

# College of Natural Resources

**Dean:** Nat B. Frazer  
**Director of Graduate Education:** Todd A. Crowl  
**Director of Undergraduate Education:** Mark W. Brunson  
**Location:** Natural Resources 108  
**Phone:** (435) 797-2452  
**FAX:** (435) 797-2443  
**E-mail:** nradvise@cc.usu.edu  
**WWW:** <http://www.cnr.usu.edu>

## **Undergraduate Advisor:**

Maureen A. Wagner, Natural Resources 120, (435) 797-2448,  
[maureen@cc.usu.edu](mailto:maureen@cc.usu.edu)

The College of Natural Resources has the following academic degree programs:

## **College of Natural Resources**

Master of Natural Resources (MNR)  
Participates in Interdisciplinary Studies (BS, BA)

## **Environment and Society Department**

Bioregional Planning (MS)  
Environmental Studies (BS)  
Geography (BS, BA, MS, and MA)  
Human Dimensions of Ecosystem Science  
and Management (MS and PhD)  
Recreation Resource Management (BS, MS, and PhD)

## **Watershed Sciences Department**

Ecology (MS and PhD)  
Fisheries and Aquatic Sciences (BS)  
Fisheries Biology (MS and PhD)  
Watershed and Earth Systems (BS)  
Watershed Science (MS and PhD)

## **Wildland Resources Department**

Conservation and Restoration Ecology (BS)  
Ecology (MS and PhD)  
Forestry (BS, MS, and PhD)  
Rangeland Resources (BS)  
Range Science (MS and PhD)  
Wildlife Biology (MS and PhD)  
Wildlife Science (BS)

A list of degree requirements, emphases, and specializations can be found in the catalog section for each department. For a description of the Master of Natural Resources (MNR) professional degree, see page 433.

## **Interdisciplinary Programs**

Many of the degree programs listed above are interdisciplinary to some extent. However, the Conservation and Restoration Ecology, Environmental Studies, Geography, and Watershed and Earth Systems programs offer students the opportunity to develop broad interdisciplinary programs to meet their interests. Conservation and Restoration Ecology and Watershed and Earth Systems build on a strong science base; Environmental Studies has a greater emphasis on management and policy; and Geography brings together ideas about culture, human behavior, and the physical environment.

The College of Natural Resources also participates in the Interdisciplinary Studies Major (see pages 342-343), which offers flexibility for qualifying students who cannot find an existing degree that meets their needs.

## **Minors in Natural Resources**

The college offers minors in the following areas:

**Environmental Studies**  
**Fisheries Science**  
**Geographic Information Science**  
**Geography/Geography Teaching**  
**Recreation Resources**  
**Watershed Science**

Requirements for the minors are found in the appropriate departmental sections of this catalog. Students should also consult a faculty advisor for the minor.

## **Objectives**

The College of Natural Resources provides programs of study and professional training in the use and management of natural resources and the environment. These programs deal with renewable land and water resources and the management of these resources and their ecosystems. Forests, rangelands, wildlife, fisheries, watersheds, and recreation resources comprise the natural resources and environmental areas in which the college has developed professional competence. The college's expertise in geography provides a link between the management of these resources and their value to our society and other cultures.

The College of Natural Resources programs and facilities provide exceptional opportunities for field experience. Forests and rangelands comprise more than 90 percent of the total Utah land area. The Wasatch-Cache National Forest and other areas of natural lands close to the USU campus provide unlimited study projects and opportunities for demonstration. Yellowstone and other national parks are within one day's driving distance.

## **Career Opportunities**

The curricula of the college prepare men and women for positions with federal or state agencies, private-sector work in natural resources management and administration, and positions in education.

## **Summer Employment/Work Experience**

Students are strongly encouraged to seek summer employment with faculty research projects or natural resource agencies to gain practical work experience and help refine career goals. Students should check with the College of Natural Resources Academic Service Center in early January regarding summer employment opportunities.

## **Undergraduate Programs**

### **Academic Policies**

#### **Admission**

Freshmen accepted in good standing by the University are eligible for admission to the College of Natural Resources. Transfer students need a cumulative 2.5 GPA for admission to College of Natural Resources majors. Departments may impose additional requirements; refer to departmental sections for information.

Students will make more satisfactory progress in natural resources majors if they have had two years of high school algebra; have taken coursework in chemistry, physics, and biology; and have obtained basic computer skills. Four years of English are also desirable. Prospective students should realize that natural resources fields are

highly technical professions, requiring not just field ability, but also high aptitude for scholarship. Success is also correlated with an ability to work well with people.

## Natural Resources—Undecided

Students who have not yet decided on a specific natural resources major may be admitted to the college as “undecided.” Many of the courses taken during the freshman year are common to all natural resources majors; however, students are encouraged to select a major as soon as possible. Students in the undecided category should meet with the college academic advisor for assistance in planning their educational program and selecting a major.

## Changes in Graduation Requirements

Students who complete a baccalaureate degree within seven years of enrollment at USU can qualify for graduation by meeting (1) the General Education/University Studies requirements in effect when they initially enrolled at USU (or any revision of the University Studies requirements that has been in effect within seven years of their graduation) and (2) the major requirements in effect when they officially declared their major (or any revision of the major requirements that has been in effect within seven years of their graduation).

Students who have not completed the baccalaureate requirements within seven years of their initial enrollment at USU must have their General Education/University Studies and major requirements evaluated and approved by their department head and dean.

## Academic Responsibility

The departments publish current major requirements in the catalog each year. It is the student's responsibility to know the current requirements and to consult with a faculty advisor in planning and completing his or her degree program.

## Graduation Requirements

Students must satisfy all University, College of Natural Resources, and departmental major requirements for graduation. Students must complete a series of basic lower-division courses, providing the disciplinary foundation for the natural resource and environmental professions, before advancing to professional coursework; foundation course requirements vary among the departments of the college. Equivalents of the foundation courses can be taken at many two- and four-year colleges. Students intending to transfer to a College of Natural Resources major should consult with a faculty advisor before registering for foundation courses at another school. Some foundation and core courses can be used to satisfy University Studies requirements. College requirements also include a grade point average of 2.5 or higher for all courses taught by the College of Natural Resources. Refer to the appropriate sections of this catalog for further details on graduation requirements.

## Student Leadership

In addition to coursework and research involvement, undergraduate education in the College of Natural Resources also includes leadership education through professional internships and extracurricular involvement. The staff and student employees of the College of Natural Resources Academic Services Center maintain contacts with public and private sector employers from around the region, not only to connect students with summer jobs, but also to provide students with

opportunities for volunteer participation during the school year, as well as with internships combining work done for academic credit with a chance to learn about future employment.

The Natural Resources Student Council and various student clubs offer opportunities for enrichment, professional development, and fun. Most of the student leaders have participated in leadership training activities offered by the College of Natural Resources. Students are strongly encouraged to participate in organizations affiliated with their majors or future career paths. Among these are student chapters affiliated with the following professional societies:

**American Fisheries Society**  
**International Association for Society and Natural Resources**  
**Society of American Foresters**  
**Society for Range Management**  
**The Wildlife Society**

## Financial Aid

A number of scholarships are available to students enrolled in the College of Natural Resources. During recent years, more than \$100,000 in financial aid has been awarded annually, with emphasis on assistance to upper-division undergraduate students. The S.J. and Jessie E. Quinney Scholars program awards up to 10 scholarships annually of \$3,000 per year to entering freshmen and transfer students in the College of Natural Resources. Interested high school students and prospective transfer students are encouraged to write to the College of Natural Resources Dean's Office regarding these scholarships.

## Undergraduates in Research

The College of Natural Resources maintains an extensive program of research in all aspects of natural resources and the environment. Undergraduate students are an integral part of this program. Their participation in research is encouraged, especially for those students planning to go on to graduate study.

Students are often able to find part-time employment in professors' laboratories, working side-by-side with graduate students and faculty members on studies involving a wide range of topics from endangered fish biology to wildland soil science, backcountry hiking behavior to sagebrush ecology, and water conservation policy to the genetics of rare plants and animals. Highly motivated students can also design their own research projects with the assistance of College of Natural Resources faculty members. University and college programs can offer undergraduate researchers financial assistance to help cover the costs of research and of presenting research results to audiences of natural resource scientists and managers, as well as to other students.

## Graduate Programs

The College of Natural Resources offers graduate programs leading to the Master of Natural Resources (MNR), Master of Science (MS), and Doctor of Philosophy (PhD) degrees. These degree programs are described in the catalog sections for the respective departments. There are also separate descriptions for the programs leading to the MNR degree (page 369), the Natural Resource and Environmental Policy Certificate Program (page 368), and the National Environmental Policy Act (page 363).

# College of Natural Resources

---

Financial assistance for graduate programs includes both research and teaching assistantships that are awarded through the departments offering each degree. For further information, students should contact their department and major professor. Fellowships and tuition waivers are offered to incoming graduate students on a competitive basis. Application is made through the student's major professor.

## **Financial Assistance**

### **Assistantships**

Teaching or research assistantships are awarded through the departments. For further information, students should check with their department and major professor.

### **Fellowships**

Fellowships and tuition waivers are awarded on a competitive basis. Incoming graduate students should apply through their major professor.

## **Course Descriptions**

Natural Resources (NR), pages 680-681.

National Environmental Policy Act (NEPA), page 676.