NATURAL ENVIRONMENT RESEARCH COUNCIL

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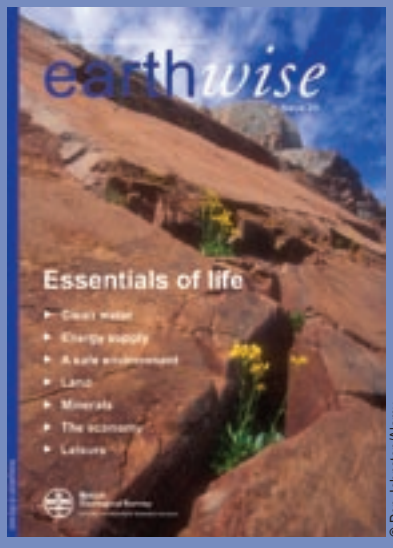

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Foreword

This issue of *Earthwise*, introduced by Dr Mick Lee, Director of Geology and Resources at the BGS, focuses on the essential, but often underappreciated, role of geology in our lives. This includes everything from the raw materials we use in our toothpaste, the places we build, the water we drink, the infrastructure we use for transport, to the countryside we farm and use for our weekend walks. In the following pages several of the BGS scientists have described how their work influences society and the everyday life of people in Britain. The focus on groundwater in Africa defines how important geological information is for the people of less developed countries, who increasingly have access to information through the internet and, like the more developed societies, are aware of the environmental consequences of their actions.

Linking up databases across the planet, intercalibrating long-term records and providing new records of how the Earth is changing are essential in understanding and communicating global change. Much of what we do in the BGS contributes to this dialogue with the wider community. Examples include our work in schools and the OneGeology project, which are featured in the *Newsline* section. However, the most difficult problem that earth scientists face is communicating and understanding the quantitative limits of our science. How well do we know the 3D subsurface models, how well defined are the geological boundaries, how fast will an aquifer recharge, how much of a trace component is absorbed from the soil into the human body? The public deserve to be given confidence limits to our scientific interpretations and this is one of our greatest challenges.

I hope the articles here provide the reader with food for thought and hopefully a little more understanding of the importance of what lies below their feet.

John N Ludden, Executive Director, BGS

Some of the research reported here is still in progress and may not yet have been peer-reviewed or published.