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BOLETO DE VIAJE
DAY PACK or BACKPACK
SLEEPING BAG
MATTRESSES
1 1/2 LITRE WATER BOTTLE
PURIFICATION TABLES FOR
SUNSCREEN
INSECT REPELENT
LIP BALM
COCA LEAVES / CATALYST

ECONOMY CLASS
Carte d'accès à bord Tarjeta de embarque
HUTCHINSON/CHARLES
Name of passenger

From **AMSTERDAM/AMS** To **LIMA**

Flight **KL 074** Class **M** Date **28 JUN**

Gate **D53** Boarding time **10.15** Seat **24E** Smoking **-**

Boarding Pass

BOLSA DE MAREO / AIR SICKNESS BAG

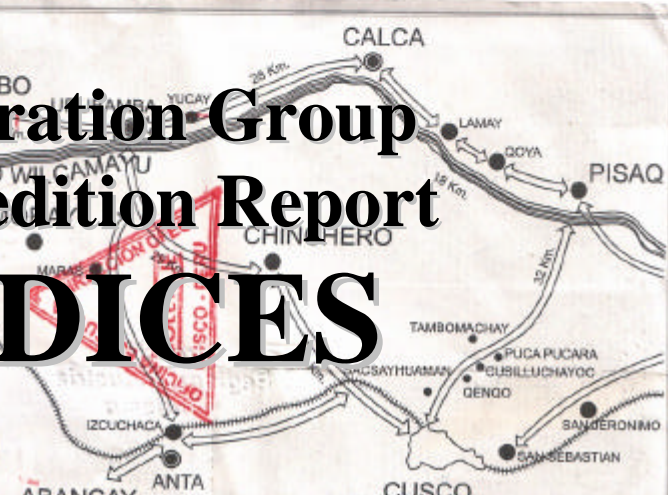
NUEVA CENTRAL TELEFONICA COMPUTARIZADA

RESERVAS

Avloclor 250 mg
chloroquine phosphate

PERU
Reserva Nacional de Paracas
Reserva Nacional de Paracas

Borders Exploration Group
Peru 2003 Expedition Report
APPENDICES



MATE DE COCA
COCA TEA

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CUZCO

SABORES PERUANOS
100% ALGODON

LAVAR A MANO EN AGUA TIBIA
SEPARAR LOS COLORES
SECAR A TEMPERATURA MEDIA
NO USAR BLANQUEADOR
PLANCHAR AL REVERSO

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CUZCO

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APPENDIX 1 - BACKGROUND TO ENVIRONMENTAL PHASE

Scope for environmental projects in Peru

With a massive range of different environments ranging from mountains, high grasslands, cloud forest, rainforest and desert, as well as a huge archaeological heritage, Peru offers a vast number of opportunities for environmental projects. As we would be staying in the mountains during the community and adventure phase it was decided to use the environmental phase as an opportunity to visit the Peruvian rainforest, which contains some of the most diverse and unspoilt areas of forest in the world.

Constraints on this phase included the short time we would have for it as well as the skills base within the group. Realistically we could only achieve a maximum of four working days at the most from the time set aside on the itinerary. This more or less ruled out undertaking any scientific studies independently as little of value could be achieved in this short time period. The two main options appeared to be taking part in an ongoing scientific study/survey or carrying out environmental repair work as part of an existing project.

For visiting the rainforest there were basically three options: the north around Iquitos or the south east where there are two main points of entry: Manu and Puerto Maldonado, both in the Madre de Dios department of the country. The north was ruled out early on due to the time involved in getting there which would take too long in what was shaping up to be a very busy itinerary. Manu was made second choice as the guidebooks suggested a couple of days to get there and greater expenses. The idea we went with originally was to fly into and out of Puerto Maldonado and take part in a project at one of the lodges/research stations along the Tambopata River.

Potential contacts were mainly found by searching on the internet. In the end Inca Explorers, the tour company who organised most of the other phases suggested a project on the upper Madre de Dios River in the Manu area. After consultation with the rest of the leader team this was accepted. The original itinerary proposed visiting two communities on the river in the vicinity of Boca Manu. While this would have allowed us to see two different communities this would have meant only one morning's cleaning in each community, with the afternoons spent travelling down river. Because of this we asked if we could stay with only one community to allow more interaction with the people who lived there and to get a significant amount of work done.

Manu National Park

While the area visited is not in Manu national Park, it is directly adjacent to the park and more or less identical. The following gives a background to the park and is from a brochure taken from the ranger station in the community at Shipiteari.

Manu National Park was established in 1973. It forms an important part of Manu Biosphere Reserve and was internationally recognised by UNESCO in 1977. It forms

part of the National System of State Protected Natural Areas, whose administration is taken charge of by the National Institute of Natural resources (INRENA). Manu Biosphere reserve was declared a World Heritage Site in 1987.

Aims and Objectives of Manu National Park.

- To preserve a representative sample of the biological diversity, as well as the landscape of the lowland forest, cloud forest and High Andes of the south east of the country.
- To promote tourism and to contribute to its development in the park and its vicinity based on ecological and culturally compatible criteria.
- To promote and facilitate research education and recreation.
- To contribute to the recognition and protection of cultural diversity as well as the self-determination of the indigenous groups of the area, in agreement with the other objectives of the park.
- To contribute to the conservation of the archaeological patrimony of the park.
- To develop adequate management skills for the participation and coordination of the various different social agents involved with the park.

Biological diversity

The park, with an area of around 1.7 million ha represents one of the largest conservation areas in Peru. It is the largest national park and has 13 different ecological zones varying with altitude, ranging from 200 m up to 4000 m above sea level. These different zones contribute to the massive biological diversity of flora and fauna.

Flora

The altitudinal range of the park gives rise to a large number of different vegetation types.

The Puna Grasslands contain several species of grass, such as *Stipa*, *Calamagrostis*, *Festuca*, etc. Andean woods made up of a few species such as *Polylepis*, *Buddleia*, *Alnus*, *Escallonia* and *Gynosis* interact with shrubby plants, bromeliads and epiphytes including orchids.

The cloud forest is made up of a heterogeneous forest with trees covered in epiphytes and an abundance of orchid species such as *Epidendrum*, mosses lichens, ferns, *Araceae* and many lianas.

The lowland forest, the most extensive area, is characterised by an abundance of trees that can reach up to 60m or more in height and up to 3m in diameter. Among the best known are species of *Cedrela* (Cedar), *Dipteryx* (Shihuahaco), *Ceiba* (Kapok), *Ficus* (Strangler fig), *Swietenia* (Mahogany), *Ochroma* (Balsa), *Chorisia* (White Kapok) etc. In seasonally flooded forests *Heliconias* and Palms, such as Mauritius palms and belly palms, are common. According to estimates there are about 5000 species of flowering plants, a significant number of which are new to science.

Fauna

The fauna of Manu is one of the park's greatest resources thanks to the good condition of the park and limited human impacts so far. According to counts carried out by the Cocha Cashu Biological Station there are more than 800 bird species. These include the Harpy Eagle, Jabiru stork, Orinoco goose, Andean cock of the rock, Macaw, Cuviers Toucan, King vultures, Rufescent tigerheron and Hoatzin.

There are more than 200 mammal species, such as the spectacled bear, several deer species, puma, pygmy marmoset, red howler monkey, black spider monkey, woolly monkey, squirrel monkey, tapir, collared peccary, Giant otter and Jaguar.

Reptiles found include white caiman, black caiman, anaconda, boa constrictor and yellow headed sideneck turtle. There is also a great variety of fish species such as Amazonian catfish, razorfish and a variety of piranhas. Insects represent the greatest variety of species, possibly exceeding one million.

Tourism in Manu is carried out in an organised way through licensed operators and nature guides who are professionally trained and constantly evaluated.

Planning for Environmental Project

Organisations contacted for projects included:

Picaflor Research Station, Tambopata River

Tambopata Reserve Society (TREES) - Chris Kirkby and John Forrest

Selva Sur (Peruvian conservation NGO)

Inkaterra - Ecotourism company

Emma Hume - runs a lodge/research station in the Tambopata area

Manu Expeditions (suggested by its owner Barry Walker, who is also the British Consul in Cusco)

Cusichaca Trust (suggested by an adventure phase contact of Emma Fletcher's). They are a Charity/research group who work on restoring Inca agricultural systems (e.g. terraces and irrigation systems) for use by locals with an aim to promoting sustainable food production.

The most promising of these were the Cusichaca trust who had several new projects starting that we could be involved in, and Emma Hume who had projects surveying Macaw/Mammal clay licks or turtles. The former was in the mountains and the latter was received after we had accepted the project we eventually did.

APPENDIX 2 - MEDICAL KIT CONTENTS

| | | QUANTITY |
|-------------------|---------------|----------|
| ANALGESIA | | |
| Paracetamol | 500mg tab. | 100 |
| Cocodamol | 8/500mg tab | 100. |
| Coproxamol | 32.5/325 tab. | 200 |
| Codydramol | 10/500 | 100 |
| Diclofenac SR | 75mg tab. | 28 |
| Rofecoxib | 50mg tab | 14 |
| Ibuprofen | 400mg tab. | 168 |
| Mefenamic acid | 500mg tab. | 56 |
| Mebeverine | 135mg tab. | 100 |
| Codeine phosphate | 30mg tab | 56 |
| Tramadol | 50 mg cap | 40 |

TOPICAL TREATMENTS

| | | |
|------------------------|-----|---|
| Fucidin cream | 15g | 4 |
| Fucidin H cream | 30g | 3 |
| Fucibet cream | 30g | 3 |
| Bactroban oint | 15g | 3 |
| Hydrocortisone cr. | 30g | 4 |
| Canesten HC | 30g | 3 |
| Daktarin | 30g | 1 |
| Flamazine | 50g | 4 |
| | 20g | 4 |
| Antiseptic cr | 60g | 1 |
| Bonjela | | 1 |
| Zovirax | | 3 |
| Gentisone HC ear drops | | 1 |

EYES

| | | |
|-----------------------|------|---|
| Fucithalamic oint | 5g | 4 |
| Chloramphenicol oint. | 4g | 2 |
| Acyclovir eye oint. | 4.5g | 2 |

RESPIRATORY TREATMENTS

| | | |
|-----------------------|----------|-----|
| Salbutamol inh | | 2 |
| Becotide | 100 inh | 2 |
| | 200 inh | 1 |
| Prednisolone | 5mg tab. | 100 |
| Flixonase nasal spray | | 1 |

GASTROINTESTINAL TREATMENTS

| | | |
|-------------------|-----------|---------|
| Diarolyte sachets | | 100 |
| Loperamide | 2mg cap | 174 |
| Senna tab | | 20 |
| Domperidone | 10mg tab. | 30 |
| Buccastem | 3mg tab. | 50 |
| Dextrose tab. | | 4 packs |
| Gaviscon tab | | 3 tubes |

MISCELLANEOUS TREATMENTS

| | | |
|-----------------|-----------|---------|
| Levonelle-2 | | 2 packs |
| Diazepam supp. | 5mg | 5 |
| Imigran | 50mg | 12 |
| Cinnarizine | 15mg tab | 84 |
| Diazepam | 2mg tab | 28 |
| Norethisterone | 5mg tab | 60 |
| Tranexamic acid | 500mg tab | 60 |
| Nifedipine SR | 20mg | 56 |
| Dexamethasone | 2mg tab | 100 |
| Nifedipine SR | 20mg cap | 28 |
| Diamox SR | 250mg cap | 336 |

ALLERGY

| | | |
|------------|----------|----|
| Cetirizine | 10mg tab | 60 |
| Piriton | 4mg tab | 90 |

MALARIA TREATMENT

| | | |
|------------------|------------|----|
| Fansidar | 3 tab pack | 1 |
| Quinine sulphate | 300mg | 28 |
| Doxycycline | 100mg | 50 |

ANTIBIOTICS / ANTIFUNGALS

| | | |
|----------------|-----------|-----|
| Augmentin | 375 tab | 200 |
| Amoxycillin | 250mg tab | 84 |
| Cephalexin | 250mg tab | 56 |
| Ciproxin | 500mg tab | 200 |
| Erythromycin | 250mg tab | 28 |
| Flucloxacillin | 250mg tab | 56 |

| | | |
|---------------|-----------|----|
| Metronidazole | 400mg tab | 63 |
|---------------|-----------|----|

QUANTITY

| | | |
|-----------------------|-----------|---------|
| Penicillin V | 250mg tab | 1000 |
| Fluconazole | 150mg | 6 |
| Canesten pessary | | 3 |
| Clotrimazole 1% cream | | 2 tubes |
| Mebendazole | 100mg tab | 6 |

INJECTIONS

| | | |
|---------------------|-------------|----|
| Atropine | 0.6 mg vial | 2 |
| Adrenaline | 0.5 mg vial | 8 |
| Piriton | 10mg vial | 5 |
| Hydrocortisone | 100mg vial | 10 |
| Voltarol | 75mg vial | 5 |
| Chlorpromazine | 50mg vial | 2 |
| Dexamethasone | 5mg vial | 2 |
| Cyclizine | 50mg vial | 10 |
| Zydol | 100mg vial | 5 |
| Ben. Penicillin | 600mg vial | 4 |
| Water for injection | | 4 |
| Lidocaine 1% | 5ml | 5 |

A & E KIT

DRESSINGS AND BANDAGES

| | | |
|------------------------------------|--------------------|----|
| Jelonet: 10cm by 10cm | | 10 |
| Surgicell | | 3 |
| Non adherent dressing: 10 by 10 cm | | 9 |
| | 7.5 by 5cm | 10 |
| Lyof foam | | 2 |
| Inadine | | 1 |
| Granuflex | | 3 |
| Sorbsan | | 1 |
| Mefix (10 by 10) | | 1 |
| Mepore: 9 by 15cm | | 1 |
| | 9 by 20cm | 6 |
| | 9 by 25cm | 5 |
| Ambulance dressings | XL | 2 |
| | L | 2 |
| | M | 7 |
| Stretch bandages | (15cm) | 2 |
| | (10cm) | 3 |
| | (7cm) | 9 |
| | (5cm) | 1 |
| Crepe bandages | (15cm) | 2 |
| | (7.5cm) | 1 |
| | (10cm) | |
| | (5cm) | 3 |
| Tubigrip | | B |
| | | C |
| | | D |
| | | E |
| | | F |
| Swabs: 7.5 by 7.5cm, packs of 5 | | 5 |
| | 10 by 10cm | 8 |
| Steristrips | (variety of sizes) | |

| | | |
|-------------------------|-------------|---|
| Sutures: | Ethilon 3/0 | 4 |
| | Ethilon 5/0 | 4 |
| | Vicryl 4/0 | 2 |
| Eye patch | | 8 |
| Zinc oxide tape (2.5cm) | | 1 |
| Transpore tape (1cm) | | 3 |
| Triangular bandages | | 6 |
| Collar and cuff | | |
| Suturing Glue | | 5 |
| Silver nitrate sticks | | 6 |
| Cottonwool sticks | | |
| Plaster assortments | | |

EYES

| | |
|--------------|---|
| Fluoresin | 5 |
| Amethocaine | 5 |
| Saline drops | 7 |

INTRAVENOUS EQUIPMENT

| | | |
|------------------|--------|----|
| Venflons: | grey | 5 |
| | Green | 6 |
| | orange | 2 |
| Needles: | white | 2 |
| | green | 16 |
| | blue | 8 |
| Syringes: | 20ml | 1 |
| | 10ml | 4 |
| | 5ml | 7 |
| | 2ml | 8 |
| | 1ml | 6 |
| Saline flush | | 8 |
| Nikofix | | |
| IV giving set | | 2 |
| Hartmanns:500ml | | 2 |
| Gelofusine:500ml | | 2 |

INSTRUMENTS

| | |
|--------------------|---|
| Scissors | 8 |
| Suture kits | 2 |
| Suture removal kit | 2 |
| Scalpels | 4 |

MISCELLANEOUS

| | |
|---------------------------|----|
| Normasol sachets | 12 |
| Unisept sachets | 2 |
| Steripod 20ml | 5 |
| Alcohol swabs | |
| Catheter 14ch and leg bag | 1 |
| Instillagel tube | 1 |
| KY jelly tube | 1 |

| | | |
|--------------------------------|-------------|---|
| Airways | | |
| Gloves: | sterile | 4 |
| | non sterile | |
| Bivi bag | | |
| Silver foil blanket | | |
| Neck collar: Stiff neck/Loxley | | |
| Sam splint | | |
| Casualty Straps | | 4 |

ADDITIONAL ITEMS

Safety pins
 Paper clips
 Cling film
 Stethoscopes
 Oro/ophthalmoscope set
 BNF
 Tourniquets
 Tongue depressors
 Pentorches
 Emergency dental kit
 Spare Tampons (regular 12, super 12)



APPENDIX 3 - TRAINING WEEKEND CATERING

Weekend 1

Cuppa soup and bread, pasta 'n' sauce with sliced vegetables, custard and Swiss roll. A simple, easy to prepare meal for our first weekend together. We spent the Saturday night bivvying out in groups and produced our meals using the Trangia stoves. A very satisfying meal enjoyed under the stars that filled us up and prepared everyone for the gorge walking later in the evening.

Weekend 2

Vegetable soup, Burns supper, apple pies and hot chocolate.

A bit more adventurous than the previous weekend, our Saturday night at the Riddell Estate saw the group tucking into a traditional Scottish feast of haggis, neeps and tatties. The vegetarians had their alternative veggie haggis and the very tasty apple pies went down well with everyone. Dinner was followed by hot drinks and marshmallows round a roaring campfire and in spite of the icy cold temperature we all went to bed well fed.

Weekend 3

Cuppa soup with bread, pasta and Dolmio sauce with vegetables, flapjacks and fruit scones. The Trangia stoves were put to good use again this weekend to prepare the soup and pasta from scratch. All the groups, exhausted from walking were grateful that boiling water was the most that needed to be done to prepare the meal. Some added sliced peppers to the pasta sauce which proved to be an appetising ingredient. The apple flapjacks and scones were a popular choice for afters and the whole group was refuelled and ready for the evening activity.



Gordon in Bacon roll production mode, possibly one of the most important roles in the team.

Weekend 4

Soup, chicken/vegetable stir fry, cheesecake.

A memorable evening in Yetholm full of creative improvisation and lots of imagination. The training team gave the venturers the task of producing an evening of entertainment for their leaders, to include a three-course meal. A catering team was quickly established and on their way to Safeway and returned with food and decorations ready to prepare the meal while the rest of the night was organised. A fine meal was produced and appreciated by all. The stir-fry was delicious and the cheesecake – orange, Black Forest or strawberry was a very extravagant treat for a B.E.G. weekend. The night was a great success. All the venturers pulled together to meet the task and showed what a great team they could be.

Weekend 5

Soup, Beanfeast and pasta, mars bars or snickers.

This meal came after a day of walking with full packs and very tired feet. We had all worked up huge appetites during the walk so were ready for a good feed. The soup and bread was a filling starter followed by the beanfeast and pasta. The meal on this weekend went down well with the vegetarians but wasn't so popular amongst the meat eaters. It was at least quick to make and in plentiful supply so no one went hungry. The chocolate bars didn't last long – everyone needed their sugar fix.

Weekend 6

Vegetable soup, chicken/vegetable curry with naan bread, apple pies. This meal was created from scratch to prepare us for the cooking during the community phase in Peru. Every vegetable had to be peeled sliced and chopped, the Chickens cooked through and the rice boiled. The time needed was hugely underestimated; it took the cooking group about three hours to produce the meal. Their efforts did not go unnoticed though when we all tucked into our food. It was a superb feed followed by warm drinks and apple pies. Definitely a better weekend than our first time at Riddell.



Hmmmm, might need a bit of ketchup

APPENDIX 4 - EQUIPMENT LIST FOR PERU 2003 EXPEDITION

| Equipment | QTY | Description / Advice |
|---------------------|------------|--|
| Clothes | | |
| Trousers | 3 Pairs | 2 light & 1 thicker pair. Must dry quickly. Tracksters, Fleece, Synthetic etc. (NOT Cotton). One of the these should be in the 'smart' box for boys. {NOT jeans or cords} |
| Shorts | 3 Pairs | Light weight, loose and comfortable. |
| Shirts | 6 | 2 T shirts Peru 2003 – one to be left. , 1 thermal top – quick drying and long sleeve, plus extra T shirts \ vests |
| Thermal Bottoms | 1 Pair | A pair of light thermal bottoms will be required. A second pair may be used to upgrade your sleeping bag |
| Sweatshirt | 1 | 1 Peru 2003 sweatshirt. |
| Fleece Jacket | 1 | Any type of fleece, however windproof fleeces like Buffalo or Trax are particularly good. |
| Hat | 2 | A good warm hat is essential, balaclavas are very useful. A cool light sun hat / cap will also be required |
| Waterproof Jacket | 1 | A waterproof jacket is essential. Shell clothing is best. Jackets with quilting / insulation may be too warm |
| Waterproof Trousers | 1 Pair | Not an absolute essential - but if included, can you get them on with your boots on? - TRY IT!! |
| Gaiters | 1 Pair | This will be a most useful item. Basic gaiters at about £12 are perfectly adequate. |
| Boots | 1 Pair | A good pair of sturdy, reliable and comfortable boots are essential. Ensure they have had plenty use beforehand. Take wax + cloth to keep them supple. Spare laces will be required. |
| Trainers | 1 Pair | A pair of light weight comfortable shoes are required. Training shoes / canvas boots etc. |
| Socks | 6 Pairs | A mixture of thick and thin socks are required to be worn with both trainers and boots. A spare pair for sleeping. |
| Underwear | 4 Pairs | Enough to ensure a clean pair each day without having to wash too much. |
| Gloves | 1 Pair | Thermal gloves or Buffalo type mitts are ideal. Note - You can wear socks as gloves but not gloves as socks! |
| Swim-wear | 1 Pair | A light weight swimming costume may be a useful item. |
| Smart Clothes | | For girls a sarong is best. The top should be a Peru 2003 T-shirt or sweat shirt |
| Washing | 1 Bottle | Travel wash is recommended. |

| | | |
|------------------------|----------|---|
| Safety Hat | | Those rafting, biking or horse ridding will require safety hats – Please await further advice |
| Toilet Items | | |
| Comb / Brush | 1 | |
| Shampoo | 1 Bottle | Check how much shampoo you use to work out how much you will require, [sachets may be easier to pack] |
| Small Mirror | 1 | A small light mirror will be a useful item. {unbreakable if possible} |
| Soap | 1 Bottle | Concentrated liquid soap is more practical than a bar.. |
| Towel | 1 | A small towel is required. 2' x 4' is adequate. Pertex towels are only good for patching tents, buffalo jackets etc. |
| Tooth Brush | 1 | |
| Tooth Paste | 1 | As small a tube as will last you 5 weeks. Liquid paste may be a good idea. |
| Face cloth | 1 | The smaller the better |
| Lip Salve | 1 | Important for anyone who suffers from dry lips |
| Deodorant | 1 | Roll-on will take up less space. |
| Sun-block | 1 | This may not be readily available in Peru or may be poor quality and expensive. You need good sunblock. + water resistance. Buy enough of the correct factor to ensure that you do not bum >Factor 10 |
| Shaving Kit | 1 | A simple safety blade and shaving cream is best. We do not want to end up scruffy!! - same for males |
| Feminine Hygiene | As Req. | You may be able to buy these in Cusco but not in the smaller towns. Work out what you will require and take them |
| Insect Repellent | 1 Bottle | Get a good quality repellent like 'Jungle Formula'. Read the instructions. Malaria - Prevention is better than cure!! |
| Toilet Roll | As Req. | To save room we will buy a 'job' lot out there |
| Nail Brush | 1 | A useful item for cleaning hands and finger nails. |
| Wet Wipes | 1 Pk | A small packet of wet wipes would be useful. |
| Eating / Dishes | | |
| Tea Towel | 1 | Used for drying your own dishes |
| Dishcloth | 1 | The sponge / Scourer types are best |
| Plastic Bags | 6 | 6 bin-liners are useful to have. A selection of smaller bags will be worthwhile also. Get bags with no safety holes eg. Freezer bags |
| Knife | 1 | A good knife is essential. Swiss Army Knives are best. No big knives. Remember you have customs to get through so this must be packed in your rucksack and not your hand luggage |
| Tin Opener | 1 | A small army type or even better if it is part of your knife. |

| | | |
|--------------------------|-----------|---|
| Water Bottle | 1 | A water bottle of at least 1 Litre. Must be able to take boiling water. SIGG bottles are good. Blue or red for water. Silver ones are for fuel only |
| Water Purification Tabs | | These will be bought as group kit to avoid confusion between different types. |
| Cutlery | | Knife, Fork, Spoon, Small Wooden Spoon, Teaspoon, Flat plate. Deep plate & Mug. Tin Mugs are bad news!! - your lips stick to very hot ones !! Please clearly mark these items |
| Other Kit | | |
| Rucsac Main | 1 | >70 litres. This must be able to carry all of your kit for the expedition., except what will go in your day sac. This must weigh <20Kg. |
| Rucsac Day | 1 | About 25 litres. Should be able to fit in to a 10" x 20" x 15" space. Use this to take all the things you need for the flight plus other personal things. This has a weight limit of 10kg. |
| Bum Bag | 1 | Useful for small outings and carrying personal things. |
| Money Belt | 1 | Essential, to get your Passport, Cash, Documents, Tickets, etc. into it and wear it under your clothes. |
| Sleeping Bag | 1 | Must be warm at least a 3\4 season. Synthetic is best. Down will do fine. A lighter bag may be improved by a fleece or mencalon liner. Compression bags are recommended as they help reduce the size of the sleeping bag. |
| Sleeping Bag Liner | 1 | Essential to prevent a smelly bag. This should be easily washable. |
| Sleeping Mat | 1 | Essential for warmth and comfort. Karrimats are good, therma rests are better, Keep it dry in a bag. |
| Torch | 1 | Head torches are by far the best idea (Petzl Zoom / Mega). Complete with spare bulbs |
| Spare Batteries | 1 set | Use long life batteries. Brand new ones in the torch. Brand new spares. Avoid powerful halogen bulbs. |
| Survival Kit | | |
| Survival Bag | 1 | A plastic survival bag / sheet is required. - minimum of 6ft x 4ft |
| Nylon Cord | 10 metres | Strong nylon cord is always very useful for many things. |
| Matches | 100 | You can water proof you own by dipping the head plus 1/4" in candle molten wax. keep in a film container with some sand paper to light them on. |
| Watch | 1 | You will need a reliable watch, preferably waterproof. |
| Whistle | 1 | A good loud whistle is a must. {plastic} |
| Compass | 1 | A basic silva type is all that is required. Remember a plastic bag for maps. |
| Insulating Tape | 1 | A roll of insulating tape can be very useful. |
| Documents / Misc. | | |
| Passport | 1 | A full UK passport is required. No passport - No go!! {Checks will be made before departure} |
| Personal Money | | This will be advised nearer the time. |
| Personal Medication | | Make sure your "Buddy" Knows your medication needs and where you keep your medication stored. |

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| First Aid | 1 | A small personal first aid kit is required. - in line with expedition doctor's recommendations |
| Camera | 1 | Remember Spare film – slides or prints [this can be very expensive abroad] Spare batteries. Lens cloth etc. |
| Sunglasses | 1 Pair | The sun in Peru will be very bright. Get a heavy tinted pair. |
| Binoculars | 1 Pair | Optional item If weight limit permits. Monoculars are even better. |
| Writing | 1 | A5 hard back book to keep a log of your expedition + pens and pencils |
| Sewing Kit | 1 | To fix any required repairs to kit. |
| Photo-Album | 1 | An album to show the Peruvians how we live. { approx. 10 photos } |
| Gifts | | Try and collect some small items from your home area eg postcards, flags, pens, pencils e.t.c. |



*Christine and Katy at the packing day making sure they've got all their essentials
(hairdryers, mobiles, make-up, mars bars etc)*

APPENDIX 5 - BEG SAFETY POLICY

It is the policy of this organisation that those responsible for management of the Borders Exploration Group operations will take all reasonably practicable steps to ensure the health and safety of all leaders, participants and other persons who may attend the groups activities.

It will adhere to the Code of Practice for Youth Expeditions, prepared by the Young Explorer's trust.

The matters to which that duty extends include:

1. Where applicable, the provision and maintenance of equipment or procedures that are, so far as is reasonably practicable, safe and without risks to health.
2. Arrangements for ensuring, so far as is reasonably practicable, safety and absence of risks of health in connection with the use, handling, storage and transport of articles and substances.
3. The provision of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety of leaders, and other persons attending the group's activities.
4. So far as is reasonably practicable as regards any venue under B.E.G.'s control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without risk.
5. The provision and maintenance of a working environment for its members that is, so far as is reasonably practicable, safe, without risk to health and adequate as regards facilities and arrangements for their welfare.
6. Within the groups programmes of activities, members should operate to well defined and understood safety procedures that are designed to control and minimise any physical dangers and cope with unavoidable contingencies that may arise during activities.
7. Safety procedures within activities should be subject to frequent rigorous examination, discussion, revision, practice, training and supervision.
8. The Chief Leader and Emergency response group will retain copies of the Emergency Response File, containing information and details of all Expedition members. All Expedition leaders must be appraised of the relevant experience and general medical condition of all Group members. They must keep each other informed of the strengths and weaknesses and progress of Individual members. If problems arise with members which may affect safety, whether their own or that of others, a leader must not hesitate to suspend that person from further activities until the issue can be addressed.

Notwithstanding the former all leaders, members and other persons attending the groups activities have a clear duty to co-operate with B.E.G. in complying with all statutory regulations, codes of practice and the Groups arrangements relating to health, safety and welfare.

APPENDIX 6 - EXAMPLE OF RISK ASSESSMENT FROM TRAINING.

| Activity | Hazard | Risk | Level and frequency | Action Taken |
|-------------|----------------------------------|---|--|--|
| Hike | Walking | blisters, sprains, strains | high, high | Wear only appropriate footwear, carry equipment for treating blisters in medical kit. Take care when crossing rough terrain and/or carrying heavy pack. Get help when lifting heavy packs. Adopt a sensible pace for the whole group. Stress the importance at Safety Briefing of people being honest if they have blisters / sore feet and not to suffer in silence and create a much more serious condition. |
| | Steep ground/rough terrain | Injury through falling | medium, medium | Appropriate footwear, negotiate hazardous terrain only where necessary and stick to paths. Be aware of hazards such as cliffs, especially in poor weather. Be wary of awkward steps, especially if ground falls away to one side. If the ground is rough, consider the areas where someone may come to stop if they slip (e.g. Boulders, trees etc ...) Always consider an alternative route, especially with a group of 35. Also, with such a big group, an awkward piece of ground may be okay for the first few people, but much harder once 30 people have negotiated it. |
| | Roads | Traffic | high level , low frequency | Walk in direction of oncoming traffic where possible, only cross where road visible for a good distance in both directions. |
| | Groups/individuals becoming lost | Disruption to group itinerary, exposure | Low, high. | Walk as a group, have route cards map and compass, make sure rest of group know route and have a copy of route card, have a plan of action for the eventuality of a group becoming lost/ split up. |
| | Weather | Hypothermia | Medium level, high frequency. Dependent on weather conditions | Make sure all group are equipped with warm and waterproof clothing and are aware of the causes and symptoms of hypothermia. Ensure individual groups stay together and have a buddy system. Risk may increase as weekend progresses due to clothes/equipment becoming wet. |

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| Camping | | Sunstroke | Low level, potentially high frequency depending on weather conditions. | Wear hats in strong sun, drink plenty of fluids |
| | | Sunburn | Medium level, potentially high frequency depending on weather conditions. | Wear hats and appropriate clothing, use sunblock. |
| | River crossings | Drowning, Clothes/equipment becoming wet and increasing risk of hypothermia, loss of equipment | medium, low | Only cross rivers where it cannot be avoided, adopt correct techniques. |
| | Environmental hazards (e.g. flooding, livestock, fire, falling trees/walls/debris in high wind) | Injury/death, damage to/loss of equipment | low, low | For this weekend, need to be aware we are camping on working farms, so machinery and livestock etc ... more of an issue. Need to be sensitive to landowners during lambing. |
| | Cooking | Fire, burns, illness | medium, low | Wash hands before cooking/eating, keep eating and cooking utensils clean and off the ground. Store food appropriately to avoid spoilage. |
| | Poor hygiene | Illness | medium level, medium frequency | Have designated toilet areas (wild toileting), cover up business and remember to wash hands. Keep tents tidy, with eating and cooking materials packed away and clean. Take footwear and dirty walking clothes off when in tents. |
| | Drinking water | Illness | high, high | Sterilise any water not known to be safe by boiling/chemical treatment/filtration. Do not share water bottles |
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APPENDIX 7 - MAIN EXPEDITION RISK ASSESSMENT

| Area of Operations | Hazard | Risk | Level and Frequency | Action To be taken |
|--------------------|---|---|---|---|
| All | Emergency situations | Lack of coordinated response | | · Emergency evacuation and accident procedures have been practiced as part of training and are detailed on laminated cards carried by all group members. |
| All | Medical Trauma | Variable | Low | <ul style="list-style-type: none"> · Close supervision of venturers in choice of activities and work areas. · Doctors with A & E experience. · Extensive medical kit carried during all phases of the expedition. · All group members to carry accident procedure laminated card. · Advice of doctors will be followed in case of medical emergency requiring a hospital and the location of suitable hospitals will be determined by research and the recce team. Coverage for emergency evacuation and repatriation will be included in the expedition insurance. · Malaria – Expedition medic will advise expedition members of the prevalence of malaria and the expedition Venturers will arrange to take prophylaxis. · Other infectious diseases – Medic will advise re- necessary immunisations to be acquired prior to departure. · General illness prevention – education prior and during expedition re-water and food preparation and consumption. · Aids – Avoid sex; take own transfusion kit and plasma. In serious medical situations try to use a reputable hospital. |
| All | Group fragmentation - subgroups/individuals becoming separated from the main group. | Increased risks to lost group/individuals. Disruption of itinerary. | Medium, increased during travel stages and when in field. | <ul style="list-style-type: none"> · All group members to be briefed on what to do in event of becoming detached from main group during all stages. · Utilise the buddy system to ensure everyone knows where their buddy is at all times. · Have travel groups during transit so that group leaders can concentrate on one part of the group. · Agreed route plans/locations and rendezvous points and times in situations where the group is to be split up. |

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| All | Natural disaster: Earthquake, landslide, flooding. | Injury, fatality | low, low | <ul style="list-style-type: none"> · Local advice to be taken on campsites, routes with respect to environmental hazards. · Group to be well-practiced in emergency evacuations. · Group to be aware of earthquake procedures which will be carried in the master file for re-familiarisation. |
| Leaders and Venturers | Sexual activity | Variable | Low | Serious briefing and agreed code of conduct. |
| Leaders and Venturers | Drink | Drunkenness leading to accident and injury, loss of productivity/disr uption to itinerary, poor group image. | High | Serious briefing, leader supervision and agreed code of conduct. |
| Leaders and Venturers | Previous Illness | Recurring Illness | Low | All group members will complete Confidential Medical Questionnaire and have a one-to-one talk with one of the expedition doctors before departure. |
| Leaders Venturers | Abuse | Trauma | Low | Code of conduct. |
| | Abuse, Bullying | Trauma | Low | Declaration; Code of Conduct |
| Leaders and Venturers | Inexperience | Accident, potentially lethal | Medium | Training will be given at briefing Week-end and in first stage of the expedition by experienced and qualified leader team; training will be ongoing throughout the expedition |
| Leaders and Venturers | Lack of fitness | Inability to participate; accident, potentially lethal | Low | All leaders and venturers will be informed of the level of fitness required; Leaders will assess fitness levels early in the expedition, and prevent participation in activities if necessary. |
| Leaders and Venturers | Unsuitable equipment | Discomfort, potential danger, even lethal | Low | An equipment list will be published; advice will be given at training Weekends |
| Political Consideration | Civil Unrest | Injury, Disruption, Cancellation | Low | Check with FCO. Currently no advice to avoid Peru. Avoid contact with any local discontent. |

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| Culture Shock Aspects | Local poverty, Poor Health | venturer Concern / trauma / homesickness | Medium | <ul style="list-style-type: none"> · Careful Briefing of venturers about local culture and the poverty of the country's infrastructure. · Leaders to be aware of possible early homesickness and inability to come to terms with the expedition requirements. |
| All | Terrorist groups, bandits | Trauma, Injury, Fatality | Low | There is no FCO advice to avoid Peru. Local advice will be followed. |
| Swimming | Drowning | Fatality | Medium | <ul style="list-style-type: none"> · Drowning is the second biggest killer on expeditions after RTAs. · An assessment of the safety of any swimming areas will be made and local advice considered. · No swimming will be allowed unsupervised by leaders. |
| All | Illness and disease | Illness, fatality | Medium | <ul style="list-style-type: none"> · All water will be treated as unsafe until known to be otherwise (e.g. bottled water). · Water will be boiled or iodine will be used to make it safe to drink. · A doctor can be asked for advice re-food preparation \ avoidance ie. street stalls, ice cream, vendors etc. · No sharing of water bottles is to be allowed wherever possible. |
| All | Dehydration | Illness, fatality | Medium | <ul style="list-style-type: none"> · Sensible work patterns will be observed. · All will be briefed on the importance of keeping hydrated. <p>A clean and adequate water supply will be ensured at all times wherever possible.</p> |
| All | Heat stroke and exhaustion | Illness, fatality | Medium | <ul style="list-style-type: none"> · Sensible work patterns will be observed. · All will be briefed on the importance of keeping hydrated. · Teams have also been briefed on the importance of sunhats and sun screen lotion and covering up in the sun (especially midday). · Location and distance of trekking must be chosen in relation to the abilities of the group. · Wear appropriate clothing. |
| Base camp | Food | Illness | medium | Good Hygiene in cooking; limited and careful use of local fresh foods. |
| | Drinking Water | Illness | medium | All water will be purified, water teams being set up during each stage of the expedition where we are supplying our own water. Sharing of water bottles will not be allowed. |
| | Stoves | Burns | medium | All venturers will be trained how to use them and will become adept with them at training weekends. All on expedition will receive training in use of stoves that are used and fires and the dangers involved. No cooking inside tents, only in eaves when unavoidable. |

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| | Hygiene | Illness | medium | Cleanliness at all times emphasised throughout training. Washing facilities to be provided wherever possible, all group members to carry own means of hand washing. Designated toilet areas in all camps. |
| | Security | Theft, assault, disturbance | medium | Invites back to camp by group agreement only, camp guards to be employed if possible or deemed necessary, vigilance at all times by all group members, sensible camp layout - all parts visible from main point. Emphasise the need to keep a low profile and not be intrusive into the local community. |
| In the field | Separation / Lost | Fatality | medium | No individual will ever be working in a group smaller than four. Each member of the expedition will carry a whistle at all times. A strict method of Roll call will be adopted before and after all excursions. Always make sure your camp and plans for travel are known by base camp. When you leave camp, make sure that a person arriving in your camp would know where you have gone. Never travel at night, except possibly in an emergency. Never travel alone. Always carry an emergency pack. |
| In the field | Dangerous flora and fauna | Fatality | medium | Research and recce will advise if there is any risk in this area. Advice of locals and guides will be followed. |
| River crossing | Accident / drowning | Fatality | low | Limit crossings by route selection. Instruction at briefing and at start of expedition. All water crossings will be avoided if possible. If avoidance is not possible the group will cross using approved routes and methods which have been practiced during training weekends. |
| In field | Trekking at altitude | injury | medium/high | Be extra careful and don't rush. Carry an inhaler if you are prone to asthma. All expedition members must be at a reasonable level of fitness prior to departure. To be educated re- symptoms of altitude sickness and to inform medic if unwell. Buddies to keep an eye on each other. Appropriate medication for relief of altitude sickness to be included in medical kit. An acclimatisation period is built into the expedition. The first few days at altitude will be taken at a relaxed pace. |
| General manual labour | Vigorous physical activity | Dehydration | medium | Ensure adequate water is supplied and drunk by all. |
| | Exposure to elements | Sunburn/Sunstroke | medium | Wear sunblock when appropriate, wear sunhats, have rest stops in shade if necessary, keep well hydrated. |

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| Heavy lifting | Heavy weights | Back Strain | medium/High | Advise all on correct technique for lifting, ensure enough hands present when heavy lifting is necessary. |
| Digging | Vigorous physical activity | Back Strain | medium | Common sense. Rest if necessary. |
| | Tools | Injury to self/others by striking with tools | medium | Be aware of where others are during digging with enough clearance for others to avoid striking them (esp. when using tools such as pickaxe). Make sure you know where others are and that they know what you are doing. |
| | | Injury to feet/damage to footwear | medium | Avoid stamping on shovels. |
| | Prolonged use of hands | Blisters | medium | Wear work gloves |
| Painting/Varnishing | Paints/Varnish/Solvents | Exposure to fumes | medium | Work only in well ventilated spaces |
| | | Skin contact with harmful substances | medium | Wear protective clothing. |
| | | Damage to clothing/equipment. | medium | Wear protective clothing. |
| Working at heights | Working at heights | Falling, dropping things on others | medium/high | Only work on a secure platform, be aware of where all edges are and stay away from them. Keep all equipment away from edges. Any scaffolding will be reassessed for safety continuously. |
| Hammering, sawing etc. | Striking with sharp and blunt instruments | Injury through striking/cutting with tools. | medium | Be sensible/use common sense with working with these tools. Keep hands well away from area of cutting/striking, if need then work in a controlled manner. Wear gloves. Make sure you know where others are and that they know what you are doing. |

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| Construction | Building materials being dropped/collapsing, scaffolding being unstable and collapsing. | severe injury, fatality. | medium/high | Hard hats will be worn at all times within a certain distance of the construction site after construction has reached a height that poses a risk. The safety situation at the building site will be reassessed continuously. |
| Flight | Accident / hijack | Fatality | Low | Use reputable airline with a good safety record. Use only twin engine aircraft with excellent safety record for CASEVACS. |
| Flight | Deep vein thrombosis | Fatality | Low | Increased incident on long haul flights. This may pertain more to the adult leaders or venturers with specific medical problems. Doctor will advise those identified as being at higher risk. All expedition Venturers will be sure to maintain movement in their extremities during the flight and drink plenty of fluids. |
| Roads | Traffic Accident | Fatality | High | RTA is the biggest killer on youth expeditions. Road transport arranged through experienced operators with well-maintained vehicles that must be driven by regular, employed drivers whose livelihood depends on unblemished records. No night driving is scheduled. Leaders will concern themselves with speed limits and the drivers' condition. Leaders will only drive as a 1st resort. Venturers will NOT drive. The transfers from and to the airport will be done using a reputable firm. Leaders will keep the driver to the speed limit, taxis will be avoided. |
| River | Water | Drowning | Medium | Check any boats to ensure they are suitable for their purpose. Use only a reputable company to organise river transport. Follow safety procedures and advice of operator when travelling in boats, do not allow any group member to put their pack on while on the boat or near edge of river. Ensure at least one leader in each boat if possible. Where a 'raft' as opposed to a boat is being used ensure that lifejackets are provided. |

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| Customs | Drugs, smuggling artefacts or species | Arrest | Low | Strict expedition policy. Briefing from Chief Leader. All expedition Venturers will pack their own luggage and will keep it with them at all times. They will not carry anything through customs for anybody else. Visitors are also not allowed to take any valuable artefacts or plant or animal species from the country without the proper authority. Any member of the expedition involved with narcotics can expect to be sent home, if they are not imprisoned in country. |
| Cities and Towns | Mugging, theft, rape | Trauma, fatality | Medium | Venturers will never be in towns and cities solo; females always will be accompanied by males; all will be warned at training weekends of potential dangers. No ostentatious display of wealth. Expedition Funds to be kept in separate areas. Minimum group size of three when out of contact with main group. |
| Accommodation and food in transit | Poor Hygiene, Fire | Injury, Illness, fatality | Low | Recce proposed stopover points; check fire escapes and regulations, brief group on fire procedures for all accommodation; check cooking facilities. Stress on personal hygiene at training weekends. |
| hostel accommodation | security | theft, assault | medium | Recce to identify better hostels if possible. Secure storage facilities for money/valuables a priority. Emphasise need for vigilance with group members. |
| All transit | Loss of group equipment | Inconvenience, disruption to itinerary. | Medium | Ensure all kit in storage Is kept in a secure location. When in transit ensure all kit is attached to vehicle correctly and is secure from theft/damage from the elements. |

APPENDIX 8 - COMMUNITY PHASE RISK ASSESSMENT

| Activity | Hazard | Risk | Level and frequency | Action taken |
|-----------------------|--|---|----------------------------|---|
| SECURITY / GENERAL | Locals / non-group members around and moving through camp. | Theft / disturbance / assault | medium/high | Campsite guard throughout night and hurricane lamp placed in centre of camp. |
| | Animals/Livestock in and around camp | Injury / nuisance / poor hygiene | low/high | Campsite guard at night. Keep tents closed when not in use. Discourage animals e.g. keep food, litter etc stored sensibly. |
| | River/bridge area | Hygiene risks/intrusion on privacy | low/low | Area initially declared out of bounds. |
| | Fire (smoking/hurricane lamp) | Fire (tents) | low/low | Designated smoking area, ensure night-time hurricane lamp is not carried around but stays in centre of camp. Provide fire buckets. |
| SURROUNDING AREAS | Terrain | Getting lost, falling/injury | low medium | Groups of 3 at least, let others know where going, have an agreed time back. Seek local advice on areas to avoid. Avoid steep terrain. |
| | Sun/heat | Sunstroke, sunburn | medium/high | Keep covered up on site and in camp, especially around midday. Wear plenty of sunblock, sensible clothing (I.e. sunhat) and keep well hydrated. |
| | Obstructions/objects left lying around | tripping/injury, loss of equipment, compromised security. | low/high | Be tidy. Don't leave equipment/belongings lying around site/camp/eating area. |

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| BUILDING SITE | Lifting | injury to back, dropping load on self/others | medium / medium | Lift only loads comfortable with, two to a brick where necessary. Boots and gloves to be worn on site. |
| | Digging | Injury to back, accidentally striking others with tools | medium/medium | Be aware of others when digging, watch out for tools with loose heads. |
| | carrying, general movement | Falling with/without loads | medium/medium | If carrying a load ensure know where your going and where to put it. No running about. |
| | Sun/heat | Sunburn/sunstroke/dehydration | medium/high | Sensible dress, no bare tops especially in middle of day. Drink plenty of fluids; wear a sunhat and plenty of sunblock. |
| | High walls/working at height | bricks/tools/individuals falling from a height. | high/medium | Hard hats to be worn at all times around building site (excepting break times away from walls etc). Ensure stability of brick piles before using as steps to access walls. |
| | Terrain/carrying down slopes | falling on slopes while carrying bricks resulting in injury | low/medium | Be aware of others when digging, watch out for tools with loose heads. |

APPENDIX 9 - EXPEDITION SAFETY REVIEW

Community Phase

Overview

We arrived late afternoon on the Sunday and camp was set up, layout having largely been decided by the advance party. Toilet pits and shower screens had been constructed for us. Monday was set aside for acclimatisation and a risk assessment of the campsite and building site was carried out. Pete and Iain also carried out a risk assessment for the campsite which was added to the main one. The situation on both the campsite building site, and general group security was reassessed several times. Morning Briefs were given each morning after breakfast and before work began on site. This gave an opportunity to communicate any developments on site relating to building work, as well as update/review safety issues concerning campsite security.

As has been the case with previous BEG expeditions we were very lucky to find a project in a welcoming and friendly community. The close proximity of a camp of pipeline workers was a slight concern as they were not part of the community and therefore potentially held us in a different light to the community members. It was quite common to see drunkenness in locals and the workers, and while an eye was kept on the situation at such times this never presented any security problems, and none of the aggressive drunkenness typical of home was witnessed.

The main problems were general housekeeping ones, keeping living and work areas clean and tidy. As mentioned below there were also difficulties in keeping track of the movements of group members outside of camp. A register was established a few days after camp, and was used on most occasions, but not all. The failure to designate the valley side with the pipeline after boulders had been seen falling in the morning by several group members was a serious omission.

Safety rules were kept to fairly well on the building site. It was decided to let group members work on top of walls; this was an example of a situation where an overly restrictive approach could have limited the amount of work available for us to do, but it was necessary that the danger of this activity was highlighted to the group.

Camp site

We were warned by some locals (not our contact) that we would need a campsite guard during the night or things would be stolen. The first night leaders/venturers took turns to guard and the rest of the time we had a local acting as guard, although not sure how effective they were as they slept a lot! No Problems in this area though.

Pigs, cows, horses, dogs and chickens would wander around day and night. Larger animals obviously causing concern but seeming fairly docile.

The smoking area was adhered to, although one possible incident of smoking in tents. Important to reinforce this message constantly as fire in tents one of main risks. Collapsible buckets kept in centre of camp – the effectiveness of these if they had

been needed is questionable. There was a narrow miss with hurricane lamp where a venturer leant against lamp and burnt a hole in their fleece. The hurricane lamp was routinely carried around by guards at night. One was discovered with the glass broken in morning. Not carrying lamp was mentioned but not emphasised often enough to guards by safety officer. This could have led to a serious incident if tents had been set alight by the lamp.

The whereabouts of group members was a rather grey area of the risk assessment. It was advised for people only to go walking in groups of four and to sign a register. Groups of less than four were common often without walking boots. One incident saw two group members walking for well over two hours a good distance from camp up one of the smaller hills nearby without leaving any indication of where they were going and without appropriate footwear.

The side of the valley seemed safe at first and a number of walks were had in the afternoon by campsite teams. A gas pipeline is under construction and it became apparent later on that this side of the valley was totally out of bounds as falling rocks and blasting became commonplace. On one day several people had gone up the same mountain side in groups. Boulders were seen falling down the hillside so those who could be seen from the building site were waved/shouted back. Those who could not be recalled were on the hill till later in the afternoon and crossed the area of the pipeline while this hazard was still present.

The sun was quite a high risk, as soon as it gets over the edge of the valley it immediately becomes very hot and by midday is very strong. The effects of sun and heat probably played a part in illness and fatigue of a significant proportion of the group. Plenty of fluids were provided all through the day, and group members were advised to keep drinking fluids. Several people worked without tops on at various points, this was discouraged, and after the strength of the sun became evident people generally seemed to take action on this of their own accord.

Items of personal/group equipment were left lying around camp/site/eating area on several occasions. This is a very easy area in which to be lax. Several items were lost, most reappearing at the end of the phase when the eating area / tents were emptied out.

Building site

Lifting the adobes was a relatively high risk area but very difficult to enforce. Proper lifting was often only partially adhered to due to tiredness setting in. Lifting generally carried out sensibly in terms of two people to a brick. Abrasions on forearms from the straw and grit in the bricks were very common.

A few grazed / bruised shins and near misses with deflected shovels/swinging picks. There were a few incidences of running about/mud slinging. This was mentioned at safety brief as not acceptable on site where there are too many things to trip over/knock into and creates a poor impression.

After first few days people realised strength of sun and made good efforts to stay covered up and hydrated. Some laxity in applying sun block as it was quickly removed by sweat/dirt. No bad cases of sunburn reported though.



Nice hat....

Once the walls reached shoulder height hard hats were issued. The rule of wearing these was stuck to the majority of the time. Exceptions included when people visited the site (this also applied to inappropriate footwear) to have a look at the building. The hats proved very popular with the Peruvians, it was assumed early on that they would not wear them as it's not part of the culture, but this was proved wrong when we got there. The workmen on the pipeline were all equipped with helmets and the workers on the building site were always borrowing ours and very keen to keep them when we left.

The means of accessing high walls was via piles of adobes, these were often unstable and in danger of collapsing, the group were advised to check these for stability before using them.

Several piles of adobes were located up a fairly steep bank behind the building. Carrying these down the slope proved quite hazardous and steps were cut. These continually wore away and there were a couple of minor near misses with people stumbling/dropping bricks while on the slope.

Adventure Phase

As with all the other phases organised with Inca Explorers, the need to directly assess every situation was taken out of our hands to a certain extent. While we kept a close eye on what was happening, there was little need for our input. All routes chosen were sensible, and they were generally used to dealing with groups that were less experienced/fit than ourselves.

While on the trek we had the satellite phone, our guides Jaime and Lucho had radios to communicate with Victor, in charge of the mule train which always set off before us to get lunch and the camp set up. Jaime led the group and Lucho followed up the rear with the back-up horses, which were used for people struggling with the altitude and or illness, or just for their packs. The group never became widely separated. Apart from the final descent one half of the group was not out of the sight of the other.

A general risk assessment had been done before departure and few situations arose that needed re-assessing. One oversight however was that while we had insisted on helmets being worn for the pony trekking, there were no arrangements made to provide helmets for those who would need to use horses on the trek. This omission

was possibly a result of the assumption that nobody would be needing horses. In the event several group members did spend a good amount of time on them.

There were several difficult pieces of terrain, but all were crossed without difficulty. The most hazardous was probably the final descent into the sacred valley, with the path being very loose underfoot on some very steep slopes.

Aguas Calientes / Machu Picchu

Being firmly on the tourist trail our main concern as a large group was being a target for theft, but there were no incidences and being in large group was definitely a big advantage.

The only real issue during this stage was our walk through the cloud forest on the first day. The only way in was to walk along the railway. This wasn't too dangerous in itself as one could move to the side when a train came, and they didn't go very fast (although this did involve immersing oneself in the undergrowth). On the way back we walked through two short tunnels, where there was very little room to move if a train came, which was a slightly questionable on the guides behalf, but then it was our responsibility to highlight anything we weren't happy about. One group member also got bit by a dog during this walk, but luckily the skin was not broken. Dogs were a constant feature for the whole expedition and this is a danger that should be emphasised.

Mountain Biking

This was well run. The first part of the day was a slow downhill, gently undulating, after lunch it became slightly more difficult, some sections probably reaching the suicidal grade if not inched down as slowly as possible, both brakes on. Issues here were razor sharp vegetation and rocks, and substantial drops next to the path. A bad fall could have easily been exacerbated by impalement on one of the small aloe-like plants with a hard as wood needle sharp spike in the middle of them. The cacti managed to embed themselves in one venturers leg, and an impressive barb made taking it out difficult. However, everybody survived despite some near misses.... The route was probably never more than one kilometre from a point accessible by the bus which followed us all day.



Cactus embedded in venturers leg.

Horse riding

This appears to have been fairly safe, the only danger being people falling asleep and falling off. All had helmets which they had brought with them. One comment has been that there was that one needed to be more experienced at mountain biking for the biking group, than riding experience was needed for the pony trekking.

White water rafting

Compared to some people's previous experiences this was quite tame. As with all the companies and guides organised by Inca Explorers the people running it seemed professional and all the equipment up to scratch. Plenty of advice was given on what to do in case of falling in. Only one person did so and was quickly recovered.

Cusco

Both times we were in Cusco we were very lucky and there were no problems. Before we left we were worried about the attention such a large group would attract but on many occasions this was probably the reason we had so little trouble. However, even when we split up into smaller groups there were few problems. It was agreed that after darkness we would only walk around town as a whole group. During the day we were advised to stay in groups of at least four and only to use registered taxis, numbers of which had been provided on laminated cards. In reality however, where we were in groups of three or more and used good judgement in choosing a taxi that was not falling apart and checking the driver there was no need to use these. They would have been essential in the case of an individual becoming lost. There were some lapses in security. The first night in the Colonial hotel I could have easily walked around and taken personal CD players, bags and passports from a number of rooms left unoccupied with the door wide open.

Environmental Phase

Again there was a large degree of control handed over to the guides in this phase, especially where transport and nature watching were concerned. However, as we were undertaking a project that would not normally be done by a standard tour group there were several decisions that had to be made requiring an input from ourselves. No risk assessments were written at the time over and above what had been covered in the main expedition risk assessment, but several safety issues were discussed and communicated to the group.

The main issue during the litter collection was the danger of poking round in the undergrowth. It was decided to use sharpened sticks to collect litter but this proved quite difficult. However, the sticks proved very useful for poking bits of litter and the undergrowth to check for any wildlife hiding in them. The gloves that we had brought from the community phase provided good protection from thorns, ants etc.

The main danger in this phase was the river. Life jackets were provided and worn most of the time. While the upper Madre de Dios was quite shallow due to it being the dry season it was still fast flowing. The river adjacent to the community was used for swimming and washing on two occasions. It was made clear that a leader and preferably one of the guides would need to be present to keep an eye on those in the water. Out of the shallows this was a considerable current and none but the strongest

swimmers was able to make any headway against it. There was plenty of accessible bank in this stretch of water so anyone caught in the current would be able to make their way to it. People were warned of this and advised not to venture into the deeper areas.

After the Manu River joins the Upper Madre de Dios at Boca Manu to become the Madre de Dios River it is a much more powerful and deep river with huge log jams testifying to the torrent that the river must be during the wet season. This required careful navigation by the pilots, this being done successfully most of the time, apart from several groundings and a few collisions with submerged trees. The main danger here is that the boat will get turned sideways to the current and capsize. The only incident causing concern here was returning from the macaw clay lick when the boat got grounded. Three of our group were asked to get out and push, only two of whom were wearing lifejackets. Even though this was in a shallow the force of water was considerable, and as we had experienced pushing the boat in a shallow tributary river earlier in the day, you could suddenly find yourself clinging to the side of the boat and treading water. Anyone losing their grip on the boat would have found themselves floating rapidly downriver.

At Maquisapayoj group member received burns to their leg when a thermos was spilt. See incident report form.

Attack by insects was commonplace, black flies being the most prevalent. These do not carry any infectious diseases, but some people reacted very badly to these bites. There were very few mosquitoes, and scanning reports at the South American Explorers club the majority of reports had said no need for malaria prophylaxis, although there is still a small risk which justified our group taking medication. Good advice was given by the guides on keeping tents closed and turning torches off before going in, as well as clearing the vestibule of insects by waving about a tea towel before entering the inner. We were also advised to find and kill any mosquitoes that had got into the inner.

Touring Phase

Once we arrived in Puno we were now more or less totally in the hands of the tour company. Group security on the arrival at Puno was well handled. We were advised not to wander around town after dark, again we followed the strategy of only going out as a whole group after dark, and made sure the restaurant wasn't too much of a walk away. Puno was probably the most tense of all the cities we visited, a lot of the trouble prior to our visit had been here and a military presence was still evident.

The visit to Lake Titicaca again involved water transport. Overloading was an issue here. Lifejackets were present in the boats, worn by those in the outside part of the boat as we left the harbour as it was regulation and we could not leave harbour without complying. We were initially divided between two boats as only a certain number of people can go in each boat, but after we had visited the floating islands we were all put onto one plus a few extra, there were probably a maximum of 20 lifejackets but these were not worn. In reality the boats were very sturdy, but one was

able to sit on the top (guarded by railings) so there was quite a bit of movement around the boat.

On the islands where we overnighted we generally took the decision of trusting our hosts and left passports, money etc in their houses when we were out touring / dancing etc. There were no problems here, although we were split into groups of three and none had a very good idea where any of the other group members were which could have been an issue if there had been a medical emergency.

One of the more serious safety incidents of the whole trip occurred on the return journey to Puno. It was a clear sunny day and we had been told by the guide that we could swim on the way back. Several of us got ready to swim on top of the boat. The guide asked us to wait for him, but this was not heard and two group members waited only until the engine of the boat had been turned off, not until the boat had stopped moving, forgetting that the boat coasts for a good hundred metres before stopping. This left them floundering in what (surprisingly enough at 3800 m) was incredibly cold water. The buoyancy aid was so well secured it could not be removed but luckily the boat was turned round, a pole was put out and both managed to gain a hold and were recovered.

The rest of the trip involved visiting the cities of Arequipa and Lima. There were no major problems here. Again we advised everyone to stay in sensible sized groups during the day and travel as a whole group at night. One group of girls was asked if they wanted a lift while walking round Arequipa during the day, this was the only unwanted attention the group received.

In summary, the trip passed of without major incident. All the near misses involved water and to a certain extent fire. Other problem areas included keeping track of the whereabouts of group members and general housekeeping/security while in base camp and hotels.

APPENDIX 10 - GOLDEN RULES FOR PERU 2003 EXPEDITION

These rules were discussed and agreed upon by all group members.

- Respect other people's views and feelings in respect to:
 - noise
 - bad language
 - group and personal equipment
 - dress
 - relationships
- No sex
- Smoking in designated places only
- No alcohol while travelling. Consumption at discretion of group leader at all other times.
- Any contact with prohibited drugs (in any form) is forbidden.
- Never go off on your own – your buddy must always know where you are. Minimum group size 3 people outside camp boundaries unless otherwise stated.
- Only use licensed taxis, and endeavour to have leader in the vehicle with you.
- Act in a responsible manner and abide by the laws of Peru.
- Invitations should be a group decision.
- Breaches of the Golden Rules will be discussed by the whole group and a solution decided.
- Swimming will be group activity only with a guard system operating on dry land. No swimming in fast flowing water. Local knowledge is essential.
- Above are subject to change at the discretion of Chief Leader.

APPENDIX 11 - ENVIRONMENTAL POLICY

The following is adapted from Environmental Responsibility for Expeditions. A Guide to Good Practice (2002) British Ecological Society in Association with YET.

CAMPSITE

- Check for animal feeding/watering/nesting sites and their routes to and from these sites.
- Consider the impact of tents and cooking areas on vegetation – move tent positions regularly
- Maintain a reasonable distance from watercourses in case of floods, animal drinking or waste pollution.
- Keep noise levels low
- Consider the visual impact of tents
- Consider water usage e.g. personal drinking washing. Do not affect access or water quality.

COOKING

- Store and pour carefully remembering cans may expand in the heat and fuel may vaporise.
- Avoid contaminating the ground with spillages.
- Never waste fuel – only use what is vital.

WASTE

A plan for managing waste should be drawn up taking into account local policies.

- Minimise packaging and disposal problems
- Use biodegradable/environmentally friendly products.
- Burn or bring out litter, even cigarette ends.
- If waste must be buried avoid water and areas with frost heave.
- Deal sensitively with human waste – burn toilet paper, dig deep pits (2-3 m if possible). Cover all pits well. Be aware of appropriate size and depth in relation to number of users, permanency and location.

FOOD

- Store food carefully where animals cannot reach it.
- Never feed wild animals.

SCIENTIFIC PHASE / ENVIRONMENTAL PHASE

Try to avoid:

- Working in large groups
- Moving stones or boulders
- Marking sites (any markings must not be permanent)
- Working in vulnerable sites and sensitive conditions. E.g. steep slopes, very dry and windy times, nesting seasons, still water, areas of slow growth rates, heavy rain, or where rare species are known to exist.

SOCIAL RELATIONSHIPS

- Minimise intrusions into private life of community members
- Visit only when invited
- Avoid walking through settlements.
- Be discrete, quiet and respectful at all times.

CULTURAL DIFFERENCES

- Observe customs e.g. tipping.
- Avoid defacing currency, discussing openly issues of politics or religion.
- Avoid exploiting hospitality
- Be aware of local taboos.

PHOTOGRAPHY

- Ask before taking photographs of people, their animals, houses or property.
- Remember that gifts in exchange for permission for photographs may be demanded.
- Never take photographs of military type installations, police stations or people in uniform.

ECONOMIC RELATIONSHIPS

- Spend money in the local community.
- Be aware of 'black market' activities, especially in changing money.
- Use services provided by indigenous peoples.
- Do not give money to anyone begging.
- Protect all property and valuables.
- Avoid ostentatious displays of wealth, e.g. wearing jewellery.