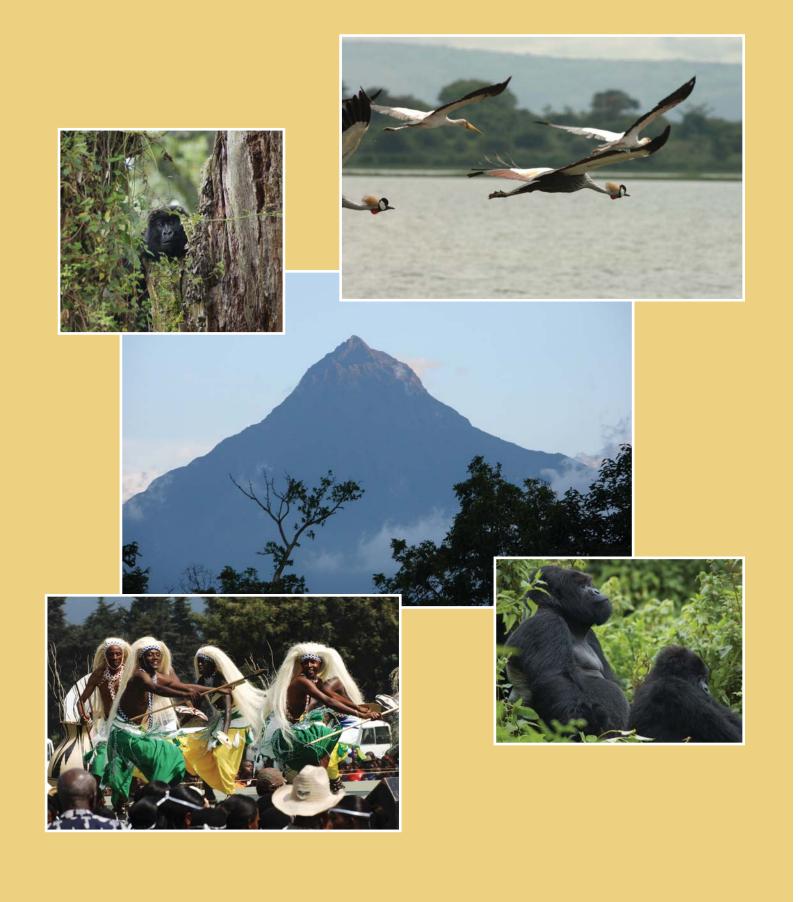
2008 annual report

Connections III





MOUNTAIN GORILLA VETERINARY PROJECT



The story of the mountain gorillas begins like many other conservation stories: only 750 left in the wild, threatened by poachers, habitat destruction, and disease transmission from domestic animals and humans. But unlike so many other stories of threatened species, this one has taken an optimistic turn: the numbers of mountain gorillas are increasing. In fact, mountain gorillas are the only great ape population that is growing, despite the challenges. What explains this success? A focused effort by governments and conservationists working together to overcome the odds. Key to this effort is the work of the Mountain Gorilla Veterinary Project, which not only provides veterinary care to the mountain gorillas in their wild habitat, but also champions the "One Health" approach to conservation. The One Health approach recognizes that to sustain the wild mountain gorillas, the health of their environment, including their habitat and the human and domestic animals with which they interact, must be maintained. This approach, explained in more detail in this report, is the key to the hopeful future for this species, and may provide the most promising prototype for conservation projects elsewhere.

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Designed by Misty Hackett Edited by Joan Clark





Dear Friends:

After almost a year of brainstorming and intense meetings of the staff, board members, advisors and partners, MGVP Inc. finalized its new five-year strategic plan. The next five year plan reflects our positive outcomes of the past five years and the One Health approach to gorilla conservation. It is a well accepted theory that the health of the habitat and the inhabitants in them are closely linked and mutually dependent. The health of any one population within the habitat will have an affect on the other's health. MGVP will continue to focus on the health monitoring, health care and the necropsies of the 700 mountain gorillas remaining in the Virunga Massive and the Bwindi Impenetrable Forest. We will continue to have direct involvement in human livestock and other wildlife health programs. The strategic plan contains modifications from lessons learned in the last five years, some changes in priorities but mostly a strengthening of the existing programs. The vision of the strategic plan is to be the research and health monitoring resource that supports the self-sustaining mountain gorilla populations. Other aspects of the program are research and information dissemination from this research for better population management. Capacity building whether its facilities or further education for local conservationists and veterinarians will be considered of the highest priority. The eastern lowland and mountain gorilla orphans that have been mentioned in previous annual reports are all healthy and plans are being made for their long term future arrangements. MGVP looks back upon this year as a success with several serious gorilla health cases resulting in a positive fashion. I would like to thank all those that helped financially, by volunteering, or with moral support over the last year to help out with this magnificent species.

This Annual Report is to update you on our programs designed to provide a "one health" approach to conservation medicine for the Mountain Gorilla and a small population of habituated Eastern Lowland Gorillas. It is a story about the health of gorillas, their habitat, other wildlife that share that habitat and the people and the domestic animals that surround these precious islands of biodiversity and one of our closest relatives. It is a narrative that occurs when wildlife and humans continue to coexist in an ever-changing world. This story is intensified by the close genetic relationship of the apes and humans and the many diseases we share. MGVP is one of the world's few programs that provide health care for individuals of an endangered species in their own habitats. We are proud of our accomplishments and our partners, but there is still much to do. The Mountain Gorillas face real survival threats each day. Health issues top the list, but deforestation and poaching are close behind. With your help we can reduce these threats and keep one of nature's most incredible species alive.

Yours since

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Mike Cranf Project Dire

From the President:

The Mountain Gorilla Veterinary Project ("MGVP" or the "Project") continued to fulfill its mission in the most recent fiscal year. The Project's accomplishments range from successful clinical interventions to strengthened partnerships with the host countries' governments and other NGO's. Perhaps most important, MGVP is secure in its future as a result of the establishment of its new home at the University of California, Davis. This Annual Report describes achievements in a number of the Project's focused efforts.

While political unrest in the Democratic Republic of the Congo made movement and communication difficult in that country for much of the year, the situation has improved. This is promising, not only for clinical interventions, but also for plans for creation of a sanctuary for orphaned mountain gorillas and establishment of a permanent MGVP office nearby.

In Rwanda and Uganda, human health programs have been expanded to include employee spouses as well as the trackers and guides who interact with mountain gorillas daily. The Project's partnership with Wyman Worldwide Health [correct name?] has started rehabilitation of a second clinic in Rwanda; basic human health facilities are essential in a country with few doctors and hospitals. These and similar initiatives are illustrative of the Project's "One Health" approach to conservation of the mountain gorillas, founded on recognition that without addressing the health of the humans who interact with the gorillas, the gorillas' health cannot be assured.

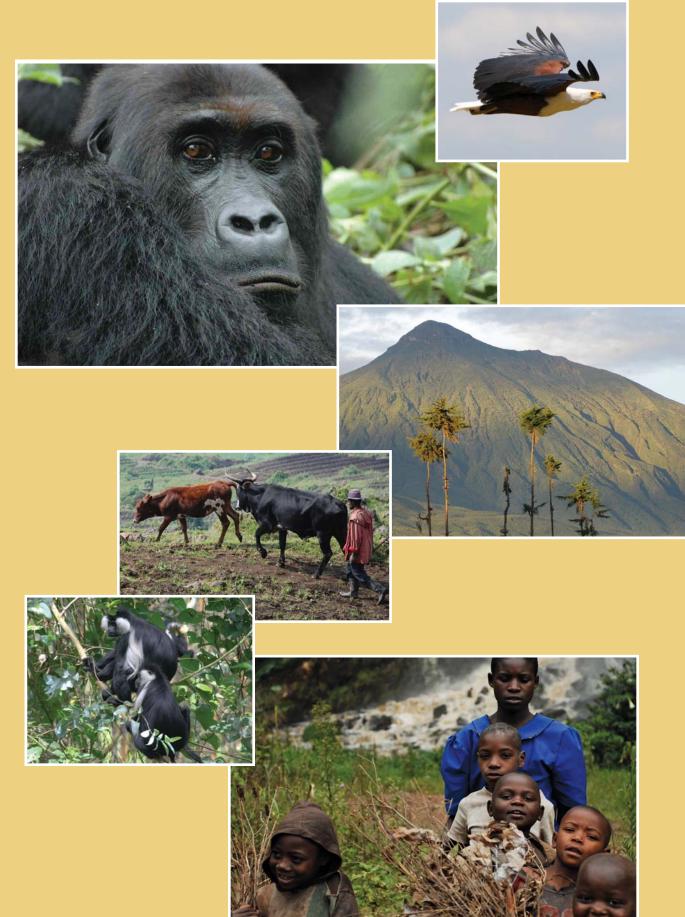
The "One Health" approach has been embraced by the Wildlife Conservation Center at the University of California, Davis as a basic tenet of its conservation philosophy. Thus, the Project has the unique opportunity to continue its work within a university structure fully supportive of its mission and its methodology. The future is bright.

As always, the extraordinary staff of MGVP, led by Dr. Mike Cranfield with excellent support in the field from veterinarians and in-country staff, continues to achieve remarkable things on a day-to-day basis. This Annual Report details some, but far from all, of those accomplishments. We hope you enjoy it.

Yours sincerely,

Billie Suit

President MGVP, Inc.





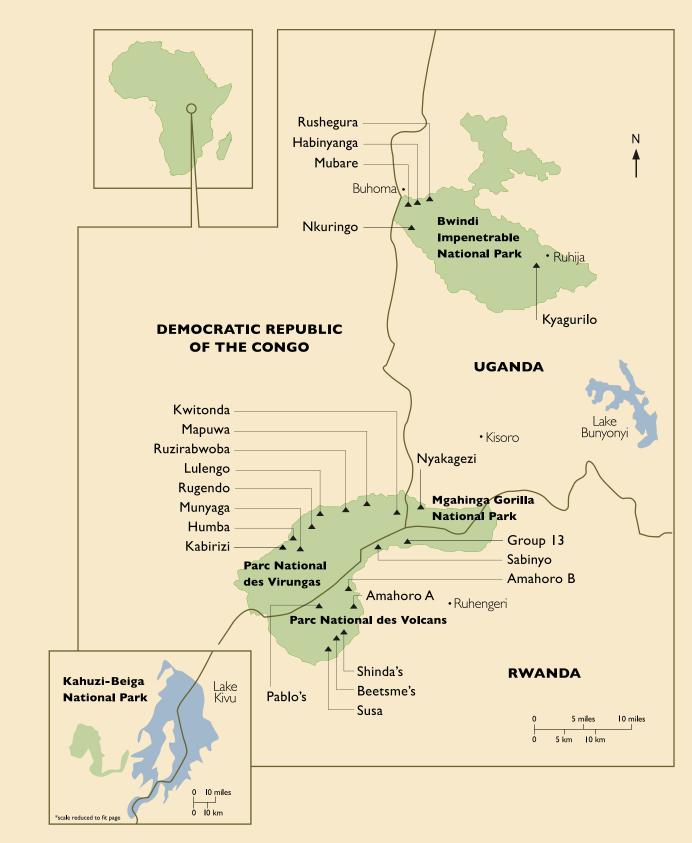


"One Health" Medicine

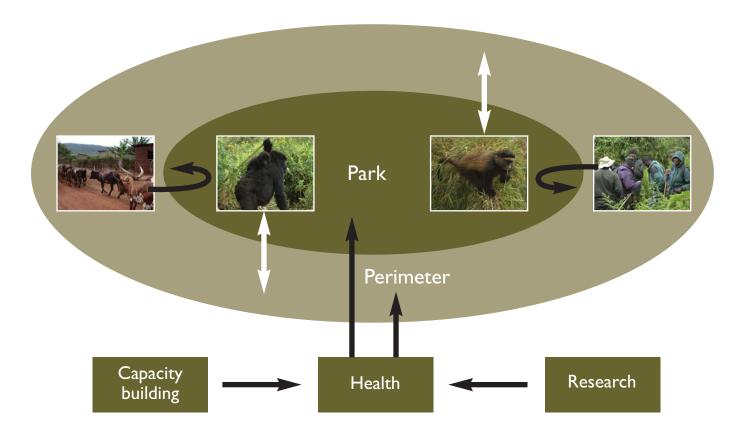
Those new to the Mountain Gorilla Veterinary Project may be unfamiliar with the "One Health" concept, which guides our efforts in the field. In short, to properly address health issues for the gorillas, we must also look at the health of their total ecosystem, and particularly the effect of human and domestic animal health issues on the wild gorilla population. The gorillas interact with humans and domestic animals on a daily basis. We cannot ensure their health without treating the potential health issues imposed on them by this interaction.

THEIR SMALL CORNER OF THE GLOBE

The Mountain Gorillas live in small groups, each led by a silverback. About 380 Mountain Gorillas reside in the Virunga Mountains, and 320 live in the Bwindi Impenetrable National Park. The ▲ symbols show the habituated groups of each country.



MGVP "ONE HEALTH" MEDICINE



8

An Update – Growing Orphan Family

MGVP's mission does not encompass care of young gorillas orphaned when taken from the wild by poachers, often after their mothers are killed. At the same time, these orphans are important to the population, and every effort must be made to return them to the wild. In the past, attempts to reintroduce young gorillas to wild groups invariably resulted in the death of the young gorilla. A new strategy of raising them in captivity until the age when migration among groups occurs naturally seems to be working.

Maisha, the female mountain gorilla confiscated in 200_, was the reason MGVP became involved in orphaned gorilla veterinary care. At the time of her confiscation, she was the only mountain gorilla in captivity and the hope was that she could be returned to the wild after growing up with other gorillas, also orphans, but of a different subspecies, Gruaer's gorillas. Maisha continues to thrive at the interim quarantine facility in Kinigi, Rwanda, along with one other mountain gorilla, a male, Kaboko, who was confiscated in March 2007 with a bad snare wound that required amputation of his right hand, and six other orphaned Grauer's gorilla. Kaboko was introduced to the main gorilla group in Kinigi on September 14, 2007 with no problems. Maisha began to carry him soon after the introduction and he regularly seeks contact with her.

Unfortunately, the Kinigi gorillas experienced an outbreak of human herpes simplex this year. We do not yet know whether human herpes simplex is present in the wild population; additional testing of wild gorillas will be conducted as soon as possible. If the virus is not already present in the wild population, the fact that the orphaned gorillas are carriers may make them unsuitable for release.

For this and other reasons, several of the countries where MGVP works are exploring the establishment of sanctuaries where confiscated gorillas could remain for life. MGVP is working to ensure that any future sanctuaries are built in locations and under conditions that present suitable habitats for wild gorillas.

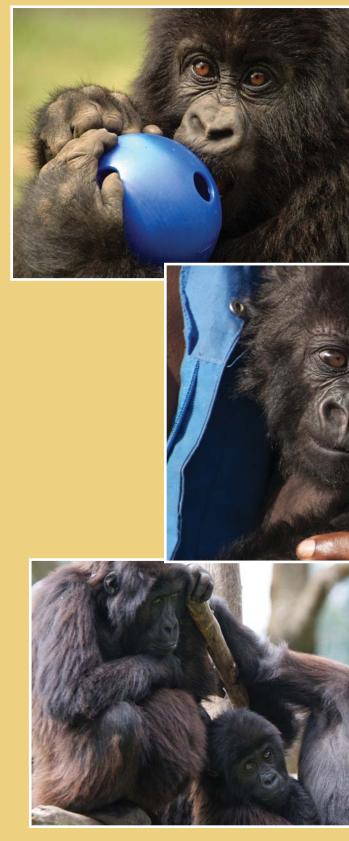
Infant Mountain Gorillas in Goma, Democratic Republic of the Congo

MGVP also provides health care for three new orphans in Goma, DRC. They include a three-month-old infant mountain gorilla from DRC, Ndakasi, rescued in June 2007, after her mother in Kabrizi Group was killed; sixmonth old infant Ndeze, rescued in July 2007 after her family in Rugengo Group was killed. Ndeze joined Ndakasi at the rented house maintained by another DFGFI in Goma under the care of four caretakers led by an ICCN ranger. The two orphans were introduced to each other on August 31, 2008, without incident and they have been housed together since then.

Juvenile Grauer's Gorilla in Democratic Republic of Congo

Early in 2008. MGVP accepted responsibility for two new confiscated Grauer's gorillas in DRC, providing emergency care and husbandry first at the ICCN ranger station in Mutsora, and then in Goma at the DFGFI office where a new isolation area was specially constructed for them. Both were emaciated and malnourished; they'd apparently been in captivity for some time.

The larger of the two new orphans, an approximately four-year-old male, Vumilia, suffered from severe watery















A new home at University of California at Davis

The Mountain Gorilla Veterinary Project has grown substantially since its inception in 1986. Originally funded by the Morris Animal Foundation, the project became too large to continue with only one funding source. In 2006, MGVP, Inc. was formed as a 501(c)(3) charitable entity and assumed responsibility for administration of the Mountain Gorilla Veterinary Project.

MGVP, Inc. has been housed at The Maryland Zoo in Baltimore, which has provided administrative, fund-raising and accounting services for the project. As the zoo faced increased financial pressures, the Board of Directors of MGVP, Inc. recognized the need to identify another institution that could provide administrative and other support services to the project.

Throughout 2008, the directors of MGVP, Inc. held exploratory conversations with a number of leading conservation organizations with histories of working with the mountain gorillas. As these talks progressed, it became clear that the best "home" for the Mountain Gorilla Veterinary Project is at the University of California at Davis.

The University of California at Davis has had a long relationship with the Mountain Gorilla Veterinary Project. Dr Lowenstine one of the top primate pathologists in the world is on faculty there and has performed the pathology program for MGVP for 2 decades. Many other faculty and researchers associated with UCD have sat on the scientific advisory board of the MGVP through the years.

In early 2009, the University of California at Davis will begin to provide the administrative and related services previously provided by The Maryland Zoo in Baltimore. The project will work with the university to further establish the scientific integrity and credibility of the One Health Program by instigating and coordinating new research that takes advantage of the opportunities and intellectual input afforded by and to both parties, including the training of veterinarians and students from both the United States and African nations in research and medicine; (ii) develop and implement a comprehensive fundraising strategy to generate longterm financial support for the Mountain Gorilla One Health Program, including applied conservation, research, training and outreach; and (iii) raising the visibility of the Mountain Gorilla One Health Program, so that other universities and integrative health programs around the world can benefit from it as a model for One Health. Some of the first tasks will be

i. Establish the Wildlife Health Center (WHC) at UC Davis as the headquarters of the collaborative Mountain Gorilla One Health Program.

ii. Form the One Health Program Advisory Board: elect a Chair, draft by-laws, determine internal structuring, and convene at least two meetings.

Expanding our reach to wild gorillas, tourists, local human populations and domestic animals, putting the "One Health" approach into practice.

Gorilla Health

The year 2007-2008 saw important expansion in the Mountain Gorilla Veterinary Project's field work. Monitoring visits for reported sick and injured gorillas remain our top priority. Nevertheless, in order to more effectively monitor the healthy population, we established a goal of conducting two routine health checks per month per habituated group (both tourist and research groups) when possible, in all three countries. Routine health checks give us baseline data for a healthy population. To implement the new plan, we scheduled routine health checks each week, whereas previously, they were conducted as part of a monitoring visit for a minor problem. Unfortunately, unrest in the DRC has made it unsafe for us to perform routine health checks in the Congolese portion of the Virungas for the past year, and in PNKB for the Grauer's gorillas for almost that long.

Human Health

The Mountain Gorilla Veterinary Project has long been involved in health monitoring training of trackers and guides. This past year, we were very involved in the review and revision of rules of ecotourism as they relate to the mountain gorillas, golden monkeys and chimpanzees. We focused both on the strength of the rules themselves and the level of enforcement, making improvements in both. Ecotourism rules have now been implemented for the benefit of chimpanzees in Nyungwe Forest of Rwanda for the first time.

The Mountain Gorillas Veterinary Project established an employee health program for Rwandan conservation personnel in 2001. Our aim is to help reduce the risk of disease exchange between the Mountain Gorillas and MGVP employees. The program provides basic health screenings, including eye exams, blood pressure testing, and HIV testing (if the patient permits). This program has now been expanded to include the staff in the parks in the Democratic Republic of the Congo where MGVP is active. By improving the health status of these important employees, we hope to reduce disease transmission from the guides and trackers to the gorillas, as well as reducing the number of sick days among conservation personnel, increasing work productivity and improving overall morale and health of their families. The employee health program for gorilla trackers and guides is administered with support from local health officials, protected area authorities, and other non-governmental organizations.





Domestic Animal Health

The Mountain Gorilla Veterinary Project supported a Masters student to complete a survey in Uganda of brucellosis and tuberculosis in cattle, sheep and goats. This is the third consecutive year MGVP has supported such a survey; the two previous years were in Rwanda and the Democratic Republic of Congo.

MGVP also supported a second trip by John Houston, our livestock consultant, to Rwanda to assess livestock management, production and marketing. The local university (ISAE [full name]) that it hired him to do extension work and spear head a consortium of seven partners NGO's, Universities, government programs brought together by MGVP to modernize the livestock industry around the park. This effort contemplates using biogas to reduce the need for wood and thereby reduce illegal logging in the Park. John Huston began his new position on October 1, 2008. His salary and benefits are paid by the University and his lodging and transportation are supplied by MGVP.

In order to increase local capacity, MGVP worked with Mississippi State University to facilitate the signing of Memoranda of Understanding with ISAE [Institute Superior of Agricultural Education.....I will have to check thqt full name], the Agricultural University of Rwanda and Makerere University of Uganda.

MGVP and ICCN continue to collaborate on the Gorilla Identification Program, which uses computer imaging software to highlight the contours and fissures of the face, lending greater accuracy to the 'noseprint' identification feature of the gorilla. A confirmed identification of each member of the groups enables us to perform regular, consecutive health checks. With the trackers' unparalleled knowledge of the gorilla groups, we hope to have a comprehensive identification chart completed in the very near future.

Finally, during the year MGVP vets have made several visits to reinforce the 'one-health' approach and offer further training on IMPACT data collection. Currently, data is collected on specially designed paper sheets, which are then transferred to a computer for uploading to the main IMPACT database at Mississippi State University.

Other Species: Domestic Animal & Wildlife Health Procedures

Giraffe Intervention at Akagera National Park

The entire MGVP team treated a giraffe in Akagera Park Rwanda with a snare injury in July 2007. Months later, the giraffe continues alive but is thin and has evidence of chronic scarring of the right front limb. He can walk and run with only a mild limp, but is not, for some reason, with the herd.

Confiscated chimpanzee, Kigali

Beginning in July 2007, MGVP began working with ORTPN to solve an animal welfare problem involving a

Biological Resource Center

Preservation of biological specimens like hair, feces, blood, urine and tissues from gorilla populations is of great concern and interest to scientists from many disciplines, including epidemiologists, clinicians, geneticists and conservationists. Specimens from known individuals allow for potential retrospective studies on emergence of new diseases and accurate determination of changes in prevalence and biodiversity of potentially harmful organisms within the gorilla groups. They also allow for the utilization of new technology, as it develops, to help resolve historical questions. Since specimens are being collected for future use when they may be tested using new technology and for yet unspecified organisms, they are stored in a diverse array of preservatives and storage situations. MGVP now has thousands of samples stored in the main Biological Resource Center at The Maryland Zoo in Baltimore and in satellite locations in Entebbe, (Uganda), Kigali, (Rwanda) and Goma, (DRC).

These include samples not only from Mountain Gorillas, but also from humans, domestic animals and other wildlife that impact gorilla habitat. Many of the samples from the Biological Resource Center have already been used by researchers throughout the world for a variety of research and advanced degree projects. International institutions that have received samples and are conducting a variety of research include UC Davis: Golden Monkey pathology (in the gorilla habitat); Max Planck Institute of Germany: Gorilla genetic study; University of Pennsylvania: Gorilla fecal virus study; and Kyoto University: Gorilla lice genetics.



2007 case summaries

Mountain Gorilla Health Monitoring: Routine Health Checks & Reported Problems

Scheduled Routine Health Checks Began in 2007

Early in 2007, regional veterinary manager Dr. Lucy Spelman established a new system of routine health checks for each of the habituated Mountain Gorilla groups in Rwanda, Uganda, and, if security allows, in DRC. By following a flexible schedule, the seven field and regional vets work together to visit each research and tourism group in each country at least once a month for a routine health check. In Rwanda, veterinary technician Elisabeth Nyirakaragire, who works for ORTPN, participates in this schedule. The routine health check visits are made in addition to visits for reported problems. The schedule ensures regular data collection for IMPACT and improves communication among the veterinarians and park staff. Sometimes, these visits reveal yet unreported problems.

Visits for Reported Problems Continue, Same or Next Day Response

MGVP regional and field veterinarians continued to visit habituated gorilla groups in response to reports of sick or injured gorillas. These visits are made later that same day if time allows, or the next morning. As in the past, the veterinarians first check the gorilla with the reported problem. When possible, they also perform a routine health check on the rest of the gorillas.]

Rwanda

After the schedule of routine health checks began in February 2007, MGVP veterinarians made _____ routine health checks, ____ monitoring visits in response to reported problems, and ____ post mortems in Rwanda. Groups visited on a regular basis included ORTPN's seven tourist groups, Amahoro, Group 13, Hirwa, Kwitonda, Sabinyo, Susa, and Umubano, and Karisoke Research Center's three research groups, Beetsme,

Pablo, and Shinda.

On July 24, 2007, trackers found a juvenile female, Dushishoze in Pablo Group with a rope snare. The following day the rope snare remained tight and the long trailing end represented a potential hazard. On July 26, Dushishoze was anesthetized, the snare was removed easily, and routine blood samples collected. She has had no problems since.

An adult female Magayane in Kwitonda Group was anesthetized for snare removal and diagnostic intervention. From September 6 through 28, 2007, Magayane was monitored seven times to follow up on an injury to her left middle finger after the August 15 snare incident. Ultimately, she managed to amputate her injured finger, which healed without further intervention.

An adult female Nzeli of Bwenge Group was monitored ten times in the month of February, 2008, as she recovered from severe fight wounds to both her hands and feet. On February 6, the gorilla could not walk, had trouble even crawling, and had not been observed eating in two days. She had recently left the silverback Bwenge and transferred to a lone male, but had just transferred back. Her wounds appeared several days old. Her hands and feet were swollen and much of the exposed tissue, especially on her feet, appeared devitalized. Nzeli was darted with an antibiotic; she began to eat the next day and was able to crawl fairly quickly, although she did not begin to walk for another ten days. No further intervention was necessary.

In April, 2008, the infant Umoja in Kwitonda Group was monitored for severe injuries including herniated intestines through a hole on the right side of his abdomen sustained during an interaction with another gorilla. Although his prognosis was poor, the infant's injuries had resulted from a natural event, so no intervention was planned. On April 25, Umoja, remarkably, was observed nursing and riding on the backs of several family members. On April 26, an

intervention was attempted but was unsuccessful. The vet team continued to check on Susa Group daily Amazingly, he continued to nurse despite the herniated as there were two other older infants with similar intestinal tissue. On April 27 the team succeeded in severe upper respiratory signs. Fortunately, they darting both Umoja and his mother Nyiramurema, recovered without intervention and Ururabo and the doing surgery on Umoja to clean and remove necrotic infant had both recovered completely within a week. tissue, replace the intestinal loops, and close the two Cases that emerged from reported problems, no holes in the abdominal wall. Umoja was given a broad intervention required: spectrum antibiotic and returned to his group. He was July 5 through August 29—Group 13 and Hirwa monitored often for the next several weeks, during Group adult females and their infants with a mild but which he made a steady recovery. This case will conpersistent skin disease noted on the neck and chest. tinue to be monitored. In Group 13 on July 5 and July 17 the condition From May 2 through 28, 2008– All individuals in Susa appeared completely resolved in Ntango. The condi-Group were monitored for a group-wide outbreak of tion had significantly improved in the female Ahazaza upper respiratory disease that ultimately required interin the region nearest the neck and armpits, but was vention and treatment of adult female Ururabo and her still evident lower down on her body. Her infant infant. The respiratory illness was characterized by Gukina had a least 3 small spots on its chest. In coughing, sneezing, nasal discharge, lethargy, partial to Hirwa Group, the mother Kabatwa had several lesions complete anorexia, apparent fever and headache. On remaining in a similar pattern lower down on her May 15, Ururabo's infant appeared weak with a wet chest noted on monitoring visits on July 13 and 17. cough, but he improved the next day and appeared sta-This problem – raised nodules progressing to flaky ble for the next four days, although his mother's cough skin and small circular areas of alopecia - resolved continued to worsen. On May 20, Ururabo was lagfirst on the parts of the body that are more readily ging behind the group, not eating, coughing loudly exposed to sunlight and this resolution corresponded and constantly, and barely holding onto her infant. to the dry season. Ururabo's infant appeared very weak with its head July 11-19—Ikaze, a female in the Titus subgroup of down, audible moist breathing, and a rapid respiratory Beetsme Group for severe left leg lameness, which rate. After two hours, it failed to nurse and appeared to resolved. weaken further. The decision was made to intervene, although the infant might not survive. October 16, 2007—An adult female Akago of Group 13 was monitored for a severe bite wound on her On May 20, an intervention was conducted to adminisright foot, the result of an aggressive encounter with ter high doses of antibiotics to both mother and infant, the silverback. The lameness resolved without intercollect samples from mother and infant, and administer vention fluids to the infant. The mother recovered without complication and held her infant normally. November 6, 2007—During a health assessment visit Unfortunately, the rest of Susa Group was now two to Kwitonda Group it was noted that Ndimubanzi kilometers away and Ururabo showed no interest in had a circular raised lesion above one lip, consistent moving that far quickly. She ate a bit and rested, and with what has been referred to as herpes. The outfinally chose to nest for the night. Both Ururabo and break affected most of the animals in the group over her infant appeared dramatically better the next mornthe next few weeks, lasting into early January, but ing. The mother no longer had a cough and she purresolved. posefully made her way back to the group by mid-day October 9, 2007—Gicurasi, a blackback in Pablo with her infant riding at times on her back.

Group, was monitored for a spherical swelling on the

upper right thorax that appeared a few days after an observed aggressive encounter with other males in Pablo Group. Ultimately, the area opened up and drained.

November, 2007—An adult female, Igiti of Susa Group was monitored throughout the year for a chronic skin wound that did not increase in size and or cause the gorilla any signs of ill health.

January 3, 2008 - Agashya, a silverback in Group 13, was monitored for injuries from a fight and found to be healing.

January 4 and 16, 2008 - Multiple individuals in Kwitonda Group were affected by "herpes-like" face lesions observed initially on December 18, 2007. All lesions had resolved in all animals by the end of January.

February 6 to 29, 2008 – Ntobo's infant of Bwenge Group, a two-month-old male, was monitored after the trackers pointed out a small wound on his right hand. When rechecked on February 10, the infant appeared alert and active, but it had strands of hair encircling the middle fingers of both hands. The hair, presumably from the mother, had caused swelling and constriction of the end of the digits on the gorilla's right hand. This problem could progress to necrosis and potentially life-threatening sepsis, but the field vets agreed that this was not a case for intervention because the underlying condition appeared natural, congenital, or genetic. By the next visit, there appeared to be more or different hair, as if the problem was recurring. It was also clear that the infant was not using his wrists or digits normally. Ntobo also clutched the infant in her arms; it was never seen riding on her back or underside, and she rarely let it free. By the end of the month, the hair appeared to be loosening around the digits and the infant was growing and playing. Nevertheless, he could not straighten either wrist, and he used his hands like claws often making sudden movements as if struggling to control them. On May 13 and June 20, 2008, Ntobo's infant was found to be growing, playful, and strong, but still not using its arms normally.

This case will continue to be monitored

February 26, 2008, Hirwa Group and Group 13 – Attempts to check on the individuals in both groups for reports of fight wounds were defeated when both groups crossed the border to the Democratic Republic of the Congo. The fighting had left one infant dead (Intambwe's infant, see below) and the silverback Agaysha wounded. [Note: Hirwa returned on April 4 and Group 13 on May 6.]

March 3, 2008 – A cloudy scar was observed on the corneal surface of adult female Muntu of Isabakuru Group after she was reported to be off food and holding one eye shut. No intervention was necessary.

March 13-26, 2008 – An adult female Aiziza of Shinda Group was monitored for an unusual eyelid swelling. The gorilla could not see out of the right eye and it did not appear painful, but photography revealed that her pupil was misshapen and the iris tissue appeared to be attached to the inner surface of the cornea. Photos of the lesion were sent to an ophthalmologist in the USA, confirming the diagnosis as trauma but leaving the possibility of ocular cancer open. She will be monitored for change.

April 9 and 16, 2008—an adult female Nyiramurema of Kwitonda Group was monitored for an eye injury that occurred on April 6. The gorilla's torn eyelids were healing but sealing the eye at the same time. It was impossible to determine if her globe was affected but she can no longer see. She will be monitored for evidence of severe pain or sepsis.

April 12, 2008—Isaro, an adult female in Isabukuru Group was monitored for a premature birth/abortion following her first pregnancy.

April 21, 2008– A draining abscess was noted on the neck of Umuci, an adult female in Pablo Group. The next day it drained a large amount of white purulent material according to the trackers and was clean and almost dry on the 24th. No follow up was needed.

May 6, 2008 –Group 13 returned to Rwanda. Several individuals had evidence of healing injuries and one

adult female, Isoni, with her infant was missing. (They returned several weeks later.)

May 19 and 31, June 27, 2008 – Nahimana, an adult female in Shinda Group was monitored first for lethargy and then for reported vaginal discharge on 25 May, three weeks after she gave birth to a very small, possibly premature infant on May 5. The infant's carcass was recovered three days after its death but was decomposed.

Democratic Republic of the Congo

Unfortunately, unrest in the Democratic Republic of Congo prevented the field vets from making visits during a large part of the year. Nevertheless, important interventions and monitoring activities did occur:

On July 24, 2007, MGVP learned that violent killings of mountain gorillas of Rugendo Group in the DRC had left at least one living orphan. The staff of ICCN requested MGVP's assistance, both in performing necropsies on the four dead gorillas and in recovering the infant. ICCN requested that the infant be hand raised, joining the infant Ndakasi orphaned in June as a result of similar, tragic circumstances. An MGVP team left that afternoon to plan the next day's events with ICCN officials in Goma. The Karisoke Research Center in Goma readied the guest house there for a second infant.

On July 25, 2007, the blackback Mukunda of the Rugendo Group was anesthetized the rescue the 5.5month-old infant Ndeze after her mother was killed; routine diagnostic intervention also done. Two other gorillas were limping badly. After Mukunda was anesthetized, the infant was taken to a waiting truck with a bottle of milk, and then to Goma to be cared for by the existing MGVP-DFGFI-ICCN team caring for Ndakasi. Mukunda was given an anesthetic reversal and recovered without incident.

On July 31, 2007, Rugendo Group was monitored to check on the two previously seen injured gorillas. A young male, Noella was observed to have a deep wound on his right arm. A young female, Bavukahe, was also believed to be injured but it was not possible to observe her closely. Because Noella was not using his arm, and the injury appeared to be human-induced—either due to a machete or other sharp instrument, the decision was made to intervene to treat him. Noella was anesthetized and was found to have a 4 cm long by 2 cm deep slash on his left forearm. The wound was cleaned and debrided but not sutured given that it was one week old. He was given long acting antibiotics; routine blood samples were also collected. Noella was monitored on August 6 and 13 to repeat antibiotic therapy delivered by dart. No further treatment was needed.

On August 20 and 24, 2008, an infant, Mutazimiza in Kabrizi Group was monitored by after apparently being orphaned on June 8, 2007. Based on ICCN records, Mutazimiza was born August 12, 2005. Plans were made to monitor this infant closely given that he is at a difficult age to survive on his own. Renewed insecurity precluded detailed information after August 26. At this time, Mutazimiza is lost to follow up.

On August 6 and 13, 2007, a female juvenile Bavukahe of Rugendo Group was difficult to observe but showed no obvious external wounds; a gunshot wound was considered a possibility as she was initially injured at the time of the violent killings of four adult gorillas in her group. A failed attempt was made to dart this gorilla with anesthetic for an exam. The intervention was aborted. Over the next few days, trackers reported incremental improvement. On August 13, she was considerably improved though still lame. No treatment was given. Insecurity in the region subsequently has precluded follow-up.

Eastern Lowland Gorilla Health and Monitoring DRC

MGVP hopes to develop a program of health monitoring for free-ranging Grauer's gorillas similar to the current program for mountain gorillas. However, relatively few individual gorillas are known, so the field vets have begun at the first level, assisting the trackers

Research and publications

Postgraduate Programs: 2007-2008

PhD's

I. Dr Christopher Whittier: Different methods of processing fecal DNA for the identification of fecal pathogens utilizing Polymerase Chain **Reaction Techniques**

Masters:

- I. Dr Denis Muhangi: Pathological lesions of the gastrointestinal tract in the Mountain Gorilla (Gorilla beringei beringei)
- 2. Dr Benard Ssebide: Prevalence of observed clinical signs in habituated Mountain Gorillas (Gorilla beringei beringei) of Uganda: The use of IMPACT (Internet-supported Management Program to Assist Conservation Technologies) as a health-monitoring tool.
- 3. Dr Benard Sebwomu: The prevalence of tuberculosis and brucellosis in cattle sheep and goats adjacent to Mgahinga National Park.

Makerere Student Research

- I. Baguma, S. Disease risks to Mountain Gorillas in the Bwindi-Mgahinga Conservation area
- 2. Aye R. The Prevalence of Amoeba and Balantidium in Mountain Gorillas and Humans in the Bwindi Impenetrable National Park

2006–2007 Publications & Presentations

Publication in Refereed Journals or Books

Abstracts

Ecohealth Conference Madison:

- I.Whittier Chris, DVM, Cranfield Michael DVM, Tack Danielle, DVM/MPVM, Nutter Felicia DVM/PhD: Employee health program to promote worker and Mountain Gorilla well being: lessons learned from Rwanda
- 2. Minnis, R, Cranfield M. The use of a syndromic health monitoring system to provide the prevalence of clinical entities in the Mountain Gorilla

3. MGVP, Inc. Writing Group of the Mountain Gorilla Veterinary Project Team c/o Maryland Zoo in Baltimore Druid Hill Baltimore MD 21217: Integrated Health Approach to Gorilla Conservation

European Zoo Vet Association Conference:

I. Gardener Roberts, D.A herpes virus outbreak in a group of Mountain and Eastern Lowland orphan Gorillas

Rwandan Biodiversity Conference:

I. Kinani, J.F. The Mountain Gorilla Project

International Primatology Society Meeting Entebbe:

- I. Iyanya, J.B. I, Kambale, E.S. I, Whittier, C.A. I, 2, Nutter, F.B. I, 2, and Cranfield, M.R.1,3: Prevalence of Tuberculosis and Brucellosis in Livestock in Proximity to Mountain Gorillas in Democratic Republic of Congo
- 2.Whittier, C.A. I, 2, Nutter, F.B. I, 2, and Cranfield, M.R. I, 3: Experiences with Employee Health Programs in Three Different Areas
- 3. Ssebide, B. J.: The use of IMPACT system in gorilla health monitoring
- 4. Cranfield, M., Kalema-Zikusoka Gladys,: Integrated Health Approach to Gorilla Conservation

PASA Meeting Kigali 2007:

- I. Gardener Roberts, D. Vet management of the Eastern Gorilla Interim **Ouarantine** Center
- 2. Childs., S. Eastern Gorilla Rehabilitation and Reintroduction Project
- British Veterinary Zoological Society Annual Meeting 2007
- I. Gardner-Roberts, D., Lowenstine, L, J., Spelman, L. Outbreak of Stomatitis in a Group of Orphan Eastern Gorillas (Gorilla beringei spp.) in an Interim Quarantine Facility, Rwanda
- 2. Gardner-Roberts, D., Gaffikin, L., Spelman L. The Mountain Gorilla Veterinary Project (MGVP Inc.) Employee Health Programme (EHP) -Part of a Conservatiton Medicine Approach to Maintaining the Health of Eastern Gorillas (Gorilla beringei spp.)

American Association of Zoological Veterinarians 2007

I. Luff, J.A., Lowenstine, L.J., Whittier, C.A., Iyanya, J. Malignancy in a free-ranging Mountain Gorilla (Gorilla beringei beringei), first carcinoid tumor described in a gorilla.



Dr. Mike Cranfield

Project Director

Dr. Cranfield received his veterinary degree and completed a residency in zoo animal medicine and pathology at the University of Guelph in Ontario, Canada. He joined MGVP as project director in 1998 and is also the director of research and conservation at The Maryland Zoo in Baltimore. Dr. Cranfield holds appointments at Johns Hopkins Department of Molecular and Pathobiology, the University of Maryland and the University of Mississippi. He was the 2006 recipient of the Emil P. Dolensek Award for exceptional contributions to the conservation, care and understanding of zoo and free-ranging wildlife.

RWANDA

Dr. Jean-Felix Kinani

Field Veterinarian

Dr. Kinani received his veterinary degree from Check Anta University in Dakar, Senegal. He joined the MGVP team in 2004.

Dr. Lucy Spelman

Regional Field Veterinary Manager

Dr. Lucy Spelman graduated from college at Brown University, and veterinary school at the University of California Davis. She completed an internship training in private practice, and zoological residency training at North Carolina State University, then worked for the National Zoo in Washington, DC, for nearly ten years, first as a clinician and then as director. Dr Spelman started with MGVP in October, 2006.

Dr. Magdalena Lukasik-Braum

Regional Field Veterinarian

Dr. Magdalena Lukasik-Braum joined MGVP in early December 2007 as regional field veterinarian. Originally from Warsaw, Poland, where she **Dr. Eddy Kambale** received her eterinary degree, Magda has been involved in chimpanzee Field Veterinarian health, ecotourism, and research in East Africa since 1998, working initially Dr. Kambale earned his veterinary degree at the Catholic University of for Jane Goodall in Gombe National Park, Tanzania, and then in Mahale Graben, Butembo, in the DRC. Before joining the MGVP in 2004, he was a National Park. She has also served as head veterinarian for CROW, a busy scholar at the Technical Institute for Agriculture and Veterinary Science in wildlife rehabilitation clinic located in Durbin, South Africa. Butembo, DRC.

PROJECT CENTER STAFF

Jean-Paul Lukusa, Laboratory Manager Jospin Mbonekube, Administrative Assistant Leon Ntahobavukira, House Manager

ADDITIONAL STAFF

Rusengamihigo Jean Claude Gakara Anastase Mwemezi Michel Mulinda Felicien Barimenshi Innocent Bahati Fabian Bisengimana Jean Baptiste Bapfakwita Amiel

Nemeye Faustin Munyambabazi Dieu Donne Nyizeyimana Samuel Ntahobavukira Leon Kabendera Innocent Storch Nina Sohl Jennifer



John Houston

In-country Agricultural Project Coordinator for MGVP

John graduated with his BS in Animal Science (1993) and a masters in Genetics and ANimal Husbandry (1995) both for Mississippi State University. He is at present time working on his PhD on Veterinary Science. He has held several livestock management and research positions. He is presently Lecturer and Organizer of International at the Institute for Higher Learning of Agriculture and Animal Husbandry.

UGANDA

Dr. John Bosco Nizeyi

Field Veterinarian

Dr. Nizeyi earned his veterinary degree at Makerere University in Uganda and his master's of science in recreational resources from Colorado State University. He completed his PhD in Fecal Cortisol Levels in Gorillas in veterinary medicine at Makerere University, and has worked with MGVP since 1993.

Dr. Benard Ssebide Field Veterinarian

Dr. Ssebide received his veterinary degree and has nearly completed his Masters of Science in wildlife health and management from Makerere University in Uganda. He also completed intensive course work in terrestrial and aquatic ecosystem health and conservation medicine in the United States. He joined MGVP in March of 2007 and will soon begin work on his PhD.

DEMOCRATIC REPUBLIC OF THE CONGO

Dr. Jacques Iyanya Field Veterinarian

Dr. lyanya received his veterinary degree from the University of Lubumbashi in the DRC. He worked for the Department of Agriculture and Development in the eastern DRC before joining MGVP in 2004.

ADVISORY COMMITTEE

Linda Lowenstine, Universality of California at Davis Chris Zink, Johns Hopkins School of Medicine Lynne Gaffikin, Johns Hopkins School of Medicine Dominic Travis, Lincoln Park Zoo Nathan Wolfe, Johns Hopkins School of Medicine Billy Karesh, Wildlife Conservation Society Joe Bielitski, University of Florida Jonna Mazet, University of California at Davis Rich Minnis, Mississippi State University Chris Whittier University of North Carolina Felicia Nutter Veterinarian Marine Mammal Center

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Partners

ORTPN (Office Rwandais du Tourisme et des Parcs Nationaux)

ORTPN was established by the Rwandan government and aims to conserve the rich biodiversity and values of Rwanda's protected areas and to promote sustainable tourism. MGVP works closely with and under the authority of ORTPN, providing veterinary care and assisting with other health-related issues for the gorillas and other species in and around their habitat in the Parc National des Volcans.

ICCN (Institut Congolais pour la Conservation de la Nature)

The ICCN's mission is to manage and conserve biodiversity in protected areas, support and promote scientific research in ecologically sustainable development, develop ecotourism that respects the fundamental principles of conservation, and to integrate conservation into local development processes for the populations surrounding protected areas. MGVP assists the ICCN with veterinary care for the Mountain Gorillas in the Parc National des Volcans and the Eastern Lowland Gorilla in Kahuzi Beiga. From 2004 to present, we also helped provide care and management for confiscated and orphaned Eastern Lowland Gorillas.

UWA (Uganda Wildlife Authority)

The UWA was established in 1996, with the merging of the Ugandan National Parks and the Game Department, to manage Uganda's protected wildlife areas . MGVP works closely with UWA's Veterinary Unit to provide health care, monitoring and other health related expertise to the gorillas in Mgahinga Gorilla National Park and Bwindi Impenetrable National Park.

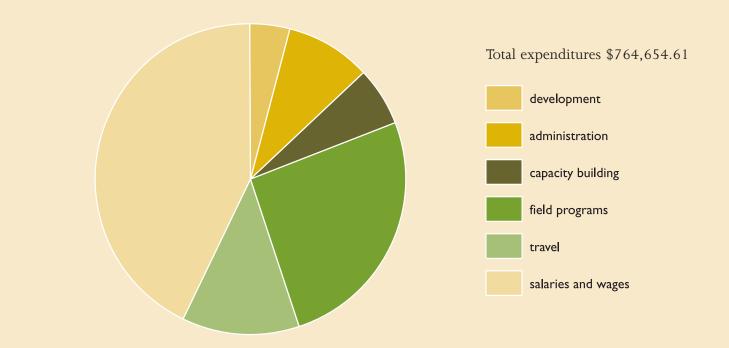
Additional Partners

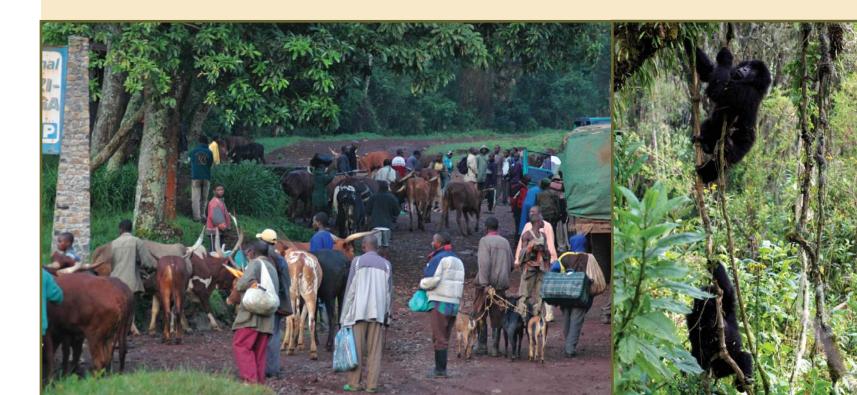
MGVP also collaborates with the Dian Fossey Gorilla Fund International, International Gorilla Conservation Program, Institute for Tropical Forest Conservation, the Jane Goodall Institute and other nongovernmental organizations dedicated to conserving African apes and their habitats in central Africa.

July 1, 2007–June 30, 2008 fiscal spending

A total of \$764,654.61 in funding was allocated through MGVP toward Mountain Gorilla health.

The chart below breaks down the expenditures.





MESSAGE FROM THE CHAIR

The Mountain Gorilla Veterinary Project (the "Project") continued to meet its Mission in 2007. The Project's focus is consistent with 'One Health,' which considers the interdependence of the gorilla, its wildlife neighbors as well as its livestock, domestic animal and human neighbors. Indeed, without attention to the health of all these and their habitat, our efforts on behalf of the gorilla are insufficient. There are many whose efforts support the success of the Project, including wildlife and environmental agencies of our host countries and many conservation organizations which support the Project with funding or resources and expertise. We thank each for their interest and activity which forwards our mission. Above all, we are grateful to the dedicated and skilled field staff of the Project and all those who make their work possible.

MGVP, Inc., the not-for-profit corporation which operates the Mountain Gorilla Veterinary Project, has continued to develop in order to support this leading global wildlife conservation project. We welcome to our Board of Directors the Honorable William Frist, M.D., conservationist and former U. S. Senator from Tennessee, Mr. Jack Hanna, well known to many as "Jungle Jack" and to more as friend to African wildlife, and Mr. John Dick, a dedicated supporter of wildlife conservation and economic development in our host countries. We intend to remain focused on mission and field activities and build only the minimum administrative and fund-raising structures for mission success.

Please join the field and office staff, our supporters at the Morris Animal Foundation, our directors and many financial supporters in continuing the important work of the Mountain Gorilla Veterinary Project in the coming year. We expect great things.

Roger G. Powell Chair MGVP, Inc.

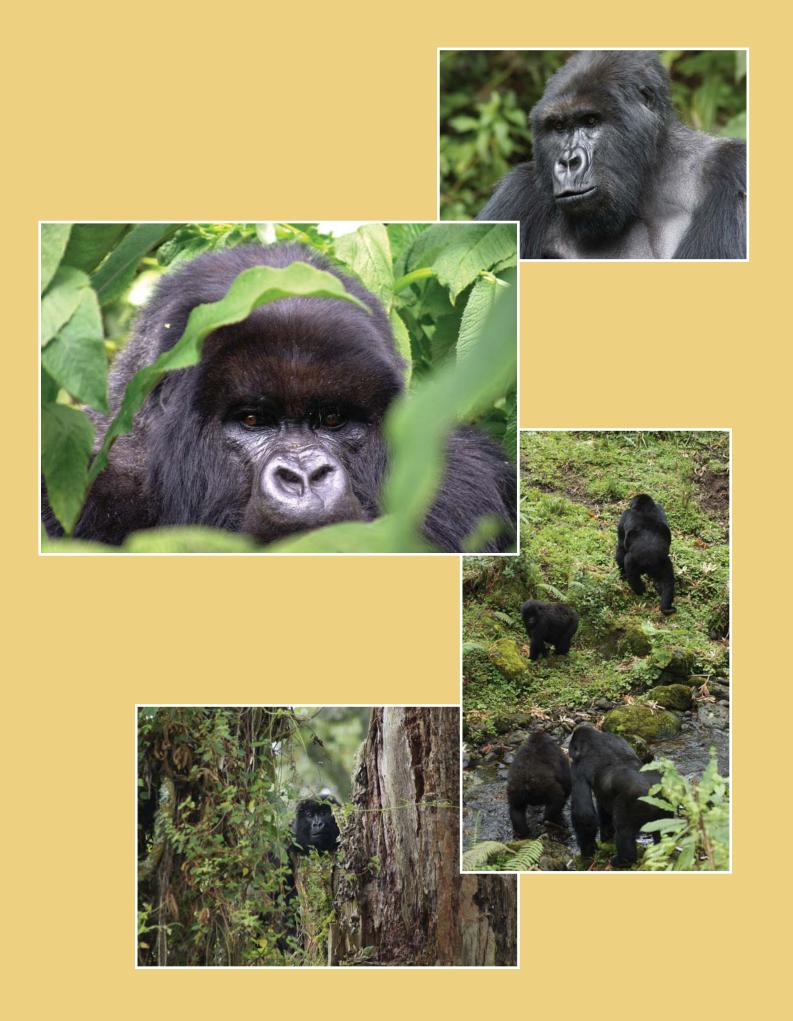




About the Mountain Gorilla Veterinary Project

The Mountain Gorilla Veterinary Project improves the sustainability of Mountain Gorilla populations by monitoring the gorillas' health, providing veterinary care, conducting relevant health studies and disseminating information. Monitoring the health of the population includes observations and accumulation of data, as well as collecting and analyzing biological samples. Providing health care involves interventions for treatment when afflictions are severe, and/or preventative measures when health threats are present. Conducting relevant health studies includes all research conducted in an effort to gain knowledge regarding the health and sustainability of the Mountain Gorillas and their ecosystem. MGVP makes every effort to disseminate information to increase public awareness of programs. In addition, we publish and/or present results of the scientific studies and share data with other agencies. Recognizing the continual need to provide these services, MGVP engages in programs to build scientific capacity within the host countries to carry out this mission. With financial support for conservation efforts, precious little relative to the work that needs to be done worldwide, MGVP approaches all aspects of the project so that outcomes of either data or technologies can be utilized by other conservation efforts. To this end we hope not just to accomplish our task, but to be a model for other conservation work by sharing our developments through the IMPACT web site so others do not utilize scarce dollars to "reinvent the wheel."

Please visit our public web site (www.mgvp.org), our scientific website (IMPACT) (www.cfr.msstate.edu), or visit us in-country through Ged Caddick at Terra Incognita (HYPERLINK "http://www.ecotours.com" www.ecotours.com).



Every individual Mountain Gorilla matters. The loss of even a few individuals impacts their kin, social groups and genetic diversity. That's why preserving their health and the populations that influence their habitat is so important. You can help by giving them the best in veterinary care through MGVP. Even if you never get the rare opportunity to meet a Mountain Gorilla face-to-face, you will know that you are helping them survive.





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An Update – Growing Orphan Family TEXT RUNOVER

diarrhea and excessive thirst; he collapsed and died suddenly just prior to transport to Goma despite an initial response to CPR. The survivor, an approximately three-year-old female, Mapendo, had extensive fungal dermatitis (ringworm.) She responded well to a proper diet and topical antifungal therapy. She will not be mixed with the infant mountain gorillas any time soon – for their health safety – although her behavior will be closely watched. The partners involved in orphan gorilla care continue to work on solutions for long term housing and/or rehabilitation.

MGVP is involved in nutrition, daily health and disease outbreaks among the confiscated gorillas. During the past year, all eleven orphans were given physical exams, bled for health screens, vaccinated and checked for disease titers.

A new home at University of California at Davis TEXT RUNOVER

iii. Instigate and coordinate new research, under the guidance of the Advisory Board on priority research questions mutually identified as such by the MGVP, Inc. Project Director and the One Health Program.

iv. Engage one UC Davis PhD Student in Epidemiology or Comparative Pathology on priority research for the One Health Program.

v. Train two MGVP, Inc. staff (veterinarians and/or technicians) at UC Davis for 6-weeks in pathology, clinical pathology, microbiology and/or parasitology.

vi. Convene veterinarians, public health physicians, epidemiologists, and tropical disease specialists to review and suggest revisions of the Employee Health Program aimed at expanding the program in ways that enhance health security for mountain gorillas.

vii. Expand the utility of IMPACT, MGVP, Inc.'s computerized data collection and management system, including the building out of modules of IMPACT not currently in use, to better serve the objectives of the One Health Program.

viii. Join a NIH-sponsored study at UC Davis on biodemographic determinants of lifespan with a focused study on health-related determinants of mountain gorilla demographics.

ix. Develop and start implementation of a comprehensive fundraising strategy to generate long-term financial support for the Mountain Gorilla One Health Program.

x. Develop and start implementing a strategic communications plan that shares success stories and lessons learned through free media platforms (print, broadcast, internet) and public presentations.

Expanding our reach to wild gorillas, tourists, local human populations and domestic animals, putting the "One Health" approach into practice. TEXT RUNOVER

During the past year, the Mountain Gorilla Veterinary Project combined efforts with Wyman World Health Partners ("WWHP"), a private foundation, to help rehabilitate human clinics that are in close proximity to the [Virungas Park-full name] in Rwanda. Although MGVP contributes no funding or in-country personnel to this effort, it is assisting WWHP with administration of the program until WWHP is fully established as a non-gov-ernmental organization in Rwanda. The first clinic to be addressed is the Shingero Clinic, which serves approximately 30,000 people who live in close proximity to the park. There are no medical doctors at the clinic. The physical facility has been upgraded, a children's nutrition program started, and a host of volunteer nurse practitioners and doctors have volunteered to build capacity for the nurses and staff at the clinic.

Domestic Animal Health TEXT RUNOVER

chimpanzee housed in Kigali. MGVP found a home for this animal at Sweetwater Sanctuary in Kenya, but it took many months to make the transfer a reality. The move was finally completed on February 22, 2008.

In August Dr. Kinani conducted MGVP's annual rabies clinic, vaccinating 900 pet dogs and cats.

Issues with Golden Monkeys

In March, 2008, MGVP responded to a call about a crop raiding golden monkey that was captured and placed in holding in Mutura, Rwanda. The animal was anesthetized and found to be healthy. Blood samples were collected and it was released back to the forest.

On May 9, 2008, two golden monkeys were severely injured near Bisate Village near Parc Nationaux du Volcans by villagers. MGVP responded to the call and joined ORTPN and Karisoke staff. One monkey, a sub-adult pregnant female, was still alive, but had a broken back and though she was fully conscious her hind legs were entirely paralyzed. The other monkey, also a pregnant adult female, had been reported paralyzed and died on the evening of May 8. The injured monkey was euthanized and both were necropsied.

2007 case summaries TEXT RUNOVER

with identification and nose print documentation. The efforts began in connection with a routine health check visit in July 2007 but subsequent visits were halted due to insecurity around the road from Goma to Bukavu, DRC.

When the security situation improved in November 2007, MGVP met with PNKB park staff and monitor the Mutura Group; MGVP also visited the Chimanuka Group of Grauer's gorillas at PNKB and met many key ICCN staff, as well as partners working for other NGOs who are involved in protecting and monitoring this species. MGVP Congo field vets hope to make one week-long visit to the park each month.

March 15 through 22, 2008, when security finally improved, field vets visited all three habituated Grauer's gorilla groups multiple times for routine health monitoring in Kahuzi Biega, DRC. Routine health monitoring of the Kahuzi Biega Grauer's gorillas continued in April and June, 2008.

Mount Tshiaberimu

On May 11, 2008, an adult female Molo of Tshiaberimu Group, a Grauer's gorilla, was found dead after a month of intermittent lethargy. This was the second death in three months among this small and dwindling population of gorillas managed by an non-governmental organization, the Gorilla Organization, for the ICCN. The first gorilla, also an adult female, Mughole, apparently developed hemorrhagic enteritis but a thorough necropsy was not performed. MGVP then offered to assist with any future health problems and was called when Molo died. MGVP sent its necropsy protocol, and later arranged to bring the samples to Goma, Democratic Republic of Congo, for their eventual export to the University of California, Davis.

After the death of this second gorilla at Mount Tshiaberimu, a park that falls under ICCN oversight but is run by an NGO, the Gorilla Organization, Dr. Cranfield and the field vets agreed that MGVP should take charge of the health care at [MTSH]. The first such trip from 19-23 May19 to 23, 2008, found all gorillas observed to be in good health and the park staff willing to collaborate from MGVP.

Uganda

The new schedule of routine health checks began in March 2007 with the hiring of Dr. Benard Ssebide as MGVP field veterinarian for Uganda. As a result, there was an significant increase in both interventions and monitoring during the past year. Groups visited included Nyakagezi in Mgahinga National Park, and Mubale, Habinyanja, Kyagurilo, Nkuringo, and Rushegura in Bwindi.

Makara, the 2nd silverback in Habunyanja Group, was reported weak and coughing on December 19, 2007. At least one other gorilla in this group showed similar signs. The silverback's condition had worsened on December 20after he was found approximately two kilometers from his group. The previous night the gorilla had not made a night nest. He had labored breathing, heavy nasal discharge, and blood-stained stool. The field vet administered antibiotics using several darts. The next day, the silverback appeared better, eating a small amount, but by then was three kilometers from his group. By December 22, Makara looked remarkably improved and rejoined his group. He continued to recover without incident or need for further treatment.

A blackback Rukundo in Nyakagezi Group, Mgahinga National Park was reported to have a snare around a rear leg on February 24, 2008. The following day, the field vet did not reach the group until the afternoon after a morning of heavy rains. The gorillas were moving quickly and the tracking team encountered both elephants and buffaloes. The decision was made to intervene at that time to remove the snare because of concern about the difficulty in getting close to this group and the chance that the gorillas would move into was monitored for a respiratory outbreak which began the Democratic Republic of the Congo where further on December 19, 2007, the day the silverback Markara tracking would not be possible. The snare was removed was treated. He had recovered well by December 27. without incident, and the Nyakagezi group did indeed The group was monitored on January 4, 6, and 8 to leave for the Democratic Republic of the Congo. check on several individuals who continued to cough. The treated silverback had recovered by the first of these An unnamed female in Nyakageze Group, Mgahinga visits, but female Binyonko with an infant was showing National Park, was reported to have a wire snare around signs on January 4. She was observed coughing, but her right upper arm on April 12, 2008. An intervention was eating and recovered gradually on the next two vison April 13 proceeded without complication with the its. No signs of illness were reported in the group exception of downpour of rain that began just as the when a routine health check was conducted on January dart hit the gorilla, and the fact that the female recov-28.

An unnamed female in Nyakageze Group, Mgahinga National Park, was reported to have a wire snare around her right upper arm on April 12, 2008. An intervention on April 13 proceeded without complication with the exception of downpour of rain that began just as the dart hit the gorilla, and the fact that the female recovered suddenly at 40 minutes post darting. The gorilla woke up so completely and quickly that she did not receive her reversal drug. This is not unusual with the anesthetic protocol being used. She was tracked briefly but the UWA team preferred to leave her to find her group on her own. The snare was made of thick bicycle brake cable wire and there was no associated injury.

Cases that emerged from reported problems, no intervention required:

An infant of Buzinza of Rushegura Group was monitored four times during October, 2007 for skin lesions. During all visits, the 8-month old infant was acting normally. On the monitoring visit six weeks after the first report of lesions in Buzinza's baby, the skin lesions appeared less prominent though similar in number. A second infant, the 7-month old baby of Kyirinvi, was observed to have similar lesions. Given the presence of two cases,

allergy as a cause was considered less likely and a viral infection more likely, possibly to pox, papilloma, or herpes. Similar but not identical lesions have been seen in the Virungas population of mountain gorillas, but not (according to available memory or records) in the Bwindi gorillas. These cases were monitored until they resolved completely.

From 8 January 4 through 28, 2008, Habuyanja Group

On January 26,2008, Nkuringo Group adult female Mama Christmas was reported to have a dry cough. The field vet visited on January 26 and found no cough.

Other

In December 2007 all of Uganda and parts of DRC were on high alert because of Ebola Virus outbreak. Also in December, the construction of a field office for MGVP in Buhoma was completed though funds are lacking for power and an internet connection.