

# FRONTIER

## DISSERTATION PROJECTS

For BSc, MSc, PhD Students

A GUIDE FOR SUPERVISORS



# INTRODUCTION

We are often asked by both undergraduate and postgraduate students if they can conduct field research for their respective dissertations whilst participating on a Frontier Project. This guide is aimed to help university supervisors and their students through the process.

It is advised to start this process as early as possible. This gives the field team ample time to prepare for the student's arrival, discuss any changes that may be necessary to their proposed project, and enable the student to prepare for their field work. We would recommend that the students start this process at least 6 months prior to deployment. Some of our more remote field teams (Nicaragua/Fiji) do not have constant access to email and telephone communication; therefore students wishing to conduct their research on these projects should start this process a minimum of 9 months prior to deployment.

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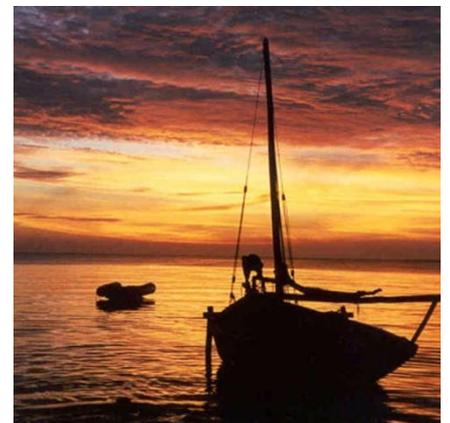


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# DISSERTATION APPLICATION PROCESS

## Initial Ideas

First and foremost students should have read all the relevant information regarding potential dissertation ideas that could be feasible on a Frontier Project. A list of **Frontier Dissertation Topics** can be found later in this guide, and is also available to download on the Frontier website. This list should be used as a rough guide as to the scope of research that could be conducted on a Frontier Project. This list is by no means exhaustive but gives a good general idea of possible projects. Background information and past dissertation titles can all be found on the website, along with downloadable reports and articles from all past and present projects. These may be especially useful when conducting literature reviews and background reading in preparation for the student's research.



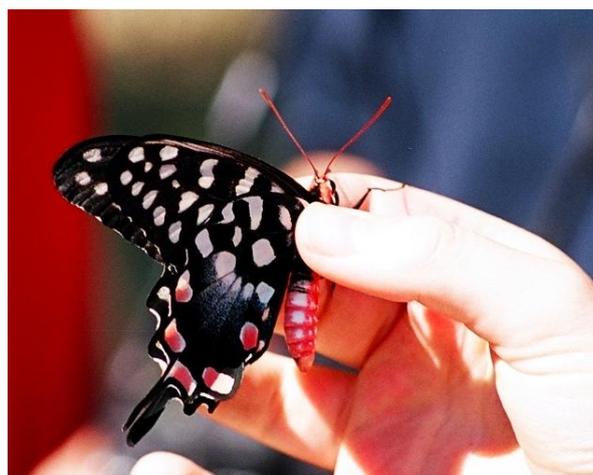
Note that locations for conducting dissertation research are restricted to Frontier conservation and research projects – these are permanent long-term projects with permanent field staff, which offer the

best scope for research. Therefore these are terrestrial and marine projects in Cambodia, Costa Rica, Fiji, Madagascar and Tanzania described later in this guide.

### Supervisor Input

At this point we would ask students to contact their supervisors and discuss the potential projects they might undertake, discuss methodologies (a list of current methodologies used by Frontier can be found on the Frontier website, and a brief outline is given later in this guide) and decide on a reasonable time line in which to collect the required amount of data.

We recommend that students participate for the full work phase of 10 weeks, in order to collect sufficient data and participate in other activities outside of their own research.



### Student Application

Students can discuss potential projects with the Research and Development team at the London office on 0207 613 2422 or [research@frontier.ac.uk](mailto:research@frontier.ac.uk). They can then apply for the project normally through the UK Operations Department ([info@frontier.ac.uk](mailto:info@frontier.ac.uk) or 0207 613 2422) and inform them that they are intending to conduct their dissertation research whilst on a Frontier Project.

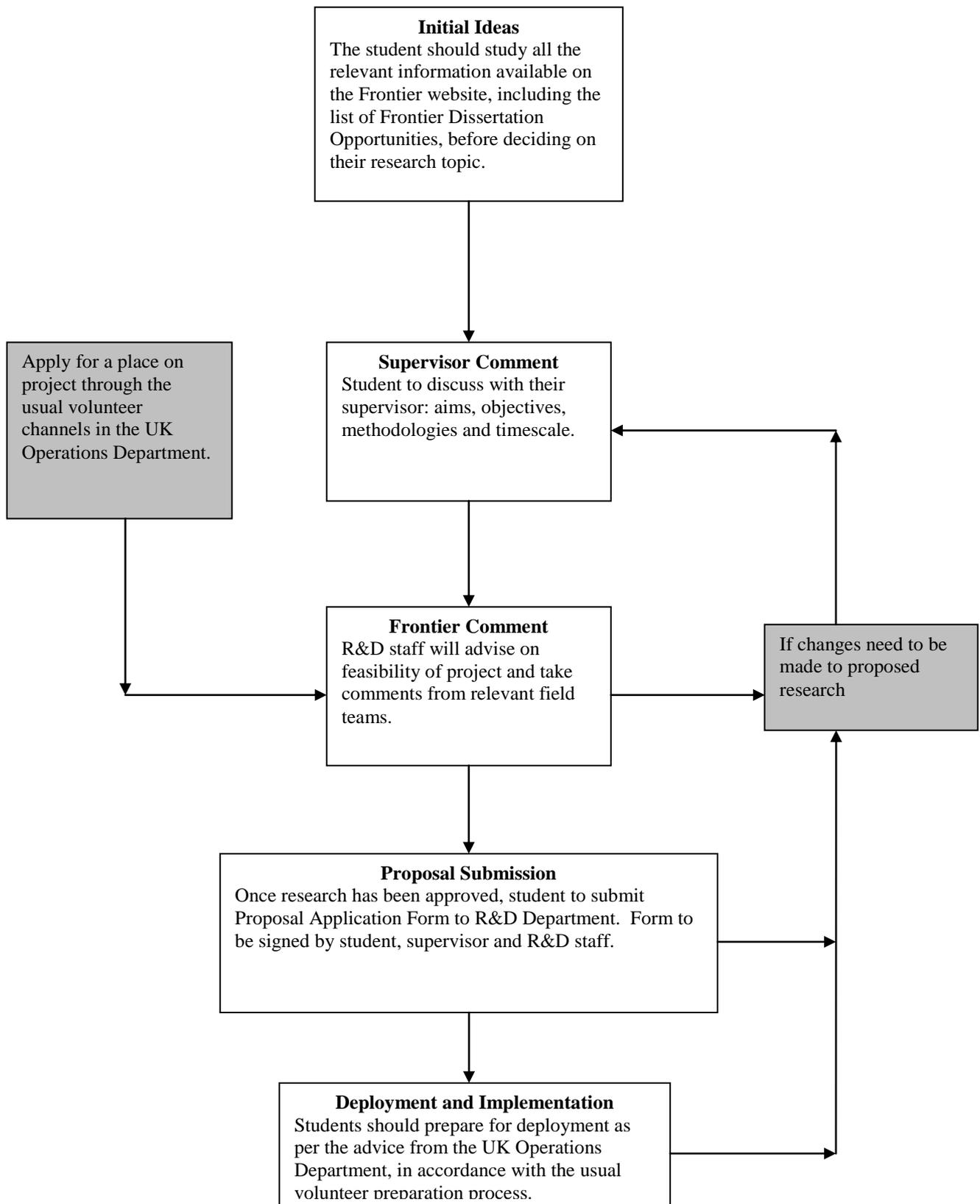
### Frontier Input

Once the potential project has been discussed with their supervisor, the student should contact the Research & Development Department with a brief summary of the aims and objectives of their study and what methodologies they wish to employ. The R&D staff will then respond with comments to develop a suitable project. The R&D staff will then discuss the feasibility of the project with field staff.



### Proposal Submission

Once the R&D Department have confirmed that the research and timeline is feasible with the relevant field teams, the student should submit a **Proposal Application Form** to the R&D Department (a copy is included at the end of this guide). This form should be signed by the supervisor and student. Once received the R&D team will co-sign the document and send it back to the student and to the relevant field team so there is a written record of the accepted research proposal. If there is any change to the proposed research or methodologies before or after submission of the proposal we ask that the student or supervisor contact the R&D Department immediately to make sure that the changes are still feasible within the scope of the project and the timeline presented.



*Procedure for dissertation applications*

## Deployment and Implementation

Once this process is complete the student needs to prepare for their project, all relevant information will be provided through the UK Operations Department as part of the usual volunteer process. Field teams will keep the R&D Department informed if there are any changes in their research schedule that will affect the student's dissertation research.

## Reporting

We ask that once the student has completed their dissertation that they send a copy to the R&D team for our files, and (with the permission of the University) we may make the dissertation available to download on our website.

## Deferral of research

If for any reason the student needs to defer their research to a later date they need to contact the R&D Department immediately, as well as the UK Operations Department so that we can inform the field of the new timeline.

## PERMISSIONS & PERMITS



As the student will be conducting their research within the operations of our field projects, all permits and permissions that these field projects have will be extended to the student. If any additional permissions are needed (for example, for more sensitive social economic research or for the collection of specimens above and beyond the permits held by the project) then these must be addressed prior to proposal submission.



## DATA OWNERSHIP

All data collected on Frontier projects remains the property of Frontier and the relevant in-country collaborating partner. However, students are permitted to use this data for the purposes of their dissertation. The student also has the right to publish their findings in a peer-review journal, in collaboration with Frontier and adhering to the Frontier policy on data publication.

However should the student request additional data collected by the project outside of the scope of their dissertation research then a Data Usage Agreement can be drawn up by the field teams to be approved by the R&D department.

The student is responsible for keeping an accurate record of their data and should not expect field teams to enter data and send it to them once the student has returned from the field. Therefore the student should bring adequate notebooks/ledgers or laptops<sup>1</sup> to store their data and return it from the field.

<sup>1</sup> Frontier accepts no responsibility for damage to or loss of laptops or any such equipment whilst the student is on a Frontier expedition; it is the responsibility of the student to have adequate travel insurance to cover such events.

## DESTINATIONS



Destinations in **Madagascar** include the dry deciduous forests of northern Madagascar, with dry tropical forest harbouring diverse wildlife including lemurs and chameleons. The Bay of Diego-Suarez has been little studied so there is the opportunity to be one of the first to dive on these coral reefs.

The Pacific Northwest of **Costa Rica** is home to several protected areas, containing rainforests, fertile wetlands, and thick mangroves. The forests are home to spider monkeys and scarlet macaws as well as elusive jaguars. Two of the world's seven species of endangered sea-turtle nest on the beaches here and in season there will be the chance to participate in hands-on turtle conservation.



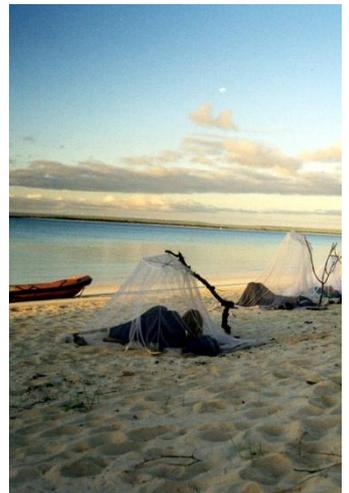
**Tanzania's** range of habitats include the upland forests of the interior mountain ranges such as the Udzungwas or Eastern Arcs, open savannah grasslands and miombo woodlands in the Kilombero Valley, and the coastal forests of Mtwara. There will be opportunities to spot big game such as lion, elephant and buffalo, as well as smaller and less-known endemic species such as the red colobus monkey. The marine park of Mafia Island offers amazing diving and snorkelling in a sea rich with marine life including dolphins and dugongs.



**Cambodia** is a land of ancient cultures and even more ancient forests. Decades of conflict have left the country extremely poor, but the country has recently emerged to become one of the most exciting travel destinations in Asia. A large number of the world's endangered mammals live in Cambodia's forests, including Sun Bears and Pileated Gibbons



**Fiji** is an unspoiled paradise of hundreds of volcanic islands scattered over 1.3million sq km of ocean. Stunning coral islands and azure lagoons host an amazing diversity of marine life, including manta rays, whales, sharks and dolphins. Evaluate coral cover and record fish and marine mammals, or conduct reef assessments to identify damaging practices and provide recommendations for sustainable management.



## PROJECT STAFF

Frontier projects are led by several experienced Frontier staff members:

- **Country Co-ordinator** - runs the country headquarters office with overall administrative control including management of budgets, accounts, reporting procedures, deployments and supervision of local staff.
- **Principal Investigator** – an experienced researcher, with a proven ability to direct field research and write up results. With a good MSc or a PhD in a relevant discipline, publications, and a significant amount of biodiversity or conservation research experience, ideally in a tropical setting, the Principal Investigator develops and implements the research programme, involving the daily supervision of volunteer Research Assistants, data collection and analysis, and report-writing.
- **Project Coordinator or Dive Officer** – the Logistics Manager is responsible for the practicalities of the field project, including budgeting, accounts, resupply and equipment. The Dive Officer manages all diving operations associated with the Marine Research Programme, including the supervision of daily diving and in-water activities and ensures the proper maintenance of all dive equipment and boats.
- **Research Officers** - researchers with experience in tropical habitat research, with writing skills demonstrated either by a solid MSc degree, overseas field experience or existing publications. They assist the Principal Investigator with the development and implementation of the research programme, involving the daily supervision of volunteer Research Assistants, data collection and analysis, and report-writing.
- **Liaison Officer** - The Liaison Officer is a locally-recruited staff member responsible for local language interpretation, permissions negotiation, and overall liaison with local people.

## EQUIPMENT

### Group Equipment

The following is a guide to what is provided by Frontier, but may vary depending on the field project.

- Tents / accommodation
- Stoves and fuel supply
- Global Positioning System (GPS) handsets
- Portable HF radio with compact whip aerial or satellite phone
- Science equipment
- Solar power set-up or generator
- Project Medical Kit
- Documentation for participants
- Communal SCUBA equipment (weights, BCDs, regulators, tanks)

### Personal equipment

Each project participant is required to take personal equipment such as sleeping bag, walking boots, suitable clothing, wetsuit, fins etc depending on their chosen project; or a particular specialised piece of survey or scientific equipment that is not held by the field project. Information about personal equipment requirements will be provided to all participants prior to deployment.

# METHODOLOGIES

Research methodologies on terrestrial and marine projects vary according to country, location, season and the work programme requirements of our in-country collaboration. Methods are systematic, standardised and in line with current scientific practice. Methods include:

## Marine

Reef Status Protocol Surveys  
Baseline Survey Protocol Surveys  
Algal Quadrat Surveys  
Coral Bleaching Surveys  
Sea Turtle Monitoring and Hatchery Management  
Gastropod Surveys  
Coral Damage Surveys:  
    *Reef Fish Surveys*  
    *Line Intercept Transect*  
    *Manta Tow*

## Terrestrial

Faunal surveys:  
    Sherman trapping  
    Bucket pitfall traps  
    Canopy trapping  
    Sweep netting  
    Mist netting  
    Diurnal/nocturnal large mammal transects; Mammal sign transects  
    Turtle trapping  
    Bird surveys  
    Camera trapping  
    Acoustic recordings  
    Opportunistic observations and collections

Vegetation surveys:  
    Vegetation plots and transects  
    Mangrove Surveys  
    Opportunistic observations and collections

Socio-economic work:  
    Disturbance transects  
    Socio-economic surveys  
    Environmental education and awareness-raising

## HEALTH, SAFETY AND EMERGENCY PROCEDURES

We have been running highly successful expeditions since 1989 for those interested in exploring tropical developing countries and contributing to the conservation of threatened species. Health and safety is our top priority and we conduct extensive risk assessments prior to setting up each camp. All of our facilities are approved as learning centres for our unique BTEC qualification (available on 4 and 10 week projects).

Mike Todd, Edexcel's External Verifier for BTEC courses gave us the following feedback:

*“Excellent assessment, feedback and support. Top class health and safety policy implemented.”*

Frontier has an excellent structure to prevent and manage medical issues and emergencies that may arise. This includes:

- Daily HF radio contact between the field project and our country HQ
- Permanently-manned country HQ with HF radio, telephone, fax, and email communication reporting directly to our London office
- Field staff who are recruited in the UK, and work in-country for a minimum of 12 months, with plenty of field experience and logistics and language skills
- London HQ Operations staff available 24 hours a day
- In-depth risk assessments for all camp locations and expedition routes
- Established plans in the event of an incident, including reliable links with local doctors, hospitals, and emergency evacuation teams
- Comprehensive medical guidelines and safety guidelines provided to each participant and advice on medical preparation including vaccinations and malaria prophylaxis
- All participants are required to have full medical insurance and all relevant vaccinations
- Medical and safety briefings are given before departure, upon arrival in-country, and with ongoing reinforcement throughout the project.

## PROJECT COSTS

Project participants will need to provide their own personal equipment and arrange their own vaccinations and visas.

Latest project costs can be found on the website. Costs start from £2000 for 10 weeks.

### **The project contribution includes:**

- Comprehensive pre-departure presentations, information, support and documentation
- Full travel and medical documentation and advice
- UK residential briefing weekend
- Advice on expedition equipment, heavily discounted medical kit and dive equipment
- Heavily discounted flights
- Frontier t-shirt
- Park and reserve fees and research permits
- UK airport departure assistance and in-country airport pickup by Frontier staff
- Internal travel and ground transfers
- Orientation, field briefing and training in tropical health and safety and field survival
- Field training in all research methodologies and scientific techniques, guidance and supervision
- Accommodation, food and water in country
- Use of field and science equipment
- UK-recruited experienced logistics, research and management staff

- Locally-recruited liaison staff
- 24-hr emergency support from permanently manned local Frontier HQ and international HQ
- Job references and inclusion in the Frontier Jobs Database

### Fundraising

Many participants successfully raise funds to cover part or all of the cost of their project. Comprehensive guidelines in the form of the fundraising pack are provided to all participants upon confirmation of their secured place on the project. This fundraising pack contains information on the following:

- letter writing to local business and grant-giving organisations
- personal enterprise
- sponsored events
- useful publications
- useful addresses
- planning a media campaign
- examples of articles and leaflets used by other participants

In addition, the Volunteer Co-ordinator can provide advice, ideas, and inspiration with examples of previous successful fundraising ventures.

## BACKGROUND TO FRONTIER

### Capacity, capability and experience

Frontier possesses the organisational capacity, expedition leadership capability, and in-country experience to successfully execute multi-disciplinary expeditions. With seventeen years of project management experience in tropical locations, Frontier holds extensive expertise in scientific surveying methods, environmental awareness campaigns, and organising challenging activities.

Since 1989 Frontier has established an extensive network of trust alliances in Cambodia, Vietnam, Madagascar, Mozambique, Uganda, Tanzania, Nicaragua and Fiji. Frontier has built a highly respectable reputation for hard work and positive results around well-planned, long-term research and conservation programmes. Frontier has a successful track record of running safe and challenging expeditions for volunteers interested in rainforest conservation, artisanal fishery research, coastal zone management, wildlife conservation, protected areas management and community based development.

Frontier is a registered PADI Educational Facility and a registered 'learning centre' for Edexcel; which means that Frontier can also offer all participants BTEC qualifications in either Tropical Habitat Conservation (10 week syllabus), Expedition Management (4 week syllabus), or Adventure Tourism (4 week syllabus). Frontier is a member of the IUCN and has produced hundreds of technical reports, manuscripts, manuals and books, including articles in *Nature* and *Biological Conservation*.

Frontier's reputation for hard work and highly intensive survey work has resulted in contracts with external funding agencies like Community Fund, the Darwin Initiative, the Critical Ecosystem Partnership Fund, and many international governmental overseas aid departments.

## CONTACT AT LONDON HQ

### Research & Development Department

Frontier

50-52 Rivington Street

London

EC2A 3QP

Tel: +44 (0)20 7613 2520

Fax: +44 (0)20 7613 2992

Email: [research@frontier.ac.uk](mailto:research@frontier.ac.uk)

## FORMAL COLLABORATIONS

Frontier is able to formalise agreements with University Departments, Government Departments and local NGOs for longer term dissertation collaborations. This is an opportunity for Universities to establish a link with a long-term field project overseas, for which a certain number of places to conduct dissertation opportunities can be guaranteed for their students.

This longer term collaboration would also generate long-term data sets, allowing dissertation projects to extend analysis beyond the 10 week standard, and enable repeatable projects to be undertaken. Frontier can arrange for students to participate on specific bespoke projects as well as on the standard Frontier projects.

Examples of potential long-term collaborative projects:

- Entomological analysis of savannah grasslands (Tanzania)
- Assessment of new coral growth after the 2000 bleaching event (Madagascar, Tanzania, Fiji)
- Changes in crop-raiding occurrence over time (Tanzania)
- Forest regrowth after disturbance (Tanzania)
- Surveys of cryptic large mammals (Cambodia)

**Application to undertake independent research on a Frontier Project**

**Full name**

**Date**

**Expedition Code**

**e-mail**

**Degree title** (indicate level: BSc, MSc etc and Institution)

**Project title**

**Project supervisor** (full title and contact details)

**Degree requirements**

(please specify exactly what you need to produce to satisfy your degree requirements)

**Project Aims:**

**Objectives:**

**Methodologies** (please use an additional sheet if necessary):

**Survey Effort** (number of transects, plots, questionnaires etc):

**Time Scale:**

**Any additional equipment required** (and where it will be supplied from)

**Deadline for submission of output to University:**

**Deadline for submission of output (hard and electronic) to Frontier London Headquarters:**

**Section to be completed by project supervisor**

The proposed project described above meets the necessary degree requirements. The student is capable of undertaking the proposed independent research under the field-supervision of Frontier staff and will be able to produce the stated written outputs to deadline. I agree to supervise the student in preparing and writing up the proposed project

**Signed:**

**Date:**

**Section to be completed by volunteer**

The proposed project described has been discussed and approved by my degree supervisor and meets the necessary degree requirements. As a student I feel I am capable of undertaking the proposed independent research under the field-supervision of Frontier staff, under field logistical constraints and will be able to produce the stated written outputs to deadline.

**Signed:**

**Date:**

**Section to be completed by Frontier, Research Programme Manager**

Frontier UK Research Programme Manager, and the relevant degree supervisor have approved the proposed project described.

**Signed:**

**Date:**

*Please return completed form to: Research & Development, Frontier, 50-52 Rivington Street, London, EC2A 3PQ*

*Proposal enquiries to: [research@frontier.ac.uk](mailto:research@frontier.ac.uk)*