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FOREWORD

RESEARCH AND DEVELOPMENT MANAGER DR ELISE BELLE PARTNER PROJECTS MANAGER NEIL COOK



The last six months have been very busy at Frontier, with a lot of work being carried out by the Research and Development team to get the results of our field studies published and secure additional funding to expand our current research programmes.

The Frontier marine project in Tanzania produced some very encouraging results, showing that biodiversity levels within the marine park on Mafia Island are now significantly higher than in other more intensively fished areas outside the park.

Meanwhile, our terrestrial project in Tanzania's Kilombero Valley funded by the Darwin Initiative (DEFRA) is now in full swing. The annual report highlighted the need for all local stakeholders to cooperate in order to

design effective management plans capable of achieving both the long term protection of wildlife and sustainable livelihoods for local communities.

Frontier marine and terrestrial projects around the world - ranging from surveying coral reefs in Fiji and Madagascar, to monitoring big cats in Costa Rica, lemurs in Madagascar, and highly endangered species in Cambodia - are all contributing essential baseline data to help conserve unique ecosystems.

Our field scientists are working very hard in often challenging conditions and the help of volunteer Research Assistants is crucial to ensure that we keep collecting enough data to provide a strong scientific basis for conservation initiatives.

With 2010 being the International Year of Biodiversity, there is no better time to get actively involved in a Frontier conservation project!



The news from the Frontier Partner Projects reflects the range and diversity of the work our volunteers have been undertaking in some far flung corners of the globe, from community work in Cusco and trekking to Machu Picchu, to sanctuary and reserve-based wildlife projects in Africa, to horse riding and teaching in Mongolia and learning Mandarin and teaching English in China. Whatever your interests and ambitions, Frontier is sure to be able to find you a wonderful placement that will provide you with valuable lessons, a definite sense of achievement, new friends and memories that will last a lifetime.

As part of our aim to help as many communities and projects around the world as possible, as well as offer the widest range and most rewarding placements available, the Partner Projects team have been busy developing new projects and establishing new partnerships. If you're thinking about travelling to Asia, look no further than our new projects in India, Thailand, Cambodia and Sri Lanka, with many more soon to follow!

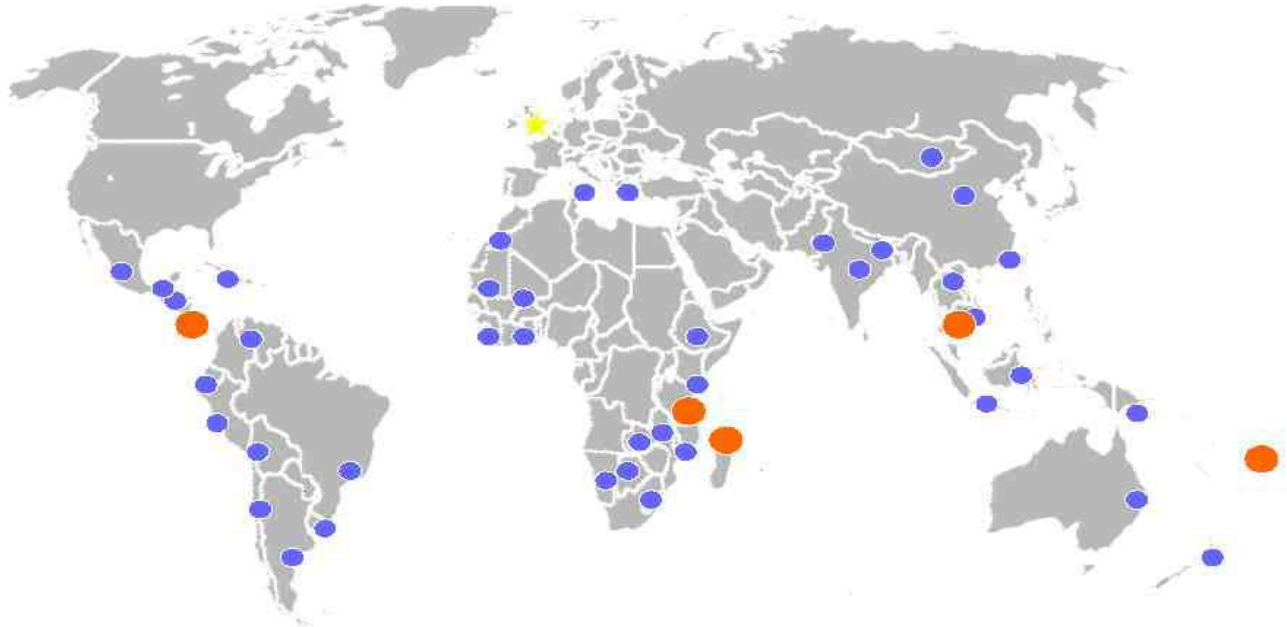
We're excited about the direction in which the Partner Projects are heading, and with more and more volunteers coming home with cries of "Send more people to our project!", there's definitely no looking back!

Mission Statement

To conserve the world's most endangered wildlife and threatened habitats and to build sustainable livelihoods for marginalised communities in the world's poorest countries. To create solutions that are apolitical, forward-thinking, community-driven, and innovative and which take into consideration the long-term needs of impoverished communities.

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 20 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, as well as partner projects in over forty countries, all with the same goal of conserving the local environment and creating sustainable livelihoods for the local communities who rely on it.



London HQ



Group Projects



Partner Projects



FRONTIER BIODIVERSITY RESEARCH

Tanzania Savannah

It has been twenty 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.

Madagascar Forest

Located between two protected areas, 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

The beautiful Bay of Antsiranana, at the remote northern tip of Madagascar, has been the location of our efforts to ensure the health of the local marine environment since 2005. Particularly important to our research are the relationships between coral reefs, mangroves and seagrass.

Costa Rica Rainforest

Frontier's new 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 are justly 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 Botum Sakor National Park are finding new species and formulating vital management strategies.

Fiji Marine

Frontier was invited on to 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.

International Year of Biodiversity



As a way of celebrating the beauty and uniqueness of our planet, we are very pleased to acknowledge that the UN have declared 2010 the International Year of Biodiversity. In an effort to generate support for conservation projects across the world, the campaign aims to raise awareness of the unprecedented loss of biodiversity worldwide. With our projects operating throughout the world, we wish to encourage any and all measures which raise the profile of conservation in the UK. It is also a great opportunity for anyone to take up the challenge with us and have a unique experience in some of the most biodiverse countries on Earth.

With such a variety of - perhaps less impressive but nonetheless worth preserving - native flora and fauna to appreciate on our very own door step, we also urge you to explore any local initiatives. Or if you are feeling particularly passionate, why not set up your own project to celebrate biodiversity? There are a range of activities you can unearth across the country. Whether you need a day to relax from work, or some family fun in the sun, muck in and help celebrate biodiversity!

CLIMATE CHANGE AND COSTA RICA



COSTA RICA AND FRONTIER

Frontier have now been working in Costa Rica for nearly a year. We have been busy monitoring amphibians, birds and mammals in the reserve, collecting long term data which will enable better analysis of the impacts of climate change on the fauna and flora of Costa Rica.

RE-VEGETATION PROJECT

Frontier staff members and volunteers have been working hard preparing a 20ha plantation site to be used in a re-vegetation programme. The 20ha of land were previously felled

and planted with spiny pochote (*Ceiba Aesculifolia*) to be used for timber. The Frontier team in Costa Rica have been marking out the site into 1ha blocks, which will be replanted with local trees. Each block will be treated with various methods and monitored to obtain results on the most effective of those.

FROGS AND CLIMATE CHANGE

Frogs are often used as an indicator species for environmental damage. There are a variety of reasons for this. Their skin is permeable which is important in allowing them to breathe under water; however, it also makes them very susceptible to pollutants, both in the air and in the water, and to climate change. Both moisture and temperature are important. There are only a few frog species that can survive arid conditions because the porosity of the frogs' skin means they lose moisture rapidly. Temperature is important as frogs are cold blooded, which means they rely on an external source of heat to keep them warm. Both temperature and humidity affect their reproduction, and for the majority of species water is an important nursery for the frogspawn and tadpoles.

Costa Rica is located in the tropics and has a huge diversity of frog species.

Unfortunately there have been sharp declines observed in frog species, which could be linked to climate change. For instance, there has been an epidemic of the disease *Batrachochytrium dendrobatidis*, which is thought to be linked to the changing climate making conditions more conducive to disease, although this is a disputed topic. Research has also shown a simultaneous decline in frog and lizard populations, both of which are associated with the same climate patterns.

Currently Frontier are carrying out surveys on the frog populations in Costa Rica, this work is crucial to be able to look at the possible effects of climate change. They have already found significant differences between the number and diversity of frogs and the altitude and leaf litter cover. This work is crucial to learn more about the frog species in the area and how sensitive they are to variations in the environment.

FRONTIER - MADAGASCAR FOREST RESEARCH PROGRAMME

JYOT JABBAL, RESEARCH AND DEVELOPMENT INTERN

FRONTIER IN MADAGASCAR



Frontier continues to work in forest fragments in Northern Madagascar, in the area between Montagne d'Ambre and the Ankarana special reserve. Wildlife surveys are still our main activity, as understanding the dependencies of the local fauna in the area is a significant part of preserving their ecology.

WHAT'S THE FOSSA

After working for some time in an area believed to be inhabited by the elusive fossa (*Cryptoprocta ferox*), our researchers were finally pleased to see proof of their continued existence in the form of a mating pair on the roof of a hut on camp.

The procreating pair had chosen that particular location for unknown reasons, but as the fossa generally shies from human contact, further research into the species might be difficult to pursue.

The fossa is the largest known carnivorous mammal in Madagascar. The species is unique to the island, and highly adapted to arboreal habitats. Their diet consists of lemur, fish and fowl, making them highly vulnerable to habitat loss.

Despite their physical similarity to the North American Cougar, the fossa is in fact more closely related to the mongoose family (Herpestidae). It is thought that more than one species of fossa may exist, as the different sightings across the country vary in reported size and colouring.

LEMUR CUISINE

Studies into feeding habits of the Ankarana Sportive lemur (*Lepilemur ankaranensis*) are helping us to better understand the dietary needs of the species in relation to

the threatened environment they rely on.

In addition, researchers are also looking to see how the species in the study site might vary under the differing environmental pressures the area faces.

The study involves nocturnal observation of lemurs feeding, with details being recorded about the food type and location of the animal.

The first results show that leaves and fruits appear to be the main components of the Sportive Lemur's diet, with leaves comprising two thirds. It is unknown whether this may be due to availability or preference, but further study may shed new light on the subject.



HANNAH BURTON, RESEARCH AND DEVELOPMENT INTERN

NUDIBRANCHS LAID BARE

Nudibranchs, meaning ‘naked gills’, are marine molluscs that are generally small and brightly coloured. They have developed these characteristics to ward off predators or to camouflage in their surrounding environment. Due to their fascinatingly colourful patterns, they have long been a favourite of the recreational scuba diver. Interestingly, however, there are very few professional biologists worldwide specialising in the study of these animals and knowledge of nudibranchs is therefore generally limited, especially in Madagascar. Frontier Marine Camp have recorded these colourful critters to Order level as part of the baseline surveys being conducted in the Bay of Antsiranana since 2005. This study is designed to try and find out more about their distributions and habitat preferences.

After 56 long hours of searching over a fifteen month period, 31 nudibranch species have been found so far. Last month, the species *Chromodoris aspersa* was recorded for the first time within the bay, and all signs seem to indicate that there are many more to be found. Across Madagascar, from Ile Sainte Marie, Toliara, Tolaganaro to Nosy Be, a total of 175 species of nudibranchs have been collected in recent years, including a number of species new to science!



Some locations within the Bay appear to be preferred by nudibranchs, supporting higher numbers of individuals and species. This may be due to the presence of different prey species in different locations, as Nudibranchs are carnivores and usually prey on sessile animals like sponges, corals or anemones.

Protection from predators is another important factor for habitat preference as they have a soft body with no shell to protect them. The Madagascar team are looking forward to conducting further surveys that should help solve the mysteries of their geographical and seasonal variations.

CORAL FARMING OPTIMISM



Figure 1. *Acropora* spp., once thought impossible to propagate, are now one of the most common artificially grown corals.

Everybody knows corals are colourful and beautiful, and most know that coral reefs are the most biodiverse of all marine environments. It is no surprise therefore that the general public would want a piece of paradise in their own home. Due to their increasing popularity, saltwater aquariums that contain living corals have dramatically increased in popularity since the late 1980s. Coincidentally, the global trade of live stony coral has increased 20 fold from 1985 to 1995 and is still increasing. Interest in keeping attractive marine species has been fuelled by popular cultural icons like Nemo, advances in aquarium technology making it easier to manage marine species, and the explosion of online retailers selling marine livestock.

Although removal of live coral for the aquar-

ium trade has received the most press in recent years, corals used in the dried curio trade and for the manufacturing of lime and building materials, consumes much more coral tonnage per year. The dried curio trade is where marine organisms, such as coral, are collected and dried to be sold as souvenirs, or fragments to be used in jewellery.

Another, albeit more virtuous, use of live coral is by the medical community. The discovery of fluorescent proteins in corals and sea anemones has indeed provided new tools to researchers studying AIDS, Alzheimer’s disease, cancer, and a host of other diseases.

As a result of the increased trade in live coral, concerns have been raised about the impact of coral removal on native reefs, and the possibility of localised extinction for some slower growing genera.

To alleviate these pressures on the coral reefs, a number of methods of coral propagation have been developed. Growing corals artificially can indeed help supply the aquarium industry, the building industry and the medical community with enough live coral to ensure natural populations will not be degraded. Furthermore, this method can also be used to restock natural reefs which have suffered from bleaching or storm damage.

Coral propagation works by taking advantage of the fact corals reproduce asexually, through polyp division and colony fragmentation, as

well as sexually, through the simultaneous release of gametes. This means that small fragments can be taken from mother colonies and used to grow new coral reefs. Over six months, the Madagascar Marine team have initiated coral propagation trials. The team are currently focusing on the propagation of hard coral of the genus *Acropora* (Fig. 1) and soft coral (such as *Sarcophyton* spp). Perfecting the methodology is vital for the efficient production of these corals, therefore the team are researching different attachment methods, different locations and recording the differences in growth and success rates.

Hopefully these methods will help to replenish natural stocks, possibly acting as a buffer against natural disasters and climate change. These trials will also encourage local economies, as restoring damaged corals will assist the popularity of sustainable ecotourism.

Furthermore, this research is not only a useful tool in the local area of Antsiranana, Madagascar, but could be repeated to promote coral propagation in other areas with similar climates.

DEDICATED TO DARWIN



At Frontier we do our utmost to conserve areas of scientific and biological importance, and our endeavours in Tanzania are by no means an exception. We have been committed to conducting research in the Kilombero region of Tanzania since 1998 on a series of different projects. In 2008, we set up Sayari Camp, located between the Kilombero River and the Selous Game Reserve. Since we made this beautiful area of miombo woodland our home, we have been conducting a variety of surveys in the surrounding area to monitor large mammal movements as well as levels of biodiversity and abundance.

One of the main reasons we chose this area to investigate, was in response to concerns raised about the threat to the migration of large mammals through the Ruipa Corridor, located between two protected areas: the Udzungwa Mountains National Park and the Selous Game Reserve. Following initial surveys we have been busy gathering more information about what may be affecting large mammal migration in the area, with the aim of preserving this important but highly threatened wildlife corridor.

Like many Sub-Saharan countries, Tanzania relies heavily on utilising its natural resources. Agricultural production specifically accounts for half of all national income, and the sector as a whole provides opportunities for over 80% of the population.

In recent years the Kilombero Valley has seen a particularly high rate of immigration to the area, attributed to the rush for fertile land which was earmarked by the Tanzanian government as a potential area for increased agricultural production.

Tanzania does have a tradition of environmental stewardship when it comes to protecting natural resources, and has fairly progressive policies in place to support this. However, an unfortunate paradox unfolds

when protecting areas of biological significance, as our research in the Kilombero Valley has shown. Often, unprotected wildlife corridors that support biodiversity lend their success to the consistent environmental conditions present in the area. Ironically, the same conditions that make this land so suitable for wildlife, also threaten it from agricultural cultivation.

Herein lies the sensitive subject we are faced with as scientists. It is paramount that we conserve areas vital for the movement of large mammals to encourage biodiversity, yet we need to ensure that local populations can survive.

In order to deal with these conflicts of interest, Frontier has embarked on an ambitious three year project. With funding from Defra (UK Department for Environment, Food and Rural Affairs) through their Darwin Initiative (to conserve threatened areas in countries which are rich in biodiversity but poor in financial resources) we are in the process of developing and implementing an ecologically sustainable management plan for the stakeholders in the Kilombero Valley. A key part of the process has involved working with farmers, village leaders, local councils and various other stakeholders to assess the use of natural resources, and the needs of local communities.

Through a series of socio-economic surveys we have sought to gain a better understanding of traditional practice in the region, attitudes to wildlife, and the use of natural resources. The results of our surveys have shown that over half of all people interviewed had arrived in the Kilombero Valley in the last year, with a significant proportion seeking land to cultivate and many planning to expand their small holdings. Another particularly important point to assess was whether local farmers were aware of

land management plans relevant to the region, set in place to curb unsustainable use of natural resources. We found that most new residents in the region were unaware of these local initiatives.

When we enquired about attitudes regarding natural resources, such as timber, firewood and water, many attributed great value to them. However, when broaching the subject of wildlife that resides in these areas, it was perceived as a threat as opposed to an asset. It is therefore important to ensure that management plans designate areas where communities have sufficient access to the resources they require, without infringing wildlife habitats. As there are no designated boundaries for the Ruipa Corridor, and even village boundaries are often disputed, a continued dialogue and participatory approach are required. The potential for ecotourism in the area may also prove a vital tool in providing alternative sources of income for the local communities, encouraging environmentally benign practice in the process.

In order to achieve an ecologically sustainable management plan for the Ruipa Corridor, it must be fair and realistic, with the possibility of striking a balance between environmental stewardship and sustainable livelihoods. This will require universal effort and cooperation from all stakeholders. Obviously, with so many parties involved, all contesting different priorities, education will play an integral part in ensuring the sustainability of the region. This is an area we are keen to be actively involved with. We are indeed already working closely with Dar es Salaam University, the Kilombero Valley Teak Company and local farmers, offering training in wildlife management.

Despite the challenges we face, the project has been met with great enthusiasm and a willingness to participate by all stakeholders and we are looking forward to the next productive and proactive year working with the Darwin Initiative.



FRONTIER IS BACK!



MAFIA ISLAND MARINE PARK

In 1995 Frontier helped establish the first multi-user marine park in Tanzania, on Mafia Island using Frontier volunteer data collected between 1989 and 1994. After several years spent in various locations outside the marine reserve, at the beginning of this year Frontier finally returned! This is an exciting opportunity for Frontier to investigate whether the marine park has been effective in preserving the coral reefs, and compare biodiversity levels within and outside the boundaries of the park.

EFFECTS OF THE MARINE PARK ON THE LOCAL ENVIRONMENT

The marine reserve on Mafia Island was set up to protect biodiversity by preventing overfishing in the area. By using boat patrols and directly involving the local popu-

lations, destructive fishing practices have been controlled and almost eliminated.

These last six months have been spent collecting data from sites within the park boundaries. The preliminary results are extremely promising with high levels of hard coral (Scleractinian), which form the primary structure of reef systems, as well as soft coral (Alcyonacea). This suggests that the coral reefs within the marine park are well developed and stable. Surprisingly, the abundance of sea urchins is around 60 times lower within the park, which is in fact good news because in large numbers urchins can be destructive bioeroders of coral. The higher number of urchins found outside the park is explained by the fact that finfish which feed on urchins are being overfished outside the park, leading to a proliferation of sea urchins.

It is also a very positive sign for the park that fishing levels are now sustainable.



DIVE TOURISM

Tourism within Mafia Island Marine Park has increased greatly within the last 15 years, and there are currently three dive operators on Miwene Island alone. However, inexperienced divers have less honed buoyancy skills and this has the potential to damage coral reefs. The Frontier team in Tanzania have come up with a potential solution. They have proposed to clear two areas of corals for learners to practise their skills. The removed coral will be transplanted to coral propagation sites and the results monitored. This may in the long term help in the restoration of damaged areas of coral reef.

Finally, another issue raised by the Frontier team in Tanzania is the use of old fishermen's anchor design on boats carrying divers. These types of anchor have poor grip on the sand and often drag, destroying large portions of the reef. A solution to this problem would be fixed mooring buoys and appropriate sites will be suggested by Frontier to the Mafia Island Marine Park authorities.

FRONTIER - FIJI MARINE RESEARCH PROGRAMME

PRISCILLA CORBETT AND ED CREMIN, RESEARCH AND DEVELOPMENT INTERNS

GO FISH!



Our volunteers and research staff have been very busy on Gau Island, investigating the abundance of fish present both on reefs adjacent to local villages and on isolated areas of coastline. Since being instructed on how to dive, the volunteers have been plunging into the crystal clear waters famous for their diverse and colourful reefs.

Our volunteers even experienced the once in a lifetime opportunity to dive with some 30

or 40 grey reef sharks around the pristine unexplored reefs of Nigali Bay. The large concentration of sharks in the area makes Nigali one of the best dive sites in the world! It's not all fun though, as populations of grey reef sharks are thought to have declined dramatically in recent years. Sharks are often caught by fisheries and their low reproductive rate and limited dispersal means their populations are susceptible to local depletion. In addition, grey reef sharks are top level predators, feeding primarily on free-swimming bony fishes and cephalopods.

In order to better understand the impacts of local fishing pressures on sharks and on the reef ecosystems as a whole, the team has established additional monitoring sites, both close to villages and in more remote areas. The first results of the surveys indicate that fish abundance is significantly lower in sites close to villages in comparison to that of sites in more remote areas, and there was

also a slight drop in the species diversity on the reefs situated next to populated areas.

The team have also been assessing the influence of 'no take zones' set up close to villages, and found that the set up of these protected zones where fishing is prohibited has had a positive impact on fish abundance and diversity, closely matching that of the most remote sites. This study therefore emphasises the usefulness of marine protected zones in preserving marine biodiversity.



DISFIGURED DISCOVERIES



Despite all our efforts to encourage the protection of biodiversity, our programme in Cambodia is perhaps one of the most challenging. Despite this, we are determined to help curb the loss of wildlife in the region.

As part of a study investigating Civet abundance and dietary preferences in the Botum Sakor National Park, a series of traps were set. However, when both the bucket traps and small mammal traps were checked, some startling developments unfolded. It was evident

that several animals caught had physical deformities. One yellow rajah rat captured had a forelimb that was not fully formed; one of the speckled forest skinks had a forked tail and one of the male garden fence lizards had a growth on its underside that made it appear to be holding eggs internally, or look gravid. In nature it is not uncommon to see abnormalities or defects. However, we feel this is no unfortunate coincidence.

In the surrounding rural areas outside the confines of the national park, there are large areas of farmland worked by underprivileged families. With such extreme pressures opposing these communities, any opportunity that presents itself is heralded as a lifeline. In the hope of maximising crop production, farmers are resorting to illegal cocktails of pesticides with increasingly disastrous effects.

Since Rachel Carson published her groundbreaking book in the 1970s entitled *Silent Spring* on the effects of pesticides

on people and the environment, these dangers have been widely acknowledged. Many farmers in Cambodia are unaware of these implications and are choosing to use pesticides as a result of seductive marketing and general prevalence in the country. As it happens, the term pesticide when translated to Khmer (the native language) includes the word 'thnam', meaning medicine. It is ironic then that these farmers are trying to treat or mend their own land by using these products, when they are effectively destroying the surrounding ecosystems. This is certainly a very pressing issue in the region, and one we must monitor in the future.



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PROJECT COORDINATOR LOTTIE DE VERENNE
GHANA ORPHANAGE, TEACHING AND COMMUNITY HEALTH



Never have I been thrown so quickly into the heart of a community as I have here in Ghana. As I stepped off the plane in Accra three weeks ago, I was already holding a Ghanaian baby who I'd entertained during the flight for a mother studying for her degree. Trying to shield the little one from the heat of the engine I soon realised that I was actually stood metres away from the aeroplane and that yes, Ghana really is this hot!

The family that I am now a part of for the next 5 months met me at the airport with smiles, hugs, and a big hand-painted Frontier sign. They immediately telephoned my parents to assure them that I was safe and well and with my new family. We then drove for about half an hour out of the relentless heat of Accra and up towards the village in the mountains. "Great," I thought, "Accra's not far if I have to get supplies or need anything!" How wrong I was. Accra may not be far, but this is Africa, and so far I haven't been lucky enough to repeat my easy half an hour journey back to the capital. Rather, it has taken me between two and four hours depending on the weather, the traffic, and how full the tro-tro (local minibus) is with people and fruit – the fewer the number of people, the more slowly a tro will travel in order to pick up as many people as possible. Although



I must admit, I am a fan of a slow tro over the faster kind.

Being so deeply immersed and accepted into the local community is a privilege. Every morning and afternoon I am greeted by the villagers who now all know my Twi (the local language) name, Efua. Everyone is named after the day of the week on which they were born (though men and women have different week names), and Efua is the name given to all the females born on a Friday. Admittedly I do find it a bit of a problem given that there are only 7 days in a week so only 7 names for all the females in the village to share, but at least you get a response from someone if you shout one of the days of the week!

Making an effort to learn some Twi has delighted the villagers, even though they all speak some English. Having outsiders who want to come here in order to understand and immerse themselves in their culture seems to amaze them. My advice to anyone travelling to any project is to try and learn even just a few words of the local language. It will help you break down many initial barriers and you'll be able to start a conversation with someone in their language even if you can't finish it.

The children in the village never fail to have me in hysterics. In the 5 minutes it takes for me to walk from home to the other end of the village, I usually have about 20 kids clinging to my legs or trying to hold my hand. "Obruni!" they shout, "White girl!" No offence is intended as they rub my arm to wipe off my top layer of skin to see if I'm black underneath. I feel almost ashamed of my seemingly celebrity status. I'm not special, and yet they're continuously fascinated by me. What they don't understand though, is that I am as fascinated by them – their independence, their resilience,

their ability to have so much fun with a tricycle with no wheels or a few stones. It makes me realise just how privileged and perhaps over-stimulated the children in our country are.

Volunteers who come to this project will be lucky enough to work with these amazing Ghanaian children. Frontier volunteers have been welcomed into the local village school who are thrilled that the children are being taught the English language by native speakers, and the volunteers themselves have been just as thrilled at the sheer delight the children have in learning 'Row, row, row your boat'. Male volunteers learn quickly that they will become pack-horses, struggling under the weight of the toddlers at the daycare and nursery who never tire of being picked up and put down over and over, and the ladies soon find out how to clap and dance Ghanaian toddler style!



Learning how they can help the teachers at the nearby school for the deaf will be a challenge for most volunteers but all will discover the more subtle and expressive ways of communicating without their voice and are likely to leave having been taught some basic sign language. Perhaps the greatest challenge volunteers face are the conditions in the village orphanage. Heart wrenching and emotionally draining, many will feel that there is not a lot that can be done to really change the orphans' situation, but after spending one afternoon playing with the children, all will realise that even the smallest amount of one-to-one attention means the world to an orphan who is one of so many.

I've already been taught so much, and even if volunteers only learn the two most basic rules of living here in Ghana, how to dodge the village kamikaze goats, and how to wash with one bucket of water (and that when the taps do flow, having a proper shower really isn't as much fun), all who take part in the Ghana Orphanage, Teaching and Community Health project will make new friends and will have the privilege of being completely immersed within a Ghanaian community.

BABOON BABIES IN NAMIBIA!

KELLY SPARK

NAMIBIA WILDLIFE SANCTUARY

My time in Namibia was the best of my life - I made some amazing friends, human and animal, and I shared a room with two girls with whom I became very close friends and shared some amazing memories. Whilst I was there I took part in a big baboon walk and at first I was a little scared as it involves walking with quite a few baboons, one of which is completely wild having been brought in with her baby when she was found with a snare trap around her waist and leg. Once one had sat on my shoulder I started to enjoy it and found it an amazing experience that words just cannot describe!

I also took part in leopard cub walks. Two of the leopards were around 18 weeks old when I arrived, and we would walk them to the waterhole where there were two big trees that we would let them climb up and play together, before walking them back to the enclosure. By the time I left they were around 22 weeks old and volunteers would have to start spending less time with them as their natural hunting instincts were starting to kick in. We also had a baby baboon rota to make sure that all the babies were looked after at night. I had them on quite a few nights and fell in love with one called Clyde. We would give them their bottles around 7 and then put their nappies on and get them settled. They would sleep with you at night and then bottle in the morning and back into their enclosure. This was a great experience which I hope to do again some day.



I also spent a lot of time with a 13 year old cheetah that had been kept by someone for 11 years and only fed on dog biscuits and she was consequently very malnourished and very thin with very little fur. She had been removed from the person and brought to the centre, and as she was kept from a young age she was completely tame. I would go in with her and groom her and just spend time with her so that she was not always alone.

Every day our dinner and tea were made for us along with amazing cakes and muffins at

break time. The accommodation and food were a lot better than I was expecting and all the people and staff were really friendly, I even helped out in the Bushman school one day. The children were so smiley and I helped them learn a few numbers and played with them in the playground.

I am already planning a return to this project as it has changed my life so much and made me appreciate things at home a lot more. I would recommend this project to anyone who would like to help and also anyone who has a love for animals.



NEW NAMIBIA PROJECT

Frontier is really excited to announce the launch of a new partnership and a new project in the heart of the Namibian bush. With the aim of restoring the local environment to its natural state, the ambition and hard work going into the project cannot be doubted. With a work programme combining bush clearance, waterhole repair, fence repair and cattle line dismantling, with game drives, leopard, cheetah and hyena tracking and monitoring, Bushman walks and big cat feeding runs, it's anyone's guess how there are enough hours in the day! If this sounds like something you could get your teeth into, then check out our new Cheetah and Environmental Conservation Project. Pack your bags, heavy duty gloves, sunhat and enthusiasm, and head for Namibia! This is the perfect stepping stone for those of you wanting to launch your career in conservation, or just those who want to know they've made a real difference in a world when all too often the beauty of the natural environment is overlooked. Our first volunteers had the time of their lives and have pleaded for more to follow in their footsteps, so don't delay and sign up today! In no time you'll be sitting around the campfire gazing up at the sparkling Namibian night sky!

TEACHING AND LEARNING IN YANTAI

ADAM WATKIN, CHINA TEACHING

I'm in my last week in Yantai and have really enjoyed teaching. It's a shame to be leaving as the weather here is starting to get much better and I had my first lie on the beach yesterday! The teaching has been great and I would urge other volunteers not to be anxious. I had no teaching experience but still seem to be engaging the students and always running over time. I think it's just really important for them to be able to hear a native speaker reading texts and talking to them, however little it might be. There have also been opportunities to help teachers with their English, and they are also very interested to hear about British customs. They can't seem to get around the concept of milk with teal



and bigger, than any university room I have seen.

Although there haven't been any other native English teachers at the school I haven't been short of company. There are other teachers similar in age who I have been meeting up with and they have also very kindly invited me round for a meal and to meet their families, which has been a very humbling experience.

The room at my school has been really comfortable and warm. It has everything you could need including a desk and internet access if anyone brings their laptop. Volunteers shouldn't expect anything luxurious but the room was just as comfortable,

The children are all very conscientious and I've never had so many people say hello to me everyday. The teachers are all very friendly and have been really helpful. I've had a few lessons on my own when I've had to use my Mandarin and the rest of the time the teachers can translate. Obviously you need to show patience and have to understand that some of the words they have never spoken before. You have to be enthusiastic and just try and make every lesson as interesting as possible. There are also plenty of opportunities to help pupils outside the class as well; playing basketball; helping with music; or just watching cartoons with them during the evening.

The food at the school has been really good although eating out is also very cheap and good value. I had breakfast in Yantai market of freshly made steamed buns for 8p! Yantai is also famous for its fruit, which I have also really enjoyed. I think food is one of the best reasons for coming to China in general. It's all very good value and diverse in taste and style. No reason to go to KFC or McDonald's!

There's plenty in and around Yantai to do as well - there's a limited but sufficient English language section in the bookshop, Asia's biggest aquarium is about an hour away and Qingdao, which is the nicest city I've been to in China, is only 3 hours away and would make for a really good weekend. There's also an area of European architecture in Yantai which is nice for a wander around.

Having some Mandarin has been really helpful but not essential. Learning a few words, especially courtesy, will go a long way and I'm sure people can pick some Mandarin up while they are here. Like anything I would just advise people to make the very most of it. I think if ever there was a time to visit China it is now and I'm sure it will be a story to tell in decades to come.

GOPI PATEL, CHINA MANDARIN LANGUAGE COURSE



When I first applied to the China Mandarin Course at Yantai University I did not know what to expect. After only three weeks in the beautiful city of Yantai it felt like home! During my first two days I felt scared and homesick and doubtful as to whether it was the place for me, but that all changed and I think Yantai is definitely the place for everyone!

The thing I love most about Yantai is the people and their hospitality. I don't feel like a foreigner here, I just feel at home! Everyone, including teachers, students and the city people, are so friendly and it is not hard to adjust to the language barrier!

I had heard that Mandarin is one of the hardest languages to learn and I can't deny it, but the teaching here is so good I feel that

although it's hard I will be able to get through it. The day before classes started I received my textbook which all seemed easy to use. When I first started my classes I found it slightly difficult but I guess everything is always difficult when you first begin.

The teachers are very helpful and happy to spend extra time with you if you need it, within no time I was really enjoying learning Chinese. Most of the teachers can speak good English which is really helpful whilst learning. My classes were for 4 hours every morning which gave me the rest of the day to make other plans. The course requires a lot of independent study, especially more if you are a westerner as the Chinese characters are much harder for us to pick up so the free afternoons are ideal for us to do this. The teachers are all very nice and helpful and give you their numbers and emails so that you can contact them at any time. Lessons are very fun and the teachers make it easy to learn such a hard subject.

The university itself is beautiful and has many canteens, sport facilities and shops. There are small campus shops right next to the international dorms that sell everything, so if there is ever an emergency you always have those shops nearby. The actual dorms are really nice and modern and they have computers accessible to all and internet access if you choose to take your laptop. The staff at

the dorms are very nice, friendly and helpful.

I look forward to waking up in the mornings to experience a new and different day but I also don't look forward to it because it means I have one day less left in such an amazing city.

When I first arrived in Yantai I couldn't believe how beautiful it was and I instantly knew that I would enjoy studying in such such an amazing city. The city itself is one that is definitely hard to describe! It has all the characteristics of a city but also the beautiful scenery of the countryside and there is a lot to do and explore here. There is nothing that you can't find, from big shopping malls to big supermarkets to toiletries to all different types of food!

Yantai is an amazing city and I am definitely having the time of my life and I will definitely be returning! I recommend this experience to anyone as it is a once in a lifetime opportunity that you really will not regret!

Yantai gives you great chances to practise your Chinese because most people do not speak English so you have to learn and practise as you go along. Overall I was very happy with the quality of teaching at Yantai University and I will continue studying here for many years to come.

SO MUCH MORE THAN JUST FOOTBALL!

ELEANOR ROBERTS-JAMES
SOUTH AFRICA WILDLIFE ADVENTURE



Getting up at 6:30am every morning for six weeks isn't as rough as it sounds. In fact working outdoors at that time of the morning is one of the nicest things about the project. Sometimes it was actual work, maybe pulling staples and nails out of fence posts, or building an aviary or stables with your group.

Sometimes it was more chilled than that, like going for a game drive out on the reserve or playing with lion cubs.

Don't go expecting to cuddle animals all day. That is a small part of it as they have hand reared cubs, and a Bengal tiger breeding pro-

gram, but in truth there is a lot of manual work involved. I loved the work - doing fence patrols looking for holes and snares, working at the elephant sanctuary, building work, and my absolute favourite - chopping down alien tree species with machetes. Game drives, game counts and lion tracking were always great fun, especially at night when the display of stars in the sky has to be seen to be believed! One of the best days for me involved being chased over a 10 foot barbed wire fence by a pack of angry ostriches whilst out on patrol in the wilderness. I thought it was hysterical but I'm not sure anyone else saw the funny side!

Weekends were spent out in Port Elizabeth, J-Bay or even Addo National Park, which was well worth the cost. All in all I had some of the best six weeks I could have hoped for and met some really lovely people along the way.



NEW SOUTH AFRICA PROJECTS

Following the FIFA World Cup in South Africa in 2010, there has never been a better time to visit this part of the world to contribute to the development of youth sports and the promotion of sustainable livelihoods for marginalised communities. As part of our commitment to providing the most current and worthwhile projects possible, we are excited to be working with a local organisation in Port Elizabeth, close to the birthplace of none other than Nelson Mandela.

The aim of the projects is to work with the youth of local townships to promote sports participation and the development of life skills associated with that, such as leadership, teamwork, goal setting and achievement. A degree of flexibility enables volunteers to concentrate on their own areas of experience and expertise and input as much as they would like into the community. The projects are ambitious and target working with as many as 22,000 young people annually, offering scholarships to schools of excellence to the highest achievers. In addition to sporting programmes, there will also be the opportunity to take part in community care work and healthcare programmes and awareness work.

Do something wonderful with your time and become a part of the force driving social change and contributing to a brighter future for the young generation of South Africa, for whom the luxuries we have grown accustomed to are not available. Look out for Frontier's new sports coaching projects in South Africa and join the winning team.



FRONTIER EXPEDITION SAFETY RECOGNITION

Frontier has recently been certified as complying to the BS8848 British Standard for the provision of visits, fieldwork, expeditions, and adventurous activities outside the UK. In achieving corporate compliance as independently assessed and endorsed by The Young Explorers Trust, Frontier has demonstrated that the systems, processes and policies we use adequately provide for the safety of the participants, risk analysis, the competence and experience of the field staff, the expedition budget, environmental concerns, and the value of the project to participants in terms of personal development achieved through adventure and the proposed projects, all as laid out in BS8848.





JOB OPPORTUNITIES

FRONTIER

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)

Teaching and Community Project Coordinator

GLOBAL:

STUDENT REPRESENTATIVES

We are looking for personable, organised and self motivated graduate and undergraduate student reps from the UK, USA, Canada, New Zealand and Australia, to assist Frontier in organising lecture halls for talks and presentations. The candidate must coordinate term time promotion and act as liaisons with relevant academics.

For more details contact: staff@frontier.ac.uk

IN LONDON HQ:

INTERNSHIPS

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

- Overseas Operations
- UK Operations
- Marketing & Events
- Research & Development

OVERSEAS OPERATIONS MANAGER

Experienced individual to manage the resourcing, logistics and recruitment of overseas research programmes and London HQ.

PARTNER PROJECTS MANAGER

Organised individual to manage the Partner Projects department, including development, liaison, evaluation and volunteer preparation.

BOOKKEEPER

Oversee the production of the annual audit, budget and management accounts and long term financial planning.

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. Further details on Frontier and all the available positions can be found on www.frontier.ac.uk.

SPECIAL OFFERS!

Frontier is now running fantastic special offers allowing YOU to save on your gap year, summer trip or dissertation project! Get in quick while places last!

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 off your Frontier Group project. BSc students will receive a 10% discount, MSc students receive a 20% discount and PhD will receive 50%!

Available on the projects listed below.

SAVE UP TO £1000 (25%) ON YOUR EXPEDITION!

Get huge savings on your gap year, with up to £1000 off when you book two or more 10 week Frontier group projects!

Choose two of the projects listed below and sign up for ten weeks on each and you will receive a 25% discount on the usual prices.

* **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.