



GIS training report

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Introduction

The training course was carried out from 3rd to 11th September 2007. The participants (see list below) were drawn from the International Gorilla Conservation Program (IGCP) Democratic Republic of Congo (DRC), Rwanda and Uganda; Institut Congolais pour la Conservation de la Nature (ICCN) DRC; Uganda Wildlife Authority and Rwanda Department of Tourism and National Parks (ORTPN).

1. Augustin Basabose	Conservation Science Officer & Country Representative DRC	IGCP
2. Altor Musema	Programe Officer – DRC	IGCP
3. Mediatrice Bana	Programe Officer - Rwanda	IGCP
4. James Byamukama	Programe Officer - Uganda	IGCP
5. Innocent Mburanumwe	In charge of monitoring PNVi (Virunga National Park, DRC)	ICCN
6. Jean Damascene Hakizimana	Monitoring agent – PNV (Volcanoes National Park, Rwanda)	ORTPN
7. Edwin Kagoda	In charge of Research and monitoring – Bwindi National Park, Uganda	UWA

PURPOSE OF COURSE

The purpose of the training was to introduce the participants to basic GIS skills to enable them carryout detailed analysis of RBM data they have been collecting since 1996. The course was designed as a project-oriented GIS training, aimed at introducing the participants to GIS software and provide them with background information on how professionals carry out and use day-to-day GIS technology. The goals of the course were to:

- Learn basic GIS concepts
- Become familiar with GIS terminology
- Learn to use basic GIS functions
 - display, query, manipulate, and analyze data
- Use GIS to complete a real GIS analytical project
- Working with GPS data

TOPICS COVERED

1. INTRODUCTION TO ARCGIS

Working with ArcCatalog, working with ArcToolbox, working with ArcMap, creating and editing features, creating map layouts.

2. PLANNING A GIS PROJECT

Planning a GIS project, creating the project database, carrying out data analysis and presenting the results.

3. SPATIAL ANALYSIS

Surface analysis, creating cost surfaces, cost distance analysis, cost path analysis, model building, suitability models

4. WORKING WITH GPS DATA

Downloading gps data, editing attributes, creating shapefiles from tabular gps data, joining tabular data to gps data.

RECOMMENDATIONS

1. Training

Overall, the training was a success. However, due to the unavailability of ArcGIS 9.2 for all participants, I would like to recommend further training in ArcView 3.2 for the RBM Rangers – Innocent, Damascene and Edwin. This would be a more useful tool for them as it's free and requires no licensing.

2. Data Management

- The current RBM data storage system is cumbersome as they maintain very many different files for the different months in a year for the different sites in different countries. I recommend combining all the data and have fields for Country, Site, Year and Month to enable easy analysis and querying of the data.
- The RBM shape files from different monitoring sites have different attributes fields. I would suggest having uniform fields for more efficient data management.
- There is no clear directory structure for the files. I would suggest grouping the data by country, site and type of data i.e. whether hydrological, topographical, biological etc. It is a more efficient way to store and manage your data.
- Have uniform naming protocols for the RBM data.
- Use of GPS data cables to download data from the GPS. This would eliminate typing errors when entering coordinates.