



EARTHWATCH 2015

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE



MESSAGES FROM EARTHWATCH

DEAR EARTHWATCHER,

We are delighted that you will be joining us on our *Animals of Malawi in the Majete Wildlife Reserve* research expedition. Majete is an incredibly special place, and if it were not for African Parks Ltd, the reserve would certainly not be the wonder it is today. Majete Wildlife Reserve, with its successful reintroduction and rehabilitation program, is now moving into the next phase of its existence - that of scientific research, so that correct management decisions can be made.

Come and join us on a great adventure and experience Africa's incredible wildlife. Join us as we gather vital data about various populations of wildlife in the reserve: elephants, rhinos, buffalo, antelopes, and the larger predators such as lions, leopards, and hyenas. Share the excitement as we download camera trap photos, conduct game counts in vehicles or on foot, carry out vegetation surveys, visit schools and communities in the nearby areas to spread the conservation word and to hear the locals thoughts and ideas about conservation in general and much more.

After a wonderful day in the reserve, our cozy camp awaits, where you will enjoy a cold drink and hearty, traditional meals cooked on an open fire. You will fall asleep to the hundreds of nocturnal sounds of the bush. Your morning alarm clock may be the majestic fish eagle.

Come and have some fun with us while contributing to a very worthy cause. This essential project cannot be undertaken without your support.

We look forward to sharing the pure magic of Majete.

Alison J. Leslie (and the entire research team)

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 over 40 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.

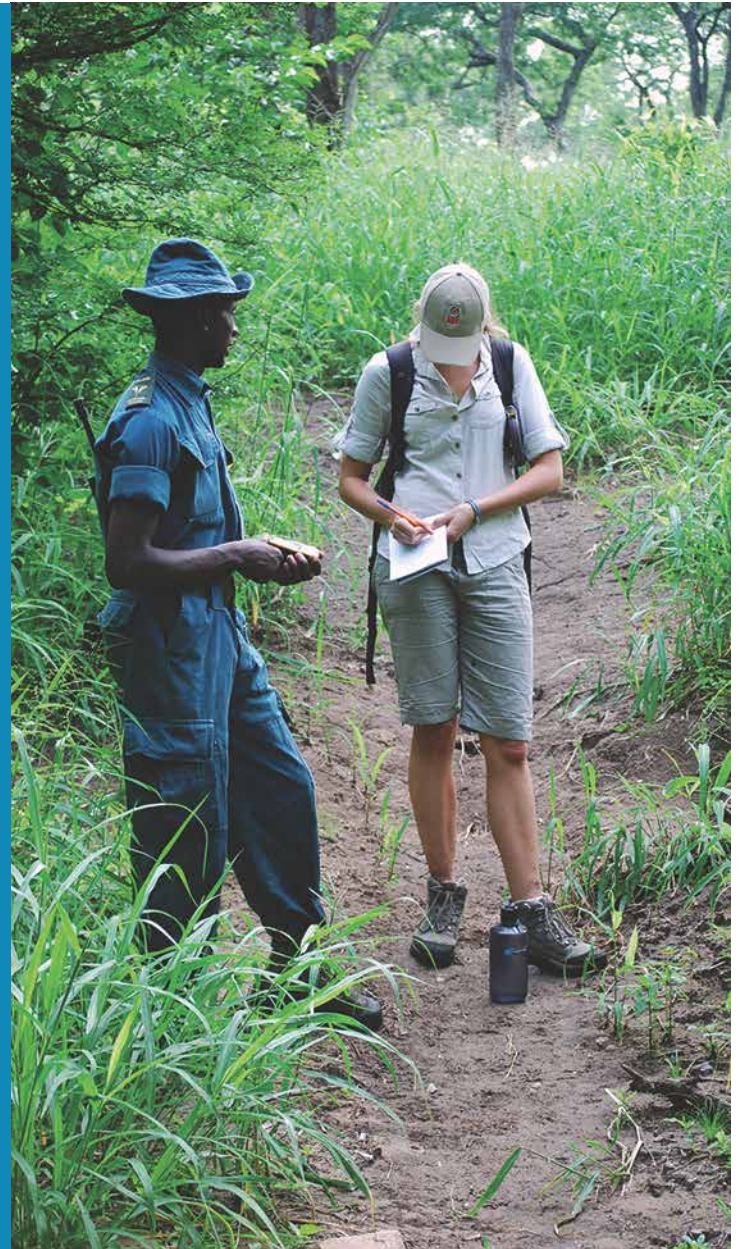
If you have questions as you prepare for your expedition, contact your Earthwatch office. Thank you for your support, and enjoy your expedition!

Sincerely,

Larry Mason
President and CEO, Earthwatch

TABLE OF CONTENTS

GENERAL INFORMATION.....	4
TRIP PLANNER	5
EXPEDITION PACKING LIST.....	6
THE RESEARCH	8
DAILY LIFE IN THE FIELD	10
ACCOMMODATIONS AND FOOD	11
TRAVEL TIPS	13
PROJECT CONDITIONS.....	15
SAFETY	18
PROJECT STAFF	19
RECOMMENDED READING	20
EMERGENCY NUMBERS	21



GENERAL INFORMATION

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE



EARTHWATCH SCIENTISTS

Dr. Alison J. Leslie
Mr. Craig Hay
Mr. Patricio Ndadzela

RESEARCH SITE

Majete Wildlife Reserve, Lower Shire Valley,
Chikwawa District, Malawi.

EXPEDITION DATES

Team 1: Jun. 20-Jul. 1, 2015
Team 2 TEEN: Jul.18-Jul. 29, 2015
Team 3: Aug. 8-Aug. 19, 2015
Team 4: Aug. 29-Sep. 9, 2015
Team 5: Sep. 19-Sep. 30, 2015
Team 6: Oct. 17-Oct. 28, 2015
Team 7: Nov. 7-Nov. 18, 2015
Team 8: Dec. 5-Dec. 16, 2015

TRIP PLANNER

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE

TRIP PLANNER

IMMEDIATELY

- Make sure you understand and agree to Earthwatch's Terms and Conditions.
- 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.

EXPEDITION PACKING LIST

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE

EXPEDITION PACKING LIST

GENERAL

- This expedition briefing
- 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

NOTE: Khaki or earth-toned colors are necessary when working with animals. White or bright-colored clothing can scare off the animals and should not be worn during fieldwork.

- Earthwatch T-shirt
- Lightweight, quick-drying, long-sleeved shirts and pants (zip-off pants are the best) for field work.
- Well worn-in, comfortable walking shoes with ankle support or boots
- Gaiters or mini-gaiters are very useful for bush walking; they keep grass seeds, sticks, stones, gravel, and sand out of shoes.
- Shorts
- T-shirts
- Plenty of socks
- A fleece or windbreaker (June through August can while in the field) be very cool at night and early morning, so come prepared with warm layers)
- Thermal nightwear/pajamas (June through August teams)
- Wide-brimmed hat for sun protection
- Those joining the wet season teams (November through March) must bring good-quality rain gear

CLOTHING/FOOTWEAR FOR LEISURE

- At least one set of clothing to keep clean for end of expedition
- Women: a long skirt (i.e. serong or wrap) to wear
- Casual clothing for recreational days and nights (loose-fitting, lightweight shorts and T-shirts are recommended for the warmer months, and lightweight long pants for winter evenings)
- Closed toed, lightweight shoes for wearing in camp

FIELD SUPPLIES

- Small daypack
- An ample supply of insect repellent spray (minimum 30% DEET)
- Two one-liter water bottles
- Sunglasses
- Binoculars
- Camera, film/memory card(s), extra camera battery

BEDDING AND BATHING

NOTE: Sheets, blankets, and pillows will be provided.

- Bath towel(s)

PERSONAL SUPPLIES

- Flashlight headlamp with extra batteries (the camp is not lit at night)
- Personal toiletries (biodegradable soaps and shampoos are encouraged)
- Antibacterial wipes or lotion (good for cleaning hands)
- Personal first-aid kit (e.g., anti-diarrhea pills, antibiotics, antiseptic, itch-relief, pain reliever, bandages, blister covers, etc.) and personal medications
- Alarm clock

MISCELLANEOUS

- Spending money (U.S. dollars in denominations of \$5, 10, 20 and 50 are best. Malawian kwacha can be obtained at the airport or if need be from the research team).
- A mosquito net that you can hang over your bed (the central hanging style net is recommended). This is recommended for the wet season: November through March, but optional for other months.

EXPEDITION PACKING LIST

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE

EXPEDITION PACKING LIST

OPTIONAL ITEMS

- A GPS unit, if you have one
- Your favorite snacks if you like to nibble between meals
- Hardware for sharing digital photographs at the end of the expedition
- Laundry detergent if you wish to wash clothes (preferably biodegradable; note that clothes can be washed but may take a long time to dry in the rainy season from November to March)
- Medicated talcum powder is great for heat rashes and to sprinkle on sheets on a hot night.
- Travel guide
- Books, games, journal, art supplies, etc. for free time
- Drybag or plastic sealable bags (good for protecting equipment like cameras from dust, humidity, and water)
- Malawi schools are chronically short of supplies; if you can and have the space, these are a few items which would be valuable to the local schools: books for children and teens, alphabet flash cards, biology textbooks, chalk, colored construction paper, colored pencils, compasses, craft scissors, crayons, dictionaries in English, encyclopedias, erasers, exercise books, general science text books, glue sticks, hand-held pencil sharpeners, health text books, human body educational wall charts, language educational wall charts, math educational wall charts, math flash cards, math textbooks, markers, notebooks, pencils, pens, protractors, rulers, science educational wall charts, solar calculators, watercolor paints, watercolor paint brushes, word flash cards, world maps. All written materials should be in English.
- Optional Items to support the research staff (if you have room to spare in your baggage): good-quality D-cell batteries (our camera traps require four each, and stock is not always reliable in Malawi), AA and AAA batteries, M & M's, and duct tape
- Bathing suit for possible recreational swimming
- Swimming towel

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



THE RESEARCH

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE



THE STORY

The 70,000-hectare (170,000-acre) Majete Wildlife Reserve provides a home for many of Africa's iconic species: leopards, elephants, water buffalo, black rhinos, sable antelopes, elands, lions, leopards, and hyenas. But it hasn't always been a hospitable place for wildlife. It was established as a game reserve in the southern section of the Great Rift Valley in 1955, and poaching became rampant during the late 1980s and 1990s. Most of these species were nearly or totally extinct in the reserve by 2000. In addition, nearby communities pushed the reserve's natural resources to their limits through illegal logging, unsustainable fishing, and uncontrolled agriculture. The reserve brought in no tourists, and local communities had little economic incentive to not exploit it.

Things started to change in 2003, when African Parks Ltd. took over management of the reserve. Since then, millions of dollars have gone into developing the reserve's infrastructure and building up its staff. A 142-kilometer (88-mile) electric fence now surrounds the reserve, protecting the original 2,554 animals of 13 different species that were reintroduced to the reserve, along with their offspring. A recent conference funded by the World Bank named Majete the best-managed park in Malawi.

This expedition gives you a chance to help Majete's management bring the reserve to its full potential. As a research team, we're working to develop an ecological monitoring program. The reintroduced species are free to roam the entire park, which leads to a number of questions: How far will they range? What effect will they have on the vegetation? Will they reproduce successfully? How will they interact with each other? Our research will give park management the scientific information needed to make informed decisions on the effective management of the fauna and flora.

These decisions can also have benefits beyond the reserve's boundary. In the future, we hope that excess game from Majete can stock other national parks and wildlife reserves in Malawi that were also devastated by poaching. Malawi needs tourism revenue, and Majete is becoming an attraction for tourists. Humankind benefits from a multitude of resources and processes that are supplied by ecosystems (scientists call these "ecosystem goods and services"). Majete, therefore, also has great potential to benefit the communities around it, if it is managed sustainably, by providing clean drinking water and food and by fostering processes such as the decomposition of wastes, nutrient cycling, carbon cycling, and other critical ecosystem services.

RESEARCH AIMS

So far little research has happened on the reserve, and the research that has been done has focused mostly on sociological issues in the surrounding communities. This area (and many other parts of the world) has a dire need for long-term ecological monitoring programs, which we plan to initiate here. The aim of such programs is to document changes in important properties of biological communities. At the least, a monitoring system should be designed to detect long-term trends; in Majete's case, these trends include population changes and fluctuations among various wildlife species.

Our research focuses on the ecology and management of a number of different species. By ecology, we mean the science of the relationships between organisms and their environment. Some, like elephant and buffalo, are easier to observe than others, like the elusive rhino and leopard. Our specific projects include the following:

- Assessing and modeling the short-term and long-term changes in the size and age composition of populations, and the biological and environmental processes influencing those changes (known as population dynamics) of some of the reintroduced herbivore species.
- Monitoring the success of reintroduced predators (lion and leopard) and their impact on prey species.
- Determining the impact of large herbivores (elephant, buffalo, and rhino) on the habitat.
- Studying the population dynamics and distribution of the spotted hyena.
- Studying the population performance and habitat use of the black rhinoceros, in other words, how the reintroduced population is faring with regard to birth rates and survival versus death rates.
- Developing a management plan for community based natural resource harvesting in Majete Wildlife Reserve
- Implementation of a best-practice fire-management strategy.
- Building the capacity and implementing measures to lessen human-wildlife conflict.

This work is part of the larger project making Majete a model for how a reserve can successfully conserve biodiversity and manage natural resources sustainably for the benefit of the economy, the people of Malawi, and neighboring communities, while also being financially viable.

HOW YOU WILL HELP

As an Earthwatch volunteer, you'll help with a number of exciting projects on different species, spending most of the day in the field collecting data. All the necessary training will be provided on site, which may include the use of

camera traps, radio and satellite tracking techniques, making a GPS system work for you, identifying and following animal tracks, identifying trees and plants, and computer skills and possibly game capture techniques. You will learn how to meticulously record information to ensure scientifically valid and reproducible results, and we'll teach you to what to do (or not to do) if you encounter a dangerous animal—such as an elephant, buffalo, or snake—while in the field.

NOTE: The type and variety of species each team focuses on will vary depending on the season and research staff present. Some species may not be studied on every team.

You may have a chance to assist with the following:

- Downloading photographs of animals from camera traps (cameras that take pictures of passing animals automatically) and other cameras (every few days), sorting them according to species, and identifying individual animals. This task will help create a photographic library for the reserve.
- Tracking elephants, rhinos, lions, leopards and hyenas via VHF receivers or satellite (again, each team will not necessarily focus on every species), either from a vehicle or on foot. If you are on foot, you will be accompanied by an armed game scout from the Department of Wildlife and National Parks.
- Conducting transects to monitor the effects of herbivores, such as rhino, buffalo, and various species of antelope, on vegetation.
- Monitoring vegetation by means of fixed-point photography (an effective and robust method of monitoring vegetation change where photographs are compared between seasons and over years).
- Monitoring vegetation in enclosure plots (small areas surrounded by fences to keep herbivores out). We compare the vegetation in enclosure plots to that in non-enclosed areas over time (visually and photographically) in order to monitor the grazing and browsing capacity in the reserve. We will provide plant samples and identification guides to help you in this task.
- Counting animals during the dry season. During this task you'll also observe and record animal behavior when possible.
- Herpetofaunal surveys in June, July and December
- Helping with data entry and analysis on the computer (particularly on rainy days). Those with GIS skills can help with the satellite telemetry and remote sensing aspects of the project.
- Visiting a local school, where you might assist with PowerPoint presentations, participate in interactive games and conservation learning tools, and tell students about your home country.

DAILY LIFE IN THE FIELD

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE

From the first day, we'll include you in the research work. We're glad to have you on board; this project requires many hands, and without the help of each and every volunteer, we can't accomplish our research goals.

Although it will be beneficial to do as much reading as possible before joining your team, no specific knowledge of the research techniques is needed. It will be helpful if you become familiar with and can identify the many African ungulate species, which include the kudu, eland, nyala, waterbuck, sable antelope, buffalo, Lichtenstein's hartebeest, impala, duiker, steenbuck, reedbuck, and bushbuck (you can look these up online; also see Pocket Guide to Mammals of East Africa by Chris and Mathilde Stuart).

During the expedition, you'll have the chance to hear lectures on topics that may include animal behavior and ecology, the use of camera trapping as a conservation tool, fixed-point photography, wildlife tracking and spoor identification, tree and vegetation identification, and the various survey methods for both plants and animals. You'll also hear more about the country and the research area. The camp has a small library of field guides and books on Malawi and Africa in general.

RECREATION DAY: The team will have one day off during the expedition. You can choose to remain at the research camp for some rest and relaxation, or you can participate in one of the excellent activities offered through the Majete Wildlife Reserve's lodge, likely involving a community visit and possibly a game drive or bird walk. These activities require an additional fee of US\$25 - 50 per person.

COMMUNICATIONS: Although there is intermittent cellphone reception in the research camp and certain parts of the reserve, you must keep your cellphone in silent or vibration mode at all times. Team members (with the exception of project staff members) may not use cellphones when conducting fieldwork; full concentration is required at all times when out in the bush.

SMOKING AND ALCOHOL: Smoking will be allowed in camp (away from others) but not on vehicles or boats, and never while conducting fieldwork. Cold beer is available at the nearby reserve restaurant and community campsite, but please limit alcohol consumption to post-fieldwork hours.

PHOTOGRAPHY: Please ask permission before photographing local people or their villages.

ITINERARY

ITINERARY

Day 1:	Rendezvous at Chileka International Airport and drive to Majete Wildlife Reserve. Settle in to accommodations, followed by introductions.
Day 2:	Safety briefing and training. Mid-afternoon orientation game drive.
Days 3-7:	Fieldwork
Day 8:	Recreational day (may include resting, a game drive, a bird walk and/or a community tour,
Days 9-10:	Fieldwork
Day 11:	School visit day, finalize fieldwork, recreational afternoon. Debriefing in the evening.
Day 12:	Trip back to Blantyre and Chileka International Airport

TYPICAL DAILY SCHEDULE

5:30-6:00 a.m.	Wake up, eat breakfast, and pack supplies for fieldwork
6:00-7:00 a.m.	Travel to field sites
8:00-noon	Fieldwork (or longer if required, with lunch in the field)
Noon-2:00 p.m.	Back to research center, lunch, rest
2:00-5:30 p.m.	Fieldwork, data and/or document management, or rest time
5:30-8:00 p.m.	Showers, drinks, dinner
8 p.m. onwards	Campfire discussions, DVD watching, nocturnal animal counts, etc.

ACCOMMODATIONS AND FOOD

ABOUT YOUR HOME IN THE FIELD



SLEEPING

Your team will stay in the small, community run campsite adjacent to the Majete Wildlife Reserve's research camp. This campground is open to the public, so you may share common spaces with other visitors. There will be an area designated for volunteers' tents. All team activities (dining, lectures, etc.) will take place at the research camp.

You'll stay in single-person canvas tents, with a groundsheet. Your tent will have a single bed/camp cot, a mattress and a bedside table. Couples will have two tents and can use one for luggage and one for sleeping, or just place their tents near each other. Sheets, blankets and a pillow will be provided, but please bring a bath towel. We also strongly recommend that you bring a mosquito net that you can hang over your bed (the net style with a single, central hook attachment), especially for the wet season (November through March).

The camp is open to wildlife, so you cannot leave your tents after dark alone. A guard is on duty every night from 6 p.m. to 6 a.m. for this purpose, and you can easily call this guard should you need to go to the bathroom or leave the tent for other reasons during the night.

BATHROOMS

The camp has a communal, gender-separated bathroom block with four showers (solar-generated hot water available) and flush toilets.

ELECTRICITY

The research camp (NOT the community camp where volunteers stay) has electricity supplied by the nearby hydropower station, which can be unreliable. The community camp has solar powered lights in the central lounging area and in the bathrooms. You can charge electronic equipment (bring necessary adaptors) at the research camp.



INTERNET AND COMMUNICATIONS

Wireless Internet is available at the research camp (for a reasonable fee), depending on the electrical supply. You may bring your own laptop computer or smart phone, but keep in mind that extreme heat and humidity can damage electronic equipment.

FACILITIES AND AMENITIES

The research center has a 10m x 5m tented communal lounge and recreational area with a DVD projector, a dining area and an office/laboratory. There is a separate thatched kitchen building with electricity and refrigeration. You can have your laundry hand-washed for approximately US\$5 per reasonably sized bundle or you can do your own. Either way you will need to provide the washing detergent.

DISTANCE TO THE FIELD SITE

The accommodations are inside the reserve so the field site distances will depend on the day's work, but they are in the same location. The nearby lodge has a pool, which Earthwatchers can use (there's no fee, but you must purchase something at the lodge's bar) depending on the number of guests at the lodge and the availability of our project staff to accompany volunteers. You may not leave the camp alone. There is also a small, reserve-owned restaurant and tuck shop nearby. The community campsite also sells cold beers and soft drinks whose proceeds benefit the park's community fund.

FOOD AND WATER

The project staff will plan the menus, grocery shop, and cook, although team members are more than welcome to assist with food preparation. Everyone will help with cleanup after meals. Volunteers and research staff will eat meals together.

Any additional snacks must be brought with you or purchased at a shopping center in Blantyre before the expedition, where we'll make a quick stop before the drive to the reserve so you can purchase any forgotten or additional items.

Below are examples of the foods you might expect in the field. Variety depends on availability, and although this list is intended to provide a general idea of food types, please be flexible.

TYPICAL MEALS

BREAKFAST	Cereal, porridge, toast, fresh fruit and juice (when available), fresh-baked bread, pancakes, tea and coffee, eggs (meals alternate on a daily basis).
LUNCH	Lunches in camp will include an assortment of salads (tuna, pasta, beans, greens, and chicken) and sandwiches. Packed lunches will be provided at times when you are busy in the field.
DINNER	Traditional African meals cooked on an open fire as often as possible. Meals will include, beef, chicken, or beans with fresh vegetables, rice, nshima (a traditional maize dish), potatoes, and more. Frozen vegetables may occasionally be served when fresh vegetables are unavailable.
BEVERAGES	Tea, coffee, and drink mixes (fruit juice concentrate that can be mixed with water) will be provided.
WATER	Plenty of potable water is available (supplied by a borehole).

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.

We can easily accommodate vegetarian diets with prior notice, but accommodating other special diets is not guaranteed and can be very difficult due to availability of food and location of the field site. In general, healthy, low-fat and low-sodium meals will be provided.

TRAVEL TIPS

SUGGESTIONS FOR THE ROAD

YOUR DESTINATION

LANGUAGE: English is widely spoken. Chichewa is the primary local language spoken in the Lower Shire Valley. All project staff speak English, and the expedition will be conducted in English.

TIME ZONE: GMT +2. For time worldwide with GMT/UTC, see worldtimeserver.com.

ELECTRICITY: Electrical sockets in Malawi are Type G British BS-1363. For more, see kropla.com/electric2.htm.

CULTURAL CONSIDERATIONS: As a visitor in Malawi, please show respect for Malawian culture. Your cultural sensitivity and behavior will shape the quality of your experience here. 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 greetings 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:** Malawians 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 Malawians 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.
- **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. 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 a project staff member first.

- **School visit gifts:** We will visit a school during this expedition, and as schools in Malawi are very underequipped, it would be much appreciated if you could bring some school supplies on the trip.
- **Taking photos:** Always ask permission before taking photos and respect people's privacy. 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. It is illegal to photograph government buildings, airports, churches or synagogues, bridges, and military installations, so please ensure that you adhere to this.
- **Religion:** Respect all places of worship and people's religious beliefs.
- **Displays of affection:** It is unacceptable for members of the opposite sex to publicly show affection, AND it is perfectly okay for people of the same sex to hold hands in public. Malawian men commonly hold hands, so male visitors should not be surprised if another man holds their hand for a time, or make assumptions on his sexuality. Malawians do not accept homosexuality.
- **Time keeping:** Malawians are quite relaxed about time keeping; try not to get irritated if people are late.
- **Lifestyles and living conditions:** Most Malawians 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. You will only cause them to start feeling demoralized or raise their expectations beyond what is possible in Malawi.



MONEY MATTERS

LOCAL CURRENCY: The local currency is Malawi kwacha (MK). U.S. dollars are also accepted as cash to exchange for kwacha.

PERSONAL FUNDS: Money can be exchanged at the airport and at any bank in Blantyre. ATMs are available in Blantyre. Cash is recommended (avoid traveler’s checks), and major credit cards can be used in the city. When out of the city, cash will be required for recreational day trips, souvenirs, snacks, and restaurant or bar purchases. Please bring at minimum US\$200.

ARRIVAL AND DEPARTURE TAXES: You must pay a departure tax of US\$35, but it is usually included in international airfare. If not, it can only be paid in U.S. dollars cash. Check with your travel agent or airline. A domestic departure tax of US\$7 is required (also payable only in U.S. cash) for anyone heading off elsewhere into Malawi.

TIPPING: It is customary to tip in Malawi. Tips in restaurants, are around 10%. Airport porters can be tipped approximately MK50-100 if you have Malawian kwacha or US\$1 at the most.

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	No
United Kingdom	Yes	No
Europe	Yes	No
Australia	Yes	No
Japan	Yes	No

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.

PROJECT CONDITIONS

THE FIELD ENVIRONMENT

GENERAL CONDITIONS

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

Malawi has a tropical climate, with hot days and balmy nights. The rainy season extends from late November or early December until about March, and once it begins in earnest, it may rain (often just short downpours) almost every day. As much as 15 centimeters (5.9 inches) of rain can fall in a single day. Temperatures at this time are around 38°C (100°F) during the day, but are cooler at night. Temperatures start to fall slowly in April when days become a little cooler. The rains gradually finish and Malawi moves into its cool, dry season until September. July and August can be cold at night and early mornings in the Shire Valley and colder elsewhere in the country, particularly at higher altitudes. Game viewing improves during this time because the scrub starts to die back, and temperatures are more enjoyable at around 20°C (70°F). October to December sees the highest temperatures, sometimes up to 45°C (113°F). Because there is much less vegetation cover, animal sightings occur more often and groups of animals congregate at the waterholes. As in many African tropical and subtropical countries, insects can be irritating, even to the entomologists out there!

GENERAL CONDITIONS

HUMIDITY: High humidity from September to March

TEMPERATURE RANGE:

May to August: 23°-25°C (73°-77°F) daily average

September to May: 27°-29°C (81°-84°F) daily average but can reach 45°C (113°F) at times in October

Nighttime temperatures are slightly lower.

ALTITUDE: 60-90 meters (197-295 ft)

RAINFALL: Averages 700 millimeters (28 inches) monthly in the rainy season

ESSENTIAL ELIGIBILITY REQUIREMENTS:

All participants must be able, independently or with the assistance of a companion, to:

- ❑ Follow verbal and/or visual instructions.
- ❑ Enjoy being outdoors all day in all types of weather in the presence of wild animals, insects, dust, and grasses.
- ❑ Cope with extremely hot and humid summer conditions. This project is not suitable for very heat-sensitive volunteers.
- ❑ Easily identify objects at a distance and close up, as well as objects moving speedily, to carry out wildlife counts and observations.
- ❑ Comfortably walk eight to twelve kilometers (five to eight miles) for two of the field days at a slow pace over sometimes rugged, undulating terrain. This is especially important for winter-team (June- August) game counts.
- ❑ Climb a tree if necessary to escape a charging buffalo, rhino, or elephant.
- ❑ Get up into and out of a truck and ride, seated, for anything from two to eight hours with short stretching breaks in between. Seatbelts must be worn when they are present.
- ❑ Carry a light backpack with equipment including at least two liters of water.
- ❑ Climb steep, rocky terrain for one to three hours per day, depending on transects.
- ❑ Live comfortably without a constant and reliable source of electricity.

POTENTIAL HAZARDS

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE

HAZARD TYPE	ASSOCIATED RISKS AND PRECAUTIONS
Transportation	Roads may be dirt/gravel/corrugated and may be extremely bumpy and either dusty or muddy and slippery depending on weather conditions. Thorny brush can lead to tire punctures and/or scratches while driving past in an open vehicle. Within the park, there are many culverts that need to be traversed and conditions are extremely bumpy. Other road hazards include fast and reckless drivers (on main roads to and from the reserve), livestock and wildlife, rain, and poor or no lighting. Traffic moves on the left side of the road. Volunteers are not permitted to drive. Seatbelts must be worn when available. Vehicles will travel slowly when inside the park and whether volunteers are required to stand. Effective means of communication will always be carried in vehicles to seek assistance should this be necessary. Keep car doors locked when traveling through urban areas to avoid possible theft. We recommend that you do not use public transportation in Malawi. Use registered taxis (preferably radio taxis where possible) and always agree on the price in advance.
Walking/Hiking/ Climbing	The terrain can be rough and very steep. Vegetation, including areas of thorny acacia scrub, can also be quite dense. Exhaustion and injuries such as scratches, sprains, and broken bones are possible. Well worn-in (not new) hiking boots with ankle support, gaiters, and socks should be worn to avoid blisters and other injuries. Appropriate dull-colored clothing (e.g., long trousers, a hat, etc.) should be worn during fieldwork. Always walk slowly and carefully and be aware of your surroundings.
Climate/Weather	Dehydration, heat exhaustion, sunburn, and other heat-related illnesses can occur, so please drink sufficient water and wear high-SPF sunscreen and appropriate clothing. Exposure to rain, wind, and cold may cause chills, so bring warm clothing in the winter months (May through August). Rainfall during the rainy season can cause roads to become extremely muddy and possibly impassable. All project vehicles will have 4x4 capabilities, and travel will not occur during severe weather. Volunteers on Teams 7 and 8 must come prepared for wet conditions with waterproof clothing and boots.
Animals	The region has a range of large and potentially dangerous animals, including lions, leopards, elephants, hippos, rhinos, crocodiles, and buffalo. Any wild animal is potentially dangerous if provoked. Never approach, antagonize, or tease any animal. Well-trained staff and, during walking transects, armed rangers will be in the field with teams to reduce the potential risks of encountering wild animals. It is of the utmost importance that you obey the orders of the field rangers when an animal is encountered. Volunteers are not permitted to handle firearms. Volunteers will be trained on how to behave in the field and avoid incidents with wildlife. The best rule is to be aware of your surroundings at all times. A range of venomous snakes are present in the reserve; volunteers must never attempt to pick up, approach, or provoke any snake. Wear ankle-high, closed-toe hiking boots for protection while walking in the bush. Closed-toe shoes must also be worn around camp at night. Staff will give training in snakebite prevention and what to do in the event of an incident. Biting arthropods (e.g., ants, spiders, flies, mosquitoes, and African bees) and stinging arthropods (e.g., scorpions, bees, and wasps) are also present in the area. Ticks, which are very small and can transmit tick bite fever, may also be present. To minimize risk, bring and use insect repellent, check yourself daily for ticks, and wear neutral-colored field attire, including long pants tucked into socks. Also avoid wearing a lot of cologne, perfume, or any other cosmetic body spray, which can attract stinging and biting insects. Volunteers with the potential for allergic reactions should inform the research staff and bring medication (antihistamines and at least two EpiPens).

POTENTIAL HAZARDS

ANIMALS OF MALAWI IN THE MAJETE WILDLIFE RESERVE

HAZARD TYPE	ASSOCIATED RISKS AND PRECAUTIONS
Plants	You can expect a few scratches on your legs and arms from vegetation when walking through the African bush. The area has a multitude of thorn trees. Wearing long trousers, gaiters, and shirts with long sleeves can help protect against scratches. You need to keep your eyes open to avoid walking into this vegetation and causing injury. Some plants may also cause allergic reactions. If you have any known allergies, inform the research staff and bring the necessary medication.
Swimming	There is a swimming pool at a local tourist camp near the reserve's main entrance. There may be the odd opportunity (not guaranteed) to visit the pool during recreational time (accompanied by a staff member). There will be no lifeguard on duty. Volunteers must never swim alone or after consuming alcohol. We suggest that volunteers avoid washing, bathing, paddling, or swimming in freshwater sources in Malawi due to the prevalence of disease.
Personal Security	When in public, do not flaunt money or valuables and be aware of your surroundings and belongings at all times. Leave unnecessary valuables at home and store important documents in safe locations (a lock-up box will be available at the park headquarters, which is a lockable building. Petty crime rates are high in the cities. Do not walk alone, especially at night and in urban areas. Be aware of overly friendly people who offer to be tour guides, or scams where fake taxi pick-ups could then lead to robbery. Do not accept any offers of food when traveling; there is the small possibility it may be drugged.
Fire	You will stay in a tented camp with some wooden facilities, and meals will be cooked over an open fire. All fires must be extinguished fully before being left unattended. Do not leave fires unattended. Smoke only in designated smoking areas, you may not smoke in tents, vehicles, or during fieldwork and always fully extinguish cigarettes. High-voltage electric fences surround the park to prevent the large mammals from leaving and potentially damaging property and crops. This fence runs around the back of our camp; do not touch it. You will be briefed on where you can and cannot go.
Cooking	You may wish to help with cooking at the camp, which is optional. There is a risk of burns from the fire and other cookers as well as food poisoning. Ask for help when cooking over the fire, and always wash your hands before preparing food.
Distance from Medical Care	The nearest basic clinic is at minimum a 25-minute drive from the research camp, and the nearest fully functional hospital is in Blantyre, a two to two-and-a-half-hour drive away. Life-threatening conditions may require evacuation to a facility in a neighboring country; air evacuation may be possible during the day. Transportation times vary due to road conditions, traffic, weather, etc. If you have a chronic condition that 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.

SAFETY

HEALTH INFORMATION

PROJECT VACCINATIONS

REQUIRED: If traveling from countries or region where yellow fever is endemic, you must have a certificate of vaccination. You will need to present this certificate when you arrive at Chileka Airport in Blantyre.

RECOMMENDED FOR HEALTH REASONS: Typhoid, Hepatitis A, Hepatitis B, rabies

EMERGENCIES IN THE FIELD

There will always be a vehicle available on site for emergencies (both project vehicles and African Parks staff vehicles) and Majete Wildlife Reserve has its own airstrip a two-kilometer (1.2-mile) drive from camp.

Minor injuries such as cuts, bruises, abrasions, stomach ailments, etc., will be treated by trained research staff. In the case of any major or life-threatening injuries, individuals will be transported by vehicle or by airplane or helicopter to the hospital in Blantyre and may then be transported on to medical facilities outside Malawi such as in Johannesburg in South Africa. The hospital will be notified via telephone and Earthwatch medical assistance provider will be contacted for support.

Volunteers who need to depart early for emergency reasons will be driven back to Blantyre by a project staff member in one of the project vehicles.

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

STAFF CERTIFIED IN CPR AND FIRST AID: Alison Leslie, Claire Gordon and Frances Forrer

NEAREST HOSPITALS AND CLINIC

EJCOM Clinic

Located adjacent to the Majete Reserve within the confines of the hydroelectric dam property. It is about 2km from the field site.

Mwaiwathu Private Hospital

Old Chileka Road, Blantyre

TEL: +265 (1) 634-989

FAX: +265 (1) 634-190

2-2.5 hours from project site

Blantyre Adventist Hospital

P.O. Box 51

TEL: +265 (1) 620-399

FAX: +265 (1) 623-293

2- 2.5 hours from project site

Queen Elizabeth Central Hospital

Ginney Corner Blantyre

TEL: +265-883-5146

Over 2.5 hours from project site

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 STAFF

YOUR RESOURCES IN THE FIELD



EARTHWATCH SCIENTIST DR. ALISON J. LESLIE, a senior lecturer in the Department of Conservation Ecology and Entomology at Stellenbosch University in South Africa, earned her Ph.D. at Drexel University in the United States working on sea turtles and crocodiles. Dr. Leslie studies a broad range of species; a common goal of her projects is to develop management plans for governments, farmers, and wildlife organizations. Dr. Leslie has worked with many Earthwatch volunteers in South Africa, Botswana, and Zambia. She is also a well-known TV personality, having worked with National Geographic television, the BBC, and a number of other documentary producers. **Schedule: Teams 1-2 and may join other teams as her schedule allows.**



EARTHWATCH SCIENTIST PATRICIO NDADZELA has worked as the project coordinator for African Parks-Majete since February 2006. He earned an M.Sc. in strategic management at the University of Derby in the U.K., and has since held related positions at a number of respected organizations. He has twenty-four years of experience in wildlife conservation, natural resource management, conservation-based enterprises, conflict management and planning of protected areas, land use planning, and community mobilization and advocacy. Patricio is a permanent resident of Majete. **Schedule: All Teams.**



CRAIG HAY, the Field Operations Manager at Majete Wildlife Reserve, holds a MTech degree in Nature Conservation obtained through the Tshwane University of Technology, South Africa. He has twenty years of experience in natural resource management, wildlife research, training of conservation staff in protected areas and ecotourism, and has worked extensively in Southern Africa including Malawi, Zambia, Botswana and South Africa. He has a particular interest in the management, development and long term sustainability of protected areas. Craig has also conducted research on the ecology of African buffalo in the Kruger National Park, where he spent a large part of his career. Craig and his family live permanently in Majete Wildlife Reserve.



CLAIRE GORDON Claire grew up with a great connection to the natural environment, with a fishing mad father and a mother who loves the mountains. She spent her childhood either fishing, surfing, horse riding, playing outside or exploring one of Table Mountain's hidden gems. After finishing school she went on to complete a Field Guide level 1 and trails guide course with Ulovane Environmental Training in the Eastern Cape province of South Africa. Completely enthralled by the vibrant and exciting life that is living in the bush, she then accepted a position as an intern with the Amakhala Conservation Centre, and went on to fulfil the role as their Education Officer for the following 8 months. Actively working in on-the-ground conservation efforts cemented her passion for wildlife conservation, and in 2014 completed a BSc in Conservation Ecology at Stellenbosch University. Claire's research project is focussing on finding ways of connecting the needs of local people with the sustainable utilization of natural resources within the park. She is passionate about people and hopes to make a long-term contribution towards the continued community support of Majete, while ensuring long term ecological sustainability. **Claire will be on ALL teams in 2015.**



FRANCES FORRER Frances was born and raised in Johannesburg, South Africa. However, at the age of sixteen her family relocated to Vietnam where she attended an international school for the final two years of her schooling career. Once having graduated with an IB Diploma she decided to head back to her home country where she completed a BSc degree in Conservation Ecology at the University of Stellenbosch. Frances knows that she chose the best possible course for herself and her passion and knowledge of the environment has grown since the day she made the decision to study conservation. Frances is studying the demographics of Majete's elephants - it is essential that we know not only how many elephants there are in the reserve, but what the population structure looks like. Frances will be on **ALL teams in 2015.**

NOTE: Staff schedules are subject to change.

RECOMMENDED READING

YOUR RESOURCES AT HOME

ARTICLES

- Shaw, Joanne. 2011. "Adaptive resource use in a reintroduced black rhino population." Ph.D. thesis submitted to the faculty of science, University of the Witwatersrand, Johannesburg.
- Seddon, Philip et al. 2007. "Developing the science of reintroduction biology." *Conservation Biology* 21(2): 303-312.
- Hayward, Matt et al. 2007. "Carrying capacity of large African predators: predictions and tests." *Biological Conservation* 139: 219-229.

BOOKS

- Briggs, Philip. 2010. *Malawi*. Chalfont St. Peter, UK: Bradt Travel Guides.
- Buckley, Bea. 2003. *My Malawi Journal*. Twickenham, UK: Athena Press.
- Else, David. 2001. *Malawi*. Melbourne and London: Lonely Planet.
- Maurel, Martine. 1991. *Visitor's Guide to Malawi*. Johannesburg: Southern Book Publishers.
- Palmer, Bentley. 2011. *Rhinos, and the Return of Malawi's Wildlife*. Blantyre, Malawi: Central Africana Limited.
- White, Kelley. 2003. *Spectrum Guide to Malawi*. Nairobi: Camerapix.

FIELD GUIDES

- Kingdon, Jonathan. 2003. *The Kingdom Field Guide to African Mammals*. London: Helm.
- Richards, Dave. 1995. *A Photographic Guide to Birds of East Africa*. London: New Holland.
- Stevenson, Terry, and John Fanshawe. 2004. *Field Guide to the Birds of East Africa: Kenya, Tanzania, Uganda, Rwanda, Burundi*. London: Helm.
- Stuart, Chris and Tilde. 2009. *Mammals of East Africa: Pocket Guide*. Cape Town: Struik.

PROJECT-RELATED WEBSITE

- african-parks.org
- cons-ent.com/
- facebook.com/Majetewildlifereserve

EARTHWATCH SOCIAL MEDIA

Get to know Earthwatch better at:

- **FACEBOOK:** facebook.com/Earthwatch
- **YOUTUBE:** youtube.com/earthwatchinstitute
- **TWITTER:** twitter.com/earthwatch_org



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 living 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



Earthwatch U.S.
114 Western Ave.
Boston, MA 02134
United States

info@earthwatch.org
earthwatch.org

Phone: 1-978-461-0081
Toll-Free: 1-800-776-0188
Fax: 1-978-461-2332

Earthwatch Europe
Mayfield House
256 Banbury Rd.
Oxford, OX2 7DE
United Kingdom

info@earthwatch.org.uk
earthwatch.org

Phone: 44-0-1865-318-838
Fax: 44-0-1865-311-383

Earthwatch Australia
126 Bank St.
South Melbourne,
VIC 3205
Australia

earth@earthwatch.org.au
earthwatch.org

Phone: 61-0-3-9016-7590
Fax: 61-0-3-9686-3652

Earthwatch Japan
Food Science Bldg. 4F
The University of Tokyo
1-1-1, Yayoi, Bunkyo-ku
Tokyo 113-8657, Japan

info@earthwatch.jp
earthwatch.org

Phone: 81-0-3-6686-0300
Fax: 81-0-3-6686-0477