

# The value of soil science



**The study of soil is a science in its own right. The objectives of soil science are to better understand how soils work so that society can derive value from the land now and sustainably into the future. Soil science is therefore of relevance to food and timber production, biodiversity conservation and recreation, wider aspects of environment, water and climate management and the complex issues of how we allocate land to the competing demands of our society for space. Soil science is also key to the rejuvenation of soils from contaminated land and their re-instatement on development and mineral extraction sites.**

: Much attention has been given in recent years to the value and  
 : wellbeing that society derives from the natural environment.  
 : The Millennium Ecosystem Assessment has been responsible  
 : for bringing the ecosystem services or natural value concept  
 : into common parlance. Society increasingly appreciates the  
 : value of soils in human wellbeing and survival, not simply for  
 : food and fibre production, but also in regulating the global  
 : climate, in water quality and availability, and in sustaining  
 : biodiversity above and below ground.

: Many, even the majority, of ecosystem services are founded  
 : wholly or in part on processes that take place in our Earth's  
 : surface layer, the soil. It is easy to think that the majority of life is  
 : above ground, but there is more life, both in terms of mass and  
 : diversity, in the ground beneath our feet than is visible above it.  
 : Healthy, functioning soil is an essential component of our  
 : planet's life support system.

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Professional soil scientists have made significant contributions to human wellbeing. Today's high crop yields are founded on past research into soil fertility and careful management of the relationship between the crop and the soil in which it is growing. The continued productivity of land, in parts of the world with high rainfall, is reliant on the findings of research into soil erosion and soil conservation practices that have emerged from this understanding. Current research into soil carbon dynamics will enable soils to contribute to future reductions in atmospheric carbon dioxide and thus climate warming.

The British Society of Soil Science exists to promote the study of soil and to foster a healthy community of soil scientists within the United Kingdom and wider Europe. Its professional arm, the Institute of Professional Soil Scientists, has been established to represent and promote the interests of soil science as a career and professional activity. The Institute considers that soil science should be conducted by appropriately and adequately qualified and experienced scientists and engineers. It has developed its Professional Competency in Soil Science Scheme, *Working with Soil*, to achieve a number of related objectives. We hope that the Scheme will assist organisations and individuals commissioning work involving aspects of soil science to find people with the appropriate qualifications and experience. In the longer term, the creation of a sustained market for professional soil scientists will attract more graduates to our science and ensure its growth. A larger community of soil scientists will hopefully ensure a sustainable future for our soil resources.

The institute provides an online searchable database of its members which is publicly accessible through their website:

[www.soilscientist.org/expert](http://www.soilscientist.org/expert)

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