# Launch Event at wildfire@manchester

## Wildfire carbon budgets

Dr Matt Davies (Glasgow)

wildfire@manchester is new series of knowledge exchange events on UK wildfires, funded by the Natural Environment Research Council. It is part of Julia McMorrow's NERC Knowledge Exchange Fellowship and associated Knowledge for Wildfire (KfWf) project. Both are based in Geography, in the School of Environment and Development at the University of Manchester.

Matt Davies (Glasgow) is a Lecturer in Environmental Stewardship at the University of Glasgow's School of Interdisciplinary Studies in Dumfries. His research is in fire science and fire ecology. Matt will present early results from a NERC-funded project on the impact of severe wildfires, such as those of spring 2011, on the carbon dynamics of moorlands (further details in the abstract below).

#### Who should attend?

Practitioners, policy-makers and academics.

To attend, please email debra.whitehead@manchester.ac.uk

### **Programme**

3:30 'Wildfire carbon budgets', Dr Matt Davies (Lecturer in Environmental Stewardship, University of Glasgow).

Hosted jointly by KfWf and Geography

5:00 Informal reception hosted by KfWf to celebrate the launch of the project. Welcome by Prof Martin Evans (Geography) and Simon Thorp (Vice Chair England and Wales Wildfire Forum; Director The Heather Trust, KfWf steering group) Paul Hedley (Assistant Chief Fire Officer, Northumberland Fire and Rescue Service). Introduction to KfWf project by Julia McMorrow (NERC KE Fellow).

Wine and soft drinks will be available.

## Wildfire carbon budgets

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#### **ABSTRACT**

Fire severity is known to vary with burning conditions but currently little data exists for heather moorlands. We adapted the Composite Burn Index to assess the severity of wildfires that burnt in spring 2011 and 2012. Fire severity varied substantially within and between wildfires whilst above-ground fuel consumption, and thus carbon emissions, appear to be greater than for prescribed burns. Our results have substantial implications for how carbon emissions following wildfire should be accounted for in national greenhouse gas inventories and when making land-management decisions. On-going monitoring of gaseous carbon fluxes and vegetation regeneration in burnt and unburnt plots will provide further information about the longer term effects of variation in wildfire severity.