

## **SAMPLE INTERNSHIP DESCRIPTION – NOT CURRENTLY OPEN – FOR INFORMATION ONLY**

### **Field Research Internship Cedar Creek Ecosystem Science Reserve**

The Cedar Creek Ecosystem Science Reserve of the University of Minnesota has opportunities for students to work as Research Interns in three types of positions; 1) Plant community ecology, 2) Wildlife biology. 3) Insect diversity.

Most positions run from June through August, but some interns are needed as early as March and some are needed through December. If you are an undergraduate or a newly graduated student with a background or interest in biology, ecology, environmental science, botany, environmental education, wildlife biology, or a related field we encourage you to apply.

#### **1) Plant Community Ecology:**

We have two large scale projects, along with several smaller scale experiments, that require most of our intern resources throughout the summer. BioCON is one large scale experiment where we explore the ways in which plant communities respond to environmental changes such as increased nitrogen deposition, increased atmospheric CO<sub>2</sub>, decreased biodiversity, and altered precipitation patterns. Another large scale project is the Big Biodiversity experiment that studies how plant diversity affects the rates, dynamics, and stability of ecological processes at the population, community, and ecosystem levels. There are multiple experiments nested within the Big Biodiversity experiment as well, looking at factors such as irrigation and increased temperatures.

#### **2) Wildlife Biology:**

The starting date will be early April to mid-May. The research will be looking at how harvesting restored prairies for biofuel affects wildlife. The work will include wildlife surveys encompassing birds, small mammals, insects, reptiles, and amphibians. Bird survey duties will include identifying birds by sight and sound. Small mammal survey duties include operating Sherman live traps and species identification. Insect survey duties will include methods such as sweep netting and pitfall traps. Additional surveys will require plant identification skills. The applicant must have a flexible schedule and be willing to work odd hours including weekends and holidays. The position will entail extensive travel throughout the western Minnesota prairie region and requires a valid driver's license.

#### **3) Insect Diversity:**

This is part of a study of the tallgrass prairies of Minnesota that looks at how harvesting restored prairies for biofuel affects wildlife. The goal of this internship is to sort insect samples collected from different harvest treatments to reveal effects on diversity and abundance. Sweep net, pitfall, and quantitative samples were frozen after collection and now insects need to be separated from vegetation and identified. This work requires a lot of time in front of a microscope and the ability to handle small objects. If you have good attention to detail and an interest in insects, you may find seeing the diversity, strange morphology, and rare orders that we encounter to be fun and a fun and rewarding experience.