

**UNIVERSITY
OF GLASGOW**

ECUADOR

EXPEDITION 2011



Expedition Leader

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This Document has been compiled by Kirstin Klimowicz, the expedition leader, and gives details of the proposed expedition to Ecuador taking place during summer 2011 and being run by the University of Glasgow Exploration Society. It gives a summary of the research projects being carried out, information about the expedition members, and logistical information essential to the running of this project. This expedition has applied for the support of the University of Glasgow Court and the Royal Scottish Geographical Society

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Introduction

Ecuador is a country of astounding biodiversity, with a range of unique habitats spanning from the high altitude of the Andes to the Amazon basin and the Galapagos Islands. It is these habitats that make Ecuador one of the most interesting and important places on earth to study and preserve.

Ecuador 2011 will be the 10th University of Glasgow Expedition to Ecuador. We will be continuing biological projects on avian, reptile and amphibian diversity in the country's north eastern province of Orellana. These studies have been ongoing since the Exploration Society's first visit in 2000. We will also be carrying out new studies including a mammal survey in the area using camera trapping techniques. Over the years, we have developed an excellent relationship with the two indigenous communities of the area, San Jose de Payamino and Verde Sumaco.

The University of Glasgow's expeditions to Ecuador are part of the larger, long-term Payamino Project. This project is in association with Aalborg Zoo in Denmark and the University of Manchester and aims to support the Payamino Community in their efforts to keep oil companies off their land (60,000+ hectares of primary rainforest) and allow the community to decide their own future.

More details of the Project are on the website: <http://www.payamino.org/home>



Summary of Research

Ornithology Group

This group aims to work towards a complete avian species list for the area. Since the first expedition to the area in 2000 a list of 313 bird species has been compiled from only a small part of the reserve. In Europe the species accumulation curve would be starting to reach an asymptote but the nature of the distribution patterns of tropical rainforest birds is such that our intended expansion of the areas surveyed will increase the species list at a rapid rate. We will spend around 5 weeks in the area moving between different sites conducting the research. This will give us time to repeat the surveys in some of the areas we covered in previous years and extend the survey to cover a much larger region of the reserve.

We will be using a variety of techniques, including mist netting, point counts and sound recordings, and using a mark – recapture method to add to the species list we've built up since 2000. We have the chance this year to use canopy access, which will give us the amazing opportunity to enhance our knowledge of canopy birds. The intention is to carry out a comparative study between ground and canopy mist netting for local bird species. This will involve setting up semi-permanent platforms in trees that can be used to easily operate the retrieval system of each mist net to ensure efficient and safe methods of checking the nets on a regular basis.

Birds will be identified using various reference tapes and books. There have been few long-term studies of this nature conducted in the tropics whereby the longer a study runs for, the more useful information emerges. Therefore we intend to keep this study running for as many years as possible.

Herpetology Group

The Payamino Reserve lies within the boundary of the Napo Biodiversity Hotspot – one of 25 of the most biologically rich areas under the greatest threat of destruction, as defined by Conservation International.

This will be the sixth year that the Herpetological Project at the Payamino Reserve has been carried out since we began research there in 2004. Previous expeditions have produced a species list of 78 frogs and considering species discovery rates have actually increased since the Project started, we feel that the potential for further research, and for the discovery of many more species, is huge. Now that we have a good knowledge of the more common species and the geography of the area, it will be far easier to set down the roots for more long-term studies into species composition and population numbers.

Monitoring of amphibian populations in areas of tropical lowland rainforest is virtually non-existent and in light of the global amphibian crisis, this study will be invaluable with all findings passed onto the Global Amphibian Assessment and the Pontificia Universidad Catolica del Ecuador.

We will be continuing the species census and mark-recapture studies of previous years using a mixture of passive and active sampling methods. Any captured individuals will be marked using the method appropriate (i.e. ventral scale clipping in snakes) and photographed for the species database. In addition to this, we will be monitoring environmental factors in order to record seasonal patterns. The herpetological group will also get the opportunity to use canopy access techniques, allowing a means to research in a niche which is virtually untouched. A biodiversity study of varying heights will be carried out using basic sticky traps at different heights in select trees. Observational climbs will be carried out both during the day and at night as a comparative study of nocturnal and diurnal species. Reference books will be used in identification and all members of the herpetological group will be fully trained in animal handling and identification prior to the expedition

Camera Trapping/Canopy Access Group

This group intends to use a number of techniques to study the species in the area. Camera trapping will be used to compose a mammal species list and will be set up in a number of sites. It is becoming an increasingly popular technique, especially for the more secretive mammals that would be difficult to study otherwise.

Canopy access has never been carried out on the Ecuador expedition before. It is thought that 70-90% of rainforest life is found in the canopy, this opportunity will give the expedition an incredible insight into life of the rainforest from a completely different viewpoint. Two members of the expedition (Trudie Marshall and Hannelore Honkanen) will be trained in canopy access and receive their qualifications before going out. Trained members and CAL supervisor, Vicki Tough, will be the only people permitted to carry out the climbs during the field course. The trained members will be in charge of determining the safety of the study site and also keeping other members of the expedition safe while they are working in the canopy. The study will focus on mid and upper canopy mist netting and canopy herpetology studies.



Expedition Members

Staff Support

Stewart White

I am University Teacher at the University of Glasgow. I hold a degree in Zoology and a Ph.D. in Insect Ecology, both from the University of Dundee as well as a teaching degree from the University of Greenwich. My main research interests are the ecology of rainforest passerines, the ecology of the Ring Ouzel, the ecology of dragon and damselflies and the behaviour and ecology of insect parasitoids. I have extensive field experience in the rainforest having been a member of seven University of Dundee and three University of Glasgow expeditions to Trinidad, several times as expedition leader as well as seven previous expeditions to Ecuador.

Football is my first love. I played semi-professional until a few years ago and I still play several times a week. I am a rabid St. Johnstone supporter and have also been known to follow Scotland at home and abroad. In the short spells of relaxation I have I listen to a wide range of music from Charlie Patton and Robert Johnson onwards. In the words of Tom Waits 'I don't wanna grow up'.

Ornithology Group:

Kirstin Klimowicz

I am a 21 year old zoology student, currently in my final year. I have always been passionate about wildlife and the natural world. I am particularly interested in the behavioural ecology of animals, particularly in birds. So to be in the bird group is really exciting. To lead the expedition to Ecuador is such a privilege and an amazing opportunity for me. I love to travel and experience new cultures and places. The expedition will be an incredible chance for me to develop my field and wildlife photography skills as well as enhancing my passion for research and conservation. Outside of university I am interested in photography, music and amateur dramatics having participated in several shows and concerts.

Kirsty Sichi

My name is Kirsty Sichi and I am currently at 1st year in Glasgow University studying Biology, Chemistry and Psychology. In my 3rd year I plan to be doing a Zoology honours degree. I wanted to be a part of this expedition as it was what drew me to Zoology. The opportunity to work in such close contact with a wide variety of species is, in my opinion, a once in a lifetime opportunity. I am really passionate about animal conservation and the research involved in it and I therefore think this Ecuador expedition is the perfect opportunity for me to gain valuable experience for the future. I am specifically interested in mammals and birds and I therefore plan to take full advantage of this opportunity to work closely with the charismatic birds in Ecuador.

David Logan

I am a third year Zoology student at the University of Glasgow and I'm hoping to do an honours project in Ecuador on Aves. I have had lots of outdoors experience from the Duke of Edinburgh Award scheme (Bronze, Silver and Gold) and also from my Munro climbing hobby. I have good sense of humour, friendly attitude and I'm enthusiastic about the things I do, this makes me quite an easy person to work alongside. In the past I've also had a great deal of fundraising experience from my time in the City of Brechin Pipe Band and the Mearns Youth Forum. As well as this, I'm used to working hard (my summer job is usually in a daffodil bulb warehouse!) and going to an area of such abundant biodiversity has been an ambition of mine for a very long time! My ambition has been enhanced by that fact that I'm going to be contributing to conservation work, which I hope to make a career in.

Amelia Easten

I'm a first year student studying English Literature, Slavonic Studies and Sociology & Anthropology. I'm also a writer currently working on the final draft of a novel ready to send out with the aim of publication. The trip to Ecuador will, I hope, be an amazing opportunity to explore the Amazon, help environmental research and develop independence for myself.

Herpetology Group:

Malyon Bimler

I am a 3rd year Marine & Freshwater Biology student. I am a hard-working with a passion for conservation. In Ecuador I will be studying anurans and hope to incorporate my Honours project into the work done out there. Alongside a commitment to furthering scientific knowledge and fighting for conservation issues, I have previous experience organising student-run ventures. I have travelled widely and spent a year in New Zealand before coming to University, and also have a basic knowledge of Spanish. Camping and hiking have given me plenty of outdoors experience and the ability to cope with uncomfortable living conditions. I'm especially interested in this expedition for both the chance to study tree frogs and be a part of a community project which works towards conservation measures that can benefit both the habitat and the local people.

Julie Duffy

I am a first year student studying Economics, Politics and Central & European studies. I am very excited about the Ecuador expedition because I want to travel and am especially interested in exploring South America. In my spare time I enjoy sports and outdoor activities such as climbing and snowboarding. I've also recently taken up pot-holing. As well as this I am enthusiastic about films and books.

Leonidas Georgiou

I am a second year Neuroscience student. I'm originally from Cyprus and am the expedition's deputy leader. This is the first scientific expedition and the first time that I will visit South America. I am very excited to live a part of my life in the wilderness of the Amazon tropical rainforest which is my dream destination. I am looking forward to get maximum experience from the expedition and to learn and work with amphibians and reptiles in one of the most exciting and diverse places in the world.

Last year I worked for a research project in electrophysiology in the department of neuroscience and volunteered as an assistant in a paediatric clinic. Before coming to the university I used to be a second lieutenant for the tanks military division for 2 years. Directly after the expedition I hope to do the third year of my studies in California. I believe that the expedition is a life time experience, a must visit destination and an opportunity to get a different viewpoint of the world.

Hannelore Honkanen

I am currently a third year Marine & Freshwater Biology student. I don't have any previous expedition experience but I'm very keen to learn and be a hardworking and enthusiastic member of the team. I am very interested in research and conservation and hoping to go on to do a PhD in the future. I'm looking forward to working in the amphibian team and gaining valuable experience in fieldwork. My other interests include reading and various sports, such as swimming and going to gym. I enjoy studying languages; I speak three (Finnish, English and Swedish) and recently have started studying Spanish.

Camera Trapping/Canopy Access/Sound recording/everything:

Hong Tai Chan

I am a first year geography student who is immensely interested in the great diversity of the natural environment. Going to Ecuador is one of the greatest opportunities I will get to come close to such biodiversity and be able to work towards its conservation. Thus, I will work hard and be thoroughly committed to aiding the success of this expedition. As I am only a first year student, I have few skills to offer but my great lust to learn and my willingness to help will be able to compensate for my lack of knowledge.

Rosanna Hignett

As a second year zoology student, I am looking forward to the chance to travel to Ecuador. This expedition will be a fantastic opportunity to work with local people in an amazing location. I'm looking forward to the experience of living in the rainforest and being able to study exotic animals close at hand, hopefully while up a tree.

I love spending time outside and have a passion for horse riding, scuba diving and sailing. I am also enjoying the chance to learn some Spanish before we go. ¡No puedo esperar!

Rita Machado

I am a first year portuguese student currently studying biology, chemistry and environmental science, but never the less hoping to become a herpetologist. I joined the Ecuador expedition because it combines research with exploring, their focus in amphibians and due to the fact that South America has always been a place that I have wanted to see. Besides that, I also do several dance classes and I'm currently participating in a spanish course to further develop my language skills.

Trudie Marshall

I am currently in second year, studying Zoology. I'm loving my courses so far and am very excited to gain experience in conducting fieldwork. I chose to go on the Ecuador expedition, as after hearing about the work done in the past, I was fascinated with the project. I'm really looking forward to working in the team, in such a beautiful place. Doing the camera traps is something I'm quite excited by, and hopefully the opportunity of canopy access. I have always wanted to go to the amazon and cannot wait for the expedition to begin.

Becca Nicol

I am 20 years old and in my 3rd year at the university of Glasgow. I began studying Geography but changed to biology after 1 year so I am currently studying 2nd year biology. I have always had a passion for the outdoors and the natural world and regularly enjoy getting out of Glasgow and into the Scottish mountains. I am a keen mountaineer and enjoy rock climbing, winter climbing and walking. I applied for the Ecuador expedition so I could practice data collection skills that I have learn and develop new methods and skills. I have travelled a bit before but not to South America so I am very excited about visiting a new country and experiencing a different way of life. I am looking forward to taking part in important research and playing a part in the conservation of threatened species.



Logistics

Timing

The expedition shall last for a period of approximately seven weeks. Flight on Wednesday the 8th of June 2011, arriving in Quito on the 9th. Flight to Coca on the 12th, where we'll spend five weeks in Amazonia. Flight from Coca to Quito on the 20th of July.

Transportation

Transportation from Quito to Coca shall be internal Flight. Travel within and from Coca and Loreto shall be by taxi. Travel in the Sumaco Reserve shall be by canoe.

Insurance

Each expedition member will arrange personal insurance individually. This will cover the six week expedition period and any time spent travelling on afterwards.

Safety Considerations

Potential Hazard	Safety Procedure/s
<ul style="list-style-type: none"> • <i>Extreme weather. Heat and torrential rain</i> • <i>Freshwater</i> • <i>Night work in rainforest</i> • <i>Venomous snake, spiders and scorpions. Stinging insects and frogs, which may secrete toxins.</i> • <i>Aggressive animals</i> • <i>Plants</i> • <i>Pathogenic microorganisms</i> • <i>Disease</i> • <i>Attack on the person or property</i> • <i>Getting lost</i> • <i>Personal illness or injury</i> 	<ul style="list-style-type: none"> • <i>Always carry an adequate water supply, wear appropriate clothes and sunscreen.</i> • <i>Wear appropriate footwear. Don't drink from the rivers!</i> • <i>Wear appropriate clothing. Head torches must be taken out. Night walks to be accompanied by a guide.</i> • <i>Hazardous animals are rarely encountered. Wash hands after any animal handling. Fieldworkers are briefed on species to avoid, and counselled always to be careful when walking through undergrowth. Wearing boots is mandatory. All workers will be briefed as to latest snakebite protocol.</i> • <i>The Ecuadorian Amazon is home to Jaguars and Anacondas. However due to the secretive nature of these animals it is highly unlikely we will come across them. Fieldworkers shall not stray from their group to stay safe.</i> • <i>Look where you put your hands! Fieldworkers will be briefed in rainforest safety, and plants to avoid. Wash hands after touching plants.</i> • <i>Washing hands after touching anything in the rainforest is again of paramount importance. Expedition members shall also bring antiseptic and antifungal agents as part of their personal first aid kit. Every expedition member shall be on a course of the appropriate anti-malarial tablets, and insect repellent is to be used in areas where potential vectors of disease are present.</i> • <i>All expedition members will have the recommended vaccinations, and have been advised by a medical practitioner concerning diseases they may be at risk from in Ecuador.</i> • <i>This is not a problem on site, as the research areas are remote and away from local populations. In towns and cities en-route to these locations however there is a minor risk. Expedition members shall stay in a minimum of groups of two.</i> • <i>High risk. We are taking trained guides familiar with the area. It is essential that fieldworkers make their location, and expected time away from camp known to at least one person remaining at camp.</i> • <i>All have completed a medical form listing any long term illnesses, medication required, home contacts. Three expedition members are to receive comprehensive first aid training. Our remote location makes travel to hospitals more difficult, but there will be enough bodies to transport an injured or sick individual on a stretcher to a road network.</i>

N.B A full risk assessment for the canopy access work has been provided by Canopy Access Limited and is provided in Appendix 1.

Budget

Expenditure

International Flights	(850 x 14)	£11900
Internal flights	(82 x 14)	£1145
Accommodation - Payamino		£7100
Accommodation – Quito		£980
Accommodation – Coca		£340
Food		£1250
Equipment/licences		£1000
Canopy Access Training	(595 (+VAT)x 2)	£1428
Canopy Equipment		£975
Reports		£300
Taxis		£65
Exit Tax		£400
Subtotal		£26883
10% contingency		£2688
Total		£29571

Funding

Personal contributions (£800 each)	£11200
Expected fund-raising income	£2500
Total	£13700

These totals show that additional funding of around **£15,871** will have to be obtained. We will be approaching various bodies of funding for this. They include:

Glasgow University Court, Springboard Trust, The Royal Society, British Ecological Society, British Ornithologists Union, Percy Sladen Trust, Royal Scottish Geographical Society, Carnegie Trust, Institute of Biology, Gilchrist Trust, Royal Geographical Society, Cross Trust, Blodwyn Lloyd Binns Trust, Dennis Curry's Trust and The Albert Reckitt Trust.

In Addition selected financial and industrial companies will be approached.

Acknowledgements

We wish to thank all of those who have helped us so far with the planning of this expedition. In the University of Glasgow, the many people in MVLS, and members of the Exploration Society for their support and aid in Fundraising. We thank in advance the Payamino Community for allowing us to carry out studies on their land, and their help as guides on our expedition.

