

International Primatological Society

IPS Bulletin



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President's Corner

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In mid January 2017, around the time that the last issue of the IPS Bulletin was being published, I returned to my long-term field site in southeastern Brazil for one of my bi-annual visits to see how the muriquis and the students who were following the muriquis were doing. As usual, I traveled there from Vitória with my long-time colleague and collaborator, Dr. Sérgio Mendes, of the Universidade Federal de Espírito Santo and our former post doc, Dr. Carla Possamai, of the Muriqui Instituto de Biodiversidade. But nothing else about this visit was routine.

We had heard reports of primates dying of yellow fever in this region of Minas Gerais during the preceding weeks but none of us were prepared for the oppressive silence that permeated the forest, and that we quickly learned was a consequence of so many of its inhabitants being lost. We called some former students to help the current ones to try to locate the muriquis, which are individually recognizable to trained observers. The students sent daily reports, and by the end of the month, had accounted for nearly 90% of the muriquis in this stronghold for the species. However, the status of the

other primates was far less encouraging. We estimated that 80-90% of the brown howler monkey population had died, which, if confirmed, would represent the loss of hundreds of individuals in a single 1,000 ha reserve. We are now in the process of documenting the actual size and composition of the howler monkey population, as well as those of the other sympatric species of capuchin monkeys and marmosets in this Atlantic Forest primate community.

The Brazilian Primatological Society¹ has been at the forefront of public education about the devastating path of the yellow fever outbreak as it spread beyond Minas Gerais into neighboring states (e.g., Espírito Santo, São Paulo, and Rio de Janeiro). This outbreak is considered to be the most severe in the history of this region of Brazil. Within just a few months it had killed hundreds of people and thousands of monkeys. No one is sure yet what made it so lethal or why it spread so quickly, or what its long-term consequences will be.

How do other factors such as climate change, habitat fragmentation, or human mobility and other behavior patterns

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Cat Hobaiter, Editor



contribute to the virulence of this mosquito-borne disease? Can primate populations that have been so dramatically reduced in size recover if past habitat fragmentation has left them isolated in forests with minimal or no recruitment possibilities? Why are some species more resistant than others, and how will plant and animal communities, such as the one we are studying, change in response to the differential impacts of these disease-related dynamics?

The urgency to find answers to questions such as these is driven by much more than intellectual or scientific curiosity, for as with any similarly severe disease outbreak anywhere in the world, both human and nonhuman primate lives are at stake and the prospects for primate biodiversity hotspots and endemic species are diminished. It is widely recognized that understanding the biological, ecological, and anthropogenic contributions to human and wildlife diseases will be critical to our abilities to mitigate their negative impacts in the future.

Initially it was difficult to reconcile the rapid disappearance of hundreds of primates in a forest I have known for 35 years and that, through the hard work of many people, has been increasingly well protected. Although its muriqui population is still comparatively strong, the vast numbers of missing howler monkeys are a stark reminder of how quickly—and unpredictably—conservation gains can be lost.

By the time we returned to the forest in early June, however, small groups of surviving howler monkeys were already being sighted. These new groups provide an equally important (and more optimistic) reminder about the resilience of nature, when it is given a chance.

Giving primates everywhere a chance through our research and conservation efforts is a major part of the IPS mission. These efforts are exemplified by our members in many ways, and none are more inspiring than those outlined in the many outstanding applications that were diligently reviewed by IPS officers and their

respective committees for our grants and awards this year. I would like to recognize all grant and award applicants, and offer my special congratulations to this year's winners, who are announced in the following pages of this Bulletin. I would also like to thank the committees and committee chairs for their time and energy in reviewing the applications.

The IPS officers will soon begin deliberations for members of the Election Committee, which will be responsible for developing the slate of candidates for the following elected positions: Secretary General, Treasurer and Vice President for Membership, Vice President for Conservation, and Vice President for Research. Please keep an eye out for IPS emails inviting your suggestions for candidates for these IPS offices, as well as for nominations for the Lifetime Achievement Award.

Finally, be sure to Save the Date for the IPS Congress in Nairobi, Kenya from 19-28 August 2018. Watch for email messages, and follow the Congress website, <http://www.ipsnairobi.org/>, and be sure to let me or the other officers know if you are interested in becoming more involved in IPS. Our united efforts can make a positive difference.

Best wishes to all,

Karen B. Strier
IPS President

¹<http://sbprimatologia.org.br/o-surto-de-febre-amarela-no-brasil-e-seus-impactos-sobre-populacao-de-macacos/>

VP for Captive Care

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The Captive Care Committee was pleased to receive 12 excellent applications for this granting cycle. Each proposal was scored by at least 10 committee members, ensuring a thorough review of content, methods and impact and in the end, we were able to recommend funding for four proposals.

- Ceballos-Mago et al., Captive pet primate characterization in Peninsula de Paria, Venezuela: taking actions for enhancing their welfare (Venezuela)
- Kahlenberg et al., Building a gorilla transfer crate for reintroduction of Grauer's gorillas in Eastern Democratic Republic of Congo (USA/DRC)

- Tully et al., Primate Care Training Program for the Pan African Sanctuary Alliance (USA, multiple African countries)
- van Dorenmalen et al., Improving primate housing by providing sustainable and removable furniture in order to increase the general welfare and rehabilitation process of primates at the Lilongwe Wildlife Centre (Malawi)

Congratulations to this year's grantees and we look forward to another excellent group of submissions next round!

Cheers

Steve Ross, IPS VP for Captive Care and Breeding

VP for Research

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Outcome of the 2017 Research Grants competition

The competition was very strong again this year, with 84 applications (84 in 2016, 69 in 2015, 93 in 2014), from 24 countries (Benin 1, Brazil 1, Cameroon 1, Canada 7, Czech Republic 1, Ethiopia 1, Germany 1, India 2, Indonesia 2, Italy 7, Japan 1, Madagascar 1, Mexico 1, The Netherlands 1, Nigeria 1, South Africa 1, Spain 1, UK 10, USA 42, Zimbabwe 1, based on affiliations).

I am very grateful to the members of the IPS Research Committee for their help in reviewing the applications and for providing constructive feedback which we sent to all applicants: Federica Amici, Sarie van Belle, Judith Burkart, Fernando Campos, Anthony di Fiore, Eduardo Fernandez-Duque, James Higham, Lydia Hopper, Maren Huck, Ikki Matsuda, Amanda Melin, Patrick Onyango, Julia Ostner, and Onja Razafindratsima.

Two members of the committee reviewed each application, based on detailed published criteria which focus on scientific excellence. Reviewers

provided a score out of 20 and comments to feedback to the author. I took z-scores for each reviewer, then the mean for each application, and ranked the applications on the z-scores.

Our evaluation criteria reflect the sections of the application form and include: the quality of the theoretical justification; the clarity of hypotheses and predictions; feasibility and suitability of the methods; feasibility of the timeline; the suitability of the budget; and whether the applicant has the experience required or adequate supervision to conduct the project. We do not assess the quality of the English as long as it does not obscure the readers' understanding. We do not fund projects focusing on primate conservation or on the captive care of nonhuman primates unless they also make a clear contribution to significance to theory that goes beyond the study species, because IPS has separate grant programmes for conservation and captive care.

We awarded a total of US\$ 12,672 in nine grants:

Name	Title of grant	Country of affiliation*	Country where work will be done	US\$	Includes Community Conservation Initiative
Elizabeth Tapanes	Diversity of pelage patterning and function in wild sifaka lemurs (<i>Propithecus diadema</i>) at the Tsinjoarivo Forest in Madagascar	USA	Madagascar	1500	no
Benjamin Finkel	Foraging Strategies of Old Chimpanzees	USA	Uganda	1500	yes
Erin Weigel	The use of multiple play signals in captive immature western lowland gorillas	USA	USA	1500	no
Chris Marsh	The effects of forest degradation on arboreal apes within Sikundur, the Gunung Leuser Ecosystem, Northern Sumatra	UK	Indonesia	1475	no
Amanda Tan	Using stable isotopes to measure the nutritional advantages of stonetool use in a living primate model, the coastal stone-tool-using longtailed macaques (<i>Macaca fascicularis</i>) of Thailand	USA	Thailand	1480	no
Lucie Rigail	Do male olive baboons (<i>Papio anubis</i>) attend to female odor signals?	Japan (French)	France	1044	no
Kelly van Leeuwen	Habitat use at a landscape scale for savanna chimpanzees at Issa Valley, Ugalla, Tanzania	UK	Tanzania	1500	no
Elizabeth Mallott	Do white-faced capuchins use preferred partners to mitigate foraging costs associated with color vision phenotypes?	USA	Costa Rica	1190	no
Laura Abondano	Mating strategies and reproductive endocrinology of female lowland woolly monkeys (<i>Lagothrix lagotricha poeppigii</i>): Implications for female mate choice in a promiscuous primate	USA (Colombian)	Ecuador	1,483	no

* The country where the applicant lives or of the university with which the applicant is affiliated. Nationality is in parentheses.

The future of the IPS research grants

Following discussion of about the geographical diversity of applications and awards at IPS council at the Chicago conference, 2016, the Research Committee engaged in an extensive discussion of the goals of the research grants. We discussed five concerns:

1. Geographical representation in the numbers of applications.
2. Geographical representation in the numbers of successful applications.
3. Applications from primate range countries are over-represented among ineligible applications (those that are not correctly targeted to the research fund).
4. We don't differentiate applications by career stage, but this is a disadvantage to those earlier in their career.
5. Some students have access to good advisors, some don't.

We noted that over the years 2011-7, the number of applications varies 69-84, with 7-9 awards and a success rate of 5-17%. The number of applications from range countries varies 9-20, with 0-2 awards, and success rate of 0-11%.

We noted our current practice:

- We advertise the grant on the IPS website and social media.
- The application form states clearly what is expected in each section of the form.
- We publish the aim and evaluation criteria on the website.
- The VP for Research responds to requests for advice in advance of deadline, and recommends an applicant tries a more appropriate competition if they submit an inappropriate application before the deadline.
- The VP for Research coordinates with the VPs for Conservation and Captive Care over suitability of grants, but application forms differ, so there's little chance for success if an application is transferred).
- The Research Committee provides constructive feedback to all applicants.

Following our discussion, the Research Committee submitted a proposal for actions to the IPS officers in June. The officers agreed that the issues we raised are important, and that lack of access to scientific training and resources hurts both primates and primatologists. To begin to

address these concerns, we agreed to implement the follow actions:

1. Provide feedback on applications in advance of the grant deadline for primatologists from range countries.
2. Increase publicity for the grants programme (via the VP for Communications).
3. Provide examples of successful applications on the IPS website.
4. Provide workshops on funding applications at national and regional meetings where possible. Janette (VP for conservation) & I are giving a presentation on how to apply for funding at the inaugural African Primatological Society in Côte d'Ivoire in July 2017.
5. To state that we encourage proposals from primatologists from range countries on the IPS website.
6. To trial a bonus system for applicants from primate range states and for early career applicants in 2018.
7. To assign three, rather than two, reviewers to each application, and examine both raw scores and standardised scores when making decisions.

If you are interested in the activities of the Research Committee, or if you have specific issues you would like addressed, please contact me.

Ad hoc committee on diversity

We held a roundtable discussion on diversity during the IPS/ ASP 2016 congress with the goal of identifying impediments to fully inclusive participation in primatology. The discussion of diversity used a framework of equity, access, and inclusion. Participants identified current practices and norms that excluded or precluded access by various groups that are under-represented and/or under-served in IPS and ASP.

Participants felt that the roundtable was the beginning of an important conversation and hope to continue that conversation in and between subsequent meetings. The IPS council agreed to the formation of an ad hoc committee to identify ways that we can enhance diversity in IPS and primatology in general.

The committee will examine barriers to attracting a diverse (ethnicity, age, gender, nationality, and cultural background) membership in primate societies. It will examine how can we promote diversity in leadership positions and in securing funding. We aim to be as inclusive as possible, and to hold a further workshop at our next meeting in Nairobi.

Dr Christopher Schmitt has agreed to co-chair the committee. The committee is currently largely comprised of people who attended the workshop at IPS/ ASP and expressed interest in participating in the follow-up. We also requested nominations from council members, but received only a few. One of our first tasks is to identify ways in which we can encourage our affiliated societies and members to participate in the committee. We welcome new members.

If you are interested in the activities of the ad hoc committee on diversity, or if you have specific issues you would like addressed, please contact me.

Ad hoc committee to promote sharing of experience and good practice to continue to make capture safer for non-human primates

We formed the ad hoc committee to promote sharing of experience and good practice to continue to make capture safer for non-human

primates following a workshop at IPS/ ASP2016 on this topic.

Dr Elena Cunningham and Dr Steve Unwin are co-chairs. The committee notes that there is a need for building trust and greater sharing of information, including detailed reporting and data collection on the immediate and long-term consequences of capture.

We aim to develop and share protocols for capturing primates. We are collating such protocols by experts in the capture of specific taxa and will IPS will act as a repository for this information.

So far, we have capture protocols for *Aotus*, *Chlorocebus*, *Loris*, *Microcebus*, *Pan troglodytes*, *Propithecus*. We are developing data collection forms to report primate capture events.

We seek to represent the major geographical regions and taxa on the committee and welcome new members.

If you are interested in the activities of the Ad hoc committee, or if you have specific issues you would like addressed, please contact me.

Jo Setchell

Trea\$ury Note\$

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As was announced via email earlier in the month, Heather Southwick and the Nacey Maggioncalda Foundation have issued a Matching Challenge to the members of IPS. Heather's challenge is for \$10,000 in honor of her late husband and pioneering primatologist, Chuck Southwick, and all funds will go the IPS Conservation Fund. The Nacey Maggioncalda Foundation has issued a \$5,000 challenge that will also go to the IPS Conservation Fund. Both challenges are open until Sept. 30, 2017. Let's contribute right away, to add a total of \$30,000 to support our many primate conservation programs.

Over \$49,000 in grants and awards have already been paid out from the IPS Conservation and General Funds during calendar year 2017. Support from the 2016 Southwick Matching Challenge, from an anonymous matching challenge, and from your contributions helped make these expenditures possible. Just as a reminder, the 2016 fund-raising campaign associated with the Southwick Matching Challenge raised over \$52,000 in total for the Conservation Fund.

Remember that IPS dues went up in 2016. Dues for regular members are now \$60 per year and dues for student members are now \$30 per year. Lifetime Membership has increased to \$780 (this can be paid in two installments of \$390 each, with a maximum of two years between payments).

Please note that you are no longer able to purchase an annual subscription to IJP through the IPS website. Very few members were taking advantage of this option and there were virtually no benefits to IPS associated with purchases of IJP. As always, you can purchase IJP at IPS member's rates through the Springer website.

Now would be a good time to renew your membership in IPS, especially if you plan to submit an abstract and register for the upcoming IPS Congress in Nairobi in August of **2018**. Registration and abstract submission for the Nairobi Congress are likely to begin in **September of 2017**, so if you are a member-in-good-standing at that time, your registration process will be quite simple. **We are continuing to devise ways to minimize the 'traffic jam' associated with abstract submissions at the deadline.**

Range country members who cannot afford to pay dues can now join IPS quite easily through the website. If you are a range country member and you cannot afford to pay dues, just check '**money order**' as your form of payment, and I will take it from there.

This is an exceptionally good time to make a donation to IPS, as the 2017 Southwick Challenge is underway. For every dollar you donate, Heather Southwick will match it, up to a maximum of \$10,000. The next \$5,000 in donations will be matched by the Nacey Maggioncalda Foundation. As always, you can donate through the IPS Donate Now! button

<https://www.asp.org/IPS/donations/getdonation.cfm>

As I mentioned above, we have awarded over **\$49,000** from the Conservation and General Funds for the 2017 calendar year, in addition to the **\$91,000** that was awarded in the 2016 calendar year to cover the Community Conservation Initiative, Conservation Small Grants, Jacobsen Awards, Southwick Awards, Captive Care Grants, Research Grants, the

Galante Award, and the Pre-Congress Training Program. As usual, thanks to everyone who has paid their dues, made a contribution to the matching challenges, and/or registered for a recent Congress. It is your commitment to IPS, primatology, and primates that has maintained the Society's financial health up until now, and allowed us to support so many worthy programs, projects, and individuals.

Membership figures for 2017 are down a bit so far, but I am expecting many members will renew their memberships for 2017 soon, in order to get the member's discount for the 2018 conference. Since 2016 membership numbers (and revenue) were down, please renew your IPS membership for 2017 at your earliest convenience.

There are now 234 Full or Partial Lifetime Members in IPS. New Lifetime Members include:

X. Carretero-Pinzon	S. Reader	
L. Jerusalinsky	N. Dominy	C. Tan

Lifetime Members will never have to pay dues again, but they can still make contributions to the General Fund or the Conservation Fund from the webpage and are encouraged to do so. If you have made a career of primatology or plan to do so, please consider a Lifetime Membership. You can either purchase the membership with one payment (\$780) or you can choose to pay in two installments of \$390 each.

Let me know if you have any other Membership-and/or Treasury-related questions, especially those pertaining to the **2018 IPS Congress in Nairobi**. Remember, you will have to be an IPS member in good standing in 2017 to receive the member's discount on registration fees when you submit your abstract for the 2018 Congress.

Once again, please consider a donation to IPS (use the "**Donate Now**" function), especially to the Conservation Fund to address the Matching Challenges and to help support primates, primatology, and primatologists across the globe.

Steve S.

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IPS Treasurer and VP for Membership

2017 Education Grants Competition

Lawrence Jacobsen Education Development Grants: This year we had 17 applications from 13 countries across Africa, South and North America, Asia, and Europe (Benin, Brazil, Cameroon [2 applications], Colombia, Côte d'Ivoire, Germany, Indonesia, Madagascar, Malawi, Malaysia, Nepal, South Africa, and USA [4 applications]).

I am very grateful to the dedicated IPS members who assisted with the reviewing and judging for the 2017 Lawrence Jacobsen Education Development grants and the Charles Southwick Conservation Education Commitment Award. Acknowledgements are due to: Anne Savage, Carlos Ruiz-Miranda, Francine Dolins, Inza Kone, Lynne Baker, Lynne Miller, Marc Myers, Renata G. Ferreira, Simplicious Gessa, Thomas Breuer, and Zarin Machanda.

We awarded US\$ 8,883 in five grants (three included Community Conservation Initiatives in their applications):

- **Rosamira Guillen** (Colombia): Keeping the Wild in Wildlife: Discouraging the Use of Cotton-Top Tamarins as Pets in Northern Colombia
- **Kathy Kelly** (South Africa): Baboon Matters Namaqualand Farm Project

- **Genevieve Crisford** (Malawi): LWT Primate Conservation Learning Facility
- **Gregg Tully** (USA): Cameroon National Conservation Education Program
- **Elysée Rasoamanana** (Madagascar): Raising Awareness for the Conservation of *Lemur Catta* in the Surrounding Area of Mangily, Madagascar

Charles Southwick Conservation Education Commitment Award: We awarded US\$ 6,000 in three grants this year:

- Bishwanath Rijal, Primate Conservationist and Educator; secondary school biology teacher in Kathmandu, Nepal.
- Bruce Ainebyona, Education Officer for North Carolina Zoo's UNITE for the Environment program based in Uganda.
- Mukesh Chalise, Associate Professor in the Central Dept. of Zoology at Tribhuvan University and President and Founder of the Nepal Biodiversity Research Society

If any IPS members are interested in serving on the Education Committee as a student competition judge, or have specific issues they would like addressed, please contact me at patrizar@usp.br

Patrícia Izar
VP for Education

VP for Communication clh42@st-andrews.ac.uk

Hello Primate folk! A short one from me this bulletin. Thank you to everyone who has submitted reports and information for inclusion in this edition.

Our new social media pages are off to a great start! If you haven't seen them yet, pop along to Facebook or Twitter, and please do send along, post, and share any primate news.

Stay tuned for further updates to the website, and please do get in touch with feedback or ideas for what you would like to see IPS do with our online profile.

Cat Hobaiter
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[@IPS_PrimateNews](https://twitter.com/IPS_PrimateNews)

IPS Nairobi is only a short 13 months away. I hope you are all thinking ahead and making plans to attend. The website is up and running and it will be updated frequently over the next few months (<http://www.ipsnairobi.org>)

As most of you know, one very important event that takes place at each congress is the selection of the congress location four years hence. In 2016, in Chicago, we selected Quito, Ecuador, as our location for 2020. When we meet in Nairobi next August, we will select the site for the 2022 meeting.

The process of selecting a location for IPS Congresses begins with commitments on the part of affiliate members to prepare a bid. Members who have such an interest carefully read the "Guidelines for Submitting a Bid to Host a Congress of the International Primatological Society," which can be found on the IPS website under the tab, Policies and Guidelines." The preparation of a bid is one that takes time and careful consideration, but it serves its purpose

well in guiding the development of a carefully considered and feasible meeting.

IPS could not achieve its mission or goals without the all-important congresses we hold every other year, and we cannot hold congresses without the dedication of members who are willing to step up and prepare bids. NOW IS THE TIME TO TALK TO YOUR COLLEAGUES ABOUT POSSIBLY PUTTING TOGETHER A BID FOR IPS 2022. Many of you have attended congresses over the years and have ideas about how the optimal IPS Congress could be planned and run. Now is the time to put your ideas into a bid that will give us a congress in 2022.

If you have questions, please contact me or IPS Treasurer Steve Schapiro. We look forward to hearing from you.

Best wishes,
Nancy Caine

VP for Conservation

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Report from the Office of the Vice President for Conservation

The IPS Conservation Committee had another successful year in reviewing grant proposals. I'm happy to report the results of our hard work.

2017 Galante Family Winery Conservation Scholarship

This year's Galante Family Winery Conservation Scholarship winner is Mr. **Emmanuel Liyong**, of Cameroon. He requested the scholarship to use

for GIS training in an in-country training program. As the Coordinator of the Centre for Indigenous Resources Management and Development (CIRMAD) and Project Leader for an ongoing research project, Emmanuel's main conservation focus is the endangered Nigeria-Cameroon Chimpanzee (*Pan troglodytes ellioti*). This three-month course will no doubt benefit the important work of his entire team. We congratulate Emmanuel on receiving this honor – and look forward to following his career in primate conservation.

2017 IPS Conservation Grants

Every year, the IPS Conservation Committee receives grant proposals for the IPS Conservation Grants and we very carefully review these to decide how best to distribute IPS Conservation Funds. For this year's competition, we received 36 applications. This was a lower number than in some years. We're unsure why. Nevertheless, it was again difficult to select only a few; many applications were of very high quality. In the end, we selected 7 proposals to fund. The following list provides the principle investigator, (country of origin in parentheses), where the work will be carried out, and the title of the project. Those with "(CCI)" were selected to receive an additional \$500 from the Conservation through Community Involvement initiative. We congratulate these winners and thank them for their work for primate conservation!

- **Chloe Chen-Kraus (USA), Madagascar.** Assessing anthropogenic impacts on endangered Verreaux's sifaka and prospects for human-lemur coexistence in southwestern Madagascar.
- **Rami Ota (Benin), Benin.** Ranging and feeding behavior of the mixed-species group of the last remaining white-thighed colobus (*Colobus vellerosus*) and the mona monkey (*Cercopithecus mona*) in Kikélé Sacred Forest and surveys of nearby community forests in the Republic of Benin (CCI).
- **Paul Tehoda (Ghana), Ghana.** Status and conservation of the Critically Endangered western chimpanzee in Southwestern Ghana (CCI).
- **Pedro Perez (Peru), Peru and Bolivia.** Investigation of genetic diversity of pygmy marmosets (*Cebuella*) in Ecuador, Peru and Bolivia.
- **Nestor Allgas (Peru), Peru.** Primate Census at "La Jungla de los Monos" reserve, El Tambo, San Martin, Peru. (CCI)
- **Ryan Satria (Indonesia), Indonesia.** Conservation of Floristic Habitat for Javan Slow Loris (*Nycticebus javanicus*) in Kemuning Forest. (CCI)
- **Jose Lopez Cruz (Honduras), Honduras.** Spatial distribution of the mantled howler monkey (*Alouatta palliata* Gray 1849) in relation to the vegetal structure.

2017 Alison Jolly Lemur Conservation Grant

In 2014, the IPS Officers voted to recognize Alison Jolly's service to IPS and her dedication to her beloved lemurs by naming one grant per year in her name. The IPS Conservation Committee is happy to announce that the 2017 winner of this named grant is Chloe Chen-Kraus of the USA. We know that her project (listed above) will honor Alison's legacy. Congratulations to Chloe.

Thanks to the 2017 Conservation Committee

I continue to be grateful to the wonderful individuals who serve on the IPS Conservation Committee during each term. They're all busy people and their work for us is very much appreciated. The following individuals provided input on at least a portion of our work during 2017's grant cycle:

Mary Blair, Swetha Bashyam, Ramesh (Zimbo) Boonratana, Drew Cronin, Spartaco Gippoliti, Reiko Goodwin, Lisa Gould, Rachel Ikemah, Inza Kone, Martin Kowalewski, Jenna Lawrence, Joanna Malukiewicz, Duc Hoang Minh, Lisa Rapaport, Michael Reid, Melanie Seiler, Arif Setiawan, Mauricio Talebi, and Jo Thompson.

If you have any suggestions for the IPS Conservation Committee – including new ways to raise money for the Conservation Funds, please contact me!

Janette Wallis
VP for Conservation

Upcoming Meetings



Celebrating 50 Years of the Primate Society of Great Britain

27-29 November 2017

Royal Geographic Society, London

Join our guest speakers: **Dr Jane Goodall, DBE**, patron of PSGB, Founder of the Jane Goodall Institute and UN Messenger of Peace, and **Prof Frans de Waal**, primatologist and ethologist, together with other leading primatologists such as Robin Dunbar, Bob Martin and Russ Mittermeier in celebrating 50 years of primate research, conservation and welfare around the world.

This event includes a get together on the evening of the 27th and then two days of talks, round table discussions, posters and other social events. Jane and our panel of experts will highlight priority areas for the next 50 years of primate conservation as well as celebrating the last 50 years of UK primatology.

The conference is open to everyone interested in primates.

The meeting will also include:

- sale of artworks and books
- book signings, including by Jane Goodall
- past presidents' memoirs

Tickets via the PSGB website: <http://www.psgb.org/meetingsphp>

or Eventbrite: <https://www.eventbrite.co.uk>

Ticket price includes lunch, tea and coffee on both days and the wine reception and gala dinner* with Jane on the 28th. Ticket prices have been heavily subsidised by the Society to encourage student attendance.

*Drinks purchased separately

Report from Conservation Grant Recipient Chrystelle Dakpogan



Project: Protecting Critically Endangered Red-Bellied Guenon and the White-Thighed Colobus: an Intensive Primate Conservation Training in the Dahomey Gap

Awarded a conservation grant from the IPS in April 2015



Chrystelle DAKPOGAN, chief executive
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ACKNOWLEDGMENTS

This training workshop was made possible thanks to the generosity of several organizations and individuals. We extend our sincere thanks to all those who contributed to the first edition of the Capacity Building in the field of primatology in the Dahomey Gap. These include:

- Prof. Dr Ir. Guy Appolinaire Mensah, Director of Research (INRAB, Benin) for his support, advice and constant presence in the preparation and mobilization of financial resources for this workshop;
- Prof. Dr Ir. Brice A. Sinsin, Rector of the University of Abomey-Calavi (Benin) and Director of the Laboratory of Applied Ecology for accepting the co-organization of this workshop;
- Dr. Reiko M. Goodwin, Researcher at the Department of Socio-Anthropology at Fordham University (USA) for her assistance in mobilizing financial resources; And for having agreed to share his knowledge and experience as a trainer at this training workshop;
- Dr. Geneviève Campbell, Consultant at AMEC, UK for her assistance in the mobilization of financial resources and the organization of this training;
- Dr. Peter Neuenschwander, Emeritus researcher at IITA for his support in organizing this workshop and his commitment to the conservation of biodiversity in Benin;
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- Dr. Georges Nobimè, Lecturer at the Department of Geography at the University of Abomey-Calavi (Benin) for his assistance in the organization of this training workshop;
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- Dr. Célestin Kouakou, Researcher at the Swiss Center for Scientific Research in Côte d'Ivoire for sharing his knowledge and experience as a trainer during this training workshop;
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- Mr Maximin Djondo, National coordinator of BEES NGOs for providing accommodation to the instructors in the Lama Forest reserve;
- Dr. Kouhadé Clément, Director of *Office National du Bois* (ONAB) for accepting the use of the Lama Forest reserve as site of experimentation of the theoretical notions received;
- Mr Dossa Léonce, Technical Director of the *Office National du Bois* for his assistance in logistics in the Lama Forest reserve;
- Mr. Tehou Aristide, Head of research and development at the National Wildlife Reserve Management Center for his assistance in the organization of this training workshop.

Our sincere thanks to the donors: the International Society of Primatology, the American Society of Primatology, Chester Zoo. Our gratitude goes also to Conservation International who offered the field guides and pocket guides: "Primates of West Africa" to the participants. We also thank IDEA WILD for donating field materials. We thank *Eau et Technologie Environnement* for providing mineral water for the participants in the field. Finally, our sincere thanks to the University of Fordham for the bags and teaching materials offered during the training workshop.

ABSTRACT

Given their threatened status in the Dahomey Gap, the red-bellied monkey (*Cercopithecus erythrogaster erythrogaster*), the white-thighed colobus (*Colobus vellerosus*) and the olive colobus (*Procolobus verus*) deserve substantial conservation attention and resources. We desperately need to build a “team” of Benin and Togo-based primate conservationists. Thus, from 7 to 14 January 2016, a training workshop was held in Benin for 14 young biologists from Benin and Togo. This workshop is part of a capacity building program for young naturalists for the sustainable conservation of the Dahomey Gap primate species. The training consisted of classroom theoretical courses and field visits. The theoretical courses focused on several themes including census and primates behavior study methods, hypothesis testing and conservation project designing. In addition, the skills of the beneficiaries were enhanced with various oral presentations and discussions related to research and ongoing conservation activities toward threatened primates within the Dahomey Gap. The field phases were devoted to the application of the notions learnt during lectures at “Sanctuaire des singes de Drabo” in Abomey-Calavi and in the Lama Forest reserve in Zogbodomey. In the Lama Forest, we also conducted education and outreach activities with school children and ecoguides and provided them with some furniture and equipment. The training acts as an impetus for the stakeholders to enact strong laws to curtail deforestation, forest fragmentation, and poaching. Armed well with newly acquired knowledge, techniques and skills, the next generation of primate conservationists promised to educate others in their communities.

I- RATIONALE OF THE TRAINING AND OBJECTIVES

Benin and Togo, two countries located in the middle of the Dahomey Gap, a distinctive eco-region due to some unique flora and fauna, is home to three threatened primates: the red-bellied monkey (*Cercopithecus erythrogaster erythrogaster*), the white-thighed colobus (*Colobus vellerosus*), and the olive colobus (*Procolobus verus*). A few primate species including the common chimpanzee have been already extirpated from this region. Given their threatened status, these primates deserve substantial conservation attention and resources.

To protect the threatened primates from further decline, we must install a viable long-term conservation program, monitor population dynamics, and enhance public awareness and conservation behavior. However, we lack practical knowledge and techniques in primatology and conservation education. The intensive training workshop aims to fill this gap. Specifically, the intensive training aims to: a) strengthen competencies of field researchers in conducting primate census, collecting behavioral-ecological data, and test hypotheses; b) establish a network of wildlife researchers at both national and international levels; and c) instill more interest in conservation so that the trainees will propagate the importance of primates to our ecosystem to the people, especially of the younger generation, in their own communities.

II- TRAINING METHODS

The intensive training in primate survey, behavioral ecology and conservation strategies consists of both formal lectures and fieldwork. Subjects covered during the workshop included: 1. Diurnal and nocturnal primate survey techniques and data processing; 2. systematic primate behavioral observation; 3. Primate ecological methods (ex. Phenology, tree inventory); 4. Case studies on primate studies and conservation in the region; 5. Conservation through community involvement. Both English and French were used during this training course.

III- RESULTS

A- TRAINEES

Fourteen participants including 12 Beninese and 2 Togolese have been selected. They were master students, research-assistants, and non-governmental organization practitioners. Table 1 shows the trainee’s affiliation organizations (list of participant in appendix).

Table 1. Trainees' affiliation organization

Organization type		Number of participants	Core competency	Prerequisite
Research centers:	2	3	Zoology, natural resources management, agronomy or Geography	Ecology; wildlife, vegetation sampling; forestry; non-timber forest products; research proposal writing
Civil society (NGO):	3	5		
Government professional:	1	1		
University:	2	4		
International organization:	1	1		
Total		14		

B- INSTRUCTORS

Dr. Célestin Kouakou is an associate researcher at the *Centre Suisse de Recherche Scientifique* in Côte d'Ivoire. He taught about reconnaissance walks and line transect survey to obtain encounter rates and population densities (Whitesides et al. 1998, White & Edwards 2000). He also cover data collection techniques, data entry and analyses; and pros and cons of camera traps to examine biodiversity (Ahumada et al. 2013, Ancrenaz et al. 2013).

Dr. Reiko Matsuda Goodwin is lecturer at Socio-anthropology department at Fordham University, New York. She started with an introduction to primate behavioural ecology, and phenology (van Schaik et al. 1993). The participants learn systematic behavioral sampling methods (Altmann 1974, Martin and Bateson 2007). She also cover nocturnal primate surveys (Bearder et al. 2012).

C- LECTURES AT THE IITA AND IN FIELDS

The trainees have been divided into three groups that discussed and worked on project planning with hypothesis testing, and discuss different strategies to engage in primate conservation. Formal lectures have been given at the International Institute of Tropical Agriculture (IITA) conference room. Individual and organization talks related to the primates research and conservation activities in Benin & Togo furnished the first day of the training. In *Sanctuaire des Singes de Drabo-Gbo*, the participants practiced systematic behavioral sampling methods observing the behavior of tame red-bellied monkey (*Cercopithecus erythrogaster erythrogaster*). In the Lama Forest reserve, the participants conducted primate surveys, calculate primate encounter rates. They learnt how to install and maintain camera traps. The list of materials distributed to attendees is presented by table 2.

Table 2. List of materials distributed to participants

Items	Quantity
Primates of west Africa pocket guide	15
Primates of west Africa field guide	15
Notepad and pens	15
Digital documents etc.	

D- CONSERVATION EDUCATION AND OUTREACH

We visited the local primary school of Massi near the Lama Forest, sharing the joy of studying primates to children by talking with them, showing primate videos, and also having the children examining various types of primate's food under microscopes. Some school stuffs and material were given to school children. The eco-guides of the Lama forest were also provided with equipment such binoculars, machetes and headlamp.

IV-TRAINING ASSESSMENT

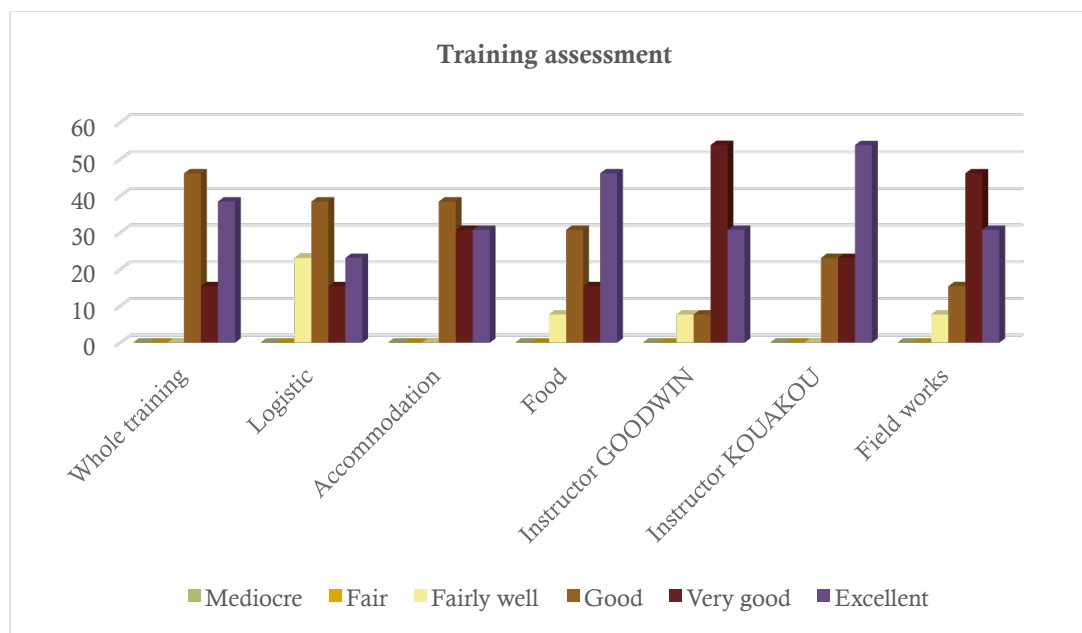
A- EXPECTATIONS OF THE PARTICIPANTS AT THE BEGINNING OF THE WORKSHOP

The participant expected to:

- have a better understanding about Primatology;
- be able to identify the Dahomey Gap primate species;
- learn the different primate's census methods;
- know how to mitigate the threats to primate and their habitats;
- learn how to study the primate behavior.

B- HOW FAR HAVE THE EXPECTATIONS BEEN MET?

In total 46.15% of participants found the training good, 15.39% found it very good and 38.46% found it excellent.



C- CHALLENGES/BARRIERS ENCOUNTERED

The exclusive use of the English by one of the instructor limits the understanding of certain trainees. Furthermore, the instructors usually went beyond the time of their presentation so that most of the schedule was not followed.

D-LESSONS/RECOMMENDATIONS

The trainees recommended to the organizer:

- to ensure compliance training program to avoid delays;
- to improve the transportation to the field sites;
- to involve the trainees in the various activities organized in primatology;
- to help fund participants research initiatives in the field of primatology;
- to initiate other primatology training workshops.

The trainees recommended to the instructors:

- to improve the communication with the organizers;
- to put more emphasis on practice;
- to be available to mentorship the trainees in their research/conservation project related to primate conservation.

V- BUDGET FOR THE TRAINING

ITEMS	TOTAL COST \$	IPS
Transportation (International fares for lecturers and land transportation for non-resident participants)	3741	1271.96
Accommodation (instructors and non-resident participants)	571	170
Honoraria	967	
Subsistence	1169	
Communication	453	
Courses material and field equipment	1966	558.04
Total	8867	2000

VI- APPENDIX**A- LIST OF PARTICIPANTS IN THE TRAINING WORKSHOP**

N°	Names	Title/position	Affiliation	Country
1	Adjalla C. Christian	MSc student, Biodiversity and natural resources management	Student	Benin
2	Agbessi Eric	MSc, ecology and forestry	<i>Eaux et Forêts Togo</i>	Togo
3	Akpo Aline	MSc, Biodiversity and natural ressources management	LEA	Benin
4	Assou Delagnon	BSc, Zoology	AGBO-ZEGUE ONG	Togo
5	Hedegbetan Georges C.	BSc, Environment management/ Certificat in Protected Area management	CREDI-ONG	Benin
6	Houehounha Dodé Heim Myline	MSc, protected area management	UICN	Benin
7	Kanhonou Arnaud	MSc student, tourism management	Student	Benin
8	Olga Alfred	BSc, Forestry and natural resources management	Etudiant	Benin
9	OhoukoAkpo F. Junior	BSc, Forestry and natural resources management	ODDB ONG	Bénin
10	Olatoundji Yves	BSc, Forestry and natural resources management	ODDB ONG	Bénin
11	Salio O. Idelphonse	MSc student, rural economy and agricultural exploitation management	Etudiant	Benin
12	Soke Gisèle	BSc, Forestry and natural resources management	ODDB ONG	Benin
13	Tchabi Ota Raimi	BSc, Geography	LEA	Benin
14	Yehouenou T. Donald	MSc, Biodiversity and natural resources management	LSF	Benin

B- LIST OF ORGANIZERS/ FACILITATORS

	Name	Title /position	Affiliation	Country
1	Dakpogan S. Chrystelle	Chief executive	ODDB ONG	Benin
2	Houndémikon M. Guillaume	Technical assistant	ODDB ONG	Bénin
3	Houngbédji Mariano Gboja	Head of research and conservation education	ODDB ONG	Bénin
4	Zannou Pamphile	Reporter/photograph	ODDB ONG	Bénin
5	Neuenschwander Peter	Emeritus scientist	IITA	Bénin
6	Mensah Guy Apollinaire	President of the scientific committee	LEA	Bénin
7	Djossou-Djègo Sylvie	Lecturer, primatologist	FAST/UAC et LEA	Bénin
8	Campbell Geneviève	Primatologist	AMEC	UK

C- LIST OF INSTRUCTORS

List of Researchers				
Name		Title	Country	Affiliation
1	Kouakou Célestin	PhD	Côte d'Ivoire	Centre Suisse de Recherches Scientifiques, Côte d'Ivoire (CSRS)
2	Goodwin Matsuda Reiko	PhD	USA	Fordham University, New York City

D- LIST OF RESOURCE PERSONS WHO PRESENTED A COMMUNICATION

	Name	Title	Affiliation
1	Kidjo Ferdinand Claude	PhD	CENAGREF
2	Nobimè Georges	PhD	LEA
3	Neuenschwander Peter	PhD	IITA
4	Djossou-Djègo Sylvie	PhD	FAST/UAC et LEA
5	Houngbédji Mariano Gboja	MSc	ODDB ONG

Further details and photographs available following these links below:

<https://www.facebook.com/oddb.org>

<https://www.facebook.com/Cercopithecuserythrogastrerythrogastrer>

<https://www.facebook.com/Colobus-vellerosus-500509303378466>

<https://www.facebook.com/Noelenforetodd>

Report from Conservation Grant Recipient

Daniel Mwamidi

PROJECT REPORT

Project title: Conservation of Roosting and Foraging Habitats for The Endemic Mountain Dwarf Galagos (*Galagoides orinus*) in Taita hills, Kenya

Principal Investigator: Daniel Maghanjo Mwamidi

Organization/Institution: University of Eldoret

**Project Location: Werugha Ward in Wundanyi Constituency, Taita Hills, Kenya.
Geographical location: Between Latitude 3°20'S and Longitude 38°19'E.**

**Project contacts-
P.O Box 7830, Eldoret, 30100, Kenya
Email- danielmwamidi@gmail.com**

Introduction

Mountain dwarf Galagos (*Galagoides orinus*) are essential in maintaining healthy ecosystem and economies through seed dispersal of valuable fruits and many tropical forests which are vital for the natural restoration of cleared or damaged rainforests. These sedentary nocturnal primates are also primary predators of night-flying insects that help reduce the need for chemical pesticides, yet they are now threatened by the local community in Taita hills at the Kenyan Coast (Mwamidi et al., 2012; Mwamidi, 2013). The most recent distressing habitat calamity was the wiping-out of 3 Hectares of indigenous community forest in Werugha which paved way for the development of a School and a Community Hospital early in 2015. This indigenous forest had the high densities of *G. orinus* due to its richness of different species of indigenous trees of wild fruits and gum bearing (such as *Grewia villosa*, *Carissa edulis*, *Ficus thoningii*, *Ficus sycomorus* and *Ocotea usambarensis*) which formed part of their foraging habitat. This had forced *G. orinus* to migrate to small patched indigenous forests on the neighborhood, which might have huge impacts on their foraging, roosting and maternity/nesting habitats since these forests are owned by community and individuals.

It is for the aforementioned compelling conservation needs which we developed an initiative to save *G. orinus* in this region. With a grant from International Primatological Society under Conservation grants, we developed a habitat protection which targeted the local community and *G. orinus*' habitat protection. Therefore, our initiative had two objectives: 1) Building conservation capacity to the landowners in conservation through educating them on protection of *G. orinus* and their roosting habitats. This was done through training of landowners on tree retention, riparian conservation, forest protection against fires, promoting foliage, leaves litter, and dense ground vine, and vegetation under-storey- which are the ideal for foraging, nesting and roosting preferences for *G. orinus*; and 2) Planting passion vines along the forests peripheries and farms which flanks indigenous forest patches with high *G. orinus* population so as to promote the dwindling forage habitats of *G. orinus* in this area because passion fruit vines yields high foliage, under-storey vine-mosaic and litter. This second intervention was also thought to have a long-term benefits to landowners since by planting passion vines, farmers would also utilize some fruits for their families' nutritional needs as well as selling some to the market and thus earning

some income. In fact this intervention is a new paradigm favored by many international conservation agencies and also it is in synergy with IUCN's recommendations of using economic incentives to local community for sustainable biodiversity conservation (IUCN, 2000).

Progress and Achievements

In order to tangibly appraise the progress and achievements of our project, we identified two key components: 1) Research which formed part of baseline survey upon which we have evaluated the success of this project; and 2) The main tangible activities of the project from the start to the end and whose impact evaluation has been done focusing on initial baseline survey.

Baseline survey for the first objective

At the very beginning of this objective which started on 2nd June, 2016 we conducted our initial Survey on landowners' knowledge on *G. orinus* nesting and roosting habitat preferences. We worked collaboratively with KIMAMU CBO -Local-based Community-Based Organization which has been handy in undertaking conservation projects in this area. We wanted to establish if the landowners knew of potential forests tree stands/bushes or species which *G. orinus* prefer and the reasons for their preference to such tree species, as well as the local community use of such particular tree species (whether indigenous or exotic) so as to examine threats to that tree species which will enable us rank qualitatively the extent of habitat threats. We conducted 45 interviews with landowners in Chambogho, Kwakinuku, Kishenyi, Saghasa, Mwakishimba and Mashangi whose land flanks forests and Table 1 indicates some trees species which landowners mentioned as being the preferred roosting habitats to *G. orinus*. We asked the landowners to mention of indigenous/exotic tree species found within their territories (in their farms or in the forests within) that is used by the *G. orinus* for roosting or food or both. Each landowner mentioned several tree species that they thought are preferred by *G. orinus* and also gave their local community's use(s) of the tree they mention, as well as their reasons that they feel *G. orinus* prefers the tree species. We also asked them to tell us of the threats associated with the tree species they had mentioned and if they were willing to address such threats and abandon practices that would endanger the *G. orinus* habitats. Data triangulation was made through four sessions of Focus Group Discussions (FGD) composed of between 6-8 landowners who did not participate in the interviews and in total, 30 landowners participated in discussions which involved probing more on the same questions asked during the interviews, but in the case of FGD, all members will contribute as a group- not individually, and others will correct/ or compliment the member who has given wrong/right answer on the spot, and thus refining and validating data and hence they were essential in data verification, and assess whether the responses of the landowners during the interviews reflect the truth on the ground. These FGDs were organized after the end of the interviews.

Table 1: The summary of Landowners' response to the probe about the type(s) tree species that are used by *G. orinus* for foraging or roosting habitats and how locals utilizes them and probable local threats to these tree species. The sample (n=45) was selected systematically by having a fixed periodic intervals of one farm (skipping one farm and going to the next one from the starting point) and were asked to mention multiple tree species used for habitats. Some mentioned of tree species which are not currently found in these forest patches but are found in other neighboring areas in within Taita hills. We only highlighted the ones which are abundant within our study area. The local trees species' local as well as scientific names are enlisted on the table.

Tree Species (I=indigenous; E=Exotic)	Local name (Taita)	# landowners who mentioned	Local uses of the tree	Why tree is preferred by <i>G. orinus</i>	Threats
Ficus sycomorus	Muku	34	It is used to make	It produces fruits and has dense leaves for <i>G. orinus</i>	cutting them for manufacturing of

(2)			Traditional Beehives	to hide and also has hollow stems for G. orinus' habitat	Bees and traditional drums
Carrissa edulis(I)	Kirumba	40	Firewood for cooking food	They produce fruits and sap on the stem which are eaten by G. orinus and grows crumbling around caves, rocks and thus offering a roosting/foraging habitat. It forms a dense under-storey foliage that favors G. orinus	Cut for firewood, deliberate and accidental fires destroy them.
Lannea schweinfurthii (I)	Mshigha	9	Used for medicinal purposes, herbal tea	Its fruits eaten by G. orinus and has dense leaves shed for them to roost at.	Harvested for medicinal uses
Acokanthera oppositifolia (I)	Mndolondolo	40	Its roots are used to make poisonous hunting arrows, Its fruits are eaten by locals	Its fruits are eaten by G. orinus and has very dense evergreen leaves which are not shaded even during the dry seasons thus offering ideal roosting/foraging habitat. It offers under-storey foliage which offers good roosting habitat.	Over-cultivation, firewood, deliberate fires.
Mystroxydon aethiopicum (I)	Kighoi	6	Locals burn charcoal and utilize it for firewood	It has sweet fruits with strong aroma which attracts G. orinus and birds. The overgrown species have big hollow stems which are used by G. orinus and owls as their roosting habitats	Charcoal burning/firewood for cooking, deliberate/accidental fires
Croton macrostachyus(I)	Waru	33	Used as building poles, the bark makes ropes	These species are evergreen and produces many leaves for G. orinus to hide and also has many branches for hiding. The bark produces sweet sap.	Over utilization as a building material.
Erythrococca usambarica(I)	Mumara	33	Used for medicine, firewood,	The tree species is dense with myriad fingerlike branches closed together and thus offering an ideal place for G. orinus to live.	Over-harvesting due to firewood, fires and medicinal uses
Grewia villosa (I)	Mshoshoti	34	Fruits eaten by locals as source of vitamins.	The fruits are eaten by G. orinus and also forms part of under-storey vegetation for their habitats	Accidental fires
Mangifera indica (E)	Mwembe	40	Fruits eaten by locals/ main source of income for local farmers	Fruits are eaten by G. orinus. They roost in mango trees because of plenty and dense foliage	No threats to mango trees

Following this qualitative survey, it was indicated that over 89% of landowners know that *Acokanthera oppositifolia*, *Mangifera indica* and *Carrissa edulis* are the most preferred tree species which offers both roosting and foraging habitats for *G. orinus*, while only 13% of landowners reporting that *Mystroxydon aethiopicum* is used as a habitat by *G. orinus*. Of the total 45 landowners, 86% felt that major threats to *G. orinus*' habitats were due to accidental and

deliberate fires from the landowners themselves during the time of clearing the land for planting especially in the months of August-October. While charcoal burning and firewood being among the local activities that threatens *G. orinus* habitats by cutting down of trees which are used by *G. orinus* for roosting/foraging habitats.

When landowners were asked whether they were willing to abandon threats that they had identified as being detrimental to *G. orinus*' habitat, 42% responded that they were positively willing to abandon practices. While 39% said they were not willing to abandon such practices such as use of fire to clear weeds on their farms. The remaining 19% were not decided as to whether to abandon the practices or not.

Project Implementation

Objective 1

After the research phase which took four weeks, we established that our main task in implementation of the first objective was to put more emphasis on: Building conservation capacities of the Landowners on tree species that are preferred by *G. orinus*; educating them on how to minimize threats to the identified tree species locally; and general management of *G. orinus* habitat by promoting under-storey vegetation cover/ foliage and litter.

We conducted 5 day-workshops-Training landowners on conservation of foraging and roosting habitats including the best way of conserving them by highlighting methods of mitigating threats such as forest fires which would destroy the under-story vegetation, foliage, ground litter which are all essential for *G. orinus* roosting and foraging habitats. We emphasized conservation and protection of species which landowners themselves had mentioned to be preferred most by *G. orinus*. We discouraged landowners from cutting down the trees not only those which are preferred by *G. orinus*, but also other tree species which also contribute to the well-being of foraging and roosting habitats of multiple fauna species in this area. These workshops were held in Saghasa Social Hall while training was conducted at Mwakishimba Community grounds which was central place for all landowners.

We also issued leaflets/brochure to landowners highlighting several aspects of conservation of *G. orinus*' roosting and foraging habitats. These informative leaflets also carried information on ecosystem functional role of *G. orinus*- the information which was meant to arouse landowners' conservational interests towards these nocturnal primate species which had been misunderstood by locals to be an agent of evil, because they come out at night and make a 'disgusting' calls at night. The information was conveyed in local Taita language for those who are illiterate to understand. Similar information was broadcasted 2 times for 10 minutes at a local radio station broadcasting in Taita local language in the month of July and August, 2016.

Impact Assessment on Objective 1

In September, 2016, we conducted impact evaluation survey which involved 45 interviews and 3 Focus Group Discussions and we wanted to gauge if the landowners' willingness to abandon practices that may endanger the *G. orinus*' roosting and foraging habitats such as using fires to clear weeds, cutting down of trees for charcoal and firewood in bid to conserve the habitats. We are hereby proud to report that 91% of landowners in Mwakishimba, Saghasa, and Chambogho had agreed to abandon harmful practices that may endanger *G. orinus*' habitats and thus they were ready to protect and conserve *G. orinus*. This is a truly remarkable change from the initial baseline survey which had indicated that only 42% were willing to abandon such practices that may harm *G. orinus*' habitat. In fact, only 9% were not willing to abandon the practice which is a significant reduction on 'negativity' from the initial 39%. While none of the landowners were undecided which in an indicator of 'informed decisiveness'.

We hereby count as a success on objective 1 and thus we can replicate the same interventions to other areas in Taita hills where *G. orinus* are experiencing similar habitat degradation threats.

Objective 2

The aim of this objective was to distributing passion fruit vines which yields very high foliage, under-storey vine-mosaic and litter to landowners for planting on their farms at the forests' peripheries so as to promote both foraging and roosting habitats for *G. orinus*. We started implementing this objective in September, 2016 so as to prepare for distribution of passion fruit seedlings immediately upon the onset of short rains in October. Firstly, we started by 2 days training/workshop to one local Community Based Organization-CBO called KIMAMU (Women/Youth Self Help Group) in habitat conservation to assist in distributing these seedlings which we bought from them (CBO).

Afterwards, we conducted a qualitative habitat assessment to quantify the habitat areas which needed swift conservation interventions. We used field measurements, and photography to map the initial habitat status which we used as a baseline data upon which subsequent monitoring and evaluation of the project. As we had indicated at the introductory part, the initial community indigenous dense forest was cleared to pave way for the development of school and health center which adversely affected *G. orinus* habitat (see figure 2- satellite image showing the original forest cover and Fig 3-Setellite image indicating the cleared forest in the same place). This community forest had high populations of *G. orinus* owing to its richness in wild fruits and gum bearing plants such as fig trees, *Carrissa edulis*, *Grewia* spp, etc. In fact according to locals, they used nick-name the forest as 'kisina cha mwangaghe' which means 'a assembly of Galagos (*G. orinus*)' because they were many and according to locals, one would see them leaping over tree tops even as early as 6:30 pm before the sunset.



Figure 1: The local community Based Organization members (KIMAMU CBO) displaying the passion fruit vines seedlings which were distributed to Landowners.



Figure 2: The 2013 Google Earth image of the Saghasa community indigenous forest (marked in Red) before it was cleared to pave way for a construction of community school and health center. The forest was home to myriad *G. orinus* species owing to its richness of wild fruits and gum-bearing indigenous trees which were ideal for their roosting and foraging.

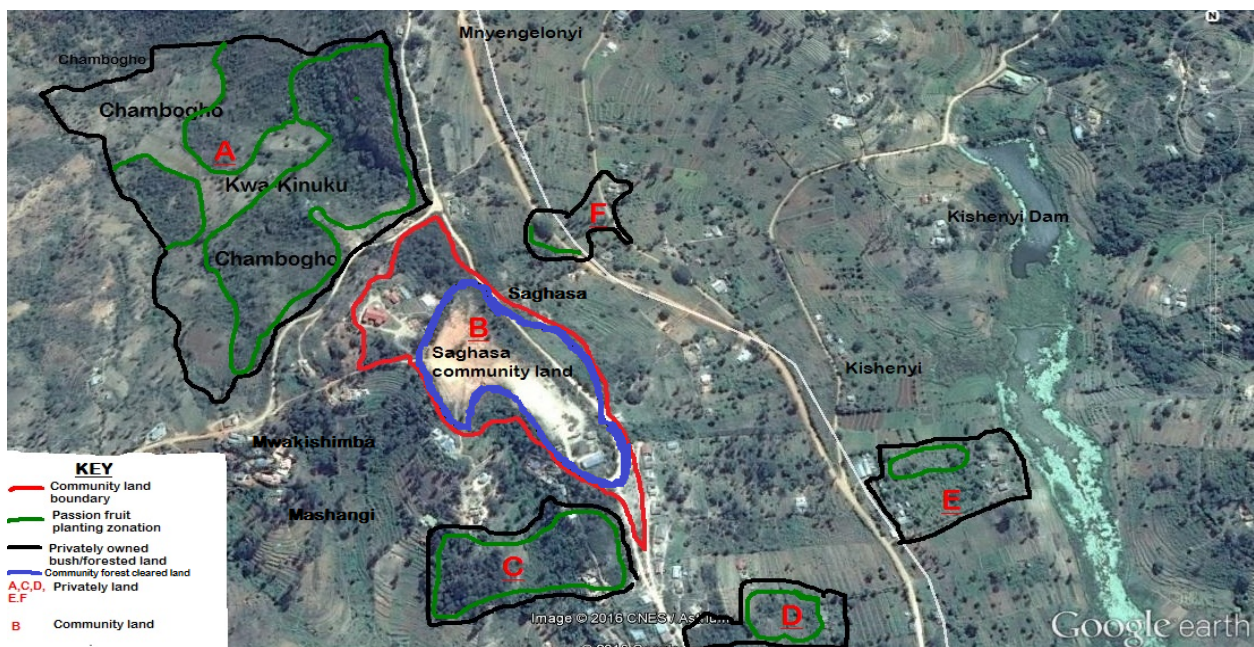


Figure 3: The current satellite from Google Earth which we calibrated to indicate areas where we conducted our project. Area marked B was an indigenous community forest land with high population of *G. orinus* but now cleared to pave way for construction of a community school and a health center. *G. orinus* moved to small patched forests which are owned by individuals. These areas are marked as A, C, D, E and F. The green color demarcations are zonation were farms that we had earmarked as ideal for planting passion fruit vines.

Following training of CBO and the earmarking of the areas which passion vines were to be planted, we organized a workshop which comprised of Local administration/ Landowners (whose farms had been identified for planting passion vines). One-day workshop was conducted at Saghasa community grounds- The goal of the workshop was to educate the landowners informing them on the best methods of planting passion vines. Training was done by a Zonal Agricultural Officer who is an expert for fruit production matters.

We purchased passion fruit vines from KIMAMU CBO and its members volunteered to distribute them to landowners. We distributed 400 passion fruit vines to 62 landowners each receiving

between 5-8 passion vine seedlings- which was depending on the length of the farm's fringe boundary with the forest. The main challenge was the delay of short rains in the month of October/November. The rains came late in December and were not sufficient. In fact some farmer planted the passion immediately after were distributed in September and watered on them, while others had to wait for onset of short rains.

Impact assessment of objective 2

In February, 2017, we conducted impact assessment of our second objective on two fronts: 1) perception of landowners towards the initiative of issuing them with free passion fruits vines to plant on their farms; and 2) Assessment on the survival rate of the passion fruit vines planted by landowners on their farms after five months and their value to *G. orinus* habitat.

We interviewed 31 landowners who were issued with passion fruit vines and we asked them whether were happy with the initiative of passion fruit vines and if they were willing to carry-on and protect *G. orinus*, and the results were fascinating because all (100%) of landowners were happy with the initiative and were willing to carry on with conservation and protection of *G. orinus*. The second assessment was conducted to determine the survival rates of the passion fruits vines that we had issued. Through the support of youths who are the members of KIMAMU CBO, we went around the farms where passions were planted and did our own assessment of seedlings' survival rate, and their ability to improve the *G. orinus* habitat. We established that 327 passion fruit vines which accounts to about 82% to had survived and it was encouraging that 78 of these vines had plenty of foliage suitable for fortifying *G. orinus* habitat especially those planted in riverine ecosystems and even some had started flowering.

Some had stagnated because there had been shortages of rains in this area, and as we are preparing this report, it had not rained yet.

We are happy to report that we recorded success in implementation of the second objective and thus we hope to scale up the same efforts in other areas with *G. orinus*'s conservation needs within Taita hills.

Difficulties encountered in implementing the project's objectives

During the meetings, just like previous projects, time schedule was a challenge since majority of the locals in Werugha are small scale farmers who practice intensive farming and thus have limited time to attend the workshops/meetings sessions. In order to publicize our project and attract many landowners, we made two announcements in three local Churches which yielded a huge positive impact on attendance.

Project Sustainability and Future Plans

We hope that the initiative of issuing passion fruits will solidify our conservation efforts in this area as well as scaling the same to other locations within Taita hills so as to avoid 'bad feelings' from other landowners who did not receive passion vines, who might work against future endeavors of conserving *G. orinus*.

Acknowledgements

We high register our sincere gratitude to International Primatological Society through the Conservation Grants, 2016 as well as conservation through community involvement initiative (CCI) for funding these initiatives of restoring and conserving the *G. orinus*' habitat. Many thanks to the Taita community especially Saghasa/Mwakishimba/Mashangi and Kishenyi villages for their hospitality during our stay in the area while conducting the project. Thanks to all Government officials, Community elders, University of Eldoret, KIMAMU CBO for their immeasurable support.

Report from Conservation Grant Recipient Donald Mbohli

Project Title: Reducing the illegal take of endangered species at the northern periphery of the Dja Biosphere Reserve, Cameroon

The project was financed by the International Primatological Society (IPS) and Projet Grand Singe (PGS) and was executed by PGS in three main villages – Malen V, Doumo Pierre and Mimpala at the northern periphery of the Dja Reserve Cameroon east region Cameroon. It was executed in collaboration with the conservation service of the Dja Biosphere Reserve, the brigade of Messamena, the brigade of Abong Mbang, the forestry control post of Malen V, Messamena and Abong Mbang. The main activities executed included the following:

- An emergency patrol to the PGS research site in the forest to catch and lock up a team of poachers were settled in a camp and killing wildlife population
- An emergency anti-poaching patrol in the three villages to confiscate all poaching material used by poachers
- To sensitise and equip a local anti-poaching team from the three villages to get them involved in the fight against poaching in their forest.

1 Emergency patrol at the PGS research site in the forest

The aim of this patrol was to catch a group of poachers who had constructed a poaching camp in the PGS research site and have been camping in it for many weeks and hunting great apes in the surrounding forest. The three poachers who were not natives of Malen V, Doumo Pierre and Mimpala were well armed with guns, knives and cutlasses. They killed animals with guns and smoked the meat to enable it last for long while they hunt more. These villagers were very courageous as they left signs in the forest to indicate their presence and hunting activity. They left used cartridges on sticks on paths used by researchers. Gun shots were heard in the night as they hunt. While PGS was organising an emergency patrol to catch these poachers, they visited the research camp in the night on 25th January 2013 while researchers were asleep. They threatened researchers with guns, knives and cutlasses and asked them to present all valuable material including money. They did and the armed men left with research material including laptop, two cameras, Global Positioning Systems, telephones, cloths, etc. They took the material to their camp. Fortunately, no researcher or guide was injured but they were terrified. The next day, the poachers celebrated last night's success in their camp, figure 1. They took several pictures of themselves with the stolen cameras and later on packed their bush meat and material and left the forest and went to Bertoua town. The town is located at the northern part of the east region of Cameroon and the PGS research site on the south.



Figure 1; poachers feast in their camp after their successful attack.

PGS's main office was contacted by researchers through the satellite telephone that was not stolen by the hunters. The main office immediately organised an emergency patrol which was executed by gendarmes of the brigade of Messamena and eco guards of the forestry control post of Malen V and Messamena. This anti-poaching team left Messamena on the 27th January 2013 and went directly to the PGS research site in the forest and interviewed researchers, figure 3 and guides who were victims of the attack.



Figure 3; Gendarmes and eco guards at the PGS camp interviewing researchers and guides

After interviewing and gathering information from researchers and guides about the attack, the team returned to Messamena and immediately informed forestry control posts and gendarmes on all outlets from the forest towards the different towns. The list of stolen material was communicated to them. Gendarmes and eco guards on the different control posts were alert and curious. They stopped all suspected villagers and took them up for interviewing. Three days after the incident, two of the three poachers were caught by gendarmes of the brigade in Bertoua. These poachers were in position of all the stolen research material and smoked bush meat hunted. The brigade in Bertoua informed PGS's main office in Yaoundé to report in Bertoua and collect the stolen material. PGS staff went to the brigade in Bertoua and collected the research material. The above pictures were seen in the camera that was recovered. The two boys caught were actually the ones on pictures and they also confirmed that they used the cameras in the forest. They were locked up in Bertoua while investigations on the third poacher went on but he succeeded to hide himself and was never seen. The bush meat was sold at auction prices and the two poachers were later transferred to Yaoundé and locked up in the central prison.

2 Emergency patrols in the villages

While the majority of villagers in the three villages were engage in alternatives income activities provided to them by PGS, others chose to hunt wildlife for commercial purposes. They hunt animals including great apes with locally made guns. These local poachers were encouraged by dealers who regularly come from neighbouring urban towns. They supply hunting material to hunters and also transport bush meat hunted to urban towns to sell. Their main means of transport were the Chinese motor bikes. Although not very resistant, the bikes are easily affordable by poachers and not too expensive to maintain, and are therefore some of their main poaching material. This illegal activity went on and the human pressure on wildlife increased. One of the targets for poachers was the PGS research site where many populations of animals including great apes were found. Animals were scared by the constant availability of poachers and shutting of local guns in the research site.

In response to this illegal activity, PGS organise three anti-poaching activities in and around the three villages in February, April and May 2013. They were all aimed at confiscating hunting material and bush meat from poachers. The first anti-poaching patrol was organised on the 28th of February 2013 in collaboration with the conservation service of the Dja Biosphere Reserve Cameroon. It was executed by a team of thirteen elements including eco guards of the

conservation service and gendarmes of the brigades in Somalomo (one of the subdivisions at the northern periphery) and Messamena all supervised by the conservator of the Dja Reserve. It lasted for seven days and bush meat and poaching material were confiscated as detailed in the patrol report from the conservation service in annex 1. Bush meat was sold at auction prices and poaching material stocked at the base of the conservation service to be destroyed.

The second anti-poaching patrol was organised on the 9th of April 2013 in collaboration with gendarmes of the brigade of Messamena and eco-guards of the forestry post of Malen V, Messamena and Somalomo. The two days patrol was supervised by the brigade commander and executed in Malen V and its neighbouring villages. The main aim was to visit two of the renowned poachers who welcomed visiting poachers and organises poaching operations with them. They were among the most active poachers in the area. These villagers were suddenly visited by the team and all their poaching material was confiscated. Bush meat was sold at auction prices and local guns and other material was stocked in Messamena pending transport to the main brigade in Abong Mbang for destruction.

The third anti-poaching patrol was also organised on the 22nd of May 2013 in collaboration with gendarmes of the brigade of Messamena and eco-guards of the forestry post of Malen V, Messamena and Somalomo. It was supervised by the brigade commander and executed in Eschou, Madjuh I and Doumo Mama. These are neighbouring villages to the three main villages above and where two main poachers live. They also welcome visiting poachers and organise poaching trips to the forest. The main aim of the patrol was to visit the two poachers and confiscate their poaching material. The two days patrol resulted to the confiscation of poaching material and bush meat, figure 5.



Figure 5; Patrol by Eco guards and gendarmes

3 Sensitisation of the local anti-poaching team

A local anti-poaching committee made up of 12 villagers from the three villages was trained by PGS and installed 2010, figure 6. Members of this committee are villagers devoted to personally fight for the interest of their entire community. They were selected by PGS and the local population and taken to Messamena for moral enquiry by the brigade commander. They were all confirmed and later on installed in Malen V in the presence of the sub divisional officer of Messamena and the conservation service of the Dja reserve.



Figure 6; installation of the local vigilance committee in Malen V

A meeting was organised in Malen V on the 20th of June 2013 by PGS. It was attended by the members of the vigilance committee and presided over by three eco guards of the conservation service. The local vigilance committee do not have the power to confront poachers and confiscate poaching material. Such attempts can result to a fight and injuries. Eco guards of the conservation service have this power and are protected by the law. They are also equipped with appropriate material including guns. The aim of the meeting was therefore to build collaboration between the local vigilance committee and eco guards to work together to ensure conservation.

The vigilance committee received training on the appropriate approach to sensitise poachers and to show them that the illegal activity they are involve in has long-term consequences both to themselves and to the environment in future. They also received training on the collection of information that is useful to eco guards during anti-poaching patrols. The vigilance committee members received writing material, rain boots, and rain coats to use during patrols in the villages.

The local vigilance committee and the conservation service of the Dja reserve have been collaborating to ensure conservation. When poachers refuse to listen to sensitisation from the local vigilance committee, and continue to hunt unsustainably, information is sent to the conservation service of the reserve and he is noted as one of the targets during the next patrol.

The series of patrols have resulted to a significant decrease in the illegal take of endangered species in and around the PGS research site. This was due to the confiscation of hunting material during the series of patrols organised. The conservation collaboration that was established between the local anti-poaching committee and eco guards of the conservation service of the Dja reserve have also contributed enormously to the reduction of poaching in the surrounding forest. The financial support from IPS has therefore played a significant role to the reduction of poaching in and around the PGS research site at the northern periphery of the Dja reserve Cameroon.

I am very satisfied and grateful to the financial support. On behalf of the PGS team; I hereby wholeheartedly thank the IPS team and its partners for their effort in conservation and in supporting conservation project.

Financial Details of the Report		
Amount Received from IPS	984,220 FCFA	2000 \$US
Detail Expenditures		
Activity	Cost (FCFA)	Cost (\$US)
Contribution for an emergency patrol at the PGS research site	368,500	748.8
Contribution for three emergency patrols in the villages	500,000	1016.0
Equipment to local anti-poaching committee	115,700	235.1
Total Amount Spent	984,200	2000.0

Report from Lawrence Jacobsen Education Development Grant Recipient Thierry Inzirayineza



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Using debate as a tool to increase young people awareness about the importance of primate conservation around Gishwati National park, Rwanda

Thierry Aimable INZIRAYINEZA, Forest of Hope Association

Gishwati Natural Forest is an important habitat that shelters endangered primates, including: the eastern chimpanzees (*Pan troglodytes*) known as its umbrella species; golden monkeys and mountain monkeys. This forest used to be the largest in Rwanda, but through the years it has seen a reduction from 280 km² in 1976 to just 9 km² in 2000. Even if the reforestation efforts increased this forest size to 15 km² from 2008 through 2011, and that in February 2016 the protection status of this primate habitat was upgraded to National Park, it continues meeting challenges of human pressure in search for minerals, firewood collection, animal grazing and timber harvesting. Since 2012, Forest of Hope Association (FHA) has been the sole Organization working on this forest conservation trying to mitigate the increasing human pressure on the forest resources.

In 2016, FHA was awarded the second Larry Lawrence Jacobsen Education Development award to organize a student debate competition in schools and communities around the Gishwati National Park. The main objective was to communicate primate conservation message to local children and enhance their understanding on local environment issues. The grant was implemented in 12 months. It has given local schools students an opportunity to discuss, share ideas and then gather supporting evidence to increase the awareness on primate conservation.



Picture of debating clubs

We worked with 13 eco-clubs in schools around Gishwati National Park to organize debates. For this debate competition, we have grouped eco-clubs in three categories used: Primary schools; nine years basic education schools and twelve years basic education schools; and used both Kinyarwanda (mother tongue) and English in debates. Considering their location eco-clubs debated with each other twice (home and away). Participants of this debate competition were 65 students. Each debate involved 10 speakers (5 from each eco-clubs) sharing their arguments either supporting or against the debate topics. Among topics used include: Primates are not important to local communities; People should be allowed to collect firewood and graze their livestock inside the park; Water pollution is the source of many diseases that can even affect primates; No need to plant trees because the park is enough to fight against erosion in the region; FHA provided an internship to one student from University of Rwanda with conservation knowledge to work as a moderator for all debates, summarize and share all debate closing statements with the audience. A team of judges (three science teachers) was used to mark and announce the winner of each debate to advance to the new round. During the elimination phase, each debating team received a soccer ball (a donation from Drake University (USA) students) as a motivation.



The moderator speaking to the audience just before the debate

The audience size range was from 100 to 400 people, mainly: students; teachers, local leaders and some members of the community. Significant ideas from debates and related best practice to reduce the pressure on Gishwati Primates was shared with local people using posters and brochures.

To evaluate the success of the project, 65 students and 65 community members in villages around schools were questioned. Based on responses recorded during the evaluation, the information from these debates reached a big number of Gishwati residents. About 81.9% of the 130 respondents has given clear responses to all questions related to the project targets. 78.2% said that this initiative helped them to know convincing arguments about primates' conservation particularly and environment protection generally.



1.



2.

Two posters produced: 1)Importance of Gishwati animals 2)Best practices/forest conservation

A large number of students who were involved in different debates mentioned that the debate method used has boosted their critical thinking. 76% (n=39) said that they improved the communication skills (English) and confidence in public speaking. Debates have not only helped in gathering proper evidence for challenging issues but also understanding what can happen in case local people fail to conserve Gishwati. 21% of students interviewed said that this initiative helped them to acquire team skills and convincing aptitude that will help to inculcate the primate conservation message among their colleagues (young students) to ensure the future protection of this park. Local community members interviewed said that they have been attracted by developed materials and have been able to know Gishwati primates and their importance. About 69.8% was able to list some best practice they can make to support this Park conservation. Even if it is early to say this, we are confident that this initiative helped to make changes in local behavior and will continue influencing young people best practices towards Gishwati primate conservation.

We thank very much the International Primatological Society (IPS) for supporting this activity of using debates to increase young people awareness about the importance of primate conservation. We hope to continue working with IPS to strengthen local community participation in this primate habitat protection and we will do all possible to sustain the achievements of this initiative.