

Final Report: Restoration Intern
Salish-Kootenai College (SKC) Technical Assistance

Restoration Intern at Glacier National Park

Hi, my name is Bert Stripped Squirrel, and I am an Intern from the Salish-Kootenai College in Pablo, MT. I am currently majoring in a 4-year degree of Environmental Science in Forestry. As for my Internship, I am working as a Biology Technician (Nursery Assistant) at the Native Plant Nursery in Glacier National Park. Fields of work that is conducted in Forestry, for working as a Biology Technician, I experienced Botany. Botany is one logic program for the Native Plant Nursery, to work in the field of Glacier National Park. Highlights of what I learned are the field, specific locations throughout the park you may need to know plant restoration in most recent disturbed areas, scouting for specific species of plants, and plant ID (identification) for seed collection; data collection, GPS use in the field, and vegetative propagation. The Internship for me was a new learning process to know that there are many fields of Forestry (working for the Native Plant Nursery in West Glacier, MT). I know Botany is one field of work that interests me, a type of work I know could use from this experience in the near future of my career path.

Being in this field of work, there are many key areas of where you need to travel and scout for seed collecting. Botany is very involved of learning and giving the experience of knowing certain species of plants. Working in the field, you are certain to find several plant species: for me it was ID-ing these plants to know where a plant is and what it looks like, and you can identify almost everything that you need to know from each location. The key idea of this work is simple, first you have a list (plant species to key) of plants you need to find and ID at certain area (e.g. Two Medicine). When you first go out into the field, you need to be prepared with everything from rain gear, food, water, first aid kit, and bear spray. For these purposes, you are scouting for certain species of plants (e.g. it could be a grass, forbs, shrub, or tree), and you may need to do a little looking around such as hiking to certain areas in meadows to find these species of plants. Some examples of plants I learned to identify are, Mahonia repens (Oregon-Grape), Arnica cordifolia (Heartleaf Arnica), Bromus carinatus (Mountain Brome), Thuja plicata (Western Red Cedar), Rosa woodsii (Woods Rose), and many species of plants that are on a variety list of over 200 different species.

Once you find the species of a certain plant, you need to mark it down with the GPS unit, and you need to mark down where the species UTM# is located for data; sometimes you don't have the technology and you need to write down the specific location with the best of your knowledge. If this happens, the computer has the Arc View for mapping to help out where you believe this species location is at, also you need to highlight that area, and save it for the future purpose of seed collecting, although most of the seeds are not ripe sometimes, you still need to do data collecting for the future of seed collecting. After scouting the area of Two Medicine, a certain plant species was found, but I don't know if it was the right one or not. So what I need to do is use this plant book to key out the plant for the right species, and it can be marked down for data. The book we use is the

Flora of Glacier National Park by Peter Lesica; we use this as a key to know the plants' species. When you know what the right species is, you need to do data; for the quantity estimate, UTM# for location, specific location such as Two Medicine, phenology and ripeness of the plants' seed. In the near future, such as the purpose of plants that have been recorded for data, you also need to go back to look at the species for seeds, and to see if they are ripe or not. If they happen to be ripe, you need to collect.

Seed collecting in the field is the best when the species of plants are ripe and you need to collect their seeds. When seeds are ripe, you need seed collecting bags, scissors, scalpels, sickles, and a plant ID (or knowing which plant is needed to be collected). When you're in the field, it feels good to know what you are looking for to collect, after all you did scout for the same plants before and you know the area well enough to know what the plant is and where its location is. After finding and collecting the seeds from the plant species, you have them for the Native Plant Nursery to store for seed propagation. The seeds are laid out in the greenhouse to dry, cleaned, and then stored.

From all this learning process of Botany, there are many purposes of having a plant nursery, especially in the park, where there are many disturbed areas that may need seeds to be collected and planted for those areas, and seeds to be stored for the future. This internship was such a working experience of being a Biology Technician (in other words a Nursery Assistant) for me to understand the many fields of Forestry. This experience for me was something different and very interesting, with a learning process of work in this area of field for Forestry, it makes a difference and a change for me to know that this type of work could be used for an involvement to contribute and continue Botanizing in my career of work towards a job in this area of Forestry.

I would like to thank Bill Swaney for giving me this opportunity to work, Joyce Lapp for everything this internship had to offer, Salish-Kootenai College, the Native Plant Nursery and crew, Reveg. Crew, the Park Rangers and employees of Glacier National Park, the people of resource & research coordinators that made this funding possible, the volunteers and everyone else who gave me this experience to learn and work during the Summer of 2005 in West Glacier, Montana.

In Contribution and Assistance,
Bert Stripped Squirrel