UPCOMING DUKE ALUMNI ASSOCIATION EVENTS

(ALL LEMUR FRIENDS WELCOME TO ATTEND, ALUMNI OR NOT!)

BY NIKI BARNETT, EDUCATION AND DEVELOPMENT MANAGER

DISCOVERING THE DUKE LEMUR CENTER – DURHAM, NC

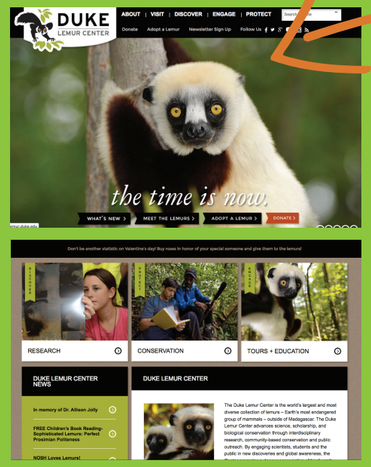
Join Duke alumni, family, and friends (and fellow lemur lovers!) for a weekend at the Duke Lemur Center, learning from Duke experts about their efforts to study and protect some of the world's most endangered mammals. This weekend event will be packed with classroom and field experience covering all aspects of the DLC!

Price: $450 per person
Date: May 16, 2014 - May 18, 2014
To make reservations email Beth Ray-Schroeder at beth@daa.duke.edu
More information at: http://lemur.duke.edu/category/events

MAGICAL MADAGASCAR

Madagascar is one of the highest conservation priorities on the planet due to its high level of endemic flora and fauna species, and the rapid rate at which many of them are unfortunately disappearing. Join us for an adventure to experience the unique plants, animals, and culture on the exotic island of Madagascar – including many, many lemurs. The tour will be led by Duke Lemur Center conservation coordinator Charlie Welch, who lived and worked in Madagascar for 15 years.

Price: $6,999 per person
Date: October 11, 2014 - October 25, 2014
To make reservations: dukealumni.com/reservation-request
More information at: http://lemur.duke.edu/protect/conservation/madagascar-trip-2014/



THE LEMUR CENTER IS PLEASED TO ANNOUNCE A TOTAL REDESIGN OF OUR WEBSITE.

CHECK OUT THE BEAUTIFUL AND ALL NEW LEMUR.DUKE.EDU!

David Haring, Editor & Photographer • Design by Hilliker Designs. This publication was printed using 100% pcw recycled paper, processed chlorine free and with soy ink.

Duke Lemur Center
Duke University
3705 Erwin Road
Durham, NC 27705
3911919-69360O

THE HOUSE THAT PETER BUILT

BY ANNE YODER, DIRECTOR

"Peter Lange, the longest-serving provost in Duke history and the architect of many of the university's signature academic initiatives, will step down next June [2014] at the conclusion of his third term."

So began the article published last August in Duke Today. But unknown to many is the fact that the very existence of today's Duke Lemur Center can be counted as one of the many "signature academic initiatives" shepherded by Peter during his tenure as Duke's Provost. In the late 1990s, the University administration had called into question the Center's value to Duke's research and education missions. There was a general sense that the (then) Duke University Primate Center (DUPC) was unresponsive to research inquiries and therefore not amenable to scientific investigation, and thus, its value to an institution of higher learning was in doubt. At Peter's behest, a detailed internal and external evaluation of the Center's value to the University was instituted. Thanks in large part to interim Director Bill Hylander's vigorous efforts to reignite research activities during this period of evaluation, Peter and other members of the administration were convinced of the value and irreplaceable nature of the Center. It was at this point that Peter made the fateful decision to reinvest in the Center, giving us the opportunity to refocus and rebuild.

In 2006, I began my tenure as the Center's Director, and over the subsequent eight years, the DLC has received the unwavering support of the Provost's office as we have rebuilt, reorganized, and forged ahead. Over this time, the DLC has made a concerted effort to raise its visibility among researchers in diverse fields and, with University support, has expanded its staff to improve operations and meet growing demand. As a tangible result, biomedical and behavioral researchers have been adding analysis of DLC-acquired data to their ongoing work in neurobiology, aging, epigenetics, retroviral and genomic evolution, disease transmission, physiology, cognition, sensory integration, cancer biology and other fields, and at least 34 federally funded research projects have utilized the Center's resources. Results from these and other projects have yielded more than 150 peer-reviewed publications across a broad array of high-impact journals, and presently, the DLC is leading the field in two signature research areas: first, the neurobiology of primate hibernation, and second, the characterization and development of the mouse lemur as model of primate aging. These DLC-led initiatives dovetail perfectly and serendipitously with President Obama's recently announced imperative for mapping the connections of the human brain, now known as the NIH BRAIN initiative. As described in some detail in a recent Science Policy Forum, the technological advances in brain imaging provide the springboard for a new revolution and "the next great American project". Via our collaboration with Duke's Center for In Vivo Microscopy (CIVM), the Duke Institute for Brain Sciences (DIBS), and the Institute for Genome Sciences and Policy (IGSP), the DLC is po-

RETURN OF ELECTED GOVERNMENT IN MADAGASCAR

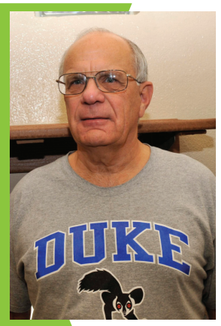
BY CHARLIE WELCH, CONSERVATION COORDINATOR

BLACK & WHITE RUFFED

After almost five years of an unconstitutional transition government in Madagascar, the country now has a democratically elected president. A runoff election was held in December of last year, in which Hery Rajaonarimampianana narrowly defeated Jean-Louis Robinson. The fact that there is now an elected government in place outweighs in importance which candidate or party was elected. Since the announcement of election results, both the African Union and the South African Development Community have reaccepted Madagascar as a member, after years of suspension. And more importantly for the people of Madagascar, foreign aid, which formerly composed an astounding 40% of the national budget, should start flowing into the country once again. During the years of the transition government, with only a very limited amount of foreign aid coming into Madagascar, the number of people living on less that $2 a day spiked from 70% to 90% of the total population. If aid is re-instated, hopefully this trend will reverse.

So, what does this mean for conservation in Madagascar, and specifically for our DLC-SAVA project? Anytime there is government instability, the number of infractions concerning wildlife, forests, and protected areas increases. The last five years were no exception, with severe impacts on the protection of Madagascar's unique flora and fauna island-wide. In the SAVA region, there has been an increase in the illegal cutting of rosewood, and most recently there has even been rosewood cutting in Marojejy National Park, the nucleus of our conservation work. Madagascar National Parks service is presently addressing the wood poaching in the park, and we applaud their efforts to end the illegal exploitation. But it remains to be seen how aggressively the new government will pursue protection of Madagascar's precious biodiversity. We are hopeful. One must always be hopeful in Madagascar.

LEMUR CENTER VOLUNTEER SPOTLIGHT: GEORGE KOLASA



Volunteer role at the DLC? Volunteer tour guide

What do you do for a living? Retired from Duke University after 24 years in financial administration

Length of volunteering at the DLC? 5 ½ years volunteering as a tour guide

Why do you volunteer at the DLC? My campus tour for new departmental staff ended at the Lemur Center. The extent of my lemur knowledge then was: "Will you look at that, lemurs!" After retiring from Duke, I decided to increase my knowledge of lemurs. Becoming a tour guide necessitated learning more about them-both facts and interesting stories. Imparting that lemur information as a tour guide to visitors to the DLC has been very enjoyable and fun, and I particularly enjoy talking about the blue eyed black lemurs. How could one go wrong talking about Presley, Redford, Margaret, Olivier, Hopkins, West, Belushi and Akroyd? Visitors are simply amazed at the celebrities found at the Center!

SUMMER CAMPS!

BY NIKI BARNETT, EDUCATION PROGRAMS MANAGER

LEAPING LEMURS! SUMMER SCIENCE CAMP

Rising 6th-8th grade, Co-ed
Session 1: July 7-11, 2014 9-4pm
Session 2: August 4-8, 2014 9-4pm
Cost: $310/per session
Registration begins: 2/1/14
***More details at lemur.duke.edu**

The Duke Lemur Center is proud to announce that the Leaping Lemurs! Summer Science camp will be returning in summer 2014. Last year both sessions sold out, and we have a feeling they will do so again this year (especially given the release of the IMAX film, Island of Lemurs!). This summer's camp will have some programmatic changes for those that attended last year, but most importantly will now be held from 9-4pm versus 9-3pm. We hope that your child will join us this summer to learn about the world's most endangered group of mammals and how they can help save them!

BRIGHT HORSE SUMMER ART AND WRITING CAMP

K-5th grade
Session 1: July 14, 2014
(1/2 or full day options)
9-12:30 ART
12:30-4:00 WRITING
Cost: $165 per half day camp
(Early bird discounts)
Registration begins: NOW!

The Duke Lemur Center is happy to announce a new lemur-themed art and writing camp being held here at the DLC in conjunction with Bright Horse Art, Inc. To register for this camp please contact Kim Murdock at 919-401-6001 or kmurdock@thebrighthorse.com. More details about this camp and others at www.brighthorseartinc.com.

LEMUR CENTER VOLUNTEER SPOTLIGHT: JODY HARPER

Volunteer role at the DLC? I am a Technician Assistant, and work mainly with the lemurs in Miaro and Aty Ala. Sometimes I work in the aye-aye cores. Lately, I have been doing some animal observations which I enjoy. I do a lot of cleaning of the animal areas.

What do you do for a living? I am presently not employed, but that gives me more time to work at DLC.

Length of volunteering at the DLC? About 3 years

Why do you volunteer at the DLC? I volunteer because I love working with animals. I have worked in four different zoos in my life, so it's been my main career. I was excited to find the DLC so I could get back to working with animals again.

Favorite species? Sifaka

BOTH PHOTOS FROM ANJAJAVY (OPTIONAL EXTENSION FOR 2014 DUKE ALUMNI MAGICAL MADAGASCAR TOUR)

COQUEREL'S SIFAKA

sitioned as a uniquely powerful and irreplaceable resource for the biomedical and basic research communities, now, and for years to come.

Our education mission has been similarly successful, with more than 55 undergraduates and at least 50 graduate students having completed independent research projects since 2010 alone. The research conducted by our wide scope of principal investigators has also provided educational opportunities. During the same period from 2010 to the present, there have been 91 student research assistantships (RAs) assisting our faculty investigators with their research projects. And in addition to formal undergraduate course activities, we have initiated a Technician Assistant (TA) program to give students and the general public an opportunity to volunteer their time and become involved in the husbandry and care of lemurs. In the nearly five years since the program was founded, the TA program has trained more than 100 students! As the program continues to grow, plans exist to develop more opportunities for TAs to assist researchers with their projects. These research opportunities will not only provide excellent learning opportunities for the students, but also reduce the burden on our research staff.

On-the-ground conservation projects in Madagascar have also rebounded over the past several years via the efforts of the DLC. Although only in its third year, the DLC SAVA Conservation Initiative is already making great strides in Madagascar. The DLC's engagement in Madagascar takes into consideration not only the biological value of lemurs specifically, but also their place in the entire Malagasy ecosystem. The challenges to that ecosystem are many, and include rapid deforestation, changes in land use due to agricultural pressures, and the political and economic developments that will shape Madagascar's future. Building upon the partnerships that have been fostered in Madagascar over the past several decades, the DLC works closely with our Malagasy partners in the sciences to advance our understanding of Madagascar's biodiversity, which in turn informs our activities for community outreach and forest protection. In summary, the SAVA Initiative has become one of the signature programs at the DLC, and one that Duke can be enormously proud of. In the event that you haven't already seen the superb coverage of the project prepared by Karl Bates of Duke's News and Communications, I encourage you to have a look: http://research.duke.edu/stories/saving-madagascar-one-parcel-time

So, I conclude by extending many thanks to Peter for his wisdom and his courage in making what was surely a complicated decision, nearly a decade ago. He recognized the potential and the ineffable qualities of our unique resource, and through his and Vice Provost for Research Jim's Siedow's unwavering support, the DLC has emerged, better than ever. As I concluded in my recent (and sadly, last) budget letter to Peter, he and the DLC have "traveled light years together". I know that he wishes us well as we continue our journey --- as we do him, most heartily.

Anna D. Yoder
PhD, Director

MY TRIP TO MADAGASCAR

BY BRITT KEITH, PRIMATE TECHNICIAN SUPERVISOR

In November, I had the opportunity to visit Madagascar for nearly three weeks. Carrying only a medium-sized backpack crammed with everything I would need, I boarded the plane at RDU, gritting my teeth in anticipation of the next 22 hours which would pass before we touched down in Antananarivo. My trip was divided into three parts: the first week was spent touring the DLC's conservation program in the SAVA region, including a four-day hike into the heart of the gorgeous Marojejy National Park; then it was on to Tamatave and nearby lovely Zoo Ivoloina, site of a conference (and 25th anniversary celebration) of the Madagascar Fauna and Flora Group (MFG). Finally I was able to spend four days visiting the Betampona Reserve, 24 miles northwest of Tamatave, which is the site of the DLC/ MFG sponsored introduction of captive bred black and white ruffed lemurs back to the wild in 1997-2001.

The road out to Ivoloina was part paved, part roller coaster dirt road of tremendous hilly proportions, where no regular car could cope. It was not fun arriving in the dark. The mosquitoes were thick, and I got lost trying to find my dormitory. That was a little scary. Finally, I settled down in my room, using a candle as I was afraid of exhausting the batteries in my headlamp- I needed it for viewing nocturnal wildlife! The next morning I awoke to the sight of white-fronted lemurs right outside gorging on ripe lychees. They spent hours there, and seeing a female with a baby was an extra treat. After a somewhat shaky nocturnal start to my zoo visit, all was indeed well with the world!

A day or so later when the MFG meeting was in full swing, a statue of a ruffed lemur was unveiled with much pomp, circumstance and speeches. There must have been 150 people in attendance! The sacrificed zebu (an essential part of any Malagasy celebration) was placed in pieces in little bags and distributed as a gift to everyone who attended. Our lunch plates were made from banana leaves and they made a special portion of rice, omelets and cooked vegetables for us vegetarians. There were also bottles of coke and orange soda, go figure.

ANDREA KATZ AND BRITT KEITH

There was very little English spoken around Ivoloina, so my English/French dictionary got alot of use, and I got lots of practice speaking. George, head keeper at the zoo, gave me a behind the scenes tour, showing me all of the animal exhibits, kitchen and medical space. As expected, most of the facilities were rather primitive compared to the DLC's much more sophisticated equipment. More than 100 animals live at Ivoloina, not including the free ranging ruffed lemurs and white fronted lemurs. Many of these animals were confiscated from the illegal pet trade. The piles of lychee seeds on the zoo paths provided evidence of recent visits from the free-rangers, and conference attendees could on occasion hear the distant calls of lemurs from surrounding forests.

After five zoo-filled days, it was time to say farewell to Ivoloina, and all were up at 5am to finalize packing for the trip to Betampona, a protected forest supported by Madagascar National Parks and the MFG. After a simple breakfast, during which time only a single white-fronted lemur female came down to investigate me (wonder why she was alone?), we were on the road by 7:15 am.

The trip from Ivoloina to the Betampona Reserve is not for the weak of heart (or stomach!) and consists of three parts. First, an hour or so in a jeep over the worst road I had encountered since my time in Uganda. Next came a quick

BEHIND THE SCENES: IMAX FILMING AT THE LEMUR CENTER

BY MEG DYE, ANIMAL BEHAVIORAL COORDINATOR

Lemur lovers and denizens of the Duke Lemur Center are nearly delirious in anticipation of the upcoming premiere (April 4th) of the IMAX film "Island of Lemurs: Madagascar". If you have not seen the trailer to what is surely the most visually stunning film on Madagascar and lemurs ever made, you must visit the IMAX website immediately (http://islandoflemurs.imax.com/) and check it out! The whole week surrounding the release will be a celebration around the Raleigh/Durham area of all things lemur. Look for details on Lemur Week (3/30-4/5) events via our social media channels, http://lemur.duke.edu/engage/imax/ and our e-letter.

If you have watched the movie trailer, you will know that one of the first scenes depicts a family of fat-tailed dwarf lemurs living in a hollow log which is floating in a mass of vegetation recently swept out to sea. The family of fat-tails is serving as representatives of the ancestral lemur which (perhaps) rafted from Africa (where primates were abundant) to Madagascar (where primates were absent) millions of years ago. The fat-tailed lemur scenes were shot entirely at the Lemur Center (minus the sea and whale, which was added in the studio later).

Prior to filming we worked with the IMAX producers to identify what behaviors would be needed from the lemurs. To create the scene we would have to train the animals to move comfortably about a hollow log, into which a top opening had been cut to allow camera access. Six weeks before filming, Primate Technicians Fallon Owens and Mack DesChamps initiated daily training sessions with the group. Sessions were generally conducted 30 minutes after the room lights went off, and the animals had begun their nocturnal activity. The technicians had a series of goals for training which included teaching the lemurs to come and station at a set location, and then to follow the point of a trainer's finger; not an easy task when working in the dark with five curious lemurs scurrying on branches in all directions!

FAT TAILED DWARF

PAY ATTENTION TO THE BEGINNING OF THE MOVIE TO SEE YOUR FAVORITE DUKE LEMUR CENTER STARS!

Before we knew it filming day arrived. The log was now cradled at just the right height and angle for the 3D camera to catch the lemurs in action. A crew member was stationed to the side ready to move a light up and down to simulate the movement of the waves. Fallon placed one of the youngest lemurs, Raven, at the bottom of the log and cued her to come to the opposite end. With our breath held Raven quickly moved up the log in the direction of Fallon's finger. She moved through the cutout section of the log and into the white light and began to s..l..o..w down. The IMAX Director instructed the white lights to be turned off, and Fallon placed Raven back in the dark at the bottom of the log. Once Raven was ready we tried again. This time Fallon had some delicious worms waiting on the far end. The same sequence of events happened… but the worms were just motivating enough for Raven to persevere through the white light and continue all the way to the end of the log! Mission accomplished! As the Director stated once we were done "There is a reason you don't see fat tailed dwarf lemurs in action movies!"

DIVISION OF FOSSIL PRIMATES NEWS

BY GREGG GUNNELL, DIRECTOR DFP

CATHERINE RIDDLE, STAFF SPECIALIST, AND GREGG GUNNELL, DIRECTOR, DIVISION OF FOSSIL PRIMATES, IN FRONT OF THE NEW VIKING STEEL SPECIMEN CABINETS IN DFP'S CLIMATE CONTROLLED ROOM.

So what happens at the Division of Fossil Primates during the winter? It is not possible to conduct paleontological fieldwork in North America during these months (I actually tried working in Wyoming in November once – BIG mistake) so we are staying close to home and taking advantage of this time to initiate several facility upgrades and research projects.

Thanks to the support of Duke's Office of the Vice Provost for Research we are making some long-needed improvements to our building and research infrastructure. A new security and fire detection system has recently been installed. This system also features temperature and humidity detectors for our climate controlled collection room. Some of the fossil specimens housed at DFP are very sensitive to changes in temperature and humidity – thanks to our new detection system we are able to monitor and track changes in these factors much more closely. We will soon install a new air compressor and forced air lines that will be routed to our new air scribe preparation room – this will allow for much more efficient preparation of fossil material than we have had in the past. In addition, new dehumidifiers recently have been installed in our climate controlled room.

In terms of research infrastructure the main addition to DFP is a high-end graphics work station that is allowing us to download and manipulate Micro Ct-scan data of fossil specimens. This permits studying internal structures of fossils without physically damaging them. We are also able to produce 3D digital images of specimens – this is a huge advantage over old, flat 2D imaging techniques and allows much greater detailed study of morphology. In conjunction with Evolutionary Anthropology's MorphoSource website (http://morphosource.org/), many of our fossil specimens are available for download as 3D rendered images. These are extremely useful for teaching and research and many more will be made available in the future as our digital library of DFP specimens expands.

We are also conducting research and reorganizing collections with the help of several Duke Work-Study students. Isabelle Clark is measuring fossil mammal teeth from South Pass in Wyoming for a long-overdue project that will be the definitive work on this important late early Eocene fossil assemblage. Colm Humphreys and Johnny Lok are moving collections and updating our specimen database in preparation for the installation of the new forced air system. Nicole Rice-Clewell is making fossil casts for exchange with other institutions as part of our on-going work to keep our cast collections of specimens from other institutions as up-to-date as possible.

DFP is also hosting an Osher Lifelong Learning Institute (OLLI) class this semester. The class, Primate and Human Evolution: Origination & Extinction is being taught by Director Gregg Gunnell and Dr. Doug Boyer from the Evolutionary Anthropology Department. The class has twelve students and has generated a lot of interesting discussion so far.

Even though, as most paleontologists, we'd rather be in the field finding fossils, the activities of DFP over the winter are fulfilling and important. Finding fossils is the first step – preparing, properly storing, and studying them makes the finding worthwhile.

NORTHERN BAMBOO LEMUR

canoe ride (lasting all of 45 seconds) across the Ivoloina River. It has been at least a decade since the bridge over this river was washed away in a cyclone. Now, once travelers who want to visit Betampona are across the river, there are two choices: walk the final six miles to the reserve entrance, or hire one of the scarce, barely operational vehicles, for the bone jarring ride of your life. We opted for the latter, and I must say, our taxi was quite a piece of work. A sort of a minibus which, at some point had fallen apart, and then, not quite correctly, been patched back together. Wires were everywhere due to the complete absence of a dashboard, and the engine was under my seat so my butt was on fire. There were no doors in the back, two guys hanging off the side, and apparently two chickens tied to the roof, which we discovered after we finally got out at the end of the 45- minute ride. The final leg was the hike that took about 90 minutes, in which we crossed the Fontsimavo River ten times. This was lovely as it cooled my feet, which in turn cooled me. Man it was hot, and I am talking midsummer Florida hot! The last 25 minutes or so were very steep but I had no trouble keeping up with our guide. Thank goodness for all of the running that I do back in NC.

Our destination, the tiny village of Rendrirendry at the base of the mountain, is truly lovely, with grass, flowering plants and pretty little thatch cabins for researchers to stay in. We had lunch, and then I took a bucket shower on the same concrete pads that provided the cage flooring for the ruffed lemurs that were brought to Madagascar from the DLC in three separate importations starting in 1997. After a few days of habituation in cages here, the ruffeds were carried into the forest in kennels and released to the wild. How about that for some history? And surrounding us were tree after tree after tree, which our very own Charlie Welch had planted from seeds years ago. Now they were towering over my head, pretty incredible! (Editor's note: Britt barely measures five feet, so this should not be misconstrued as a comment on Charlie's age, only his horticultural skills!).

After a sleepless night, due to the presence in my room of various uninvited rodent creatures from the surrounding forest rifling through my possessions, I was alerted at 4:30 am by what sounded like a pod of whales calling in the forest. Indri! It was beautiful and eerie all at the same time. Later in the forest we saw two groups, each had an infant which were both climbing and jumping off and onto their moms. We also saw a group of four diademed sifaka very close to us. Three males seemed to be trying to court a single female but she wasn't having any of it. Typical female lemur! We spent about an hour with the two groups. We also spotted large groups of white-fronted lemurs feeding, the males with those spectacular white ruffs around their faces, the females with babies.

That night, exhausted from the hike, I lay in bed under my mosquito net, my bags, clothes and boots safely stashed high above the ground outside, and a protective candle burning brightly, hopeful this would keep unwelcome rodent visitors at bay. Fat chance, but there was a gecko eating roaches on the ceiling, and I took that to be a good sign. What a wild place this is I thought, and I had a strong appreciation that I, as a lowly visitor, should not disturb any of the wildlife, even those visiting my living quarters uninvited!

The DLC has a new commitment to regularly send one of our technicians (and other eligible staff) to the island of Madagascar! As you can imagine, connecting DLC staff to wild lemurs and habitats in Madagascar is an exceptional opportunity for their professional development. If you would like to help make this trip of a lifetime a reality, please consider an unrestricted donation to the Lemur Center. To donate directly go to lemur.duke.edu, click donate or send a check directly to the DLC. Thank you!

REMEMBERING FOSTER

BY DAVID HARING, REGISTRAR/PHOTOGRAPHER

The Duke Lemur Center (DLC) community was shocked to hear right before Christmas the news that Foster, one of the DLC's lemur Queens, was dead at the age of 17.5 years. During much of her reign, Foster had been the only breeding blue-eyed black lemur (Eulemur macaco flavifrons) in the entire North American captive population, leading the SSP coordinator for her species to say "Foster's ability to get pregnant and have kids may have singlehandedly turned around the flavifrons population for North America, the fact that she's left behind so many descendants is a great accomplishment for one lemur."

Foster was born into the largest group (two males and four females) of blue-eyed lemurs ever to free range at the DLC. Blue eyed lemurs, especially females, are notorious for their inability to play well with other lemur species, and this group dominated all free rangers in the original NHE 6 for years. Foster's dam, Garbo, had been wild caught in Madagascar during the summer of 1990, and Foster learned well from her how to be a dominant female. In June 1998, Garbo, with Foster playing a key role as second in command, successfully ejected rival females Lange and Thurman from the group.

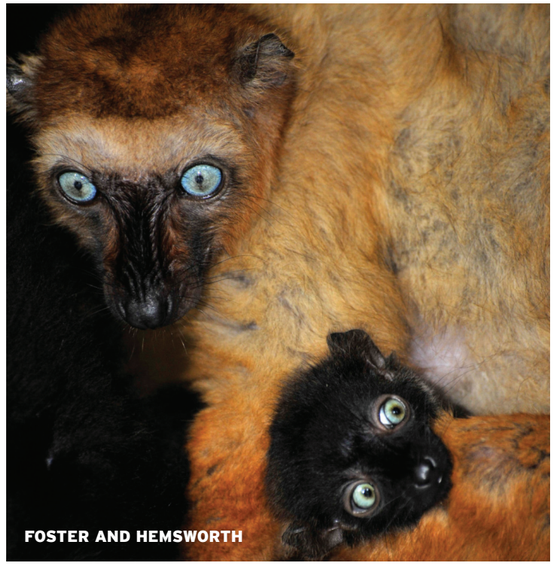
After the death of Garbo, Foster took up the reins of leadership, and with her submissive mate Bogart at her side (or more likely, following five feet behind her) became the boss of NHE 6. Bogart died in March, 2005, and Foster was then introduced to Olivier, with whom she produced seven infants. Finally, she settled down for her final years with Hopkins who proved to be a suitably loyal, submissive, and dedicated mate, and who sired Foster's last infant, Hemsworth. For days after the death of Foster, Hopkins searched relentlessly throughout the cages the group had occupied in Ata Aly, all the while pitifully making lost calls.

Foster's mothering career definitely had its ups and downs, and was painfully slow to start. Her first infant (a stillborn male) arrived in 2001, and of the six infants which followed in consecutive years, none survive today (although two females born during this period, Witherspoon and Alley, each lived over a year, but met tragic early deaths).

Then in March 2009, Foster hit her breeding stride, and for two consecutive years produced healthy sets of twins (the Blues brothers; Akroyd and Belushi, born in 2009, followed by Presley and Margret in 2010). True to her reputation as a lemur Queen most temperamental, Foster proved to be a high strung and easily stressed mom. Raising twins apparently was more than she could tolerate, and she rejected all four infants before they were weaned (the Blues brothers were given the boot at nine weeks, and Margret/Presley followed the next year at just five weeks of age). Veterinary and technician staff were able to supplement both sets of twins till they could eat solid food on their own, and they are healthy young adults today.

All breathed a sigh of relief in Spring of 2011 and 2013 when Foster gave birth to singletons (West was born in 2011 and Hemsworth in 2013). Either Foster had mellowed with age, or single infants were easier to deal with, and Foster proved to be a perfect mom with these two, which sadly proved to be her last infants. All this was made ever sadder when it was discovered after her death that she was once again pregnant with a single fetus.

During the course of her reign in NHE 6, and later after the construction of Aty Ala in NHE 9, Foster bullied any group of lemurs that she happened to share space with, including Pyxis' red ruffed group, Sprite's ring-tailed group and Drusilla's sifaka group. Although never actually inflicting injury on any other animal, Foster would throw her weight around by chasing any lemur foolish enough to cross her path. In her later years chasing became



FOSTER AND HEMSWORTH

unnecessary, apparently based solely on her reputation. It never failed to amaze and amuse anyone who watched Foster casually crossing the bridge from the building to the forest as a dozen ring-tailed lemurs and Coquerel's sifaka (some weighing significantly more than Foster) fled in terror from her mere approach, with Foster never even glancing in their direction.

Although our lemurs, especially ones fortunate enough to have access to free ranging NHEs, are treated much like royalty, they are still captive and subject to having food and shelter delivered by human caretakers on our schedule. But, as anyone who works here will tell you, we seem to most admire and enjoy those animals who rattle their cages a bit, and don't precisely toe the SOP line that we have drawn. Rebellious lemurs who refuse to get along perfectly with their fellow free rangers (without actually inflicting injuries), who show up for feeding on their own schedule (because at feeding time they were foraging on delicious wild grapes), and who have the audacity to raid other species' feeding sites, all the while flicking their tongues in disdain towards us humans, all seem to gain universal admiration. Foster was definitely one of those animals. She was much loved, and much cursed, and was every inch the Lemur Queen. Her absence in NHE 9 will be palpable for years.

MAKE A GIFT THAT WILL SUPPORT THE CENTER FOR YEARS TO COME

BY NIKI BARNETT, EDUCATION AND DEVELOPMENT MANAGER

As you consider ways of giving, you may wish to make a planned gift that will help support the Lemur Center, as well as provide you with important benefits. Planned giving can be directed towards a specific department or project at the Center, or it can take the form of an unrestricted gift supporting the Center as a whole. Planned giving can be as simple as including the Lemur Center in your will or as a beneficiary of your IRA. There are also life income gifts that can support the Center while providing a payment to you for life.

If you are interested in giving a planned gift that will benefit the Lemur Center, please contact Anne Morrison Bradley at 919-613-5224 or ann.bradley@dev.duke.edu or Niki Barnett at niki.barnett@duke.edu.