

SUMMARY

This summer an expedition from Imperial College, London spent six weeks climbing and collecting specimens within the Pamir mountains, which lie at the end of the highest range in the world stretching from the Himalayas and continuing through the Karakoram.

During this time five British first ascents of mountains ranging from 5400m to 6350m were made and a unique collection of mosses, lichens and diatoms obtained for The Natural History Museum, Academy of Sciences in Dushanbe and other European scientists.

TRAVEL

THE JOURNEY

The Pamir lie within the Republic of Tadjikistan whose capital is Dushanbe, a city of approximately 600,000 people. There are two strains to society here; the local, dark skinned Tadjiks and the fair skinned Russians who used to control the country when it was part of the Soviet Union.

It took two flights with Aeroflot and a stark introduction to the inward and outward face of the old Soviet system to reach Dushanbe. The international flight was from Heathrow to Moscow and both the plane and airport would not have been out of place in any European city, but how many crew let passengers crouch in the back of the cockpit whilst landing?

However the internal flights are another story, Aeroflot is the sole operator of all internal flights and ours from Moscow to Dushanbe left from an airport which reminded one of Heathrow just after Second World War in an old airplane whose lockers flew open during landing and takeoff. Dushanbe's airport resembled a ranch with roaming cattle tended by locals camped on the grass between the runways. The inflight meal was spartan, centering on a suspicious piece of rubber chicken and sweet tea served from large, white enamel teapots. On the return trip we were prepared for this and the stewards kindly offered us a second pot of tea to wash down the sweetmeats, cheese, bread, fruit and honey we were happily tucking into after our Aeroflot first course!

We hired a group of Soviet mountaineers, from Kazhan, to organise our transportation from Dushanbe to the mountains. We had found them through a chance meeting with the group's leader in a climbing shop in Capel Curig, Wales. Although their contract specified only two people, they had invited nine of their friends to enter into the adventure. The journey, which lasted three days, was split into two sections. The first involved a 200km drive from Dushanbe to Vanch, the last major town before the Pamirs, on fairly good dirt and tarmac roads. The second section was a 90km stretch on inconsistent dirt tracks interspersed with taxing stretches off road. To cope with this we had a Kamaz, a huge army transporter truck which had wheels up to one's chest and a suspension stiffer than the Soviet immigration regulations.

Whilst on the journey we had to travel along the border with Afghanistan. All along this section there were numerous border checkpoints manned by wary Tadjik army officials armed with sub-machine guns. The Kazhans were very good at negotiating us through some very tense and sensitive regions and it was uncanny how everytime we were asked for the only ones that could be found belonged to the Kazhans. For those border guards that could not be fooled by our pretence at being from the Eastern Block the official noteheaded paper from the various institutions proved very effective. The Soviets love official looking documents regardless of their content, one letter from the RGS, inviting us to a party on our return to England, was considered very impressive.

From Vanch the roads deteriorated to bad dirt tracks and the river crossings and boulder sections increased in frequency. However we were cheered on by the enthusiastic children of the little farming villages as we roared past waving with one hand and clinging to the metal framework of the Kamaz with the other.

BUREAUCRACY

Although the Soviet Union is now finished, its systems still remain and in order to negotiate them you need; luck, someone who speaks Russian, money (US dollars) and a lot of patience. Originally we thought that we would be able to get by without being able to speak the language, in hindsight we may never have made it to the mountains without Pollyanna interpreting for us.

It should be remembered that the systems are still designed for tourists who travel on package tours with companies which use large Soviet firms such as Intourist to handle the bureaucratic matters. They are not geared towards the independent traveller, in fact the concept is alien to them, and they expect everyone to know the rules and regulations.

To enter any Republic one needs a Visa. Obtaining one can prove the hardest part of organising the expedition. First of all one needs an invitation from a recognisable organisation or person within the area that you wish to visit. Who ever sends you the invitation is then held responsible for you actions whilst you are within the country. Signed papers denying, or passing on, such responsibility are worthless in the eyes of the authorities.

We obtained an invitation through a company called Alpnivrust who were going to organise our trip, however they were too expensive and we eventually used the Kazhans.

The people who invite you must also contact the Ministry of Foreign Affairs for the Republic that you wish to visit who will decide whether they will allow you to visit. Once they give approval for you to enter the country you can then apply for a Visa from the CIS embassy in London. If plenty of time is left before the trip this will cost £5 per Visa.

Check the Visa carefully to make sure that the dates are correct and that the towns you wish to visit are stated on it. Our Visas only mentioned Dushanbe and theoretically this meant we should have stayed within the capital city's boundaries. Three of our members wanted to stay on for an extra two weeks but this was not stated on the form and we were unable to rectify this before leaving England because we had had communication problems with Dushanbe.

We obtained our Visas through Aeroflot for £20 per person the week before we were due to depart. We subsequently found out that Aeroflot had put pressure on the Tadhik Foreign Office and used the Alpnivrust invitation to get our Visas, which meant Alpnivrust were still responsible for us. When we arrived in Dushanbe we had to negotiate with Alpnivrust who claimed that we owed them \$250 for their invitation and other work that they had done for us. We managed to settle on £50.

On arrival in Dushanbe one must let the authorities know that you have arrived by registering at the Ministry for Internal Affairs. Failure to do so will result in expulsion, we did not do this, but were lucky and only found out about this from the three that stayed behind to extend their Visas. We also believe that when one moves to another town one must re-register there.

We now realise that we were extremely lucky in being able to get to Tadhikistan and move around within the country. Although we unknowingly broke several rules we were helped by the fact that the system is changing, to what we do not know, but it seems that nobody else does either. Our air of confidence and the smooth talking of the Kazhans meant that we were given the benefit of the doubt.

THE ABDUKAGOR VALLEY & SURROUNDING AREA

GEOGRAPHY

This area is one of the last major uncharted regions of the earth, and is as yet relatively unspoiled by man. It contains regions of temperate rain forest, further down the Vanch valley, to areas of semi-desert, arid and bare. There are lush green valleys and one of the largest non polar glaciers in the world, the Fedchenko, which stretches for 72 miles in a roughly north-south direction, amid terrific mountains.

We based ourselves at the top of the Vanch valley, 2700m, in a set of deserted mine buildings, see map ****, about 100 km NE of the Afghan border.

The mining activity in the Abdukagor valley commenced in 1949 and finished three years ago, when the road became impassable due to the advancement of the Medevichi glacier. The mines produced very high quality clear quartz in the form of rock crystals, for use in Satellite optics. Further down the Vanch Valley were Nickel mines, also disused since 1989. These were located near Peomazar.

The mines maybe reopened, should the glacier cease to move, enabling the road up the Abdukagor to be used. Presently a local man, by the name of Suliman, is responsible for keeping the road from the nearest village to the main mining camp open during the Summer. This is probably to allow access for trekkers and the Tadhik farmers with their goats and sheep. Several sections of the road were repaired by bulldozers during our stay.

Mines, and the buildings and machinery to service them, are located all the way up the Abdukagor valley to Lake Sokolov. Snow and rain have made all the buildings, apart from the main complex where we were, uninhabitable. The two areas which we explored are marked on map ****. There are two small buildings in the valley below area one which we slept on top of, and we climbed up a haphazard series of ladders to reach the various mine entrances. Area two involved a fantastic 300m slab climb to a top set of mine buildings with an easy walk down.

The few tracks in this area marked on the maps were old mining roads and have consequently suffered badly from neglect for a number of years. As a result the few bridges higher up the valleys are in bad condition and river crossing is very time consuming, the rivers are in general too fast to wade except early in the morning.

Three main valleys can be accessed from this Base Camp, one faces south, the second south east and the third north east. All lead up to the Fedchenko glacier, but have very different habitats. We concentrated on the second valley which leads up to the Fedchenko via the Abdukagor glacier.

VALLEY 1

To gain this valley from the mine buildings involved crossing the river very early in the morning or by means of the suspension bridge at the head of the Vanch valley. The path, which was in poor condition, wound its way up the right hand slopes of the valley. However we found it easier to follow the river within a deep ravine.

This valley was the lushest of the three whilst the upper reaches of the valley afforded an interesting new angle on the surrounding mountains.

VALLEY 3

The 'Medvichy' glacier flows down the third valley, surging right across the floor of the Abdugahor valley. This valley is very barren all the way to the a pass which takes one on to the Fedchenko. The track which leads up the Abdugahor valley used to cross the Medevichi a quarter of a mile up this valley.

The glacier is strewn with loose boulders and, as the road has long since disappeared, makes all the routes across and up it's length very hard work. There is a path along the high ridges of lateral moraine that flank the glacier which make the going a little easier.

VALLEY 2

The main area that we explored took us up the Abdugahor valley to the glacier and then on to the Col. From here we dropped down onto the Fedchenko. This approach provided us with good acclimatisation whilst we were stocking our camps and doing our science work and offers some spectacular walking.

Apart from our Base Camp we had four other camps :

Camp 1, 3100m, was at the snout of the Abdugahor and used in the first weeks of the expedition as an equipment dump. To reach it took between three to four hours, depending upon the weight being carried, and, apart from crossing the Medevichi glacier, offered no difficult terrain.

Camp 2, 3200m, an idyllic campsite, by a river, which was nestled between the foot of the mountains on the north side of the glacier and a 10m high lateral moraine ridge. As we later found out, to our cost, camp higher than the river floor since the river rises in the evening as the snow melts.

It was reached from camp 1 by a gully on the north side of the glacier. This gully terminated at a fast flowing river which came down an impassable gorge and then under disappeared under the glacier. The next thirty minutes walking was the most precarious on the journey up to the Col, involving a steep climb up loose rubble onto the glacier and then up to the top of the lateral moraine. However this was still considered the easiest way. A track on the other side of the valley which went all the way up to lake Sokolov has been rendered useless after an enormous landslide.

We made this our major base camp for the second half of the expedition, resting and eating here between mountaineering trips to the Col and the Fedchenko.

Camp 3, 4800m, the last campsite before we had to rope up for the wet section of the Abdugahor and also the last place where water could be obtained, from a sunken lake.

It took about four hours from camp 2 to follow the river, or the top of the moraine, up the glacier and then bear north, keeping high to the shoulder of the mountainside to reach camp 3.

The slopes above the river were initially covered in snow making ascent and descent quick. At the end of the expedition the snow had melted leaving the slopes strewn with boulders.

This camp proved useful in the first few weeks for acclimatisation or if we were too late in the day for the glacier crossing. Later it was abandoned because people preferred to climb to the Col from camp 2 in one night, although an early start, midnight, was required so that the snow on the glacier would not be too soft.

Camp 4, 5100m, referred to as the Col, is the saddle between the Abdukagor glacier and the mighty Fedchenko glacier.

Normally the walk from camp 3 would take three hours. It seems probable that the glacier advances greatly in winter and retreats in summer. During the six weeks between our arrival and departure the Abdukagor glacier became almost impassable; cracking open into huge crevasses, some cutting across the entire width of the glacier. (red area on map * *)

Although The Col can be reached within 2 - 3 days from our base camp, it is not advisable to try until properly acclimatised.

CLIMATE

We arrived in the area in the first week of July and the snow was just melting away. The snowmelt accelerated and by August (around the first week) most had disappeared from the lower slopes and peaks. The locals told us the first snow falls in late September or early October.

The weather was cyclic, typically four days of good weather followed by four days of rain and snowstorms. Thunderstorms were rare, but were frequently seen in the distance.

Daytime temperatures were about +30°C in the shade, falling rapidly to -20°C in the night at 5100m. Lower down, the night time temperatures were higher : about +8°C at Base Camp. The climate at the Col was likened to a 'cold fryingpan', scorching and burning due to reflected sunlight, yet cold because of the wind and snow.

FLORA

The main flowering and snowmelt above 3500m did not start before the first week in August, when previously bare snowpatches exploded into verdant groundcover.

The entire area is very dynamic and mobile, making it difficult for plants to establish themselves. Many of the slopes are inherently unstable with rockfalls and avalanches occurring daily, especially around the Abdukagor glacier, but also behind Base Camp and on the farside of the Medviergi glacier.

Further up the Abdukagor valley (location A5, B4 & B6 : Map ****) the track up the left hand side of the valley snakes through meadows. These were snow covered until late June and contained only a yellow hogweed type plant, which is very damaging to humans, causing severe burns upon contact when either you or it are wet. Sheep however appear unaffected and eat it! Towards the beginning of August this plant was dying, giving way to a host of other plants including 1.5 - 2 metre tall dock type plants, Lupin like plants (especially location B3) and on slopes further up rhubarb (B2, B3, A3, A4, A8), thyme, lavender, ferns, sedges, grasses, 'golden root', camomile, chives, and spring onion. Also on wet areas; mosses and algae (filamentous) eidelweiss (A7) some bushes and dwarf trees

occured, mainly Juniper, willow, some conifers and some birch. These were mainly 0.5m or less in height, although evidence of previous larger trees existed in the form of dead trunks and driftwood.

The plant called 'golden root' was held to have medicinal properties by the locals and Russians. It was said to cure stomach ailments, but by far the most common use was to dry and pickle it in Vodka for three weeks, giving it a reddish, golden colour and a strong, slightly bitter taste. It costs about 10 roubles/gram in Moscow ??? and is illegal ???) Some was collected for analysis.

FAUNA

Apart from the local livestock, sheep and cattle, which invaded our base camp after three weeks many other animals were seen.

A multitude of butterflies were seen, mostly Apollo and Swallowtail (Papilionidae). These were especially abundant at camp 2, caterpillars being black with red spots. Caterpillars were very plentiful during the last two weeks in July.

Birds such as Jackdaws were extremely common and scavanged everything, including food caches, with the marmots. Further down the Vanch valley minor birds were seen, as well as in Dushnabe. A few birds of prey and one vulture were also observed during the inward journey.

At least two species of Marmot, probably including the red marmot (*Marmota Caudina*), abounded on the slopes which were not snow covered.

Footprints and tracks of a large cat were seen both on the hills beyond Base Camp (A2, A3, & A4) and on the Fedchenko, which the Russians called Panther tracks. Photographs were taken and will be investigated, but no cats were sighted.

According to a locally resident Estonian Bilogist wolves and bear also exist in this region, but move further up into the hills during the summer time. We saw no evidence of this, nor of the yeti that are said to live in the Dsmurog valley, and are sceptical as to the reliability of this report.

MOUNTAINEERING

TRAINING

To improve overall fitness a simple training circuit was drawn up at Christmas. Those that persevered with the programme, trying to exercise at least three times a week, found that they benefited greatly during the expedition.

In the past year we brushed up on the particular techniques that we would need by doing long climbs in Snowdonia, Lake District, Scotland and the Alps.

On arrival in the Pamir we found practising safe methods of crevasse rescue and glacier crossing in controlled conditions very worthwhile and valuable lessons were learnt. Oliver and Phil discovered how quiet and eerie it is to hang inside of a huge crevasse and wait to be rescued,

"It was like hanging in the jaws of a huge monster which you believed could snap shut at any moment. There was a constant fear of dropping something into the bottomless pit below and so you would double and triple check everything before taking it off or putting it on to your harness."

SETTING TARGETS

Before departing, the expedition had some idea about what the mountains would be like. Snow, rock and weather conditions were largely unknown. We had obtained some photos, and graded maps from various Russian climbers.

We were viewing the trip as mainly reconnaissance, aiming to bring back as much information about the area as possible for future expeditions.

On meeting the Kazhans we managed to trade for a guide book which listed all of the climbs on mountains within the Soviet Union! This showed that the Pamir had been extensively explored and climbed by Soviet mountaineers, although there were still some unclimbed peaks, and there were many routes of varying difficulty which we would be able to attempt.

SNOW CONDITIONS

The condition of the snow was found to vary depending upon altitude. On the lower slopes it was generally well consolidated and we always made fast progress at night and in the early hours of morning. The crust, generally hard enough to walk on by 11pm, had weakened by midday so that it would no longer take our weight and so we would have to wade.

At higher altitudes, above 5600m, the slopes became more unstable. Consolidation was poor, with thin crusts that one would often puncture through. Many of the peaks had avalanche prone slopes at 45 - 50°. Windslab and deep powder snow with poor adhesion to the ice sheets beneath were encountered, making routes which originally looked simple much more challenging. Much time was spent trying to choose the best line but this was difficult to do accurately from the glacier.

THE CLIMBS

From the Col there were a number of peaks of varying difficulty which could be climbed in one day. The easiest only require a walking axe, crampons and a short length of rope whilst the hardest are a match for any serious route in the Alps.

Everybody managed to ascend at least one mountain and four members of the expedition, one of which had had no previous climbing experience, broke through the 6000m barrier. The summits afforded beautiful views of the surrounding area, including some of the highest peaks in the area such as Kommunismus, Lenin and Revolution.

Malish proved a good warm up peak and introduction to mountaineering for the novices in the group. The summit was reached within two and half hours from the camp 3 at the Col and we were able to witness a breath taking dawn over the Fedchenko.

Kovshovich, the most technically demanding and longest climb, took twenty two hours and was the darling of the experienced climbers. It tested both nerve and skill with pitches on loose rock, steep ice, and mixed sections. The summit was finally reached by an exhausting climb up softened snow and a scramble up a narrow rock ridge along which one could peer through gaps in the cornice to the glacier 1000m below.

Tannymas is a relatively straight forward mountain which does not need to be pitched, even so it required two attempts before being conquered. The first bid was abandoned on the ridge half an hour from the summit because of a storm.

St. Exupery developed complications near the top with three snow/ice pitches, the last involved breaking through a cornice. The snow conditions on the descent deteriorated rapidly in the afternoon and the situation became tense on steep avalanche prone slopes.

Paris Commune was the zenith of the mountaineering. Involving 1200m of ascent in one day it was the most physically demanding climb. Strong winds buffeted the route but died away once the summit was reached. These winds never seemed to die down and whilst camping on the summit we would get a chill blast if we ever went too close to the edge.

PROSPECTS

We found that the beauty of this area is that there are plenty of climbs to suit all abilities, from simple trekking peaks to full scale Himalayan climbing. The area is popular with Soviet trekkers and climbers, another three parties from various Republics arrived towards the end of our stay, otherwise we had the area to ourselves. Even so it makes Nepal seem as crowded as the M25.

The list of opportunities for British first ascents are endless and the multitude of mountains on the Fedchenko mean that there are plenty of new routes waiting to be done, some on virgin peaks. Those interested in planning an expedition should use the contact names, at the back of this document, who will be able to give advice based upon your interests and abilities.

SCIENCE

INTRODUCTION

'Collections of living, preserved, dried and fossil materials, in museums botanical gardens and zoos are a resource of fundamental and persuasive importance in taxonomic research. Such collections have a variety of roles; they serve as repositories of information to which taxonomists, evolutionary biologists and others, return time and time again for further study. They are inventories of bio-diversity, records of both short and long term evolutionary change, sources of distributional data essential to biogeography and reference sources for verifying identifications.'

NERC report May 1992
Evolution, biodiversity - the new taxonomy

AIMS

The aim of the scientific work was to :

1. Collect specimens of Lichens, mosses, diatoms and fernspores for the Natural History Museum, London. And also to collect a set of lichens for Dr. Kudratov, Academy of Sciences, Dushanbe.

These are to be incorporated into the NHM herbarium which prior to our expedition did not contain any specimens from Tadzhikistan; and especially not from these altitudes (2580m - 5850m) in the Western Pamir. The importance of such a collection is gradually becoming more recognised as is illustrated by the quote above.

2. The collection of specimens was made in as wide a diversity of habitats and altitudes as possible. The aim was to encompass as large a variety of sites as possible in order to find a wide range of species and ecotypes.

In addition to this major project four smaller studies were undertaken by individuals, for their own interest or because they had been commissioned to do so :

3. Collection of diseased plant material and soil samples for Glaxo, Natural Products Discovery Dept., ecology group.

This project was to be carried out during the return journey, as the hot climate would otherwise cause the samples to ruin before arrival in the UK. Due to a misadventure on the return journey when our truck sank in a deep Tadzik river, causing serious delays, we were unable to complete this project collecting 16 samples out of 30.

4. A small entomological project, collecting Lygeids and leafhoppers (with hostplant material) for Mr John Hollier and Professor Claridge respectively.

5. Studying plant succession on glacier forelands for Dr John Matthews, Cardiff University.

6. Collection of 10g of samples of lichens for Dr Huenick, Halle, Germany.

METHODS

A total of 54 man days were spent collecting and packaging specimens for the main project. Minor projects were completed in individuals own time, with the exception of Glaxo which was done on the return journey.

DEFINITIONS

Location :A distinctive area of the valley in which a number of sites would be found. Usually would involve one day's worth of collecting.

Site: A particular habitat within a location.

An example is location A5, on map 2, which looked at the north side of the lower section of the Abdukagor valley and contained 17 sites which ranged from clumps of trees to boulders, to streams. Different aspects and altitude could also distinguish a site.

COLLECTING

Teams of two were used on collecting trips which lasted from one to three days, depending upon the situation of the locations.

One person would be responsible for choosing and packaging the samples. Most lichens were chipped from the rocks and wrapped in tissue paper, to prevent scraping on other samples, before being placed in a plastic bag with the other specimens from that site. Mosses were squeezed dry.

The second collector recorded the site details in a notebook. This was important as it would enable the scientists to make use of the specimens.

Sample bags were referenced to the note details by a code consisting of :
Location | site | initials of collectors.

All specimens from one site were collected into bags and labelled with one code. At camp, specimens were dried using nylon mesh to prevent them flying away. Finally they were rewrapped in Kimwipe and packaged into envelopes, labelling with the relevant site number.

Diatom samples were collected by scraping the mud surface off stream beds and pools into collecting bottles, until they were half filled. The water in damp mosses was also collected by squeezing the fluid into the bottles via a collecting funnel.

The site number was written on labels and placed inside the bottles. They were subsequently topped up with a 40% concentration of ethanol back at camp to preserve them.

Dr Huenick's lichen samples were collected as above.

Glaxo samples were collected from plant material, such as diseased leaves, fruiting bodies, roots, seeds, rotting wood, small pieces of bark or twigs if bearing fruiting bodies, decaying leaf litter, evergreen leaf material and soils

such as that found around trees and roots of plants, farmland (not monoculture fields) and high altitude soils. These were placed into sample tubes and site details logged. Insects were collected primarily by shaking off bushes and shrubs onto a white sheet or tray. Traps were set for Lygeids, consisting of a plate of water with a little detergent. The specimens were pickled in ethanol.

OBSERVATIONS

Lichens were found to grow on most rocks which were stable enough to allow growth, except at location B3 where the rocks were very red and heavy, possibly indicative of high iron content (A sample was collected and will be investigate by Prof. Richard, Cardiff University). Even on old scree slopes where other vegetation was well established, lichens did not grow on these rocks. Lichen were predominantly found on rock, but also on dead tree trunks, bases of telegraph poles and the bases of small trees and bushes. Lichens were found at all altitudes, even occurring on the rock summits of Malish (location A8, 5400m) and Kovobvich (loc. A10 5850m). Some lichen and a few mosses were also found on the saddle between the Abdukagor and Fedchenko glaciers (5100m, location B8), on some North facing rock slabs.

Mosses were found in more sheltered areas, which were often damp, such as river and stream beds, under rocks and boulders and in cracks on rock faces. Ferns were very sparse, growing in darker places, well hidden beneath large boulders or in deep cracks. They were small, 0.25m or less, and only really commenced to grow late in the season, about the last week in July.

Diatom samples were collected from melt water pools, streams, snow and damp areas. Approximately 80 diatom samples were taken.

RESULTS

The results of the main collections are will be released at a later date. Overall, specimens were collected from 114 sites in 18 locations, ranging in altitude from 2580m to 5850m. The locations are marked on map 2.

The entomological project yielded several specimens which are currently being identified :

1. Two horseflies collected from Camp 2, 3500m, map 2. These will be incorporated into the National Museum of Wales' collections and are being identified by Mr. John Deeming at the museum.
2. Sphecid wasp, also from Camp 2.
3. Lygeids found at Base camp, 2700m. These are being identified by Mr John Hollier, Imperial College at Silwood Park.
4. Leafhoppers found at Basecamp, together with host plant material. Being identified by Prof. Claridge, Cardiff University.
5. A noctuid moth found on the Fedchenko glacier, 5100m. It had probably been blown there by winds.
6. A tenebrionid beetle found in our flour store in Base Camp is being identified by Mr Mike Bansall, Imperial college.

Several 10g samples of Lichens were collected for Dr. Huenick in Germany. These were mainly collected from Camp 2 but also from further up towards the saddle.

FINANCE

BUDGET

A balance sheet showing income and expenditure to date is given in the table below. This is not the final statement of accounts but an estimate based upon transactions to date.

INCOME

Imperial College Exploration Board	£2,500
University of London	£1,500
Prinze	£540
Mount Everest Foundation	£450
Natural History Museum	£370
Royal Geographical Society	£350
British Mountaineering Council	£250
Society for Cultural Relations with the USSR	£150
Glaxo Research	£150
Donation	£50
Group Fund Raising	£655
<u>Individual Contributions</u>	<u>£4,905</u>
TOTAL	£12,650

EXPENDITURE

Administration	£450
Information and Documentation	£300
International Transport	£5,800
Local transport, supplies & services	£1,700
Travel expenses	£1,200
Rations - food	£170
Equipment & supplies	£1000
Insurance	£1670
<u>Contingency</u>	<u>£360</u>
TOTAL	£12,650

DEFINITION OF TERMS

Fundraising - the selling of Expedition T-shirts proved extremely successful and a burger stall was run at an Imperial College Union event.

Administration - Production of proposals, reports, photocopying, postage, telexes, telephone calls etc. *Information & Documentation* - Visas, guidebooks, medical books, maps etc.

International transport - Airline tickets, extra baggage allowance, freighting costs.

Local supplies and services - money paid to Kazhans for their services.

Travel expenses - Accommodation, local food bought, excess baggage on return journey.

Equipment & supplies - capital expenditure on tents, ropes medical equipment etc.

OBSERVATIONS

The overall estimate of the budget was approximately correct, however there were large fluctuations in the actual cost of goods compared to our original predictions eg. final food expenditure was £960 less than originally anticipated.

Major areas of expenditure were the transport costs to Tadhikistan, transport costs within the country and the purchasing of group equipment. We were very successful in raising money from trusts, especially from the educational establishment.

We found that although the initial estimates were inaccurate extra expenditures incurred were matched by the savings that were made. On reflection it is best to be very generous with the initial estimate, having an excess is psychologically much better than having to find more.

Factors which can distort the initial budget are :

Obtaining donations of equipment, food or money - Imperial College Exploration Board lent us the base camp tents, cooking equipment and other useful items from their equipment store.

Being offered discounts - we were very fortunate in obtaining discounts on all the equipment we needed, these ranged from 20-50%.

Distinguishing between group and personal income - raising money takes a lot of time and effort and so it was decided that monies raised from individual fund raising ventures, such as doing a sponsored event or giving a talk to a local charity, should go the person that raised it.

Distinguishing between group and personal expenditure - because everybody had different requirements for personal gear this was not included in the general budget. Even so the average amount spent by the mountaineers buying all the technical climbing equipment was £1200 and that by the trekkers £900. Putting this into the overall budget would have boosted it to over £24,000.

Forgetting to include items - the services rendered by the Kazhans are not within the initial estimate.

CONTRACTS

We found our relationship with the Kazhans became strained whenever the subject of money and the fulfillment of our contract was raised.

Now that we know the cost of living in the Eastern Block we realise that the fee arranged with them was too high, instead of £190 per person a more realistic figure would have been £100. However it was reassuring to know that we did have a truck and people looking after us. Petrol was scarce in the Republic and when the Kamaz became stuck in a river on the journey back it did prove difficult to find someone willing to drive us to Vanch and then back to Dushanbe. However the delay was no more than a day when looking for a vehicle.

We now realise that all dealings with Soviets have to be conducted in a very careful and considered manner. All letters and contracts have to be carefully worded in simple, correct English. Never take anything for granted and state everything explicitly. Originally we asked for a helicopter to fly us out of the mountains and believed that the high price we were paying included this service. We did not get a helicopter but because it was not explicitly stated in the contract, we now have no grounds for complaint.

Although the Kazhans understood and fulfilled their responsibilities towards us it was also in their interests to make as much money as possible. In future, it may be wiser to hire a person to act as a negotiator and arranger to handle details such as hiring transport rather than someone to actually provide the service. Being paid at a fixed rate they will be on your side and it will be in their interests to negotiate good deals for you. This will be easier for them because they will be a Soviet citizen and so know what the price of goods and services are and will be treated fairer by the vendors than Westerners would.

CURRENCY

The two currencies in use are the rouble and the US dollar. Whilst we were there the exchange rate was approximately 150 roubles to the dollar. All prices are much cheaper if paid for in roubles and it is wise to get hold of some as quickly as possible. This can either be done officially, eg. at the Hotel Tadhikistan, or on the black market, which is illegal. Outside of Dushanbe it is almost impossible to exchange money legally.

Generally we were approached by black marketeers if we waited in one place for long enough. Deals offered would vary enormously but one expected about 10 to 15 roubles over the official rate.

Be very careful about letting anyone know that you possess foreign currency; an ugly scene developed in one of the bazaars when one of our members produced a dollar in front of a crowd whilst haggling over the price of a knife.

PURCHASING GOODS

Due to the poverty in these countries whenever anyone finds out that you are a Westerner they immediately believe you to be fabulously wealthy and will try all sorts of ways to get US dollars from you. Although prices seemed cheap, they were often inflated, and it was important to haggle. Not only because this is good fun but to prevent the traders from raising their prices for future tourists, thus ripping them off even more. In Moscow this has reached excessive proportions and one can end up paying Western prices for the use of a taxi to get from one airport to another.

The recommended Pollyanna haggle technique was :

Go to several vendors and see what price each one asks, this gives one a feel for the right figure. Then pick one vendor and start bargaining, if this falls through, try someone else. In the Soviet system patience brings its rewards.

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