Full details

All details held on the selected case study are shown below.

Went live on	Title	Reference
27 Oct 2009	Risk to woodlands and heathland from ramorum blight	SID0204

Synopsis

Through an interdisciplinary research project that draws on lessons from the past, scientists are assessing the impact of the spread of ramorum blight (so-called 'Sudden Oak Death') on woodlands, gardens and heaths in Britain.

Description

Defra, the Forestry Commission and devolved administrations in Scotland and Wales are seeking to control the spread of ramorum blight, which can damage and ultimately kill a variety of trees and shrubs. Defra has recently commissioned a team at Imperial College London to carry out an interdisciplinary research project to assess how it has been dealing with the UK outbreak.

The disease is sometimes (inaccurately) called 'Sudden Oak Death', following the destruction of millions of oak trees in the USA. In Britain, beech and non-native oaks such as Turkey oak and red oak are threatened, along with a number of other ornamental tree species and shrubs. Recently, heathland plants such as bilberries have also fallen victim so the threat has extended to other habitats. Trees are especially at risk when growing alongside rhododendrons, as these are one of the disease's principal hosts.

Dr Clive Potter, a geographer with interests in rural environmental policy, countryside change and bio-security, is working on the assessment alongside Dr Isobel Tomlinson and Dr Tom Harwood. Other members of the team include economists, biologists and plant pathologists.

Three decades ago, Dutch elm disease was responsible for the loss of over 30 million trees in the UK alone. Although a different disease from ramorum blight, there is much to be learned from the outbreak and policy decisions and practices at the time. A better understanding is helping assess the effectiveness of current control policies.

As part of a larger project, funded through the research councils' Rural Economy and Land Use (RELU) programme, the team are comparing past experience with threats to trees and woodland from tree disease epidemics. It has been investigating the lessons to be learned from Dutch elm disease by archival research and interviews with people involved with the outbreak. Through modelling and other techniques, the likely spread of ramorum blight has been predicted given the deployment of different control measures, such as restrictions on plant nurseries. The project has also considered the implications for the landscape, and the financial costs and responsibilities. Shortly (sometime in 2009), findings are to be presented to interested parties for their views on the manageability of a future widespread outbreak of the disease.

"We're well placed to take an independent look at government policy in this area as it fits well with the work we are already doing on Phytophthora ramorum and Phytophthora kernoviae," said Dr Clive Potter. "We know that some of the practices pursued in the 1970s inadvertently promoted the spread of Dutch elm disease. For example, felling diseased trees but then transporting the timber without removing the bark, enabled the pathogen to survive and move around the country very rapidly. So a review of the strategies being employed against these new woodland diseases is timely. It will enable us to bring experience from the past to bear and to evaluate the effectiveness of current policies."

RELU is a collaboration between the Economic and Social research Council (ESRC), the Biological Sciences Research Council (BBSRC) and the Natural Environment research Council (NERC). The Scottish Government and Defra are also providing funds.

Commenting on the impact of the project, Dr Joan Webber of Forest Research said, "We recognise that increasing global trade provides the pathways for organisms to move into new habitats and attack new hosts - Dutch elm disease and ramorum blight are examples of this process. Exploring the impact that newly introduced pathogens can have on our environment, as well how people perceive the threat they pose, is the key to managing these disease outbreaks and preventing new introductions in the future."

References and links	
Hyperlinks	1. Defra - Consultation on future management of risks from Phytophthora ramorum and Phytophthora kernoviae 2. Imperial College London - Dr Clive Potter 3. PlanetEarth online - British trees and shrubs face sudden death 4. RELU - Memory and Prediction in Tree Disease Control - Home 5. RELU - Lessons from Dutch Elm Disease in Assessing the Threat from Sudden Oak Death

Impacts	
Actual impacts	Policy, Industry, Practice
Key outputs	Computer model Policy change

Research and funding		
Funding type	Research Programme	
Funding partners	*£ Unknown*	BBSRC
	£ Unknown	EPSRC
	£ Unknown	NERC
	£ Unknown	Dept of Environment, Food and Rural Affairs
	£ Unknown	Scottish Government

Classification	
Science themes	Biodiversity
Science areas	Terrestrial
Policy areas	Biodiversity

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