



MONITORING OCELOTS IN TRINIDAD



PLANNING CHECKLIST

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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 at the time your expedition is booked.

6 MONTHS PRIOR TO EXPEDITION

- Log in at earthwatch.org to complete your participant forms.
- If traveling internationally, make sure your passport is current and, if necessary, obtain a visa for your destination country.
- Bring your level of fitness up to the standards required (see the Project Conditions section).

90 DAYS PRIOR TO EXPEDITION

- Pay any outstanding balance for your expedition.
- Book travel arrangements (see the Travel Planning section for details).
- Make sure you have all the necessary vaccinations for your project site.

60 DAYS PRIOR TO EXPEDITION

- Review the packing list 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 parent, relative, or friend.
- Leave copies of your photo ID and flight reservation number with a parent, 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.

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NOTE FROM THE PI

DEAR EARTHWATCHER

Welcome to the Expedition for the Trinidad Ocelot Project, the first project ever to investigate the status and ecology of the only Caribbean population of ocelots!

You may know that the ocelot is one of 13 species of felid, or wildcat, native to the western hemisphere, and one of 10 inhabiting Central and South America. Currently it is classified by the IUCN as 'Least Concern', a classification generally considered lowest priority among the world's threatened and endangered species. This means that unlike many of these species, the ocelot is widespread and in many places, and is considered locally common. But the ocelot population on Trinidad is unique for several reasons. For one, it is the only population of ocelots occurring on a continental island. All other ocelots occur on the mainland, including those occasionally restricted to "river" islands due to seasonal or periodic changes in water level. Two, on Trinidad the ocelot is the largest mammalian predator, a naturally occurring ecological context that exists in no other parts of their range. Everywhere else, the ocelot coexists with jaguars and pumas. Ocelots on Trinidad are therefore, ecologically, and possibly even genetically unique, as is their evolutionary history.

This Expedition represents the first scientific survey and investigation of the ocelot on Trinidad. Trinidad's forests are diverse, and the island is home to a number of species found nowhere else. But Trinidad's fauna and flora are subject to threats similar to those faced by other regions in the tropics of the western hemisphere: deforestation, agriculture, urbanization, pollution, and of course, illegal hunting. Among our primary objectives will be to estimate the size of Trinidad's ocelot population, study the use and diversity of prey taken by and available to ocelots, and evaluate the impact of different land uses on the ocelot's distribution. Our ultimate goals? In the near-term, we hope to determine the impacts these activities are having on the island's ocelot population and the diversity of its mammals. Long-term, we are hopeful that our work will form the basis of a long-term ocelot monitoring plan, as well as a comprehensive strategy for connecting, protecting, and maintaining the integrity of important habitat across the island.

The good news is that there is still time to protect Trinidad's ocelots and the forests they depend on. More importantly, with the right amount of publicity, we believe we can capture the local public's attention and raise awareness of the need to protect this rarest of ocelot populations.

Your participation in this expedition is what makes this work possible, and so we are excited to have you here! We know your participation will make a difference, and hope this experience will leave you with a better understanding of the link between ocelots, forests, land use, and conservation planning. As you help us put out and retrieve camera-traps, assess habitat, survey for prey and sign, and sort and analyze data, your contribution to our research will be invaluable.

Welcome to our expedition, and we look forward to having you join us!

Sincerely,

Dr. Anthony Giordano
Lead Earthwatch Scientist





THE RESEARCH

MONITORING OCELOTS IN TRINIDAD



THE STORY

Ocelots were once extensively hunted for their fine fur with its distinctive stripes and spots. While illegal hunting still occurs in some areas, the biggest threats to these wild cats today include habitat destruction (Phillips & Abercrombie 2003, Lawrence & Nelson 2011) and road kills, the latter of which frequently occurs when ocelots travel outside of protected areas.

Ocelots are the largest terrestrial mammal predators on Trinidad, but there is little to no data on their population status, distribution, and behavior on the island (Lawrence & Nelson 2011, Bhagratty et al. 2013). Although ocelots are not considered to be threatened globally (Caso et al. 2008), the situation in Trinidad may be quite different given the unique ecological context, and the sensitivities ocelots have demonstrated to human activities and development (Haines et al. 2006, Di Bitetti et al. 2008, Kolowski & Alonso 2010). Anecdotal evidence (such as photographs collected through camera traps) suggests there is a relatively small population of ocelots on Trinidad.

This study is expected to be one of the largest terrestrial wildlife conservation studies on the island. The research team will both evaluate the conservation status of ocelots and other terrestrial wildlife on the island of Trinidad, and will help to determine how the presence of ocelots relates to the health, integrity and functioning of Trinidad's ecosystems—in other words, whether ocelots can serve as an indicator of environmental health.

By better understanding the population of these wild cats in Trinidad, researchers hope to make the ocelot the face of forest conservation on the island—raising awareness and inspiring policies to protect these animals and their habitat.



RESEARCH AIMS

The research study has four primary objectives:

1. Assess the population status of ocelots in Trinidad, map suitable habitat, and evaluate possible threats to these cats.
2. Conduct the first comprehensive survey of Trinidad's terrestrial wildlife, especially in relation to the distribution of ocelots. This will provide insight on how the presence of ocelots relates to potential prey across different habitats they occupy. It will also provide an opportunity to identify invasive and potentially threatened species.
3. Evaluate how ocelots interact with prey on Trinidad, including domestic animals. Specifically, research teams will look at the role of domestic animals in the diet of ocelots, and this in turn will help scientists to understand the frequency and intensity of conflict with humans.
4. Understand and evaluate the potential for ocelot presence and activity as indicators for environmental health, as well as determine how the island's various land uses impact the continued presence of ocelots.
5. The expedition will take place in multiple locations on Trinidad, including: The Arena Forest Reserve, Nariva Swamp, Victoria Swamp, Victoria Mayaro Reserve, Aripa Savannah, and the Asa Wright Nature Center.

HOW YOU WILL HELP

As an Earthwatch volunteer, you will be involved in all areas of research to help achieve the scientific objectives. Specifically, you will:

- **DEPLOY AND RETRIEVE CAMERA TRAPS:** Help to set up camera traps to document ocelot presence in Trinidad. Assist in the processing of data collected by camera traps, including sorting and organizing the photos for analysis.
- **ASSIST WITH COLLECTING DATA** to assess the importance of various habitat and anthropogenic features on the presence of ocelots and other terrestrial wildlife- including monitoring tree species and diversity, recording tree size, canopy cover, water and soil quality, land use types, and signs of invasive agricultural species across sampling areas. Volunteers will also help GPS and map landscape connectivity.
- **TRACK AND PROCESS SCAT:** Hike in teams or ride in vehicles to search for scat. Help to process and examine scat at the research station to assess prey contents and possibly prepare for genetic analysis.
- **ASSIST WITH THE INTEGRATION OF PHOTOS AND DATA** into education materials like brochures, posters, etc. to be distributed locally to promote awareness of the project and ocelots.



DAILY LIFE IN THE FIELD

PLANS FOR YOUR TEAM

DAILY ACTIVITIES

We'll give training on data collection techniques, and research equipment use and safety protocols at the accommodations and in the field. You'll see a presentation covering general ocelot biology and conservation, along with the overarching goals of each data collection team.

Over the next few days, you'll practice each research task with project staff members. Your team spirit will be essential. Project staff members and participants like you work long hours together on all aspects of the project. We know that most volunteers are not accustomed to hot temperatures or consistent days of long hiking, so we try hard to make everyone as comfortable as possible.

In addition to the research tasks, you'll have an unparalleled chance to learn about Trinidad's natural environment. Project staff members know the surrounding jungle ecosystem well, and they'll share their expertise at optional lectures and discussions throughout the expedition (typically during early evenings). Please note that you can expect to help out with general clean up and house chores each day.

ITINERARY

WEEK 1 ("A" TEAMS):

Day 1	Rendezvous, introductions, travel to Hamgel field station from POS, safety briefing.
Days 2-7	Fieldwork days: Activities will include deploying, maintaining, and/or retrieving camera-traps, conducting habitat mapping and measurements, and walking habitat or primate transects. They may also include small mammal trapping, organizing, sorting, and analyzing camera-trap data, and searching for sign of ocelots and other fauna (e.g., tracks, scats, etc.).
Day 8	"a" teams conclude and depart for the POS airport.

WEEK 2 ("B" TEAMS):

Day 8	Rendezvous, introductions, travel to field station
Days 9-14	Fieldwork days

DAILY SCHEDULE

6:00 a.m.	Wake up and prepare for the day.
7:00 a.m.	Breakfast
9:00 a.m.-12:30 p.m.	Deployment and or retrieval (hiking) of camera traps (affixing/ dissembling), and habitat measurements/ characteristics. Alternatively, depending on the research needs, volunteers may search for scats using detector dogs, or help with small mammal trapping/ grids, or collecting soil/ water samples.
12:30 p.m.	Lunch in field
1:30 p.m.	Hike back to the field station.
3:30 p.m.	Return from field/freshen up/ shower/ downtime
4:00 p.m.	Computer work (photo sorting and species ID, data analysis, mapping), museum/ reference collection work/ small mammal ID or later afternoon fieldwork, including collecting scat and checking small mammal traps.
6:30 p.m.	Dinner
7:30 p.m.	Debrief and prepare for the next day. Downtime. General clean up and house chores.
8:00 p.m.	Short presentation on relevant conservation topic, and possible visit to the nature center or museum.





ACCOMMODATIONS AND FOOD

ABOUT YOUR HOME IN THE FIELD



All teams will stay at the Hamgel research station, which was newly constructed in May 2012 and serves as a workspace for researchers performing fieldwork in Trinidad. The station is located in the Manuel Congo on the north bank of the Caroni River, and is in close proximity to the Arena Forest Reserve, a multi-use region with a variety of habitats and ecotones.

The station sits on four acres of property. Nearby habitats include patches of primary and secondary forest, and the site was formerly used for cacao, coffee and citrus plantations. Trinidad's larger mammals, including agouti, peccary, anteaters and armadillos use the area, as do local Trinidadians who hunt them. You may also see iguanas, terrapins, and multiple species of gecko on the premises.

SLEEPING

You will stay in in one of 5 rooms at the Hamgel research station. Each room is equipped for two volunteers in bunk style beds. One set of bedding and towels will be provided. Rooms also include a bathroom with a flush toilet and a shower. Depending on available space at the research station, single or couple room requests can be accommodated. Please alert Earthwatch as soon as possible with any specific rooming requests.

BATHROOMS

Each room contains its own bathroom with flush toilets and showers. Hot water is available for limited periods throughout the day. A washer and dryer are also available to use at no extra cost.



ELECTRICITY

You are welcome to bring electrical equipment. Electrical outlets in Trinidad are 115v and use plugs type A and B, just like in North America. However, if your device uses a grounded 3-prong plug, we recommend bringing an adapter, which converts from 3 to 2 prongs.

PERSONAL COMMUNICATIONS

Wireless Internet access is available at the accommodations for free. You may bring your own laptop or tablet for free-time use. Cellular networks are GSM-based and restricted to B-mobile and Digicel. At the research station, B-mobile has the most coverage and is the most reliable.

PIs and staff can be reached via telephone, cell phone, and e-mail for both emergencies and casual communication at the research site.

Local calls can be placed from the field station with a general use-cell phone. International calls can be placed at your own expense. While international mobile phones work well in Trinidad, roaming charges can be very expensive. Note- cellular phone service is restricted to B-mobile and Digicel in Trinidad (and only available with GSM-compatible phones). Of these, B-mobile is the most reliable network at the accommodations and research areas.

PLEASE NOTE that 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.

FACILITIES AND AMENITIES

The accommodations are equipped with a shared living area, full kitchen and a study. There is personal refrigerator space available for special circumstances, e.g. medicine storage.

DISTANCE TO THE FIELD SITE

The distance to the field sites varies from a short walk to a 30–40 minute van ride. **NOTE*** there will be hiking after the team arrives at the field site, especially for deploying camera traps.

FOOD AND WATER

Breakfast and dinner will be catered each day. Volunteers should still expect to help the field staff with cleanup. Meals are typical Trinidad fare- beans, rice, vegetables and poultry or beef. Most days will include bagged lunches, but breakfast and dinner will be sit-down, family style.

Smoking and alcohol consumption are not permitted on teen expeditions. **PLEASE NOTE** that there will be limited access to Western style food while you are on the expedition.

TYPICAL MEALS

BREAKFAST	Locally grown fruits (watermelon, oranges, bananas, mangoes), toast and jam, corn beef, tomato choka, bacon, pumpkin choka, sautéed tuna, sautéed bodi, fried ochroes, sausage casserole, scrambled eggs, and coconut bake. Coffee, tea and juice are available.
LUNCH	Please bring robust, waterproof Tupperware that you can fit in your backpack. Lunch will often be in the field. You are encouraged to pack items from the previous dinner or breakfast to eat at lunch
DINNER	Roast beef, scalloped corn, sautéed patchoi, herbed grilled potatoes, roasted vegetables, black-eyed peas, stewed chicken and onions, cream of pumpkin soup, saffron pilaf, lentils in coconut, lamb chops, smoked red beans Dasheen scoops, local fish in white wine, cucumber chow, Dhal, Channa and potatoes, fried rice, chow Mein, sweet and sour fish and scalloped potatoes, stewed pork, BBQ chicken, and various salads.
BEVERAGES	Fresh juice (depending on availability), along with water, coffee and tea.

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.

Vegetarians and vegans can be accommodated on this project with advance notice, and if they are prepared to be flexible. Usually there is plenty of food that meat and dairy can just be avoided.

PROJECT CONDITIONS

THE FIELD ENVIRONMENT



Trinidad is a jungle-covered island transected by three mountain ranges. The area around Hamgel Field Station is in a mixed-use area with secondary forest to the east and rapid housing development to the west. A river is on the south boundary of Hamgel grounds and the Arena forest reserve is about 400m directly south. The grounds are a mix of clay and sand and generally easy to walk on except in times of flooding. The river has a steep drop off and banks can be muddy enough to frequently remove sturdy boots. It is not recommended to venture to the river unattended.

Expect typically hot and humid weather. March through May typically constitutes the dry season, and June through August is part of the wet season. Teams that fall during the wet season should expect the schedule to change a bit based on weather conditions. Please also be prepared for the possibility of many mosquitoes if it rains.

GENERAL CONDITIONS

JUNE/JULY

HUMIDITY: 70–90%

TEMPERATURE RANGE: 68°F/20°C to 90°F/32°C

RAINFALL: 4–6 in/10–15 cm per month (June–August)

ALTITUDE: 0 to 656-ft./200 m

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, including rain, heat, and humidity, in the potential presence of insects, snakes and other wild animals. Fieldwork WILL continue in rainy conditions.
- Hike up to 5 miles total per day, over steep, slippery mountain terrain.
- Good cardiovascular conditioning and high mobility will be needed given the quick changes in elevation at some research sites.
- Staff team members will carry 45 lbs. packs over gullies and steep slopes. Volunteers can assist carrying gear, but this is only for seasoned individuals.
- To assist with camera trap tasks, volunteers must engage in moderate to strenuous exercise, and not be impaired in their mobility.
- Watch footing while moving through dense, tangled vegetation.
- Carry personal daily supplies such as lunch, water, and some small field equipment.
- Get oneself up into and down out of a four-wheel-drive vehicle, minibus, or car and ride, seated with seatbelt fastened.



POTENTIAL HAZARDS

MONITORING OCELOTS IN TRINIDAD

HAZARD TYPE	ASSOCIATED RISKS AND PRECAUTIONS
Transportation	In some years portions of the island experience extreme flooding that washes out roadways, causing landslides and disabling infrastructure. We may encounter poor road conditions. Only qualified, experienced drivers will transport volunteers in project vehicles; we ensure project vehicles are well maintained. Seatbelts must be worn at all times. Volunteers are not permitted to drive. Driving after dark will be avoided, except in cases of emergency.
Hiking	You'll likely traverse uneven terrain and hike uphill in humid tropical conditions; there's a risk of sprains, strains, bruises or breaks due to falling or tripping. You should never walk ahead of your team leader, and should follow the leader's instructions. Wear appropriate footwear, with good treads and ankle support, while hiking. You may wish to use a walking stick to help with balance while hiking. Some locations may require elevation climbs of one to two thousand feet in humid tropical forest. This can be challenging and strenuous, particularly in the wet season.
Forest Fires	In the dry season, forest fires are a potential hazard. If a forest fire occurs the team will evacuate as necessary and leave the research area.
Animals	<p>Venomous snakes are present in the area, including two pit viper species, the fer de lance, and bushmaster. Great care and attention will be needed when walking and hiking-through the forest.</p> <p>Team members should wear rubber boots or snake guards in the field, and should under no circumstances attempt to handle snakes. Volunteers will also be instructed on how to identify dangerous species and avoid them. You'll likely encounter many insects; wear long-sleeved shirts and long pants and apply insect repellent frequently to avoid bites. Those with insect allergies should bring the proper emergency treatment (such as an Epi-Pen) and inform staff of the problem and the location of the treatment; they should take special precautions while collecting field data.</p>
Hunter traps	Care will need to be taken to avoid traps set by hunters. Staff member will attempt to identify these so they can be avoided in the field.
Climate/ Weather	<p>Dehydration, heat exhaustion, sunburn, and other heat-related illnesses can occur, but you can protect yourself by drinking sufficient water, wearing high-SPF sunscreen, and wearing appropriate clothing. Dehydration from sweating can be a problem; please bring your own water bottles that you can easily carry and refill them with electrolyte-replacing packets.</p> <p>Because of the high humidity, people who use a hearing aid device may find it doesn't work properly. Consider purchasing a hearing aid dehumidifier. You must be able to stay outside in the rain for extended periods of time.</p>
Personal Security	Avoid areas designated as off limits by project staff. However, like many tourist destinations, greater Trinidad has its share of petty crime, muggings, and the rare assault. Most crime on the island is theft, usually of possessions left unguarded, or muggings (rarely violent) of visitors in dark streets and back alleys of Port of Spain and San Fernando at night. Take care with your luggage in and around the airport, and lock your rooms everywhere you stay. Exercise caution at night by sticking to well-lit streets; do not travel alone at night in poorly lit areas, such as scenic overlooks. Leave unnecessary valuables at home.
Distance from Medical Care	The nearest medical center is 20 minutes away, and the nearest fully equipped hospital is more than 40 minutes away and may take an hour or more with arranged transport. 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.



HEALTH & SAFETY

MONITORING OCELOTS IN TRINIDAD



EMERGENCIES IN THE FIELD

Project staff members are not medical professionals.

STAFF CERTIFIED IN SAFETY TRAINING:

WILDERNESS FIRST AID: Anthony Giordano and Nigel Noriega

EMERGENCY COMMUNICATIONS

The project will have cell phones and two-way radios for communication among the team while conducting fieldwork.

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 & TRAVEL VACCINATIONS

Please be sure your routine immunizations are up-to-date (for example: diphtheria, pertussis, tetanus, polio, measles, mumps, rubella and varicella) and you have the appropriate vaccinations for your travel destination. Medical decisions are the responsibility of each volunteer and his or her doctor, and the following are recommendations only. Visit [cdc.gov](https://www.cdc.gov) or [who.int](https://www.who.int) for guidance on immunizations.

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



TRAVEL TIPS

SUGGESTIONS FOR THE ROAD

YOUR DESTINATION

LANGUAGE: English.

TIME ZONE: GMT/UTC -4.

CULTURAL CONSIDERATIONS: It is illegal to bring or purchase any illicit drugs in Trinidad and Tobago, and the country has severe, strictly enforced drug laws. Possession of even small amounts of narcotics can result in long jail sentences and expensive fines. The penalty for carrying narcotics into or out of the country is five to 15 years jail time with no possibility of parole. Visitors are subject to local laws regarding the possession, use, or sale of drugs, including marijuana; violations of local law may be prosecuted with no recourse to foreign laws and attorneys. Officials may subject incoming travelers and luggage to rigorous search. Prescription and legal non-prescription medications are allowed. Camouflage clothing and luggage are against the law in Trinidad and Tobago, and will be confiscated.

ELECTRICITY: The research station has electricity (110–115 volts, standard U.S.-style plugs with two blades and a grounding pin). You may bring personal electronic equipment.

MONEY MATTERS

LOCAL CURRENCY: Trinidad and Tobago dollars (TT D). U.S. dollars (USD) are sometimes accepted.

PERSONAL FUNDS: An amount of approximately US\$300 in small bills can be brought for spending money. Use your discretion as to how much money you would like to bring for spending within the country. You will have access to an ATM in La Fortuna during activity days. An ATM will not be accessible during research days or field station days.

Credit cards are accepted in most of the country. Outside of the research area, only large hotels accept credit cards and traveler's checks. You can also exchange money at the airport when you arrive.

Be prepared to pay the airport departure tax of TT \$100 or US\$17; this is almost always included in the price of your ticket, but in some cases it is expected to be paid at the airport. Check with your airline.

COUNTRY AND PROJECT ENTRY REQUIREMENTS

Entry visa requirements differ by country of origin, layover, and destination, and do change unexpectedly. For this reason, please confirm your visa requirements at the time of booking and, again, 90 days prior to travel. Please apply early for your visa (we recommend starting 6 months prior to the start of your expedition). Refunds will not be made for volunteers cancelling due to not obtaining their visa in time to meet the team at the rendezvous. You can find up to date visa requirements via the following site:

www.travisa.com

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.

Generally, passports must be valid for at least six months from the date of entry and a return ticket is required.

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:

Hammond Noriega

Hamgel Research Station
lamp post 82, Sar sar trace
Manuel Congo
Trinidad

PHONE: 1-868-780-4925

Nigel Noriega

Hamgel Research Station
lamp post 82, Sar sar trace
Manuel Congo
Trinidad

PHONE: 1-868-775-5885



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)
- Certification of vaccination (if necessary)
- Sealable plastic Tupperware for packing lunches

CLOTHING/FOOTWEAR FOR FIELDWORK

ALL TEAMS:

- Earthwatch T-shirt
- Snake guards are mandatory- please note: camouflage colors are prohibited in Trinidad. Please make sure your snake guards are NOT camouflaged.
- 2-3 lightweight, quick-drying, button-down long-sleeved shirts
- 2-3 pairs of quick-drying long pants
- Wide-brimmed sun hat or baseball hat
- Hiking boots with ankle support, already broken in, OR good rubber boots
- Lightweight raincoat or poncho
- Thick hiking socks
- Bandana

CLOTHING/FOOTWEAR FOR LEISURE

- At least one set of clothing to keep clean for end of expedition
- Sandals (preferably ones that can get wet)
- Jeans
- Shorts
- T-shirts/tank tops
- Sweatshirt / light jacket
- Tennis shoes / casual shoes

FIELD SUPPLIES

- Small daypack to keep your personal items together and dry
- Sunscreen lotion with SPF 45
- Lip balm with sunscreen
- Field notebook and pencils
- Two one-liter water bottles
- Insect repellent
- Sunglasses
- Drybag or plastic sealable bags (good for protecting equipment like cameras from dust, humidity, and water)

BEDDING AND BATHING

NOTE: one set of bedding, as well as a bath towel, is provided by the project. If you wish to bring your own, the beds are twin size.

PERSONAL SUPPLIES

- Personal toiletries (biodegradable soaps and shampoos are encouraged). Note: simple soap and toilet paper are provided, but volunteers must bring all other personal toiletries.
- 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
- Flashlight or headlamp with rechargeable batteries (don't forget your charger!)

OPTIONAL ITEMS

- Binoculars
- Flip flops or sandals for the shower
- 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
- Earplugs for light sleepers

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



NOTE: The specific staff scheduled to run your team is subject to change.

DR ANTHONY GIORDANO received a M.Sc. from Frostburg State University (University of Maryland) in Conservation Biology and Applied Ecology, and a Ph.D. from Texas Tech University in Wildlife Science and Management. Anthony's career ecological research has included sharks, snakes, and raptors, among other predators. His greatest focus has been on mammalian carnivores, including Jaguars in the Gran Chaco of South America, Clouded Leopards in Southeast Asia, Fishing Cats in Bangladesh, Lions in Cameroon, Sun Bears on Borneo, and Maned Wolves in Paraguay. Anthony balances applied research with conservation problem solving, raising public awareness, developing emerging conservation professionals, and resolving human-wildlife conflict. Anthony first worked with ocelots as a volunteer for an Earthwatch project in western Mexico shortly out of college, and has previously studied their ecology and behavior at three other field sites. **He will be present for teams 1a, 1b, 1ab, 3a, 3b and 3ab.**



DR NIGEL NORIEGA, Co-PI received his Ph.D. from the University of California at Berkeley in Integrative Biology. He has worked on previous projects in Trinidad focused on fish. He has also worked with birds, reptiles and amphibians in multiple locations across the US. He has experience working with primates and amphibians in Uganda and Kenya as well. As a research biologist specializing in the evolution of vertebrate sexual dimorphism, most of his career focus has been unraveling the "Endocrine Disruptor" hypothesis and associated effects of chemical and environmental alterations on vertebrate ecology. He has recently changed his focus to conservation and science communication aimed at audiences for whom the world of scientific journals is inaccessible in time-sensitive scenarios. **Dr. Noriega will help coordinate field logistics and will be present on teams 2, 3ab, 3a and 3b.**



RECOMMENDED READING

YOUR RESOURCES AT HOME

RESOURCES

ARTICLES

- <http://news.mongabay.com/2013/08/trinidad-and-tobago-a-biodiversity-hotspot-overlooked>

PROJECT-RELATED WEBSITES

- <http://ecoevoeco.blogspot.com/search?q=hamgel>
- <http://www.sii-inc.org/>
- <http://www.carnivores.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: blog.earthwatch.org/
- YOUTUBE: [youtube.com/earthwatchinstitute](https://www.youtube.com/earthwatchinstitute)

LITERATURE CITED

YOUR RESOURCES AT HOME

LITERATURE CITED

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EMERGENCY NUMBERS

AROUND-THE-CLOCK SUPPORT



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. It is volunteers like you who fuel our mission and inspire our work.

While at Earthwatch, I've had the opportunity to field on a few expeditions, most recently in Kenya with one of my daughters. Each expedition has touched me deeply, and made me proud to be able to roll up my sleeves alongside my fellow volunteers and contribute to such meaningful work.

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.

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

Sincerely,



Scott Kania
President and CEO, Earthwatch





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