

# SOCIETY FOR ENVIRONMENTAL EXPLORATION

SPRING NEWSLETTER



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## EXCITING TIMES AHEAD FOR CAMBODIA FIELD TEAM

# CBF

TIMOTHY ALLEN, BIODIVERSITY AND CONSERVATION INTERN



Frontier's Cambodia Forest Project (CBF) has recently had to relocated to the Kulen-Promtep Wildlife Sanctuary. No other NGO has ever surveyed our chosen area of the sanctuary, providing us with a unique opportunity to make a direct contribution to conservation within Cambodia.

The first phase of our project was centred on obtaining species biodiversity data to establish long-term project aims for the

continuation of our research. Our findings our set out below:

1. 60 amphibians were found, comprising 13 identified species of frog, 1 species of toad, and a further 2 unidentified species of frog. One species, the similar frog, is classed as vulnerable, whilst the spotted warty tree frog is currently classed as threatened.
2. Reptile species were found across all survey sites, none of which are afforded a status by the IUCN (International Union for Conservation of Nature) red list.
3. 193 butterfly specimens were collected of which 55 species have been indentified, with no identification for an additional 7 as of yet.
4. 56 small mammals were found with a total of eight species indentified. All are listed as least concern.
5. 27 large mammal species were recorded, representing

high large mammal diversity in the area. The most significant species by IUCN Red list standards are the dhole, sunda pangolin and pileated gibbons, which are all currently classified as endangered.

6. 48 bird species were sighted, most of which were characterised as least concern by the IUCN. However, three birds sighted are categorised as Near Threatened. Seven species are listed under Cites Appendix II, and one each in Appendix III and Appendix I.

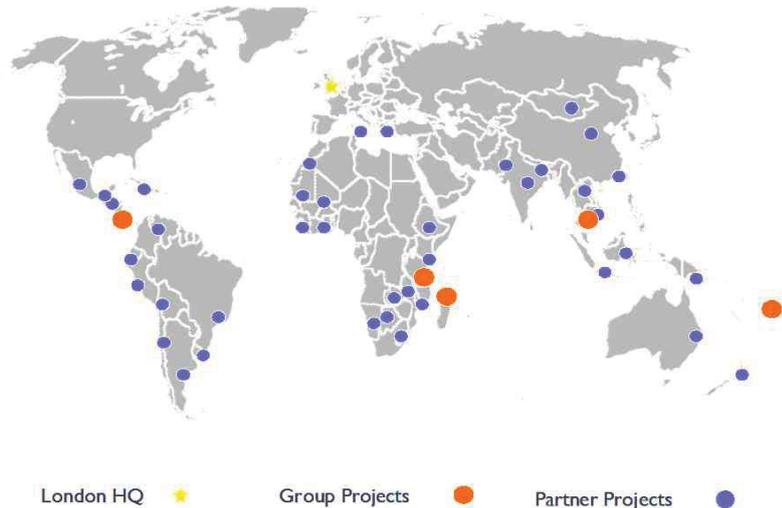
Using the data collected during the surveys, the principal investigator for CBF has identified new objectives to take the project forward. Research conducted from phase 2 onwards will concentrate on building a large scale project looking into biodiversity levels of different taxa within different disturbed habitats.



## About Frontier

The Society for Environmental Exploration was established in 1989 as a non-profit conservation and development non-governmental organisation which operates under the banner name of Frontier. Frontier began with just one volunteer-based project set up by Eibéis Fanning, the founder and managing director of the company. Over the past 23 years Frontier has expanded greatly and we now have both marine and terrestrial projects in five different countries, Cambodia, Costa Rica, Tanzania, Madagascar and Fiji, all with the same goal of conserving the local environment and creating sustainable livelihoods for the local communities who rely on it. We additionally run partner projects in over forty countries, where volunteers can gain experience in other disciplines, such as teaching English and working in an orphanage.

## FRONTIER BIODIVERSITY RESEARCH



### Madagascar Forest

Located on Nosy Be, Frontier is carrying out vital exploratory research, seeking out important forest fragments which may harbour populations of endangered lemurs, birds and chameleons, and instigating community forest programmes

### Madagascar Marine

In beautiful Nosy Be, Madagascar Marine are surveying to assess the health of the local marine environment. Particularly important to our research are the relationships between coral reefs, mangroves and seagrass.

### Tanzania Savannah

It has been twenty three years since Frontier first started carrying out terrestrial research in Tanzania. Now located in the Kilombero Valley, an internationally important wetland, we monitor large mammal movements between the valley and nearby Selous National Park.

### Tanzania Marine

Having moved back to Mafia Island, which became a protected marine park in 1995 thanks to Frontier's pioneering work, we are monitoring the effectiveness of the reserve, and have been asked by the government to carry out more survey work on currently unprotected coral reefs with the aim of extending the park.

### Costa Rica Rainforest

This project combines crucial rainforest conservation with community initiatives to help understand the impact of climate change on the environment and its wildlife.

### Cambodia Forest

Frontier is rightly proud of being the first organisation of our kind to be invited into Cambodia to carry out conservation research. Our studies in the dense forests of the Kulen-Prometep Wildlife Sanctuary are finding new species and formulating vital management strategies.

### Fiji Marine

Frontier was invited onto the idyllic island of Gau by the Lomani Gau committee (guardians of the island) to help maintain their precious marine resources. We've been surveying the coral reefs, seagrass beds and mangrove forests since 2006.

## RECENT PUBLICATIONS

- Edwards S. (2012) First confirmed records of sun bears in Kulen-Prometep Wildlife Sanctuary. *International Bear News* 21: 11-12
- Jew, E. & Bonnington, C. (2011) Socio-demographic factors influence the attitudes of local residents towards trophy hunting activities in the Kilombero Valley, Tanzania. *African Journal of Ecology* 49: 277-285
- Ahrends, A., Burgess, N.D., Gereau, R.E., Marchant, R., Bulling, M.T., Lovett, J.C., Platts, P.J., Wilkins Kindemba, V., Owen, N., Fanning, E. & Rahbek, C. (2011) Funding begets biodiversity. *Diversity and Distributions*, 1-10
- Evans, A., Steer, M.D. & Belle, E.M.S. (2011) The Alcyonacea (soft corals and sea fans) of Antsiranana Bay, northern Madagascar. *Madagascar Conservation and Development* 6 (1): 29-36
- Labanowski, R.J. & Lowin, A.J. (2011) A reptile survey in a dry deciduous forest fragment in northern Madagascar showing new records for the little-known snake *Pararhadinaea melanogaster* and a range extension for the skink *Amphiglossus tansyosoma*. *Herpetology Notes* 4: 113-121
- Durkin, L., Steer, M.D. & Belle, E.M.S. (2011) Herpetological surveys of the forest fragments between Montagne D'Ambre National Park and Ankarana Special Reserve, Northern Madagascar. *Herpetological Conservation and Biology* 6 (1): 114-126
- Platts, P.J., Ahrends, A., Gereau, R.E., McClean, C.J., Lovett, J.C., Marshall, A.R., Petri, K. E., Pellikka, P.K.E., Mulligan, M., Fanning, E., & Marchant, R. (2010) Can distribution models help refine inventory-based estimates of conservation priority? A case study in the Eastern Arc forests of Tanzania and Kenya. *Diversity and Distributions* 16: 628-642
- Lowin, A. (2010) Lepilemur feeding observations from Northern Madagascar. *Lemur News* 15: 20-21
- Johnson, S.A., Perryman, R.J.Y., Steer, M.D. & Belle, E.M.S. (2010) Observations of a *Pteropus rufus* colony in a dry deciduous forest fragment of Northern Madagascar. *African Bat Conservation News* 23: 3-6

## FRONTIER - COSTA RICA RESEARCH PROGRAMME

LAURA IRESON, BIODIVERSITY AND CONSERVATION INTERN

# CRF



of the project has also led to an increase in the observations of Howler Monkeys including sightings of infants within the troops. This increase in howler monkey abundance appears to correlate with the peak of the rainy season.

The turtle project has continued to yield results, with 33 green sea turtle and 380 olive ridley individuals recorded on both beaches. Olive Ridley turtle populations have decreased compared with last phase as the peak nesting season has come to an end.

Researchers working on the amphibian swamp species study observed the gliding tree frog on three separate occasions, making a new addition to the swamp species inventory. Continuation of the Neotropical River Otter surveys has led to an amazing discovery of 2 juvenile otters. This exciting

observation not only shows that there is more than one otter in the area, but also strongly proposes that there is a breeding pair.

Costa Rica's Forest project has successfully continued with its re-vegetation work, planting over 6500 individual plants within the *Bombacopsis quinata* plantation which covers seven 1 ha plots.

Frontier's hardworking and enthusiastic team continued to collect data on the wildlife of the Osa Peninsula providing valuable information to help give a greater understanding of any climate change impacts.



Over the past 9 months the research team in Costa Rica have seen some thrilling and encouraging results from their study. In particular, the primate surveys have certainly seen some exciting outcomes with Geoffrey's spider monkeys frequently observed, closely followed by the Central American Squirrel Monkey; both of which are at risk of extinction according to the IUCN red list. The most recent phase

## FRONTIER - MADAGASCAR FOREST RESEARCH PROGRAMME

TIMOTHY ALLEN, BIODIVERSITY AND CONSERVATION INTERN

# MGF



During our most recent phase of research in the Lokobe reserve, Nosy Be, MGF has dedicated most of its efforts to completing a survey of the impacts of the varying degrees of forest clearance and recovery on vertebrate communities.

Overall, forest recovery appeared to have positive outcomes for herpetofauna communities. Species diversity was lower at early phase research stages in comparison with later phases, where it was around double. The number of threatened

and declining species (IUCN red list) was positively correlated with forest age. Not only were more species found in older forests, but more species of high conservation importance.

Bird diversity appears to be remarkably low on Nosy Be and around Lokobe, especially when compared with the mainland. The very occasional sighting of parrots on the island, an abundant and gregarious species on the mainland, indicates that this species at least is able to reach the island. We hypothesise that Lokobe's size, 740 ha, and high degree of isolation may be too great to support forest bird specialist species in the long term.

A total of five small mammalian species were recorded but sadly we were unable to detect any positive impact of forest recovery

on small mammal communities in this survey.

In conclusion, our research has shown that herpetofauna communities appear to diversify with recovery succession gradients, contrasting with bird communities which became less species rich. Small mammal diversity was low throughout the study, with exotic species dominating the captures. The effects of forest recovery on mammalian species appear to be affected by the presence of invasive small mammal species, a common situation in Madagascar.

Our results highlight the potential benefits of forest recovery for herpetofaunal communities but also the likelihood that site scale forest recovery alone is insufficient for the conservation of all species.

LUCAS LOWE, BIODIVERSITY AND CONSERVATION INTERN

After five years of marine research in the Baie De Diego Suarez, the Frontier Madagascar marine team relocated from the sheltered of Manta Camp to Madagascar's biggest island, Nosy Be. Very little marine-based conservation research has been carried out in Madagascar compared with the equivalent terrestrial work, making it an ideal site to conduct Frontier's research.

The team have carried out essential Baseline Survey Protocols (BSPs) across all survey dive sites, including three newly mapped reefs in the surrounding area, established as a result of the team's exploration efforts. The need for baseline data on coral reef health increases with the rise in pressure from anthropogenic impacts, such as tourism and overfishing, making the project's results ever more relevant to Madagascar's conservation initiative and manage-



ment decisions.

The end of our most recent phase of research saw the completion of all the proposed BSPs, the addition of three new fish species for MGM and many other successfully completed objec-

tives. Frontier's Madagascar camp as a whole have also continued and successfully integrated with the local community and have strengthened their social and working relationship with the village. Objectives for the next phase (121) include surveying new sites along the east coast of Nosy Komba and setting up a satellite camp, thus allowing MGM

to continue to monitor the reefs as part of its long term observation of changes to the health of the island's surrounding coral reefs.

## INGESTION AND INDIGESTION OF PLASTIC DEBRIS IN TURTLES

BY WILLIAM MATTHEWS, BIODIVERSITY AND CONSERVATION INTERN



Many marine turtles have been found to consume plastic debris items, often mistaking it for food items. The most common example of this is the consumption of plastic bags, which look and move like jellyfish in water, the most common (and in some cases exclusive) food item in the diet of marine turtles.

The contents from the stomach of a single juvenile turtle, found off the coast of Argentina in 2011, was

found to contain over 400 pieces of plastic. Unsurprisingly, these sharp plastic shards were the cause of this animal's death, which impacted upon and caused obstruction of the oesophagus. Unfortunately this is not an isolated event, rather an increasingly common one. With rising levels of non-biodegradable plastic pollution in our oceans, the chances of marine turtles encountering plastic debris items are ever increasing.

The complex structure of most plastics means that most varieties do not biodegrade like other marine debris; instead they photodegrade, disintegrating into smaller and smaller pieces whilst still remaining a polymer. Even in this micro state, plastic is still detrimental to marine life; the plastic flotsam concentrates into the upper levels of the water column where it is ingested by the smallest marine organisms, such as plankton. From this level, plastic moves up through the food chain via the many marine creatures that consume plankton as food.

All seven species of marine turtle are listed on the IUCN Red List of Endangered Species as either "endangered" or "critically endangered". Many natural occurrences already endanger marine turtles, including predation (especially of hatchlings), and currents which drag individuals from their native warmer waters into colder seas where they become cold shocked and die. However, many new threats to sea turtle species have arisen and increased due to the presence of humans. Such problems include egg collection, collisions with boats and interactions with fisheries. Pollution with plastics is perhaps the most unnecessary contribution to the decline of turtles, and one that can be significantly reduced. With numbers already low, threats to marine turtle populations are perhaps more significant than ever and any further increase may eventually see this remarkable animal disappear from our seas forever.



Over the last 6 months the Frontier Tanzania Savanna team has made strong headway in local conservation efforts. In September land use management plans that gazetted two wildlife corridors were legally ratified. These plans were developed with the local communities to plan the future of their villages. These plans will benefit both the villagers and local conservation as they encourage sustainable, controlled use of natural resources as well as

gazetting the wildlife corridors. Protecting the corridors is a big success as they will allow large mammals to cross a main road without coming into conflict with humans. To build on this achievement the team are painting and designing scores of signs that will be erected across boundaries between different land use zones. Previous experience in this area shows that the clearer the laws, the more people follow them so these signs are a crucial part of the project.

As well as planning for the next generation our team have been working with them; in addition to regular English lessons they have been running conservation education days at the local school. These have been a great success with hands on activities using animal skulls, snares and games to inspire children to get involved.

In a recently completed project the team surveyed over 22,000ha of the local teak companies conservation land. The main aim of this project is to improve the management of the land but there are many other benefits. Large areas of the woodland are essential to the success of the corridors that we protected through our socioeconomic work, making good management of this land essential to their success. We are also hoping to use the large dataset to establish the effect of human impacts in this area. By assessing the extent of degradation by different human activities we are hoping to prioritise future work.

We hope that through continuing this holistic work we will be able to make an enduring change to this area.

## FRONTIER - TANZANIA MARINE RESEARCH PROGRAMME

WILLIAM MATTHEWS, BIODIVERSITY AND CONSERVATION INTERN

# TZM



The research team on Mafia Island has expanded the number of monitoring sites to include two areas situated outside the bay, allowing a comparison of reef health and commercial fish species within two different zones of the park. The results are encouraging, with fish abundance higher in the core zone, showing that the protected areas are a success and restocking of the surrounding waters is successful. This will hopefully ensure sustainable fishing for the future.

In terrestrial areas, questionnaires

and hippo awareness posters have been designed and distributed throughout the local villages, and an overnight survey of known Hippo sites was conducted. To assist with research and generate local revenue, it is hoped that a hippo ecotourism venture can be established in cooperation with a local village. The revenue from this venture will be used to minimise damage caused by the hippos on the island and provide compensation where appropriate.

Cleaning of sea turtle nesting beaches also continues in cooperation with the Tanzanian NGO Sea Sense. This important task aids both nesting and hatching of turtles, providing an obstruction free path to and from the sea and ensuring access to the best nesting locations.

Frontier continued its education mission in 2011 by holding environmental education days at two local primary schools on the island, involving events and activates with

the students and volunteers. An environmental group was successfully created and the group now meet every two weeks for lessons, lectures and environmental activities.

Finally, Frontier has expanded into new conservation areas, this time with a focus on whale sharks. With the aim of improving the protection afforded by the whale shark conservation society of Mafia, local fishermen now collect basic information on the whale sharks, which can hopefully be used in the future to aid in the protection of these creatures.



## WHERE HAS THE WILDLIFE GONE?

TIMOTHY ALLEN, BIODIVERSITY AND CONSERVATION INTERN

The wildlife trade is a hugely profitable business, generating hundreds of billions of dollars every year from the sale of exotic pets, food stuffs, souvenirs and alternative medicines. However, an underground faction is posing a serious threat to the sustainability of the trade and more importantly, to the existence of countless wild species across the globe.

The illegal sale of wildlife is cited by both TRAFFIC and the Wildlife Conservation Society (WCS) as being the second largest illicit trade behind the narcotics industry. Largely operating in trade 'hotspots', a huge black market for rare and highly prized species is fuelled by an ever increasing demand in China, the US, Europe and Japan. This has led to the systematic draining of wildlife from all habitat types across regions where poaching is rife and uncontrolled.

According to the World Wildlife Fund for nature (WWF), global populations of tigers have declined

by up to 95% over the last century whilst over 12,000 elephants are slaughtered each year for their ivory. 100s of millions of additional marine and terrestrial species have also been unlawfully sold in Southeast Asia during the last decade.

Efforts to combat illegal trade are increasing and international agreements like CITES (The Convention on International Trade in Endangered Species), are imperative to policing the sale of wildlife on a global stage. Unfortunately, important as these agreements are, they do not exercise 'grass roots' control on the trade. Front line defences, such as surveillance, anti-poaching patrols, electric fencing and the development of environmental education schemes, have proven time and again to be some of the most effective combative measures to the illegal exportation of wildlife. Encouraging a change in attitude towards conservation is arguably the most important of

these measures as it promotes environmental responsibility and guides communities towards sustainable industries. Ecotourism for example, provides an alternative form of (sustainable) income and encourages 'would-be' poachers to protect their business interest rather than exploit it. It is unlikely that, without the knowledge acquired from the heightening of environmental awareness, the perpetrators of these environmental crimes could ever be persuaded to move away from the lucrative wildlife trade.

It is therefore critical that governments and wildlife charities work in tandem to provide training for park rangers and community development offices as well as providing financial incentives to 'start-up' sustainable businesses. Without this impetus, the goal of reducing illicit sales may never be achieved and the extirpation of the world's wildlife will continue for some time to come.

## FRONTIER - FIJI MARINE RESEARCH PROGRAMME

WILLIAM MATTHEWS, BIODIVERSITY AND CONSERVATION INTERN

# FJM



Four reef sites were surveyed in accordance with the previous phase in addition to a further five sites as part of the on-going FJM-WWF collaboration.

The reefs at Somosomo and Nukuyaweni continue to indicate high levels of biodiversity and reef health, whilst Naviavia shows higher numbers and abundance of fish and invertebrates but low

levels of algal cover. In contrast to these sites, Nawaikama remains characterised by low levels of biodiversity, hard coral and lower reef resilience, and is characterised by high levels of anthropogenic activity.

Many sea cucumbers (holothurians) are harvested and dried for export for use in Chinese cuisine and holothurians are actively fished on Gau Island where the fishery is a significant source of income for local communities. However, evidence suggests that the fishery is currently operating not only at an unsustainable level but uneconomically as well since the species recorded are characterised by those of a minimal commercial

value.

Since phase 111, it has been observed that the population of crown-of-thorns starfish is increasing in the Lomaiviti Group of islands. Whilst the rate of increase in observed numbers does not indicate a potential outbreak at this time, it does indicate the need for monitoring in order to anticipate an outbreak

Finally, FJM looks to expanding its conservation measures to include the grey reef shark by establishing a new marine protected area at Nigali Passage. Other sharks of interest include the tiger shark and bull shark (also Near Threatened).

## DISSERTATION TOPICS

Frontier works in many locations on many research topics, from fish surveys on Tanzanian reefs to tracking sun bears in Cambodia. As a result of this diversity of work, we are able to offer an almost endless list of dissertation projects. This variety means that although our principal dissertation topics are listed below, we are more than happy to discuss new ideas. We also feel that it is important to discuss and develop the project to suit the individual carrying out the research.

The data requirements of a dissertation are such that the majority of projects will require a minimum ten week participation. Dissertation students are also eligible for the following discounts (subject to conditions):

BSc 10%

MSc 20%

PhD 50%

### ***Cambodia Forest***

What is the potential for resin trees to produce sustainable incomes for local communities?

Determine the economic value of timber in the forests and examine the potential conservation implications.

To what degree are non-timber forest products used to supplement income by local people?

How does human disturbance relate to large mammal abundance?

Using faecal samples describe the diet of large mammals of the area and investigate whether seeds that have been ingested remain capable of germination.

### ***Costa Rica Forest***

Leaf cutter ant ecology – determine foraging distance, tree selection/leaf preference, overall biomass and scent marking efficiency (which would include some lab work)

Behavioural study of army ants including troop dynamics, relationship with weather and food competition

Turtles – the variation of temperature at different sand depths. What are the factors that determine sand temperature and what effect will that have upon the sex of turtle eggs laid in different locations?

Using turtle nests that are relocated due to bad placement identify the variation in the weight and size of eggs and explore the implications.

### ***Madagascar Forest and Marine***

Lemurs: studies in abundance, habitat preference, diet, social structure.

Small mammals, amphibians and reptiles: seasonality, abundance and diversity in relation to habitat type and reaction to human disturbance.

Examine the interplay between local attitudes to natural resource use and conservation goals.

Examine fishing methods and compare catch for subsistence, artisanal and commercial fisheries.

Using the example of local fisheries discuss the interplay between local attitude and conservation goals.

Fish food webs, what is the makeup of the community with respect to diet?

What fish species use the mangroves as nurseries and in what densities?

### ***Tanzania Savannah and Marine***

The value of marine protected versus unprotected areas to the ecotourism and fishing industry.

Study the effect of varying soil characteristics such as pH, nutrition level and salinity on plant species.

Investigate the diet of large mammals, the presence of viable seeds in dung (and thus their potential role in seed dispersal), and estimations of their abundance and species makeup.

Investigate the importance and role of natural resources – what economic value to natural resources represent?

### ***Fiji Marine***

Assess locally managed marine reserves and the spill over effect in maintaining local fisheries.

Assess the population ecology of commercially important holothurians.

What are the effects of anthropogenic activity and surface run-off on the ecology of coral reefs?

Compare the abundance of damaged or bleached coral to living coral.

Identify abundance of coral eating fish in relation to coral – what is their overall feeding rate?

If you are interested in conducting research alongside our field scientists then the first step is to contact our research department at [research@frontier.ac.uk](mailto:research@frontier.ac.uk) or phone our London office on +44 (0) 207 613 2422. We can then discuss your interests, what is applicable to your course and what will best contribute to your future career. Armed with this information you can then work with both us and your university supervisor to develop your project. Once you have a clear project idea then it is time to fill out a project proposal form and send it in. All that is left after that is to go and do the research!

## TINY SPIDERS REALLY CAN THINK ON THEIR FEET

LUCAS LOWE, BIODIVERSITY AND CONSERVATION INTERN

Recent studies have shown that small spiders have such large brains relative to their body size, that their other organs can be pushed further into the arachnid's body cavities.

The on-going study was conducted by a team of researchers led by a staff scientist at the Smithsonian Tropical Research Institute (STRI) and a professor at the University of Costa Rica, Bill Eberhard. The team examined the nervous system of nine spider species from six different web-weaving families. Smaller spiders were found to have considerably larger brains relative to their body size, in some cases occupying up to 80% of the total space in their bodies, including 25% of their legs. This fascinating finding could explain why smaller spiders are just as capable of spinning webs as the larger arachnid species. Some very small juvenile spiders

even have deformed bulging bodies which contain excess brain that is not seen later in life as the individual grows to accommodate it.

Haller's rule is a general rule for animals that is thought to be applicable to arachnids, with the rule stating that as body size goes down, the proportion of the body taken up by the brain increases. Brain cells do require significantly high levels of energy and it is suspected that these small spiders convert much of the energy generated from their food into brain power. Spinning webs is a behaviour thought to be quite complex, which would explain the need for such a relatively large brain.

The jumping spider, *Phidippus clarus*, is an excellent example of

how other organs seem to have to compromise in order to fit around the brain; the adult's digestive system is actually in the spider's cephalothorax – its head and body cavity. This is accentuated in the baby of the species, with the digestive system being less developed as a result. It is currently unknown what affect this will have on juveniles' development.

There are some interesting comparisons to be made however, as three kleptoparasitic spiders that no longer have the ability to spin webs, do indeed have a relatively large brain, but why? As the brain power is not needed for complex web spinning, researchers speculate that it is the spider's behaviour of stealing other spider's prey that demands a certain level of intelligence to ensure their success.

## PHOTO OF THE MONTH - COSTA RICA





## OVERSEAS:

### TANZANIA:

Assistant Research Officer (terrestrial and marine)

### MADAGASCAR:

Assistant Research Officer (terrestrial and marine)

### COSTA RICA:

Assistant Research Officer (terrestrial)

### FIJI:

Assistant Research Officer (marine)

### CAMBODIA:

Assistant Research Officer (terrestrial)

## IN LONDON HQ:

### INTERNSHIPS

Available in the London HQ throughout the year in various departments:

- Overseas Operations
- UK Operations
- Marketing & Events
- Biodiversity and Conservation

If you would like the opportunity to join the Frontier team and apply for one of these positions, please email your CV with covering letter explaining your suitability for the role: [staff@frontier.ac.uk](mailto:staff@frontier.ac.uk)  
Further details on Frontier and all the available positions can be found on [www.frontier.ac.uk](http://www.frontier.ac.uk)

# SPECIAL OFFERS

## GROUP DISCOUNTS

Why not save up to 20% by travelling with friends by taking advantage of Frontier's group discounts? Here's what you could be saving:

- Groups of 2 people - save 10% each
- Groups of 3 people - save 15% each
- Groups of 4 or more people - save 20% each

Available on the below projects for 10 weeks +

## CALLING ALL STUDENTS!

If you're studying towards a BSc, MSc or PhD, Frontier can not only help you with your dissertation but are offering some fantastic discounts on your Frontier Group project. BSc students will receive a 10% discount, MSc students receive a 20% discount and PhD will receive 50%!

Available for all projects listed below

- Fiji Marine Conservation & Diving - The Fijian archipelago lies scattered lazily in the achingly blue waters of the Pacific Ocean, bathed in the radiant South Pacific sunlight. Join our team of volunteer divers and marine scientists and dive alongside dolphins, sharks, manta rays and turtles, scuba dive training to PADI AOW level FREE.
- Madagascar Marine Conservation & Diving - Visit the home of some of the world's most spectacular and least explored dive sites. FREE dive training to PADI AOW level.
- Madagascar Wildlife Conservation Adventure - Explore some of the world's most spectacular and least explored wildlife and wilderness as you camp and trek on the extraordinary island of Madagascar.
- Cambodia Tropical Forest Conservation & Adventure Project - Explore Cambodia's uncharted and pristine tropical rainforests and discover a host of exciting wildlife while living as an intrepid explorer in the jungles of Cambodia.
- Tanzania Marine Conservation & Diving - Dive with your fellow volunteers and conserve pristine coral reefs in the turquoise waters of the Indian Ocean surrounded by turtles, rays and whale sharks. Dive train to PADI Advanced Open Water FREE.
- Tanzania African Wildlife Conservation Adventure - Track and monitor threatened wildlife communities in the open savannas and wooded wildlife corridors in the heart of Tanzania.
- Costa Rica Big Cats, Primates and Turtle Conservation - Help save endangered sea turtles, patrol beaches, and release turtle hatchlings. Trek volcanoes and explore tropical forests.