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The International Primatological Society

IPS Bulletin

President's Corner

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First of all, I would like to thank you for your condolences and support following the March disaster in Japan. Your kind expressions of sympathy are gratefully acknowledged and deeply appreciated.

The disaster of March 11, 2011, was caused by the fourth-largest earthquake (magnitude 9.0) since the beginning of modern seismic measurements in 1900. It triggered extremely destructive tsunami waves of up to 38 meters. Over 230,000 houses and buildings were destroyed, and at least 14,877 people lost their lives. More than 9,900 people are still missing, and the number of refugees is about 240,000. Then, the worst calamities followed the initial disaster: four out of the six reactors at the Fukushima I Nuclear Power Plant suffered serious problems due to the tsunami and have been out of control since then. Radioactive contamination has spread to the air and water. The scale of this accident exceeds that of Three Mile Island in 1979 and may actually match that of Chernobyl in 1986. People in a 20-km radius of the facility were asked to evacuate, and the government has recommended that those in a 30-km radius also evacuate. Since high levels of contamination were detected in dairy milk as well as certain kinds of vegetables and seaweeds, the government has stopped shipment and sales of these products from the contaminated area. The victims and stricken areas are facing serious social and economic collapse.

Fortunately, no member of the Primate Society of Japan has been lost in the disaster. At Kinkazan Island, very close to the center of the earthquake, one of my graduate students was conducting a survey on Japanese macaques at the time of the earthquake. He was on the seashore, watching macaques, and noticed that the sea started to ripple. He decided to run up the hill and thus escaped from the tsunami. The research station was heavily damaged by the earthquake, and no communication outside the island was possible. He survived in the ruined center by using the stocked food supply and was eventually rescued by a helicopter searching for victims. We, the primatologists of Japan, are now trying to support the reconstruction of the research center on the island. I would like to thank you again for your kind contributions to these activities.

We have made various efforts toward revival of the stricken areas. The victims have suffered by losing their family, friends and property. Many people have endured a hard life in the evacuation areas, where they are separated from their neighbors. Due to insufficient energy production caused by the

IPS Website: www.internationalprimatologicalsociety.org

KATIE LEIGHTY, EDITOR

MANY THANKS TO STEPHEN NASH FOR THE SOCIETY LOGO

Fukushima accident, the electric power company has decided to stop supply of electricity several hours daily in the eastern part of Japan, including Tokyo, our capital. This has resulted in a significant reduction of academic activities, especially research work. Therefore, in addition to dispatching volunteers to the stricken areas to help with the reconstruction of facilities, social services, medical care, measurement of radioactive contamination and so on, universities in the western part of Japan have decided to accept researchers and students so that they can continue their studies. Many conferences and workshops scheduled to be held in the eastern part of the country have been moved to venues in other regions of Japan. I would like to emphasize that it is perfectly safe to visit most places in Japan now. I hope many of you will not hesitate to come see us in Japan to build and support our academic activities.

Under the threat of the tsunami, people were cooperating in their attempts to escape. Many impressive stories were told after the disaster. I was touched by one of these stories. The earthquake occurred in the afternoon of a weekday, when all students were in school. The students in a primary school had been taught by a seismologist, in a special lecture before the disaster, how to behave when facing the threat of a tsunami. When they experienced the large earthquake this time, they expected the tsunami. Following the expert's guidance, the elder students took the hands of younger students and headed to the hill indicated by signs near their school. However, when they turned to look at the tsunami, they thought it would swallow the hill. They did not stop but changed direction to another, higher hill. By acting on their own decision, the lives of all students were saved.

Other than the knowledge of seismologists, ordinary Japanese people have transmitted their experiences of natural disasters, such as earthquakes, tsunami, and typhoons, as well as wise measures during these threats, to their children. People have developed the habits of mutual help, tolerance and a strong will toward recovery after disasters. A famous story in Wakayama Prefecture during the Edo era (1854) was translated in English as "A Living God." The chief of a village, who was living on the hill, noticed a big tsunami wave after an earthquake. At that time, all of the villagers were actively engaged in preparation of a festival and unaware of the tsunami. He put to fire bundles of rice straw, and the blazing fire made the people run up the hill to extinguish it, thus allowing the people to escape the tsunami. The chief gave his own property to reconstruct the broken village and to build a large embankment against the threat of tsunami. This embankment has been well maintained by the villagers for more than 150 years, and this time it actually protected the villagers against the large tsunami. I am very proud of such stories in the past and present of Japan. Such traditions are still alive in Japan, and people are cooperating to overcome the disaster peacefully but strongly. No riot has occurred, and no city or town has been looted after the disaster.

The wisdom of our tradition is not to combat the causes of natural disaster but to try living safely under its threat. This time we should reflect on our present lifestyle that consumes a lot of energy at the large cost of natural resources. Japan is the third-largest nuclear state in the world. We now have 54 nuclear power plants. Seven additional plants are in the planning stage, and all of them are located on a seashore and thus exposed to the danger of tsunami waves. About 20% of the world's recent earthquakes higher than magnitude 6.0 have occurred in Japan. We run a great risk of having the same kind of accident as Fukushima in the near future. After the accident, Naoto Kan, the Prime Minister of Japan, proposed stopping one of the plants in Shizuoka Prefecture near Tokyo. Mr. Toru Hashimoto, the governor of Osaka Prefecture, stated his desire to discontinue the use of nuclear power and to change production of electricity to thermal, hydraulic, wind, or solar power. I think that most Japanese people have reconsidered the risk of nuclear power after this accident and are now eager for alternative electricity production in the future.

At this time we should learn the appropriate direction of our life from primatology. We, human beings, share many features with non-human primates and have constructed our social life using such features. What brings us happiness and satisfaction? No person can live alone happily. We have been so social from the beginning of our evolutionary history. We enjoy the blessings of harmonious coexistence with neighbors, which include various living things. In order to increase the function and power of human coalition, we

have developed specific abilities such as empathy and sympathy using the common sense of primates. Based on these emotional abilities, we have succeeded in constructing a strong community consisting of several families. Since then, we have learned many things from living things in nature. We have exploited natural resources extensively, but we have also scolded ourselves for overusing them after investigating natural conditions. The behavior of non-human primates has often instructed us in a better way of life. Some of these stories remain in the folktales of countries where non-human primates have lived, now or in the past. Now we have come to understand that modern technologies do not always provide us a happy life. We should re-evaluate our traditional low-cost lifestyle. Seeking a harmonious relationship with non-human primates leads us to the best way of conserving nature, and to the best way of experiencing our future life with human happiness, I believe. I hope all IPS members will take a leadership role in changing our way of life toward sustainable human societies.

Juichi Yamagiwa

VP for Education

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I would like to thank the many dedicated members of the IPS Education Committee who assisted with reviews of applications for the Lawrence Jacobsen Education Development Grant and nominations for the Charles Southwick Conservation Education Commitment Award.
Seven Jacobsen grants were awarded:

Tammie Bettinger - The Use of Radio Drama to Educate Communities on the Importance of Keeping Gorillas in their Forest Home
Alejandra Duarte - Primate Conservation Education in the Mountain Range of Tenosique, Tabasco, Mexico
Corrin LaCombe - Participatory Assessment of Feasible and Site Specific Livelihood Improvement Activities and Conservation Education Materials Aimed at Enlarging and Enhancing Critical Habitat of the Tonkin Snub-nosed Monkey in Khau Ca, Vietnam
Vicky Melfi - Selamatkan Yaki Educational Programme
Kefeng Niu - Fostering "Little Green Guards": A Primate Conservation Education Program for School Children in Guizhou, China
Sian Waters - Further Education and Awareness Raising In Barbary Macaque Habitat, Northern Morocco – 2011
Victor Wodi - Tangkoko, Duasudara and Batuangus Conservation Education project

Two Southwick awards were bestowed:
Mariamah Achmad, Manager of Environmental Education and Sustainable Livelihoods at Gunung Palung Orangutan Conservation Program
Joseph Karama, Conservation Education Manager for the Karisoke Research Center in Rwanda

Congratulations to all of our awardees!

Previous awardees for any IPS grant/award – please send me your name, project title, award year, and award type as we are trying to track our awardees and grantees in a database. Thank you!

If any 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 elonsdorf@lpzoo.org.

Elizabeth Lonsdorf

IPS Trea$ury Note$

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The IPS Treasury remains in decent shape, especially the General Fund. The Conservation Fund is running with a fairly low balance at the moment, as we paid out almost $89,000 from this Fund alone during the 2010 calendar year. We have already paid out another $32,000 from the Conservation Fund this year to support Conservation grants, the Conservation through Community Involvement initiative, Southwick awards, and Jacobsen grants. We have not had a chance to replenish the Conservation Fund yet in 2011, so we encourage you to make a contribution to the Conservation Fund at your earliest convenience. We have added a new "Donate Now" function to the IPS website. Please give it a try; it is fast and easy.

Overall, IPS will award another $28,000 this year from the General Fund to the winners of Captive Care grants, Research grants, and the Galante Award. Without additional sources of revenue, we will be unlikely to award as much money next year as we have in the past two years.

As usual, thanks to everyone who has paid their dues, made a contribution, attended a recent Congress, or purchased IJP. It is your commitment to IPS, primatology, and primates that has maintained the Society's financial health and allowed us to support so many worthy programs, projects, and individuals.

Membership figures for 2011 are strong, with over 1100 members in good standing at the moment. We had almost 1700 members in good standing at the end of 2010, up from about 1500 in 2008 and 1040 in 2006. Let's see if we can make it to 1800 members in good standing for 2011. Remember, that in order to receive the substantial savings associated with the Member's registration fee for the 2012 IPS Congress in Veracruz, Mexico, you must be a member in good standing in IPS.

If you have not done so, please renew your IPS membership for 2011. As always, you can join through the IPS website: www.internationalprimatologicalsociety.org or through your National Primate Society (American, German, Congolese, and Spanish only).

IJP subscriptions can be purchased through IPS and the sooner you purchase your subscription, the sooner you will have access to the Society's official journal. IPS receives a small payment for each IJP subscription purchased through IPS. This is the second year that electronic subscriptions to IJP are available. You can either purchase a hard copy subscription (still $48, including electronic access to IJP) or you can purchase an electronic subscription only (still $37). When your IJP payment has been processed, I will email you a token that will give you electronic access to all issues of IJP (not just those published during the subscription year). If you have any questions, please contact me.

There are now 170 Full or Partial Lifetime Members in IPS. New Lifetime Members since the last Bulletin include:

M. Li
B. Ren
N. Kuze
H. Leasor

Lifetime Members will never have to pay dues again, but they can still order IJP or make contributions to the General Fund or the Conservation Fund from the webpage and are encouraged to do so.

Let me know if you have any other Membership and/or Treasury questions. Once again, please consider a donation to IPS (use the "Donate Now" function), especially to the Conservation Fund, to help support primates, primatology, and primatologists across the globe.

Steve Schapiro

VP for Conservation

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Your IPS Conservation Committee has had another active start to the year. In addition to our annual review of grant applications, we made some changes regarding the procedures and information surrounding this process.

What's New?

This year, we've add a "Frequently Asked Questions" document to the IPS Conservation Grant page. We worked hard to pull together some of the most frequent and relevant questions we're asked about the process of applying for our grants. This document will be reviewed and updated annually to better inform potential applicants. By the way, if YOU have questions that you think should be added to this list, please feel free to contact me.

Also, the IPS Conservation Committee has announced that we will provide a limited review service to applicants that may need some advice about improving their English language/wording. This decision came about over the last couple of years when we realized that some proposals may have benefited in the review process if they had been easier for the reviewers to read. It must be noted: this service is restricted to helping applicants with English. In no way are we providing advice on the scientific or thematic content of the proposals. For more information, see details on the IPS Conservation web site.

IPS 2011 Conservation Grants

This year, we received 50 applications for an IPS Conservation Grants and, as usual, it was a very difficult task to narrow our list of winners from so many outstanding applications. After careful review and deliberation, we selected eleven projects for funding. The following list provides (alphabetically) the principle investigator(s), country 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!

- *Chetry, Dilip & Kyes, Randy* (India): "Field Course in Conservation Biology & Global Health at the Gibbon Conservation Centre, Assam, India"
- *Coulson, Claire* (Nigeria): "Training and Equipping Iko Esai CCDC Surveillance Committee to Protect their Forests for Long Term Sustainability" (CCI)
- *Hill, Julia* (Cambodia): "The Effects of Ecotourism on the Behavior of a Group of Habituated Gibbons (*Nomascus annamensis*) in Ratanakiri Province, Cambodia: Implications for Management of Ecotourism Schemes"
- *Marechal, Laetitia* (Morocco): "Impacts of Tourism on Barbary Macaques (*Macaca sylvanus*) in Morocco"
- *Moody, Jessica* (Cambodia): "Assessing the Conservation Status and Taxonomic Assignment of the Indochinese Silvered Langur (*Trachypithecus germaini*) in Two Protected Forest Sites in Cambodia"
- *Shanee, Noga* (Peru): "Environmental Education in Northeastern Rural Peru"
- *Souza-Alves, Joao Pedro* (Brazil): "Effects of Habitat Fragmentation on the Feeding Ecology of Two Groups of Coimbra-Filho's titi (*Callicebus coimbrai*) in Southern Sergipe, Brazil"
- *Subarkah, Muhammad* (Indonesia): "Survey Recent Status of Javan Langur and Conservation Project in Mt. Merapi"
- *Wehr, Jenna* (Madagascar): "A Preliminary Study of the Botanical Species Abundance and Dietary Strategies of the White Sifaka (*Propithecus verreauxi*) in the Anthropogenically Disturbed Parcel II of the Beza Mahafaly Special Reserve, Madagascar" (CCI)
- *Wieczkowski, Julie* (Kenya): "Community Resource Use in the Lower Tana River Forests, Kenya" (CCI)
- *Wyper, Rebecca* (Indonesia): "Ecological Drivers of Macaque (*Macaca ochreata brunnescens*) Crop Raiding in Buton, Indonesia: Human Responses & Implications for Conservation"

IPS 2011 Martha J. Galante Award
The IPS Conservation Committee is also pleased to announce the winner of the IPS 2011 Martha J. Galante Award. This is an award given to professionals from primate habitat countries and provides funds to be used for conservation training. We are proud to announce the award winner this year is Mr. Didier Abavandimwe from Rwanda. Mr. Abavandimwe works as a senior research assistant with the Dian Fossey Gorilla Fund International and devotes his energies to the protection and study of the Mountain Gorillas of Virunga National Park. Didier's award funds will be used for a specially-organized training opportunity, "Training in Analytical Methods for Applied Primate Ecology" to be held at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany. The IPS Conservation Committee feels certain that this training will benefit Didier immensely in his continued work with the majestic Mountain Gorillas. Please join us in congratulating Didier for his fine work and dedication to primate conservation.

Thanks to the Committee
I've been very fortunate in having a terrific group of people helping me this year. I want to thank the following IPS Conservation Committee members for their service and dedication to the Society. These individuals are all busy professionals or students – from all over the world - who very generously gave of their time to help me review grant proposals and/or Galante Award applications. I'm very grateful for their service: Richard Bergl, Mukesh Chalise, Fanny Cornejo, Alejandra Duarte, Ian Gilby, Laura Marsh, Nguyen Nhai, Julia Ostner, Lisa Rapaport, Hanta Rasamimanana, Swapna Reddy, Caroline Ross, Melanie Seiler, Arif Setiawan, Mauricio Talebi, Jo Thompson, and Chris Whittier.

Janette Wallis

Secretary General

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Call for Nominations for Officers
Officers of the IPS serve terms of four years, and re-election is allowed for all offices but President. So that the terms can be staggered, the election of half of the officers takes place every two years, and the timing centers around the dates for the Congress. Thus, elections will be held in early 2012, and newly elected officers will assume their positions in Veracruz. The Council will soon appoint an Election Committee that will be in charge of developing a slate of nominees for each of the following offices:

President
Vice President for Communications
Vice President for Education
Vice President for Captive Care

Nominations will be solicited by the Elections Committee in November, but it is not too soon to begin thinking about possible nominees for these very important posts.

I hope you will all take a few minutes to read the reports from grant recipients that are included in this and all IPS Bulletins. These reports demonstrate the enormous good that IPS funds do in the service of research, education, and conservation. In particular, the extent to which monetary awards contribute to conservation in habitat countries is evident in these summaries, and should make us all proud to be members of IPS.

Nancy Caine

VP for Research

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2011 Research Grants competition

The competition was very strong this year, with 80 applications (approximately twice the number than last year) from 22 countries. These were evaluated by members of the IPS research committee (many thanks to Diane Brockman, Antje Engelhardt, Eduardo Fernandez-Duque, Reinhold Hutz, Patricia Izar, Chuck Snowdon, Tetsuro Matsuzawa and Emilia Yamamoto).

The 10 successful applicants were:

*Caitlin Barale**: "The Emergence and Function of Sex Differences in Wild Juvenile Geladas (*Theropithecus gelada*): Model-based Inferences and Conservation Implications"

Mackenzie Bergstrom: "Behavioral and Physiological Correlates of Dominance in Female White-faced Capuchins (*Cebus capucinus*)"

Maryjka Blaszczyk: "Temperament and Social Niche Specialization in Female Vervet Monkeys"

Debapriyo Chakraborty: "Demographic Histories of Two Sister Species of Macaques from the Indian Subcontinent: Model-based Inferences and Conservation Implications"

*Sofia Forss**: "Testing the Cultural Intelligence Hypothesis on Orangutans: Variation in Exploration, Intelligence and Response to Novelty"

Cecile Garcia:"Sexual Signaling and Mating Behavior in the Japanese Macaque (*Macaca fuscata*)"

Jess Hartel: "Social Dynamics of Aggression Mitigation and Behavioral Stress Correlates in Wild Chimpanzees (*Pan troglodytes*), Kanyawara, Kibale National Park, Uganda"

Luca Pozzi: "Unveiling Cryptic Biodiversity and Mechanisms of Speciation of Nocturnal Primates (*Galagoides* spp.) in Eastern Africa"

Nicoletta Righini: "Nutritional Ecology of Mexican Black Howler Monkeys: the Role of Nutrients, Plant Secondary Metabolites, and Behavioral Flexibility"

Rebecca Wyper: "Ecological Drivers of Macaque (*Macaca ochreata brunnescens*) Crop Raiding in Buton, Indonesia: Human Responses & Implications for Conservation"

(* indicates CCI funds awarded)

Other activities

I've also been working on ethical issues related to field research in primatology. This is very much a work in progress, and currently takes the form of (i) a draft set of ethical guidelines for the society to be circulated to the membership for comments and (ii) a survey of primate darting with Elena Cunningham of New York University College of Dentistry.

Jo Setchell

VP for Captive Care

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This year we received 20 grant submissions for captive care and while the committee would like to fund all worthwhile submissions, unfortunately, we could only select seven for this year. The seven selected stood out from the rest as seen in the scoring by committee members, and were approved by council. The successful applicants were:

Andrea Edwards: "Creating a Garden for Supplementing the Diet of over 100 Confiscated Primates at Lwiro Sanctuary in Congo Democratic Republic"
Claire Coulsen: "Construction of New Mobile Facilities for Endangered Primates at CERCOPAN Sanctuary, Nigeria"
Jasper Lepema: "Construction of Primate Quarantine Facilities at the Wildlife Centre in Zambia"
Pablo Stevenson: "Study of Captive Diet and Conditions of Wolly Monkeys in Columbia in Order to Improve Captive Care of this Endangered Species"
Raffaella Commitante: "Support for Veterinary Workshop for Organutan Sanctuaries in Indonesia and Malayasia"
Steven Unwin: "Support for Veterinary Workshop for Primate Sanctuaries in Africa"
Tilo Nader: "Construction of Release Site Cages for Delacour's Langur in Vietnam"

We continue to work with the local committee for next year's Congress in Mexico to provide an additional workshop on Captive Care specifically for the region. The workshop will differ from normal IPS workshops in that it will be conducted in Spanish rather than English, to ensure people who actually carry out captive care duties, but are likely not to have a proficiency in English, can attend. It will be the first time that a region focused workshop in captive care has been conducted and thus will be considered a pilot project that hopefully, we can replicate in the future.

Debby Cox

Societal Business

Recognize Primatology's Unsung Heroes

Would you like to formally recognize someone's service to primate conservation and/or welfare? The IPS Council has initiated a program to formally acknowledge the work of individuals who support the goals of IPS but whose contributions are unlikely to be recognized in traditional ways. It is our hope that this program will provide an opportunity to honor those that make the work of our membership possible, such as (but not limited to) a colony manager, a park ranger, a docent, a customs officer, journalist, laboratory technician, or law enforcement agent. This program is not meant to be a competition; instead, individuals whose work is deemed to support the aims of our society will be sent a letter of recognition on behalf of the officers of IPS. If you would like to recognize an "Unsung Hero of Primatology," please send a 1-2 page testimonial of this individual's work and how it promotes our efforts to IPS VP for Communications, Katie Leighty (katherine.leighty@disney.com).

IPS 2012 in Veracruz, Mexico

VERACRUZ CITY WILL HOST THE XXIV CONGRESS OF THE INTERNATIONAL PRIMATOLOGICAL SOCIETY

Veracruz city will play host to more than 1,200 primatologists from around the world at the upcoming XXIV International Congress of the International Primatological Society, August 13-17, 2012. It is the first time Mexico hosts this Congress and organizers are ready to welcome participants to one of the most culturally and biologically diverse states in the country.

Considered one of the oldest cities in the country, Veracruz is nowadays a major port city and a major tourist resort because of its rich history, beautiful scenery, fine beaches, and excellent accommodations. Located 405 kms from Mexico City, it offers a wide variety of activities to enjoy, from museums, natural reserves, coral reefs, and sandy beaches to traditional celebrations, music, dance, food and fairs. Veracruz offers an important heritage in colonial architecture and historical buildings such as the fortress of San Juan de Ulua and prehispanic archeological sites nearby, such as El Tajin and Cempoala which can be visited.

Weather

The climate is tropical and the annual average temperature is 25.3°C. The city is equipped with a modern hotel infrastructure including 12,000 hotel rooms of all categories, from family residences to five-star hotels. Veracruz offers over 500 restaurants and 250 evening entertainment venues like bars and nightclubs. Its museums, aquariums, beaches and promenade combine to make Veracruz a major Mexican tourist destination

Did you know?

- The second highest mountain in North America, Citlaltepetl, is found in Veracruz.
- 700 hectares of tropical forest in Los Tuxtlas have more species of vascular plants than the entire United Kingdom.
- The coral reef in front of Veracruz has a great biological diversity and endemism.
- The largest archeological site in Mexico, El Tajin, is located in northern Veracruz.
- Mexico is the country with the largest Native American population in the Americas and 50 ancestral languages are still spoken there. Veracruz hosts the third largest Native American population. Veracruz hosts about 8 native groups and ca. 10 Amerindian languages are spoken there.
- Veracruz is the oldest municipality in the continental Americas
- The oldest evidence of written language in the Americas are two Olmec stone figures found in southern Veracruz.
- More than 50 shipwrecks from colonial times wait to be located.
- People from Veracruz are among the friendliest and happiest people on Earth.

About the venue

The WTC-Veracruz has been chosen as the venue, since it is affiliated with the International World Trade Center Association and is designed and equipped according to international standards. It is one of the few places in México that can offer attention to all kind of events in 16,000 m2, with modern elevators and electric stairs, handicap ramps, commercial stands, lockers, ticket windows, and parking lot. It also has direct access to a mall and the congresses' main hotel which makes the use of the installations much more comfortable. A range of other hotels are within walking distance, and connect through pedestrian bridges. Others are short bus rides away, with several buses stopping at the WTC.

www.wtcveracruz.com.mx/

Congress Registration Price Structure

	Registration Time	Early Bird	On-Time	Late	On-site
Participant type					
Full member		**$450**	$495	$560	$630
Student/ Range country member		$270	$300	$340	$380
Non-member		$560	$630	$700	$770
Guest		$180	$205	$225	$270

Other News Items

Tribute to Professor Toshisada Nishida

Professor Toshisada Nishida passed away at his Kyoto home after a long battle with cancer on June 7, 2011. He was 70 years old. We lost one of the great pioneers in primatology. He started his career in primatology by studying the solitary males among Japanese macaques when he was a graduate student (Physical Anthropology) at Kyoto University. He traced the dispersal of male Japanese macaques from their natal groups and clarified that solitary life is common for males and that they typically dispersed more than 100 km from the range of their natal groups. His findings helped to elucidate the population structure of Japanese macaques.

In the next major step of his career, he conducted field studies of wild chimpanzees on the eastern shore of Lake Tanganyika, along with his colleagues Prof. Takayoshi Kano and Prof. Kosei Izawa under the supervision of the late Prof. Junichiro Itani. He succeeded in habituating two groups of chimpanzees with the late prof. Kenji Kawanaka at Mahale, allowing him to discover many interesting features of chimpanzees. After Gombe Stream, founded by Dr. Jane Goodall, Mahale is the second-oldest long-term study site of wild chimpanzees. He reported that the group structure of chimpanzees was based on male coalition and female dispersal, and he found this by identifying each habituated chimpanzees and recording his or her movements. Many important papers on the behavior of chimpanzees, such as tool-using, hunting, food sharing, and medicinal use of plants, have been produced by researchers who worked with him at Mahale. He dedicated himself to the creation of the Mahale Mountain National Park. This was the first-ever national park in the world established through an overseas cooperation program run by the Japanese government. He has invited many researchers to Mahale, and these visits have led to an abundance of cooperative research projects, to an exceptional degree among chimpanzee study sites.

Prof. Nishida served as president of IPS from 1996 to 2000. He wrote about his great hopes in the IPS Bulletin in 1996 (Vol. 23, No. 2), after the hand-over of the president's duties from Prof. Alison Jolly. He was the first IPS president from one of the countries with viable populations of non-human primates in their natural habitat. He tried to strengthen the connection between IPS and the habitat countries, in particular, by increasing the representation of the third world. His first job as president was to support the IPS Congress held in Madagascar. At that time, he told me that there was not a single fax machine in

the organizing committee's office. Consequently, he pressured the Japanese government to donate fax machines and slide projectors. The Congress was very successful. I attended it and visited several study sites of lemurs in Madagascar. The opening ceremony was held at the Grand Amphitheatre of the Université d'Antananarivo with the attendance of the Prime Minister and five other ministers related to environment and education, and Ambassadors from France, Japan, UK and USA. As he expected, it was a great milestone in the effort to protect the precious natural environment of Madagascar. Many people, not only researchers, but also various stakeholders, journalists and the public, watched scientific presentations as well as cultural performances supporting conservation and, in addition, visited several study sites of primates in Madagascar. They were able to truly comprehend the importance of research and conservation of non-human primates in their natural habitats.

Professor Nishida warned that the IPS Congresses had become more and more over-luxurious (IPS Bulletin, Vol. 27, No. 1). In large banquets, people discussed local food delicacies rather than scientific topics. A large amount of disposable plastic cups, plates, knives and folks were used in the big congresses. He stated that the IPS conservation committee should not allow such wasteful practices in the organization's own meetings. When he visited my study site in the Petit Loango Reserve of Gabon in 1998, he was shocked to see heaps of rubbish and scraps washed up on the shore of the Atlantic Ocean. He thought that we should change our modern lifestyle from one of seeking convenience and comfort to a more sustainable one. He suggested doing away with luxury and waste in the IPS congress to reflect the spirit of conservation. We followed his suggestions in organizing the 2010 IPS Congress in Kyoto, keeping costs as low as possible. The welcoming party and the banquet were very simple affairs with Japanese traditional music recalling the old, more sustainable lifestyle of Japan. I was delighted to see Prof. Nishida's satisfaction with the character of this congress.

When he resigned from the president post, he proposed a special status of 'World Heritage Species' for the great apes to UNESCO (IPS Bulletin, Vol. 27, No. 2). He regarded this as an urgent step toward stopping commercial hunting for bushmeat as well as illegal logging, which destroys natural habitats. He drafted a resolution by IPS to express our grave concern about the destiny of the great apes, our closest relatives. However, he faced many objections, with people asking: Why should only the great apes enjoy the benefits of World Heritage status? Why are the lesser apes neglected? Why are the more endangered primate species excluded from this proposal? Finally the proposal was submitted to UNESCO after many discussions, but the World Heritage Species has yet to be recognized by UNESCO. Instead, GRASP (Great Apes Survival Program) was established in the United Nations Environment Programme (UNEP). He organized GRASP-Japan to connect Japanese ape researchers from seven long-term study sites, and he has served as their president. These activities for conservation of the great apes are still continuing, and they have produced many fruitful results.

Professor Nishida won the IPS Lifetime Achievement Award and the Leakey Prize through his great contributions to primatology and the study of human evolution. He left many plans for research and conservation of primates that remain only half-fulfilled, due to the challenges he faced in his later years. We should try to follow and complete these plans. Now I pray for him to have a peaceful rest. His achievements will never be forgotten by the world's primatologists.

Juichi Yamagiwa

Report from Research Grant Recipient Jackson Frechette

The Effects of Primate Seed Dispersal on Tree Regeneration

From May 13 to June 22, 2010 I conducted preliminary reconnaissance research in Yupukari Village, Region 9, Guyana. Yupukari village is located in the central Rupununi savanna. The Rupununi savanna is a superseasonal Savanna with riparian gallery forests as well as natural forest patches distributed throughout the area. The gallery forests along the river are connected to continuous primary rainforest located approximately 10 miles to the south.

I began by attempting to assess the location and composition of primate troops in the forest patches in the closest proximity to the center of the village. Due to the seasonal flooding of the forested areas, following monkeys on foot was very difficult. Additionally, the troops of capuchin (*Cebus apella apella*) and squirrel monkeys (*Saimiri sciureus sciureus*) were not habituated to human presence, and may in fact view humans as predators due to harassment by locals. These difficulties made following troops of monkeys for any extended period of time very difficult because they would flee to inaccessible areas. Thus, measuring natural seed shadows was almost impossible.

I made an effort to follow and habituate a nearby troop of capuchins until early June, when the fruiting of plants over flooded areas caused the monkeys to spend all their time over water. During that time, I was able to assess some of the common and important fruit trees used by monkeys in the forest areas that are not seasonally flooded. I observed high densities of *Tetragastris panamensis* fruiting trees throughout the entire area, including areas >15 km to the south in the Kanuku Mountains. My initial observations indicate that this is a good target species for my research. Capuchins regularly consume these fruits by swallowing the seeds and defecating them at a later time. I can ensure enough trees from which to collect fruit given that the *T.panamensis* trees are quite common throughout the entire area. The fruit season was finishing by the time I arrived, but I was able to observe other common fruiting trees consumed by capuchins. I identified the following as species consumed by capuchin monkeys: *Attalea maripa, Spondias mombin, Inga pezizyfera, Inga edulis, Peritassa sp.* and *Euterpe oleraceae.*

In early June I began surveying additional forest at further distance from the village proper. I primarily surveyed the Awarikru River using canoes, marking the presence of observed troops of monkeys. Overall, I identified 3 different capuchin troops within a 3 mile radius of the center of Yupukari. I additionally encountered two large forested areas of terra firma with suitable habitat for several more troops of monkeys, despite not contacting any there. The capuchin troops appeared to number between 8-15 individuals. There is at least one and likely more than two large squirrel monkey troops in the immediate area as well, with numbers between 20-40 individuals.

I placed a camera trap beneath fruiting *Peritassa ps.* and *A.maripa* to determine the presence of secondary dispersers. Data from the camera traps indicate that pacas *Cuniculus paca a*nd tapirs *Tapirus terrestris* may be important secondary dispersers. Additionally, much of the *A.maripa* fruit consumed by tapirs and pacas were processed and dropped beneath the tree by primates, presumably capuchins. This indicates a possible important relationship between capuchin foraging and secondary seed dispersal that I intend to investigate further.

Overall, there appears to be healthy populations of squirrel, howler and capuchin monkeys within the immediate proximity of Yupukari village proper. The densities of troops are such that troops can be easily accessed during the dry season along the Awarikru River at a continuous distance gradient from the village. Although I was able to survey for the presence of monkeys, I am still uncertain at the difficulty of habituating them. Further investigations must be made during the dry season to be able to fully ascertain the feasibility of this project.

With the Community Conservation Initiative, I had originally intended to develop educational materials regarding the importance of primates to ecology. But after spending time with the villagers and working in the forest I realized that the biggest immediate threat to monkeys in the area was habitat loss. The monkeys all live in forest patches running along the river and extending into areas with slightly higher elevation. The largest areas of intact forest are desirable farmland because they do not fully flood during the wet season. Forest is converted to cassava fields regularly, and as the local population increases, the need for agricultural land increases. I realized that preserving the monkey habitat would require some form of incentive. After discussion with a family of farmers, I decided to try a pilot project of small-scale agroforestry. The goal is to create a sustainable alternative to clear cutting for agriculture. I purchased seeds of shade tolerant coffee, cacao and collected seeds *S.mombin*. The seeds are currently germinating in a makeshift greenhouse in Yupukari. Early this spring, the seedlings will be planted in forested areas adjacent to the family plots of a local colleague. Only a small area of the understory will be cleared, leaving the canopy intact and keeping high levels of structural diversity. If successful, I hope that through this small-scale subsistence agroforestry some farmers may reduce their clear cutting of forest. This will hopefully help strike a balance of the economic needs of people with the habitat needs of wildlife.

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Report from Research Grant Recipient Alecia Carter

Personality and Sociality in Chacma Baboons



Overview

According to basic evolutionary theory, individuals should adapt their behaviour in response to their current physical and social environment, however recent research has found that individuals are sometimes constrained within individual personalities or behavioural syndromes. For example, an individual that acts in a bold manner towards conspecifics may win access to more resources, however, that individual would suffer from a greater predation risk if it were also bold in the presence of a predator. The aim of the current research was to investigate the role of personality in social games and social contexts.

The research was completed at Tsaobis Leopard Park in Namibia on two troops of chacma baboons. Data were collected over two years during the winter/autumn period. A total of 58 individuals (2009) and 53 individuals (2010) were the focus of the study and included all adult, subadult and juvenile baboons from both study troops. All individuals' personalities were tested using presentation with a novel food (2009, 2010) and a model threat (2009). Experienced observers also assessed all individuals' personalities using a basic questionnaire.

All individual baboons were focal followed for at least 22 hours over the two field seasons. Event data such as dominance interactions, leaving sleeping cliff decisions and waterhole approaches were collected *ad lib*. In addition to the personality experiments, large scale provisioning experiments were conducted in order to experimentally manipulate the patch entry decisions of individuals in order to gain access to a highly valued resource.

Preliminary results

The data collected from the past two field seasons will be analysed in the coming months. However, preliminary results regarding the personality experiments completed showed that both when presented with a novel food or presented with a model snake, individuals varied significantly in their reactions to the stimuli. This variation seems to depend on a) personality and b) age-sex class (for example, adult females' reactions were, on average, shyer than those of juveniles of both sexes and adult males). This behaviour has been found to be broadly consistent between years for individuals, however this relationship was stronger for assessments by observers than for individual responses to novel foods.

The first analysis completed (in prep) showed that observer ratings of personality broadly predicted the reactions of the baboons in the objective experiments. We hope that this result opens lines of communication between the behavioural ecology and comparative personality approaches to animal personality research.

Report from Research Grant Recipient Eva Wikberg

Relationships, Relatedness and Residency Patterns in Female *Colobus vellerosus*

Grant money
The grant money was used to buy RNAlater ($749.32) for storing the DNA samples, gloves and wooden spatulas for collecting the samples (156.00), shipping samples from Ghana to the laboratory in the US via courier mail ($453.00), and ziploc bags and batteries ($141.70).

Research objective
My objective is to examine proposed benefits associated with female philopatry in an egalitarian primate species, *Colobus vellerosus* (ursine colobus) at Boabeng-Fiema Monkey Sanctuary, Ghana. I will investigate 1) if females show kin bias in affiliative behaviors, and 2) if larger coalitions of female kin are better at defending resources. This population shows facultative female dispersal (i.e. some females disperse while others remain philopatric). Facultative female dispersal will likely lead to between-group variation in female kinship; some groups may be kin-based while others consist of female non-kin. Previous research at this site was not able to rule out the possibility that there is intergroup competition for food, however, more research is needed to draw solid conclusions.

Field work
I have completed my behavioral data collection with a total of 3831 contact hours for eight groups (2006-2010). I collected in total 1032 focal hours from 64 adult and subadult females. During my study, 61 females remained in their current group while 21 females dispersed.

Results regarding female-female grooming relationships
Females have on average 3.5 female grooming partners and groom average 57% of available females. Grooming was observed in 172 out of 223 female-female dyads. Adult females spent more time grooming with other adult females than with subadult females (Wilcoxon signed ranks test, $p<0.001$), while subadult females did not show significant preferences for either adult or subadult grooming partners. In the seven known mother-daughter dyads, the daughters spent more time grooming their mothers than other adult females in the group (Wilcoxon signed ranks test, $p<0.05$). However mothers did not bias grooming toward their daughters. These preliminary findings indicates that both age and kinship influence the distribution of grooming in this population.

Results regarding female intergroup aggression
The presence of female aggression during intergroup encounters has traditionally been interpreted as evidence for female food defense against other groups. However, alternative hypotheses have rarely been investigated although it is possible that female intergroup aggression have multiple functions. For example, female intergroup aggression may be a form of infant defense in species where males attempt to kill infants in opposing groups. In species where females disperse, female aggression during intergroup encounters can also deter potential female immigrants. *C.vellerosus* offers a good opportunity to investigate these hypotheses because intergroup encounters occur frequently and all groups in the forest are habituated to human presence. Recent immigrant males and extra-group males commit infanticide and young infants are generally the most vulnerable to infanticide.

I investigated these three hypotheses regarding the function of female intergroup aggression (food defense, infant defense, and resistance to female immigration), using behavioral data collected *ad libitum* and via focal sampling of 61 females, and hourly recorded location points from eight groups. I ob-

served 265 intergroup encounters during 11 months. Only encounters between the eight study groups are included in the subsequent analyses because the predictor variables are unknown for nonstudy groups. First, I used a logistic regression with encounter duration as a covariate to examine whether the presence of aggression during 110 encounters was affected by: 1) encounter location (i.e. within or outside the focal group's 50% core area), 2) presence of young infants (i.e. 0 -3 month old) in the focal group, and 3) number of potential female immigrants (i.e. sudadult and cycling adult females) in the opposing group. Female aggression was affected by the encounter location ($P=0.041$), but not by the presence of young infants in their own group or the number of potential female immigrants in the opposing group.

Second, I investigated the association between female initiation of encounters and: 1) location, 2) presence of young infants, and 3) presence of potential female immigrants using chi-square tests. I was not able to control for variation in different predictor variables due to the small sample size. Female initiation of encounters was defined as when one or more females led the group progression when approaching the opposing group to 50 meters and included cases where the resident male accompanied them. Females initiated more encounters than expected within the core area of their home range ($N_{Core}=18$, $N_{Non\text{-}core}=6$, $\chi^2=4$, $df=1$, $P<0.05$), and fewer encounters than expected when their group contained young infants ($N_{No\ Infants}=18$, $N_{Infants}=7$, $\chi^2=4.84$, $df=1$, $P<0.05$). Females initiated encounters according to expected frequencies when potential female immigrants were present in either the focal group or the opposing group.

In summary, the resource defense hypothesis is supported since females initiate and show aggression more often when the encounter occurs within the core area of their home range. Female aggression during intergroup encounters was not a common infant defense strategy in this study. Instead, females may avoid intergroup encounters when young infants are present in their group, as they initiate encounters less frequently than expected during these periods. My analyses did not support the resistance to female immigration hypothesis. However, female high-intensity aggression (i.e. chases and contact fighting), which is rare during intergroup encounters (20/110 encounters), was always observed during encounters in which the resident male copulated with a female from the opposing group (n=5). It is possible that female high-intensity aggression towards extra-group females who interact with their resident males is a way to reduce the likelihood of female immigration. This study provides more convincing evidence for the female resource defense hypothesis by using a multivariate rather than univariate analysis since competing hypotheses are not mutually exclusive. Studies using multivariate analyses will improve our understanding of female intergroup aggression, and therefore contribute to the empirical data base needed to more accurately model the evolution of primate social structure.

Laboratory work

I have finished the bulk of my laboratory work, but have missing information for five females. The samples from these females were collected during my first field season and these samples are of very low quality compared to the samples that I collected during the latter field seasons. Due to the low DNA concentration in the extracts from these samples, the drop-out rate when genotyping is very high and it is hard to get reliable results. Therefore, I will collect more samples from these five females when I return to the field site in May 2011 to teach a field school. Thus, I will not be able to finish genotyping all females until June 2011. Preliminary data based on 20 microsatellite markers show that groups contain both close female kin and non-kin, and the number of female kin varies between groups, ranging from two to eight dyads.

Future research
I will finish genotyping the females within the next four months, and can then perform more extensive analyses regarding kin bias in social behaviors and if groups with more female kin are more efficient at defending food during intergroup encounters.

I have incorporated one additional hypothesis regarding the plausible benefits associated with female philopatry in *C. vellerosus* based on Isbell's dispersal costs/foraging efficiency model. Females do not benefit from residing with kin, but if dispersal is costly, they will remain philopatric when their natal range contains sufficient food resources for successful reproduction. This hypothesis predicts that females will disperse: a) from large groups occupying low quality home ranges; b) when they have low average feeding efficiency; and c) when they receive elevated levels of female aggression. These conditions presumably indicate low food abundance and high levels of feeding competition. Females are expected to disperse despite the presence of female kin in their current group. I will use data from my five field seasons (2006-2011) during which 60 females remained in their current group while 21 females dispersed. A generalized linear mixed model will examine if cases of female dispersal can be predicted by home range quality, feeding efficiency, rates of female-female aggression, presence of female kin, kinship to resident males, and stability in male group membership. The two latter variables are included since inbreeding and infanticide risk may influence female dispersal. Group and animal identity will be used as fixed effects.

I have already co-authored one paper using data from the last 10 years that shows that females show facultative dispersal and it appears that infanticide risk is important for dispersal decisions. This paper used data from several different observers and not all researchers collected detailed information about female feeding efficiency, female-female aggression or home range quality. Therefore, I will publish a paper with more detailed analyses regarding female dispersal decisions. Since I will investigate whether the presence of female kin influence female dispersal decisions, I will need to genotype the samples I collected from the dispersing females. I have not genotyped many of the samples I collected from the females who dispersed during my first field season since they are not high-priority subjects for investigating kin bias in behaviors or intergroup aggression. If I am successful with upcoming grant applications, I will use the money to finish genotyping these females. Expanding my research to include the 21 dispersed females will provide a more holistic analysis of the costs and benefits of female philopatry in *C. vellerosus*.

Conservation through Community Involvement
The community involvement grant was used to make two metal signs ($300) to put up at the entrance of the forest urging tourists not to feed the monkeys and not to litter in the forest. The remainder of the grant was used to buying head lamps for the night walks ($200). The signs were in the process on being made when I left the field site last time and I will have to wait until May 2011 when I return to see if they have helped the problem with tourists feeding monkeys and littering in the forest. When trying to set up the night walks to view the galagos in May 2009 and May 2010, we found very few of them despite walking the trails where I found them repeatedly when I did the survey of the galago population. The infrequent encounters with the galagos could possibly be explained by being larger groups (4 people) making more noise than when I surveyed the galago population with only one other observer. However, it is possible that the galagos have changed their ranging pattern since I did the survey. Since I could not find the galgos reliably, I did not proceed in setting up the night walk. When I return in May 2011, I will walk trails in a different part of the forest to see if I can find the galagos more frequently. I will only have one other person with me to reduce the noise we are making. My hope is that this will increase the encounter rate and that it will be possible to set up the night walks for tourists during 2011.

Report from Captive Care Grant Recipient Hannah Trayford

Monitoring Welfare Strategies for Rehabilitant Orang-utans in Indonesia

The aim of this project was to use empirical data to distinguish systematically between existing practices of orang-utan rehabilitation techniques in Indonesia that help orang-utans to develop survival-related competencies. The results from this work were used to implement a behavioural husbandry programme targeted at enhancing the survival-related skills in rehabilitant orang-utans at the Sumatran Orangutan Conservation Programme (SOCP) quarantine facilities in Sumatra, Indonesia.

It is hypothesised that the behaviour of rehabilitant orang-utans can be enhanced by improving welfare conditions through behavioural enrichment and good husbandry. This was assessed through goal-directed enrichment that directly targeted orang-utans' survival-related behaviours before and after release to the forest. Orang-utans that show survival-related behaviours during captive conditions will be better representatives for their wild counterparts, an important educational component for local staffs working directly with the animals and for guests to the facility.

The Principle Investigator was a PhD student from the University of Cambridge trained to monitor and evaluate quantitatively the enrichment used and the effects that it had on the welfare of the orang-utans. The keepers constructed the enrichment devices and the full-time Indonesian veterinarians monitored and ensured the safety of the orang-utans and the maintenance of the enrichment materials.

Baseline behaviour data was collected for 6-months to ensure that any behavioural changes seen after the implementation of enrichment can be measured. Data was collected on individuals in quarantine and rehabilitation, and prior to release. The after-release data is currently in the process of being compared to assess for relationships in observed behavior before and after release.

Based on daily observations the presence of stereotypies was identified in the orang-utans' behavioural repertoire, especially those associated with feeding regimes and locomotor stereotypies. Recommendations were made and implemented for the second phase.

Phase 2 was used to address stereotypies, particularly those likely derived from thwarted locomotor functions. The physical habitat was enriched (*see Photo 1*) to provide opportunities for more complex locomotion. The orang-utans were then observed for the same period of time as the baseline observations.

Juvenile orang-utan on physical habitat enrichment

Each enrichment device was quantified through behavioural observations in order to assess if the device achieves the goal, if it is suitable for this programme and the facilities provided, and the behavioural effects on the orang-utans of each device under the conditions of different housing conditions at quarantine. At the time there were 52 orang-utans at the centre all benefitting from the enriched conditions.

The personality and welfare questionnaires were completed for all orang-utans by all staffs. A subjective assessment of orang-utans' well-being and personality was conducted using questionnaires provided to keepers familiar with the orang-utans. The questionnaires were translated into Bahasa Indonesia and back-translated into the English language to ensure accuracy.

Complete analyses of the data sets are still ongoing as this is part of a 4-year PhD project and results will be published when available.

Acknowledgements
This project has received support from Starbucks, ACE Hardware, Singapore Zoo, and fire departments in Singapore and the UK (the latter was fire hose for enrichment). I have received funding from the RSPCA, International Primatological Society, Humane Society International, Primate Society of Great Britain, the Primate Action Fund from Conservation International, and Selwyn College, Cambridge.

Report from Conservation Grant Recipient Melanie Seiler

Effects of Habitat Degradation on Behaviour and Ecology of the Sahamalaza Peninsula Sportive Lemur, *Lepilemur sahamalazensis*, in NW Madagascar

Project summary

The Critically Endangered Sahamalaza Peninsula sportive lemur (*Lepilemur sahamalazensis*) was first described by science in February 2006 from the Ankarafa Forest on the Sahamalaza Peninsula (Andriaholinirina et al. 2006, Olivieri et al. 2005), followed by inclusion on the World's Top 25 Most Endangered Primates 2006 – 2008 list (Mittermeier et al. 2007). So far, only population density, habitat preference and activity budget for this species have been investigated (Ruperti 2007). An overall population of no more than 3,000 individuals is estimated to remain and the habitat is continuously shrinking, which reinforces the conservation status of this species. The main objective of this PhD-project is to assess the impact of habitat degradation and fragmentation on key aspects of *Lepilemur sahamalazensis* behaviour (specifically home range, social behaviour, anti-predator behaviour and acoustic communication), to directly inform future conservation efforts for this species.

First field season

In this preliminary field season, the different habitat-types were described using the point-centred quarter method (Ganzhorn 2003). In 4 forest fragments, a total of 252 points (63 points per fragment) were described. A basic ethogram of diurnal and nocturnal behaviour of *Lepilemurs* was created. From July to October 2009, 606 hours of diurnal behavioural observations and 324 hours of nocturnal observations were conducted on 18 sportive lemurs, 17 of which were observed during the day and 4 during the night. The latter four individuals were fitted with radio tags (TW3 SM, Biotrack, Dorset, UK) and were followed using a portable TR-4 receiver (Telonics Inc., Arizona, USA) and a three-element yagi antenna (Biotrack, Dorset, UK). Diurnal and nocturnal behaviours and additional information related to spatial and ecological factors were recorded continuously during 6-hr or 12-hr observation sessions using focal animal sampling. The exact time of each activity was noted. Each individual was observed for a minimum of three days and three nights to quantify home range size, habitat use, food preferences, activity budget, social behaviour, anti-predator behaviour, vocal spectrum and context of vocalisations. Recordings of vocalisations will be a useful non-invasive diagnostic tool for rapid identification of this cryptic species, especially for population density surveys.

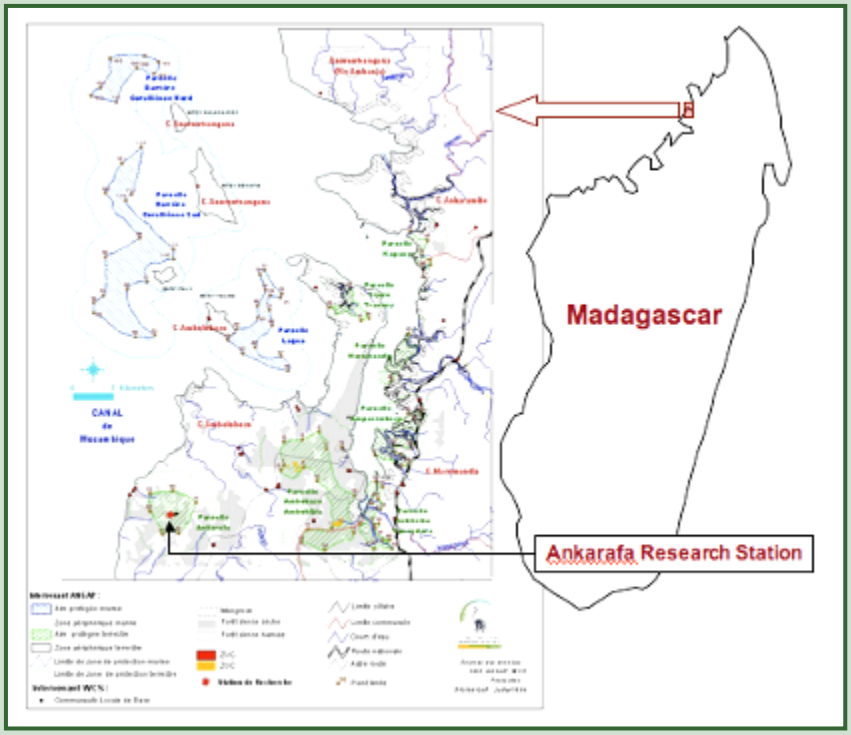
First results

The four described forest fragments differed significantly in density of large and small trees, height of large trees, and crown diameter of small trees. Whereas the secondary forest fragment had the highest tree density and largest crown diameter, the degraded primary forest fragment contained the overall largest and tallest trees and had the highest species diversity.

As the data analysis is not completed at this point of the study, only a first impression of *Lepilemur* behaviour can be given:

The home range size of the radio-tracked individuals ranged between 0,5 and 1,5 hectar. The followed males had a larger home range than the females. Almost every night social encounters, like feeding in the same tree (often), allogrooming (2x) and agonistic behaviour (2x) could be observed, which may imply that this species is not entirely solitary and home ranges of *Lepilemur* individuals overlap. The individuals preferred high trees (especially Mango; height 10 - 15m) to forage, eat and and meet other *Lepilemurs*, but many times they also could be observed making use of various smaller trees.

One of the collared females gave birth to a single offspring in Mid-September, so brood care behaviour was observed for about a month. The baby rested on the belly/front of the female during the day, but was left in a tree during the night. The female carried the baby around the front of the neck and in the mouth. The female returned to the baby every hour and rested there for several minutes before leaving again for foraging and feeding.



Location of Ankarafa Research Station on the Sahamalaza Peninsula NW Madagascar (SIG/ANGAP, 2004)

All individuals rested solitarily during the day, except for one pair that rested together in close body contact on two observation days. As the latter two individuals were differently-sized, I assumed that they were mother and dependent infant. Eleven to 23% of the *Lepilemur* behaviours were active, although they did not leave their sleeping sites. There is a difference in the diurnal activity between the different sleeping sites, with a significantly higher level of activity in tree holes as well as a significantly higher level of activity in secondary forest fragments in comparison to the primary forest fragment. This results suggest that individuals resting in tree holes and living in more degraded forest fragments are more vulnerable to predators, especially to birds of prey, due to the smaller canopy cover. This finding means that the diurnal research of this nocturnal primate may be important in order to better understand their anti-predator behaviour and habitat requirements.

Conservation accomplishments

During this first field season, we heard people logging trees in the already small remaining forest fragments almost daily, and five times fires in forest and bush occurred. This fires seem to be set by the local population, as they intend to show their dissatisfaction with the recently established National Park, which makes the use of the forests for them impossible. The fires and daily logging were reported to the WCS headquarters in Antananarivo and MNP. During the research conducted in this first field season, three researchers and five field guides gained practical experience and a basic understanding of *Lepilemur sahamalazensis*. We tried to share this knowledge with a wide audience, especially the local community. All information gained during this study will be described in detail to facilitate future research and conservation action, especially conducted by Malagasy students, and will be published and reported on as widely as possible.

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Report from Captive Care Grant Recipient Claire Coulson

The IPS Captive Care grant provided $1500 in April 2010 to construct a new Mangabey enclosure to replace an existing structure which was deemed 'beyond economical repair'. This is the second IPS Captive Care grant received by CERCOPAN to replace aged existing structures with new steel portable enclosures, which can be easily relocated to our new UNICAL (University of Calabar) site once sufficient funds are attained to facilitate our move.

First enclosure upon completion

The enclosures replaced, whilst used to house Mangabeys, are different to that outlined in the original proposal. Whilst the other enclosure will still require replacement in the future, we were forced to re-prioritise when two of our enclosures became completely uninhabitable following the rainy season and the primates within them had to be moved to temporary accommodation. This report outlines spending and activities undertaken between April 2010 and March 2011.

This grant was used along with support from various other individual donors to demolish two enclosures, next door to each other, and build two new and much better enclosures on the same site. The old wood and mesh enclosures were replaced with welded and bolted steel structures which are easily collapsible for moving to our new University of Calabar site. We were donated 12 large pieces of drill pipe from Addax petroleum limited, which were used to form the foundations of the structure.

The mangebeys enjoying their new enclosure.

Tjark Platt, the Facilities Manager at Wild Futures, a primate sanctuary in the U.K., joined us as a short term volunteer for two months to construct the IPS sponsored enclosures. At Wild Futures, Tjark is responsible for the design and construction of all primate enclosures. He was able to further build upon and improve our original portable enclosure design to produce an even stronger and more locally sustainable construction design. Tjark's enclosures, whilst still long wearing and portable, use entirely locally sourced materials rather than requiring the 'quick clamp fittings' from the USA that we employed for previous enclosure construction (we were finding it difficult and expensive to ship sufficient quantities of the quick clamp fittings from the USA).

For the previous IPS sponsored enclosure, welders were contracted from the Calabar area to construct the structure. On this occasion however, we purchased a welding machine and an angle grinder to undertake the work ourselves. Throughout the construction phase, Tjark trained members of our Nigerian staff to cut and prepare lengths of steel pipe with the grinder and then to weld different sections of pipe together. We hope to continue this training with our staff, given that in the future we wish to replace all of our wooden enclosures with metal framed full and open topped enclosures.

To date, four of the 20 wood and mesh enclosures at our current site have now been replaced with portable and hard wearing structures in preparation for our forthcoming move, thanks to IPS Captive Care support. An additional large enclosure was provided entirely by an individual donor. The IPS base funding for such constructions attracts support from other individual donors, which may not otherwise be available and allows us to double the impact of the funding. In addition to facilitating a quick and easy move to our new site once development begins (which is essential is order to avoid the costs and logistical issues of temporarily running two separate sites), in the short term the new constructions improve welfare, reduce the risk of escapes, reduce maintenance costs and allow us to take in animals that we would be otherwise be unable to rescue if we could not replace aging constructions.

Report from Lawrence Jacobsen Education Development Grant Recipients Debby Cox and Tammie Bettinger

Raising Community Awareness of Gorilla Conservation

The Gorilla Rehabilitation and Conservation Education (GRACE) Center located near the Tayna Nature Reserve in eastern Democratic Republic of Congo is the only facility dedicated to the care and rehabilitation of orphaned Grauer's gorillas. GRACE is currently responsible for the care of 11 orphaned gorillas ranging in age from 9 years to less than 1 year. The orphans, victims of illegal hunting and the bushmeat trade, typically arrive weak and withdrawn. GRACE staff provide critical care for the orphans until they are strong enough to begin socializing with other orphaned gorillas. The ultimate goal of GRACE is to reintroduce as many of these orphans as possible back into the wild.

But reintroduction cannot occur until the forest where the gorillas will live is safe from poachers and human encroachment. To address the issue of illegal hunting and capture of primates, GRACE is committed to conservation education and sensitization programs for people living around the Tayna Nature Reserve as well as in adjacent forested areas. In 2010 we began an education campaign that focuses on keeping apes and monkeys in their forest home where they can live with their families. The program draws comparisons between human and non-human primate families and their need for a place to call home.

With funds provided by a 2010 Lawrence Jacobsen Education Development Award, a full-time conservation educator was hired that is responsible for conducting education programs in the community as well as coordinating the activities of volunteer educators from the local conservation college. An education program was developed with three goals aimed at teaching community members and students to: 1) properly identify adult and infant gorillas, chimpanzees and

monkeys, 2) understand the laws protecting gorillas and chimpanzees, and 3) understand why primates do not make good pets. Images of adult and infant primates were used in the identification exercise and also served as a pre-post evaluation of participants' ability to differentiate taxa. In conjunction with the Jane Goodall Institute, two posters where developed to address illegal trade and the primate pet issue.

Development and printing of posters was completed by June 2010 and a training workshop for the volunteer educators was conducted in August 2010. From the volunteers, a full-time paid educator was selected by a committee of local GRACE supporters. The dissemination of the education program was provided to local schools and to local civic groups/community gatherings. In total, 838 primary school students, 140 secondary school students and 335 community members participated in the program. The evaluation data show that students nearest GRACE were more informed about apes and conservation than were students from communities further away. Adults were least familiar with ape identification as well as conservation laws.

After delivering the program around local communities, educators began challenging others within the community to talk with their friends and families about what they had learned. These people were given posters they could distribute once they talked with others about the program. In this way, an education chain was formed with the goal of broadening the impact of the education program. In November, the educators began development of a drama, a conservation song and a short DVD to use in locations with power. The song has been completed and is now sung as part of the education programs. We are in the process of finalizing the details of the drama and dissemination of it through radio broadcast is currently being discussed.

The GRACE educator is now part of the regular staff at GRACE so will continue to lead the education outreach for the center. The evaluation data from this year clearly show that education outreach must extend beyond the immediate area of GRACE. This is consistent with information on confiscated apes as well. Building on learning from this first attempt at education outreach, we are conducting another education training workshop that will include educators from 10 locations in North Kivu, focusing on areas of highest number of reported illegal sightings of apes. This region of DRC does not have newspapers and there are few roads. We are continuing with the goal of securing funding for radio broadcast of information as we feel this will be an effective method of relaying information.

We thank IPS for allowing us this opportunity to secure funding to begin an education outreach program in this area of DRC. This was a first step to implementing a larger education initiative and provided us the opportunity to test programs and make important adjustments in methods before disseminating the program to a larger audience.

Conservation Through Community Involvement
IPS also awarded $500 to use in a community conservation initiative. Our original plan was to provide travel funding for an ICCN official (Congolese Wildlife Department) to travel to Kasugho and train local people on the use of a machine that makes briquettes from garden waste. However, upon further investigation, it was discovered that the garden waste at Kasugho does not dry out sufficiently for making into briquettes.

We held a meeting with the community officials and discussed other activities that could be considered that would contribute to conservation in the area but also provide benefit to the local people. After much discussion, the decision was made to plant fruit bearing trees. The trees will provide shade as well as producing fruits that can be eaten. The goal is that the trees will produce enough fruit that the community will have enough for consumption and for sale. This will also decrease the community members need to go into the forest to gather food thereby lessening their dependence on the forest. The tree planting will begin in February 2011.

Additional support for this work was provided by Disney's Animal Programs and the Dian Fossey Gorilla Fund International .

Report from Captive Care Grant Recipient Andrea Edwards

Located in the South Kivu province of the Democratic Republic of Congo (DRC), the Centre de Rehabilitation des Primates de Lwiro (CRPL) is a crucial resource for the protection and rehabilitation of the country's primates. CRPL provides desperately needed care and housing for over 112 primates displaced or orphaned by the illegal forest activities of DRC. In this politically tense region, CRPL not only serves to help primates but is dedicated to working with the community in developing collaborative programs, providing education and creating an environment in which endangered wildlife and humans can successfully coexist. The CRPL is a Pan African Sanctuary Alliance member and is also included in the Operational Plan for the Kahuzi-Biega National Park, a world heritage site located just 4km from the CRPL. In addition to this, the CRPL was included in the Conservation Action Plan for the Kivu landscape in 2011, indicating its importance in conservation in the region.

The CRPL is currently managed by a team of 5 Management Advisory Group members, including the Congolese government organizations Institut Congolais pour la Conservation de la Nature (ICCN) and the Centre de Recherche en Sciences Naturelles (CRSN).

Project Introduction

The Centre de Rehabilitation des Primates de Lwiro (CRPL) and partners are building a Chimpanzee Habitat for Conservation and Education which will house the 48 resident chimpanzees. Presently, all chimpanzees are housed in 4 groups which are age specific. The cages in which the animals reside are fabricated from concrete bricks and metallic wire and do not provide the animals with an appropriately stimulating or healthy environment. It is our aim to provide all resident animals with the best care possible. Therefore a 3 hectare patch of primary forest which lies opposite the current sanctuary is being transformed into a chimpanzee facility.

Aside from the obvious animal welfare benefits, this new facility will become a hub for education and ecotourism in the South Kivu region and beyond. The new facility will allow both local and international guests to view the animals uninterrupted, while receiving an education session. Each session will be targeted to each group for maximum benefit.

The Chimpanzee Habitat for Conservation and Education will also lend support to local authorities with regard to creating more space for the continuation of law enforcement within the area, as this is the only chimpanzee and monkey sanctuary in the Kivu region.

Activities

The CRPL commenced the construction of the Chimpanzee Habitat for Conservation and Education in January 2010 with the excavation of the land donated by the CRSN. The foundations were then laid, metallic poles erected and painted and the over hang support welded into place. Currently the metallic trellis is being hung on the fence poles and once finished the overhang will be secured and the electric/solar system will be installed. The final stages will be the addition of a water system inside the habitat and security fencing surrounding the facility.

Conservation Through Community Involvement

The CRPL applied for Conservation through Community Involvement funds in order to pay the MALWIUMA (the local women's group in support of the CRPL) to plant bamboo in the savannah area of the forest enclosure. This bamboo will provide extra entertainment and enrichment for the chimpanzees once they are in the forest habitat. This project allowed us to hire local women who are not otherwise able to find employment in the area. Through this activity local people can observe that employment and opportunity is present in the area due to the presence of the CRPL and chimpanzees.

Report from Lawrence Jacobsen Education Development Grant Recipient Kate Grounds

The following is a report on my MSc research carried out in Sri Lanka, which was supported by the Lawrence Jacobsen Education Development Grant provided to me by the International Primatological Society. The funds provided by this grant paid for the essential travel, insurance and medical costs associated with the logistics of carrying out such a project, and without this support I could never have carried out the research I did.

Sri Lanka is one of the world's Biodiversity Hotspots, yet its biodiversity is being severely threatened due to habitat destruction, human encroachment and illegal produce extraction. Forest cover was reduced by 50% from 1956-1993 alone due to human activities and Sri Lanka is considered to have one of the highest rates of loss for forest and wildlife habitats in South Asia. Sri Lanka is home to five species of primate, the Sri Lankan grey langur (*Semnopithecus priam*), the purple-faced langur (*Trachypithecus vetulus*), the toque macaque (*Macaca sinica*), the grey slender loris (*Loris lydekkerianus*) and the red slender loris (*Loris tardigradus*). The purple-faced langur, the toque macaque, and the red slender loris are all endemic to Sri Lanka on the species level, and the grey slender loris and the Sri Lankan grey langur are endemic to the island on the subspecies level. All of the primates found on the island are classed as Endangered or Critically Endangered by the IUCN Redlist of Threatened Species (IUCN 2010).

An adult female toque macaque with 2 week old baby

Habitat destruction is the biggest threat to Sri Lankan primates and outside of protected areas there is little suitable habitat remaining, with the majority being situated in the dry zone area. Even here, much land is privately owned and centred around tourism hotels or eco-resorts, which have the potential to play an important role in the conservation of Sri Lanka's primates.

My MSc project aimed to evaluate the potential of a large hotel resort situated in Habarana, central Sri Lanka, for promoting the conservation of endangered primates through educational means. The hotel was owned by John Keells Hotels Ltd, a large chain with hotels across Sri Lanka promoting wildlife tourism. However, despite two species of primate living on the hotel's extensive 27 hectare grounds, and two other species located within 1 hour's drive, tourism activities are focused on the elephant and the leopard.

Kate watching the toque macaques while surrounded by a troop of grey langurs

The projects had a number of elements and goals involved in it. The main goal was a continuous study over three months of two groups of toque macaques residing on the hotel grounds, to determine their ranging patterns, sleeping areas, behavioural patterns, and group composition. The results from this study, combined with those from another student studying the grey langurs, form the basis of recommendation to the hotel for implementing primate education at the hotels and designing primate focused tourism activities. The hotel plans to post informational signs for tourists along key routes and areas of high use highlighted by my study. The results from the study were also used to create material for an interactive educational

board for the lobby of the main hotel. The information displayed describes the primates, their behaviour and ranging patterns, and highlights the need for support and action to help these endangered animals. The board will also have a fun 'identify the monkey' section, which highlights key members/ characters of each toque macaque (and grey langur) group for tourists to try to identify them themselves while walking through the hotel habitat. The information for this education board has also been put on a webpage that is linked to the main promotional site for the two hotels (http://cinnamonlodgeprimates.webs.com/). I also wanted to produce an additional education material which could be picked up and used by hotel guests and staff alike, and so I decided to produce a brochure which provided information on the hotel's two primate species, guidelines for observing them, and a 'tick box' page for identifying species, gender and behaviours.

One of the most interesting and exciting aspects of the macaques' behaviour was that of swimming. A number of primate species use water for various reasons, including for thermoregulation, diet, predator avoidance and range expansion. There have been numerous observations of macaque species in both captivity and in the wild using water sources for play. This is normally by the juveniles of the primate group. However few studies have studied water use behaviour in wild primates and this study provided the perfect opportunity to examine the water behaviour of these toque macaques in more detail. While there was some evidence towards the use of water for thermoregulation (to cool down in the hottest part of the day) the strongest reason for toque macaques entering water was solely for play. Water play was a huge attraction for tourists who loved to watch the human like characteristics of the rough and tumble games the monkeys played. This behaviour was identified as a potentially unique attraction for tourists and was included in recommendations for future primate watching and education.

Sub adult male and female enjoying a play in the water

The second element to my project was an investigation into current tourist experience and interest with primates at the hotel. This was conducted through a questionnaire presented to hotel guests and the information collected supported the fact that tourists are intrigued by primates and would like more opportunities to learn about them. Data from these questionnaires will also be used by the hotel when designing and implementing primate activities for future tourists.

Wherever possible general education on primates was imparted to hotel guests through informal talks to tourist groups who expressed interest. Additionally, discussions with hotel staff were carried out daily on how to mitigate human primate conflict on the hotel grounds and local area. A third element of my project examined the current interactions between primates and humans in the hotels, to make recommendations to the hotel for future mitigation and to ensure any primate activities with tourists were carried out with the primates' welfare in mind.

John Keells hotels have continued to promote the hotel primates to incoming visitors and local staff since our departure from Sri Lanka. They are planning to test my brochure now that the hotels are fully open again and have been promoting our study in national newspapers (e.g. http://sundaytimes.lk/110109/Plus/plus_18.html) and are currently trying to get an article into the in flight magazine for Sri Lankan Airways. The educational board which we designed is also currently being finalised and constructed for display. The company is keen to promote the conservation of all primates in Sri Lanka and focus on designing primate focused tourist activities and education for both tourists and staff in all its hotels across the country.

Over the course of just three months it was amazing to see the difference just a small amount of education imparted by two students could have on the general interest and understanding shown towards the hotel primates, both by tourists and local staff and villagers. It is my hope that with the support of this hotel chain, further knowledge, understanding and interest in Sri Lankas's primates can be spread through educational means. Without the support of IPS, this project would not have been possible, and so I would like give a heartfelt thank you to the organisation for their help in allowing me to carry out the research project I was so enthused to make the focus of my MSc. Thank you IPS and keep up the amazing work and support you do for our world's primates!

Primate Brochure designed for the hotels as part of the education.

Report from Lawrence Jacobsen Education Development Recipient Claire Coulson

First Class Upgrade

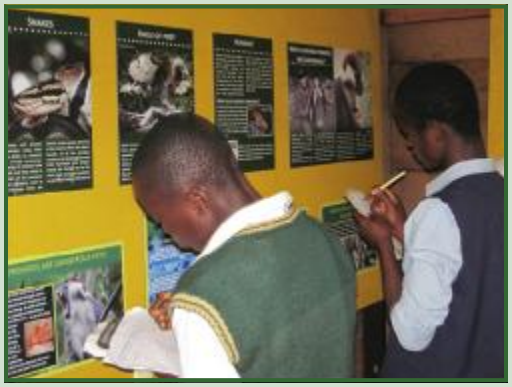
CERCOPAN's work to promote conservation of primates and Cross River State's globally important rainforests in Nigeria includes a year-round environmental educational outreach programme to 8,000 students in primary and secondary schools, educational tours for over 17,000 visitors a year to their headquarters in Calabar, field trips held for university students, and day-out events for school children at the Rhoko education centre in the middle of the rainforest. These activities target the long-term via a generational change in attitudes, and in the short-term build further momentum behind the State's ambitious efforts to bring about permanent protection for its unique biological heritage. All of CERCOPAN's educational activities are free for those attending and, as an NGO entirely reliant on donations and grants, these require funding each year for this vital work to continue.

The Rhoko education centre is a wooden building immediately on the western edge of the forest that runs continuously to the east to the Cameroon border and beyond. Adjacent to the education centre is a 1-hectare forested enclosure housing a social group of red-capped mangabeys, and dotted throughout the forest are smaller enclosures for mona guenons. A nature trail with stop points and informative sign-

boards loops through the forest, round to the mangabey viewing platform and back to the education centre. The forest immediately surrounding the centre is home to wild drills, red eared guenons, putty nosed guenons and 6 species of nocturnal primate. Further into the forest monas, red capped mangabeys, crowned guenons, chimpanzees and Preuss's red colobus can be found.

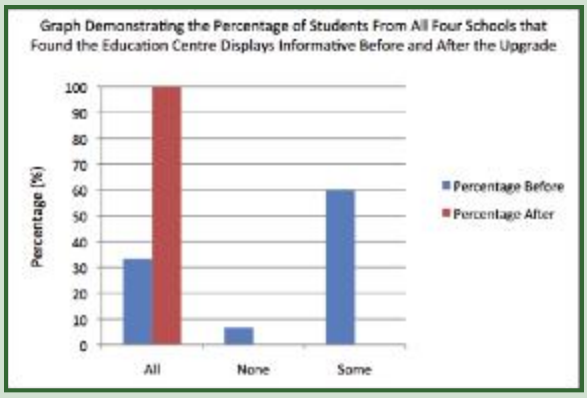
This striking rainforest setting provides the perfect opportunity to impart conservation messages about the wealth of biodiversity in the area, the importance and place of primates and other wildlife in the ecosystem, the value the forest provides to the community, and the loss that non-sustainable practices result in relative to community livelihood. Since 2000 the Rhoko education centre has incorporated a series of laminated posters and banners designed by school children. Despite constant replacement of posters and photographs, the displays always looked old and lacklustre due to humidity affecting the paper.

Thanks to the Larry Jacobsen Education Development grant, during 2010/2011 CERCOPAN has been able to completely renovate the entire Rhoko education centre display area. New plywood boards were purchased and painted with bright yellow paint for an eye-catching background. Eighty five A3 and A0 'Dibond' boards were then individually designed by volunteers using the Adobe Indesign package, and shipped to Nigeria from the UK. The waterproof and hardwearing boards are not only more colourful and attractive than the former paper displays, but they are also guaranteed for 20 years! In addition to themed boards on topics such as primate behaviour, community conservation, the role of the rainforest, and primate hunting and predation, a further set of boards on primate behaviour was also designed specifically for our viewing platform. The viewing platform boards cover topics such as female bonding, how mangabeys communicate, dominance hierarchy, grooming and mating and these allow the children to observe the behaviour of the primates and then read about what they see. In addition to the boards, interactive education tools were added such as a covered mirror which reads above it "What is the main threat to primates and the rainforest?....lift the veil to find out!" Metal 3D butterflies, and a white board where we can write daily what wildlife and birds have been seen complete the additions.

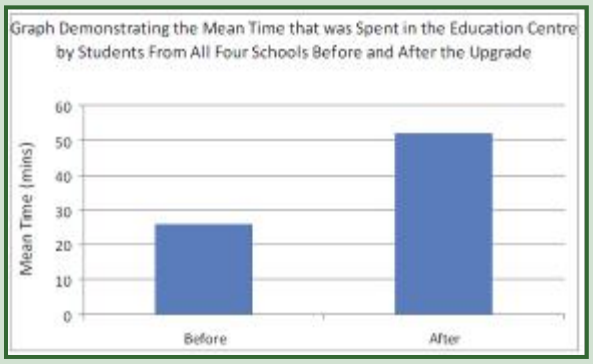


The funds allocated for the Community Conservation part of the grant were used to bring four schools to the centre before and after the renovation. Questionnaires were given to the children to determine whether the new design facilitated learning by increasing children's interest in the information (the time they spent reading the interpretation boards). Questions were based upon the time spent in the centre, the attraction of the boards, the percentage of information read, and the comprehension of some of CERCOPAN's key conservation messages.

Results show that children spent on average 26 minutes in the education centre formerly, and this increased to 52 minutes following the refurbishment. Students used to read on average 50% of the information in the centre but this increased to 79% on the second visit. All children found the education centre displays attractive after the refurbishment, but only 20% found it completely attractive before, 50% found some of it attractive and 30% didn't find the original centre attractive at all. Similarly, all students found all of the new education centre informative, whereas only 33% found all of it informative before, 7% found none of it informative and 60% found some of it informative.



The children absolutely loved their experience at the new and improved centre. For example, Martha from Iko Ekperem commented "Thank you to CERCOPAN for bringing us here. We can see they have done a lot of work since our last visit, and I really prefer the education centre as it is now. It shows very well that CERCOPAN is growing." Similarly, Daniel from Iko Esai stated "We will come back home and tell our parents how monkeys are important, and that they should help protecting the forest. I learnt more this time than few months ago, because the Education Centre is better now."



Claire Coulson Director at CERCOPAN continued in the same enthusiastic vein: "A huge thank you from everyone here to IPS for the Lawrence Jacobsen Education grant. This grant has demonstrably made a monumental difference to our vital education programme."

Report from Research Grant Recipient Erin Wessling

Status-Dependent Differences in the Travel Patterns of Adult Male Chimpanzees at Fongoli, Senegal.

Like other fission-fusion species, chimpanzee travel patterns reflect individual decisions regarding ranging behaviors. These decisions are dictated by compromises between maximizing access to social partners and food sources, both of which are limiting resources for which competition among individuals occurs. In places where resources are especially limiting, like the savanna-woodland habitat of Fongoli, Senegal (Pruetz and Bertolani, 2009), competition for resources like food is likely to have a significant effect on behavioral responses to ecological conditions. As frugivores, chimpanzees are likely to undergo considerable contest competition among individuals due to the clumped nature of fruiting trees, and thus chimpanzee competitive interactions are more likely to elucidate individual differences in access to resources than species who do not specialize on fruit, and whose resources are more evenly distributed.

Several adult males traveling on a footpath at Fongoli, Senegal

Although ecologically-determined behaviors like daily path length are generally believed to be a response to scramble competition, the benefits conferred to or withheld from individuals of different social rank suggests that rank-dependent differences among individuals in ecologically-linked variables like daily path length should exist and are therefore linked to contest competition as well. Competitive interactions are likewise especially relevant to male chimpanzees who exhibit distinct dominance hierarchies in which differential access to resources via contest competition may create a natural context for examining how individuals respond to varying amounts of available resources. Male chimpanzees also are more likely to belong to larger groups than are female chimpanzees, which suggests that although they are not believed to be reproductively limited by food resources, both within-group scramble and contest competition remain relevant to patterns of male chimpanzee.

Although significant strides have been made in understanding male chimpanzee social relationships and travel patterns, as both of these foci form the basis of understanding fundamental chimpanzee behavior, little research has been conducted at the intersection of these topics. Three interrelated-characteristics of the behavior of the chimpanzee (dominance, travel patterns, and fission-fusion grouping patterns) provide an interesting and important area of study for the interaction of ecological factors and behavioral responses. I therefore investigated if and how subordinate individuals compensate for reduced access to resources in their traveling patterns, specifically via time spent traveling and the lengths of their daily paths (DPL).

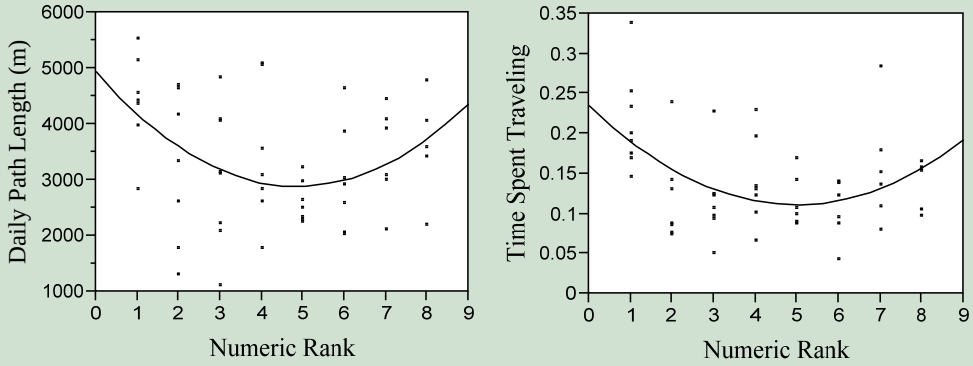
Research was conducted at the Fongoli Savanna Chimpanzee Project (FSCP) study site in the Department of Kedougou in Senegal (12°40'N 12°12'W) between May and August 2010. Located at the intersection of the Sudanian and Sudano-Guinean vegetation belts in southeastern Senegal, the Fongoli site is best described as a savanna-woodland mosaic (Pruetz and Bertolani, 2009). Here a community of 31 West-African chimpanzees has been studied since 2001, with systematic data collection beginning in 2005. To test my hypotheses, geographic location data were combined with behavioral data on individual male subjects. Attempts were made to follow one focal male continuously all-day, from nest site to nest site. Per FSCP protocol, adult males (n=8) were be followed from a minimum distance of 10 meters.

Five-minute instantaneous focal data were collected on maintenance behaviors such as travel and feeding behaviors. Daily path length distances were measured using focal individual straight-line distances between locations collected at five minute intervals via a global positioning (GPS) unit. GPS

Please submit your contributions for the next IPS Bulletin to Katie Leighty at katherine.leighty@disney.com

data were collected simultaneously with offset data so that data points more accurately reflect true chimpanzee locations. Dominance rank was derived from pant grunt records, which is an indication of submission to another individual, and strongly unidirectional. This data was collected concurrently with other data types (e.g. contests) for a representative sample of current dominance relationships.

I collected a total of 544 hours of data on travel behaviors. In that time 2031 travel bouts were observed totaling 160.80km traveled. Fongoli males spent 14.37% of their time traveling, which is comparable to other reports of travel at Fongoli. Travel bout duration did not differ according to rank and averaged 2.36 ±0.07 minutes in length. The average party size and several measures of estrus female presence positively correlated with number of travel bouts and daily path lengths. Daily path lengths averaged 3.33±0.15 kilometers and were not linearly affected by rank. Instead, there did appear to be a positive quadratic relationship between rank and daily path length, where high and low ranking males had longer path distances than did mid-ranked males (Figure 1). As was the case with distance traveled, rank had an effect on time spent traveling. When regressed linearly against time spent traveling, rank approached significance in a positive manner, but this relationship was better explained quadratically.



Regression of rank on daily path length (meters) and percent of time spent traveling

Several factors suggest that Fongoli males do experience resource constraints according to rank as a result of contest competition, and that these constraints vary according to rank. However the quadratic relationship seen in both daily path length and times spent traveling is suggestive that factors external to feeding competition (such as maximizing access to estrus females or maintaining status), especially in higher-ranked males, also are affecting travel behaviors. Further evaluations of these data are underway, and complete analyses of these data are expected to be concluded and submitted in April 2011 as part of my master's thesis. I would like to thank the International Primatological Society for their generous support of this study.

References

Pruetz, J. and Bertolani, P. (2009). Chimpanzee (*Pan troglodytes verus*) behavioral responses to stresses associated with living in a savanna-mosaic environment: Implications for hominin adaptations to open habitats. *PaleoAnthropology* 2009:252-262.

Primate Resources and Links

Websites to Check Out

"1 of 750: The Mountain Gorilla Print Project"
A project that donates limited edition prints to those who give on their website: 1of750.yolasite.com. All proceeds minus shipping costs go to the Mountain Gorilla Veterinary Project.

"Izilwane"
Izilwane is an online magazine that takes an anthropological approach to loss of biodiversity and conservation. Check out: www.izilwane.org.

Funding Opportunities

Nominations Solicited for the Charles Southwick Conservation Education Commitment Award

In honor of Dr. Charles Southwick's longstanding commitment to conservation education, we have developed the Charles Southwick Conservation Education Commitment Award. This award is dedicated to recognizing individuals living in primate habitat countries that have made a significant contribution to formal and informal conservation education in their countries. The amount of the award is $1,000: $750 will be given directly to the recipient and $250 will be given in the recipient's name to a project of their choosing in their community.

We encourage investigators working in primate habitat areas to nominate members of their staff (or of the local community) that they feel have made a significant contribution to conservation education in their study area. Eligible candidates must be residents of the region in which they are working and include education staff, field assistants, graduate students, or other individuals that are directly involved with providing educational programs to the people living around the project area. Candidates do not need to have an advanced degree to be eligible.

Nominators should provide the name, title and full mailing address of their nominee, along with a letter of recommendation stating the nominee's qualifications for the award, focusing on past and potential contributions to conservation education. A copy of the nominee's resume should also be included. Supporting letters from other individuals acquainted with the nominee's work may be submitted as part of the packet.

Deadline for applications is March 1st, 2012. Email applications to: Dr. Elizabeth Lonsdorf at elonsdorf@lpzoo.org.

IPS Conservation Grants

The Conservation Committee of IPS is soliciting applications of up to $1,500 to support the development of primate conservation field programs. The committee expects to distribute up to $10,000.00 per year. The deadline for this award is March 1st, 2012. For guidelines about the application process please see the IPS website or contact Dr. Janette Wallis (janettewallis@sbcglobal.net).

IPS Captive Care Grants

The Captive Care and Breeding Committee of IPS awards grants of up to $1,500 for projects focusing on captive care issues that relate to: (1) the status of primates in captivity (e.g., sanctuaries, private, commercial) in range countries, (2) information from local wildlife officials and field researchers on the problems relating to captive primates, and (3) improving conditions for the well-being of captive primates in range countries. Deadline for applications is March 1st, 2012. For guidelines about the application process please see the IPS website or contact Debby Cox (cox.debby@gmail.com).

IPS Research Grants

The IPS Research Committee awards grants of up to $1,500 to support outstanding primate research proposals. We invite proposals for primate-oriented research projects with a strong theoretical component. These projects can be conducted in the field and/or in captivity. Scientific excellence will be the primary selection criterion. Proposals for projects focusing solely on primate conservation or on the captive care of nonhuman primates will not be considered by the Research Committee and should be directed to the Conservation or Captive Care Committees. Deadline for applications is March 1st, 2012. If you have any questions regarding this funding mechanism, please contact Dr. Joanna Setchell (joanna.setchell@durham.ac.uk).

Lawrence Jacobsen Education Development Grant

The Education Committee of IPS solicits grants of up to $1,500 to support the development of primate conservation education programs as part of the Lawrence Jacobsen Conservation Education Award. These initiatives should support field conservation programs, work with local community and/or schools, or are used to provide training in conservation education techniques. Application information and forms are available on our website. Deadline for submission is March 1st, 2012. If you have any questions regarding this award please contact Dr. Elizabeth Lonsdorf (elonsdorf@lpzoo.org).

Don't overlook the optional CCI (Conservation through Community Involvement) component of the Conservation, Captive Care, Research and Jacobsen applications!

See the IPS website for more details.

Martha J. Galante Award

Grant proposals are solicited from professionals of habitat countries of primates. Money awarded is to be used for conservation training including: transportation to the course or event location, course or event fees, or expenses during the event period. Deadline for applications is March 1st, 2012.

People interested in receiving this award should:

- be officially enrolled in an academic institution or a similar organization (either taking or giving courses or doing research or conservation work)
- provide information about the program of interest (courses, congresses, symposia, field work, etc.)
- send a letter explaining his/her interest in participating in the course or event (in English)
- send a C.V. in English
- include a letter of acceptance for the respective course
- provide two recommendation letters (including information about referee).

Send the completed grant proposal by email to Dr. Janette Wallis (janettewallis@sbcglobal.net).

Upcoming Meetings

Primadaption Workshop Offered by Primate Products
Dates: July 11-14, 2011
Location: Panther Tracts Learning Center, Immokalee, FL
Website: http://www.primateproducts.com

Chimpanzee Care and Management Workshop
Dates: July 12-14, 2011
Location: Kansas City Zoo, Kansas City, MO

Joint Meeting of the International Ethological Conference and the Animal Behavior Society
Dates: July 25-30, 2011
Location: Indiana University, Bloomington, IN
Website: www.indiana.edu/~behav11

45th Congress of the International Society for Applied Ethology
Dates: July 31– August 4, 2011
Location: Hyatt Regency, Indianapolis, IN

10th International Conference on Environmental Enrichment
Dates: August 14-19, 2011
Location: Benson Hotel, Portland, OR
Website: http://bit.ly/icee2011

AAP Summer Course 'Husbandry of Rescued Primates'
Dates: August 21-26, 2011
Location: AAP, Sanctuary for Exotic Animals, Almere, The Netherlands
Website: http://www.aap.nl/english/aap-summer-course.html

IV Congress of the European Federation for Primatolgy/III Iberian Primatological Conference
Dates: September 14-17, 2011
Location: Almada, Portugal
Website: http://apprimatologica.com/Actividades/CEP2011.aspx

34th Meeting of the American Society of Primatologists
Dates: September 16-19, 2011
Location: Austin, TX
Website: http://www.asp.org/asp2011/index.htm

29th Annual Nonhuman Primate Models for AIDS
Dates: October 25-28, 2011
Location: Bell Harbor International Conference Center, Seattle, WA
Website: http://nhp2011.wanprc.org

International Primatological Society XXIV Congress
Dates: August 13-17, 2012
Location: World Trade Center, Veracruz, Mexico
Website: http://www.citrouv.edu.mx/ips2012/

International Primatological Society

RESEARCH CAPTIVE CARE EDUCATION CONSERVATION

Membership Application/Renewal Form 2011

Second Notice

(please type or print legibly or attach your business card)

Name: _____
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Fax: _____
Email: _____
Specify National Primate Society Membership:
(Japanese, Spanish, etc.) _____

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IPS Treasurer
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