Zoology professor Kay Holekamp, one of the world’s leading experts on spotted hyenas, is having an impact on people around the world and on animal behavioral science. Her ability to intertwine research, teaching, and outreach has, most directly, allowed a select group of MSU students to have a transformational experience in East Africa—as their blogs below reveal.

Recently a film crew from the BBC descended on Holekamp’s research laboratory in the Masai Mara, Kenya, where she has been studying spotted hyenas for more than two decades and has received numerous awards for her teaching and research. The BBC is not alone in finding interest in her work. She has also been the focus of stories in the New York Times, and Smithsonian magazine, and on Animal Planet and the National Geographic Channel.

Holekamp’s research projects are funded by the National Science Foundation (NSF) and she has published dozens of research papers on topics involving spotted hyenas as well as ground squirrels and other rodents.

While the Natural Science Building at MSU is home to her primary lab, much of the media attention has focused on Holekamp’s field lab—“Fisi Camp” located in Kenya (“Fisi” is the Masai word for “hyena”). Holekamp spends several months each year at Fisi Camp while MSU students are there all year gathering data to answer fundamental research questions in the areas of disease ecology, evolution, behavior and conservation.

Of particular current interest to investigators is the spotted hyena’s ability to survive the diseases that often kill many of the other carnivores inhabiting the areas where the hyenas live. This trait, along with the hyenas’ physiology and social complexities, are larger questions the Holekamp Lab is investigating with long-term benefits of understanding disease transmission, biology of a large carnivore, and the ability to maintain ecosystem health.

In addition to the ongoing research at Fisi Camp, Holekamp started a study abroad class in 1999 which provides an intensive 3-week field course focused on the behavioral ecology of African mammals. The course—Behavioral Ecology of African Mammals, or BEAM—is led by senior doctoral students who have worked with Holekamp, and the program intersects with the ongoing field research.

Holekamp’s work contributes to maintaining ecosystem health in one of the world’s richest biodiversity hot spots. This research also offers training opportunities for MSU students in an international environment along with Kenyan graduate students and Masai students in rural elementary schools.

This past summer, students in the Holekamp Lab started a blog to help share the stories of life in Fisi Camp. The blog, at msuhyenas.blogspot.com, serves to enhance understanding of their research and provide an additional layer of outreach in order to improve understanding of the spotted hyena and help in conservation efforts. What follows are some sample blogs from Kate Shaw, Leslie Curren and Andy Flies, three students currently at Fisi Camp.

Michael Steger is the communications manager for MSU’s College of Natural Science. He has never been to Africa, so he travels vicariously through the bloggers.
It’s true... the struggle to survive out here can be brutal, shocking, and emotional. However, when new life emerges, it’s pretty darn cute.

Hello from Fisi Camp in the beautiful Masai Mara National Reserve. After a one year hiatus from fieldwork, I am back in the Mara and thrilled about being back. I have been working primarily in the lai (lilly) field to the left of the Linda Manfield lab and Jean Tiao lab most of the summer and have been itching to get back to the fieldwork for the past month. My research focuses on the ecology or wildlife disease and the immune response to infection. I will not elaborate beyond that at this point, but if you want more information about my research, you can visit my website: www.msu.edu/~fliesand

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Many of my friends ask what it is like living in a tent for an extended period of time. For my first post on the blog, I thought it would be fitting to introduce everyone to camp the way I see it and my home for the next 6 months. To do this I created a simple map to give readers an idea of what the camp looks like. The map is a bit crude and geographers may be appalled, but I think you will get the idea. To supplement the map, I have also made a brief photo tour of some of the important features of Fisi Camp. By the way, for new readers, Fisi means hyena.

When I first arrived at Fisi Camp last year it exceeded my expectations. I thought living in a tent in Africa would be hard, but camp has proven very comfortable to me. The biggest adjustment for me is not being able to eat meat regularly, since there is no refrigeration in camp. We have outstanding cooks in the camp that work wonders with the availability of meat.

On this topic, so I’m going to save it for my next post—stay tuned for that. For now, suffice it to say that the Masai have made a priority for the Masai.

I’ve wanted to write a post for a long time about the culture of the Masai, the ethnic group that lives in our area of Kenya. I hesitated for fear of being unwittingly politically incorrect, but that seems like a silly reason to deprive readers the opportunity to learn about this fascinating culture. To describe his people as nomadic pastoralists, which accounts for their generally tall and thin body types. According to legend, the first Masai came from the sky with a cow, so Masai believe that all cows everywhere (yes, even the ones in Vermont) really belong to them. They therefore have a very strong attachment to these cows—as John put it, “A Masai without a cow is not a Masai.” In fact, cows are the standard of currency among Masai: one average-sized cow is equivalent to about 10,000 Kenyan shillings or about $150 USD.

The traditional roles of men and women are pretty, well, traditional. Men are the heads of families and the community leaders, and are in charge of the cows and providing security for the family. Women (“mamas”) care for the children and the house, collect firewood and water, do all the cooking and washing, and buy food at the market. They also build all the huts out of dried cow manure, which is grueling work given that it can take two women about six months to build one home. Boys often herd cows, but girls have many more responsibilities, as they are expected to help their mothers pretty much as soon as they are physically able to (it’s not uncommon to see a child as young as four or five caring for a younger sibling).

Historically, education has not been a priority for the Masai. There is much more to be said on this topic, so I’m going to save it for my next post—stay tuned for that. For now, suffice it to say that the Masai have...
Leslie is taking measurements of a briefly tranquilized byena named Primeau.

John, a worker at Fisi Camp, is the primary source for Leslie’s blog.

Traditionally been enthusiastic about educating their boys, and extremely reluctant to educate their girls. Instead, girls are circumcised at the young ages of between 10 and 13 years old (many in their next time, too). Once they have been circumcised, they can be married off to men as much as 25 years their senior. The bride is not given a choice in whom she marries, and the bride’s family typically receives between 5 and 10 cows as payment. Mamas then begin bearing children at around age 15. Multiple wives are seen as a sign of affluence, although as more and more Masai become Christian, this custom is becoming less common.

Masai men are typically grouped in “age sets,” which are cohorts consisting of men who are all within several years of each other. A person’s cohort is a big part of his identity, and each cohort has its own songs and dances that are used in celebrations.

The time-honored custom has been that when boys are between 16 and 20 years old, thousands of them will be circumcised together as one cohort. This cohort will then live together and train to become Masai warriors, and those who are able to kill a lion single-handedly are the most revered. Warriors are then responsible for protecting the tribe from other marauding tribes. In recent decades, however, the need for warriors has diminished, since the Masai’s inter-tribe conflicts have subsided almost entirely. That fact, combined with the government’s credo that “all children must attend school,” has made Masai warriors slightly obsolete and much less common.

The spoken language of the Masai is Maa, and although John, who speaks four languages fluently, happily claims that it is “not hard,” I can attest that for native English speakers, it is extremely difficult. This is because many of the phonemes are so different that we physically can’t form them with our mouths.

Cheetahs are solitary animals and are rarely seen together, unless it is with siblings or their mother. Given the solitary lifestyle of cheetahs and the low density of cheetahs in the Mara (it is estimated there are around 50 cheetahs here), it seems unlikely they would have high enough contact rates to maintain a high prevalence of mange. Domestic dogs that are frequently in the park may play a role in the spread and maintenance of mange in the wild animals in the park. Mange is also seen in other animals such as buffalo, but to my knowledge, few thorough studies have been done at this point.

Special thanks to Linda Mansfield for her input on mites and mange!