

THE DIAN FOSSEY Gorilla Journal

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Daily Protection | Scientific Research | Educating Conservationists | Helping Communities

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Beyond gorillas

All those we protect

By Tara Stoinski, Ph.D.
President and CEO/
Chief Scientific Officer

Last month, the world celebrated Endangered Species Day, but at the same time a new report from the United Nations showed that nearly one million species around the world are facing extinction, primarily as a result of human activities. That's one in eight of all species!

We are truly in the midst of a global extinction crisis that has many causes, including habitat destruction, climate change, pollution, exploitation of natural resources and other factors.

Here at the Dian Fossey Gorilla Fund, we've always believed that protecting endangered gorillas was important, for preventing their extinction due to loss of habitat and other human-related pressures. See **Beyond gorillas**, page 8



Golden monkeys above, share the mountain gorilla habitat in Rwanda, as does this unique and endangered tree frog, right.



Grauer's gorillas, above, are among the world's most-endangered primates. Our protection for them in Congo benefits many other vulnerable species as well.

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**THE DIAN FOSSEY
GORILLA FUND
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Program news and highlights

Fossey staff, local students join global bird-counting day

In our programs we pay attention to many species beyond gorillas, because all are important to the health of the forest ecosystem.

In May, we enthusiastically – and successfully – participated in a worldwide bird-counting event called “Global Big Day,” bringing local students, our interns, research

found in the whole country!

“By participating in this, we as the Dian Fossey Fund not only showcase what our field sites and host countries have to offer in terms of biodiversity but also boost citizen-science efforts in the region,” says the Fossey Fund’s biodiversity researcher, Dr. Yntze van der Hoek.

“It was a day of science, but most especially a day to get people excited

behind a young son, who stayed with her body for some time.

“While we have no way of knowing for sure what the animals were thinking, in the case of adult female Tuck there is compelling evidence her young son was grieving,” says Dr. Porter. “Similarly, with the dominant silverback Titus, young male Ihumure, who shared a close social relationship with



Far left, Our bird-counting team in Rwanda.

Near left, This sunbird was one of 76 species we found in just one day!

assistants and field staff on a bird-watching excursion in Rwanda.

The goal was to count and identify as many birds as possible within a 24-hour period, as did more than 30,000 other volunteers from around the world, all organized by a global citizen-science group called “eBird,” managed by the Cornell Laboratory of Ornithology. The bird counts are later entered into official global databases, which help show how well different bird species are doing, and areas that may be of concern, needing greater study or protection. Birds are important indicator species for habitat health overall.

In Rwanda, our team found the most birds of all those counting there, with a total of 76 species, out of a total of about 200 species

about nature and conservation,” he adds. “We went to a national park to count birds this day, but even if you don’t have access to such sites you can participate in these things. Just look around you, in your garden, on your balcony, what do you see? Everyone can do this, with all kinds of species.”

Fossey scientists study gorilla grief, stress, habitats

In a study published this spring, Fossey Fund scientists, led by Dr. Amy Porter, reported their studies of how gorillas reacted to the deaths of other gorillas. One case involved the legendary silverback Titus, whose deceased body was observed and inspected by other group members for some time. Another was the death of female Tuck, leaving

Titus after his mother transferred groups, remained near the body and even slept with it.”

This study was important in terms of understanding gorilla behavior but it also has important conservation implications, because close inspection of bodies can present a serious risk for disease transmission among the gorillas. This study was led by the Fossey Fund with collaborators from University of California Davis, Uppsala University, and the Congolese Institute for the Conservation of Nature.

Another study, led by Fossey Fund Rwanda Research Manager Dr. Winnie Eckardt, looked at physiological stress levels in the mountain gorillas we monitor, by measuring certain hormones and parasites obtained from fecal



samples left behind in gorilla night nests. This method is important because it can be done without any disturbance — or additional stress — to the gorillas.

Results showed that there are at least two factors affecting the gorillas' stress levels noticeably — greater weather extremes (temperatures and rainfall) and small home range areas accommodating more gorillas. This means that the effects of environmental and population changes must be closely monitored

involve students so that we train future wetland researchers and conservationists,” says Fossey Fund Biodiversity Program Manager, Deogratias Tuyisingize.

Fossey intern named National Geographic Young Explorer

We're so proud of our up-and-coming young scientists in Africa, including intern Narcisse Uwitonze, who has just been named a National Geographic Young Explorer, for his project on gorilla food plant

regeneration. Narcisse is one of many University of Rwanda young scientists who have trained with us during and after college. Now Narcisse is planning to pursue master's and doctoral degrees, focusing on helping local communities through science and conservation.

“It is very hard to do good research and to get the support for it, so I am very grateful to the Fossey Fund and the National Geographic Society for supporting young researchers and helping me implement my project on gorillas' key food plants,” Narcisse says.



Group members were observed gathering around the body of female Tuck.

and used to develop long-term conservation strategies, to help address risk factors like these.

And, in the spirit of biodiversity, we also have many studies about other species and even whole habitats going on. For example, we have been studying frogs in Volcanoes National Park for more than six years, which not only helps us understand additional species but provides important information about the health of critical wetlands in the park.

We also have other wetlands projects underway, including a long-term habitat study that includes our Rwandan student interns. “This is the first-ever long-term wetland project in the gorilla habitat and it was important to



Intern Narcisse Uwitonze is studying gorilla food plant regeneration.

Kitchen gardens help with community conservation

This spring, we expanded our community outreach programs in Rwanda to include new livelihood initiatives for those who may have formerly hunted for game animals in the forest to provide food for their families. Our kitchen gardens project involves training local families on how to grow vegetables in very small gardens or even in old tires around their houses. This includes soil enrichment work, community compost piles, creating



Kitchen garden plot: We're training households to grow vegetables.

raised beds and distributing seeds.

In our work in the Democratic Republic of Congo, where we work in community-managed forests, we have started fish farms using locally found fish, also to provide sources of protein without hunting. ■



Remembering Poppy, who ‘could do no wrong’

The last of Dian Fossey’s study gorillas

Historic mountain gorilla Poppy was first seen as an infant by Dian Fossey, after Fossey observed her birth in 1976 in one of the groups she was studying, called Group 5.

Fossey wrote about the playful infant many times in her journals and in her book, *Gorillas in the Mist*, calling her the group’s “little darling . . . winsome and appealing. She could do no wrong.”

Poppy stayed in Group 5 until Nov. 1985, just a few weeks before Fossey was killed. In her new group (called Susa group), Poppy quickly rose in status among the females, reaching the top level of dominance and giving birth to several infants.

She lived most of her reproductive years in this growing group, which is monitored by the Rwanda park authorities of the Rwanda Development Board. But in 2009, the group started to split and Poppy moved with two of its offshoots, though eventually returned to the main Susa group

Then, in July 2015, following a stressful series of events in the Susa group, Poppy suddenly appeared in one of the groups the Fossey Fund monitors, which was newly formed by young silverback Iyambere.

Our field staff were delighted to see Poppy again, especially given her historic past and her now elder age. Poppy did well in this new little group and even gave birth to another infant, at the advanced age of 40, but the infant was stillborn. She gave birth again in 2017, when she was 41, becoming the oldest mountain gorilla to give birth ever recorded.

Missing since 2018

In August 2018, her new group faced a stressful sequence of



When the group was clearly seen again, Poppy was not with them.

Thus began a series of major searches to locate her, since she seemed well when last seen, and it was hoped that she was fine.

But despite the searching, no sign of Poppy was found again, leading our staff to conclude that she probably had died, although we cannot be totally sure and Poppy has surprised us before.



Top, Dian Fossey with young Poppy in the late 1970s.

Left, Young Poppy (far left) with mother and matriarch Effie.

events, after intrusions by lone silverback Agahozo and injuries to leader Iyambere. These events also resulted in the death of Poppy’s latest infant.

The group then began traveling quickly over long distances and sometimes hiding in deep ravines, making it difficult for our trackers to see them.

She had already become the oldest mountain gorilla ever followed for her entire life, reaching her 42nd birthday on April 1, 2018.

Iyambere’s small group disintegrated at the end of 2018. He had been injured yet again, and his last female left him soon after, along with her 2½-year-old youngster, transferring to Susa’s group.



Left, Poppy with her last infant, in 2018.



Below, Last seen in August 2018, after a stressful interaction between her group and a lone silverback.

An important matriarchal line and source of knowledge

In addition to her own interesting life events, Poppy comes from an important line of female mountain gorillas, as the daughter of an historic female named Effie.

Effie was the matriarch of a family whose members are spread out in many gorilla groups in the

Virungas. Poppy’s sister Mahane, who at 34 years old was also born during Fossey’s lifetime, is still alive.

(Note: Mahane has a new infant and the pair can be symbolically adopted at this link: gorillafund.org/adopt)

Since Poppy has been known throughout her long life, she

embodies all the stages and aspects of mountain gorilla life that we have come to know. She also still has five thriving offspring of various ages in several groups, one of whom – female Ishyaka – is in a group monitored daily by the Fossey Fund.

“Being able to observe Poppy over so many years of life gave researchers a wealth of knowledge,” says Dr. Tara Stoinski, Fossey Fund President and CEO/Chief Scientific Officer.

“She taught us so much about reproduction, female transfers, dominance, and of course, personalities.”

Remembrances from staff

“We remember the day that Poppy joined a group we monitor as one of the best days of our daily work,” says Veronica Vecellio, Fossey Fund gorilla program senior advisor. “It was like seeing a family member again after a long absence,” she adds.

“Poppy broke the mold for what we know about mountain gorilla females – transferring at an older age, joining a very young and inexperienced male, having a baby so late in life. We all felt privileged to know her and observe her through the final years of her life. And it is so wonderful that we know about her infancy from Dian Fossey. Surely, this means we will remember her forever.”

Research assistant Gudula Nyiradayambaje remembers meeting Poppy when she came back to the groups we monitor in 2015. “We are all sad to lose her, but we know she lived a long and important life.” ■



Two largest groups have been intertwined for decades

Pablo & Susa groups share history



Pablo and Susa groups have often interacted. The event above in 2014 lasted for three hours. There were no serious injuries.

Young female Umwari, right, recently moved from Pablo to Susa group.

Editor's note: This is the fourth in a series of articles chronicling the lives of the gorillas in a legendary mountain gorilla group named after former silverback Pablo, in honor of the group's 25th anniversary.

Pablo formed the group in 1993, when Dian Fossey's study Group 5 split. The leadership of silverback Pablo was short, lasting only about 18 months. The group was then taken over by legendary silverback Cantsbee, who would reign for the next 20+ years. Today, the group is led by Cantsbee's son, Gicurasi.



Gorillas live in groups of diverse sizes and composition, and the various dynamics of group formations and changes are among the most fascinating aspects of gorilla life, showing us many things about their strategies, adaptability, individual choices and other behaviors.

In 52 years of studying mountain gorillas in Rwanda, the Fossey Fund has witnessed many groups forming, transforming, and ending. Pablo's group is one of the most-stable and longest-existing groups, probably due mainly to the decades of strong leadership by the late silverback Cantsbee, as well as to the daily protection the group has received since its inception.

But there is another historic group, called Susa group, which lives nearby, on the southwestern slope of Mt. Karisimbi. The original silverback leaders of both groups were both first seen and habituated by Dian Fossey — Pablo was first seen in 1967 and Susa's leader in 1978.

We are often amazed at the similarities between these two groups, as well as by the way they interact and how they maintain their ongoing longevity.

Susa's group was among the first group of gorillas visited by tourists, and it is currently among the groups monitored daily by the Rwanda Development



Female Indamutso, above, is another recent transferee from Pablo to Susa. Gutangara, *right*, has been in Pablo since 1995 but originates from Susa.

Board staff. It is very popular among tourists, due to its large size and the presence of many males and infants. Pablo group has been monitored every day by the Fossey Fund, since its formation in 1993.

Similar in many ways

Pablo and Susa groups share many things in common. For example, they have competed for years for the record as the largest gorilla group known in the region. And both had dominant silverbacks who stayed in charge for more than 20 years.

The two groups also have exchanged females for many decades, during intergroup interactions. In fact, since their formation, more than 30 females have moved between the two groups, in both directions. The earliest move recorded was that of female Poppy in 1985, as she moved from Group 5 (Fossey's original study group) to Susa. Poppy then came back to another subgroup of Pablo, led by silverback Iyambere, 30 years later! (*See the story on Poppy, pages 4-5*).

Susa and Pablo groups also saw similar changes



occur after reaching their largest sizes. Both split into four subgroups, mainly as the result of having multiple adult males, as well as the advancing ages of the dominant silverbacks. Splitting up allowed the younger, stronger males the chance to leave with females for themselves.

The transfer of so many females between the two groups has been facilitated by the relatively stable home range they occupy on the slope of Mt. Karisimbi. Even as the number of gorillas and groups has increased overall, the home ranges of Pablo and Susa adjusted by expanding to the west side of Karisimbi.

But the female moves are also facilitated by the familiarity among these individuals, since many are related through their mothers' lines. This allows moves to happen without major dramas.

For example, all the non-native females currently in Pablo's group actually originate from Susa's group, including Gutangara, Ishema and Mukecuru. Mukecuru and Gutangara transferred at the same time back in 1995! And the reverse is true as well, with most of the adult females in Susa's group coming from Pablo.

More recently, two young females – Indamutso and Umwari – transferred to Susa group in January. According to the Rwanda Development Board

staff, which monitors Susa's group, these two females have integrated well, and that's likely because they knew most of the females already there in Susa.

What's coming next in Pablo?

This historic group continues to remain fairly stable and has boasted some new infants and arrivals recently, but there have also been serious interactions with other groups, some subgrouping, strenuous traveling, and other stressful events. So stay tuned for the next episode of "Life with Pablo Gorillas." We'll post any breaking news at gorillafund.org/Pablo. ■

Beyond gorillas

Continued from page 1

And nearly half of all primate species are threatened with extinction.

But every day it's becoming clearer to us that our daily gorilla protection has an even greater role and a much bigger impact than we initially realized.

There are so many other endangered and vulnerable species in the two areas where we protect gorillas, and our daily presence in the forests benefits all of them. This includes iconic species like elephants, chimpanzees and leopards, as well as numerous lesser-known species, many of which are found only in these areas.

We also study a number of these species directly, especially those that are good indicator species for overall habitat health. Frogs – and wetlands – and various species of birds, for example, are not as adaptable as gorillas to changes in their environment,

so it is important to know about their well being and status, if we hope to save the ecosystems that are home to the gorillas as well.

I'm extremely saddened and concerned by the U.N. report. But the mountain gorilla story shows we can save a species from extinction, and in the process protect many other species as well. I'm especially thankful to all of our amazing donors, whose impact is truly far reaching. You've empowered us to create one of the world's few conservation success stories in helping save mountain gorillas, bringing them back from the brink of extinction.

You've also played a key role in helping so many other species – and important ecosystems – survive. These forests are critical to all life on the planet, including ours. Working together, I know we can continue to make a huge difference in saving our earth's remarkable biodiversity. ■

Saving the planet's last wild gorillas is an important mission. But we know now that the impact of this work is even bigger.

Check out our annual report!

The Fossey Fund's annual report for 2018 is now online.

Please visit our website at gorillafund.org/annualreport to read about all of our activities from last year.

Building your own conservation legacy

Planned giving is a unique way to support the work of the Dian Fossey Gorilla Fund during your lifetime and beyond.

When you inform us of your planned giving intentions, you become a member of our Legacy Society, allowing us to recognize you appropriately for your generosity and dedication to wild gorilla conservation in Rwanda and the Democratic Republic of Congo.

There are many vehicles that allow you to provide for your loved ones and make a planned gift to the Dian Fossey Gorilla Fund, including:

- wills and living trusts,
- life insurance policies,
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- bank and investment accounts,
- gifts of stock or securities, and
- donor-advised funds.

To learn more, please contact Katherine Cadwallader kcadwallader@gorillafund.org

Or visit gorillafund.org/giving.

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