



Soil Scientist

Soil Scientists study soil characteristics, map soil types, and investigate responses of soils under certain conditions. Soil Scientists study the chemical composition, structure, and properties of soil and of the chemical processes and transformations that they undergo. Some personal qualities of soil scientists include being practical, working well in a team and as an individual, analytical, strong communication, organizational and writing skills, strong planning and organizing skills, problem solver.



Inspiring Minds to Grow

Funded by the Department of Commerce and Economic Opportunity

career profile

Name: Hazel Gilliad
Job Title: Soil Scientist

Employer: Natural Resources Conservation Service

Education: BS, Texas A&M University: College Station

 Agriculture has always been part of my life. I grew up on a farm. I participated in 4-H and the National FFA Organization where I learned about leadership and setting goals. I earned my American FFA Degree and, while at Texas A & M, I was a member of the collegiate FFA. Studying agriculture in college just seemed natural.

 I work as a soil scientist for the Natural Resources Conservation Service. Basically, I study soil characteristics, map soil types, and determine use capabilities of soils. I study the responses of various soil types to fertilizers, tillage practices, and crop rotation. I provide information and recommendations to farmers and other landowners regarding the best use of

land and plant growth.

One of my special interests is sustainability and how soil erosion can be avoided or corrected. I conduct research on soils. I also budget for research work and provide reports in regard to trial/research progress. I'm on my own quite a bit, so I think it is important for someone considering this field as a career to be self-motivated.

 The best part of my job is helping landowners and farmers. It gives me a good feeling to help them solve a soil-related problem or when they adopt a practice that results in better yields and is beneficial to the environment.



Soil Scientist

overview



A **soil scientist** studies the chemical, physical, biological, and mineralogical composition of soils as they relate to plant growth.

suggested high school courses



[plant and soil science](#), earth science, biology, chemistry, mathematics, and computer science

experience needed



Participate on campus in labs and research trials when possible. Plan and implement a related Supervised Agricultural Experience (SAE) Program.

degree(s) required



A bachelor's degree is required. More research-oriented careers require a master's or doctorate degree.

potential employers



colleges and universities, conservation organizations, environmental organizations, governmental agencies, private companies, research firms

salary range



\$35,190 to \$86,910

employment outlook and trends



Employment for soil scientists is expected to grow about as fast as the **average** for all occupations.

professional organizations



American Society of Agronomy www.agronomy.org/

Soil Science Society of America www.soils.org/



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