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Toward a UK fire danger rating system: Understanding fuels, fire behaviour, and impacts

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Wildfires in temperate regions like the UK can cause major impacts for ecosystems, society and human health and wellbeing. Under changing climate and land use patterns it is therefore important to better understand how we can assess the danger posed by fires in the landscape. Major wildfire events in the UK over recent years have highlighted the risk posed by wildfires, and has led to recognition of wildfire as an environmental hazard in the UK National Risk Register.

Fire Danger Rating Systems (FDRS) are designed to assess the fuel and weather to provide estimates of flammability and likely fire behaviour under those conditions. These danger ratings can inform management decisions for land managers, direct resourcing plans for FRS teams, and feed into strategic planning for local and national governments. However, the UK does not yet have a fit-for-purpose FDRS and we lack the fundamental scientific and end-user understanding to predict effectively the likelihood, behaviour and impact of wildfire incidents in the UK at present and under future climate and land use scenarios.

This poster will present the outline and structure of a new NERC-funded, multi-institution, 4-year project that will develop the underpinning knowledge and tools to develop a UK FDRS. We are very keen to hear from the wildfire community about ways in which this work could help you with your activities and to link up with other projects.