IUCN Conservation Outlook Assessment 2014 **(archived)**
Finalised on 28 September 2014

Please note: this is an archived Conservation Outlook Assessment for Bwindi Impenetrable National Park. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Bwindi Impenetrable National Park

SITE INFORMATION

Country:
Uganda
Inscribed in: 1994
Criteria:
(vii) (x)

Site description:
Located in south-western Uganda, at the junction of the plain and mountain forests, Bwindi Park covers 32,000 ha and is known for its exceptional biodiversity, with more than 160 species of trees and over 100 species of ferns. Many types of birds and butterflies can also be found there, as well as many endangered species, including the mountain gorilla. © UNESCO

SUMMARY

2014 Conservation Outlook

Good with some concerns

Bwindi is a relatively small, ecologically- isolated island of Afromontane forest in one of the most densely populated parts of Africa. As such it faces enormous pressure from surrounding communities, which have traditionally used the forest's resources but are now prevented from doing so. Conflict over resource access rights remains an issue. Achievements have been made in improving park-community relation, but there needs to be better understanding of linkages between national park conservation and poverty alleviation and of the interventions that can address both issues.

Current state and trend of VALUES

Good
Trend: Stable

Since the change in management status in 1991 (from forest reserve to national park), timber harvesting and other forms of consumptive resource use have reduced in most areas, and protection has resulted in recovery of more natural pristine habitats. Although there are few supporting data, it appears that the dynamic ecological processes and biodiversity values of the property are at least stable, and may be improving in some respects. Mountain gorilla census data from 1997 to 2011 indicate an increasing population of these highly endangered primates with 400 individuals in 2011(Robbins et al., 2009; IGCP, 2012).

Overall THREATS

Low Threat

Overall, the threats to the site are moderate and localited. The increase in the gorilla population from the 2011 census is a positive indication that law enforcement efforts have protected the gorilla population. However, reducing threats through law enforcement is not sustainable over the long-term, and the

major threat is the poverty of the people living in the surroundings and their feelings of injustice about conservation. The recent advent of gorilla-based tourism has created a strong economic incentive for enhanced protection and efforts to alleviate the poverty drivers of biodiversity loss, and the park has attracted strong donor support for an array of interventions to mitigate development pressures, engage local communities and strengthen management thus reducing threat levels. There remain significant conflicts between park authorities and local communities over access to forest resources, fair and equitable distribution of benefits from the national park, as well as crop damage by wildlife. Gorilla-based tourism brings the risk of transmission of human diseases to the gorillas, and habituation makes them more vulnerable to being killed. Collection of some minor forest products (honey, medicinal plants and basketry materials) continues under management agreements with local communities, affecting 18% of exterior areas of the park. The park is relatively small and has become ecologically isolated, threatening the viability of some of the larger species in the long term. Climate change will alter vegetation communities and may threaten some of the unusual Afromontane forest species. The possibility of civil unrest and insurgency cannot be ignored, since the park lies in a region of central Africa that has a long history of instability and there is presently unrest across the border in the Democratic Republic of Congo. Other potential threats arise from the possibility of upgrading roads through the park.

Overall PROTECTION and MANAGEMENT

Mostly Effective

Protection and management of the area has been considerably strengthened since it became a national park in 1991 and timber harvesting was reduced. About half of the park is now maintained as a wilderness zone, largely free of human activity, with a quarter designated for gorilla-based tourism and 20% managed for sustainable use of non-timber forest products by local communities. Despite the challenges of its situation as an ecological island in one of the poorest, most densely populated parts of the continent, the park has developed a strong integrated management programme. Achievements have been made in improving park-community relations but the challenge of better linking conservation and poverty is still to be met.

FULL ASSESSMENT

Description of values

Values

World Heritage values

► **Mountain Gorillas and other threatened mammals**
Criterion:(x)

Bwindi is home to about 400 (45%) of the world's mountain gorillas (IGCP, 2012), and other rare and endangered mammals, including elephants, chimpanzee and l'Hoests monkey (SoOUV, 2011). The property has an unusually rich small mammal fauna with 47 species of rodents, 20 shrews, and numerous bats (UNEP-WCMC, 2012), at least four of which are rare Albertine Rift endemics (Davenport et al., 1996)

► **Rich montane flora and fauna.**
Criterion:(x)

The park has one of the richest montane floras of any site in Africa, including many endemic species. For all major taxonomic groups, available information indicates unusually high total species counts for an area of this size. The property has the highest diversity of tree species (over 200 species including 10 endemics) and ferns (some 104 species) in East Africa, and maybe the most important forest in Africa for montane forest butterflies with 202 species (84% of the country's total), including eight Albertine endemics (SoOUV, 2011). There are at least 1,000 known species of flowering plants, 120 species of mammals, 348 species of birds in an area of just 321 km2 (UNEP-WCMC, 2012)

► Rare and endemic birds

Criterion:(x)

The property is internationally recognized as an Important Bird Area (Birdlife, 2012) and lies within the Albertine Rift Mountains Endemic Bird Area (Stattersfield et al., 1998). At least 348 species of birds have been recorded, including 23 of the 36 known Albertine Rift endemics (UNEP-WCMC, 2012). The avifauna includes eight Red Data Book species, including two considered to be endangered (Grauer's Swamp Warbler and Turner's Eremola); three classified as Vulnerable (African Green Broadbill, Chapin's Flycatcher and Shelly's Crimsonwing; and three Near-threatened (Lagden's Bush Shrike, Dwarf Honeyguide and Forest Ground-thrush) (IBA Factsheet 2012)

► Occurrence of Albertine Rift endemic species

Criterion:(x)

Although knowledge of the site's biodiversity is far from complete, most groups of flora and fauna exhibit high levels of endemism. Eleven (41%) of the 27 known amphibians are endemic to the Albertine Rift (UNEP-WCMC, 2012), as well as 8 of the known 310 species of butterfly (Davenport et al., 1996), and nine (64%) of the 14 recorded species of snakes (UNEP-WCMC, 2012)

► Diversity of co-evolving habitats

Criterion:(x)

There is an exceptional diversity of habitats on account of the range of altitude (1,190 to 2,560m), equatorial location and high rainfall. These cover the complete transition from lowland to montane forest, with some notable swamps and a small grove of bamboo at the highest elevations.

Other important biodiversity values

► Water catchment

The rugged hillsides of Bwindi serve an invaluable role as a water catchment, maintaining biodiversity and life-support systems downstream, particularly

the key fisheries of Lakes George and Edward.

Assessment information

Threats

Current Threats

Low Threat

The park's rugged terrain, long history of protection and low potential for commercial forestry have resulted in the fact that threats are localized. The recent advent of gorilla-based tourism has created a strong economic incentive for enhanced protection and efforts to alleviate the poverty drivers of biodiversity loss, and the park has attracted strong donor support for an array of interventions to mitigate development pressures, engage local communities and strengthen management thus reducing threat levels. Collection of some minor forest products (honey, medicinal plants and basketry materials) continues under management agreements with local communities. There remain significant conflicts between park authorities and local communities over access to forest resources, fair and equitable distribution of benefits from the national park, as well as crop damage by wildlife. There is a limited amount of illegal hunting of bushmeat. Gorilla-based tourism is increasing and there are some associated risks including the possibility of human disease transmission and increased scope for illegal killing of gorillas. In the long-term, climate change may cause far-reaching ecological changes.

► Fire/ Fire Suppression

Low Threat
Inside site

Fire can cause localized habitat destruction when conditions are exceptionally dry, especially along the forest edge where fires can spread from neighbouring agricultural lands (EoH, 2007). However, the wet closed canopy forest is generally resilient to outbreaks of fire.

► Other

Low Threat
Inside site

The property is an ‘ecological island’ of forest in one of the most densely populated (and intensively cultivated) parts of Africa. Local population densities around the forest edge are typically 160-320 people per km2 (UNEP-WCMC, 2012), and the forest has been progressively isolated from other protected forests along the Albertine Rift through the clearing of forest remnants in the agricultural areas. The small size of the forest (320 km2) means that maintaining viable populations of larger species – such as elephants, gorillas, chimpanzees, birds of prey – may not be possible without sustained intervention.

► Crops

Low Threat
Inside site
Outside site

Although the park boundary is clearly demarcated, there have always been periodic instances of encroachment by neighbouring cultivators.

► Logging/ Wood Harvesting

Low Threat
Inside site

A few trees are felled illegally by local people for building poles and sawn timber.

► Subsistence hunting

Low Threat
Inside site

Low-level subsistence hunting has been a way of life for the local Bakiga people and (especially) the forest-dwelling pygmy Batwa community for centuries. Its impact has been limited due to the extremely rugged terrain and relatively low human population densities around the forest, at least in the past. Hunting is now illegal, but there is still significant hunting pressure, generally using wire snares to trap animals and hunting dogs (EoH, 2007;

IUCN Consultation, 2014). In 2013, bushmeat was the most desired forest resource and the most widely consumed by local people. Hunting and consuming bushmeat is mostly concentrated in remote areas and the frontline zone of the national park, and driven by the poverty associated with a lack of money to buy meat or livestock (Baker et al., 2014).

► Other Biological Resource Use

Low Threat
Inside site

Minor forest produce, notably honey, medicinal plants and basketry materials, make an important contribution to local livelihoods and these products may now be taken from designated zones under the terms of community-use Memoranda of Understanding. Off-take is monitored by park rangers (IUCN Consultation, 2014).

► Invasive Non-Native/ Alien Species

Low Threat
Inside site

The occurrence of alien exotic vegetation is generally limited to areas around the edge of the forest and affects no more than 2% of the property (EoH, 2007)

► Roads/ Railroads

Low Threat
Inside site

An unsurfaced rural access road cuts through the highest reaches of the park, along its boundary and through the narrow ‘neck’ that connects the two parts of the forest. This seems to serve as a barrier to gorilla dispersal and use of habitat, and may also affect other species. It is frequented by local people on foot, bicycle and car, and used as a main through route for lorries transporting goods from the regional capital at Kabale to villages lying to the north of the forest.

► Habitat Shifting/ Alteration, Storms/Flooding, Temperature changes

Data Deficient

Inside site

Global warming is raising temperatures and is expected to cause a general shift of vegetation zones to higher elevations. This will increase the area of the forest suitable for lowland forest species and reduce its suitability for higher-elevation montane species (which tend to be the rarer ones). The small grove of bamboo which currently exists at the highest point may no longer survive under warmer conditions.

► Other

High Threat
Inside site

Whilst habituation of mountain gorillas for tourism brings enormous economic benefits, it also puts them at risk of disease transmission from human visitors, and exposes them to the threat of being killed easily (for example, by those who may not benefit directly from gorilla tourism and resent the sacrifices being made by local people denied access to other forest resources; or by ‘dealers’ wanting to sell gorilla babies or body parts on international markets). Gorillas may also suffer disturbance from the activities of local people taking forest produce in the designated ‘integrated resource use zones’ around the edge of the forest, and tend to avoid using such areas, thus reducing the area of suitable habitat available to them (EoH, 2007). Many claim that habituating gorillas is increasing gorilla crop raiding. There is no empirical evidence on this. However, crop raiding gorillas face additional risks of contracting diseases from local people (IUCN Consultation, 2014).

► Other Activities

High Threat
Inside site

Crop damage around the forest edge remains a source of conflict between park authorities and local farmers, with crop raiding by elephants, gorillas, chimps, baboons and other primates, as well as bushpigs, antelope and birds (EoH, 2007). This conflict is exacerbated by the long boundary (relative to area protected), and high population pressure all along it. Crop raiding influences the attitudes of communities negatively towards conservation, reduces the ability of families to feed themselves and leads to poaching and

snaring (EoH, 2007). Resentment by local people over the lack of support for crop raiding drove illegal activities. This has important implications for conservation, as local feelings of injustice about conservation is a primary driver of illegal activities (in addition to the poverty drivers) (Baker et al., 2014).

► Tourism/ visitors/ recreation

High Threat
Inside site

Tourism numbers are relatively low and most tourist activities are centred on gorilla tourism. Visitors are generally taken into the forest in groups of 6 to track and locate a known group of gorillas and spent an hour with them. Controls on tourist visits to gorillas are tight, with each group visited once daily, and fees are substantial (they have been increased repeatedly and stood at US$ 500 per person in 2011). There is strong pressure from tourism operators to increase the number of gorilla groups that are habituated and ten of the known 36 groups (involving 168/400 individual gorillas) are now habituated (IGCP, 2012). Habituation of gorillas means that they become fearless of encounters with people – making them vulnerable to those who might want to kill them and susceptible to transmission of human disease.

Potential Threats

Low Threat

The possibility of civil unrest and insurgency cannot be ignored, since the park lies in a region of central Africa that has a long history of instability and there is presently unrest across the border in the Democratic Republic of Congo. Other potential threats arise from the possibility of upgrading roads through the park.

► War, Civil Unrest/ Military Exercises

High Threat
Inside site

The park is located in a volatile part of central Africa, with insurgency activity erupting from time to time and currently (2012) causing severe disruption just across the border in eastern DRC. A particularly nasty incident occurred in 1999 when Rwandan Hutu rebels killed 8 westerners and a park ranger

(UNEP-WCMC, 2012). Although the park is now secure and tourism and management activities are progressing normally, the possibility of renewed violence is very real.

► Roads/ Railroads

Low Threat
Inside site

Although there are currently no plans to upgrade or build roads through the park, this is a constant potential threat. An old road used to run through the western edge of the park, close to the DRC border where gorilla tourism is now centred, south of Buhoma. There is strong interest in re-establishing this road, but doing so would be highly disruptive to gorilla movements and tourism in the area, and create an ecological barrier across a critical part of the forest (which links to Sarambwe, a small contiguous protected forest on the Congolese side of the border).

Protection and management

Assessing Protection and Management

► Staff training and development

Mostly Effective

No recent data available

► Relationships with local people

Some Concern

Prior to the change of status from forest reserve to national park in 1991, local people had unrestricted access to ‘minor forest produce’ for their own personal domestic use, and many people were employed in ‘sustainable timber harvesting’ using traditional pit-sawing methods under forestry department supervision. The granting of national park status was accompanied by an initial ban on all consumptive use of resources, followed by a gradual relaxation of this ban to restore access rights for specialist resource users within the local community to three minor forest resources (honey, medicinal plants and basketry materials) within designated zones

under the terms of agreements that are formally negotiated with the specific forest-edge communities. Community relations have improved in recent years, but there are still significant challenges. Currently, resentment amongst local communities that drove illegal activities arose from three main factors: 1) lack of support to address crop raiding; 2) feelings of inequity in the distribution of benefits from revenue sharing that went to people far from the national park, not those suffering from crop raiding; 3) employment by the national park goes to outsiders (Baker et al., 2014). Considerable efforts have been made in recent years to foster better community relations, including provision of financial support to community projects (20% of gate entry fees are used on community projects (US$58,400 in 2006/7; EoH, 2007) as well as income from the Bwindi & Mgahinga Conservation Trust).

► Legal framework and enforcement

Mostly Effective

The legal framework is strong. Originally protected as a Forest Reserve in 1932, Bwindi became a National Park under Statutory Instrument No. 26 of 1991. No cultivation or settlement is permitted within the park. The park is managed by the semi-autonomous Uganda Wildlife Authority (UWA), established under the Uganda Wildlife Statute 1996, with its own Board of Trustees. Enforcement is generally strong. Financial sustainability is based on retention of all park revenues by UWA, enabling cross-subsidy within the Uganda parks system.

► Integration into regional and national planning systems

Mostly Effective

The park is managed alongside Mgahinga Gorilla National Park as the Bwindi Mgahinga Conservation Area within UWA’s regional management structure. Its management is in accordance with national wildlife policies and planning procedures. Coordination of management for all the parks that support mountain gorillas (in Uganda, Rwanda and DRC) is achieved through the International Gorilla Conservation Programme (IGCP, http://www.igcp.org)

► Management system

Mostly Effective

The park has been under planned management for more than half a century,

the first management plans being produced by the Uganda Forestry Department. Park management is structured around actions dealing with (1) resource conservation and management, (2) tourism development, (3) community conservation, (4) park operations and management, (5) monitoring and research, and (6) regional cooperation (GMP, 2001). Management is implemented by UWA, with support for community-level interventions outside the park provided by the Bwindi and Mgahinga Conservation Trust (http://www.bwinditrust.ug/), and research and monitoring led by Mbarara University's Institute of Tropical Forest Conservation (http://www.itfc.org/). A new general management plan for the park has been recently prepared (IUCN Consultation, 2014).

► Management effectiveness

Mostly Effective

Management has been strongly supported by donors since the area became a national park. This has helped Bwindi become a regional 'model of best practice' in park management, developing a well-balanced strategy that includes strong initiatives for sustainable finance, community integration, park protection and management-orientated research and monitoring. By 2001 the park had a staff of 78, slightly short of the minimum required (88) (GMP, 2001), but nevertheless providing for generally effective management. The park was selected as a pilot site for development of the Enhancing Our Heritage management effectiveness monitoring tool, under which a series of reports were produced detailing the results of annual assessments of management effectiveness from August 2001 to 2007 (EoH, 2007). By 2007, ten out of 13 'outcomes of management' were assessed as 'good', and 191 of the required 216 actions in the GMP (2001-11) had been completed or had substantial work done (EoH, 2007)

► Implementation of Committee decisions and recommendations

Mostly Effective

At its 23rd session (1999) the Committee expressed concern about the deteriorating security situation at the property (after 8 visitors and a ranger were killed by Rwandan rebels) and requested information on measures taken to improve it (Committee Decision, 1999). This request was addressed promptly by the State Party and there have been no significant security

incidents in subsequent years.

► Boundaries

Mostly Effective

The park is an ‘ecological island’ of forest habitat in an intensively cultivated landscape. Its boundaries are well marked with concrete beacons and lines of planted trees, creating a ‘hard’ boundary, the intact forest of the park contrasting with the adjacent cleared agricultural land. There are no significant boundary incursions. There is no formally-recognised buffer zone, but forest-edge communities have been supported to plant trees and encouraged to grow crops that are not susceptible to damage by wildlife. The property comprises two tracts of forest linked by a narrow ‘neck’ (which has a public road running through it), with a correspondingly high boundary:area ratio. This means that most of the forest is within easy walking distance (an hour or two) of the forest boundary and at risk from ‘edge effects’. The narrow neck seems to have (so far) prevented mountain gorillas from using the smaller tract of forest, which appears to offer suitable habitat.

► Sustainable finance

Highly Effective

The park benefits from two main sources of sustainable finance – an endowment fund, and the proceeds of gorilla-based tourism. The Bwindi Mgahinga Conservation Trust (BMCT, http://www.bwinditrust.ug/) was established with approximately US$ 8 million of donor investment from the GEF, Netherlands and USAID in the 1990s (UNEP-WCMC, 2012). It provides support to local communities around the parks, as well as some research and monitoring activities. Gorilla-based tourism generated US$ 1.2 million in park ‘gorilla tracking’ fees in 2007 (EoH, 2007), and may be generating much greater revenues by now, with higher fees and new groups of gorillas habituated. Revenues generated at Bwindi are used to cross-subsidize UWA operations across the Uganda national parks system, and were contributing 50% of UWA’s gross income in the late 90s (UNEP-WCMC, 2012).

► Sustainable use

Mostly Effective

Ten Memoranda of Understanding have been developed under which communities adjacent to the park can harvest medicinal plants, basketry materials and place beehives in designated zones (which collectively account for 18% of the park's total area). Resource availability and off-take are monitored by park rangers and community members to ensure sustainable use.

► Education and interpretation programs

Data Deficient

A community education and development plan aimed at strengthening awareness of park values amongst local communities is described in the GMP (2001). This builds on earlier community education work involving video recording and local drama group productions, supported by CARE's Development Through Conservation (DTC) project during the 90s (GMP, 2001). However, the remote location of the park and difficulty of access means that education programmes tend to be limited to the immediate vicinity of the park and target a relatively small number of beneficiaries. In 2006, only 280 school children visited the park (EoH, 2007).

► Tourism and interpretation

Highly Effective

Bwindi attracts relatively low numbers of 'high-value' visitors, prepared to pay the substantial amounts charged for gorilla tracking (US$ 500 per person in 2011). Although it is hoped to diversify the range of activities on offer at Bwindi, most visitors come to make the one-day trek to spend an hour with a habituated group of mountain gorillas. The number of visitors is growing steadily, reaching 11,680 (i.e. an average of 32 per day) by 2006/7 (EoH, 2207). There is no visitor interpretation centre or self-guided trail interpretation displays, but tourist guides are trained to inform visitors about wildlife, aspects of park ecology and human use of forest products.

► Monitoring

Mostly Effective

Bwindi operates a Ranger-Based Monitoring (RBM) programme, through which rangers collect relevant data as part of their daily routine, which is

used to detect broad trends within the ecosystem and inform management decision-making. Customised computer software (MIST) is used to provide rapid feedback to those involved, including maps and graphics of patrol coverage, illegal activities, animal distributions etc, thus serving as a motivational tool (EoH, 2007). SMART is now also being used.

► Research

Mostly Effective

Mbarara University's Institute of Tropical Forest Conservation (ITFC) is an internationally-supported research institute located within the park at Ruhizha. It serves a lead role in providing management-orientated research services to the park, co-ordinating gorilla censuses, training university students, carrying out biodiversity inventories and hosting international scientific studies (see http://www.itfc.org/). Despite the existence of ITFC, however, the results of the studies do not always form the basis for management decisions (GMP, 2001), and there is scope to strengthen the working relationships between UWA and ITFC. At a joint workshop during the preparation of the GMP (2001), 11 priority research topics were identified, as well as 23 additional needs for management-orientated research (GMP, 2001).

Overall assessment of protection and management

Mostly Effective

Protection and management of the area has been considerably strengthened since it became a national park in 1991 and timber harvesting was reduced. About half of the park is now maintained as a wilderness zone, largely free of human activity, with a quarter designated for gorilla-based tourism and 20% managed for sustainable use of non-timber forest products by local communities. Despite the challenges of its situation as an ecological island in one of the poorest, most densely populated parts of the continent, the park has developed a strong integrated management programme. Achievements have been made in improving park-community relations but the challenge of better linking conservation and poverty is still to be met.

► Assessment of the effectiveness of protection and management in

addressing threats outside the site

Some Concern

The site has a relatively long boundary and is surrounded by some of the poorest, most densely-populated agricultural land in Africa, so human-wildlife conflicts around the forest edge are widespread, and there is lingering resentment over the loss of resource access rights that accompanied the area's designation as a national park. The challenge at Bwindi is to better link conservation and poverty – this requires understanding the role of poverty reduction activities in reducing biodiversity loss and the contribution that national park conservation can make towards poverty alleviation.

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Mountain Gorillas and other threatened mammals**

Good
Trend:Improving

Census data for mountain gorillas over the past 20 years indicate an increasing population at Bwindi, with 400 individuals in 2011(Robbins et al., 2009; IGCP, 2012), and superficial impressions of the abundance of other threatened mammals suggests that populations are probably stable.

▶ **Rich montane flora and fauna.**

Good
Trend:Stable

There are no data on trends in overall species richness, but the property is well protected and the general state of conservation is good (EoH, 2007), so species richness is expected to be stable

▶ **Rare and endemic birds**

Good
Trend:Stable

There are no data on trends in rare and endemic bird populations, but the property is well protected and the general state of conservation is good (EoH, 2007), so the status of the park's birds is expected to be stable. Ornithological surveys carried out in collaboration with the US-based Wildlife Conservation Society (WCS) added several new records in recent years, as well as increased our understanding of the basic distribution and habitat requirements of the little-known Albertine Rift endemic bird species (EoH, 2007; see also www.albertinerift.org)

► Occurrence of Albertine Rift endemic species

Good
Trend:Stable

There are no data on trends in the occurrence of endemic species, but the property is well protected and the general state of conservation is good (EoH, 2007), so this is expected to be stable

► Diversity of co-evolving habitats

Good
Trend:Improving

Given that the property is well protected and the general state of conservation is now better than it was prior to the establishment of the national park in 1991 (EoH, 2007), habitats have been recovering from previous cutting of timber and returning to a more pristine condition. Periodic measurements of trees in permanent sampling plots by scientists at ITFC indicate a general accumulation of woody biomass over the recent past (Pers. comm..)

Other important biodiversity values

► Water catchment

The rugged hillsides of Bwindi serve an invaluable role as a water catchment, maintaining biodiversity and life-support systems downstream, particularly the key fisheries of Lakes George and Edward.

Summary of the Values

▶ **Assessment of the current state and trend of World Heritage values**
Good
Trend: Stable

Since the change in management status in 1991 (from forest reserve to national park), timber harvesting and other forms of consumptive resource use have reduced in most areas, and protection has resulted in recovery of more natural pristine habitats. Although there are few supporting data, it appears that the dynamic ecological processes and biodiversity values of the property are at least stable, and may be improving in some respects. Mountain gorilla census data from 1997 to 2011 indicate an increasing population of these highly endangered primates with 400 individuals in 2011(Robbins et al., 2009; IGCP, 2012).

Additional information

Key conservation issues

▶ **Sustainable use**
Local

The availability and use of key resources by community members from the designated ‘Multiple Use zones” needs to be closely monitored, so that off-take and management can be continuously adjusted to maximize community benefits and ensure sustainability.

▶ **Disease surveillance and preparedness**
Local

Close monitoring of the incidence of diseases that might be transmitted between humans and wildlife (especially gorillas) needs to be put in place along with necessary safeguards to prevent transmission, and limit the spread

of disease.

▶ Community relations

Local

Community relations could be strengthened by increasing the share of benefits given to those most directly affected by wildlife damage, or lost opportunities to use forest resources.

▶ Human-wildlife conflict

Local

Efforts to develop suitable strategies and non-lethal methods to minimize crop damage by wildlife coming out of the park need to be strengthened

▶ Control of alien exotic vegetation

Local

Carry out comprehensive surveys of exotic alien vegetation, and implement programmes to control any species suspected of becoming invasive

▶ Habitat use by gorillas

Local

Conduct necessary research to understand aspects of the ranging behaviour and use of different habitats within the park with a view to developing strategies to minimize human disturbance and/or eliminate other possible barriers to use of suitable habitat by gorillas throughout the forest

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Bwindi Mgahinga Conservation Trust		Range of community-support projects with funding stream from large capital endowment

№	Organization/ individuals	Project duration	Brief description of Active Projects
2	International Gorilla Conservation Programme (WWF, FFI & AWF)		Interventions to support conservation of both populations of mountain gorillas (i.e. the trans-boundary population in the Uganda/Rwanda/DRC Virungas volcanoes, and the Bwindi population)
3	Wildlife Conservation Society (WCS) Albertine Rift Conservation Programme		Biodiversity inventories and conservation planning on regional basis along the Albertine (western) Rift Valley
4	Conservation Through Public Health		Disease surveillance
5	Mountain Gorilla Veterinary Project		.
6	Max Planck Institute for Biological Anthropology		Gorilla research and census
7	Dian Fossey Gorilla Fund International		Funding support for gorilla census
8	Institute of Tropical Forest Conservation		Comprehensive research programme at Bwindi

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