



INVESTIGATING THREATS TO CHIMPS IN UGANDA



DEAR EARTHWATCHER,

We truly appreciate your interest and contribution to this exciting project.

Researchers at the Budongo Conservation Field Station (BCFS) have, for the past twenty years, blended research and conservation to ensure sustainable management and use of the Budongo Forest Reserve, the largest remaining tropical rainforest in East Africa, as a model for tropical rain forest management. Unfortunately tropical forests continue to face immense challenges ranging from illegal and/or unsustainable harvesting to climate change. Most recently climate change has emerged as a key threat to tropical forests and the local communities that depend largely on the goods provided by these forests. BCFS conducts research with the aim of generating world-class scientific research on the forest and its people.

In particular, you will participate in a complex project that explores links between sequential variations in forest tree fruiting patterns, primate foraging, avifauna (bird) abundance, and crop raiding by wild animals. This research will help us recommend ways that people can mitigate human-wildlife conflicts, which climate change and changing forest structure are believed to exacerbate. You will also examine tree fruiting patterns and insect pollination to explore how plant species respond to changes in forest structure. Studies of tree flowering and fruiting in tropical rain forests can aid our understanding of tree growth patterns in forest ecosystems and the effects of climate change on tropical rain forest structure and functioning. All this information is aimed at supporting policy development, conservation action, and sustainable resource management.

While at Budongo, you will get to meet and interact with a number of scientists from many parts of the world. Many of these scientists are postgraduate students from Western Europe and North America.

Thank you for choosing to work with us, and I look forward to meeting you. I am sure you will not forget to ask me about that animal that seems to yell its voice hoarse after your first night at Budongo! Karibu Saana!

Assoc. Prof. Fred Babweteera



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GENERAL INFORMATION

INVESTIGATING THREATS TO CHIMPS IN UGANDA



EARTHWATCH SCIENTISTS

Assoc. Prof. Fred Babweteera
Dr. Caroline Asiimwe
Mr. David Eryenyu
Ms. Moreen Uwimbabazi
Mr. Geoffrey Muhanguzi

RESEARCH SITE

Budongo Forest Reserve, western Uganda

EXPEDITION DATES

Team 1: Feb. 4–Feb. 15, 2017
Team 2: Apr. 8–Apr. 19, 2017
Team 3: Jun. 10–Jun. 21, 2017
Team 4: July 8–July 19, 2017
Team 5: Aug. 5–Aug. 16, 2017
Team 6: Oct. 7–Oct. 18, 2017

Complete travel information is not available in this version of the briefing.

Please contact Earthwatch with any questions.



TRIP PLANNER

INVESTIGATING THREATS TO CHIMPS IN UGANDA

TRIP PLANNER

IMMEDIATELY

- Make sure you understand and agree to Earthwatch's **Terms and Conditions** and the **Participant Code of Conduct**.
- If you plan to purchase additional travel insurance, note that some policies require purchase when your expedition is booked.

90 DAYS PRIOR TO EXPEDITION

- Log in at earthwatch.org to complete your volunteer forms.
- Pay any outstanding balance for your expedition.
- Book travel arrangements (see the Travel Planning section for details).
- If traveling internationally, make sure your passport is current and, if necessary, obtain a visa for your destination country.

60 DAYS PRIOR TO EXPEDITION

- Make sure you have all the necessary vaccinations for your project site.
- Review the Packing Checklist to make sure you have all the clothing, personal supplies and equipment needed.

30 DAYS PRIOR TO EXPEDITION

- Leave the Earthwatch 24-hour helpline number with a relative or friend.
- Leave copies of your passport, visa, and airline tickets with a relative or friend.

Read this expedition briefing thoroughly. It provides the most accurate information available at the time of your Earthwatch scientist's project planning, and will likely answer any questions you have about the project. However, please also keep in mind that research requires improvisation, and you may need to be flexible. Research plans evolve in response to new findings, as well as to unpredictable factors such as weather, equipment failure, and travel challenges. To enjoy your expedition to the fullest, remember to expect the unexpected, be tolerant of repetitive tasks, and try to find humor in difficult situations. If there are any major changes in the research plan or field logistics, Earthwatch will make every effort to keep you well informed before you go into the field



THE RESEARCH

INVESTIGATING THREATS TO CHIMPS IN UGANDA



THE STORY

In Uganda's Budongo Forest Reserve, as in any other ecosystem, the health of one species depends on everything around it. The 700–800 chimpanzees that thrive here are part of one of the largest populations in Uganda. These chimpanzees depend on the trees for food, and the trees in turn depend on a hospitable climate and abundant insect pollinators. Humans, too, rely on this forest: many who live at the forest's edges make their living from it, and their ability to prosper depends on how healthy it stays.

But what happens when something in the ecosystem changes? On Investigating Threats to Chimps in Uganda, we hope to find out. For almost 20 years, we have monitored tree phenology in the reserve—the timing of natural events like flowering, fruiting, and leaf shedding—and the data we have collected indicates a 15% reduction in the total number of trees that produce fruit over the last 15 years. Most of these trees are still alive but are simply not fruiting anymore. We don't know precisely what has caused this reduction, but we know that it may have profound significance: it could make it harder for plants to grow and regenerate, alter the way chimpanzees, other primates and

birds forage, and cause additional conflict between humans and wildlife.

RESEARCH AIMS

On this project, you will help us to investigate both the causes and potential impacts of the tree phenology changes we have observed. We'll look at how climate change, changing forest structure, and the abundance and distribution of pollinating insects (Biesmeijer et al., 2006) may have caused these changes. We'll also explore how fruit-eating birds and primates, primarily chimps, have coped with the new fruiting pattern: Do they forage at different times or places? Is their dietary composition changing? Do they raid people's crops more often? These questions can lead us to develop better forest management strategies, and help us protect the well being of chimps and people alike.

Because we have studied primates and trees in the Budongo Forest Reserve since the early 1990s (Plumptre, A. J. 1996), we have an excellent opportunity to detect long-term change. Our tree phenology observations throughout the years can help us see how plant species respond to changes in climate (Tutin and Fernandez 1993), a critical question as we investigate what a warmer climate means for agriculture and plant diversity and



health. We can also compare the foraging patterns we observed in the past with current foraging patterns, which helps us understand not only how life in this particular forest has changed, but also how primate species may adapt to the effects of climate change in tropical rainforests everywhere. We will also compare the current composition and abundance of frugivorous birds with the data collected in the early-mid 1990s to determine whether reduced fruiting is affecting bird communities as well.

HOW YOU WILL HELP

You'll contribute to four major components of our research:

PRIMATE FORAGING: While in the Budongo Forest Reserve, you'll have the unusual opportunity to watch primates closely in their natural habitat. Working with field assistants, you will follow primates' foraging behavior from around 7:00 a.m. until noon, and again from 3:00–6:00 p.m. Over the course of the project, you'll likely get to observe a few different primate species (chimpanzees, blue monkeys, red-tailed monkeys, black and white colobus), and learn to identify the many different types of trees whose fruit they eat.

BIRD COMPOSITION: You will participate in mist-netting surveys of bird communities in selected forest blocks. The captured birds will be identified using bird guides and expert field assistants. With 360 species of birds recorded, the Budongo Forest is recognized as important bird habitat in Uganda. The abundance of fruit-eating birds—including turacos and forest hornbills—will help shed light on the state of the fruiting trees.

TREE PHENOLOGY: Until 2011 we collected phenology data from 400 plots established along 10 two-kilometer (a little over one mile) transects, which are the set paths along which we make our observations. Then we increased the number of transects we monitor to 30, and the total number of plots along them to 1,200. This expansion allows us to research more types of forest within the reserve, but it also means we need many more eyes in the field to complete our data collection on schedule each month. Your help is therefore invaluable as you walk transects with us and make observations of tree fruiting patterns and take measurements of canopy openness in the research plots. We also monitor rainfall and temperature in each forest type to capture a full picture of the environment. This will enable us to understand why many tree species are no longer fruiting, and investigate the likelihood that climate change is influencing fruiting patterns.

In addition to determining the causes of reduced tree fruiting, we would like to understand how trees are utilizing their energy given that they are reproducing less. Moreover, with increased atmospheric carbon dioxide it is plausible that trees are responding by increasing their growth rate at the expense of reproduction. You will be helping us gain evidence for changes in forest processes due to increases in atmospheric carbon dioxide levels. This will be done through measurement of the forest ecosystem carbon budget both above- and below-ground in order to assess what changes in stem growth mean for overall ecosystem carbon storage and release.

SOCIO-ECONOMIC SURVEYS IN LOCAL COMMUNITIES: In addition to experiencing the natural world of the reserve, you'll have the chance to participate in surveys of local community members who live along the edge of the Budongo Forest. We'll use questionnaires to ask community members when and how often primates raid their crops, so that we can correlate these events with tree phenology patterns. We will attempt to understand whether communities view crop raiding as an increasing problem or not. In addition, we'll set up experiments on selected farms to determine the frequency and intensity of crop raiding so that we can observe the community responses and get a qualitative assessment of the crop-raiding problem. We will give you a full briefing on how to conduct these interviews, and any cultural differences that you need to be aware of. Should you feel uncomfortable at any point, please indicate this to the field assistant with you and you can switch to another task.

POLLINATOR ASSEMBLAGE DATA: From the same plots where we study phenology, we'll collect data on the type, number, and distribution of pollinating insects in an area. You'll work alongside our field assistants to set insect traps, collect trapped insects, and label and preserve the collected specimens for further identification.

Our involvement in each of the above research areas will vary throughout the year depending on the season and fruiting of the trees. Your team may not participate in all of the above tasks, so we ask you to be flexible, as this is the nature of field research.

DAILY LIFE IN THE FIELD

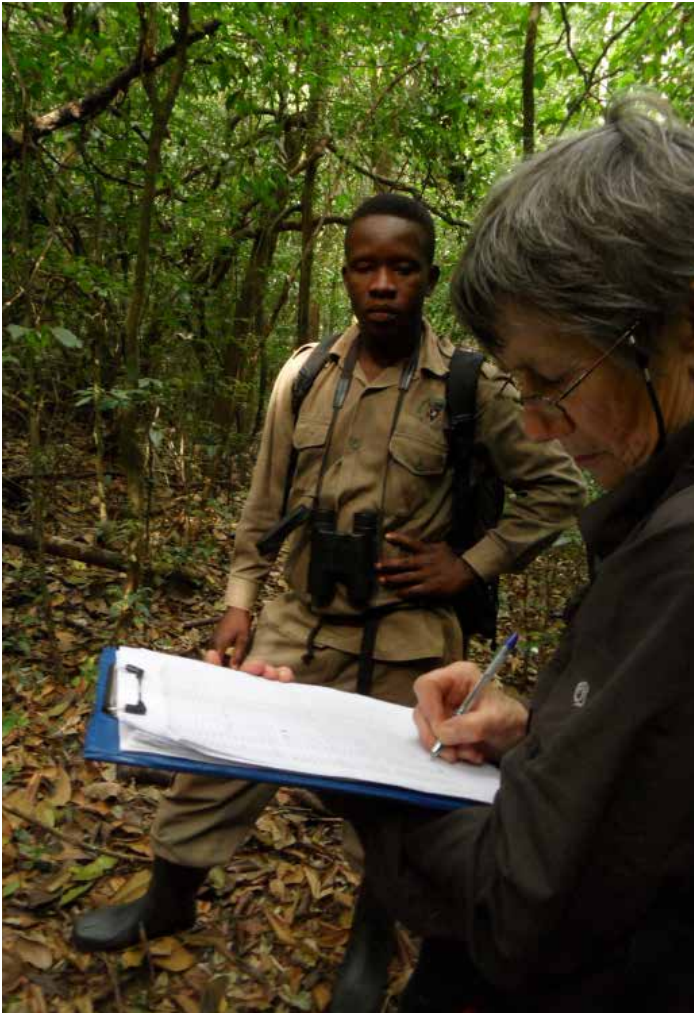
PLANS FOR YOUR TEAM



On this project, you will research foraging behavior of monkeys and chimpanzees for three full days in your week. Your team will split into two to three groups that will alternate between chimpanzee foraging and monkey foraging. Therefore, each volunteer will spend two days collecting data on the foraging behavior of chimpanzees (one day with a semi-habituated group and one day with a fully habituated group) and one day collecting data on the foraging behavior of monkeys (species vary in their habituation levels). “Habituated” animals are wild animals that have become accustomed to human presence to the extent that they perceive humans as part of their natural environment. However, please be mindful that chimpanzees, like all wildlife, are unpredictable in their ranging patterns and behavior, and on some days the researchers do not see them.

The other four research days will involve a mix of tree growth, phenology, bird surveys, pollinator assemblage, and crop-raiding research. Because of the quarantine period required before volunteers can have contact with chimpanzees, this research will happen first, followed by the primate research days.





DAILY ACTIVITIES

Generally, the research team sets off to the forest at or shortly before 7:00 a.m. each morning. Depending on the activity, the research team may return to camp for a lunch break or carry a packed lunch and work till about 4:00 p.m. On some days the team may not return to the forest in the afternoon, and will instead sort, compile, and profile the insects and biomass samples collected, usually working in the lab at the camp. The team will alternate between activities, and you'll receive a full schedule on arrival. Data collection in local communities is often an afternoon activity. This allows the locals to attend to their subsistence farms in the mornings.

ITINERARY

DAY 1	8:00 a.m. Rendezvous in Entebbe. Drive to Budongo Conservation Field Station, with a stopover at a shopping center on the outskirts of Kampala to exchange money and buy any last-minute essentials. Lunch in Masindi around 2:00 p.m. before arriving on site. Evening welcome and orientation.
DAY 2	Safety briefing and training day. Begin transect work in the afternoon.
DAYS 3–7	Fieldwork, beginning with bird surveys, tree growth, pollinator assemblages and phenology work.
DAYS 8–9	Recreational days (e.g., resting at camp, trip to Murchison Falls National Park, shopping in Masindi, Kinyara Pool and Bar, own activities).
DAY 10	Fieldwork.
DAY 11	Finalize fieldwork. Debrief in the evening.
DAY 12	Return to Entebbe. Departure flights after 5:00 p.m.

Tasks vary according to seasons. Researchers set the exact timetables within two weeks of each team once they know what data can be collected.



ACCOMMODATIONS AND FOOD

ABOUT YOUR HOME IN THE FIELD

BUDONGO CONSERVATION FIELD STATION REGULATIONS

ALL FOREST WORKERS: If you might be ill, DO NOT enter the forest. Failure to comply places the future of the project, the livelihoods of the staff, and the well being of the wildlife at risk.

- Littering in the forest is forbidden.
- No food waste (organic or otherwise) should be disposed of in the forest.
- If defecation in the forest is unavoidable, please bury your waste in a pit that is at least 30 centimeters (12 inches) deep.
- Do not urinate closer than 25 meters (82 feet) from streams, swamps, and other waterways.
- Do not intervene if you encounter illegal activity in the forest. Note the location and other details and report to the project director or administrator.
- For your safety, you may not enter the forest alone.
- Vaccinations should be up to date.

PRIMATE RESEARCH REQUIREMENTS:

- A minimum distance of 7 meters (23 feet) from the primates is to be maintained at all times.
- Voices should be at low level.
- Eating (if unavoidable near chimpanzees) should be discreet.
- All primate research is non-invasive. Your behavior should not affect any individual's behavior or decision-making.
- No flash photography is permitted at any time and red focus lights on cameras should be turned off or covered if possible—both can disturb and stress the chimpanzees.
- If you encounter a sick, injured, or snared chimpanzee, do not intervene. Report it to the project director or administrator.
- Avoid shouting colors (such as red or yellow). Preferably wear green.

SMOKING: Smoking is not permitted indoors at the research center, in the accommodations, or in the forest. A smoking zone is provided outside the houses.

SLEEPING

You'll stay in the heart of the reserve at the Budongo Conservation Field Station, an opportunity that an ordinary tourist doesn't have. The station has five residential houses, each of which can accommodate up to six people (including research students, who may be in residence during your expedition). We host researchers from all over the world, so you're likely to meet a diverse group of people when you visit.

In the house, you'll have a private bedroom with a bed, sheets, pillows, blankets, a mosquito net, and a reading desk and chair. We have two rooms with double beds for couples, and you can reserve one at no extra charge, depending on availability, through Earthwatch.

BATHROOMS

You'll share four on-site pit latrines. The station also has two showers connected to water tanks, and each evening a staff member fills the water tanks and heats them to provide for quick hot showers. Water for Budongo Conservation Field Station (BCFS) is harvested from the roofs during the wet season and stored in tanks around camp. The tanks have taps at about half a meter (one and a half feet) off the ground for face- and hand-washing. In the dry season, water for showers, laundry, and cleaning is taken from the Sonso River. Please be resourceful with water at all times. Three staff members clean the rooms, showers, and toilets on a regular basis. Please remember to bring a headlamp with you for using the latrines at night.

ELECTRICITY

All rooms have solar electricity for lighting. There are three work spaces designated for charging laptops and other electronic equipment. Usually, we do not have power failures during the dry seasons (December through March and June through August) when the sun is constantly out. However, during the wet season, the cloudy, rainy weather limits the amount of solar energy available. We conserve power when necessary, but we also have a standby generator in case we need to charge equipment for the next day's work.

Both the solar system and generator have a 240-volt output. The station has three-pin U.K.-type outlets.

Batteries are not recyclable in Uganda. Please take any used batteries back to your home country for proper disposal.



PERSONAL COMMUNICATIONS

The field station has access to mobile telephone networks. You can easily buy local network mobile phone cards for your home mobile phone, although the latter is more expensive. Alternatively, you can be contacted by phone or email through Geoffrey Muhanguzi and Zephyr Kiwedde's contact details.

Personal communication with outsiders is not always possible while participating in an expedition. Earthwatch encourages volunteers to minimize outgoing calls and immerse themselves in the experience; likewise, family and friends should restrict calls to urgent messages only.

We have dial-up Internet access, but the connection is often weak. If you bring a laptop, you can purchase your own mobile modem for 100,000 Ugandan shillings (about US\$40) for a one-month subscription. Or, you can borrow the camp's mobile Internet hook-ups if researchers are not using them.

We have mobile phone coverage at camp. The best reception comes from Orange, but Celtel, WARID, and MTN networks are also available. To use your phone, make sure it is unlocked and set up for international calling and messaging at the correct bandwidth (i.e., broadband). Also, ensure that your phone can take a SIM card, which you can purchase in Kampala or Masindi. You can also purchase short-term phones in Kampala, which range in price from US\$24 to US\$300. Airtime can be purchased all over the country (1,000–3,000 Ugandan shillings per minute for calls outside Africa; 300 to 400 Ugandan shillings per minute for within Africa; international text messages cost 220 Ugandan shillings).

TELEPHONE DIALING CODES: When calling Uganda from another country, dial the country's international dialing code, followed by 256 and the number. When calling within Uganda, omit the 256 and dial the number directly. When calling another country from Uganda, dial 000, followed by the other country's country code and the number. **PLEASE NOTE:** you should check with your cell phone provider to obtain any carrier-specific dialing codes you may need; many providers have dialing procedures that may differ in whole or in part from these directions.

CONTACT INFORMATION

"Your Name"

C/o Budongo Conservation Field Station
P.O. Box 362
Masindi, Uganda

Mail can take up to two weeks and won't be forwarded when the expedition ends.

FACILITIES AND AMENITIES

The station has a communal dining room, as well as three workspaces that participants can use, and a small library largely filled with articles, books, reports, and journal publications about Budongo. There is no shared refrigerator for your food or medicine.

A woman at camp will wash clothes and bedding placed in a designated drop-off spot. But underwear and sleepwear are considered private; if you need those items washed you have to do so yourself.

You won't incur extra fees at camp, but you will need to pay for meals eaten outside camp (e.g. on recreational days).

Masindi, the closest town is approximately 40 kilometers (25 miles) away. We do most of our shopping and dining there, as there are no restaurants or other establishments within walking distance from camp.

RECREATIONAL TIME: At the camp, you'll have opportunities to relax and socialize. Sometimes researchers and other camp residents play volleyball or Frisbee in the evenings. Those keen to bird-watch can take an evening stroll to the Royal Mile, a 10- to 15-minute walk away. Twice a month the administration hosts a dinner at camp, to give the management, researchers, and volunteers a chance to interact and learn more about the work being done by different teams at the field station. During the dinners, we encourage participants to make presentations about any conservation-related topic (this could be something you have been involved with back home, or a current project).

During weekends (non-working days), you may opt to go shopping at the local markets in Masindi, and you may have a chance to go out with the veterinary team for their periodic veterinary rounds in the local communities. You can also spend the day relaxing at local Kinyara Sugar Works, which has a swimming pool, bar, and table tennis facilities (per Earthwatch policy, please do not drink before swimming). It costs about 2,000 Ugandan shillings (75 cents in U.S. dollars) to use these facilities for the day.

You may also choose to arrange your own recreational activities over these two days, (e.g., a trip to Murchison Falls National Park or a Rhino Sanctuary) but you will have to sign a release form, before leaving, and arrange your own travel to and from the research camp.



DISTANCE TO THE FIELD SITE

You'll stay in the heart of Budongo Forest, practically jumping out of bed and into the forest for work each day.

The distance from sites varies by activity:

To get to phenology transects, you'll have to walk up to 3 kilometers (about 2 miles). The transects themselves are two kilometers long (around a mile), and you'll have to walk to get between them, for a total daily walking distance of between six to 10 kilometers (about 3–6 miles).

The primate groups we observe for the foraging study frequent areas within a radius of 5–7 kilometers (3–4 miles) from camp. Depending on where the primates are feeding, we will walk between 100 meters and three kilometers (300 feet to 2 miles) to the observation sites for monkey groups, and between 1–7 kilometers (0.5–4 miles) for chimpanzee groups.

The pollination study sites depend on the location of fruiting trees. If the trees are more than 4 kilometers (2.5 miles) from camp, we will drive there.

The community study sites are 4 kilometers (2.5 miles) from camp. You'll be driven to the end of the road en route to each community, but you may need to hike some distance over uneven terrain to reach the communities, as many do not have direct road access.

FOOD AND WATER

Staff members will prepare most of your meals. At breakfast, though, you'll get to make your own (hot or cold) depending on what you prefer; we can purchase most common Western breakfast foods in Masindi. You can help prepare evening meals if you like.

Most ingredients come from local markets and shops, which we visit once a week to pick up supplies. You can generally give input into what food we purchase and help with the mid-team shopping trip to replenish supplies.

Below are examples of the foods you might eat. Variety depends on availability. It is very important that volunteers be flexible.

TYPICAL MEALS

BREAKFAST	Cereal/oats, coffee and tea, bread, eggs and chapati (flat Indian bread cooked on a griddle)
LUNCH	Sandwiches, chapati, rice, mixed vegetables, egg, fruit
DINNER	Rice, chapati, potatoes, spaghetti, beans, beef, fish, peanuts, cowpeas (also known as black-eyed peas), eggs, and assorted fresh fruits and vegetables. You'll also eat local dishes like cassava, matooke (stewed bananas), and ugali (also called posho—a cornmeal bread).
SNACKS	You may purchase additional snacks at your own expense when shopping in town. Options include chocolate bars, chips/crisps, and juice.
BEVERAGES	On selected nights beers and sodas will be served. If you wish to have beers and/or sodas on other days, they can be purchased locally.
WATER	You'll get sanitized drinking water at camp, either from harvested rainwater or river water. Water is boiled over the wood stove before drinking, so it has a slightly smoky taste. DO NOT drink water from the tap or any other source, and avoid ice.

SPECIAL DIETARY REQUIREMENTS

Please alert Earthwatch to any special dietary requirements (e.g., diabetes, lactose intolerance, nut or other food allergies, vegetarian or vegan diets) as soon as possible, and note them in the space provided on your volunteer forms.

Accommodating special diets is not guaranteed and can be very difficult due to availability of food, location of field sites, and other local conditions. We can accommodate vegetarian diets, but vegan diets may be difficult to manage.



PROJECT CONDITIONS

THE FIELD ENVIRONMENT

The information that follows is as accurate as possible, but please keep in mind that conditions may change.

The driest period of the year is between December to February, when temperatures peak at 30°–35° C (86°–95° F). The second, (milder) dry season happens between June and August. The mean annual rainfall is 1,680 millimeters (66 inches) and has two peaks: March through May and September through November.

You'll encounter generally flat terrain, though on occasion there are steep valleys you may have to traverse and one of the chimpanzee groups under study are located in a more hilly area of the forest. Some parts of the forest have dense undergrowth, but we have an established and well-maintained grid system within the forest, along which the research teams walk to collect data. However, when following primates, the research team may move off the grid; when this happens, the team will have to walk through a dense tangle of vegetation, climb over fallen logs, bend under hanging branches and occasionally cross shallow streams. Newly cut sections of the grid system have more uneven terrain and unclear debris to walk over.

GENERAL CONDITIONS

MEAN RELATIVE HUMIDITY: 45%–50%

MEAN TEMPERATURE RANGE: 14° C (57° F) to 35° C (95° F)

MEAN ANNUAL RAINFALL: 1,680 mm (66 inches)

ALTITUDE: (ABOVE SEA LEVEL): 1,010 m (3,314 ft.) to 1,180 m (3,871 ft.)

ESSENTIAL ELIGIBILITY REQUIREMENTS:

All participants must be able to:

- Follow verbal and/or visual instructions independently or with the assistance of a companion.
- Enjoy being outdoors all day in all types of weather, often exposed to heat and sun for long periods of time.
- On most days, hike for approximately 6–10 kilometers (about 3–6 miles) each day across gentle slopes.
- One of the chimpanzee groups you'll study has a large home range. The physical activity required to track this group is much higher than is required to track other groups (though there will be opportunities to stop and rest). When following this group, you must be able to hike from 10–20 kilometers (6–12 miles), depending on how active the chimps are, over uneven, sometimes steep, terrain.
- Hike through dense tangles of vegetation.
- Step or climb over vegetation and fallen trees.
- Carry basic research equipment, including GPS handsets, plastic containers for trapping insects, data sheets, drinking water, and on some occasions packed lunch all weighing up to three kilograms (seven pounds).
- Make visual observations of animals feeding high in the canopies, approximately 40 meters (131 feet) high. Binoculars will be provided.
- Traverse small streams, sometimes using logs, which require good balance, to reach some research areas.
- Get oneself up into and down out of a vehicle, as well as ride, seated with a seatbelt fastened, for about five hours on arrival and departure days, and be comfortable for shorter driving periods daily. Roads are mainly paved for the longer travel routes, but for shorter periods, travel is off-road.
- To conduct primate work, be in good health and not carrying a flu virus.
- Squat low to the ground with no support to use the pit toilets.
- Get low enough to use water from rainwater storage tanks for face- and hand-washing, which have taps at about half a meter (one and a half feet) from the ground.



POTENTIAL HAZARDS

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HAZARD TYPE	ASSOCIATED RISKS AND PRECAUTIONS
Transportation	<p>The research area has dirt, gravel, and corrugated roads, which can be bumpy and either dusty, or muddy and slippery depending on weather conditions. Deep ruts in the road can cause the vehicle to lurch. The road from Entebbe to Masindi is paved and in fairly good condition, but road hazards still include fast and reckless drivers, livestock and wildlife in the road, and poor or no lighting on roads. We will not drive at night except in case of emergency. All project vehicles will carry means of communication, first-aid kits, and water.</p> <p>Participants may not drive. Wear seatbelts at all times when available and remain seated in your own seats when vehicles are in motion. Many people ride motorbikes in Uganda; Earthwatch participants are not insured to travel by motorbike and must not do so. Public transport hazards include poor vehicle maintenance and reckless driving. We recommend that you use special hire vehicles or taxis—make sure they have seatbelts—and do not use public transport. Do not hesitate to ask drivers to slow down, or to get out and travel with another driver if you feel uncomfortable at all.</p>
Hiking/ Working in the Forest	<p>You'll encounter fallen trees; do not jump over large logs, walk around them. Terrain may be uneven and slippery when wet. Newly cut sections of trail sometimes have sharp roots sticking up from the ground. Wear sturdy boots with good tread at all times, and never run.</p> <p>You can easily get lost—always enter the forest with a staff field assistant and carry a whistle. The field assistant will carry a compass, and we will train you to understand the forest grid system.</p>
Plants/Animals/Insects	<p>Baboons, monkeys, and sometimes chimps may enter camp. Baboons try to scavenge food, so you must keep your windows closed at all times. Also ensure that all doors in camp are shut and bolted behind you. If you see an animal in camp, be calm and do not approach it. You'll receive a full briefing on appropriate behavior around wild animals when you arrive—follow staff instructions at all times.</p> <p>Chimpanzees occasionally carry out dominance displays around researchers—should this occur, stay calm and follow staff instructions. Do not run.</p> <p>Do not eat any wild plants—some are toxic. Some also cause irritation when you come in contact with them; wear long sleeves and pants to avoid this.</p> <p>Malaria is common. Bring and take a malaria prophylaxis, and wear long sleeves and pants as protection from mosquito bites (and other biting insects). The project accommodations provide mosquito nets—use them. Also use insect repellent at all times, particularly at dawn and dusk when mosquitoes and other insects are more prevalent. You may also encounter other biting and stinging insects. If you have allergies to stings or bites, clearly indicate them on your medical form and bring any appropriate medication. Inform field staff where you keep them when you arrive.</p> <p>Other insects you might encounter include ants—there are many in camp, some of which bite. You'll soon learn which areas to avoid. Be especially careful when wearing flip-flops. Jigger flies are generally found in villages, and you best avoid them by wearing closed-toe shoes.</p> <p>Mango flies, which burrow under human skin to lay larvae, are present in Uganda. You can best avoid by having camp staff iron all clothing, including underwear, after washing and before wear, and by hanging your laundry to dry indoors.</p> <p>We will brief you on how to avoid the venomous snakes that live in the area. Never enter the forest alone and immediately alert a staff member if you see a snake.</p>
Climate/ Weather	<p>Generally, the interior of the forest comfortably cool, but it can get extremely hot outside the forest (up to 35°C), which may cause sunburn and dehydration. Avoid long sun exposure, wear protective clothing and a hat, and drink lots of fluids.</p> <p>We may occasionally get rained on in the field. Always carry rain gear in your backpack and wear sturdy, waterproof boots with good tread. Poor weather may cause branches to fall. We will stop forest research activities if severe weather conditions persist.</p>
Fire	<p>You will stay and work in wooden buildings, and therefore must follow strict fire prevention protocol. You may not smoke in or near the field center or the forest.</p>
Cooking	<p>You may wish to help with cooking at the camp, which is optional. There is a risk of burns from the gas or wood cookers, and a risk of food poisoning. Ask for help if you're using the wood cooker, and always wash your hands before preparing food.</p>



Personal Security	<p>Political demonstrations sometimes take place throughout Uganda. Such demonstrations have on occasion turned violent. Avoid any protests, demonstrations and large public gatherings; do not stop to photograph them. Terrorism is also an ongoing and indiscriminate threat in Uganda; several bomb attacks have occurred in the last few years. Exercise caution and always be vigilant. In the unlikely event of banditry, do not try to defend property—personal safety should come first. All of this activity all tends to happen in major cities and border regions, and are not likely at the project site. However, always stay alert and aware, particularly when traveling through Entebbe and Kampala to the project site, and follow advice from local authorities and hotel personnel.</p> <p>When in public areas, particularly tourist destinations, do not flaunt money or valuables and be aware of your surroundings and belongings at all times. Leave unnecessary valuables at home. Petty crime rates are high in the larger cities. We strongly advise you not to walk alone, especially at night and in urban areas.</p> <p>This project location is fairly secure, and we often leave doors unlocked. But it's always best practice to keep valuables hidden.</p>
Swimming/ In or Near Water	<p>The forest has some streams and small rivers, over which logs may have been put to enable crossing. These logs can be slippery, so cross with care and test the log's strength before crossing. We will not cross streams deeper than ankle height via the riverbed.</p> <p>Follow normal swimming pool rules if visiting the Kinyara Sugar Works pool on the recreational day.</p> <p>We advise you against taking any boats or ferries on Lake Albert or Lake Victoria due to their poor safety records and the likelihood of overcrowding.</p>
Distance from Medical Care	<p>The nearest clinic is at minimum a 25-minute drive from the project site, and the nearest fully equipped hospital is in Kampala, at least four hours away. Transportation times may vary due to road conditions, traffic, weather, etc. If you have a chronic condition which could require immediate medical care (e.g. heart conditions, kidney problems, severe asthma, etc.), or if you are pregnant, please discuss your participation on this expedition with your physician.</p>
Disease	<p>Zoonotic diseases (those transmissible between humans and animals; the flu is most virulent) are of major concern. We've not had any cases in the past, but we know that, since we're working with habituated chimpanzees, the risk of disease transmission is high. We have strict research protocols to temper this risk.</p> <p>Uganda has had recent outbreaks of Ebola and Marburg virus. These did not affect the project area, but we take any sign of these diseases seriously and will consider evacuation if necessary.</p> <p>Lastly, malaria is highly endemic in most parts of Uganda and there is a risk of contracting the disease.</p> <p>Traveler's diarrhea affects many international travelers.</p> <p>Other diseases found in Uganda include malaria, dengue fever, filariasis, leishmaniasis, onchocerciasis (river blindness), and trypanosomiasis (carried by insects), schistosomiasis (a parasitic infection), chikungunya, West Nile virus, tuberculosis, HIV, hepatitis B and C, STIs, meningococcal meningitis, plague, and polio. Please see the U.S. Centers for Disease Control and Prevention (cdc.gov) or the World Health Organization (who.int/en/) websites for more information on these conditions and how to avoid them.</p> <p>You can decrease your risk of many diseases above by avoiding mosquito bites, practicing good hygiene, and drinking only bottled or filtered water. Tap water in Uganda is NOT SAFE TO DRINK.</p> <p>If you feel ill once you return from your trip, make sure you inform your doctor that you have recently returned from a tropical region.</p> <p>A few notes on vaccinations and treatment:</p> <ul style="list-style-type: none"> • MALARIA: Uganda is a malarial area and researchers have contracted the disease. Local Plasmodium strains are thought to be resistant to Paludrine and Chloroquine. You should speak to a physician before arriving in Uganda and bring an anti-malarial that is best for you. Both Doxycycline and Mefloquine (Lariam) are available in Uganda. Malarone is not available. • RABIES: Vaccinations are generally recommended for this expedition given the potential contact with wildlife and the prevalence of loose and stray dogs. The rabies pre-exposure vaccination consists of three doses over a 28-day period. Please be sure to consult your physician or travel health clinic well before your expedition to ensure that you have time for the full vaccination series. If you have previously been vaccinated, a booster shot may be required. <p>Whether you have been vaccinated or not, always avoid loose and stray dogs. The pre-exposure vaccination does not eliminate the need for post-exposure medical attention and treatment, but it does provide additional protection against the disease in event of a delay in treatment. In addition, bites or scratches should be immediately and thoroughly washed with soap, clean water, and a topical povidone-iodine solution or ethanol. NOTE: Globally there is currently a shortage of the standard rabies immune globulin, which is used to treat bite victims who have NOT had the pre-exposure vaccine against rabies. In 2013 some key hospitals in Uganda had no availability of this immune globulin. Please consider this when discussing the vaccination with your doctor.</p> <ul style="list-style-type: none"> • TUBERCULOSIS: Volunteers returning from developing countries may wish to have a (PPD)-tuberculin skin test to screen for potential infection. • YELLOW FEVER: A vaccine protecting against yellow fever is available, although pregnant women and immune-compromised individuals cannot be vaccinated. <p>Your home country may require a certificate of vaccination for re-entry if you travel to an area where yellow fever is endemic</p>



SAFETY

HEALTH INFORMATION

EMERGENCY COMMUNICATIONS

Staff members have mobile phones, although not all areas of the forest have a signal. We also carry VHF radios for in-forest communication between research teams.

Project staff members have basic first-aid training, but any serious medical issues will require transport to Kampala, at least four hours away. We have a small first-aid kit at camp for emergency use, and all groups will carry first-aid kits into the field. One field staff member will always be at camp, and you'll receive their phone number when you arrive at the field site. If someone gets injured while in the field, the team will return to camp immediately or call (if you have a phone and a signal) the field staff person at camp. There is always a vehicle at camp to transport anyone that needs medical attention, and air evacuation from the local clinic possible, but will take a long time, as transport must come from Kampala first.

If you need to depart early due to an emergency, please notify the field staff and Fred Babweteera, who can help make arrangements for your departure.

PHYSICIAN, NURSE, OR EMT ON STAFF: Project staff members are not medical professionals.

STAFF CERTIFIED IN SAFETY TRAINING: All project staff members have received basic first aid training from the Ugandan Red Cross, which focuses on the likely needs in the context of research and the project setting.

For emergency assistance in the field, please contact Earthwatch's 24-hour emergency hotline number on the last page of this briefing. Earthwatch is available to assist you 24 hours a day, 7 days a week; someone is always on call to respond to messages that come into our live answering service.

IMMUNIZATIONS

Please be sure your routine immunizations are up-to-date (for example: diphtheria, pertussis, tetanus, polio, measles, mumps, rubella and varicella). Medical decisions are the responsibility of each volunteer and his or her doctor, and the following are recommendations only. Visit the Healix Travel Oracle website through the "Travel Assistance and Advice" page in your Earthwatch portal, cdc.gov or who.int for guidance on immunizations.

PROJECT VACCINATIONS

REQUIRED: If traveling from countries or region where yellow fever is endemic, you must have a certificate of vaccination.

RECOMMENDED FOR HEALTH REASONS: Typhoid, hepatitis A, hepatitis B, rabies, meningitis

TRANSFER OF DISEASE TO HABITUATED PRIMATES

We take the health and safety of the fauna of Budongo Forest very seriously. A simple cough or cold could have a devastating effect on the wildlife, and potentially on BCFS operations. It is your responsibility to arrive in good health and have your routine vaccinations up to date. BCFS may require you to provide proof of vaccinations. If you suffer from a medical condition or allergies you must ensure that these are listed on the Health section of your Earthwatch Participation Form to ensure proper arrangements can be made. There is a 5-day quarantine period between the day you enter Uganda and the day you are allowed into the forest for primate work, to ensure that you have not picked up any illnesses, which could then be transmitted, to the forest fauna. We will schedule tasks accordingly; you will begin with phenology and pollinator work and only move onto the primate monitoring once project staff are satisfied that there is no possibility that you are carrying any flu-like virus. Should you become ill during the project, you cannot continue with primate monitoring work; however, you can work on other research tasks if you are sufficiently well.





TRAVEL TIPS

SUGGESTIONS FOR THE ROAD

YOUR DESTINATION

LANGUAGE: Most people speak English in the urban areas of the country. Most staff at the research camp can read and write English, but some do not speak English. Around the forest, most community members speak Swahili. Some speak one of a dozen other local languages.

TIME ZONE: GMT + 3.

CULTURAL CONSIDERATIONS:

As a visitor in Uganda, please show respect for Ugandan culture. Your cultural sensitivity and behavior will shape the quality of your experience here. Here are a few guidelines:

GREETINGS: Before any conversation, be prepared to exchange a few greetings before getting to your point. You may wish to practice some in the local language, which most people will appreciate. People also often exchange handshakes, which come in many forms (you can learn as you go) before conversations.

PERSONAL SPACE: Ugandans tend to operate with a smaller area of personal space than most westerners. You will notice this especially when queuing, which can be uncomfortable when it is hot. Most Ugandans also are very sociable and will want to sit and chat when they visit. For some, the need to spend time on one's own will require an explanation.

DRESS CODE: Dress is conservative, especially in rural areas. Revealing clothing (e.g., short skirts, short shorts, sleeveless tops) is not appropriate. When visiting villages, towns, schools or attending meetings, please dress neatly in clean clothes. Women should wear knee-length or longer skirts and dresses. Field clothes should also be appropriate: no low-cut pants or midriff tops, for example, because any exposed skin will likely get bitten, stung, or scratched.

FOOD AND DRINK: If offered food or drink, try to always accept at least a small amount to avoid being considered rude. When dining out, the person who initiated the outing usually pays for everything. People do not generally split checks and pay for themselves in Uganda.

GIVING GIFTS OR MONEY: People often ask visitors for their money or belongings, and it is not rude for you to politely say no. We strongly discourage you from giving money or gifts directly to people. The Budongo Conservation Field Station (BCFS) staff works hard to ensure that local communities engage with us for their own future benefit and knowledge, not for money. Handouts are not a sustainable way to live and can cause difficulties for later researchers visiting. If you feel that camp

staff members have done a particularly good job and you wish to leave a tip or gift for them at the end of your stay, please consult Geoffrey Muhanguzi, the BCFS field director, first.

It's not customary to tip in Uganda, except for safari drivers, tour guides, etc. Tips are not necessary in restaurants, although if you wish to tip, you do not necessarily need to tip as much as you would in your home country.

TAKING PHOTOS: Always ask permission before taking photos and respect people's privacy. Adults in the communities surrounding the Budongo forest often do not like having their photos taken. In some tourist destinations it's normal to pay to take photos of local tribes, etc., but we discourage this practice in an everyday setting.

RELIGION: Respect all places of worship and people's religious beliefs.

DISPLAYS OF AFFECTION: It is not acceptable for members of the opposite sex to publicly show affection, but it is perfectly okay for people of the same sex to hold hands in public. Ugandan men commonly hold hands, so a male visitor should not be surprised if another man holds his hand, or should not make assumptions on his sexuality. Ugandans generally do not accept homosexuality.

TIME KEEPING: Ugandans are quite relaxed about time keeping; try not to get irritated if people are late.

LIFESTYLES AND LIVING CONDITIONS: Many Ugandans survive on very little money and have very basic living conditions. But do not assume they are unhappy, and try not to make direct comparisons between your home country and things here—they are incomparable on many levels. Accept people and their living conditions, and avoid conversations about how people survive on so little. This may cause them to start feeling demoralized or raise their expectations beyond what is possible in Uganda.

ELECTRICITY: At the camp, both the solar system and generator have a 240-volt output. The station has three-pin U.K.-type outlets.

MONEY MATTERS

LOCAL CURRENCY: Uganda shillings (UGX), but US Dollar bills are accepted in Uganda and are the preferred method of payment at the Airport View Hotel and many other tourist establishments. However, bills printed before 2003 are often not accepted. Please bring crisp, new looking bills (no tears or blemishes) that were printed in 2003 or later. Small bills (\$1, \$5, \$10, and \$20) are accepted, but they often are exchanged at a lower rate than larger bills (\$50 and \$100).



PERSONAL FUNDS: You'll need some money (likely no more than US\$80) for additional snacks and perhaps a meal while in Masindi for shopping. You can exchange most foreign currencies at any foreign exchange (Forex) bureau. You'll likely see a small Forex as you exit the Entebbe International Airport building, and you can exchange currency there. You will not be able to obtain Ugandan shillings before arriving in the country, so we suggest you get a small amount at the airport and wait to exchange more until you can get to a Forex in Entebbe, where the rates will probably be better. We will stop at a small shopping center on the outskirts of Kampala on the way to the research site for you to exchange money, if necessary.

The airport has ATM machines that accept Visa cards but NOT MasterCard. While in the field, you can also obtain money through ATM machines in Masindi (a 40-minute drive from camp).

Most shops and restaurants do not accept traveler's checks or credit cards, so please have cash. Many hotels will quote prices and expect to be paid in U.S. Dollars, but you should have Ugandan shillings on hand for all other purchases. The hotel in Entebbe will accept credit cards. Credit card fraud is high in Uganda, so, again, use cash whenever possible. But do not travel with a very large sum, and make sure to keep it well hidden.

PASSPORTS AND VISAS

Passport and visa requirements are subject to change. Check with your travel advisor, embassy or consulate in your home country for requirements specific to your circumstances. Generally, passports must be valid for at least six months from the date of entry and a return ticket is required.

CITIZENSHIP	PASSPORT REQUIRED?	VISA REQUIRED?
United States	Yes	Yes
United Kingdom	Yes	Yes
Europe	Yes	Yes
Australia	Yes	Yes
Japan	Yes	Yes

If a visa is required, participants should apply for a TOURIST visa. Please note that obtaining a visa can take weeks or even months. We strongly recommend using a visa agency, which can both expedite and simplify the process.

WHERE TO GET A VISA: Contact the nearest Ugandan embassy or consulate to find out how to apply. Please note that this process can take weeks or even months. We strongly recommend using a visa agency, which can both expedite and simplify the process.

You can also get your visa at Entebbe International Airport when you arrive. Entry visas available at the airport are good for up to 3 months and cost about 50 US dollars, or 30 British pounds. This information was accurate at the time this briefing was printed. It is each volunteer's responsibility to confirm the cost of a visa with their local consulate before they travel.

We suggest you have the exact amount in cash, because change is most often unavailable. If you already have your entry visa, you may wait in the resident line instead of the line for all other passports, which will save time.

SUGGESTED AGENCIES

IN THE U.S.: Trivisa; +1 (212) 613-2223; trivisa.com

IN EUROPE: CIBT, Inc. (U.K.); info@uk.cibt.com; uk.cibt.com

IN AUSTRALIA: Ask your travel agency if it can send your visa application on your behalf.

REQUIRED INFORMATION: You will need to send your passport (it must be valid for at least six months beyond your stay), a visa application and immigration form, two to four passport-size photos, and payment to the embassy or visa agency (if applicable).

CONTACT INFORMATION: You may be required to list the following contact information on your visa application and immigration form:

Assoc. Prof. Fred Babweteera

Makerere University
School of Forestry and Environmental Sciences
P.O. Box 7062
Kampala
Tel: +256 (772) 466-336 or +256 (702) 466-336

PHYSICAL ADDRESS:

Makerere University
Room 212
School of Forestry and
Environmental Sciences
Makerere Hill Road

COST OF A VISA: Generally between US\$40-\$100, but varies from country to country and can cost up to US\$180. A visa agency will charge an additional fee. Usually not applicable.

CONTACT INFORMATION

You may be required to list the following contact information on your visa application and immigration form, or if your luggage does not make it to baggage claim at your destination:

Assoc. Prof. Fred Babweteera

Makerere University
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P.O. Box 7062
Kampala
Tel: +256 (772) 466-336 or +256 (702) 466-336

PHYSICAL ADDRESS:

Makerere University
Room 212
School of Forestry and Environmental Sciences
Makerere Hill Road



EXPEDITION PACKING LIST

WHAT TO BRING

EXPEDITION PACKING CHECKLIST

GENERAL

- This expedition briefing
- Your travel plans, rendezvous details, and Earthwatch's emergency contact information
- Photocopies of your passport, flight itinerary, and credit cards in case the originals are lost or stolen; the copies should be packed separately from the original documents
- Passport and/or visa (if necessary)
- Certification of vaccination (if necessary)
- Documentation for travel by minors (if necessary)

CLOTHING/FOOTWEAR FOR FIELDWORK

- Earthwatch T-shirt
- Dark-colored (dark green is best), long-sleeved, quick-drying shirts, and pants/trousers
- Do not bring blue, red, or other brightly colored clothing—it may frighten the animals
- Comfortable, sturdy shoes with good tread
- Gumboots, Wellingtons, or other waterproof boots with good grip for walking in the forest—a requirement of working in the forest. You can purchase these in Uganda (approx. US\$10). However, the smallest size available is a UK size 6/US size 8.5
- At least one sweater/jumper for cool mornings and evenings, especially for the April team
- A broad-brimmed sun hat
- Rain gear (jacket and pants/trousers)

CLOTHING/FOOTWEAR FOR LEISURE

- At least one set of clothing to keep clean for end of expedition
- Sandals (e.g., flip flops)
- Flip flops for the showers

FIELD SUPPLIES

- Small daypack or rucksack with waterproof cover
- Binoculars
- Dry bag or plastic sealable bags (good for protecting equipment such as cameras from dust, humidity, and water)
- Insect repellent spray (with DEET)

- Two one-liter water bottles
- A headlamp (not a flashlight; you'll need your hands free) with extra batteries and bulb
- Whistle

BEDDING AND BATHING

- Blankets, pillows, and bed sheets will be provided by the project. Towels are not provided.
- Towel

PERSONAL SUPPLIES

- Personal toiletries (biodegradable soaps and shampoos are encouraged)
- Antibacterial wipes or lotion (good for cleaning hands while in the field)
- Personal first aid kit (e.g., anti-diarrhea pills, antibiotics, antiseptic, itch-relief, pain reliever, bandages, blister covers, etc.) and medications
- Spending money

OPTIONAL ITEMS

- Laundry soap, if you plan to wash clothes
- Ear plugs—highly recommended for light sleepers due to nighttime calling of tree hyraxes
- Travel guide (the Bradt Travel Guide to Uganda is highly recommended, especially the Natural History and Practical Information sections)
- Transformer (220v to 110v) if you intend to use electrical appliances from the U.S.
- Materials for an optional presentation on a conservation topic for possible communal field station dinner
- Camera, film or memory card(s), extra camera battery
- Hardware for sharing digital photographs at the end of the expedition
- Dry bag or plastic sealable bags (e.g. Ziploc) to protect equipment like cameras from dust, humidity, and water
- Books, games, art supplies, etc. for free time

NOTE: Do not bring more luggage than you can carry and handle on your own. If traveling by air and checking your luggage, we advise you to pack an extra set of field clothing and personal essentials in your carry-on bag in case your luggage is lost or delayed.



PROJECT STAFF

YOUR RESOURCES IN THE FIELD



EARTHWATCH SCIENTIST ASSOC. PROF. FRED BABWETEERA was born in Uganda. He currently directs the Budongo Conservation Field Station, serves as the regional coordinator of research and conservation for the Royal Zoological Society of Scotland, and is an associate professor at Makerere University in Uganda. He has great experience teaching biologists and managing multidisciplinary conservation projects, and has worked with many stakeholders to develop ecosystem management plans. He sits on editorial boards of various scientific journals and has received numerous academic awards. **Schedule: All teams.**

MR. GEOFFREY MUHANGUZI, originally from Uganda, works as the field station manager for the BCFS. He runs daily operations, manages field staff for all BCFS project, and coordinates with researchers. He has years of experience working on natural resources management projects in Uganda, and his current interests focus on wildlife conservation, specifically the conservation of forest habitats. **Schedule: All teams.**

MS. MOREEN UWIMBABAZI is also an Earthwatch scientist and native Ugandan. She is a postgraduate student in the department of Zoology and at Makerere University. She leads the ornithology study and has wide experience and interest in ornithology. **Schedule: All Teams.**

MR. ZEPHYR KIWEDDE was born in Uganda and is the BCFS's field station administrator, a position he earned after many years of committed service to BCFS; he began working there as field assistant in 1991, when the field station first opened. He holds a diploma in forestry, and is currently pursuing a bachelor's degree in public administration. **Schedule: All teams.**

DR. CAROLINE ASIIMWE is the Conservation Coordinator at BCFS and a native Uganda. She oversees the conservation projects implemented by the field station and will lead the studies relating to community livelihoods including the impacts of reduced tree fruiting on crop raiding.

MR. DAVID ERYENYU is a native Ugandan and a Research Fellow at BCFS. He has worked on previous fielding sessions with Earthwatch and will be the Field Team Leader. He is a graduate student at Makerere University.

NOTE: Staff schedules are subject to change.



RECOMMENDED READING

YOUR RESOURCES AT HOME

RESOURCES

BOOKS

- Reynolds, V. (2005). *The Chimpanzees of the Budongo Forest: Ecology, Behavior, and Conservation*. Oxford University Press.
- Briggs, P. 2010. *Bradt Travel Guide: Uganda*. (6th edition). This guide is highly readable and informative. We especially recommend the Natural History and Practical Information sections.

PROJECT-RELATED WEBSITE

- **BUDONGO CONSERVATION FIELD STATION WEBSITE:**
budongo.org

EARTHWATCH SOCIAL MEDIA

- **FACEBOOK:** [facebook.com/Earthwatch](https://www.facebook.com/Earthwatch)
- **TWITTER:** twitter.com/earthwatch_org
- **INSTAGRAM:** [instagram.com/earthwatch](https://www.instagram.com/earthwatch)
- **BLOG:** earthwatchunlocked.wordpress.com
- **YOUTUBE:** [youtube.com/earthwatchinstitute](https://www.youtube.com/earthwatchinstitute)

LITERATURE CITED

LITERATURE

- Biesmeijer J.C. S. P. M. Roberts, S.P.M., Reemer, M., Ohlemuller, R., Edwards, M., Peeters, T., Schaffers, A.P., Potts, S.G., Kleukers, R., Thomas, C. D., Settele, J., Kunin, W. E. (2006). Parallel Declines in Pollinators and Insect-Pollinated Plants in Britain and the Netherlands. *Science* 313, 351-354.
- Plumptre, A. J. (1996). Changes following 60 years of selective timber harvesting in the Budongo Forest Reserve, Uganda. *Forest Ecology and Management* 89:101-113.
- Tutin, C. E. G. & Fernandez, M. (1993). Relationship between minimum temperature and fruit production in some tropical forest trees in Gabon. *Journal of Tropical Ecology*, 9, 241-248.



EMERGENCY NUMBERS

AROUND-THE-CLOCK SUPPORT



EARTHWATCH'S 24-HOUR EMERGENCY HOTLINE

Call Earthwatch's 24-hour on-call duty officer in the U.S.:

+1 (978) 461.0081

+1 (800) 776.0188 (toll-free for calls placed from within the U.S.)

After business hours, leave a message with our live answering service. State that you have an emergency and give the name of your expedition, your name, the location from which you are calling, and if possible, a phone number where you can be reached. An Earthwatch staff member will respond to your call within one hour.

TRAVEL ASSISTANCE PROVIDER: HEALIX INTERNATIONAL

+44.20.3667.8991 (collect calls and reverse charges accepted)

U.S. TOLL FREE: +1.877.759.3917

U.K. FREE PHONE: 0.800.19.5180

E-MAIL: earthwatch@healix.com

You may contact Healix International at any time. They can assist in the event of a medical or evacuation emergency or for routine medical and travel advice, such as advice on visas and vaccine requirements.

FOR VOLUNTEERS BOOKED THROUGH THE EARTHWATCH AUSTRALIA OFFICE:

Earthwatch Australia 24-Hour Emergency Helpline

+61.0.3.8508.5537



MESSAGE FROM EARTHWATCH

DEAR EARTHWATCHER,


Thank you for joining this expedition! We greatly appreciate your decision to contribute to hands-on environmental science and conservation.

As an Earthwatch volunteer, you have the opportunity to create positive change. And while you're out in the field working toward that change, we are committed to caring for your safety. Although risk is an inherent part of the environments in which we work, we've been providing volunteer field experiences with careful risk management and diligent planning for nearly 45 years. You're in good hands.

We hope this expedition will inspire you to get more involved in conservation and sustainable development priorities—not just out in the field, but also when you return home. We encourage you to share your experiences with others, and to transfer your skills and enthusiasm to environmental conservation efforts in your workplace, community, and home.

If you have questions as you prepare for your expedition, contact your Earthwatch office. Thank you for your support, and enjoy your expedition!

Sincerely,

A handwritten signature in black ink that reads "Scott Kania". The signature is fluid and cursive, with the first name "Scott" being more prominent than the last name "Kania".

Scott Kania
President and CEO, Earthwatch



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