

Signposting NERC-funded research on vegetation fire for EWWF

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Aim

To develop an 'Who does What' online resource of UK vegetation fire researchers.

Context

- A resource was needed to help signpost England and Wales Wildfire Forum (EWWF) and other stakeholders to relevant UK-based vegetation fire researchers, especially after the Knowledge for Wildfire (KfWf) project finishes in Sep 2016
- Built on Prof. John Dold's 2012 survey of 31 researchers
- Funding obtained from the Natural Environment Research Council (NERC), 04/04/15 – 07/09/15 to produce an online resource for the KfWf website, www.kfwf.org.uk
- Two deliverables: (i) a 'Who does What' spreadsheet of UK-based researchers who work on different aspects of vegetation fire; (ii) interactive map.

Method

- Desk survey of similar online resources. Webmaster consulted on technical issues
- Two rounds of EWWF consultation
- Two rounds of researcher consultation, based on John Dold's 2012 survey and the KfWf contact list. Snowballing process; asked researchers to pass it onto others.
- Analysis of feedback after each round of consultation

Envirobase .info

Work detail Export to... Excel PDF 20%

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

Short title: FIREs

Id: RES150

Lead research org: University of Manchester (The), School of Environment and Development

Duration: 01 Sep 2007 to 31 Aug 2009

Funder's Id: G05-496-26-0039

Data provider: ESRC

Summary: Seminars organised by University of Manchester researchers are influencing the UK's first wildfire management plans. The seminars brought together researchers with landowners and fire services to help tackle wildfires more effectively.

Objectives:

Aims: - To build capacity for inter-disciplinary research on fire and its impacts on ecosystem services of UK heaths and moorlands; - To establish a cross-cutting inter-disciplinary research agenda on the relationships between ecosystem services, managed fire and wildfire in UK heaths and moorlands, especially implications of increased wildfire risk under climate change scenarios; - To incorporate the needs of policy makers, moorland managers and other stakeholders, facilitate knowledge transfer to policy makers and contribute to adaptive management response. **Objectives:** 1. To facilitate dialogue between participants on three levels: (i) socio-economic, environmental and physical scientists; (ii) researchers, academics (international and UK) and postgraduate students; (iii) and researchers, stakeholders and policy-makers. 2. To identify the ecosystem services of UK heaths and moorlands, assess the role of managed fire in maintaining them and the costs and benefits of reductions in prescribed burning. 3. To assess the threats to ecosystem services posed by wildfire, including future threat from climate change. 4. To evaluate the suitability for the UK of wildfire modelling tools, including identifying data needs and implications for policy. 5. To identify alternative strategies for managing wildfire risk, evaluate their relative costs and benefits for ecosystem services, and identify the political and institutional policy drivers. 6. To disseminate findings and define an agenda for further cross-disciplinary research to form the basis for future research grant applications.

Description: Wildfires can be a serious problem for much of the UK countryside but, until recently, they have been largely ignored by government policy. Now, a seminar series run by researchers at the University of Manchester has encouraged the National Trust to create two wildfire management plans for the Peak District. Government departments, including the Cabinet Office, have also begun to show an interest in wildfire monitoring and reporting. 'Locally, the awareness is very high,' says Julia McMorrow, a Senior Lecturer at the University of Manchester who led the seminar project, 'but I think nationally it wasn't really on the agenda.' The FIREs (Fire Interdisciplinary Research on Ecosystem Services) seminar series, which took place in 2008/09, brought together academics, landowners, fire and rescue services (including local helicopter pilots), policy-makers, and international experts in fire management. McMorrow notes that this was 'the first time the Fire and Rescue Services had been brought into the debate. The seminars also helped McMorrow and colleagues develop a network of contacts to build capacity in the area of research, particularly amongst early-career researchers and practitioners. Wildfires often occur in largely inaccessible areas of grasslands, heaths and moorlands across the UK. Since 1970 there have been around 400 wildfires in the Peak District National Park alone. They are a natural part of many ecosystems, but severe fires can cause substantial damage to ecosystem services. This includes increased carbon emissions (particularly if the fire burns into peat soil and releases carbon stored there), biodiversity loss, reduced water quality as pollutants such as heavy metals are released from peat, loss of livelihoods, and a negative impact on tourism and recreation. Wildfires tend to happen in clusters at certain times of year and in some years more than others. For example, there

Figure 1: Example of an Envirobase project page

- Data mining of Envirobase (<http://www.envirobase.info/>) for project and researcher information (Figure 1). Provided quality control for projects, as all listings were funded by UK Research Councils or Government agencies and were recognised by the Living With Environmental Change (LWEC) partnership.
- KfWf steering group consultation on final version of 'Who does What' database and webpage.

'Who does What' UK researcher database on vegetation fire by Knowledge for Wildfire (KfWf)

Note: NERC: UK-funded project. Listings in black indicate the researcher has provided their details. Red questionmark indicates unconfirmed information collected from the public domain. (Disclaimer as of 09/10/2015)

CONTACT DETAILS		RESEARCH TOPICS: (1) indicates a main research interest; (2) is a secondary interest																		PROJECT INFORMATION							
Researcher's name	University	University/Post Office Address	University Email	Government funding of research	Researcher's role	Fire ecology	Fire management	Fire risk	Fire prevention	Fire suppression	Fire impact	Fire history	Fire policy	Fire science	Fire services	Fire safety	Fire statistics	Fire training	Fire awareness	Fire education	Fire communication	Fire research	Fire projects	Other projects	Other projects	Other projects	
Paul Abernethy	Manchester Metropolitan University	1.10.100	p.bernethy@mmu.ac.uk		Academic	1																					
James Allen	University of Manchester	1.10.100	James.Allen@man.ac.uk		Academic																						
Katherine Allen	University of Liverpool	1.10.100	k.a1@liverpool.ac.uk		Academic	1																					
Stephania Armitage	University of Manchester	1.10.100	s.armitage@man.ac.uk		Academic																						
Richard Arnold	University of Suffolk	1.10.100	r.arnold@suffolk.ac.uk		Academic	2																					
Jonathan Ayres	University of Manchester	1.10.100	Jonathan.Ayres@manchester.ac.uk		Academic																						
Abdulbasit Badi	University of Salford	1.10.100	a.badi@salford.ac.uk		Academic	2																					
Janis Balfanz	University of Leicester	1.10.100	jb1@le.ac.uk		Academic																						
Oliver Bellcher	University of Exeter	1.10.100	o.bellcher@ex.ac.uk		Academic	2																					
Lee Bellver	Queen Mary University of London	1.10.100	l.bellver@qmul.ac.uk		Academic																						
Will Blake	Plymouth University	1.10.100	w.blake@plymouth.ac.uk		Academic	2																					
Andrew Blundell	University of Leeds	1.10.100	a.blundell@leeds.ac.uk		Academic	2																					

Figure 2. Prototype of 'who does what' UK-based researchers database on vegetation fire by KfWf as featured on the website. It is available for download from the Knowledge for Wildfire website <http://www.kfwf.org.uk/researchersdatabase/>

'Who does What' UK fire researchers database

- Spreadsheet of 73 UK and 2 Eire-based researchers working on vegetation fire, listed against their specialist topics (Figure 2).
- Contact information: University, email, link to their webpage.
- Project information; links to relevant Envirobase projects and other project web pages supplied by researchers
- Downloadable as searchable Excel file from KfWf website

Researchers Database

Download 'Who does What' UK researcher database on vegetation fire (MS Excel 2460KB)

High Coe

1 of 9

High Coe
Institution: University of Manchester
Email: hugh.coe@manchester.ac.uk
http://www.manchester.ac.uk/research

Specialty (1) Primary (2) Secondary (7) Unconfirmed

- Experimental Burns: Yes (1)
- Combustion: Yes (2)
- Fire Ecology: Yes (1)

Figure 3: Interactive map with a pop-up window of researchers topics and contact details. The arrowhead at top of pop-up window is used to access other researchers at that University

Interactive map

- Map (Figure 3) links to a postcode field in the spreadsheet.
- Click on a highlighted location to open a pop-up window showing the specialisms and contact details of researchers
- Zoom in and click arrow at top of pop-up window to access other researchers at that University
- Map and spreadsheet both available from: <http://www.kfwf.org.uk/researchersdatabase/> (Figures 3 & 4)

How NERC science can help

NERC science can assist wildfire management by improving our understanding of, for instance:

- How climate change may change wildfire frequency and intensity, and how fire affects climate
- How past fire regimes were related to climate and land management
- How wildfires affect air quality
- How wildfire affect carbon budgets
- How fire ecology explains the complex relationships between fire, vegetation, soil, climate and people, including how managed fire and wildfire affect biodiversity
- How remote sensing from satellites and aircraft can be used to detect where and when fires occur, fire intensity, and the severity of their impact on soil and vegetation

NERC has invested approximately £4 million in fire-related research, much of it overseas. KfWf aims to show how we can learn from this, including increased research in other countries.

We also aim to show where new research is needed for the UK. The FIREs seminar series policy brief (PDF, 200KB) identifies knowledge gaps for the UK. New research is beginning to fill these gaps, but many are still current. KfWf is working to facilitate new partnerships research in these areas.

Benefits of project

For end-users

- Access to NERC-funded science and expertise
- Opportunities to influence the research agenda
- Add value to Incident Recording System (IRS) and other user data

For researchers

- Benefit from end-user expertise and data
- Increase the impact of your research
- Improve the evidence base for management, policy making and funding applications.

For funds

- Links into other networks
- Build partnerships for funding applications

Figure 4. 'How NERC science can help' webpage with link to the 'Who does what' database of UK-based vegetation fire researchers.

Challenges

- A one-off, snap-shot in time; some unconfirmed data and omissions due to timing and short duration of project.
- Send us your feedback. Database may be updated if future funding is available.
- Data after 31/01/2015 is not included on Envirobase. It is now an archived resource
- Interoperability on different platforms and browsers.

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