

# Technologies

Developing the tools for innovative environmental science



## World depth record broken

Scientists carrying out the first direct investigation of the distribution and behaviour of the deepest-living fishes have broken the world depth record for successfully operating an unmanned autonomous submersible.

On 12 July 2007, one of two submersibles specially built for the mission by engineers at OceanLab at the University of Aberdeen reached a depth of 10,015 metres in the Tonga Trench in the South Pacific Ocean. This is just shy of the deepest part of the ocean, the Challenger Deep, at 10,896m in the North Pacific.

The research, led by Monty Priede in the UK, is a collaboration between Oceanlab and the Universities of Tokyo, Japan and Tübingen, Germany and will continue in 2008.

Monty said, 'We were amazed to see swarms of fast-moving shrimps arriving at bait within five minutes at this extreme depth; life is much more active than we previously thought. We look forward to seeing videos of the fishes that must be living there.'

## New digital technology improves Countryside Survey

The Countryside Survey is a unique study or 'audit' of the natural resources of the UK's countryside, carried out at regular intervals since 1978 by the Centre for Ecology & Hydrology. New digital technology, used by scientists in the field to capture data, has meant that the latest Countryside Survey will publish its results 18 months early and save around £1.2 million.

For the first time, researchers digitally recorded all the species data and habitat mapping in the field, improving data quality and saving time and money. Results are due in late 2008.

