

Wildfire in the UK: status and some key issues

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Do we have wildfires fires in the UK?...

International Association of Wildland Fire, 2nd Human Dimensions of Wildland
Fire Conference, San Antonio, Texas, 27-29 April 2010

'When the conditions are
supportive, WF has a
significant impact'
*[Northumberland Fire and
Rescue Service]*

UK has 3M ha of peat. Peat fires
in Peak District National Park of
up to 8km² and 30 days



(b)



(a)



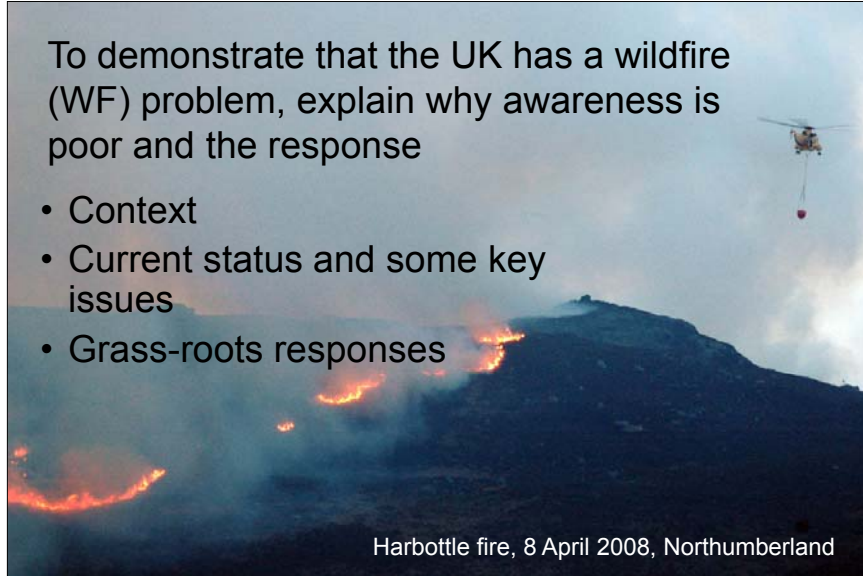
(c)

Photo credits: (a) Andy Newman, West Yorkshire FRS; (b) Peak District National Park Fire Operations Group.
(c) Chris Ruddy, Pennine Helicopters

Aim and structure

To demonstrate that the UK has a wildfire (WF) problem, explain why awareness is poor and the response

- Context
- Current status and some key issues
- Grass-roots responses



Harbottle fire, 8 April 2008, Northumberland

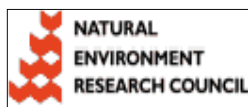
Context

FIRES seminar series

Fire Interdisciplinary Research on Ecosystem Services: Fire and climate change in UK moorlands and heaths

- 4 residential seminars, '07-'09
- Cross-disciplinary
- >50% participants were practitioners
- Cross-sector: fire responders, land managers, government agencies, academics

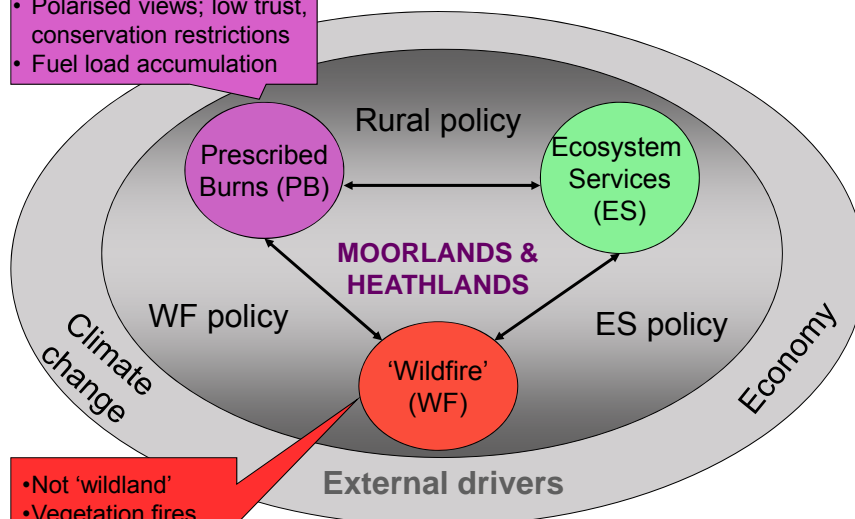
Policy Brief
Key messages
Knowledge gaps
Policy recommendations



www.fires-seminars.org.uk

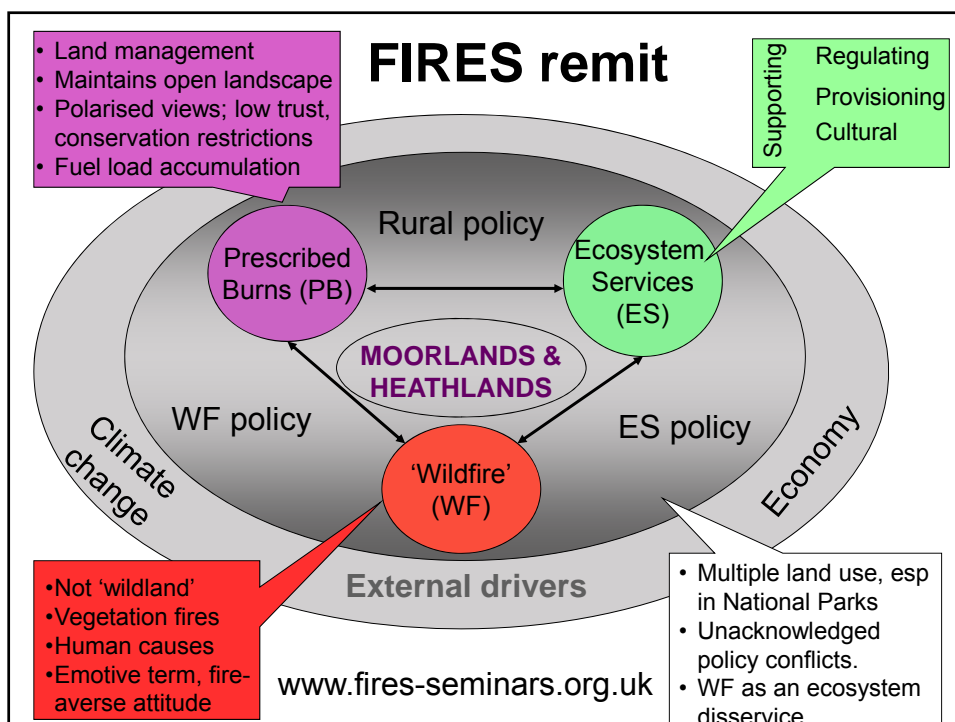
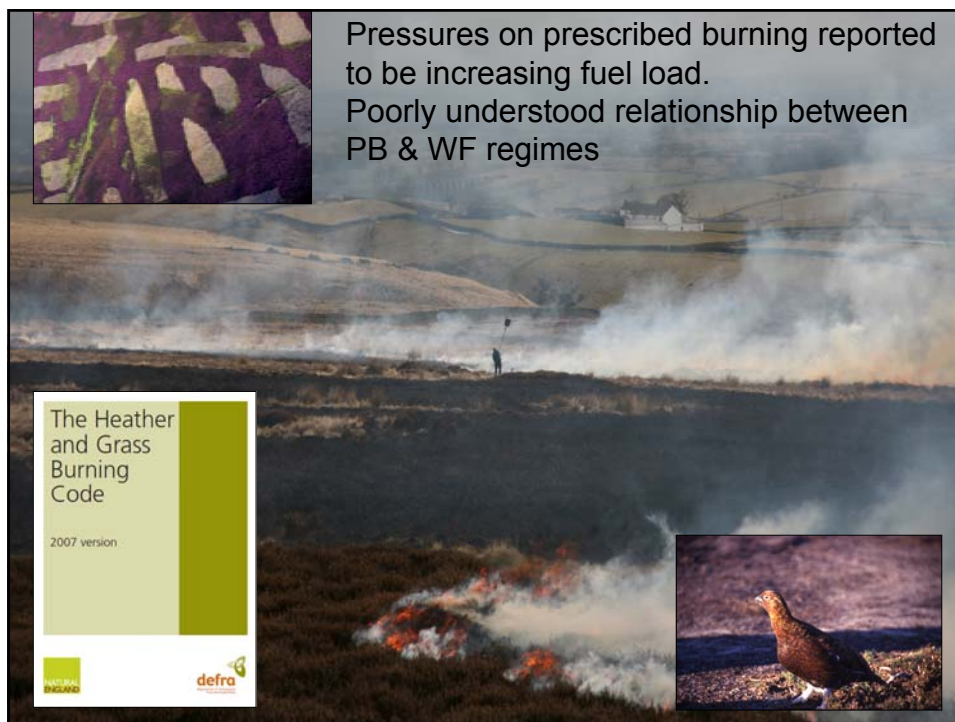
- Land management
- Maintains open landscape
- Polarised views; low trust, conservation restrictions
- Fuel load accumulation

FIRES remit



- Not 'wildland'
- Vegetation fires
- Human causes
- Emotive term, fire-averse attitude

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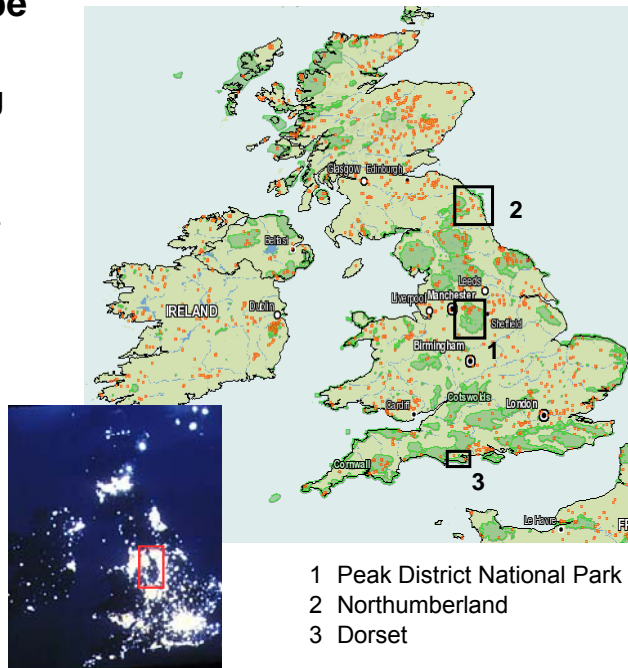


Location and type

2 types:

- Moorland, including peat fires; remote access & limited water supplies. e.g. Scotland, Northumberland. Peak District,
- WUI fires; grass, heathland, gorse, e.g. Dorset
- Closure of Access Land at times of high fire risk

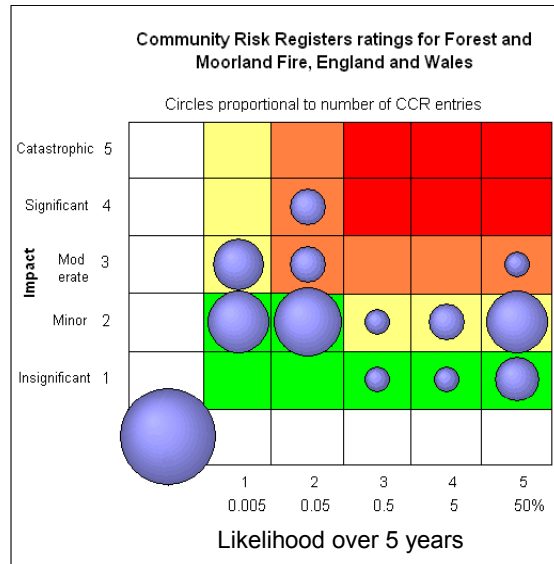
MODIS-detected fires 1 Jan 2003 – 29 March 2010



Current status and some issues

Status of wildfire in the UK

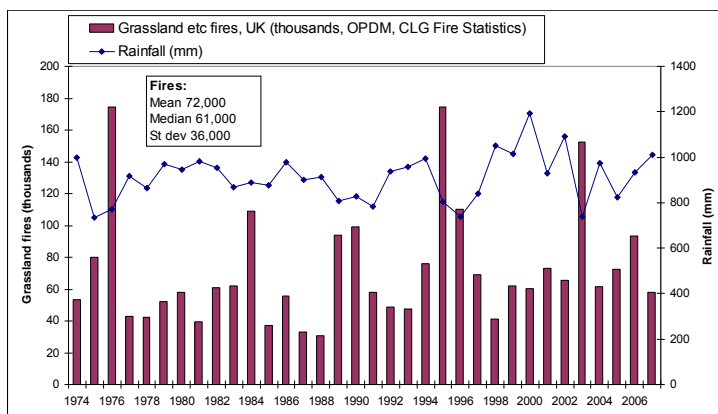
- Low awareness, politically unimportant relative to flood. Not on National Risk Register
- Identified on 28 of 41 Community Risk Registers
- *Likelihood* low; 5 year term is short relative to frequency of severe fires and poor database
- *Impact* minor; few fatalities or illnesses, little structural damage. But ES not classed as 'property'



• Medium – low relative risk

Frequency and timing issue

In spring and summer droughts, more numerous & severe fires
→ pressure to manage the risk



Timing of fire season varies:

- spring & summer,
- one
- none

- But frequency < staff turnover & 5 yr political time scale. In wet yrs → awareness ↓ and fuel load ↑
- Database also too poor to calculate likelihood reliably....

Evidence issue – nationally poor database

No clear UK-wide picture of the WF problem, 'Catch-22'

Poor frequency & impact statistics → problem unrecognised
→ no need to improve data

- Spatially fragmented: >40 FRS brigades. Moorlands straddle several brigades.
- Most vegetation fires are 'secondary fires' (<5 appliances), so reported to lower standard
- Poor geo-location data hinders spatial analysis. Call-out point, not fire ground
- Improvements expected since roll-out of Incident Recording System (IRS), April 2009

Narrow definition of property

Damage to most ecosystem services is poorly recognised, recorded and costed:

- Extend definition of property beyond buildings.
- Will carbon capture (e.g. moorland restoration) become a costed environmental asset?
- Few robust cost-benefit studies, where 'avoided costs' inc suppression and restoration are offset against cost of WF management

Some other issues

Fire-fighter safety

Urban/structural bias in training and equipment. Poor understanding of vegetation fire behaviour; 'chasing the flames'. Out-dated manuals. Better training required.



Resilience challenges for FRS; off-site impacts.

Opportunity costs of reduced cover for urban areas,

Grass-root responses

Advisory groups

- *Scottish Wildfire Forum*
- *English Wildfire Forum*

Non-statutory; Fire Services, land managers, government agencies, academics

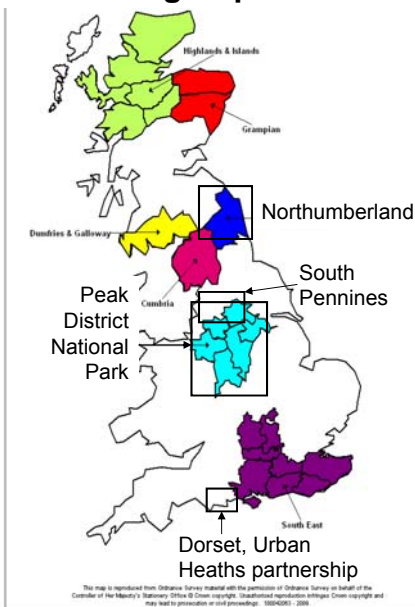
Set up after 2003 and 2006 fires

To provide advice on policies and strategies to minimise rural fires

Partnership working encouraged in IRMP Policy Guidance on Wildfire, 2008

Map credit: Trevor Johnson, SWF

Partnership working: Local fire groups



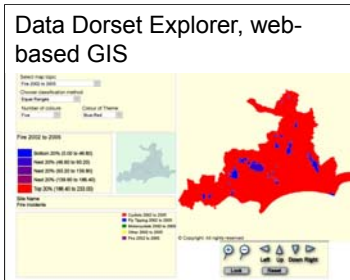
Peak District National Park (PDNP) Fire Operations Group (FOG)

- First local fire group, established 1996
- National Park, 6 FRS, landowners
- Compatible equipment, joint training exercises, fire plans, etc



Dorset Urban Heaths Partnership

- WUI gorse and heather fires.
- 10 partners; conservation bodies, FRS, Police, Council, etc.
- EU Natura LIFE project. Now funded £1M pa by planning fees, £1719/new house within 400m-5km of a Natura heathland
- Co-training. Site-specific risk profiles. Fuel reduction. Patrols. School visits. Rangers advise at fires, record data, restore sites.
- Reduced heathland fires by 62%. UK 46% increase. Saved FRS £0.5M pa



Acknowledgement; Andy Elliott, Dorset County Council

Summary

- The UK has wildfires but low awareness of the risk
- Because: severe fires are infrequent & unpredictable relative to staff turnover and political cycle; poor evidence base; narrow definition of property; and few good costing studies.
- Unconfirmed fuel load issue, due to changes in rural economy, including pressures on prescribed burning
- FRS urban bias creates major safety & resilience concerns
- Being addressed by partnership working



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Thank you for listening.

**Hope to see you at
Wildfire 2011, Peak District, UK!**

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Photo credit: Chris Ruddy, Pennine Helicopters