



**British  
Geological  
Survey**

## *Geology from a politician's perspective*

Allan Rogers MP

The impact of geology on the life of people in Great Britain is barely noticed. Yet there is very little that anyone does that is not in some way dependent on materials that are quarried, mined or pumped out of the ground. Everyone recognises the importance of metals and knows that the petrol in their car and the plastic package containing their lunchtime sandwiches are made from oil, but there are many other commonly used materials that are less obvious. Most of the paper in glossy magazines, for example is made with china clay from Cornwall; cat litter is the expanding clay, fullers' earth, quarried in Bedfordshire; the mineral rutile, titanium oxide, is present in paint; the pumice in your bathroom is an imported volcanic rock; an important component of detergents is derived from phosphate rock; powdered calcium carbonate (calcite in nature) is the filler in many pills and both calcium carbonate and china clay (kaolinite) are important ingredients of toothpaste.

Throughout history and prehistory the stages in the progress from cave dweller to city dweller have been marked by the discovery of new ways in which the Earth's resources can be used. The oldest

mines known in Britain are Neolithic flint mines in East Anglia. Copper mines near Llandudno are believed to have been working 3000 years ago, while the arrival of iron-age culture in Britain is marked by iron ore mines in Sussex. During the eighteenth and nineteenth centuries, at the height of the Industrial Revolution, Britain was the world's biggest producer of metals such as tin, copper and iron from our own mines. Now, the age of metalliferous mining is past, but the needs of a modern service-based economy make huge demands for industrial minerals to sustain the infrastructure of society: over 200 000 000 tonnes of crushed rock, sand and gravel are used each year for civil engineering projects along with 3 billion bricks and 11 million tonnes of cement.

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This sort of material consumption generates difficult political problems. A balance has to be struck between the need for the materials, the practicalities of materials substitution, re-use through recycling and the need to protect the environment. Powerful lobbies exist, fighting each cause and decisions have to be based on well informed cases. All participants in the debate need information and must be able to understand it, which is why I so strongly support the way in which the British Geological Survey is using its magazine, *Earthwise*, to bring information on geology into the public arena, written with the non-specialist in mind.

In this issue, the articles are entirely about the relevance of earth science to the community and show the way in which the BGS faces up to its responsibilities in the community. The exploitation of mineral deposits is covered, but this is a small part of the whole. In a time when global warming is bringing about climatic change, the prospects of drought in UK have to be faced and a knowledge of our groundwater

# The BGS in the community

resources, acquired through an understanding of the geology of the aquifers, is essential. The link between geology and health has only recently begun to be evaluated. Radon, known to be linked with lung cancer, is generated in rocks and the cause of several other diseases can be traced to variations in the chemical content of soils and bedrock, which affect our food and water.

Whether the community is concerned with the disposal of domestic waste or nuclear waste, with contaminated industrial land, the effect of old mines on housing, polluted drinking water or threats to property from natural subsidence and unstable land, geological information has to be taken into account. The British Geological Survey, as a publicly-funded organisation has the responsibility to gather this sort of information and make it available to the community at large. This issue of *Earthwise* is part of that process.

*Allan Rogers has been Labour Member of Parliament for Rhondda since 1983 and was a member of the European Parliament from 1979 to 1984 representing South East Wales. Before embarking on his parliamentary career he served for many years as a district or county councillor in South Wales. He has the distinction of being the only current Member of Parliament with a geology degree, having received a BSc Honours in that subject from University College, Swansea. He has practised as a geologist in the United Kingdom, Canada, United States of America and Australia and has also worked as a teacher and with the WEA.*

*Allan was born in Wales in 1932 and is married with four children. His political interests are varied and include health, education, energy, the environment, Europe and defence. He was Opposition Spokesman on Defence from 1987 to 1992 and Opposition Spokesman on Foreign Affairs from 1992 to 1994. He has been a member of the Intelligence and Security Committee since 1994. His personal interests include music and sport.*