

# UW-Stevens Point Internship in Southern Africa Operating Guide





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# Overview

The UW-Stevens Point Internship in Southern Africa is a program under the Wisconsin Center for Wildlife (WCW) and is made possible through the Douglas R. Stephens Endowment. This endowment provides funding for wildlife research, student engagement, professional travel, and faculty-mentored projects. Integral to the implementation and success of the internship program is a partnership with Tau Consultants, a private wildlife research organization located in Botswana. The internship is ideally designed for two students of sophomore or junior standing who have demonstrated a strong interest and academic success in the field of natural resources research and management. A senior or recent graduate serves as a Project Assistant and facilitator of the interns for the duration of the experience, both at UWSP and while abroad. The internship is designed to be a complement to the CNR's Treehaven Summer Field Experience program. One half of the summer will be spent completing the Summer Field Experience and the other half as an intern in southern Africa. As an intern, you have the opportunity to gain a wide array of field skills and a greater understanding of human-wildlife conflicts in Botswana, and the southern region of Africa. Many of these skills and lessons translate to similar studies and issues in the US. Field skills include spoor (track) surveys, game surveys, camera trap surveys, data collection and organization, basic statistics, written reports, and oral presentations. Interns also will gain experience living and working in Southern Africa and cooperating with other researchers and wildlife professionals. Interns will spend a majority of the time in the field and should expect camping conditions for the majority of the time. In the down time, participants will have the opportunity to go on game drives without data collection responsibilities, and explore the town of Maun. The ability to observe wildlife in Southern Africa is an incredible experience. The wildlife diversity from birds to ungulates to large carnivores helps to explain why the economies of this region of the world are heavily dependent on wildlife. This is not a safari; interns will be required to participate in all aspects of the research process, of camp, and daily life. Interns will have the unique opportunity to experience a part of the world not seen on tourist safaris. Upon return to the US, interns will be responsible for creating and presenting a poster of their research at the CNR Undergraduate Student Research Symposium and will join past internship participants as representatives of the program.



# Collaborators

## Tau Consultants

**Christiaan and Hanlie Winterbach**- owners of Tau Consultants in Maun, Botswana.

Tau consultants is an environmental consulting company that specializes in wildlife research, wildlife surveys, and land-use planning in Southern Africa.

- **Address:** Tau Consultants (PTY) LTD  
Private Bag 8, Maun, Botswana
- **Email:** [tauconsultants@gmail.com](mailto:tauconsultants@gmail.com)
- **Phone** +267 72525511

**Robert Thomson**- recent employee of Tau consultants. He previously worked for Cheetah Conservation Fund.

- **Email:** [rob@stripdonkey.com](mailto:rob@stripdonkey.com)

**Gail Potgieter**- recent employee of Tau consultants. She previously worked for Cheetah Conservation Fund.

- **Email:** [gailsfelines@gmail.com](mailto:gailsfelines@gmail.com)

**Vera and Julius**- local trackers hired by Tau consultants to help with spoor (track) and wildlife identification during fieldwork.



*Above, left to right: Christiaan and Hanlie Winterbach, Rob Thomson, Gail Potgieter, Vera and Julius.*

# PREPARING



**Passport** - Make sure your US Passport is current and does not expire within 6 months of traveling. If you do not have a passport, go to the following site to apply: <https://travel.state.gov/content/passports/en/passports/apply.html>. Plan on at least 6 weeks for delivery.

**Plane tickets** - Dr. Hygnstrom will arrange the flights with Fox Travel through Eric Yonke (UWSP International Programs).

**Health** - Schedule an appointment at the UWSP Health Services travel clinic or with your own physician. Bring your itinerary with a list of places you will be traveling and a copy of your immunization record to your health appointment.

- Bring extra contact lenses or glasses in case any are lost or broken.

**STEP Enrollment** – When your tickets are purchased and dates are confirmed, go to the US State Department’s website and register with the Safe Traveler Enrollment Program (STEP) <https://step.state.gov/step/>. This is important in case anything of concern occurs while you are in Botswana, so that US Consulate in Botswana can reach you.

- Use Christiaan as the emergency contact while in Botswana – phone: +267 72525511, Home address – Plot 86, Boro Ward, Maun, Botswana
- U.S. Embassy in Gaborone, Botswana emergency phone number: 267-373-2222; e-mail: [ConsularGaborone@State.Gov](mailto:ConsularGaborone@State.Gov)

**Talk to your Bank and Credit Card Companies** - Call ahead about your trip and give them the dates and countries you will be traveling through, including airport layovers if you plan on spending money while in-transit. Your regular debit/credit cards will work fine, but you can consider an international card.

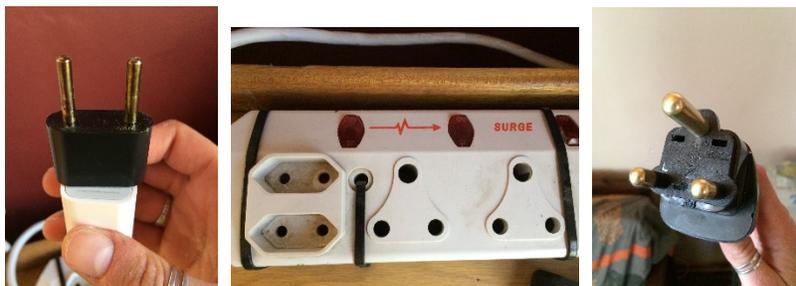
**Do some research on Botswana** - Fodders, The Lonely Planet, Google

**Readings** - See the Reading List on page 13.

**Meet with Dr. Hygnstrom** - This is an opportunity to receive additional training, pick up equipment, secure travel insurance, and address other questions before you leave.

<b>Packing List</b>	<b>**essential item to have</b>
Pre-Departure	
	Make copies of all important documents and keep them in separate, secure places**
	Passport**
	Shots**
	Emergency Information**
	Insurance cards- school's and personal**
	Credit/Debit Cards- Let bank know where you're going**
	Driver's License**
	Photocopies of Documentation**
	Enroll in SAFE- US State Department**
Basics	
	One large suitcase to check**
	Small duffle bag to fit into large suitcase for trips into the field**
	Backpack or carry-on bag**
	Can bring some US \$ to exchange but easiest to use ATMs in Maun for money withdrawals
	Sleeping bag (extra blankets can be provided)**
	Small pillow (not necessary)
	Water Bottle – 1 L or larger**
	Games, cards, books (there can be a lot of down time, bring things to entertain yourself)
	Travel journal, pens, pencils**
	Books, magazines, notebook
	Multi-tool (Leatherman)
	Sunglasses
	Watch
	Granola bars (you can buy these in Maun but not as much variety)
	Water flavor packets
	Expect to pack – binoculars, field guide, and rangefinder from Dr. Hygnstrom in luggage
Clothes	
	Clothes to last 2 weeks - include layers as some places can get quite cold in June-August**
	2-3 pairs field pants
	3-4 pairs shorts
	5-6 short-sleeve shirts (dry-fit is nice)
	2-3 long-sleeve shirts, thermals, button ups
	Warm fleece jacket or hoodie
	Windbreaker jacket
	Wool socks, stocking cap, gloves (foldback, fingerless, or smart touchscreen gloves are ideal)
	Comfy clothes for in Maun
	Sandals (closed-toe hiking sandals are best)**
	Light boots or tennis shoes**

	Bandana, buff, or neck warmer
	Brimmed hat or baseball cap
Electronics	
	Camera, film, SD cards, batteries, charger
	Flash drive or external hard drive**
	Good headlamp or flashlight**
	Extra batteries for flashlight or other electronic equipment (you can buy these in Maun)
	Electrical outlet converter (see photos below, you can buy these in Johannesburg airport)**
	Phone and charger**
	iPod and charger
	Laptop and charger**
	Battery pack (for charging small electronics in the field)
Medication	
	Sunscreen**
	Sunburn lotion (aloe)
	Insect repellent (bugs are not bad)
	Personal prescriptions
	Aspirin, ibuprophen, or tylenol in original container
	Contact lens prep solution (can get at pharmacy in Maun)
	Pepto Bismol/Imodium
Toiletries	
	Small towel and washcloth**
	Toothbrush and toothpaste
	Shampoo and conditioner (can get in Maun, bring small amount for after travel)
	Soap (can get in Maun)
	Lotion- easy for skin to get dry
	Chapstick – with spf
	Personal hygiene items
	Tissues
	Babywipes and hand sanitizer (for out in the field)
	Fingernail clippers
	Brush and hair ties



*Above are photos of the electrical converters you will need and how the outlets in Botswana look.*

# DURING

## Living Arrangements in Maun

Interns stay in canvas tents located on the Winterbach's property. Interns will be able to use the house for everything but sleeping. This includes completing office work, food preparation, and restroom needs. Purified drinking water is brought in from Maun so there should be no health concerns related to the access of clean water. Meals are made communally and interns are expected to help prepare, cook, and clean up after meals. Occasionally, you will be able to eat at some of the local restaurants in Maun, shop for souvenirs, and attend scientific seminars. Opportunities to do laundry will be available in Maun between trips to the bush. Although interns will have some work to do while in Maun (shopping, packing for the next trip in the bush, updating Excel spreadsheets with the latest data, and reading literature), you will be afforded leisure time. Be prepared to entertain yourself with activities you have brought (books, games, movies, etc.). Access to the internet is limited in Maun, but there will be opportunities to send emails, Skype, and complete other personal tasks online. Be prepared for occasional power outages. Interns may spend 3 to 7 days in Maun at a time, depending on re-supplying and car maintenance.



*Above: The house and garden in Maun.*

*Below: The tent you will sleep in. You will have time to shop for souvenirs while in Maun.*



## Living Arrangements in the Bush

Interns will camp the majority of the time, for up to 8 days while in the bush. Arrangements may include old hunting camps or stays at a working safari lodge, but should not be expected. All meal preparations will be done over an open fire or with a gas stove. Camp sites are determined by locations that best suit fieldwork objectives. Everyone at camp is expected to help with camp set-up, cooking, and dishes. The day typically begins at 5:30 am. Camp is packed up and transects begin by 7:00 am. The afternoon transect typically concludes by 5:30 pm and a place to camp will be found afterward. Enjoy your time in the bush. You are essentially in the wilderness with no other people for miles around. The stars are incredible! Most places where you will be working have a low density of wildlife, so danger from a wildlife encounter is low. However, it is not unheard of to experience elephants roaming through camp and lions roaring nearby at night. When in a high-density wildlife area, it is imperative to listen to the instructions that supervisors provide to maintain safety.

Be prepared for all types of weather conditions. Temperatures fluctuate dramatically throughout the day. It can get down to 32 degrees F at night and may still be very cold during morning transect drives. Afternoon temperatures range from 80 to 100 degrees F. Skies typically are clear with little cloud relief and almost no rain because fieldwork is conducted during the winter dry season.



*Above, clockwise: An elephant visitor at Mogothlo Safari Lodge; a typical bush camp set-up; fresh-baked bread in the bush; completed transect.*

## Expectations and Responsibilities

Interns will be expected to:

- Actively engage in all field and office work. Skills are learned by doing, not by watching.
- Pay room and board costs: P100 (~\$10) per day for time in the bush and P50 (~\$5) per day for time in Maun (may be subject to change slightly).
  - All meals are included in room and board costs, but any snacks or additional items will be paid for by the intern.
- Be prepared to pay for university costs associated with receiving internship course credit ~\$1,000. Airfare and insurance will be provided at no expense to the intern.
- Actively participate in reading discussions.
- Help set up and take down camp and their tent.
- Clean up the areas they use.
- Help with cooking and clean up both in Maun and while in the bush.
  - In the bush, a dishes-camp clean up rotation will be instituted for all those in camp with exception of the trackers. Each night two individuals will do dishes while the others clean camp for the night.
- Have a positive attitude and be flexible.
  - Interns will quickly discover that unforeseen complications such as vehicle problems are a regular part of fieldwork and need to be taken in-stride.
- Ask questions – there is much to learn about the wildlife, plants, and environment.
- Respect and follow the directions of supervisors.
- **IMPORTANT:** Be proactive about data management. Set a structured time to sit with Christiaan (it only needs to be an hour) EVERY TIME you get back from the bush so he can assign the next task for analysis
  - Don't get stuck dealing with data you don't understand when you are back in the US. It is much more efficient to get it done while in Maun!

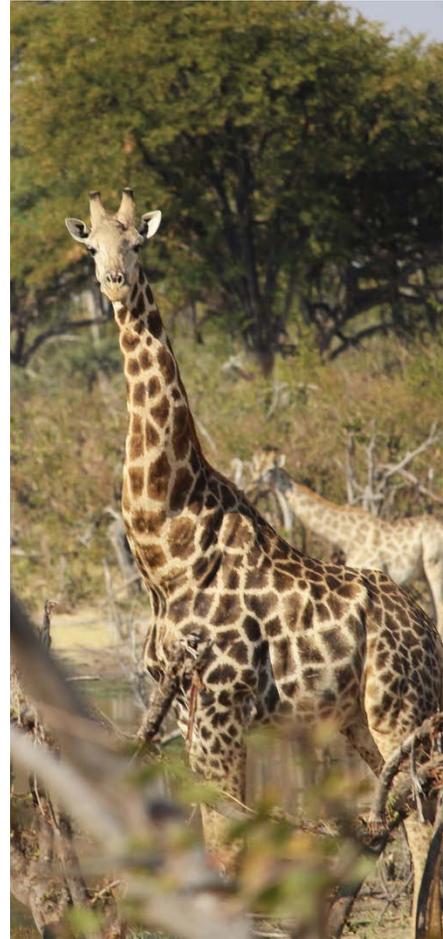


*Above: identifying spoor (tracks); a flat tire*

# POST EXPERIENCE

## Expectations

- Each participant will be expected to create and present a poster with their own research focus related to the data collected while in Botswana. A good place to present the poster is at the CNR Undergraduate Student Research Symposium
  - Dr. Hygnstrom, the LTE Technician, and those at Tau Consultants will be available as resources and help with any questions.
- Each participant will be asked to represent the program throughout the following school year and pass their knowledge on to the next crew.
  - This could include giving presentations such as during TWS chapter meetings.
- Alternative experiences may be available.
- Expect to participate in debriefing meetings and collaborate with other participants to produce research papers, posters, and presentations in the months after returning from Botswana.
- Share all of your stories to inspire others to experience Africa and its great diversity of wildlife!



*Above: Discussing the components of a research project.*

# Training Materials

## How-to Conduct a Transect Survey

Every morning and afternoon while out in the bush you will be conducting a transect survey via vehicle. A break is taken in the middle of the day (11:30 am to 2:30 pm) because the high sun makes it difficult to distinguish tracks. You will observe animals and record any that you see. The trackers will identify fresh spoor <24 hours old for you to record as well. Usually there will be 1 to 2 trackers and 1 to 2 animal observers at one time. During a transect, one observer will be in charge of using a laser Rangefinder while the other observer uses Cybertracker Field Data Collection System on a Samsung tablet to enter the data.



*Above: using the rangefinder*

1. Begin the transect by selecting “Start Transect” in Cybertracker and recording appropriate information on the following screens.
2. Stop when you encounter spoor or when perpendicular to where an animal was first observed.
3. One observer will use the Rangefinder to determine the perpendicular distance (in meters) to the animal.
4. The other observer will use Cybertracker to enter details of the encounter: Is it a spoor or animal observation? How many individuals are there? Are they male or female? How old is each individual? What is the habitat type?
5. End transect (a typical transect is 20 to 30 km long) by selecting “End Transect” in Cybertracker and enter the total distance traveled.



*Above: Showing employees of the Botswana Department of Wildlife and National Parks how to use Cybertracker; counting livestock.*

## Reading List

Below is a list of articles to read before and during your time with Tau Consultants in Botswana. This list was chosen as a sample of papers that cover important conservation issues in Africa, particularly Southern Africa. We believe that understanding and discussing current knowledge are crucial to implementing scientifically rigorous fieldwork. During your stay in Botswana, you will discuss the issues that come up in these articles and will encounter some of them first hand. Reading this list will give you a basis of understanding for the scientific community you will be a part of while in Botswana. Please read the articles in the order laid out below. If possible, download all of the articles before leaving the US, but if you aren't able to download them beforehand, hard copies and PDFs will be available for your use in Maun. (READING LIST SUBJECT TO CHANGE – CONTACT GAIL FOR UPDATED LIST PRIOR TO DOWNLOADING)

### **Read before arrival in Botswana. General Conservation Topics.**

PIMM, S.L. (2007) Africa: Still the “Dark Continent”. *Conservation Biology*, 21, 567–569.

WESTERN, D. (2003) Conservation Science in Africa and the Role of International Collaboration. *Conservation Biology*, 17, 11–19.

SUTHERLAND, W.J., PULLIN, A.S., DOLMAN, P.M. & KNIGHT, T.M. (2004) The need for evidence-based conservation. *Trends in Ecology & Evolution*, 19, 305–308.

CHAN, K.M.A., PRINGLE, R.M., RANGANATHAN, J., BOGGS, C.L., CHAN, Y.L., EHRLICH, P.R., ET AL. (2007) When agendas collide: human welfare and biological conservation. *Conservation biology*, 21, 59–68.

FLYMAN, M.V. (2003) Bridging the gap between livestock keeping and tourism in Ngamiland District, Botswana. In pp. 1–21. ACORD, Gumare, Botswana.

### **Read during Week 1. Research methods – game counts, spoor counts and camera trapping.**

GAIDET, N., FRITZ, H., MESSAD, S., MUTAKE, S. & LE BEL, S. (2005) Measuring species diversity while counting large mammals: comparison of methods using species-accumulation curves. *African Journal of Ecology*, 43, 56–63.

STANDER, P.E. (1998) Spoor counts as indices of large carnivore populations: the relationship between spoor frequency, sampling effort and true density. *Journal of Applied Ecology*, 35, 378–385.

GUSSET, M. & BURGNER, N. (2005) Estimating larger carnivore numbers from track counts and measurements. *African Journal of Ecology*, 43, 320–324.

HOUSER, A.M., SOMERS, M.J. & BOAST, L.K. (2009) Spoor density as a measure of true density of a known population of free-ranging wild cheetah in Botswana. *Journal of Zoology*, 278, 108–115.

CARBONE, C., CHRISTIE, S., CONFORTI, K., COULSON, T., FRANKLIN, N., GINSBERG, J.R., ET AL. (2001) The use of photographic rates to estimate densities of tigers and other cryptic mammals. *Animal Conservation*, 4, 75–79.

CHAPMAN, S. & BALME, G. (2010) An estimate of leopard population density in a private reserve in KwaZulu-Natal, South Africa, using camera-traps and capture–recapture models. *South African Journal of Wildlife Research*, 40, 114–120.

BALME, G.A., HUNTER, L.T.B. & SLOTOW, R. (2009) Evaluating Methods for Counting Cryptic Carnivores. *Journal of Wildlife Management*, 73, 433–441.

### **Read during Week 2. Carnivore conservation.**

RIPPLE, W.J., ESTES, J.A., BESCHTA, R.L., WILMERS, C.C., RITCHIE, E.G., HEBBLEWHITE, M., ET AL. (2014) Status and ecological effects of the world’s largest carnivores. *Science*, 343, 1241484.

WINTERBACH, H.E.K., WINTERBACH, C.W., SOMERS, M.J. & HAYWARD, M.W. (2012) Key factors and related principles in the conservation of large African carnivores. *Mammal Review*, 89–110.

RIGGIO, J., JACOBSON, A., DOLLAR, L., BAUER, H., BECKER, M., DICKMAN, A., ET AL. (2012) The size of savannah Africa: a lion’s (*Panthera leo*) view. *Biodiversity and Conservation*.

BALME, G. A., LINDSEY, P. A., SWANEPOEL, L.H. & HUNTER, L.T.B. (2013) Failure of research to address the rangewide conservation needs of large carnivores: leopards in South Africa as a case study. *Conservation Letters*, 00, xx – xx.

PACKER, C., LOVERIDGE, A., CANNEY, S., CARO, T., GARNETT, S.T., PFEIFER, M., ET AL. (2013) Conserving large carnivores: dollars and fence. *Ecology Letters*, 16, 635–641.

CREEL, S., BECKER, M.S., DURANT, S.M., M’SOKA, J., MATANDIKO, W., DICKMAN, A.J., ET AL. (2013) Conserving large populations of lions - the argument for fences has holes. *Ecology Letters*, 16, 1413–e3.

PACKER, C., SWANSON, A., CANNEY, S., LOVERIDGE, A., GARNETT, S., PFEIFER, M., ET AL. (2013) The case for fencing remains intact. *Ecology Letters*, 16, 1414–e4.

### **Read during Week 3. Hunting and Sustainable Utilisation of Carnivores.**

CARO, T.M., YOUNG, C.R., CAULDWELL, A.E. & BROWN, D.D.E. (2008) Animal breeding systems and big game hunting: Models and application. *Biological Conservation*, 142, 909–929.

MILNER, J.M., NILSEN, E.B. & ANDREASSEN, H.P. (2007) Demographic Side Effects of Selective Hunting in Ungulates and Carnivores. *Conservation Biology*, 21, 36–47.

FUNSTON, P.J., GROOM, R.J. & LINDSEY, P. A (2013) Insights into the management of large carnivores for profitable wildlife-based land uses in African savannas. *PloS one*, 8, e59044.

LINDSEY, P. (2011) An analysis of game meat production and wildlife-based land uses on freehold land in Namibia: links with food security. In p. 92. TRAFFIC East/Southern Africa, Harare, Zimbabwe.

PACKER, C., KOSMALA, M., COOLEY, H.S., BRINK, H., PINTEA, L., GARSHELIS, D., ET AL. (2009) Sport Hunting, Predator Control and Conservation of Large Carnivores. *PLoS One*, 4, e5941.

WHITMAN, K., STARFIELD, A.M., QUADLING, H.S. & PACKER, C. (2004) Sustainable trophy hunting of African lions. *Nature*, 428, 175–178.

NELSON, F., LINDSEY, P. & BALME, G. (2013) Trophy hunting and lion conservation: a question of governance? *Oryx*, 47, 501–509.

**Read during Week 4. Human-wildlife conflict.**

SILLERO-ZUBIRI, C., SUKUMAR, R. & TREVES, A. (2007) Living with wildlife: the roots of conflict and the solutions. In *Key Topics in Conservation Biology* (ed D.W. Macdonald), pp. 255–272. Wildlife Conservation Research Unit, Oxford University, Oxford.

TREVES, A. & BRUSKOTTER, J. (2014) Tolerance for Predatory Wildlife. *Science*, 344, 476–477.

LINDSEY, P.A., HAVEMANN, C.P., LINES, R., PALAZY, L., PRICE, A.E., RETIEF, T.A., ET AL. (2013) Determinants of Persistence and Tolerance of Carnivores on Namibian Ranches: Implications for Conservation on Southern African Private Lands. *PLoS ONE*, 8, e52458.

MADDEN, F. & MCQUINN, B. (2014) Conservation's blind spot: The case for conflict transformation in wildlife conservation. *Biological Conservation*, 178, 97–106.

DICKMAN, A.J. (2010) Complexities of conflict: the importance of considering social factors for effectively resolving human–wildlife conflict. *Animal Conservation*, 13, 458–466.

TREVES, A., WALLACE, R.B. & WHITE, S. (2009) Participatory Planning of Interventions to Mitigate Human–Wildlife Conflicts. *Conservation Biology*.

SHIVIK, J.A. (2006) Tools for the edge: what's new for conserving carnivores. *BioScience*, 56, 253–259.

**Read during Week 5. Community-Based Conservation.**

BERKES, F. (2007) Community-based conservation in a globalized world. *PNAS*, 104, 15188–15193.

HULME, D. & MURPHREE, M. (1999) Communities, wildlife and the 'New conservation' in Africa. *Journal of International Development*, 11, 277–285.

CHILD, G. & CHILD, B. (2015) The conservation movement in Zimbabwe: an early experiment in devolved community based regulation. *African Journal of Wildlife Research*, 45, 1–16.

NAIDOO, R., WEAVER, L.C., STUART-HILL, G. & TAGG, J. (2011) Effect of biodiversity on economic benefits from communal lands in Namibia. *Journal of Applied Ecology*.

TWYMAN, C. (2001) Natural resource use and livelihoods in Botswana's Wildlife Management Areas. *Applied Geography*, 21, 45–68.

KISS, A. (2004) Is community-based ecotourism a good use of biodiversity conservation funds? *Trends in Ecology & Evolution*, 19, 232–237.

BROWN, K. (2003) Three challenges for a real people-centred conservation. *Global Ecology And Biogeography*, 12, 89–92.

## Species List

The follow is a comprehensive list of the wildlife that interns may encounter in Botswana. Species listed may be observed as an animal or spoor (track). Interns may not see all of the species listed, or may see species not listed below, depending on the areas you work while in Botswana.

### *Common Ungulates:*

- Greater kudu
- Impala
- Steenbok
- Common/grey duiker
- Plains/Burchell's zebra
- Common eland
- Oryx/Gemsbok
- Blue wildebeest
- Common tsessebe
- Red hartebeest
- African buffalo
- Waterbuck
- Red lechwe
- Roan antelope
- Bushbuck

### *Other Herbivores:*

- African elephant
- Giraffe
- Hippo
- Warthog
- Porcupine
- Scrub hare
- Springhare
- Ground squirrel
- Tree squirrel
- Epauletted fruit bat

### *Primates:*

- Lesser bushbaby
- Chacma baboon
- Vervet monkey

### *Carnivores:*

- Jackal: black-backed, side-striped
- African wild dog
- Lion

- Leopard
- Cheetah
- Hyena: spotted, brown
- Caracal
- African wildcat
- Honey badger
- Mongoose: dwarf, yellow, slender, banded
- African civet
- Small-spotted genet

### *Insectivores:*

- Aardvark
- Pangolin
- Bat-eared fox
- Aardwolf

### *Reptiles/Amphibians:*

- Lizard skink
- Leopard tortoise
- Puff adder
- Rock Monitor/Crocodile

### *Birds:*

- Ostrich
- Kori bustard
- Secretary bird
- Francolin: redbilled, crested, coqui, Swainson's
- Korhan: red-crested, black
- Guineafowl
- Grey go-away bird
- Hadedda ibis
- Sacred ibis
- Hamerkop
- Bateleur
- African fish eagle
- Tawny eagle
- Brown snake eagle

- Martial eagle
- African hawk-eagle
- African scops owl
- Pale-spotted owl
- Spotted eagle-owl
- Giant/Verreaux's eagle-owl
- Goliath heron
- Open-billed stork
- Saddle-billed stork
- Maribou stork
- Wattled crane
- African jacana
- Crowned lapwing
- Blacksmith plover
- Hornbills: red-billed, yellow-billed, African grey, southern ground

- Southern ground hornbill
- Bee-eater: European, swallow-tailed, little
- Lilac-breasted roller
- Doves: Namaqua, cape turtle dove, emerald-spotted wood
- Spotted dikkop
- Double-banded sandgrouse
- Spur-winged goose
- Egyptian goose
- White-faced whistling duck
- Shrike: long-tailed, crimson-breasted
- Vultures: white-backed, white-headed, lappet-faced



*Above, clockwise: An assortment of the wildlife you may see in Botswana – lilac-breasted roller, spotted hyena, steenbok, red-billed hornbill, bushbuck, and African wild dog*

# Questions?

Feel free to contact those listed below. They will be able to provide a more in-depth explanation of the experience in Botswana and are happy to answer any questions you may have.

Scott Hygnstrom (Professor)

e-mail: [shygnstr@uwsp.edu](mailto:shygnstr@uwsp.edu)

phone: 715.346.2301

Emma Doden (LTE Tech June-August 2016):

e-mail: [dodene0614@gmail.com](mailto:dodene0614@gmail.com)

Shanell Budleski (intern June-July 2016)

e-mail: [sbudleski@gmail.com](mailto:sbudleski@gmail.com)

Haylee Stangler (intern July-August 2016)

e-mail: [hstan192@gmail.com](mailto:hstan192@gmail.com)