsletter!











RainDrop – An LTE For Our Times

It has been a year of extremes at RainDrop, a climate change study on calcareous grassland at Wytham, Oxford, where species richness, diversity and productivity resulting from a +/- 50% change in precipitation is quantified relative to control plots. In July the annual species survey and first of two biomass harvests for this year were undertaken by Oxford post-doc Emma Jardine. Despite the 'Beast from the East' delaying spring, a wet then sunny spring resulted in Emma clipping and sorting the largest amount of biomass on each plot (for any harvest) since the experiment began (2016). The photo above illustrates the extreme effect of the heatwave on site, with limited plant growth. The second biomass harvest of the year, due at the end of September, looks likely to be the smallest yet. The extreme weather of 2018 will likely result in treatment effects that differ in strength to those observed in other years, highlighting how important it is that this is a longterm experiment.

More information



A First at Glen Finglas LTE – Using Camera Traps

As well as the usual bird surveying and recording vegetation height and structure, 2018 saw the Glen Finglas team's first attempt at using camera traps to look at the relationship between meadow pipit foraging and the vegetation. Researchers are trying to tease out the differences between availability of invertebrates, their quality as diet and how this depends on vegetation quality and structure. It does mean processing lots of pictures and chemical analysis on invertebrates and plants, so results will take a while to emerge. However, the camera traps have revealed а somewhat unexpected visitor to the plots - black grouse! The replacement of the fencing is "complete", though the sheep are consummate escape artists and constant vigilance is required to stop up holes they make under the fences. The drought has meant they have been removed for a little while normal Scottish weather resumes!

More information

LONG-TERM EXPERIMENTS FOREVER!

ECT's Tenth Anniversary Celebration at BES 2018

A gentle reminder that ECT is marking its 10th year of existence with a unique <u>interactive</u> thematic session at the BES2018 annual meeting in



Birmingham from 16-19 December. The session is titled *Long-term Experiments Forever – Unique Challenges and Opportunities* and will feature seven talks followed by a 45-minute panel discussion. The keynote speaker will be Bridget Emmett from CEH Bangor who will discuss the effects of long-term drought and warming on ecosystem processes.

Register for the session as part of your overall BES2018 registration.

Register here



LTEs as Platforms: A Case Study at Moor House

Grazing Bioindicators

Althea Davies from St Andrews University proves that long-term experiments can provide unexpected opportunities for new research. She has recently used the four peat moorland plots at Moor House to assess how well the abundance of spores from coprophilous (dung-loving) fungi reflects the experimental grazing treatments. Her aim is to develop a quantitative proxy for grazing that can be used over multi-decadal to millennial timescales to better understand when and how large herbivores drive changes in vegetation composition in peatlands. The results indicate that dung fungal spores are consistently more abundant than pollen indicators of grazing and therefore potentially provide a stronger proxy for herbivory. For more on dung fungi signals, contact Althea directly. More information





Please stay in contact!