



Park Establishment

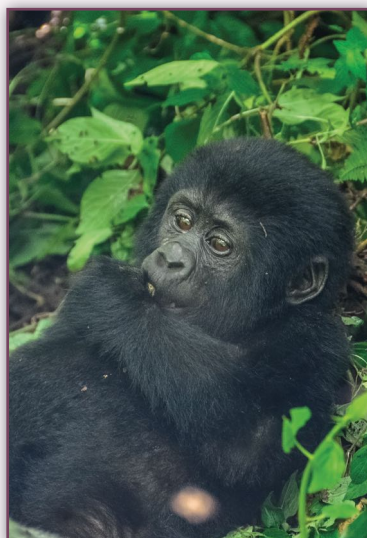


Why was Bwindi Impenetrable National Park (BINP) established?

Bwindi Impenetrable National Park (BINP) was created in 1991 to protect the endangered mountain gorillas and their forest habitat. By designating the land as a national park, people could no longer go into the forest to cut trees, convert pieces of forest into farmland, gather plants, harvest animals for protein food, or poach gorillas or other animals. The park has built relationships with nearby communities, providing ways for them to benefit from the park in sustainable ways.



Communities Near the Park



How have BINP and communities built mutually beneficial relationships?

Tourists from around the world travel to Bwindi to visit the national park and mountain gorillas, creating both pride and economic benefits for local communities. A portion of the entrance fees and gorilla trekking permit fees within BINP are given to nearby villages to use for building health centers, markets, schools and other community infrastructure and services. This means some mothers no longer have to travel many kilometers to deliver their babies. The park revenue sharing makes health education and support for family planning and other health issues accessible to more people. Local residents are able to get jobs as rangers and porters, and are able to set up ecotourism businesses that provide meals, lodging, and locally-made souvenirs for tourists.



Batwa & the Forest



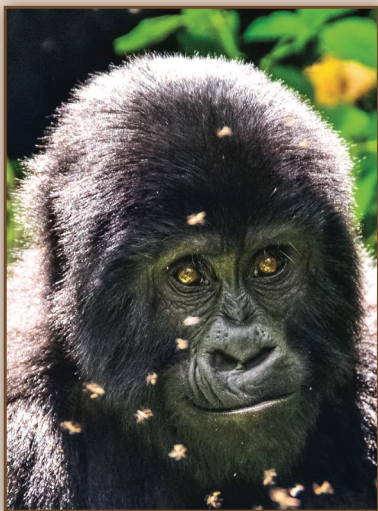
What is the relationship between the Batwa and the forest?

“Batwa feel strongly attached and part of the fauna of the forest and the entire environment of Bwindi.” - Batwa elder Geoffrey BUCHEBE

This ancient forest is the traditional homeland of the Batwa, who have lived here for 80,000 years and are one of the oldest surviving Indigenous tribes in Africa. Like Indigenous communities across the world, they were an integral part of the forest ecosystem, coming to be known as “The Keepers of the Forest.” When the park was formed, the Batwa were forcibly removed and now live in small communities on the edges of the forest. Their vast knowledge of the forest’s plants, animals, and ecosystems has been built over millennia and is still passed from generation to generation in oral traditions. However, without access to their homelands, this knowledge is at risk of being lost.



Unique Nose Prints

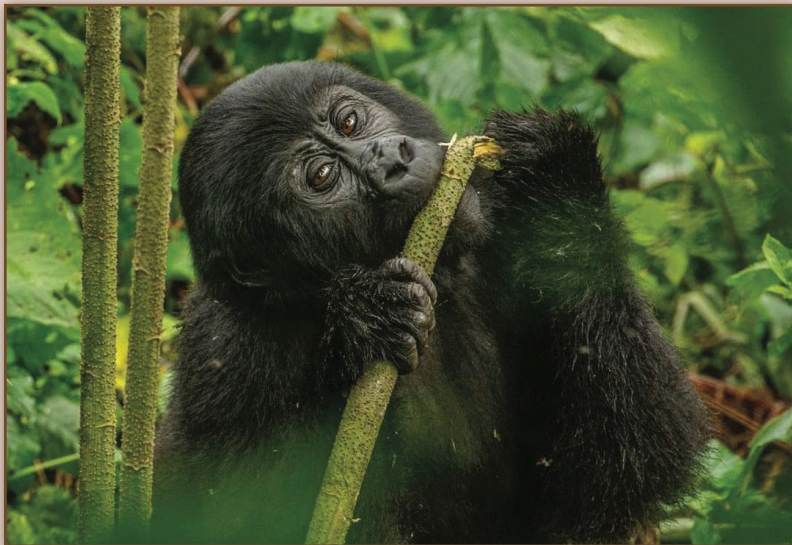


What does a mountain gorilla look like?

Who's who? Each mountain gorilla has a different pattern of wrinkles on its nose that makes it unique, just like the fingerprints of people. Park staff and scientists use a gorilla's unique nose print to identify individuals.



Eat Plants



How do mountain gorillas spend their days?

Mountain gorillas spend around 7 hours (30%) of the day eating leaves, stems, roots, and fruits of over 100 different plants. Their forest home is like a giant salad bowl. These plants also give gorillas most of the water they need. Bwindi gorillas also drink from streams. The family group's movement through the forest is affected by the amount, type, and location of plant foods as well as the location of other gorilla groups.



Get Curious



How do mountain gorillas spend their days?

Mountain gorillas are very curious! Habituated gorillas have learned that they are safe around some humans and will allow rangers, scientists, and tourists to sit nearby. Gorillas watch people, just as people watch gorillas. In rare instances, gorillas have looked at their reflections in camera lenses and examined people's belongings. This close contact because of curiosity can be harmful to gorillas, as some germs are easily passed to them from people and their belongings. For this reason, Uganda Wildlife Authority requires people to keep at least ten meters (11 yards or 33 feet) from gorillas even when the animals are roaming outside of the forest. On gorilla treks, it is critical that people closely follow the ranger's instructions to maintain a safe distance from the gorillas, to correctly wear a mask over nose and mouth, and to stay quiet and calm. Doing this will allow the gorillas to continue their natural behaviors safely.



Belches



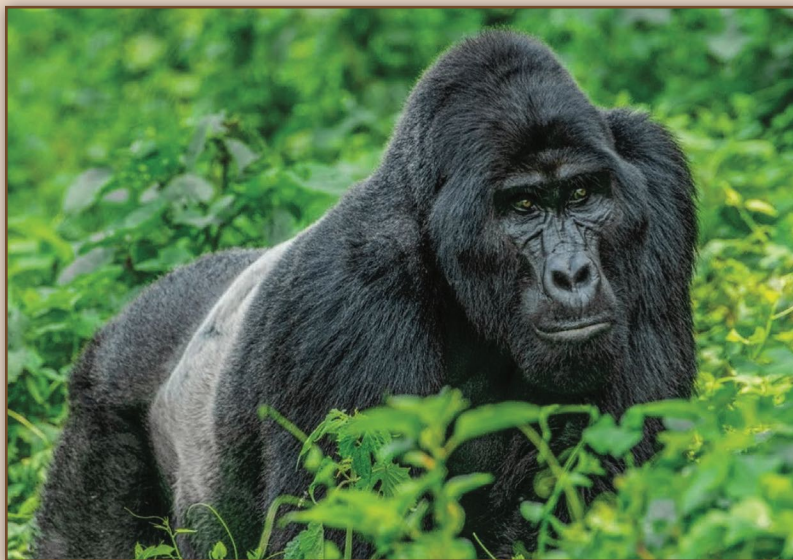
How do mountain gorillas communicate with each other, other wildlife, and people?

Mountain gorillas communicate using at least 22 different sounds. Tracker rangers and scientists understand the meanings of many, allowing them to respond and communicate with the gorillas.

The most common sound is called a belch. The soft throat-clearing “um-hmmm” is made between members of a group to say that all is well: “I’m ok. Are you ok?”.



Dominant Silverback Male



What are the different roles for members of a mountain gorilla group?

A silverback mountain gorilla is a sexually mature adult male who can become the leader of the gorilla family group. The black fur on his back begins turning silver at 12-13 years, with the change being complete by 15. The silverback gorilla is the protector of his family, often seen sitting by himself watching and listening for signs of danger. He keeps track of all family members to make sure they are safe and staying close.



Moms



What are the different roles for members of a mountain gorilla group?

A mountain gorilla mother is loving, gentle, and protective. She does not allow other gorillas to touch the baby during birth or to care for the newborn. For the first three years of life, babies sleep with their mother. By the age of four the young gorilla is independent enough to stop nursing and feed entirely on solid food. Once this happens, the mother is able to get pregnant again.



Forest Water Catchment



How do parts of the forest interact as a balanced ecosystem?

The forest is the water catchment basin (watershed) that provides water to surrounding villages. When rains fall in the forest, water can stay on the surface, making its way into streams and eventually out of the forest. It can also soak into the spongy forest soils to collect as groundwater. Village wells can pump this groundwater back to the surface for people to use. As long as the forest is healthy, this water catchment can continue to provide a reliable source of stream water and groundwater.



Chimpanzees (Empundu)



How do the native animals affect the Bwindi forest ecosystem?

Gorillas aren't the only great ape in Bwindi – chimpanzees live in the forest as well. Like their close relatives, chimps live in large family groups and spend time on the ground and in trees. They eat mostly plants and fruits and will occasionally eat smaller animals. They are very intelligent and curious mammals.



Forest Elephants (Enjojo)



How do the native animals affect the Bwindi forest ecosystem?

Bwindi is home to a small number of elephants who have adapted to the forest. They are called ecosystem engineers because their behavior changes the environment around them. As they walk through the forest, they trample plants, eat them, and pull them up. This opens space for new plants to grow that create food and shelter for other wildlife.



Birds (Enyonyi)



How do the native animals affect the Bwindi forest ecosystem?

Bwindi has 346 species of birds, 23 of which are endemic to this ancient forest – they are found nowhere else in the world! Many birds are seed eaters who help move seeds from one place to another in the forest. Some drink nectar and pollinate flowers. Others catch and eat other animals or eat animals that have died. Some commonly seen birds are the great blue turaco, Rossi's turaco, black and white casqued hornbill, Newmann's warbler, Shelly's crimson wing, African green broadbill, Grauer's rush warbler, and Chapin's flycatcher "Muscicapa lendu." Birdwatchers from around the world come to see Bwindi's birds.



Ficus Trees (Ekyitoma)



What are some native forest plants and how do they help the ecosystem and people?

The Ficus tree is one of the biggest trees in Bwindi, reaching heights of around 90 meters. It can grow up and around other trees, eventually fully enclosing and strangling them. The base of the tree can have large roots above the ground called buttresses. Traditional Batwa clothing and shelter are made from Ficus bark. It is one of the oldest textiles.



Edible & Medicinal Plants



What are some native forest plants and how do they help the ecosystem and people?

Bwindi is a pharmacy and supermarket of medicinal and edible plants, many of which are found nowhere else in the world. The wide variety of fruits are favorites for both people and wildlife. Other plants can treat health issues ranging from simple cuts and allergies to back pain, ulcers, and life-threatening illnesses. The Batwa, who lived in harmony with the forest plants and animals until 1991, have 80,000 years of traditional knowledge about the edible and medicinal uses of forest plants. Today, gathering these plants by local residents is only allowed in controlled multi-use areas of the park, or outside park boundaries.



Ranger Patrols



What village jobs help the people, community, forest, and wildlife?

Ugandans, with many opportunities for local residents, are hired and trained to become rangers by Uganda Wildlife Authority (UWA) to protect the forest, mountain gorillas, and other wildlife. Rangers have many important parts of their job. They are gorilla trackers who make daily trips into the forest to check on the gorilla groups' location, activities, and health. They act as law enforcement in the park, doing anti-poaching patrols to remove snares set illegally to catch animals for bush meat and trade. They watch for other illegal activities like cutting down trees for fuel or construction, or polluting streams.



Gorilla Guardians



What village jobs help the people, community, forest, and wildlife?

About 140 community residents around Bwindi volunteer as Human and Gorilla Conflict Resolution Teams (HUGOs, aka Gorilla Guardians) with Uganda Wildlife Authority (UWA), Conservation Through Public Health, and other partners in conservation. They are trained by UWA and partners to safely herd gorillas and other wildlife back into the protected forest when the animals wander into peoples' fields and gardens. This reduces conflict between the people and wildlife. Gorilla Guardians also help to monitor gorilla and community health, knowing that the health of one is deeply connected to the health of the other. One way they do this is collecting gorilla fecal samples and monitoring the signs and symptoms of ill health in mountain gorillas and other wildlife.



Artists & Handcrafters



Kaplan Gadson Musinguzi



Bwindi 4 Women

What village jobs help the people, community, forest, and wildlife?

Tourists often want to take home a souvenir to remember their time in BINP, or they might want an item that is immediately helpful during their stay. Carvings, toys, musical instruments, weavings, dolls, artwork, fabric, jewelry, and walking sticks are just a few examples. There are so many creative and innovative ways to share culture and environment through art, and to provide items that tourists might need. These are sold in shops and near park entrances.



Reduce Community Litter



Buhoma Community Primary School



Rafiki Football Club

Identify and investigate a **problem** that is harmful to people, community, forest, and wildlife.

The Problem: Many villages around BINP lack a complete waste management system, leading to litter on the ground and in the water. Plastic rubbish takes 20-500 years to decompose and collects in rivers and pollutes the local water supply. Bacteria and other harmful germs can grow on all types of litter (even biodegradable), harming people and animals. Gorillas and other wildlife can be curious and investigate litter, and scientists have found gorillas with scabies, measles, and respiratory viruses after coming in close contact with it.

Design and do a **project** to sustainably solve the problem using STEAM (Science, Technology, Engineering, Art. Math).

STEAM Conservation Project: Design a plastic and biodegradable waste collection system; teach others to use the system to change community waste disposal behavior and increase understanding of harm from plastic litter.



Reforest with Indigenous Trees



Pangolin Rescue Center



Katembe Primary School

Identify and investigate a **problem** that is harmful to people, community, forest, and wildlife.

The Problem: Most indigenous trees have disappeared outside of BINP, leading to soil erosion, desertification, poor water quality, lower crop yield, and loss of natural ecosystems. Fast-growing forests of eucalyptus trees are common outside the park, providing a source of wood for construction, cooking, and heating. However, these single-species forests lack indigenous plant biodiversity and limit habitat for indigenous animal species to live. Currently, many community projects focus on planting individual trees. These efforts could be even more impactful if trees are planted as diverse community forests (i.e., mini-forests) to encourage the return of indigenous animals and a balanced ecosystem.

Design and do a **project** to sustainably solve the problem using STEAM (Science, Technology, Engineering, Art. Math).

STEAM Conservation Project: Plant community forests of indigenous trees to reduce impacts of deforestation and climate change, and to provide resources.



Improve Hygiene & Sanitation



Identify and investigate a **problem** that is harmful to people, community, forest, and wildlife.

The Problem: Lack of available toilets, hand washing stations, and sanitation infrastructure can allow the spread of infectious diseases between people, livestock, and wildlife. People can unintentionally pass diseases to gorillas and wildlife when the animals come out of the forest into areas where people live.

Design and do a **project** to sustainably solve the problem using STEAM (Science, Technology, Engineering, Art. Math).

STEAM Conservation Project: Improve availability and use of hygiene and sanitation services to reduce the spread of germs between people, livestock, gorillas, and other wildlife.