Fire Interdisciplinary Research on Ecosystem Services: fire and climate change in UK moorlands and heaths (FIRES)

SEMINAR 2

The impact of wildfire on ecosystem services: relationships between wildfire, climate change and people

The University of Manchester, 24th June 2008

Session 1:
When, where and why do wildfires occur in the UK?

Rapporteur: James Rowson (Durham University)

Chair: Simon Thorp (Heather Trust)
Keynote: Mark Jones (Essex Country Fire and Rescue Service)
Responses: National Parks, Sean Prendergast (Peak District National Park Ranger Service); Heathlands, Andy Elliot (Dorset County Council); Land Management: Michael Bruce (Eurofire).

Redefining land as property within the legal system was a theme raised several times within the discussion. This would allow prosecution of persistent offenders who are thought to cause a disproportionate amount of wildfire events. Combining a tougher legal system with an education program aimed at schools and the general population was thought to reduce wildfire events and an example quoted was a 62% reduction in wildfires over a three year period in Dorset. Conversely, excluding the general population from an area of high potential wildfire was thought to contribute little to reducing wildfire events as persistent offenders would ignore an exclusion order and a well educated population was thought to provide an effective early warning system. A wide scale education scheme with an increase in media awareness of high wildfire risk days, similar to a pollen count on TV or radio, would potentially reduce the risk of verge fires from cigarette butts thrown from cars.

Concern was raised about the introduction of the new National Incident Recording System, suggesting that the data collected would lead to inaccuracies since Fire Service personnel were not qualified in accurately determining first ignition points or specific vegetation types. Time restraints on the Fire Service could potentially reduce its effectiveness by causing it to be bogged down by paper work. A scheme in Dorset used 12 rangers to record wildfire events, actively seeking out wildfire sites which are often not recorded such as less than 1 m$^2$ events or self extinguishing events. Data sources were from aerial photographs, remote sensing and ground truthing.

Coordination between the Fire Service and land managers was raised as a potential method for accurately fighting fires as land owners have local knowledge of heath and moorland fires and skills of fire control which could be utilised by the local Fire Service. A need was expressed for plans to be established prior to a wildfire event, similar to fire plans for houses which are open to the public, and combined with an ecosystem habitat classification. It was felt that a national scheme could not be applied as different counties had different requirements; for example, what would or might work in Essex would not necessarily work in Derby.
Ecosystem classification of a site prior to a wildfire event could lead to a greater control of wildfire risk, with sensitive ecosystems receiving greater attention than sites where little ecosystem damage would occur; for instance, a spring grassland fire is less prone to damage than a woodland or herb rich cliff ledges. Season would also be a consideration as the same wildfire occurring during autumn would potentially cause greater ecosystem damage than a spring event. Mapping areas with regard to fire severity rather than aerial extent was considered more important.