

## **New Student Trip Description Mt. Rainier Environmental Service Project**

This trip is an environmental service project with the scientists who work for the National Park Service at Mt. Rainier National Park. The majority of our time during the day will be spent in the aquatic habitats (lakes, streams, and rivers) found in old growth forests and alpine areas, collecting data on the populations of amphibians (salamanders, frogs, newts, etc.). The exact location of our work will depend on conditions later this summer. Our work area will be in places that not many people visit, due to the long hikes in, and remote nature of these areas. It's about a 3-hour van ride from campus to Mt. Rainier National Park, then, each day, our group will be hiking 6-20 miles to get to our sampling sites. In some cases, we will backpack in and set up a base camp. In other cases, we may drive to different trailheads each day and do long day hikes (without full backpacks) to get to the sampling sites. We may split the group into two, with one College Outdoors leader in charge of each sub unit. This is in order to have less impact on the alpine areas we may be camping in, and also, to allow us to hike into more sampling sites.

This description does not cover all aspects of the trip, but it will give you a few more details about this adventure. Due to the many variables of outdoor trips, it's impossible to describe exactly what the trip will be like. It's standard practice with our program to inform you of the hazards and dangers that are possible on this trip. Some (but not all) of those follow.

This service project will require physical endurance and stamina due to the hiking and backpacking involved. You want to be physically fit and interested in learning about scientific research (specifically, amphibian population research) to sign up for this service project. Because we'll be in a remote area, advanced medical care will not be readily accessible. Each of the two leaders for this service project has Wilderness First Responder training, and will carry our standard outdoor program first aid kit. We estimate we'll be at elevations ranging from 1000 to 8000 feet during our sampling work.

Poison oak/ivy may be present in some areas on our hike in, but is almost never seen in the alpine area where we'll be working. Yellow jackets, bees, wasps, or hornets are common at this time of the year, and people with the potential for severe reactions to stings need to carry anaphylaxis kits with them. Mosquitoes and flies can be plentiful or non-existent, depending on how cold the nights are and how dry the season has been. Usually the mosquitoes are not troublesome, but West Nile virus has been identified in the Pacific Northwest, so avoiding mosquito bites by using insect repellent and clothing to cover up bare skin is always a good idea. Ticks and rattlesnakes are not common in Mt. Rainier National Park, but could possibly be present in some areas.

Bears and mountain lions, as well as elk and mountain goats, may be found in the area we will be working, and while sometimes these animals will charge, they will generally avoid humans. We have never had a problem with these animals on any of our trips. However, precautions must be followed for camping in bear country. Skunks and other animals in the area have been known to carry rabies and other diseases, so it's important to keep a clean camp and not feed or try to pet wildlife. Cliffs and rock outcrops can be unstable and dangerous in places.

The area in which we'll be working is generally fairly dry by late August. Plenty of water needs to be carried by each person in the field and the fire danger is generally high. In Mt. Rainier's backcountry areas, fires aren't allowed, to protect the vegetation, and we'll need to be very careful with our backpacking stoves. That being said, it's also possible to have very wet weather in late August, so you want to be prepared for both dry conditions and possibly very wet ones- including the possibility of snow and below-freezing temperatures.

Due to the remoteness of the sites we will hike into, it is possible to get lost. We will go over map and compass skills at the beginning of our work, and procedures to follow if you do become temporarily lost. We will have whistles for you to carry and we plan to have walkie-talkies for communication, but their range can be limited. We'll break into small groups and travel, in some cases, over steep terrain to the research sites, where we will inventory amphibian populations and collect data. This service project is a great educational opportunity, but the hours may be long, the hiking can be challenging due to the terrain and the weight of your backpack.

On our first full day in the area, we plan to go through an orientation to the techniques and sampling methods. After that training, we will be heading into the park. Using maps, compass, and GPS-enabled data recorders, we will work in teams. At the study sites, we will follow the park service's population sampling protocol and record the data. Expect air temperatures during these days to be in the mid 50's-80's degrees F. during the day and 30's-50's at night—though this could range higher or lower, depending on weather systems moving through.

In the evening, there will be time to relax, cook great meals, and get to know the other new students on the trip. We will be camping out during the entire trip, but will have access to showers at the end of the trip. We'll be sharing camp chores, including meal preparation and clean up. Sanitation and proper food handling techniques, including frequent hand washing, are very important in a camp setting, to prevent illness. We'll cover this information on our first few days in the field.

If you're interested in contributing to the understanding of ecological populations of amphibians, want to learn a bit about what a National Park Service scientist does as a career, have a good sense of humor and are in great physical shape with a good work ethic, this is the trip for you! You'll also make some great friends, share some good laughs, and see some incredible scenery. Have a great summer, and we'll see you in August!