

Careers Exploration

NUTSHELL

In this classroom lesson, students review profiles of Wisconsin college students who are working toward degrees in natural resource fields. Students study the profiles and select education, work experiences, skills, and other qualifications to create a résumé. Students then choose one of five career fields and match their résumé to the qualifications required to fill a vacancy announcement. In summary, students discuss how to prepare for a career in a competitive job market.

ENDURING UNDERSTANDINGS

- A variety of agencies, companies, and individuals manage forests. Forest resource professionals in each of these areas have training and responsibilities to meet individual, societal, and environmental needs through forest management and/or education.
- Forest research and management involves professionals with backgrounds in many fields, including forestry, biology, wildlife, soils, water, land management, urban planning, engineering, sociology, geography, technology, environmental education, and chemistry.

ESSENTIAL QUESTION

- What education, experience, and skills do I need to work in a natural resource career field?

OBJECTIVES

Upon completion of this lesson, students will be able to:

- Identify experiences and skills needed to be successful in different natural resource career fields.
- Explain how they can prepare for a career in a competitive job market.

SUBJECT AREA

Science (Science Applications)

PROCESS SKILL

Résumé building

LESSON/ACTIVITY TIME

Total Lesson Time: 60 minutes

- Introduction15 minutes
- Activity 120 minutes
- Activity 220 minutes
- Conclusion5 minutes

TEACHING SITE

Classroom

BACKGROUND INFORMATION

There are many different careers in natural resource-related fields, but only a few are highlighted in this lesson.

A career in soil science is one that helps manage soil resources. This is a field with job possibilities in both the public and private sectors. People with soil science degrees may be employed in such areas as agriculture, solid waste management, recycling, pollution prevention, hazardous waste management, forestry, municipal wastewater treatment plants, construction, etc.

Water science-related careers include areas of specialty such as limnology (study of lakes, ponds, streams), fisheries, watershed management, drinking water supply and treatment, aquatic toxicology, water chemistry, hydrology, wastewater treatment, groundwater protection, oceanography, and wetland restoration. A master's degree may be required in order to be competitive for certain water science positions. There are job opportunities in both the public and private sectors, with the fastest growing demand being in the private sector.

People working in the parks and recreation field are involved in enhancing the experience of visitors who come to natural areas to relax and enjoy their surroundings. Most of the employment in the parks and recreation field is found in the public sector. Some general areas of work within the parks and recreation field include forest resource management, outdoor education/recreation, environmental interpretation/education, tourism, administration, site operations/maintenance, and community development. A bachelor's degree is usually required for careers in this field, with a master's degree preferred for administrative positions and higher level opportunities for long-term careers.

Wildlife-related careers include wildlife biology, research, animal rehabilitation, urban wildlife, fisheries, habitat restoration, environmental law enforcement, endangered species management, wildlife education, range management, ichthyology, aquaculture, marine biology, and wildlife refuge management. Because of the appeal of this career field, a master's degree is usually required in order to support long-lasting careers in this profession. Most of the job opportunities in the field of wildlife are in the public sector.

MATERIALS LIST

For Each Student

- Copy of Student Page  **3, Résumé Template**

For Each Group of 3 to 4 Students

- Copy of Student Page  **1, Careers**
- Copy of Student Pages  **2A-K, Student Profiles**

For the Class

- Copies of Student Page  **4A, Forestry Position**,  **4B, Parks and Recreation Position**,  **4C, Soil and Water Conservation Position**,  **4D, Wildlife Position**, and  **4E, Wood Science Position** (each student will receive one of their choosing)

There are a wide variety of career opportunities in forestry, with increasing need for people in fire prevention/suppression and urban forestry. Other areas of specialty in forestry include forest/wood products, forest ecology, research, arboriculture, urban planning, entomology and forest pathology, forest economics, forest hydrology, forest recreation, and forestry education. Foresters are involved in helping to manage hundreds of thousands of acres of public, private, tribal, and industrial forestlands in Wisconsin.

The forest products industry has a growing need for young, science-minded business people with education and experience in paper and wood science. Specialties in this career profession include wood products, paper science and technology, wood science and technology, engineering, and marketing. In each of these specialties, professionals work to improve the efficiency of paper and wood products facilities and the utility of paper and wood products to consumers.

Today's natural resource management professionals must have a broad understanding of how to integrate their activities with those of other professionals who are managing the same resource for different objectives. For example, a forester should have a general understanding of the objectives of soils, waters, wildlife, and wood products so that there can be an integrated approach to managing the forest resources. For this reason, communication skills, the ability to work cooperatively on a team, and an understanding of and respect for diverse perspectives are key qualifications. In general, people who desire to succeed in natural resource careers must have a solid foundation in the sciences, well-developed people skills, and an understanding of general business principles.

PROCEDURE

Introduction

1. Begin by asking students if they know what career or job they would like to have after they graduate from high school. Tell the class that they will be learning some basics about how the job application process works, and what they might be able to do to improve their chances of landing the job they want.
2. Divide the class into groups of three or four students. Have the groups divide a piece of paper into five sections. In each one of the sections, have a student write the headings:
 - Soil and Water Conservation
 - Forestry
 - Parks and Recreation
 - Wildlife
 - Paper and Wood Science
3. Hand each student group a copy of Student Page **1, Careers**. Have a student in each group read the job descriptions to the group. Ask the group to highlight several jobs that sound interesting.
4. Ask students what it takes to get a job. (*Skills, experiences, education.*) Next, have them brainstorm the qualifications that they might need to be a successful classroom teacher. Give students examples relevant to your classroom. Have each group brainstorm the qualifications that they believe someone would need to be successful in each of the highlighted careers.

Ask students to identify qualifications in the following three categories:

 - Knowledge/Education
 - Experience
 - Skills
5. Once the groups have finished their list of qualifications, have them share the jobs that they highlighted and the associated qualifications with the rest of the class. Point out the similarities and differences among groups.

Explain to students that there are some common qualifications needed for almost every natural resource career field (e.g., *good communications skills, ability to work as part of a team, fundamental knowledge of science, basic computer skills*). Also, point out qualifications that are unique to specific careers (e.g., *the use and maintenance of certain laboratory equipment is a skill specific to lab technicians and researchers*).

**“Solitary trees, if they grow
at all, grow strong.”**

★ Winston Churchill ★

Activity 1 – Building a Résumé

1. Explain to students that they are now going to build a résumé to prepare for a future career. They are going to accomplish this by looking at the goals, education, experience, and skills of a variety of Wisconsin college students who are working toward careers in natural resource fields.

Hand each group a copy of Student Pages **2A-K, Student Profiles**. Explain to the groups that each of the students in the profiles was interviewed while attending college and that all of the information on the profile is real. Have students read the profiles.

2. Distribute a copy of Student Page **3, Résumé Template** to each student. Review the basic parts of a résumé and ask the class to explain what a résumé is used for. (A résumé is a summary of a person’s education, experience, and skills that helps employers find and hire qualified employees.)

Tell students that to prepare themselves for a future career, they can fill in their résumé with any of the education, experience, skills, and other qualifications found in the student profiles. Ask students to choose qualifications that interest them. They can choose one educational degree, three experiences, and three skills.

NOTE: Before students begin developing their résumé, you may wish to give a brief explanation of the following terms: bachelor’s degree, master’s degree, college major, and emphasis of study.

Activity 2 – Qualifying for a Job

1. After completing their résumé, have each student choose one of the following five fields in which to start their career:
 - Forestry
 - Parks and Recreation
 - Soil and Water Conservation
 - Wildlife
 - Paper and Wood Science
2. Once each student has chosen a field, hand him or her the corresponding vacancy announcement and candidate scorecard from Student Page **4A, Forestry Position**, OR **4B, Parks and Recreation Position**, OR **4C, Soil and Water Conservation Position**, OR **4D, Wildlife Position**, OR **4E, Wood Science Position**. Have the students read the vacancy announcement and then use the qualifications scorecard to score their résumé.
3. Once students have rated their résumé, have them go around the room and find other students with the same career field to see how their résumés scored. Explain to students that often, what we want to do and what we need to do to get a job are two different things. Ask students to find examples of certain things they wanted on their résumé that did not help them get the job.
4. To better qualify for the vacancy announcement, have students review the student profiles to find qualifications that will better match them to the position. Students should record these additional qualifications in the “other qualifications” section of the résumé template and then complete the “Modified Résumé” section on the scorecard.

“People who will not sustain trees will soon live in a world that will not sustain people.”

★ Bryce Nelson ★

**“We’re merely one tree
with various types, shapes
and sizes of leaves
that all wave
differently in the breeze.”**

★ *Rasheed Ogunlaru* ★

**“Even if something
is left undone,
everyone must take time
to sit still and
watch the leaves turn.”**

★ *Elizabeth Lawrence* ★

**“Education forms the common mind.
Just as the twig is bent, the tree’s inclined.”**

★ *Alexander Pope* ★

**“Acts of creation are
ordinarily reserved for
gods and poets,
but humbler folk may
circumvent this restriction
if they know how.
To plant a pine, for example,
one need be neither god nor poet;
one need only own a shovel.”**

★ *Aldo Leopold* ★

**“The great French
Marshall Lyautey once asked
his gardener to plant a tree.
The gardener objected
that the tree was slow growing
and would not reach maturity
for 100 years.
The Marshall replied,
‘In that case, there is no time
to lose; plant it this afternoon!’”**

★ *John F. Kennedy* ★

CAREERS

SOIL AND WATER CONSERVATION

- **Groundwater Specialists** work to ensure that groundwater is both available and suitable for drinking and other human and ecological needs; include geologists, geographers, planners, and researchers.
- **Watershed Managers** work to conserve lake, river, and stream water resources for current and future human and ecological needs; include city and community planners, rural land managers, hydrologists, and fisheries biologists.
- **Hazardous Waste Management Specialists** identify hazardous wastes, ensure their safe handling and disposal, and reduce waste production.
- **Soil Conservationists** develop plans to help land users such as farmers, developers, and homeowners, meet their land use objectives while conserving soil resources.
- **Agriculture Specialists** work to provide agricultural products; include crop and soil scientists, engineers, botanists, entomologists, and animal scientists.

FORESTRY

- **Forest Ecologists** study the interrelationship between the living and nonliving components of forest ecosystems to better understand how they can be sustained.
- **Forest Managers** work with government agencies, community leaders, businesses, and landowners to provide the economic, social, and environmental benefits of forests to current and future generations.
- **Procurement Foresters** work with private and public forest landowners to measure, harvest, and sell trees.
- **Urban Foresters** work with the political, physical, and social aspects of cities to plan, plant, and manage trees in cities and towns.
- **International Foresters** work with local and foreign governments, organizations, and businesses to manage forested areas and manage the trade of forest products.
- **Wildland Fire Specialists** work with landowners, communities, and other natural resource professionals to prevent and control wildfires, as well as use fire as a management tool.

PARKS AND RECREATION

- **Resource Recreation Managers** manage outdoor areas for activities such as backpacking, camping, fishing, hunting, snowmobiling, and birdwatching.
- **Environmental Educators/Interpreters** work to educate the public about environmental, cultural, or historical resources.
- **Community Development Specialists** work with governments, businesses, and citizens to create development plans that provide social, economic, and environmental benefits to communities.
- **Eco-Tourism Specialists** work to promote responsible travel to natural areas.

WILDLIFE

- **Wildlife Managers** work with landowners, businesses, organizations, and governments to manage outdoor areas for animal habitat.
- **Range Managers** work with governments, landowners, industries, and farmers to manage undeveloped areas for wildlife habitat, cattle grazing, and other human uses.
- **Wildlife Researchers** study animal species to better understand their evolutionary history, range and distribution, habitat needs, and population health.
- **Law Enforcement Officials** enforce laws governing the human use of wild animal, fish, and plant species.

PAPER AND WOOD SCIENCE

- **Wood Scientists** study the physical, biological, and chemical characteristics of wood to improve the manufacture of wood products.
- **Wood Products Researchers** study wood characteristics, manufacturing processes, and societal needs to develop new wood products and production methods.
- **Pulp and Paper Scientists** study the physical, biological, and chemical characteristics of wood, paper pulp, and paper to improve the paper manufacturing process.
- **Facilities Managers and Engineers** oversee and manage manufacturing processes in sawmills, veneer mills, secondary wood products facilities, and paper mills.

STUDENT PROFILES (A)

— Rebekah Berger —



COLLEGE MAJOR

Wildlife and Biology

COLLEGE MINOR

Captive Wildlife

PLAN(S) AFTER GRADUATION

Veterinary School to become a certified wildlife veterinarian or Graduate School to research wildlife behavior

CAREER GOAL(S)

Work with captive wildlife and integrate knowledge of animals in the wild to benefit captive wildlife

EDUCATION

- Saint Mary High School
- Bachelor of Science in Wildlife and Biology

EXPERIENCE

- **Job(s):** Fox Cities YMCA - Conducting ecological surveys to lay the groundwork for a future nature reserve
- **Club(s):** Wildlife Society - Vice president
- **Project(s):** Flying Squirrel Project - Co-leader, studied the competition between Northern Flying Squirrels and Southern Flying Squirrels and home range delineation; Small Mammal Project; Raptor Surveys
- **Volunteer Work:** Mead Wildlife Area - Deer aging; Sandhill Wildlife Area - Deer aging and wolf tracking; Archibald Lake Association - Waterfowl surveys, water quality surveys; Gordon Bubolz Nature Preserve - Bluebird surveys

SKILLS

- Critical thinking and problem solving
- Knowledge of statistical programs
- Native flora and fauna identification
- Radio-telemetry
- Communication skills
- Mammal trapping techniques
- Geographic Information Systems (GIS)
- Bird surveying techniques

STUDENT PROFILES (B)

— Greyling Brandt —



COLLEGE MAJOR

Forest Management and Forest Recreation

COLLEGE MINOR

None

PLAN(S) AFTER GRADUATION

Work as a recreation land use planner with the U.S. Forest Service

CAREER GOAL(S)

Become a district range manager with the U.S. Forest Service

EDUCATION

- Rock Falls High School
- Bachelor of Science in Forest Management and Forest Recreation

EXPERIENCE

- **Job(s):** Wisconsin Conservation Corps - Trout stream restoration and timber stand improvement; Wisconsin Department of Natural Resources fire prevention team - Heavy engine unit; Wisconsin Department of Natural Resources - Hazard tree removal and trail rehabilitation
- **Internship(s):** Superior National Forest - Student Career Experience Program

SKILLS

- Geographic Information Systems (GIS)
- Budgeting and management
- Global Positioning Systems (GPS)
- Interpretive science
- Database management
- Writing and verbal communication
- Chain saw safety and maintenance
- Knowledge of Wisconsin environmental regulations

STUDENT PROFILES (C)

— Kelli English —



COLLEGE MAJOR

Environmental Education and Interpretation

COLLEGE MINOR

None

PLAN(S) AFTER GRADUATION

Work as a Park Ranger for Indiana Dunes National Lakeshore

CAREER GOAL(S)

To supervise interpretive operations for a place such as a National Park Service unit or be director of education at a nature center

EDUCATION

- Whitney M. Young Magnet High School
- Bachelor of Science in Anthropology (Biological Anthropology)
- Master of Science in Natural Resources (Environmental Education and Interpretation)

EXPERIENCE

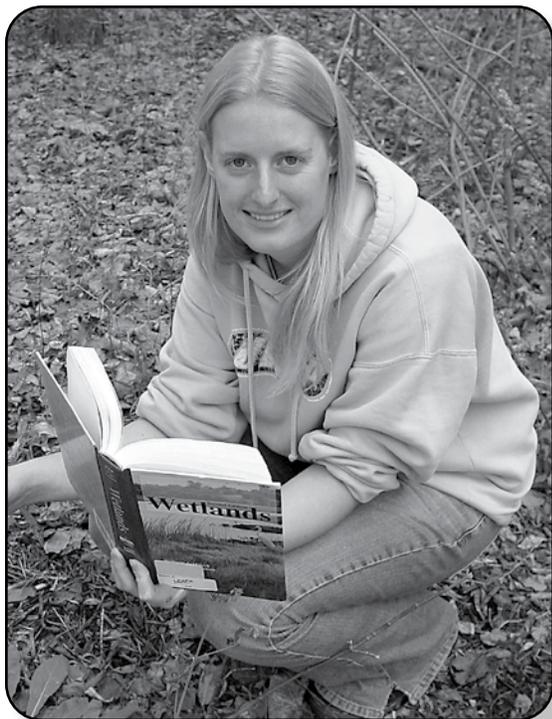
- **Job(s)/Internship(s):** Schmeeckle Reserve Visitor Center - Graduate assistant; Indiana Dunes Environmental Learning Center - Outreach education specialist; National Institutes of Health - Research assistant; Cambridge Youth Enrichment Program - Counselor
- **Club(s):** National Association for Interpretation; Fire Crew; National Parks Conservation Association
- **Volunteer Work:** Indiana Dunes National Lake Shore; Harvard Club of Chicago

SKILLS

- Public speaking and presenting
- Acting and interpretation
- Certified Wildland Firefighter
- First Aid, CPR, and First Responder
- Education Programming (Project WILD, Project Learning Tree, Hoosier Riverwatch, Leopold Education Project)
- Traveled throughout Southeast Asia, Europe, Mexico, Brazil, and the Caribbean
- Highly proficient in written and spoken Spanish
- Highly proficient in violin, vocal, and theatrical performance

STUDENT PROFILES (D)

— Stacy Lueck —



COLLEGE MAJOR

Water Resources and Wetlands

COLLEGE MINOR

Soil Science

PLAN(S) AFTER GRADUATION

Graduate School in Environmental Civil Engineering

CAREER GOAL(S)

Work in wetland and water quality restoration

EDUCATION

- Chippewa Falls High School
- Bachelor of Science in Water Resources

EXPERIENCE

- **Job(s):** Department of Natural Resources lake restoration program, University of Wisconsin Extension - Design and construction of lakeshore restoration projects, sampled lakes for water quality
- **Internship(s):** Wisconsin Department of Transportation - Reviewed permits, monitored and delineated wetlands, created mitigation plans
- **Club(s):** Isaac Walton League; American Water Resources Association

SKILLS

- Wetland delineation
- Environmental regulations
- Plant identification
- Water sampling
- Wildlife identification
- Boat and ATV safety
- Project leadership
- Computer programs (Excel, Word, PowerPoint, and Access)

STUDENT PROFILES (E)

— Ed Moyer —



COLLEGE MAJOR

Water Chemistry

COLLEGE MINOR

Chemistry and Math

PLAN(S) AFTER GRADUATION

Law School

CAREER GOAL(S)

Work with environmental regulations and policies, specifically focusing on water quality regulations and water allocation, including working with the Clean Water Act and National Environmental Protection Act

EDUCATION

- Neenah High School
- Bachelor of Science in Water Chemistry

EXPERIENCE

- **Job(s):** Research Assistant - Greenhouse gas emissions from water; USGS - Global warming studies contractor
- **Club(s):** American Water Resources Association (AWRA); Soil and Water Conservation Society (SWCS)
- **Project(s):** Aquatic biodiversity survey of a river system in sub-Saharan (southern) Africa; Wisconsin Department of Transportation and Wisconsin Department of Natural Resources - Studies concerning the eradication of purple loosestrife

SKILLS

- Various laboratory tests and procedures
- Global Positioning Systems (GPS)
- Writing grants and research proposals
- Public speaking skills
- Geographic Information Systems (GIS)

STUDENT PROFILES (F)

— Sarah Orlofske —



COLLEGE MAJOR

Biology and Wildlife

COLLEGE MINOR

Chemistry

PLAN(S) AFTER GRADUATION

Graduate School

CAREER GOAL(S)

Become a college professor of herpetology or do research with amphibians

EDUCATION

- Homeschooled
- Bachelor of Science in Wildlife and Biology

EXPERIENCE

- **Job(s):** Department of Natural Resources - Researched threatened species; Wisconsin Humane Society - Wildlife rehabilitation assistant
- **Internship(s):** Racine Zoo - Worked with captive wildlife; USGS - Aquatic invertebrate research
- **Club(s):** Herpetology Society - Numerous positions including president; Undergraduate Research Symposium Committee; Wildlife Society
- **Project(s):** Amphibian-parasite research; Ecological research on new skink species in Portage County; Global amphibian decline related to ecotourism in Peru
- **Volunteer Work:** Tutor for biology and natural resource college classes

SKILLS

- Knowledge of research process
- Radiotelemetry
- Grant writing
- Numerous computer programs
- Research proposals
- Monitoring methods for reptiles and amphibians
- Knowledge of microscopes (electron, dissecting, and compound)

STUDENT PROFILES (G)

— Alexis Sandy —



COLLEGE MAJOR

Soil and Land Management

COLLEGE MINOR

Water Resources

PLAN(S) AFTER GRADUATION

Attend Graduate School at Virginia Polytechnic Institute and State University in the Crop and Soil Environmental Science Department

CAREER GOAL(S)

Maintain employment with the Natural Resource Conservation Service (NRCS) and eventually move into private consulting in soils and forestry

EDUCATION

- Little Falls Community High School
- Bachelor of Science in Soil and Water Conservation

EXPERIENCE

- **Internship(s):** NRCS - Soil conservationist (summers and part-time during the past two academic years), developing conservation plans, worked with landowners to develop and implement conservation practices and management (nutrient management, waste storage, erosion control, water quality)
- **Club(s):** Student Chapter of Soil and Water Conservation Society (SWCS) - Vice president
- **Project(s):** Horicon Marsh Research Project - Presented research and projects at national conventions
- **Volunteer Work:** Highway cleanup

SKILLS

- Knowledge of GIS and remote sensing
- Leadership skills from jobs and clubs
- Certified Grazing Planner
- Soil taxonomy
- Organic farming training

STUDENT PROFILES (H)

— Adam Schmidt —



COLLEGE MAJOR

Paper Science

COLLEGE MINOR

Chemistry and Business Administration

PLAN(S) AFTER GRADUATION

Get a job in the paper industry, either in a paper mill or chemical sales

CAREER GOAL(S)

Obtain an MBA and become a vice president or president of a company in the paper industry

EDUCATION

- Mishicot High School
- Bachelor of Science in Paper Science

EXPERIENCE

- **Job(s)/Internship(s):** Menasha Co. (tissue mill) - Process engineer, conducted various tests and used a standardizing process to make sure the operations were running smoothly; Chemical sales company in Hinckley, Maine - Service position; University of Wisconsin-Stevens Point - Worked with the university paper machine
- **Club(s):** Paper Science Student Organization
- **Project(s):** Installed a new biocide to kill bacteria
- **Volunteer Work:** Teach basic papermaking process to third and fourth grade students

SKILLS

- Time management
- Tests for bacteria and fungi
- Ability to multitask
- Chemical tests on properties of pulp/paper
- Troubleshooting and critical thinking skills
- Knowledge of microscope use and workings
- Knowledge of general paper machine workings

STUDENT PROFILES (I)

— Takahiro Seki —



COLLEGE MAJOR

Resource Management

COLLEGE MINOR

International Resource Management

PLAN(S) AFTER GRADUATION

Work for a few years to gain experience in watershed management and then attend Graduate School

CAREER GOAL(S)

Work toward the sustainable management of resources in developing countries

EDUCATION

- High School Diploma, Japan
- Bachelor of Science in Resource Management

EXPERIENCE

- **Job(s):** University Center - Building assistant
- **Club(s):** Wildlife Society; United Nations Student Organization; International Club

SKILLS

- Speak fluent Japanese
- Knowledge of GIS and remote sensing
- International experiences in Europe and New Zealand

STUDENT PROFILES (J)

— Chris Tyrrell —



COLLEGE MAJOR

Forest Ecosystem Management and Restoration and Biology

COLLEGE MINOR

None

PLAN(S) AFTER GRADUATION

Graduate School to pursue a Master's Degree

CAREER GOAL(S)

GIS specialist with federal government or Conservation Biologist at the state level working with Natural Heritage Inventory Program

EDUCATION

- Charles B. Whitnall High School
- Bachelor of Science in Forestry and Biology

EXPERIENCE

- **Job(s):** Nature Merit Badge Counselor; National Park Service - Biological science technician; Contractor for botany and wildlife monitoring and inventory; Research assistant; University Herbarium Student Database Manager
- **Internship(s):** Wehr Nature Center - Land management assistant
- **Club(s):** Society of American Foresters - Treasurer; Society of Ecological Restoration - President; Wildlife Society; Research Symposium Committee; Fire Crew
- **Project(s):** Research and publication on oak savanna forest succession

SKILLS

- Computer skills
- Creating/managing websites
- Geographic Information System (GIS)
- Knowledge of research process
- Computer programming
- Knowledge of vegetation monitoring and inventory methods

STUDENT PROFILES (K)

— Kristin Wild —



COLLEGE MAJOR

Soil Science

COLLEGE MINOR

None

PLAN(S) AFTER GRADUATION

Work as a soil scientist for the Natural Resource Conservation Service (NRCS) in North Dakota immediately after graduation; duties include soil mapping, data analysis, and computer mapping

CAREER GOAL(S)

Become a project leader and oversee soil projects and scientists in the NRCS, be a mom, eventually go back to school to get a teaching degree to teach children about soil science

EDUCATION

- Oshkosh West High School
- Bachelor of Science in Soils

EXPERIENCE

- **Job(s)/Internship(s):** Teaching assistant for a college soils field class; NRCS North Dakota - Soil conservationist; NRCS North Dakota - Soil scientist
- **Club(s):** Student Chapter of Soil and Water Conservation Society (SWCS) - President, research project leader
- **Project(s):** Horicon Marsh research; Soil judging
- **Volunteer Work:** Teaching soils to second-grade students; High school career workshops; Teaching with Wisconsin Groundwater Guardian Program

SKILLS

- Interpersonal skills
- Geographic Information System (GIS)
- Communication
- Soil taxonomy

RÉSUMÉ TEMPLATE

Name:

Education

1.

Experience

1.

2.

3.

Skills

1.

2.

3.

Other Qualifications

1.

2.

3.

FORESTRY POSITION

POSITION: Procurement Forester

HIRING ORGANIZATION: Green Tree Timber Company

DUTIES: Provide timber management assistance and buy trees from nonindustrial private forestland owners. The successful person in this position will promote sustainable forest management on private lands. Individuals will represent Green Tree Timber Company in the professional, business, and social communities in which we operate and oversee environmental management systems and safety regulations. Principle responsibilities include wood procurement, public relations, and safety assurance.

KNOWLEDGE AND SKILLS:

	First Résumé			Modified Résumé		
EDUCATION						
Bachelor's degree in forestry or related field	+	OK	-	+	OK	-
EXPERIENCE						
Forest management	+	OK	-	+	OK	-
Timber production	+	OK	-	+	OK	-
Wood procurement (tree buying)	+	OK	-	+	OK	-
SKILLS						
Basic computer and database skills	+	OK	-	+	OK	-
Global Positioning System (GIS) skills	+	OK	-	+	OK	-
Use of computer forest modeling programs	+	OK	-	+	OK	-
OTHER QUALIFICATIONS						
Able to carry up to 40 lbs. through rough terrain	+	OK	-	+	OK	-
Good written and oral communication skills	+	OK	-	+	OK	-
TOTALS						

PARKS AND RECREATION POSITION

POSITION: Urban Planner/Park Designer

HIRING ORGANIZATION: City of Green Bay

DUTIES: Preparation of community development master plans, landscape design plans, parks and recreation plans, and similar projects in Green Bay. Primary responsibilities include coordination of regional planning workshops, assisting with biological and water resource assessments, and maintaining compliance with environmental regulations.

KNOWLEDGE AND SKILLS:

	First Résumé			Modified Résumé		
EDUCATION						
Bachelor's degree in parks and recreation, regional planning, or related field	+	OK	-	+	OK	-
EXPERIENCE						
Project management	+	OK	-	+	OK	-
Work with environmental regulations	+	OK	-	+	OK	-
Landscape design	+	OK	-	+	OK	-
SKILLS						
Computer design programs	+	OK	-	+	OK	-
Writing and research	+	OK	-	+	OK	-
Facilitation/participation	+	OK	-	+	OK	-
OTHER QUALIFICATIONS						
Written and oral communication skills	+	OK	-	+	OK	-
Work well with a team	+	OK	-	+	OK	-
TOTALS						

SOIL AND WATER CONSERVATION POSITION

POSITION: Water Resources Specialist

HIRING ORGANIZATION: Wisconsin Department of Transportation

DUTIES: Position will assist in drainage design for highways, bridges, and culverts in southwestern Wisconsin. Responsibilities include floodplain analysis, hydrologic modeling of watersheds, roadway and sewer design, and design of flood control projects to minimize impact of construction activities on wetland and agricultural areas.

KNOWLEDGE AND SKILLS:

	First Résumé			Modified Résumé		
EDUCATION						
Bachelor's degree in water/soil resources, civil engineering, or related field	+	OK	-	+	OK	-
EXPERIENCE						
Research water system characteristics	+	OK	-	+	OK	-
Work with environmental regulations	+	OK	-	+	OK	-
Wetland ecology	+	OK	-	+	OK	-
SKILLS						
Land surveying	+	OK	-	+	OK	-
Surface water modeling	+	OK	-	+	OK	-
Plant identification	+	OK	-	+	OK	-
OTHER QUALIFICATIONS						
Work well with a team	+	OK	-	+	OK	-
Able to work outdoors in wet/cold conditions	+	OK	-	+	OK	-
TOTALS						

WILDLIFE POSITION

POSITION: Conservation Biologist – Karner Blue Butterfly

HIRING ORGANIZATION: Wisconsin Department of Natural Resources

DUTIES: Assist with the Habitat Conservation Plan for the Karner blue butterfly in Wisconsin. Develop monitoring methods and provide results in annual reports. Interpret habitat requirements and butterfly life cycle conditions and report Karner blue flight status. Develop conservation strategies and provide technical information to DNR staff on monitoring results and management protocols. Conduct public presentations for environmental groups, professional organizations, landowner associations, and legislators.

KNOWLEDGE AND SKILLS:

	First Résumé			Modified Résumé		
EDUCATION						
Bachelor's degree in conservation biology, wildlife, or related field	+	OK	-	+	OK	-
EXPERIENCE						
Population monitoring	+	OK	-	+	OK	-
Surveying native plant communities in barrens/savanna ecosystems	+	OK	-	+	OK	-
Management of barrens/savanna ecosystems	+	OK	-	+	OK	-
SKILLS						
Geographic Information System (GIS) skills	+	OK	-	+	OK	-
Database development and management	+	OK	-	+	OK	-
Public presentation skills	+	OK	-	+	OK	-
OTHER QUALIFICATIONS						
Team leadership/project management	+	OK	-	+	OK	-
Written and oral communication skills	+	OK	-	+	OK	-
TOTALS						

WOOD SCIENCE POSITION

POSITION: Assistant Technology Auditor

HIRING ORGANIZATION: Wood Systems of Wisconsin

DUTIES: Position will work in wood products facilities to assess levels of technology (machinery, computer hardware, software). Position will also develop needs assessments and plans to improve the efficiency of manufacturing processes. Primary responsibilities include diagramming and monitoring material flow, monitoring and reporting on computer hardware and software performance, and working with human resources and company management to create technology, staffing, and training strategies.

KNOWLEDGE AND SKILLS:

	First Résumé			Modified Résumé		
EDUCATION						
Bachelor's degree in wood science, engineering, or related field	+	OK	-	+	OK	-
EXPERIENCE						
Manage lumber and veneer production	+	OK	-	+	OK	-
Operation of lumber and veneer production machinery	+	OK	-	+	OK	-
Use of computer software used in lumber and veneer production	+	OK	-	+	OK	-
SKILLS						
Needs assessment development	+	OK	-	+	OK	-
Computer diagramming software proficient	+	OK	-	+	OK	-
Planning	+	OK	-	+	OK	-
OTHER QUALIFICATIONS						
Project management	+	OK	-	+	OK	-
Work well with a team	+	OK	-	+	OK	-
TOTALS						