



The University of Edinburgh

Butterfly Lifecycle Expedition



Tambopata, Peru, 1998

Supported by:

Davis Expedition Fund, James Rennie Bequest, Alex Stewart Assayers Ltd, Development and Alumni Services - Small Project Grant, Ripley St Thomas C.E School, The Red Fernal, Donaldson's School for the Deaf, Wesley College and Edinburgh's Butterfly and Insect World.

BUTTERFLY LIFECYCLE EXPEDITION, TAMBOPATA, PERU 1998

Preliminary Report

Introduction:

On the 1st of July 1998 the Tambopata butterfly expedition arrived in Lima as planned.

In Lima, as well as contacting our Peruvian counterparts we also arranged the collection of our Permits. We then travelled to Puerto Maldonado, where we met our two main contacts Chris Kirkby and Tina Smith. They advised and assisted us in collecting the equipment necessary for our project and warned us of the hazards of working in the rainforest. While in Puerto Maldonado we tried to arrange a meeting with the local Butterfly Farm, but this proved difficult due to the busy work schedule of the managers. We were, however, able to contact them during a later supply trip.

On arrival at Bahaja Lodge, the group was allocated to our own bungalow which contained two sleeping areas and a third room that became our office. The group took some time to adjust to the humidity and during this time we planned and designed the project. Once we had all acclimatised, we began a trial study. This enabled us to alter our proposed methods to suit the environment. During this time we became familiar with the trail routes and gained a searching eye for caterpillars.

In addition to our main contacts, we found that the local Peruvians working at the lodge, had extensive knowledge of the flora and fauna in that area and this proved very useful. We enlisted the help of a local Peruvian student, from Puerto Maldonado University, when identifying our plant species.

Achievements of the project:

Throughout the course of this project the group gained valuable knowledge and experience. The project observed and recorded numerous species of caterpillar and butterfly. This was achieved through collection of specimens which were then drawn and photographed. The caterpillars were documented at each stage of their development and the time between each stage was noted.

We were also able to identify a number of different butterfly species found around the lodge especially on the river bank/beach.

Transects were carried out after we had spoken to the butterfly farm about the deaths of our caterpillars during a friajes (a period of cold weather that occurs during the dry season). They suggested that we monitor the abundance of small, medium and large butterflies during, before, and after the friajes in order to study its effects.

Personal achievements:

Our planning and organisational skills were improved by arranging and conducting this project.

The whole group gained invaluable experience in the collection and analysis of the field data. We also developed useful communication skills within the group and expanded our knowledge of colloquial Spanish. We gained experience from living within a different culture and working with local people on a daily basis.

As a member of our group is deaf, we learnt the benefits and difficulties that this disability has when working and travelling in a foreign environment.

Problems encountered:

Our main problem was the rearing of the collected caterpillars. We found that in order to keep the caterpillars alive an immense amount of time and effort were needed. Cleaning was a major priority, since if not performed daily caterpillars were susceptible to parasitic infections and moulds. As host plants were usually young plants with little foliage, and the caterpillars ate large amounts of foliage each day, it was often the case that food supplies became scarce. Some times caterpillars were found on the wrong host plant and as a result had to be released.

A small number of caterpillars died from parasitic infections that they were suffering before they were collected and so did not last through many instars. Frijoles were also a major cause of death, killing large numbers of caterpillars at a time.

Time budgeting was a major limitation to our project. We found that in order to collect enough information to justify the project a longer sample time was necessary.

Although small mammal traps were set for the duration of the project only a few small mice were caught. However a number of amphibians were caught.

Due to the sheer size of our primary aim the mineral study could not be conducted fully. Although trays were placed on the beach containing different soil samples the butterflies did not investigate them.

Budget

Income

Name of organisation	Amount £
Davis Fund	5000
James Rennie Bequest	1000
Alex Stewart Assayers Ltd	1000
Development and Alumni Services	
Small Project Grant	900
Ripley St. Thomas C.E School	200
The Red Final	150
Raffle	148
Wesley College	100
Donaldson's School for the Deaf	100
Laura's mum	50
Personal Contributions	4200
Total	12848

outgoings

Items	Amount £
Publicity and communication	56
Equipment Peruvian	38.13
Camera accessories	83.99
Camera and two lenses	450
films	55
Medical	
Injections	406
First aid	135
Travel	
International flights	4200
Peruvian transport	646.25
Insurance	1214.23
Permits	185
Accommodation	
Lima	135
Lodge	4511.25
Puerto Maldonado	67.5
Tanya's Medical costs	43.38
Photo development	160
Project write up	400
total	12886.73
Remaining money:	
Contingency money	61.27