painting with lemurs
By Niki Barnett, DLC Education Coordinator

Tour duration: 60-90 minutes
Maximum participants: 2
Age Requirement: 10 and above
Offered: year-round (afternoons)
Cost: $95 per person

Description: Lemur Van Gogh? No, but close. We at the DLC consider it abstract art! Experience the Lemur Center through a different medium. Join us on this exclusive tour and learn more about the Duke Lemur Center’s behavioral enrichment program. This tour will not only take you behind the scenes into one of our new lemur housing areas, but also highlight some of the activities the staff here at the Center can do to improve the daily lives of our lemurs. Painting is an activity the lemurs enjoy, and something different added to their normal routine. Participants on this tour will get to choose up to three different colors of paint (all non-toxic, water based tempura) and observe the lemurs making their masterpiece first hand! The best part of the whole experience is that you get to take the lemur masterpiece home with you!

Opportunity to see lemurs in their native land!
By Charlie Welch, Conservation Coordinator

Here is your chance to see lemurs in the genuine wilds of Madagascar! Duke Alumni Travel is sponsoring a tour of Madagascar in October of 2012, led by DLC’s conservation coordinator, Charlie Welch. Experience the exotic plants and animals of both rain forest and dry forest sites, and scenic rural countryside of a bygone era. You will also spend a relaxing day at Parc Ivoloina, a conservation center which DLC has been involved in since its inception. A truly unique opportunity! Check out Duke Alumni Travel’s on-line site for more detailed information about the exciting tour.

For Alumni Travel: http://www.dukealumni.com/learn-travel/wildlife-madagascar

TOURS

research • conservation • education
spring 2012

lemur.duke.edu

remembering romeo
living in madagascar
painting with lemurs

in this issue
We are very happy to announce:

Charlie Welch, the Lemur Center’s Conservation Coordinator, has been nominated for the distinguished Indianapolis Prize, the world’s premier award for animal conservation, given every other year to an individual who has made extraordinary contributions to conservation efforts involving a single animal species or multiple species! The award consists of an unrestricted cash prize of $100,000 and the prestigious Lilly Medal, an original work of art. Needless to say, Charlie was nominated for his tireless 25 years of work in Madagascar both at the captive conservation center Parc Ivoloina and at the Betampona Natural Reserve. When asked what he would do with his prize winnings, Charlie said that he would, (no surprise here!) invest the money in our conservation efforts. Gaining support for Madagascar, targeting it towards the Lemur Center’s conservation initiative in the SAVA region in the northeastern part of the country. Most likely the funds would be used to build and support a center for environmental education in the town of Sambava. Charlie is one of only 29 conservationists worldwide to receive a nomination; by this spring the nomination form will whittle the field down to six, with the announcement of the winner sometime this summer. Everyone at the Center wishes Charlie the best of luck in making it to the next round!

BRANDON SEMEL, DUKES JUNIOR MAJORING IN EVOLUTIONARY ANTHROPOLOGY AND ENVIRONMENTAL SCIENCE

Brandon Semel is a Duke Junior majoring in Evolutionary Anthropology and Environmental Science. He has been a work study student at the Lemur Center for nearly three years. He just returned Spring Semester from five months in Madagascar, and already has plans to return this summer. Life in rural villages is simple, monotonous, and in constant struggle for survival. That much was made clear to me by the meager bags of corn provided by the Madagascan Food Program that sat in the corner of my host dad’s small, dark hut. A hailstorm had destroyed the previous season of crops, further straining the already limited resources. It is no wonder that not a single tree exists on the gently rolling hillsides in the Androy region of southern Madagascar. The few that have not been cut down for charcoal or construction grow nearly parallel to the ground, crippled by the constant howl of wind from the Southern Ocean. Yet the contiguous levels of happiness and excitement exuding from my host family would sweep away these harsh realities every night as we would come together to perform the traditional Tandroy songs and dances.

Living in Madagascar and unraveling the mysteries of its biodiversity have always been dreams of mine, but not until weeks after living in some of Madagascar’s remote southern regions, far from the well-worn tourist track, has it come to hit me just how second- ary these issues are to a far more pressing concern: the Malagasy people themselves. Seeing cute baby lemurs at the Lemur Center every week and thinking how great it will be to one day see their progeny returned to the wild, it becomes easy to forget that the Center’s most important role does not lie with complex ideas of research or conservation.

Like the Tandroy lifestyle, simplicity is everything. In Madagas- gar, the average adult has completed less than five years of school. Education inspires new ideas. Without innovation it is impossible for the Malagasy to find local solutions to their food crises, and impossible for conservationists to find solutions to the devastating endemic that is slowly robbing the Malagasy of their once extensive forest resources. Seeking simply to educate ourselves and those around us regarding the impact we have on our environment allows us to reach across cultures and continents to make the world a better place both now and well into the future.

NICKOLAS SCHOOL

By Charlie Welch, Conservation Coordinator

We at Duke are fortunate to have one of the world’s premier schools for environmental science and policy – the Nicholas School of the Environment. Dean Bill Chameides best explains the school’s mission: “We engage with scientists, governments, industry leaders, conservation practitioners and communities throughout the world to address critical issues like climate change, energy, water quality, ecosystem management and conservation, and human and environmental health… We strive to produce a new breed of environmental leaders.”

We at Duke know that through a team of four Nicholas School students have chosen to collaborate with us for their Masters Project (MP). Each student in the program is required to complete a MP for a real world client. Students in the Nicholas School have chosen to study the teacher training programs in Madagascar that we have been involved with for years - first through the Madagascar Fauna Group (MFG) at Parc Ivoloina, and now in our own SAVA conservation initiative. The way to know if techniques to achieve conservation goals are working and are having an impact is to periodically evaluate them. As the teacher trainings have been adapted by the MFG, evolving over more than a decade, there is a need to both describe the current methods, and to take a critical look at what they are accomplishing. The students, Gina Angiolillo, Nicole West, Noelle Wyman, and Sanjyot Sangodkar, had hoped to travel to Madagascar to observe training in person but funding did not materialize. They are now using questionnaires, phone and skype interviews to bridge the distance to Madagascar. We are hopeful that once finished, their Masters Project will not only give us a comprehensive description of the training that can be referenced and applied by other conservation projects, but also give us an objective evaluation of the impact of the teacher training program.
make sure the heaters were running properly, and they would occasionally have to help thaw out propane tanks when the temperatures got too low to keep fuel flowing to the furnaces. But thankfully, all that ended in 2010 when Duke University invested more than 10 million dollars to build two new animal housing buildings that are home to more than half of the Center’s lemur colony. These new buildings have state-of-the-art heating systems that are designed to keep the lemurs warm 24 hours a day, seven days a week. The heating units are equipped with sensors and advanced communication systems to alert a network of specialists when something stops working or gets out of sync, regardless of the time of day.

All winter long, Duke’s heating technicians fine-tune and tweak the settings of both of these new buildings to make sure the lemurs stay warm and heating systems are operating efficiently. The new buildings also feature a back-up heating supply, so that in the event one of the main systems stops working another system takes over heating the animal areas until repairs can be made. In addition to being warm, the new buildings also provide the animals with exposure to sunlight all winter long as well as access to the outdoors via spacious connected outdoor yards anytime the temperature reaches forty-one degrees or higher.

If you are interested in getting a closer look at the Lemur Center as it is, it’s always a great season to be a lemur at the DLC! One of the many fascinating things about the Duke Lemur Center (DLC) is how it changes with the seasons. With each season the focus and responsibilities for the staff change as does the physical appearance of the Center itself. For example, during the winter, the Center’s focus shifts from the animals being in the forest and outdoor enclosures to keeping them warm in their winter housing. Since all lemurs come from the subtropical island of Madagascar, they are not accustomed to the extreme cold temperatures, snow and/or ice that can accompany North Carolina winters.

Years ago keeping the lemurs warm was a major effort because of their make-shift winter housing. It used to be that starting in mid-October, plastic tarps would cover the animals’ outdoor enclosures which were heated with large furnaces. Technicians would rotate shifts and come in after hours to make sure the heaters were running properly, and they would occasionally have to help thaw out propane tanks when the temperatures got too low to keep fuel flowing to the furnaces. But thankfully, all that ended in 2010 when Duke University invested more than 10 million dollars to build two new animal housing buildings that are home to more than half of the Center’s lemur colony. These new buildings have state-of-the-art heating systems that are designed to keep the lemurs warm 24 hours a day, seven days a week. The heating units are equipped with sensors and advanced communication systems to alert a network of specialists when something stops working or gets out of sync, regardless of the time of day.

All winter long, Duke’s heating technicians fine-tune and tweak the settings of both of these new buildings to make sure the lemurs stay warm and heating systems are operating efficiently. The new buildings also feature a back-up heating supply, so that in the event one of the main systems stops working another system takes over heating the animal areas until repairs can be made. In addition to being warm, the new buildings also provide the animals with exposure to sunlight all winter long as well as access to the outdoors via spacious connected outdoor yards anytime the temperature reaches forty-one degrees or higher.

If you are interested in getting a closer look at the interior of these amazing new buildings, the Center offers behind the scenes tours during the winter, so you can stay warm while you’re looking at and learning about lemurs (call 919.491.7240 to schedule your tour). As winter comes to a close, we will soon be turning our sights to spring, which means more changes and a different look and feel to the Center. But no research stops! Students will be delighted to know that, if you like putting in the effort, it’s always a great season to be a lemur at the DLC!
Surely readers of this newsletter have by now heard the sad news of the death of our beloved Romeo the 21st of January. At his death, Romeo was the only diademed sifaka (Propithecus diadema) in captivity in the world (outside of one animal that we know of in a hotel’s park in Madagascar). He arrived at the Center in October of 1993 when he was about six months old, with his mother, Titania and an unrelated adult male, Oberon. Less than six months after their arrival, Romeo’s mom had died, unable to adjust to a captive diet. Then, a few months later, the male died leaving Romeo alone, the only diademed sifaka in captivity anywhere. No one could have imagined at that point that he would continue to hold the dubious distinction of “only captive diademed sifaka” for nearly twenty years!

It was certainly never our intention that Romeo spend the rest of his life as the sole captive representative of his species; in fact, in the 1990s a couple of expeditions were sent to Madagascar under the leadership of Ken Glander with the mission of finding Romeo a “Juliet”. But both attempts failed to deliver a Juliet into Romeo’s waiting arms and willing toothcomb. The first expedition came back empty-handed because the team was unable to locate any population of this species in unprotected forest. But the second expedition fared much better, an unprotected population of diademed sifaka was discovered, and a potential Juliet was captured. However, when she was examined more closely in the bright light of captivity, her appearance was so startlingly different from Romeo’s that scientists thought that they, in fact, might have located a different subspecies or even a new species of sifaka! At this point, one can only imagine poor young Romeo’s reaction had he been aware of the situation. Did the care if it could have been the number of sifaka, bring her to me, and we will make a go of it!”

Alas, poor Romeo, it was not to be. But although no Juliet ever arrived to grace Romeo’s threshold, he did enjoy companionship from several sifakas for a significant part of his lifetime at the Lemur Center. He was introduced to a young Coquerel’s sifaka female, Drusilla in 1994, and the two got along splendidly (not to worry lemur purists, Drusilla was a sub-adult at this point in time, and had she continued to live with Romeo she would have been put on the lemur version of the pill). To lose Titus, the Coquerel’s sifaka male, that same year, was a blow that Romeo could not tolerate, and he regressed in behavior and health prompting concern that he would not recover. He was again stressed following the loss of a third sifaka, bring her to me, and we will make a go of it!”

Titus and Romeo continued to live in harmony for another 5.5 years until they started fighting in January 2002, at which point, sadly, they had to be split up, thus condemning both males to a prolonged period of bachelorhood. Romeo lived alone for another six and a half years, until, well into middle age, he was introduced to another lovely young Coquerel’s sifaka female, Matilda (she had just been kicked out of her group) in July 2009. Romeo the old man, and the graceful Matilda lived happily and compatibly for about a year (definitely different tastes in music!), although in deference to Romeo’s advanced geezer ways and worsening gut problems, they had to be separated for all meals. If not, Matilda might have in, dominant female sifaka fashion, chased Romeo around the dinner table, and wound up with all the choice food items. Alas, a young Coquerel’s sifaka male, Lucius, became available (also kicked out of his family group) and at the urging of the Coquerel’s sifaka SSP the young male “stole” Romeo’s Matilda from him. Romeo remained alone for the rest of his life. But do not weep for Romeo! It is safe to say that at this point, he was probably glad to be living by himself since each and every day he entertained a pretty remarkable string of visitors, whether technicians or guests, came forward with the idea that they were providing enrichment for the old boy. But we all know the truth: Romeo was providing us with first class enrichment, as only the scratching of one of the sweetest members of the lemur species can do for the planet.

Whenever I write one of these articles about the death of one of the Lemur Center’s great old animals, I list their “accomplishments”. For captive endangered lemurs, this usually involves the number of offspring produced, the number of grandchildren, etc. surviving. Or perhaps the number of research projects the animal was involved in. In this regard Romeo did not have many “companionable” projects, he had no chance to breed, and he was used very little in research projects, given the fact that due to his uniqueness he represented a sample size of one. But most of us are lucky enough in our lifetime to have known one special person, be it a beloved relative or a dear friend. We think so much about that single person that in my 30 years here, I have grown perhaps a bit lemur-centric. I have seen some pretty awesome lemurs die, and not one of them received a sympathy card. Only Romeo in his passing elicited such an outpouring of grief in the lemur and human community, inspiring such words as those which follow (garnered from newspaper headlines, obits and quotes of lemur center staff), which I think pretty much sum up how all who knew him felt about this wonderful animal.

“Lemur Center legend Romeo dies at 19” “Romeo, the sweetheart of the Duke Lemur Center is dead” “He was a beautiful and graceful animal who reminded us of our close connection to other primates whenever we met his eyes. We will miss these exchanges with him terribly.” “Romeo was an exquisitely beautiful creature, and was gentle and responsive to his caretakers. If someone told him he was to be enchanted by him, and for those who cared for him day in and day out, he was a vivid presence. He was also a symbol of hope and optimism.”

RESEARCH

girls rule! By Mel Norris

Who’s the boss at your house? I’ll wait while you have a lively discussion with your housemates/siblings/parents/children/significant other...

Serious though, in most mammal species, the dominant sex is the male. However, among lemur species, it is common for females to be dominant. Duke E-Vanth graduate student Joe Petty is interested in whether female dominance is associated with hormones such as estrogen and testosterone, and if so, how. Are the females dominant over males, or are the males deferential to the females, and is either state associated with an elevated level of hormones in one or the other sex?

To gain insight into this question, Joe is recording the interactions between Margret and Tatantico, blue-eyed black lemurs (Eulemur macaco flavifrons), a species listed as critically endangered in the wild. Two of those species, Red-fronted and Collared Brown lemurs, do not show female dominance over males, and Joe is hoping to see the results from these pairs as a useful comparison.

Joe hopes that this study will provide insights into Eulemur social systems and reproductive behaviour that will lead to better management of captive animals.