



**British
Geological Survey**
NATURAL ENVIRONMENT RESEARCH COUNCIL

Applied geoscience for our
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PRESS RELEASE

3rd June 2009

Anglesey from Above

Scientists take to the skies to study the geology and environment of Anglesey and north west Gwynedd.

During two weeks in June 2009, the British Geological Survey will carry out a low level airborne survey of Anglesey and north west Gwynedd around Bangor and Caernarfon, North Wales. The aircraft used (shown below) will be a De Havilland Twin Otter with a distinctive red and white striped tail-plane and registration OH-KOG. It will fly along a regular series of lines 200 metres (656 ft) apart, oriented north-south and at a height no lower than 56 metres (185 ft) as it gathers information on the local geology and environment. The aircraft will be based at Caernarfon Airfield for the duration of the 2-week long survey.



Photo Caption: BGS scientists take to the skies to study the geology and environment of Anglesey using this distinctive De Havilland Twin Otter aircraft.

The most important measurements in this particular survey will be made with an electromagnetic system; this records variations of electrical conductivity in the shallow earth which may reflect land quality. The plane's other sensors measure magnetism, which can indicate rock type and structure, and natural gamma spectrometry, which reflects mainly the type and condition of the soils.

David Schofield, senior geologist at the British Geological Survey said: "*Anglesey has been the subject of geological controversy from the earliest days of the geological sciences. Some of the oldest rock in the British Isles, south of the Scottish Highlands are preserved on Anglesey and the island has long been considered by scientists as a 'test-bed' for understanding the processes by which the fundamental building blocks of southern Britain were assembled.*"

"The most recent geological survey was published in 1920, however significant advances in geological sciences and a large body of research carried out on the island have necessitated this new survey. Our mapping team will be using all the modern techniques available to bring the map up to a modern standard. Of these, the airborne survey will probably provide one of the most significant new datasets for interpreting the geology."

Anyone requiring further information about the project may contact the British Geological Survey Cardiff office on 02920 521 962 (08.30 to 17.30, Mon-Fri) or email enquiries@bgs.ac.uk or if calling out-of-hours on 0797 138 5730.

Ends

For further details or to arrange media interviews please contact:

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Notes for Editors

The survey aircraft will fly:

- In daylight hours between Mondays and Saturdays;
- Mostly in a north-south direction;
- At an altitude no lower than 56 metres (185 ft)
- Along lines spaced 200 metres (656 ft) apart
- At a speed of approximately 130 mph with a noise similar to that of a passing lorry

The British Geological Survey

The British Geological Survey (BGS), a component body of the Natural Environment Research Council (NERC), is the nation's principal supplier of objective, impartial and up-to-date geological expertise and information for decision making for governmental, commercial and individual users. The BGS maintains and develops the nation's understanding of its geology to improve policy making, enhance national wealth and reduce risk. It also collaborates with the national and international scientific community in carrying out research in strategic areas, including energy and natural resources, our vulnerability to environmental change and hazards, and our general knowledge of the Earth system. More about the BGS can be found at www.bgs.ac.uk.

HiRES (High-resolution airborne Resource and Environmental Survey of the UK)

High-resolution airborne geophysical surveys provide a rapid, cost-effective and non-invasive means of studying natural and artificial conditions of the near surface. They deliver key data for: monitoring and protecting the environment; developing environmental strategies and remediation plans; managing the sustainable development of land and natural resources; and targeting site investigations. Further information on the HiRES project can be found at: www.bgs.ac.uk/science/hires/home.html.