## Skills and Knowledge Needed

## Knowledge

Biology
Chemistry
Mathematics
Education/Training
Computers & Electronics
Communications & Media
Geography
Physics

## **Work Styles**

Attention to Detail Integrity Initiative Dependability Independence Persistence Adaptability Innovation

#### Skills/Abilities

Science (rules & methods) Active Listening Critical Thinking

#### **Communication Skills**

Judgment & Decision Making Reading Comprehension Complex Problem Solving Active Learning Systems Analysis Writing Reasoning Observation



Learn more about careers in soil science at: www.soils.org/careers

### Sources/Career Sites

**USDA-NRCS** website:

http://soils.usda.gov/education/facts/careers.html

Soil Science Society of America

www.soils.org/careers | www.soils4teachers.org



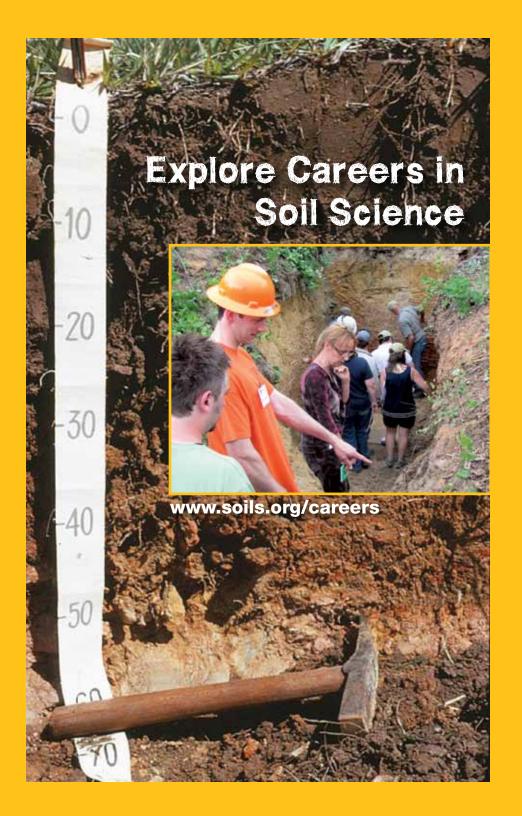
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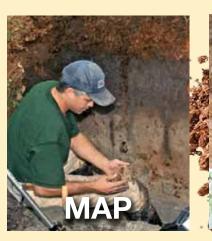
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Sherry S. Fulk-Bringman, Istockphoto.com/Kapsas.











Soil scientists explore and seek to understand the earth's land and water resources. Students of soil science learn to identify, interpret, and manage soils for agriculture, forestry, rangeland, ecosystems, urban uses, and mining and reclamation in an environmentally responsible way. Graduates can choose from a range of excellent professional opportunities and challenging careers.

## People who become soil scientists...

- have a love of science
- enjoy working outdoors
- have an enthusiasm for maps and relationships
- desire to be integral in environmental decisions related to soil conservation, land use, water quality, or waste management
- have a willingness to communicate their knowledge about soils and the environment to all aspects of our society

## Soil science . . .

- encompasses biology, ecology, and a variety of earth and other natural resource sciences.
- interfaces with geology and geography.
- focuses on understanding, managing, and improving land and water.

- uses chemistry, physics, microbiology, and mathematics, as well as high technology tools for soil exploration, analysis, data interpretation, and modeling of soil and landscape processes.
- integrates concerns for people, food production, and the environment.

### Soil scientists. . .

- bring science and technology to issues involving soil and water resources.
- are well versed in the natural sciences.
- play key roles in public and private decisions related to soil and water resources.
- are employed in the private sector with environmental and agricultural consulting firms.
- are employed with U.S. government and internation agencies.
- may attend graduate school in soil science or closely related environmental, natural resource, or agricultural sciences.

## Soil scientists may work on. . .

- conducting research in public and private research institutions
- managing soils for crop production, forest products and erosion control management.
- teaching in colleges and universities
- predicting the effect of land management options on natural resources
- helping to design hydrologic plans in suburban areas
- evaluating nutrient and water availability to crops
- managing soils for landscape design, mine reclamation, and site restoration
- regulating the use of land and soil resources by private and public interests

# Civilization itself rests upon the Soil.

**Thomas Jefferson**