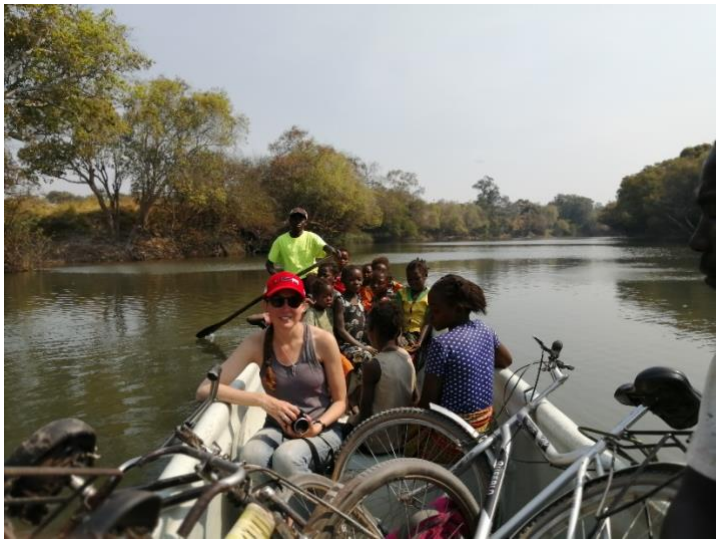
Project title: Attitudes Toward Wildlife in Southern Africa

Location: Kasanka National Park and North Luangwa National Park, Zambia

Dates of funded research: June 22-July 30 2019

Crossing the Lusemfwa River to collect data in remote villages



In the summer of 2019, I conducted preliminary fieldwork to assess the appropriateness of different sites for my dissertation research. The original sites being considered were all in Mozambique, but after arriving in South Africa to meet up with the partner organization Peace Parks, I was informed that the project had been cancelled and they were no longer willing to work together. Without their support, I was unable to obtain the necessary visa for research and therefore was unable to do research in Mozambique on my own after the agreement with Peace Parks fell through. At this time, I chose to shift the location of my planned research to Zambia where I have many useful contacts that were willing to provide logistical support. I decided to focus specifically on two national parks, Kasanka and North Luangwa based on advice from my contacts and my advisory committee.

I spent time meeting with staff from several government and private organizations involved in conservation in Zambia. This included Zambia's Department of National Parks and Wildlife (DNPW), Frankfurt Zoological Society, and Kasanka Trust. These organizations expressed interest in the research project and a willingness to work together leading to a Memorandum of Understanding between myself as a researcher and Kasanka Trust as well as one with Frankfurt Zoological Society. The relationships developed over this summer will be invaluable for my future research as I plan to continue working with both organizations.

In addition to fostering relationships with important organizations, I also collected preliminary research on attitudes toward wildlife. I conducted 70 semi-structured interviews in Mukungule Game Management Areas (GMAs) outside North Luangwa National Park. These interviews included free-listing of animals that were considered harmful and helpful and free-listing of

animals that the individual liked and disliked. This structured activity was followed by additional questions to clarify why certain species were listed in certain ways and examples of the harm caused by certain species to provide more qualitative data. Participants were also asked about crop damage and livestock loss in the previous year. Finally, a pile-sort activity was used for participants to sort cards showing pictures of wildlife into 2 separate categories of harmful and not harmful. They were then asked to rank both the severity and frequency of harm for each species by placing the cards in order from highest to lowest for frequency of damage and then repeated the process for severity of damage by each species. These interviews were paired with two focus groups, one for men and one for women, to allow more conversation on the topic. I will analyze the data using a variety of ethnoecology methods designed for such data and results will be returned to Frankfurt Zoological Society within the next six months and hopefully published in a peer-reviewed journal as well.

In the GMAs around Kasanka National Park, the location of over 200 households were recorded along with vegetation data and previous experience with human-wildlife conflict (primarily elephant-related). This basic information can be paired with existing reports on conflict to provide the spatial component that was previously lacking. This will allow for spatial analyses of where human-elephant conflict is most prevalent and can inform conservation initiatives. Finally, remote sensing analyses can be conducted using the more than 300 vegetation training samples to identify land use and land cover changes in the area. These changes in vegetation can result in less natural habitat/vegetation for wildlife like elephants which in turn can increase the likelihood of crop-raiding and other behaviors that are destructive to humans.

The vegetation training samples from GMAs near Kasanka National Park will be used for a supervised land cover classification which I will complete over the next six months. This data can be compared to past vegetation cover using one or more unsupervised land cover classifications of past vegetation cover. In addition, the current data can provide a valuable baseline for future comparisons that seek to identify trends in land cover use/change over time. This data is also valuable to Kasanka National Park in their continued monitoring of habitat loss within the buffer zone that comprises some of the GMA.

With this preliminary research, I will begin applying for grants to return to North Luangwa National Park to conduct a livelihood and attitudinal survey throughout all 5 GMAs that border the park. I hope to develop a large team to work on this project with other graduate students form the University of Florida and interns from Frankfurt Zoological Society. By understanding how people are living and how their livelihoods impact and are impacted by wildlife we can develop better strategies for a sustainable coexistence between humans and wildlife in these buffer zones around national parks.

Timeline of Activities:

Dates	**Activities**
June 22-July 5	Develop new plan for Zambia and get all the necessary approvals to collect research (visa, parks permit, memorandums of understanding etc.)
July 5- July 20	Conduct interviews and focus groups in Mukungule GMA near North Luangwa

July 20-July 30	Collect vegetation training samples and household data in the buffer zone around Kasanka National Park

Entrance to North Luangwa National Park

Entrance to Kasanka National Park

Rhino in North Luangwa National Park