

PRESS RELEASE

25 June 2009

City pupils use GPS to map heathland

Pupils from a Nottingham secondary school will use advanced GPS technology to help protect our unique habitats — and the plants and animals that make their home there — from the effects of climate change.

Year ten students from Hadden Park High School in Bilborough will map fragments of heathland at Sherwood Pines Forest Park as part of a research project run by The University of Nottingham for the national Open Air Laboratories (OPAL) network. The project aims to raise awareness of heathland — a unique but often overlooked environment. Sherwood Pines covers 1,173 hectares, which includes 69 hectares of heathland that occurs in about ten isolated patches.

Heathland is one of the rarest habitats in the world. The UK is home to just 60,000 hectares of lowland heathland, which is 20 per cent of the global total for this habitat. In Nottinghamshire we've lost 90 per cent of our heathlands since the 1920s. Heathlands are now a high priority for nature conservation and a large proportion of them have been designated Sites of Special Scientific Interest. Despite this a number of heathlands are still under threat from encroachment of trees and shrubs, nitrogen pollution and fragmentation.

The students will work on the site with Dr Amy Rogers from the University's School of Biology and Simon Roberts of the Institute of Engineering, Surveying and Space Geodesy. The 'Mapping for Climate Change' project will log these isolated 'islands' of heathland habitat. This information will then be used to develop 'habitat corridors' — passages of land via which the organisms living on the heathland can safely travel from one heathland site to another if threatened by the effects of climate change. The students will give their results to the Forestry Commission to aid conservation management decisions.

"The idea is to decide how best to link heathland fragments together with a corridor," said Dr Rogers. "Habitat corridors are becoming more important with the threat of climate change, as organisms will need to move to match environmental conditions. If they are trapped on isolated islands this won't be possible. As heathland is one of the rarest habitats we have it's even more important that species can move to new, safe homes."

"The Hadden Park students are very excited about visiting Sherwood pines," said teacher Gretchen Zoller. "Living in a city, field trips and other activities are very important for our developing biologists to see the variety of habitats that are out there."

"Working with the University provides our students with access to equipment that schools can only dream of and the benefits to the students are huge. Hopefully this project and others with Dr Rogers will encourage the Hadden Park science students to consider a career in conservation science."

The heathland at Sherwood Pines is home to nesting nightjars — and the moths and beetles that form their diet. The nightjar is on the 'red list' of Birds of Conservation Concern compiled by a partnership of conservation and wildlife organisations, including the RSPB, Game and Wildlife Conservation Trust and the British Trust for Ornithology. The habitat is also likely to be an important home to adders and common lizards, which would need to move along the ground to find new homes if their habitat was damaged.

OPAL has received a grant from the Big Lottery Fund and brings together universities and other agencies across the country, such as the Royal Parks, the Natural History Museum and the Environment Agency. The project is inspiring a new generation of nature lovers to spend more time outside understanding and enjoying the world around them.

Orchards, rivers, roadsides and woodlands are among the habitats that are being studied as part of OPAL across the UK. People are being encouraged to take part in national surveys collecting data on soils, water, air and climate. Projects will run until 2012, and information collected in the East Midlands will add to our knowledge of the UK's natural environments and biodiversity.

— Ends —

Notes to editors

The University of Nottingham is ranked in the UK's Top 10 and the World's Top 100 universities by the Shanghai Jiao Tong (SJTU) and Times Higher (THE) World University Rankings.

More than 90 per cent of research at The University of Nottingham is of international quality, according to RAE 2008, with almost 60 per cent of all research defined as 'world-leading' or 'internationally excellent'. Research Fortnight analysis of RAE 2008 ranks the University 7th in the UK by research power. In 27 subject areas, the University features in the UK Top Ten, with 14 of those in the Top Five.

The University provides innovative and top quality teaching, undertakes world-changing research, and attracts talented staff and students from 150 nations. Described by The Times as Britain's "only truly global university", it has invested continuously in award-winning campuses in the United Kingdom, China and Malaysia. Twice since 2003 its research and teaching academics have won Nobel Prizes. The University has won the Queen's Award for Enterprise in both 2006 (International Trade) and 2007 (Innovation — School of Pharmacy), and was named 'Entrepreneurial University of the Year' at the Times Higher Education Awards 2008.

Nottingham was designated as a Science City in 2005 in recognition of its rich scientific heritage, industrial base and role as a leading research centre. Nottingham has since embarked on a wide range of business, property, knowledge transfer and educational initiatives (www.science-city.co.uk) in order to build on its growing reputation as an international centre of scientific excellence. The University of Nottingham is a partner in *Nottingham: the Science City*.

The Open Air Laboratories (OPAL) network is a new nation-wide partnership initiative that will inspire communities to discover, enjoy and protect their local environments. It aims to create a new generation of nature-lovers by stimulating interest through local and national projects which are accessible, fun and relevant to anyone who wants to take part

OPAL will provide the skills and materials needed for the first community-led study of the world around us.

The Big Lottery Fund's Changing Spaces programme was launched in November 2005 to help communities enjoy and improve their local environments. The programme funds a range of activities from local food schemes and farmers markets, to education projects teaching people about the environment. Imperial College London (the leading OPAL partner) was awarded a **£11,760,783** Changing Spaces grant in August 2007

The Big Lottery Fund, the largest of the National Lottery good cause distributors, has been rolling out grants to health, education, environment and charitable causes across the UK since its inception in June 2004. It was

established by Parliament on 1 December 2006. Full details of the work of the Big Lottery Fund, its programmes and awards are available on the website: www.biglotteryfund.org.uk

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