# Challenging Careers in the Natural Resources Conservation Service









# A lot of people *talk* about protecting our Nation's natural resources.







# But talk doesn't get the job done. We at the U.S. Department of Agriculture's Natural Resources Conservation Service need people who are committed to action. People who want to apply their education and experience to making sure that all of us enjoy the benefits of productive soil, clean water, and everything else that comes from healthy natural resources.







You could be one of those people!

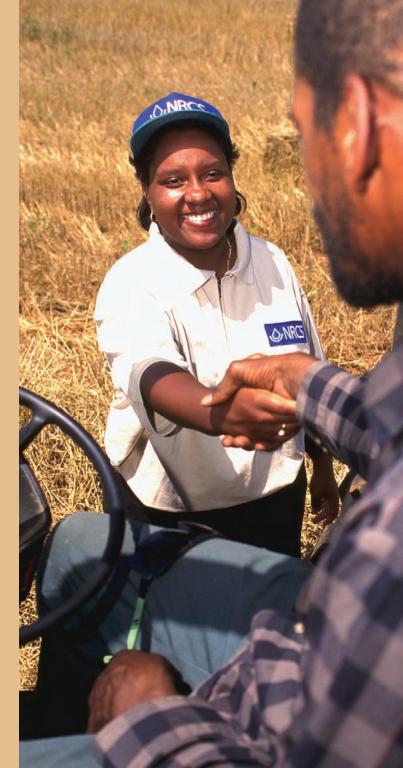
Before we get into the people and careers that make NRCS the Federal Government's conservation leader, here's some information for you about NRCS and what it means to America.

#### WHO WE ARE...

The NRCS came out of troubled times—the Dust Bowl days of the 1930s. Dust storms ravaged the Nation's farmland, stripping away millions of tons of topsoil. Huge dust clouds carried the soil hundreds of miles, all the way to the Atlantic Ocean. Since that time, NRCS has kept a commitment to protecting and conserving soil and other natural resources on America's private lands.

The NRCS is known worldwide for its accomplishments and innovations in conservation. The people of NRCS are recognized for their talent, dedication, and ingenuity in making the agency's programs work. Participation in NRCS' programs is voluntary—the people we serve want us with them as they take necessary steps to reduce erosion, protect wildlife, promote good land use, and other measures to preserve the Nation's natural resources for future generations.

At NRCS, we take pride in our partnerships. We work with local soil and water conservation districts to let people know how important it is to conserve natural resources...and, together, we work with them on how to do it.



### **Conservation Careers**

The NRCS offers career opportunities for folks who are still in college and for those who have already graduated. Here's an overview of some of those opportunities, along with information about what it takes to come on board...

#### SOIL CONSERVATIONIST



As an NRCS soil conservationist, you'll spend most of your time in the field working with farmers, ranchers, and other land users. You'll offer conservation planning and technical help to everyone from family farmers to local government officials. You'll suggest to them ways to conserve the soil, improve

water quality, manage nutrients, and protect and improve wildlife habitat.

You'll help teachers start outdoor laboratories for students. You'll give talks and present conservation demonstrations to clubs and organizations. You'll help people set local conservation priorities. You'll also provide outreach for NRCS programs, and plan, layout, design, and implement conservation practices.

**Qualifications:** A degree in a major field of study in soil conservation or a related agricultural or natural resource discipline, such as agronomy, soil science, forestry, biology, agricultural economics, agricultural education, or agricultural engineering. You need 30 semester hours in natural science or agriculture, including at least 12 semester hours in a combination of soils and crops or plant science. Of the 12, you need at least 3 semester hours in soils and 3 semester hours in crops or plant science.

#### SOIL CONSERVATION TECHNICIAN

Soil conservation technicians assist soil conservationists. As a soil conservation technician, your most important job is working on the land with farmers, ranchers, and others. You'll show them how to install conservation practices and oversee the quality of those practices.



You'll perform engineering surveys and design standard conservation practices such as waterways, terraces, and contour stripcropping systems. You'll make follow-up visits to check the progress and results of the practices and update the land user's conservation program.

**Qualifications:** Knowledge of farm or ranch operations. Education or work experience that makes you familiar with conservation practices is desirable.

#### SOIL SCIENTIST



As an NRCS soil scientist, you'll map and classify soils. You'll identify problems such as wetness and erosion. You'll use aerial photographs to map soils and write soil descriptions and prepare other information about soils. You'll sample soils and evaluate soil quality, work with watershed information and

water quality reports, and record changes in land use patterns.

**Qualifications:** A degree in a major field of study in soil science or a related discipline. Your study must include 30 semester hours or equivalent in biological, physical, or earth science, including a minimum of 15 semester hours in such subjects as soil genesis, pedology, soil chemistry, soil physics, and soil fertility.

#### RANGELAND MANAGEMENT SPECIALIST



As an NRCS rangeland management specialist, you'll help plan grazing systems that improve the quality of forage and other grazing land functions. You'll suggest ways to use grazing animals as tools to improve and sustain natural resources. You'll offer advice on water management or better ways to pro-

duce forage. Whether landowners want to use their rangeland to support livestock, wildlife, recreation, or a combination of these, you'll tailor conservation plans that will help landowners meet their goals. **Qualifications:** A degree with major field of study in range management or a related discipline that includes at least 42 semester hours in a combination of plant, animal, and soil sciences, and natural resources management, with 18 semester hours in range management.

#### BIOLOGIST



As an NRCS biologist you'll spend most of your time in the field working with private land owners, other agencies and units of government. You'll provide technical support on fish and wildlife habitat development or restoration. You'll suggest ways to manage fish and

wildlife populations and restore habitat.

**Qualifications:** A degree in biological sciences, agriculture, natural resource management, chemistry, or related disciplines appropriate to the position.

#### ENGINEER



The NRCS employs a large number of engineers who have specialized skills in erosion control, water management, structural design, construction, hydraulics, soil mechanics, and environmental protection. We also employ those with general engineering skills. Your job assignment may include establishing stream-

bank and erosion control measures and water supply systems; designing waste management systems and concrete and earthen dams; and applying bioengineering principles to solve a host of natural resource problems. You may also become involved in helping communities recover from natural disasters.

**Qualifications:** A bachelor's degree in engineering. Specialties include agricultural, environmental, and civil engineering.

#### ENGINEERING TECHNICIAN



As an NRCS engineering technician, you'll be involved in planning, design, and construction work. You'll help with surveying the land, plotting notes, and laying out construction measures. You'll gather data, make computations, and prepare maps and cross sections of profiles. You may serve as a

construction inspector on a wide variety of projects.

**Qualifications:** Have studied engineering in school, have experience on a survey crew running levels and transits, or have worked on construction, layout, and inspection. A sound knowledge of basic mathematics is desirable.

**Note:** Qualifications can also be met with a combination of experience and education that includes the coursework listed for each specialty.

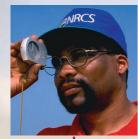
# OTHER CAREERS IN SOIL CONSERVATION

The Natural Resources Conservation Service also offers careers for people trained in:

ACCOUNTING	GEOLOGY
AGRICULTURAL ECONOMICS	HYDROLOGY
AGRONOMY	LANDSCAPE ARCHITECTURE
AQUATIC BIOLOGY	PLANT SCIENCES
BUSINESS ADMINISTRATION	RECREATION
CARTOGRAPHY	SOCIOLOGY
COMMUNICATIONS	WATERSHED MANAGEMENT
INFORMATION TECHNOLOGY	WETLAND SCIENCE
FORESTRY	WILDLIFE BIOLOGY

#### EQUAL OPPORTUNITY

The Natural Resources Conservation Service is an equal opportunity employer. Applicants will be considered without regard to race, color, religion, gender, national origin, age, politics, disability, sexual orientation, marital or family status.



#### PLACEMENT AND SALARY

The NRCS has more than 2,500 field locations throughout the United States. So, regardless of your location, there may be opportunities where you want to work.

Starting salaries are competitive with those of other government agencies and the private sector.

#### TRAINING AND ADVANCEMENT

You will get many chances for on-the-job and formal training. You'll set career goals and NRCS will help you achieve them.

There are promotion opportunities. How fast and how far you advance depends on you. Advancement opportunities broaden as you gain experience with varied work assignments in different locations.

#### EMPLOYEE BENEFITS

#### Vacation, Sick Leave, and Disability

During your first 3 years of service, you'll earn 13 days of vacation leave each year. After 3 years, you'll earn 20 days. After 15 years, you'll earn 26 days.

Each year, you earn 13 days of sick leave. You can accumulate sick leave without limit to cover serious illnesses.

Special benefits are available if you are disabled or injured while working.

#### **Quality of Worklife**

The NRCS offers flexible work schedules and programs to help employees balance the demands of work with personal and family responsibilities. These include various alternative work schedules, job sharing, telecommuting, and employee assistance programs.

#### **Health and Life Insurance**

The NRCS pays a substantial part of your health insurance costs and there are a variety of medical plans offered under this voluntary program.

Another voluntary program provides life insurance. The amount of insurance available to you depends on your salary, and again, NRCS pays part of the cost.

#### Retirement

Most Federal employees hired today are covered by the Federal Employees Retirement System (FERS). This system has three components: (1) Social Security, (2) a basic annuity, and (3) a tax-deferred Thrift Savings Plan. FERS employees may contribute up to 12 percent of their salary to the Thrift Savings Program at present, rising to 15 percent by 2005 and NRCS will match up to 5 percent of that amount. Depending on your investment goals, you can invest in any combination of government securities, stock, and bond funds.

#### FOR JOB INFORMATION

For information on how to apply, contact your local NRCS office. NRCS offices are listed in your local telephone directory under U.S. Government, Agriculture, Natural Resources Conservation Service.

To find out more about NRCS, check the agency's homepage on the World Wide Web. The address is **http://www.nrcs.usda.gov** 

Local People, Global Mission!

## Every day, NRCS keeps its

commitment to

protecting and conserving natural resources on America's private lands.

#### STUDENT CAREER EXPERIENCE

Each year, NRCS hires students under its Student Career Experience Program. If you are still attending college or graduate school, you may qualify.

You can alternate periods of work and study, or work on a part-time schedule while attending school. You'll work for, and learn from, NRCS professionals in your field of study. You'll learn by doing and earn while you learn.

Participation in this program could lead to a job offer and a full-time career when you graduate. For more information, contact your school's placement office or cooperative education department.







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September 2003 PA 1634 Supersedes PA 1298, "Challenging Careers in Soil Conservation"