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## COMMUNITY AND HUMAN IMPACT

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### Evaluating the water quality of Dura River

#### Abstract

The study was carried out to evaluate the water quality of Dura River using the macroinvertebrate community within the Kibale National Park perimeter. Samples were collected from four sites on Dura River using kick nets and pond nets. Two of the study sites had high diversity of macroinvertebrates and were located within a semi-pristine forest, while the remaining two sites had low diversity levels which showed that there might be some pollution due to human disturbance. Functional feeding guilds showed that site 1 and site 2 had lot of gathering collectors followed by predators then scrapers. Water quality was measured using the macroinvertebrates EPT (Ephemeroptera, Plecoptera and Trichoptera) indices. Site 2 and site 3 had high abundance of species and site 1 and 4 had the least. However analysis of the abundance of individuals per site showed no significant differences. On the other hand, our result showed that site 2 and site 3 of River Dura had good water quality and is not disturbed by human activity. Nevertheless, since the water flows along one side, if the disturbance increases at site 1 and 4, it will affect both sites 2 and 3.

Harnon Whymah Garbo, Farmers Associated to Conserve the Environment, Liberia

Marwa Elhaj, Sudan University, Sudan

Yankho Chapeta, Museums of Malawi, Malawi

2012

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### Illegal activities in the north-western part of Kibale National Park

#### Abstract

A majority of people living around Kibale National Park depend on fuel wood, poles for building and tree bark for medicines from the forest. Many people who do not own private forests are forced to illegally extract these resources from the park. This study investigated the illegal activities in the North Western part of the park. We found that wood products were highly extracted from areas bordering both Eucalyptus and Tea plantations. Signs of poacher snares were found in some extent at a distance from the boundary closer to the forest interior.

Ellen Winberg, Gothenburg University, Sweden

Rose Peter Kicheleri, Sokoine University of Agriculture, Tanzania

Tokinaiaina Hobinjatovo, University of Antananarivo, Madagascar

2008

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### A comparative study of the influence of anthropogenic activities on water quality and invertebrate diversity in an equatorial river system

#### Abstract

Stream order has an effect on the water chemistry through increased size and catchment area on the stream system studied. Since water quality has a direct relationship with invertebrate species composition any change in water chemistry would be expected to affect the invertebrate community. Man causes tremendous changes to the natural river and stream habitats through

agriculture and clear cutting of forests surrounding the systems. Farming activity in the Mpanga River catchment area has had an effect on the water chemistry and possibly on the invertebrate fauna in the river. Denitrification rate is five times faster in the pristine rivers than in the Mpanga River. The implications of this were discussed.

Hassan A. Boru, African Wildlife Foundation, Kenya

Sophie A Butt, University of Sydney, Australia

Claire M. McDonald, University of Leeds, United Kingdom

2005

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### **Relationships between catchment land uses and biodiversity in four crater lakes in western Uganda**

#### **Abstract**

This study analysed the relationships between human catchment use and aquatic biodiversity in four crater lakes in Western Uganda. The four investigated lakes show small variation in the physical and chemical environment. The catchments of the lakes have been subjected to a number of human stresses, notably agriculture, settlement and tourism development. Tourism and agriculture have an influence on water chemistry, particularly biological oxygen demand (BOD), which subsequently should influence aquatic biodiversity. The Pearson Correlation showed no simple relationship between the catchment land uses and aquatic diversity.

Daniel Nai, Ghana

Simon Akweteireho, Uganda Wildlife Authority, Uganda

2005

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### **Use of medicinal and wild food plants by local communities in and around Kibale Forest National Park, Western Uganda**

#### **Abstract**

The study of the local use of medicinal and wild food plants was carried out in six villages in Kiko parish, Kibale Forest National Park in September 2004. Data were collected using semi-structured interviews and guided questionnaires. A total of 132 individuals were interviewed and the data were analysed using descriptive statistics. We recorded use of 35 families with 76 species of medicinal plants and 20 families with 25 species of wild food plants. Leaves were most used for medicine and fruits were the most eaten plant parts as food. The study also showed that time taken to collect plants depended on the distance from the forest. Local people in Kiko parish have a good knowledge of use of medicinal plants, including the young people. The people who planted and cultivated in home gardens were more common than those who did not practice any activity related to conservation of the plant resources. More research should be done on the study of medicinal plants, especially on the active chemical components and should be published.

Peter B. Olanya, Makerere University, Department of Botany, Uganda

Mahazomanana Z. Iharimbolatiana, University of Antananarivo, Madagascar

Omonlola N. Worou, University of Abomey-Calavi, Benin

2004

## **Impact of paths on the herb layer in Kibale Forest, Uganda**

### **Abstract**

An investigation of impacts of paths on herb layer showed that paths affect the herb species composition and cover. Path creation was observed to involve a decrease in litter depth and cover and this might be responsible for the change in herb composition and cover. Measurements of diffuse light factor revealed that gaps occurring on paths were distinctly different from natural gaps in the forest. Further studies are recommended to understand better the effects of paths in Kibale Forest.

**Elke Mueller, University Bern, Switzerland**

**Winfred M. Musila, National Museums of Kenya, Kenya**

**1998**

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