





POST-FIRE PEATLAND RESTORATION

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POST-FIRE ECOSYSTEM RESTORATION

Wildfires are increasing across the globe. In a timeframe of just a few days or weeks, carbon that has been accumulated over centuries is lost to the atmosphere. Additionally, the fire has altered physical, biogeochemical and biological (i.e. microbial communities, seedbank) conditions in the peat. As a result, natural recovery of these systems including their carbon sink function is very slow.

In this project we make use of mesocosm that have been extracted at the Saddleworth moor (Pennines, UK) which has burned last year. You will contribute to work that underpins the work of PhD student Harry Shepherd (University of Southampton) by studying if we can expedite ecosystem recovery by 'seeding' post-fire peat with 'microbial inoculates'.

You will gain skills in gas flux measurements, soil ecology, plant ecophysiology measurements, biogeochemistry, microbial ecology, and multivariate statistics.

Work is mainly situated at our lab and the experimental garden, but fieldwork in burned peatlands (e.g. UK, Sweden) is possible.