



Biodiversity Surveys with GRI

Biodiversity can be defined as the variety of species in a given area, this variety can be classified in broad terms and includes not only the different species but the genetic diversity in a particular Species under study. Biodiversity is very important as it provides us with natural resources and services that humans heavily depend on. These services and resources can range from nutritious foods to providing oxygen on which we so highly depend on.

Game Rangers International is a conservation Non-Governmental Organisation currently operating in Zambia. It can be categorized in to three main themes which are Recourse Protection, Community Outreach and Wildlife Rescue. All the listed above programmes work holistically within the organisation and one cannot function without the others. All the above programs have one primary goal to conserve the biodiversity of the natural environment. This includes both flora and fauna (plants and animals) in any defined location.

Biodiversity has faced many challenges worldwide and as time goes by it's becoming more difficult to conserve the natural resources that we have. As game rangers we value all species and our aim is to contribute to the better management of biodiversity.

However, the better management of biodiversity requires a team effort as well as an understanding of the current situation of the biodiversity. For proper management and improvement in resource generation in the ecosystem, we need a full understanding of the variety and abundance of species in a given location and any given time.

Biodiversity surveys of any species involve an inventory of the variety of species, abundance of each particular species in the given area and their interaction in the environment they are in at a given location at a defined time. Biodiversity surveys answers the following questions

1. What plants and animals are found in this defined area?
2. What is the abundance of each animal and plant identified in this defined location?
3. How are their patterns in different times or seasons?
4. What is their environment?

Biodiversity has many benefits such as, economic, recreational, ecological life support, cultural and scientific provisions. These questions help us in understanding our surrounding natural environment for;

1. Proper management of resources
2. Education to the surrounding community
3. Impact of our efforts over a specified period of time

As volunteers we value your contribution in the time you have allocated with us to help us with data collection. Biodiversity data collection may differ in each location depending on the environment as well as the availability of resources. The following are the locations you will be visiting and some of the biodiversity you may be trained to collect data on.

GAME RANGERS

INTERNATIONAL

At Game Rangers International you will be exposed to three different facilities - in each of which you will be required to conduct biodiversity surveys. The following are the three different locations and what to expect in the Biodiversity experience.

1. **Kafue Release facility:** this facility is located in the Kafue National Park one of the largest national parks in the southern part of Africa. Unfortunately, because of its size of 22400 square Kilometres, it is incredibly difficult to manage or even get the statistical numbers of wildlife. Here, you will only be collecting biodiversity data of a small section on the park. This area covers a 10km radius around the release facility. You will be collecting data on large mammals, birds as well as vegetation. For the large mammals you will be collecting data using an adaptation of the line transect called the road count survey, this means you will collect data following road routes. You will need a camera, data collecting tablet or Phone, GPS tracker, compass and Range Finder (please note that the above will be provided). This data collection will mostly centre in different vegetation classifications, this may include, open areas as well as thickets.
2. **Musa gate Facility:** this facility is located next to the lake and is at the boundary of the national park. At this facility you will be focusing on the same things as at the Kafue Release facility except this will be centred along the lake and you will use the same equipment.
3. **Lilayi Elephant Nursery:** this facility is located in Lusaka, the capital city of Zambia. Near to this facility is the Lusaka National Park, where you will also be collecting bio data. This park is the smallest national park in Zambia with the size of 67 square kilometres so, we will be covering the entire national park, and you will be collecting data on large mammals, woodland birds, small mammals, amphibians, reptiles and vegetation. A wide of range of equipment will be used, including camera traps and pitfall traps.

You will be trained and directed by the Research Assistant as well as your Volunteer Supervisor on how to collect data and your schedules parting to this program at each site you visit. We highly appreciate the time you will give us to help us collect this valuable data. We look forward to your arrival.