USING EVALUATION RESULTS: Durban Sept 8-17 2003

Bwindi Impenetrable National Park: Uganda
IUCN Management Category: II (National Park), Natural WH Site: Criteria iii, iv

1.0 Summary
This document provides a brief review of the completed initial assessment (evaluation) at Bwindi Impenetrable National Park (BINP)[1]. It has been used to facilitate discussion between the Enhancing our Heritage (EoH) team, BINP staff and partners on developing future assessments for the park and on the implementation of park programs based on the results of the evaluation.

2.0 Introduction
BINP covers 32,092 ha and is located in southwest Uganda. The park's rare afromontane vegetation provides one of the richest habitats in East Africa for birds, butterflies (over 300 species), trees and mammals; the latter includes chimpanzees and half the world's remaining mountain gorilla population. Sectors of the forest have been protected since the 1930s. The National Park was gazetted in 1991 and inscribed as a World Heritage Site in 1994. BINP is not a pristine system and 90 per cent of the forest has been disturbed by logging and other activities. The edges of the park are generally marked by an abrupt boundary and change into farmland.

BINP is managed by the Uganda Wildlife Authority (UWA) with the prime purpose of conserving the montane forests and their associated wildlife populations especially the gorillas. All other functions, including tourism, which focuses almost entirely on gorilla watching, are secondary. Tourism, however, provides a major source of income for BINP and UWA, and 20 per cent of the park's revenue from entrance fee is paid to the districts local governments within which the park occurs as a contribution towards meeting the basic social and economic needs of the local people.

3.0 Initial Assessmenrt (Management Evaluation)
In August 2001, a workshop was held in Bwindi with all relevant park staff to introduce the concept of management effectiveness and self evaluation with support from Enhancing Our Heritage Project. A second workshop was held in September 2001, attended mainly by NGOs working in and around Bwindi (i.e. ITFC, CARE and the IGCP). This resulted in a draft initial assessment report. Finally an all-inclusive workshop was held in August 2002 and the draft document was used by the stakeholders as a working document for discussion. Prior to the August 2002 workshop, between September 2001 and July 2002 all the park staff underwent a 3 months refresher course in two shifts on basic natural resource conservation principles and ethics including monitoring and evaluation. In the same period the Management Information System (MIST) developed for purposes of monitoring management effectiveness among others within UWA was installed in Bwindi and staff trained in its use and maintenance.

The Initial Assessment document was prepared by John Makombo, Chief Warden for BINP and Alistair McNielege, Director of ITFC, with input from Aggrey Rwesitba

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[1] Initial Assessment Report for Management Effectiveness at Bwindi Impenetrable National Park, August 2002

the Monitoring and Research Coordinator for BINP and Moses Mapesa, Director - Field Operations of UWA.

3.1 Overview of assessment results

The assessment results clearly demonstrate the effort that has been put into restructuring the management of BINP, i.e. a well trained upper level of management, monitoring through the MIST system and good community relations. The assessment does however show some areas which need to be improved to facilitate the management of BINP. These include the need to address inadequate information on the biological resources and dynamics of the park, inadequate levels of staffing and infrastructure and low levels of staff training in less senior staff. There is however already a provision through a World Bank supported project, Protected Area Management for Sustainable Use (PAMSU) funding support for developing monitoring and assessment systems to help fill the gaps in information, training and infrastructure development.

The assessment was somewhat biased towards the biodiversity objectives and less on the cultural/social objectives that are important for the overall effectiveness of park management. Future efforts will therefore focuss on cultural/social efforts as well.

Specific comments from the team who carried out the initial assessment in Bwindi include the need to:
- Consult with the EOH project to simplify some areas of the WCPA assessment framework that was used.
- Identify indicators to measure outcomes.
- Assess inputs versus outcomes.
- Lack of statistical evidence should not feature again.

3.2 Next steps

The overview of the assessment and the conclusions from the assessment itself provided the basis for developing the plan for the next two years with support of the EOH of the project; and the subsequent release of funds by UWA for implementation of park management programs.

4.0 ASSESSMENT RREWSULTS AND HOW THEY HAVE BEEN USED

4.1 CONTEXT REVIEW

4.1.1 Focal Management Targets Data Sheet

What were the results?
BINP used the objectives identified in the current management plan as the basis for developing the focal management targets. Some clear gaps in knowledge on these targets were identified. The review identified ten focal management targets:
- **Biodiversity values**
1) Mountain gorillas
2) Habitat
3) Other endemic species
- **Other natural values**
4) Climate modification

5) Water catchments
6) Carbon sink
7) Scenery
- **Cultural/social values**
8) Revenue generation from tourism activities
9) Non-timber forest products
10) Education and Research

Interpretation of results
The focal management targets closely resemble the resource values identified in the General Management Plan (GMP) for BINP and Mgahinga Gorilla National Park.

Gaps and responses

Gaps	Responses
1. Information on gorilla health is scattered	Existing programme with ITFC and others on-going on gorilla health.
2. Information on education and research activities/database exist, but needs updating	Work is proceeding with ITFC and UWA monitoring unit.
3. Vegetation maps exist but are old and need updating	Prepare a short project proposal for funding a rapid ecological assessment. ITFC could assist in this with funding support from EoH.
4. Information on other endemic species is scant and requires further research	
5. Information on NTFPs is scant and requires further research.	

4.1.2 Engagement of stakeholders/partners in management

What was assessed?
The assessment was carried out for the broader grouping of targets, i.e. biodiversity values, other natural values and cultural/social values. For each of these broader grouping the same six stakeholder groups was assessed: local community, local government department, tourists, tour operators, NGOs and ICCN (the management authority responsible for the neighbouring Sarambwe Forest in DRC). The assessment detailed the level of stakeholder engagement in each of the groups (using a scale of high, medium, low and none) and then summarised the overall engagement of each stakeholder group (using a scale from very good, good, fair, poor to very poor). The summary table was also completed aggregating these scales for each stakeholder grouping.

What were the results?
The management of Bwindi has put considerable effort into working with local communities and NGOs, which is clearly reflected in the results of the assessment. The summary table identified engagement of local communities in management as very good, of local government as good, of tourists as fair, of tour operators as fair, of conservation NGOs as good and ICCN as poor. Overall engagement of stakeholders in biodiversity values was considered good, in other natural values as fair and in socio-economic values as good. Overall it would seem that the review did not indicate any issues relating to the stakeholder/partners relationship with BINP managers that were not known previously. However, by formally documenting the assessment and

presenting/discussing the results widely with stakeholders, the efforts of UWA and partners have been formally acknowledged. *As Moses Mapesa remarked, "I was surprised at some of scores given to us by the community members and indeed I put them to task whether they were merely telling us what they thought we wanted to hear or they were genuine. In the final analysis they explained that although ideally they still expect more from UWA they sincerely acknowledge what so far has been done particularly when you consider the cumulative impact of all the NGO projects and the tourism activities within the whole Bwindi landscape."*

Interpretation of results
- **Local community**: All the ratings were positive and indicated the same overall trend: that the relationship with communities was good but dependent on ensuring communities access some resources and get economic benefits from the park in return for their engagement in the conservation of the parks values.
- **Local government department**: The ratings indicate that the local government has an important role providing leadership in the communities, the departments willingness to engage in the park was rated as medium, whilst their contribution to management and overall level of engagement was rated as high.
- **Tourists**: In general the influence of tourists was low, apart from positive impacts of revenue generation and willingness to engage – when and where approached. Their political and social influence was low, which perhaps indicates that the Ugandan government has not taken full advantage of tourism in the development of the country. Input to management and engagement was ranked as medium as when visitors meet staff and they are asked for their suggestions. Overall relationships were rated as fair for biodiversity values, poor for other natural values, and good for other social and cultural values, indicating that more effort needs to be made to engage tourists in BINP overall rather than just in the resident gorilla population.
- **Tour operators**: Operators have a high economic dependency on the Park, and were generally rated as having a medium level of engagement across the other factors, although as noted above engagement in the wider values of BINP is lacking.
- **Conservation NGOs**: Relationships with NGOs were rated as good for all three values, indicating the symbiotic relationship between the NGOs operating in the Park and the Park management.
- **ICCN**: The engagement of ICCN is limited by the political situation in DRC although regional collaboration is on-going. The overall rating for engagement with biodiversity values and other natural values was fair, however the engagement with other social and cultural values was rated as very poor, with there being virtually no engagement cited.

Gaps and responses
The clearest gaps identified are related to diversifying tourism within the park and surrounding area, a requirement that is reflected in the GMP as one of the primary objectives of management.

Gaps	Responses
1. Further development of relationship with tour operators and tourists to highlight all the values of BINP – could be linked to development	Some developments are taking place in line with the GMP.

projects (i.e. new trails to cultural sites, promotional literature etc.)	
2. Promoting tourism on the national agenda within Uganda.	Uganda Tourist Board is to address this with local tour operators and UWA

4.1.3 Identifying Stresses and Threats

What were the results?
Current threats
Stresses and sources identified were:
- Poaching
- Fire
- Insecurity
- Grazing
- Exotics/aliens
- Over-harvesting of Non Timber Forest Products (NTFP)
- Crop raiding by animals in the park
- Disease and pests
- Low economic position of communities
- Potential roads

Potential threats
Stresses and sources identified were:
- Loss of forest habitat
- Mining

4.1.4 National Context

What were the results?
Some gaps in the wildlife statute 1996 were identified in relation to problem animal control and compensation and controlling illegal trade in wildlife and wildlife products. It was also noted that there is no integrated planning between the various government departments that are involved in environmental issues.

Gaps and responses

Gaps	Responses
1. Inadequacies in the law relating to control of illegal wildlife trade	UWA has made proposals for changes in the law to strengthen control of illegal trade

4.2 PLANNING ASSESSMENT

4.2.1 Adequacy of General Management Plan

What was assessed?
The General Management Plan was assessed.

What were the results?
Considerable work has been put into developing the management plan and operational plans for BINP. As a result both plans are up-to-date and are the focus for management activities at the site.

4.2.2 Design Assessment

What were the results?
The management constraints linked to park design in BINP relate to the small area of the park and the boundaries, which are irregular and abrupt.

- **Ecological integrity**

BINP does not include all gorilla territory in the area. The park is small there is no room for expansion. The boundaries although clear are irregular and leave room for encroachment. Although there is connectivity with neighbouring forest areas, this connectivity is inadequate due to small areas and intensive resource use beyond the parks borders.

- **Community well-being**

Designated zones for resource use, tourism etc are clear, however use of these zones is not well monitored. The pressure on resource use in BINP is aggravated by the small size of the park and the lack of connectivity to other areas for alternative resource use.

- **Management factors**

The legal status of the park is secure, although the possibility of conflicts with local people was raised. Access to BINP is limited due to landscape features; this was assessed as both a benefit and weakness. It was noted that communities farm up to the boundaries of the park, which can lead to increases in animals from the park raiding crops and fire, used in agriculture, spreading into the park.

Gaps and responses

Gaps	Responses
1. Inadequate monitoring of compliance with zoning provisions	Data is being collected and will be assessed using the MIST system
2. Boundary problems have not been adequately addressed	Boundary issues are being addressed. However, crop raiding problems still remain a challenge.

4.2.3 Input assessment

4.2.3.1 Assessment of Management Needs

What was assessed?
A table detailing staffing needs and training was provided. Budget information was limited. However methods for recording budget data are being revised and will allow for more information to be provided in the future.

How was the assessment done?
The assessment was compiled from a variety of sources including training needs assessments, staff appraisals and the general management plan. Information on the infrastructure was obtained from the general management plan.

What were the results?
- **Budget**

About 85 per cent of the budget is funded.
- **Staff numbers and training**

There are currently 76 staff in post. The table identifies another 34 posts as required. All persons in post have received some form of training. The training of the Chief Warden and Research and Monitoring Warden are rated as very good, and the level of training of the Law Enforcement, Tourism and Community Wardens, Accountant, Clerks and some drivers is rated as good.
- **Equipment and infrastructure**

BINP has 5, out of a required 8 vehicles, and of these 3 currently out of action. Similarly there are 4 motorcycles, out of a required 7, and only 2 are in good condition. There are also shortages of GPS systems and binoculars, and sleeping bags or mats (40 of each are required). Accommodation and office equipment is also lacking. BINP also needs a visitor centre.

Gaps and responses

Gaps	Responses
1. Staff recruitment and training issues	To be addressed with PAMSU support
2. Presentation of budget was not sufficient to assess effectiveness	Being addressed through AOP planning and new budget codes based on activities.
3. Infrastructure and equipment	To be addressed under PAMSU support
4. Lack of visitor centre.	Planning has been completed, but further fundraising is required. EoH to help with fundraising.

4.2.3 Process Assessment

What were the results?
In general the rating system for management processes showed that the systems are in place in BINP that allow effective management to take place but that shortfalls identified in other areas of management (budget, staff numbers, equipment etc) are to some extent impeding management.

Interpretation of results
Although great efforts have been made to involve communities in BINP the assessment indicates further efforts could be made in involving communities in decision making and in ensuring that community welfare programmes dovetail with resource conservation.

Gaps and responses

Gaps	Responses
1. The process assessment does not totally reflect the reality of Bwindi	UWA and partners will work on tailoring the process assessment to develop the assessment to suit BINPs needs

4.2.4 Management Plan Implementation

Quarterly evaluations of the management plan will be developed from 2003.

Work/Site Output Indicators

What was assessed?
Information was provided from July 2001 to June 2002.

How was the assessment done?
The indicators were taken from the operational plan.

What were the results?
Most of the planned activities were completed and all activities had some action. The 15 per cent budget shortfall was the reason for most uncompleted actions. Indicators show many objectives have been achieved. Gaps identified, normally due to limited funding, include number of patrols, security meetings, staff recruitment and training, renovation of outposts, trap construction and some bridge repairs. The assessment also notes some important improvements in management

Gaps and responses

Gaps	Responses
1. Assessment of management plan implementation	Quarterly evaluations of the management plan will be developed from 2003 using MIST.
2. Monitoring of patrol coverage	This information will be gathered by the MIST system

4.3 OUTCOMES

4.3.1 Biodiversity Health Outcomes

What were the results?
- **Focal management target: Mountain Gorillas**
Overall rank - good.
- **Focal management target: Habitat**
Overall rank – fair. Although area of forest cover is within the acceptable range, the other key factors (condition: natural regeneration after disturbance; and landscape context: fire regime, climate and connectivity) are assessed as not within their acceptable ranges.
- **Focal management target: Other endemic species**
Overall rank – good, but no acceptable ranges identified

Interpretation of results
The assessment of habitat and other endemic species both rate the landscape context key factor of fire regime, climate and connectivity as not being within their acceptable range of variation.

Methodological recommendations
It is clear that this methodology requires significant work to be made more useful.

Gaps and responses

Gaps	Responses
1. Although significant monitoring is already taking place in Bwindi, there is need for continued ecological monitoring.	Gorilla health monitoring will continue including the impact of tourism on the gorillas. Vegetation mapping will be undertaken.

4.3.2 Assessment of Threat Status

What were the results?

The threat-to-target assessment was only carried out for the three biodiversity targets. Overall ranking for threats were: Poaching - low, fire- high, insecurity - low, grazing - medium, exotics/aliens - medium, over harvesting of NTFPs - high, crop raiding - high, disease and pests – low, and low economic position of communities - medium. The overall threat status for the park was medium. Fire control measures are being taken, however gaps exist in dealing with some of the issues (see below).

Methodological recommendations

The methodology for this assessment is very complicated and hard to understand. The methodology will be reviewed.

Gaps and responses

Gaps	Responses
1. Overharvesting of NTFPS is perceived as a problem but information on vegetation is limited.	Need more information on species being harvested, conservation states, ecology of restoration and off-take levels.
2. Dealing with crop raiding by elephants and gorillas etc	Several options are available but need evaluation/experimentation to establish practical effectiveness. EoH will help evaluate effectiveness of methods used so far (buying land, scaring animals, planting live fences) and looking into other options (trenches, fencing spray guns).

Achievement of management objectives

This methodology is aimed at assessing the focal management targets not assessed as part of the biodiversity health assessment. However, the BINP assessment has looked at the three biodiversity targets again and not the other targets. This gap should be addressed in future assessments.

Review by Moses Mapesa and Sue Stolton
Responses by Uganda Wildlife Authority
Review discussed by EoH team, UWA management and Bwindi staff.