

Information for Local Education Authorities on the Health & Safety measures taken to safeguard the Operation Wallacea Peruvian expeditions

1. Introduction

The aim of this document is to highlight the procedures and protocols in place for school groups who are involved with Operation Wallacea research expeditions in Peru. It is intended to fulfill the criteria set by the local education authorities with regard to overseas expeditions and is based on the information requirements set out in *Guidelines for Educational Visits and Outdoor Education Activities 2004*, produced by Surrey County Council. The Surrey CC document in turn is based on the Department for Education and Employment *Health & Safety of Pupils on Educational Visits (1998)* and on the August 2002 document produced by the Department for Education and Skills entitled *Standards for LEA's in Overseeing Educational Visits*. As with all these documents the aim is to ensure that there are adequate preparations and safety systems in position to ensure that best practice with regard to Health & Safety issues is being used in the planning and implementation of the expeditions.

2. Structure of the expeditions

The structure of the expeditions is a little different to that with many other expeditions or educational trips that are run by schools. Operation Wallacea is running a biodiversity research programme in conjunction with the Durrell Institute of Conservation Ecology (DICE) at the University of Kent and the World Conservation Society (WCS) on the Samiria River in the Pacaya-Samiria National Reserve in north-eastern Peru. The school groups fly to Lima in Peru and then either overnight or fly straight to Iquitos, depending on their flight times. They will need to arrive in Iquitos the day before their expedition starts. In Iquitos they are met at the airport and helped with getting transport to the hotel where they will leave the next day to join the boat. (picked up at the airport and taken to the river) where they join the Clavero, Lobo de Rio and/or Nutria boats. They will either be taken by bus to the port in Iquitos or by bus for 2 hrs to Nauta depending on where the boats are. For the Pacaya-Samiria National Reserve monitoring expeditions, the research vessel(s) depart Iquitos on the Nanay River onto the Amazon River and then to the Marañon River to the city of Nauta. From there the ship(s) will continue onto the Samiria River, checking in at the Park guard posts along the way. Total travel time from Iquitos to Pacaya-Samiria National Reserve is 2-2.5 days. The ships travel together and on arrival anchor off the edge of the forest.

Small boats are used to complete the river based surveys or to transport the surveyors to the start of the *terra firme* transects through the conservation area. The students are based on the ship for the whole of their stay, only leaving to complete the survey work. Return voyages from Pacaya-Samiria take about 2 days to travel down the Samiria River to the Marañon, Amazon and Nanay Rivers. During the course of the journey to and from the research site lectures will be given on the history of Amazonia, the wildlife and conservation efforts.

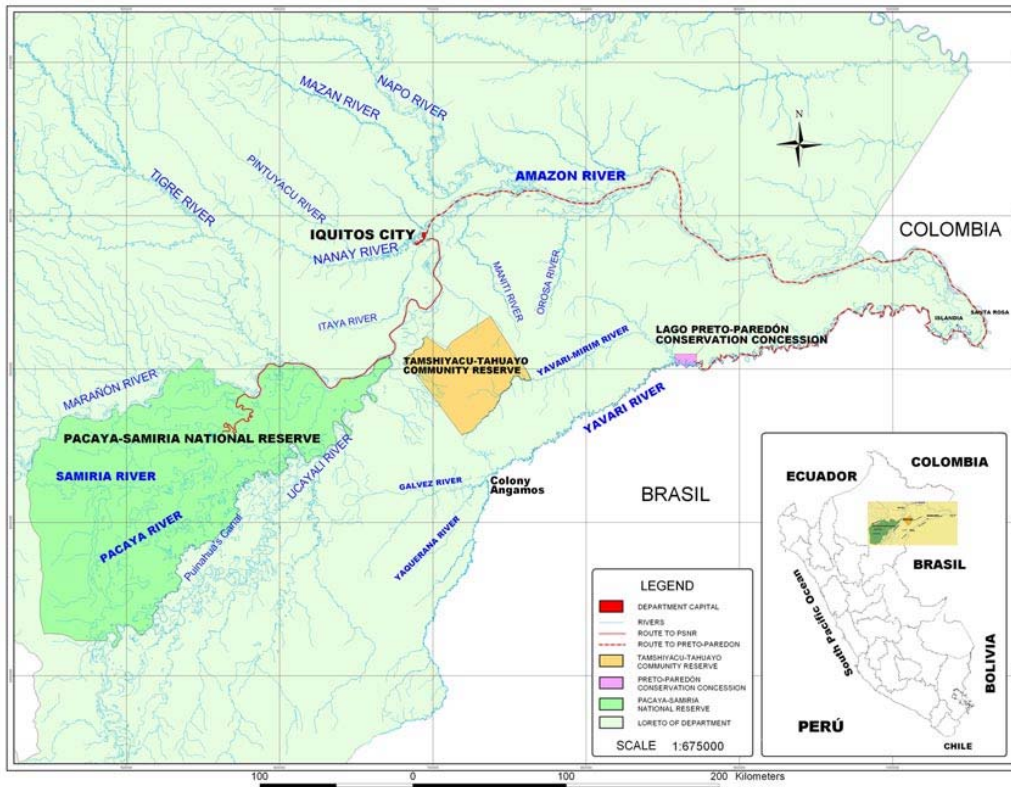


Figure 1 Location of Iquitos and the survey sites at Pacaya Samiria

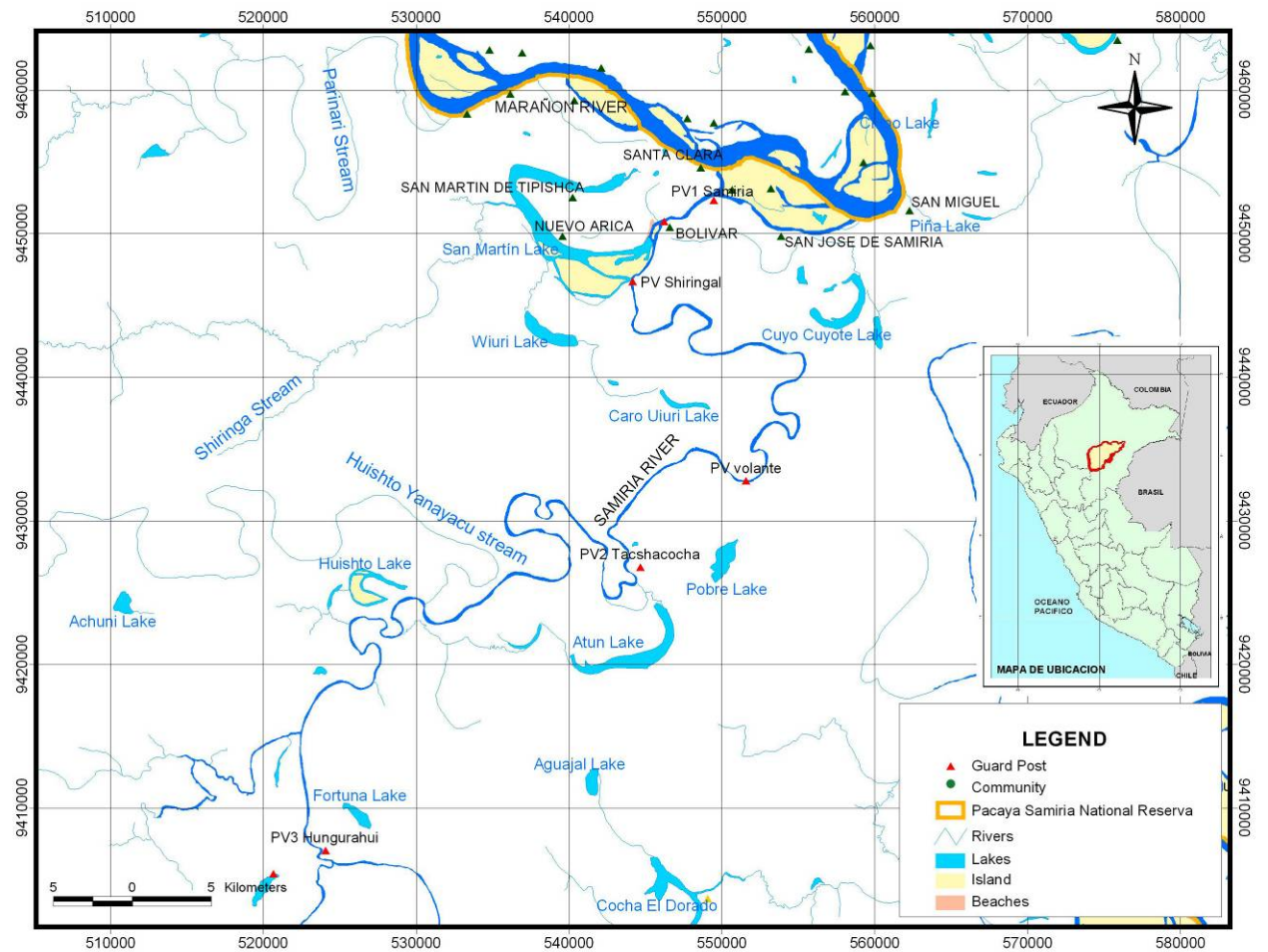


Figure 3 Map of the survey locations within the Pacaya-Samiria National Reserve

3. Risk Assessments

A thorough assessment of all the places visited, the boat and the activities are completed before the start of the season and reviewed throughout. Risk assessments are completed for each site as well as generic risk assessments for each activity. These [risk assessments](#) are published on the website and are available as a hard copy if requested.

4. Training before the expedition

Operation Wallacea staff work closely with teachers to ensure that pupils are ready and prepared for the expedition abroad. Various joint meetings take place with the Operation Wallacea schools team and the teachers regarding facilities on site and skills required. A full training day is arranged with each of the schools with the following aims:

Preparation for the expedition

Lectures are given on how to prepare for the expedition and the conditions likely to be encountered.

Survey methodologies

All the pupils are given a lecture on the aims of the surveys they will be participating in as well as the methodologies to be used. A written description of the survey methodology to be used is given to each pupil so they are aware of exactly what they will be doing in the field. The Operation Wallacea staff are always available to talk to any student, parent, or teacher, who has any questions about any aspects of the expeditions, and the preparation required.

5. Designated Leaders and Competencies

Role of the teachers

The teachers accompanying the students are responsible for ensuring the pupils' travel arrangements from the school until the expedition start time in Iquitos on the Sunday of the start date of the expedition. If the group arrives in Iquitos before the Sunday start date then they will book into the Doral Inn Hotel or the Hostel Pascana and will be picked up from there on the Sunday morning. Once the expedition starts the teachers will be travelling with the group and responsible for pastoral care issues. At the end of the expeditions the teachers and the group are delivered to Iquitos by 2000hrs on the Saturday and will stay at the Pascana or Doral hotel before departing for Lima the following day.

Expedition Co-ordinator

The Senior Scientist, Dr Rick Bodmer is responsible for the overall running of the boat based expeditions and for the safety of the volunteers and staff working on the project. He has various staff assisting in different aspects of the project. Dr Bodmer has 24 years research experience in the Amazon, has organised and/or led over 300 students from universities and schools for the last 13 years in the Amazon. He has owned and operated research ships in the Peruvian Amazon for the last 18 years. It is the responsibility of the Expedition Co-ordinator to ensure that the correct level of leadership is provided for each of the groups and to check that the designated leaders have the requisite qualifications and/or experience. The project has a very high overall level of staffing with up to 30 staff at any one time running the surveys or providing logistical support for the expeditions. The DICE/WCS office in Iquitos provides the admin back up to support the boat.

Senior Operation Wallacea Representative

Emily Cook from Operation Wallacea will be onsite during the entire expedition to ensure that the agreed operations procedures and risk assessments are being adhered to. She will also be responsible for ensuring the groups are met and given an initial briefing at the Hotel Pascana/Doral Inn, so that they know what to expect for the following day. Emily has been working with Operation Wallacea for almost 5 years, has led an expedition in Cuba, and has been responsible for coordinating school groups on Opwall expeditions in both terrestrial and marine settings for 2 years in Indonesia. She will act as the teachers

first point of contact for any questions relating to their expedition, or if they have any concerns.

6. Use of Guides

Every group leaving the boat must be accompanied by a group leader and a local guide. No formal guide qualifications exist in Peru, (particularly that are available to the local people in the remote communities in which we work) so the appointment of guides relies primarily on their levels of experience and their suitability gauged via personal references from senior village members. The Expedition Co-ordinator has the responsibility of employing locals as guides. A number of skills are required by all guides including:

- Knowledge of the local area
- An awareness of dangerous species including venomous snakes

In addition to the local guide though each group has a leader who is a graduate Peruvian biologist. Each of these group leaders have training in working with young people, how to respond to dangerous situations, basic first aid and how to lead a group. Their training follows a 3-stage induction period: shadowing a more experienced guide; then leading a group while supervised; and finally leading a group on their own.

7. Medical Procedures

This section summarises the medical procedures report which is a much more detailed description of the staffing, First Aid facilities and procedures to be followed.

Information and records

All school staff and pupils are required to complete an Operation Wallacea medical questionnaire prior to their departure. These forms are required to be completed and returned to the Operation Wallacea Medical Coordinator at least 3 months in advance of the expedition. At a meeting in April each year, all the medical staff that will be working on various expeditions for Operation Wallacea that year, review the medical forms received and identify any potential medical issues that could restrict sites or activities for individual pupils or staff, or aspects which require additional information before the start of the expedition. All medical information is held securely under the guidelines provided by the data protection act.

On site medical information about each pupil and teacher is provided to the Boat Medical officer in advance and a file is created for each person. There are additional forms for treatment provided and the individual files remain with the pupils and the teachers throughout their stay and are returned in a sealed envelope to the Operation Wallacea Medical Officer at the end of the expedition. All medical problems, illnesses, injuries and near misses are recorded at each of the sites. At the end of the season, these data are collated and a health and safety report is completed and published on the website. This report classifies incidents into 7 categories and allows comparison between the expeditions and other activities. The policy of publication of the accidents and illnesses recorded on the expedition is a unique aspect of the Operation Wallacea expeditions and helps ensure the procedures on site are followed fully.

Medical staffing and facilities

There will be a Peruvian qualified nurse on each group of research boats and based at the Pacaya Samiria research station. A full medical kit is on the boat which includes the equipment and medications needed to be able to deal with the minor conditions that may be encountered in the field. This reduces the need to rely on general medical care and enable us to continue working in the field. Research into medical facilities in country are completed prior to the start of the season by the in-country representative. Medical emergencies for students on the Samiria River are handled at the Ana Stahl Hospital in Iquitos, which is a 4 hour speed-boat trip from the research site.

8. Operating procedures

There are detailed operating procedures for all aspects of expedition management. The main measures used to minimise risk are included in the risk assessments which are

published on the web site but are summarised below if they are not included in other sections of this report:

Safety on the research boats

On board the boat the group are given a safety briefing before leaving, covering behaviour on the boat (moving up and down stairs), life jackets and safety boat cover in the event of having to abandon ship and fire control and marshalling measures. Note there are 2 research ships travelling in convoy, so if one had to be abandoned the other would have space to house the volunteers and staff temporarily.

Groups leaving the research boat

There is a whiteboard system operating, where all groups leaving the boat have to sign out, with details of the group leader, the group members, the intended location, departure time and estimated time of return. The group leader has to take a radio if they are on a boat or a runner if they are doing a land based transect, a First Aid kit and ensure all group have appropriate attire (eg hats, boots) and have enough water for the trip. In addition a local guide has to accompany the group. On the terrestrial projects navigation is fairly easy since there are marked transects and survey sites and maps available of the transect layout at each camp.

Small boat surveys

All volunteers and staff on small boats must wear a life jacket at all times and must ensure they have a hat, sunscreen and sufficient water for the planned trip.

Trekking

The guide takes the front of the trek line with the slowest group member immediately behind and the fittest group member at the end of the line followed by the group leader. There are no deepwater river crossings on any of the transects used.

Alcohol

No alcohol is allowed on the boat.

9. Emergency procedures

This section summarises the emergency procedures report which is a much more detailed description of the procedures used at each of the sites.

Training of staff

Carefully planned evacuation protocols are in place for the Lago Preto research site. All staff on the boat will have training on evacuation procedures, and protocols are rehearsed prior to the expeditions starting.

Emergency levels

Operation Wallacea has 3 levels of evacuation as follows: **Emergency** (requiring the fastest possible transfer, usually by air) **High Priority** (requiring the patient to be moved at the fastest speed possible by river to the hospital facilities at the Brazilian army base at Peloton or hospital at Iquitos) or **Medium Priority** (requiring the patient to be moved as quickly as possible back to the research ship for treatment).

In all Emergency or High Priority case where a patient is being transferred to medical facilities they are accompanied by the relevant Medical Officer or someone appointed by the medical officer as fit to accompany the patients. Note there are also university groups on site with their own Medical Officer so in the temporary absence of the Schools Medical Officer the University Medical Officer would provide cover.

10. Insurance

All participants for the expeditions are required to have adequate travel insurance with the following cover:

- At least £1million for medical repatriation
- At least £1 million medical fees
- The activities permitted by the insurance must cover diving up to 18m

Operation Wallacea has purchased an insurance policy that covers all of its participants to this level. This insures that the evacuation procedures and medical facilities that will be utilised on the expeditions can be agreed in advance. This saves a huge amount of time in an emergency, and means that there is no delay whilst, for example, the helicopter facilities arranged for emergency evacuations wait for authorisation from the insurance company before taking off.

Operation Wallacea have comprehensive combined liability insurance with up to £10,000,000 for public/product liability, and are members of ABTOT, which provides financial protection to participants in the event of insolvency.

11. Child Protection procedures

We endeavour to ensure that all school students participating in our activities are safe in accordance with the Protection of Children's act 1999. This is done a number of ways:

Supervision and accompanying adults.

Operation Wallacea offer a free teacher place with every 10 students thus giving an automatic ratio of at least 1 to 10 (in line with the DfES). For each activity provided by Operation Wallacea in the field the following ratios apply:

- 1 to 7 ratio for terrestrial survey work (plus at least one guide)
- 1 to 7 ratio for all river based surveys (plus at least one guide)

These ratios do not include other supervisory staff such as guides, or the schoolteachers. Overall there is at least a 1 to 3 ratio of adult staff to students on site providing a very high level of supervision. Teachers are asked to accompany students on as many activities as possible.

Minimum number of students

No school pupil is allowed to participate in any activity without at least one other pupil from the school or a teacher being present.

Criminal Records Bureau Checks

Most of the research and logistical staff working on the project are Peruvian and there is no direct equivalent system to the Criminal Records Bureau checks in the UK. The strategy used by Operation Wallacea therefore is to ensure that at all overnight locations (the research boat and the hotels in Lima and Iquitos) there will always be an accompanying teacher.

Codes of Practice

All WCS/DICE/Operation Wallacea staff and other additional leaders, biologists and guides in the field are required to sign a code of conduct before they are employed. The Code of Conduct commits each staff member to not entering into relationships with school volunteers as well as conformity to restrictions on alcohol use and a complete ban on drug abuse. WCS/DICE/Operation Wallacea will dismiss staff that do not follow the code of conduct.

Complaints procedure

Any complaint by a school pupil about inappropriate behaviour from any staff member or other student will be treated as a formal complaint and documented. The accompanying teacher will be informed immediately and together with the senior Operation Wallacea staff member on site will investigate the complaint. If the complaint is upheld then any individuals involved will be dismissed from the expedition and a police file created if the incident was serious enough. To date no such incidents have been recorded on any of the Operation Wallacea expeditions.

12. Communications

The research ship has a UHF radio that can communicate with the co-ordinating office in Iquitos and there are standard radio check times twice a day. The research ship also has a satellite phone that can be used in an emergency and is used for transmitting and receiving limited email messages daily. During periods of navigation the ship has to report its position daily to the Peruvian coastguard.

Groups leaving the research boat on either river or terrestrial surveys have to sign out and confirm their return time. There are limited VHF radios available although problems have been encountered in getting the signals to reach some of the transects. Preference is therefore given to groups working on small boats and all of these carry radios. For groups working on transects, there is a local runner with each of them who can reach the ship within 30 minutes in case of an emergency.

There is a 24 hour emergency officer based in the UK office (tel 07818 061029) in the event of an emergency message needing to be passed on to the field. The direct number and email address for the Iquitos office which will be co-ordinating the expeditions are published on the web site shortly before the start of the expeditions.

13. Transport

All transport arrangements conducted by Operation Wallacea in the field are subject to stringent protocols. Transport used to move pupils from various sites have been assessed by the Peru team and only reputable companies with a excellent safety record are used.

Buses in Iquitos

A pre-departure vehicle check is carried out by the Peru staff, which includes checking fluid levels and tyres on each of the buses before they are allowed to depart with volunteers. A senior member of Operation Wallacea staff is present on all transportations to ensure that drivers conform to safe procedures such as no speeding.

Research ships

There are sufficient life jackets and life boat spaces in the event of the ships having to be abandoned. In addition there are throw rings for man overboard situations, as well guard-rails along all sides of the ship to prevent anyone accidentally falling overboard.

Small boats used from research ship

All volunteers and staff have to wear life jackets when using these boats

14. Accommodation and Camp Security

Hotel Pascana and Doral Inn in Iquitos

Both hotels have a security guard and the main doors are locked at night.

Research ship

The Pacaya Samira Site is positioned some 7 hours boat journey upstream from the nearest large community (Nauta), and there are at least 2 park security posts between the survey sites and this community. In 17 years of working at the site there have been no instances of any criminal activity towards the research boat, it's guests or staff.

15. Cultural aspects of the expedition and local issues.

The model of conservation used by WCS/DICE/Operation Wallacea is strongly rooted in principles of suitable economic growth in areas whose biodiversity is under threat. This means that huge efforts are made to ensure that conservation is tied with development of sustainable harvesting strategies.

WCS/DICE has been working in Peru for over 15 years now and has very strong links with each of the communities. They have been involved in bringing financial assistance to the

communities adjacent to the Lago Preto concession and there is strong local support for the projects.

All pupils are encouraged to visit one of the local communities and several school groups have helped before at other Operation Wallacea sites by fundraising for local schools they have visited or getting involved in sporting events such as football matches.