

Expedition Report

1992 IIT Mountaineering Club Expedition

**Shitidhar/Ladakhi Peak
Himachal Pradesh, India**

John & Fran Gilchrist

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Acknowledgements

Participating in this expedition came about by chance. Prof V.N.Shukla, Director of the Centre for Electronics Design and Technology, Calicut visited the, then Paisley College Scotland during the summer of 1991. A few months after this visit, an invitation was received to take part in an expedition to the Garhwal Himalaya during December 1991. As a result of participating in this expedition, an invitation was received to take part in an expedition during the summer of 1992.

Originally the expedition was planned to climb two peaks in the Garhwal. However, there was a lot of expedition activity in this region during the summer and as we were there in December, the powers that be, asked us to change the area of our expedition. We only found out about this on our arrival in Delhi. The expedition leader V.N.Shukla had in the space of a week arranged for us to travel to Himachal Pradesh, with the mountains of Ladakhi Peak and Shitidhar being the new objectives. The only disadvantage about climbing in Himachal Pradesh during June/July is that the monsoon is 'snapping at your heels' with pre-monsoon storms frequently occurring.

This report is a collection of *our experiences and observations* in Himachal Pradesh. From a personal view point the people that inhabit these high areas of the world are often neglected in books and articles. This report will hopefully help redress the balance. After all, it is people and their effect that give inhabited mountain areas their character.

Hopefully this report will provide enough information to guide future visitors in this beautiful area. We felt that by giving too much information, would in effect spoil the feeling of exploring a magnificent wilderness area, inhabited by fascinating people. Rather this report should be used as a thumbnail guide, we have described our routes in enough detail to enable them to be followed safely and hopefully given some flavour of this area with our descriptions.

We had a problem in defining distances in the report, as maps of the area are hard to obtain. We have used metric distances only where we were pretty sure that they were accurate. All other distances are given as approximate timings. Place name spellings can vary, the spellings we have used are taken from source (i.e. local signs) to be as accurate as possible.

We would like to thank and acknowledge the help and assistance given to us by the *Mountaineering Council of Scotland* and the *Scottish Sports Council*.

Special thanks are also extended to *M^r Alex Mayes of Summits, 96 Causeyside Street, Paisley (041-887-5536)* for his generosity and advice in helping us obtain our climbing/trekking equipment.

*John & Fran Gilchrist
October 1992.*

Part One: Introduction

Himachal Pradesh an overview

The mountainous region now called Himachal Pradesh, was once known as the Punjab Himalaya but with the partition of the then Punjab district, into Punjab and Haryana in 1966 Himachal Pradesh came into being.

Himachal Pradesh, literally meaning, 'The Land of Snow', enjoys a unique position in the Indian Himalaya. Nature here is both sublime and beautiful, rugged and harsh; from the green meadows and fertile valleys of Kangra and Kullu to the barren valleys of Lahul and Spiti on whose rocky slopes no grass grows.

The elevation of the region varies from 350m in the foothills of Kangra to 6975m in the higher ranges of Lahul and Parbati valleys. While Daramshala has the second highest level of rainfall in India, the areas of Lahul and Spiti hardly receive any rain at all.

In Himachal Pradesh, gods live in every corner, on mountain tops, on the passes and lakes and in the hundreds of temples that are scattered throughout its valleys. It is a land of myths and legends where Pandavas roamed, Rakshasas ruled and great sages like Vyasa, Vashisht, Jamdagni and Manu had hermitages. Parshuram, the warrior saint of Puranas, seems to have played an active role in this region and the Mahabharata heroes have many shrines consecrated to their memory.

Many religions flourished here. While the majority of the population is Hindu; Buddhism is practised in Lahul, Spiti and Kalpa-Kinnaur where some of the most beautiful monasteries are

built atop strategic points. The Sikh Guru Gobind Singh lived in the foothills of Himachal Pradesh. Daramshala is now world famous because His Holiness the Dali Lama has chosen to make it the headquarters of the Tibetan Peoples exiled because of the Chinese occupation of Tibet.

Himachal is a land of high passes and deep valleys through which great rivers flow or have their sources. It is a region where many races have mingled with each other or co-existed peacefully. In the markets of Manali many races can be observed from the sharp featured Aryans, the narrow eyed Mongoloids from Lahul and Spiti, the Tibetans and the Gurkhas (who had conquered part of Himachal for a brief period), as well as the dark coloured original inhabitants of the valley.

Geography of Himachal Pradesh

Himachal Pradesh extends from the plains of the Punjab and Haryana to the high mountains separating it from Ladakh and Tibet. It is surrounded by Jammu and Kashmir to the north and north west, and to the east Uttar Pradesh. There are many climatic zones in the region, these vary from sub-tropical forests in the foothills to high alpine zones in the mountains.

There are two main mountain chains in Himachal Pradesh. The Pir Panjal range and the Dhauladhar range. The Pir Panjal branches off the Great Himalaya range, north of the Sutlej between Shipki and Chini and forms the watershed of Chandra Bhage, the Beas and Ravi. The Dhauladhar range leaves the Great Himalaya range to the east of Wangtu (in Kinnaur) where the Sutlej cuts through it, after that it passes through the north and north east

of Kullu district where it joins the Pir Panjal.

The Dhauladhar range rises almost perpendicularly from the valley of Kangra and is drained and cut by the tributaries of the Ravi and Beas on its northern and southern slopes. As the Pir Panjal and Dhauladhar ranges stand directly across the path of the monsoons, they receive plenty of rainfall. But the valleys of Pangi, Lahul, Spiti and Kinnaur that lie beyond the Pir Panjal, remain almost dry. As the Pir Panjal acts as a barrier between the monsoon and these regions. Between these two ranges are a number of mountain ranges of different heights traversing the tract and enclosing between them valleys of varied width and length, the main valleys are Kullu-Manali, Lahul and Spiti, Kalpa-Kinnaur, Chamba, Pangi and Kangra.

The four important rivers which flow through Himachal form the valley systems of the area. The Sutlej river watershed, forms the districts of Kinnaur, Shimla and Bilaspur. Kullu and Mandi districts lie in the valley formed by the Beas and its tributaries. The Ravi river watershed forms the regions of Chamba; Chandra Bhaga of Lahul and Pangi Tehsil and Kangra district comprises the slopes and plains below the Dhauladhar range whose water flows into the Beas.

The total area of the state is 55,673Km with a population of 4,288 million in 1984. The population density varies from about 2 people per square kilometre in the barren valleys of Lahul and Spiti, to about 150 persons per square kilometre in Kangra region.

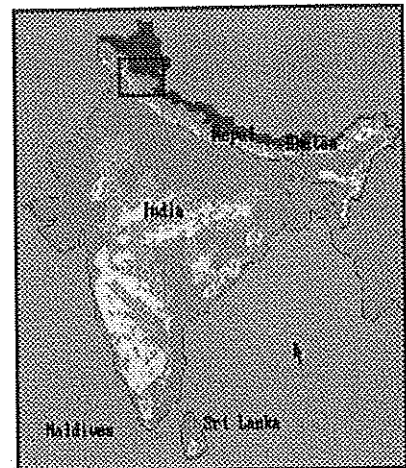
The trans-Himalaya occupies 10.7% of Himachal Pradesh (about 6,000 sq Km). The Pir Panjal

being the approximate boundary of the zone (Shitidhar & Ladakhi Peak are both in this range).

The vegetation of this region has a high altitude desert characteristic and can be described as dry alpine steppe. Throughout the zone 5,200m can be regarded as the approximate upper limit for vegetation, above this permanent snow/ice and bare rock predominate.

The common ungulates in the trans-Himalaya are wild sheep, goats and buffalo. Ibex are found on the higher slopes in Himachal. The great Tibetan sheep or Nayan (the largest sheep in the world) is found in Spiti. Other ungulates found in the Himachal trans-Himalaya include the Tibetan wild ass (Kiang), Tibetan gazelle (Goa) and yaks.

Less visible than the herbivores,



Map 1: Location of Himachal Pradesh



Map 2: Features of Himachal Pradesh

carnivores are represented by brown bears, Tibetan Wolf, Phara (wild dogs), lynx, foxes and the rare snow leopard.

There are many small mammals in this area these include; voles, bats, otters, Tibetan wooly hares, mouse hares and marmots. There are few resident birds, but there numbers are swelled by migrants. Residents include eagles, ravens, finches, larks and warblers.

Agriculture is the main occupation of the people of Himachal Pradesh. Seventy per cent of the population depends upon agriculture. If horticulture and other land occupations are also included, then about ninety per cent of the people depend upon the land. About sixty per cent of domestic products come from the land and only twenty one per cent of the land is brought under the plough. The rest of the area comprises mountains and other areas where cultivation is not feasible.

The average family holding is one and a half hectares, most holdings being on steep slopes. Terraced fields rise above one and other on these slopes. Heavy monsoon rains, soil erosion, thin surface soil and heavy winter snows make it hard for the farmer to eke out a living under these inhospitable conditions.

The regions of Lahul, Spiti, Kinnaur and some areas of Chamba and Pangi are above 2500m, the climate here only allows one crop a year. Most of the agricultural produce is contributed by the lower regions and foothills of the state.

The table at the top of the next column shows the growing ranges, for some of the crops that form the basic diet or are grown as a cash crop in Himachal Pradesh.

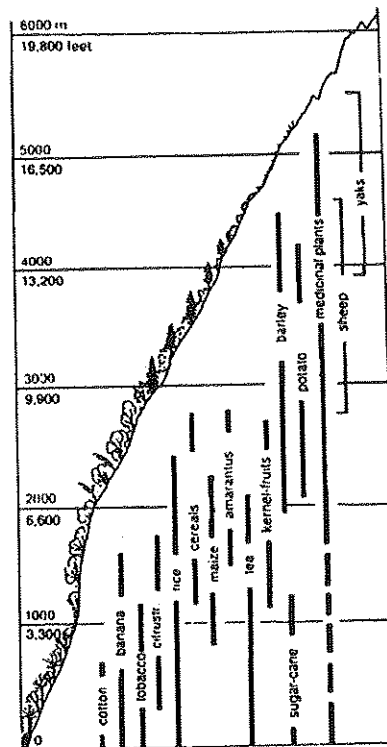


Table 1: Relationship between agricultural products & altitude

Extracting a living from the soil is a task which has made the people hardy and patient. Many of the men work on the plains, leaving their families behind, with the result that women do most of the work on the land. In order to lessen the pressure on land use, especially where cultivable land is scarce, as in Lahul and Spiti valleys and Kinnaur, the people have evolved the system of polygamy and polyandry. A few of the tribes, such as the Gaddis, have adopted a semi-pastoral life and can be seen roaming the far corners of the mountains with their herds.

Language

Pahari is the main language of the people of Himachal Pradesh and is spoken by nearly ninety per cent of them, and is more akin to Punjabi than to Hindi. Pahari is said to have been derived from Nagar Apabhhransh or Shorseni which are also the basis for

Punjabi, Rajasthani and Gujarati. Kil-Kirati is the aboriginal dialect of the area, influences of which are found in Pahari.

In the past Tankri script was used and many important historical and literary manuscripts still exist, though Devnagri script is now gaining popularity.

There are many different dialects such as Chamiali, Mandiali, Kului etc. The language spoken in Lahul, Spiti and Kinnaur is quite different and is more akin to Tibetan than Hindi, Punjabi or Pahari. There are more than 200 dialects which are spoken throughout the state. Out of these, 30 are broadly recognised dialects.

A Brief History

The western Himalaya was probably already settled during the Old Stone Age. Neolithic evidence exists in Spiti. There are megaliths and rock paintings, depicting hunting scenes. Excavations of caves in Spiti suggests a hunter-gatherer society, possibly related to Indo-European ethnic peoples, possibly to the Dards described by Herodotus.

When the Aryans migrated to different areas from Central Asia, one group reached India via Afghanistan and Hindu Kush; came to be known as the 'Khash' while the second group, which proceeded towards Khashgar, Gilgit, Kashmir and then spread throughout the himalayan region of Kangra, Kullu, Mashasu, Chamba, Garwhal and Nepal.

In these regions they had to face opposition from the tribes who were already living there. After establishing themselves firmly as republics, their rule reached its zenith around the fifth century

B.C. The name of the 'Kulind' republic being mentioned in the Mahabharata.

In 327B.C. the Macedonians with their Greek and Persian allies, under the leadership of Alexander the Great travelled along the Beas River. During his attempted invasion of India. But a high desertion rate and near mutiny of the army forced his return to Persia, along the desert coastline of modern Iran. In Chamba coins and other evidence suggest Greco-Bactrian settlements existed in the foothills of Himachal.

Until the first century B.C., the whole of Himachal Pradesh was divided into more than one hundred feudalities and principalities. Except for the kingdoms of Chamba, Kangra and Kullu, the state was ruled by petty Thakurs and Ranas. They fought continuously amongst themselves and made it easy for outsiders to subjugate and defeat them and establish their own kingdoms.

By 257B.C. almost the entire region of Himachal came under Ashoka, but he let them rule without any appreciable interference in their affairs. During the medieval period, some of the large states were broken up and smaller ones came into existence.

At the end of the twelfth century, when the Turks came to power in Delhi, the hill chiefs refused to recognise their supremacy and there was a continuous tug of war between them. During the Mughal period the hill chiefs made treaties with them and the struggle ceased for some time.

During the reign of Aurangzeb, the tenth guru of the Sikhs, Guru Gobind Singh, tried to unite the warring hill tribes against the Mughals. But contrary to his

expectations some hill tribes attacked him. After defeating the hill tribes, some joined his cause and a combined army defeated the Mughal army near Nadaun.

During the nineteenth century, many parts of Himachal were conquered by the Gurkhas and Maharajah Ranjit Singh of Punjab. Raja Sansar Chand of Kangra freed many parts of the territory from the Gurkhas. But when the British came, the Gurkhas were defeated and Himachal became part of the Raj.

After Indian independence (15th April 1948) the hill states were merged to form the province of Himachal. In 1966 when Punjab was split, the hilly areas were transferred to Himachal Pradesh, in 1971 Himachal was declared a state within the Indian Union.

A Brief History of Climbing in the Kullu Valley.

The Kullu valley is dominated by the River Beas which rises in the Rohtang pass, and by its major tributary the Parbati.

Some of the earliest climbing in the Kullu valley was done by C.G.Bruce and Heinrich Fuhrer in 1912. They climbed in the Solang Nala and made the first ascent of Hanuman Tibba. They also carried out several reces around Deo Tibba, but poor snow conditions and the monsoon forced them into Lahul where they climbed Gepang Goh and several peaks near Patseo. The Parbati valley was also explored.

Deo Tibba was the prime attraction during the early years of climbing in Kullu, due possibly to its proximity to Manali.

In 1939 J.O.M.Roberts carried

out further exploration of Deo Tibba, by way of the Malana Glacier. However in 1952 Mr and Mrs Graff and K.E.Berrill finally climbed Deo Tibba. Deo Tibba's neighbour Indrasan was climbed by the Japanese in 1962, the mountain having repulsed English attempts in 1958 and 1961.

The second ascent of Hanuman Tibba was made in 1966, and the first ascent of Manali Peak was carried out in 1968.

The head of the Malana Nala lies the 'Malana Towers', 1966 saw the first ascent of one of these. In 1969 the granite obelisk of Ali Ratni Tibba was climbed.

Just over the Rohtang pass the CB (Chandra Bhaga) peaks are to be found, of these 5000-6000m peaks only a handful have been climbed.

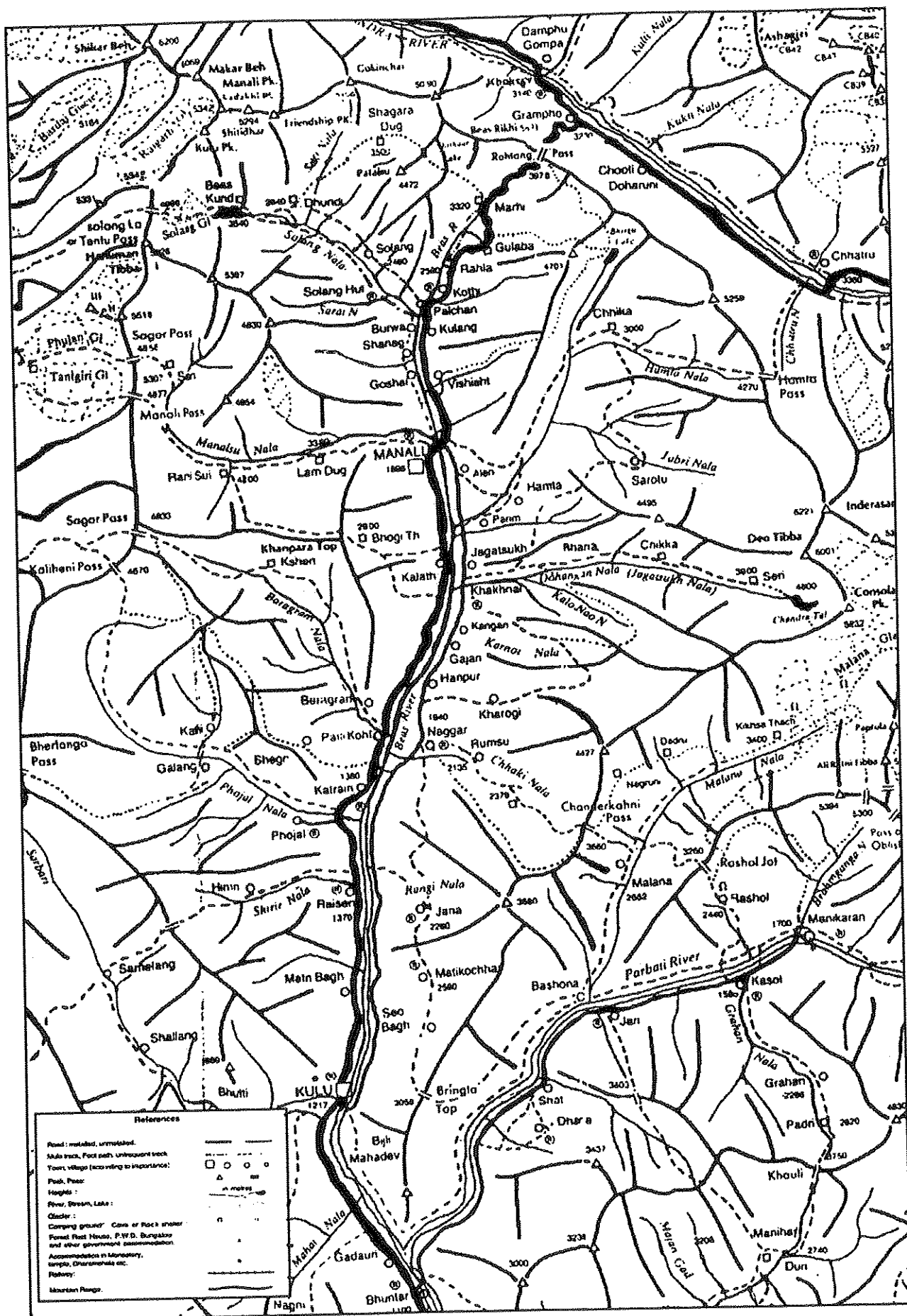
Expedition location

The expedition of which we were part of, was the ascent of Shitidar (5294m) and Ladakhi Peak (5342m).

These mountains are situated at the head of Beas Kund, the glacial basin that is one of the sources of the river Beas. Which flows through the Kullu valley. The Kullu valley is a long and narrow slice of lush verdure nestling between the Dhauladhar and Pir Panjal ranges. It is about 80Km in length, extending from the Rhotang pass to the gorge of the Beas at Aut.

To help acclimatize, we trekked in the Parbati, Malana and Chhaki Nalas crossing the high passes connecting these valleys.

The map overleaf shows the Kullu valley, the area that the expedition climbed and trekked in.



Map 3: Kullu Valley

Part Two: Expedition Report

Expedition Report: Shitidhar/Ladakhi Peak, Himachal Pradesh, India 1992.

The first thing we noticed after arriving at Indra Gandhi International Airport, Delhi was the furnace like heat that blasted our faces as we left the plane, even though it was 6am, the temperature was already 38°C. The heat seemed to drain the energy out of us, we were looking forward to the relative cool of the mountains after only a few steps in Delhi.

Waiting for immigration and customs clearance tried our patience, as the arrivals hall seems to lack adequate ventilation or air-conditioning. Eventually we were in India. But before travelling into Delhi, we had to obtain some money. The Indian Rupee is at present a restricted currency, but since our last visit six months previously, we noticed that forty percent of any money changed is at a higher rate than the other sixty percent. We found out later that the Indian government has plans to make the Rupee fully convertible on the international markets within the next two to three years. The State Bank of India has a branch at the back of the arrivals hall, though all arrivals seem (or have) to use this bank, so a wait is inevitable.

Our next task was to find some transport into Delhi, about 11Km away. On the right hand side at the exit of the arrivals hall is a pre-paid taxi desk. Apparently to stop taxi's overcharging (though prices are that cheap that being overcharged by twenty or thirty pence does not seem to make the desks worth while). You tell the man behind the desk your destination and pay him, our fare into Delhi was 140 Rupees (about £2.40), in all modes of transport in India the baggage is also paid for. A receipt with the location

and registration number of your taxi is issued, the next task is to find the taxi.

After arriving at our accommodation, which the expedition leader, V.N. Shukla had reserved for us, at the YMCA on Jai Singh Road. The YMCA in Delhi, has a good central location, air-conditioned rooms, a restaurant and is cheap, though any reservations are only held until 6 in the evening. After catching up on some sleep, we saw the other expedition members, and the final arrangements about the expedition were communicated to us.

Departure from the sizzling heat of Delhi (about 47°C) was made the following evening from the Inter State Bus Terminal (ISBT) at Kashmiri Gate, old Delhi at about 11 o'clock at night. Trying to find the Shimla bus in the turmoil that passes for a bus station was a Herculean task. It turned out that the first coach we approached was the Shimla bus, though for some unknown reason until about 30 seconds before departure the bus was going anywhere but Shimla, then followed an amazing sight, from nowhere appeared the passengers and their luggage, the boarding process defies description, it was amazing there was no injuries. Even though we had seat reservations in our names, it turned out that there was three John Gilchrist's on the bus (one of which was female!) and two Fran Gilchrist's on the bus. The bus journey that followed, in an non air-conditioned bus, journeying through the Gangetic plain pre-monsoon is certainly a hot experience.

The 9 hour, overnight bus journey

to Shoghi (about 15Km outside Shimla) took us through the states of Haryana, Punjab and eventually into Himachal Pradesh. Each state border being greeted by road blocks and hoards of armed police. An all too common sight in the northern states of India.

By the time dawn broke, the bus was beginning its long journey up into the Himalayan foothills, leaving the sweltering heat of the plains behind. Luckily the bus driver decided to stop at a tea stall. Even though we were tired, it was indeed memorable and magnificent to see the foothills of the Himalayas at sunrise.

At about 8am we arrived in Shoghi and eventually we arrived at SATH (Shimla Adventure and Trekkers Hamlet) an adventure school where our friend and summit leader Ranjan Thakur who we first met in the Garwhal last year, teaches adventure skills.

We spent two days in Shoghi, acquiring provisions and managing some sightseeing in Shimla. Before leaving Shoghi we accompanied Ranjan to the local Hindu temple, which is dedicated to Hanuman, the monkey god. This temple is situated high on a secluded ridge about one and a half hours walk from Shoghi. We received our blessing from the priest, and hoped that it would bring luck.

Shimla, was surveyed in 1817 by the Gerald brothers, two Scottish army officers, the town that developed from this survey was built along 12Km of a crescent shaped ridge and has the feel of a rambling English village in need of some repair. Walking through the old part of Shimla it is difficult to believe that you are in India,

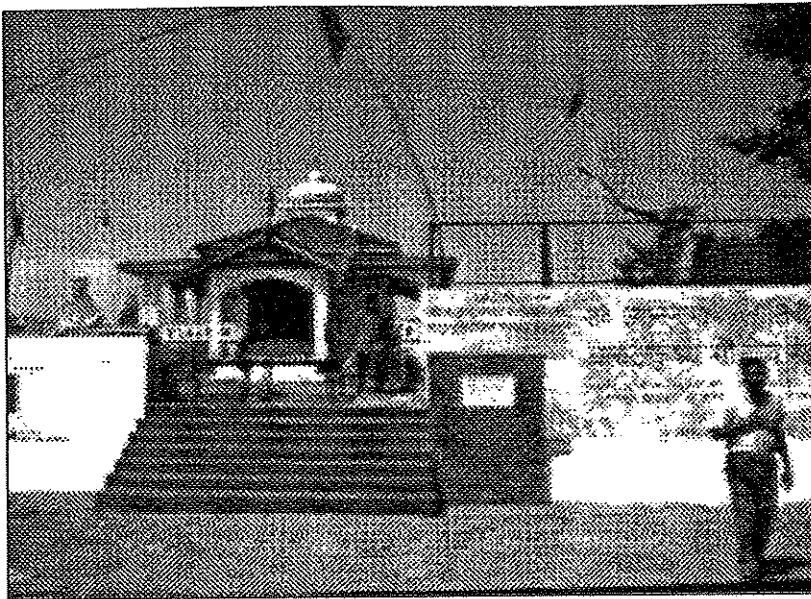


Photo 1: Temple outside Shoghi.

the climate is cool and the buildings range from Scottish Baronial to mock Tudor. With a population of about 50,000, small by Indian standards but this number increases dramatically in the (pre-monsoon) summer months, by the richer Indians who come here to escape the unbearable heat of the Gangetic plain.

During the Raj, Shimla was the summer capital, the town still has the buildings and administrative centres of government (though now their use is limited to governing Himachal Pradesh of which Shimla is the capital). It is not hard to see why the government of the Raj was moved first from Calcutta, and from 1911 onwards from New Delhi to Shimla, having experienced the heat for ourselves. Walking along the buttressed promenades to Prospect Hill and Scandal Point it was not too hard to imagine the past. The views from Scandal Point offer a 360° view of hills, valleys and the ranges to the North, our final destination. But we also had stores and supplies to buy, the shops proved adequate for non perishable provisions. Perishables being bought on trek, where possible.

From Shimla there was another overnight bus journey, the destination, Manikaran the point from where our feet would become the mode of transport.

After a long overnight bus journey, of ten hours, during which we passed many mangled buses on the valley floor, saw exhilarating views, perilous drops and interesting road signs such as; 'Arrive late in this Life, Not early in the Next' and 'Overtakers will meet Undertakers'. Our bus driver, who had aspirations to be a Formula One driver, drove as such. No doubt the crashed bus drivers thought so too!. Our worst fears came alive at about 4am, when our coach (or racing) driver



Photo 2: Arrival in Manikaran

hit something and blew a tyre. There followed a two hour wait, as the driver was unable to change tyres, as he did not have the tools, went on the scrounge. Eventually we resumed our journey, arriving in the Kullu valley after a 205Km journey. We reached Bhuntar at 6am. At 8am the bus for Manikaran appeared out of nowhere, as did the other passengers.

Our trekking got under way at the pilgrimage village of Manikaran (1700m), the village lies in the Parvati valley which is named after the consort of the god Shiva. Manikaran is holy to both the Sikhs and Hindus, and is famous for its hot springs, the springs being the hottest non-sulphurous water springs in the world. We took the opportunity to wash the dust from the travelling off and hopefully helped ourselves on our journey towards nirvana, as the locals in the bath explained, bathing in these waters helps in the journey towards enlightenment. There is of course a legend associated with these hot springs which was enthusiastically told to us, it tells how the serpent god stole Parvati's earrings while she was bathing, upon being threatened by Mahadev (Shiva), the snake snorted the earrings out of his underground home causing holes were the hot springs now bubble out.

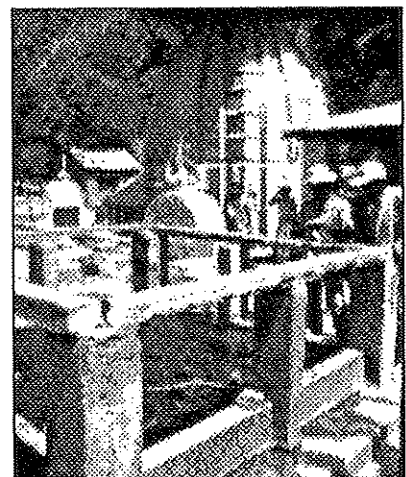


Photo 3: Hot Springs & Temple Manikaran.

Refreshed from the hot bath, we had a easy 7Km walk following the course of the Parvati River, we travelled along a narrow road/ track frequented by many pilgrims. The scenery in the valley at this point is gorge like with oak and pine rising above the gorge, though as we neared Kasol the valley opened up with pines coming down to the river bank. Looking back towards Manikaran, in a general Westerly direction, the horizon is dominated by the massif of South Malana Peak (5429m).

As we arrived in Kasol (1585m, 2hours walk) the weather closed in, with heavy rain falling for the remainder of the afternoon. Looking around for a campsite the expedition leader V.N.Shukla approached a forester from the Indian Forestry Departments plantation, we were shown to a clearing in the forest and pitched camp by the Parvati River. The forester gave us a conducted tour around the nursery plantation. In an effort to stimulate the local economy by conservation, the forestry department are using local labour to grow and plant saplings. The saplings are then replanted on the deforested slopes, hopefully fixing the soil, reducing erosion and enabling existing terraces to continue operation. Reforestation is being pursued with a vengeance in the Parvati Valley, it is good to see an effort being made to combat a major problem of the Himalayan regions. Porters and a cooks assistant were hired in Kasol for the trek to Nagar. In order to acclimatise better and shake off any travel stiffness we decided to carry most of our personal equipment ourselves.

When a 'foreigner' hires porters, there are stipulated rates of pay (100 Rupees a day in Manali. Rates are displayed), sleeping bags



Map 4: Area of Acclimatisation Trek.

and clothing have to be supplied and bonuses paid for extra loads carried or hours worked. However when Indians hire porters, they negotiate rates of pay, terms and conditions of service. We noticed a distinct difference in the way Indians treated Indians. The non mountain dwellers (city people) tended to treat the porters like servants, mountain dwellers treated the porters as employees. It was interesting to observe these different cultural aspects, we noted that everyone always fell into a 'pecking order' with the oldest being at the top, experience apparently does not count. We saw many examples of this, young highly experienced (and qualified)

mountaineer listening attentively and then following instructions they knew were absurd. On the other hand our Indian friend could not understand why we listened to experience and spoke our mind.

The next morning we crossed a suspension bridge over the Parvati river and walked along the track to Rashol, the track follows the river for about 400m, before turning into a side valley leading to the village of Rashol. The walk along the river was illusionary, it looked for a moment that we were walking along the Spey, though the 20Kg+ we were carrying and the high peaks in the distance soon brought us back to

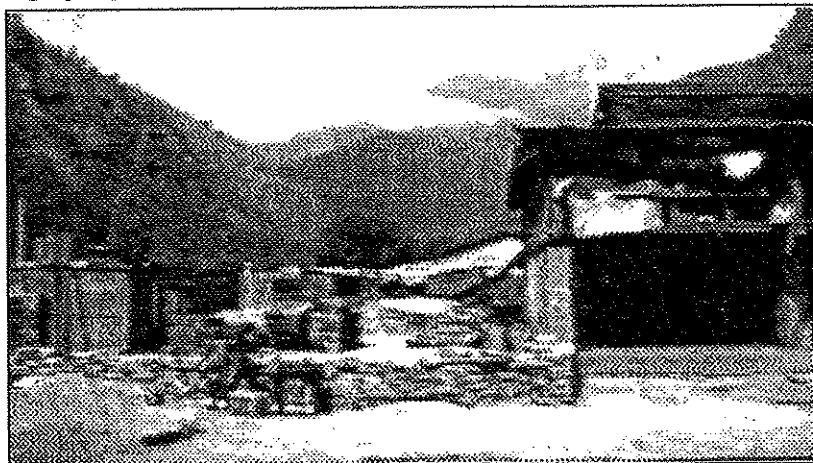


Photo 4: Looking towards S Malana Peak from Kasol.

reality. We were fortunate, the porters were carrying about 40Kg to start with, though we eat some

though the incline remained the same. In the distance we could see the outline of the Rasol Jot cut like

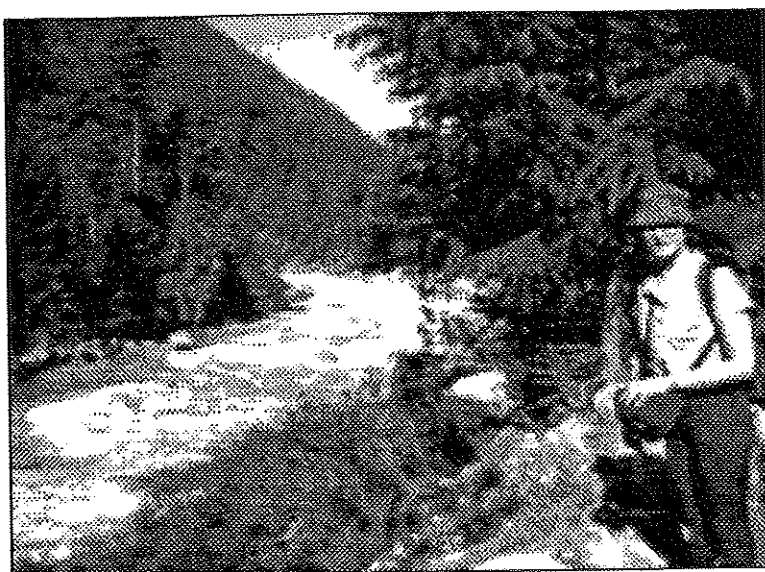


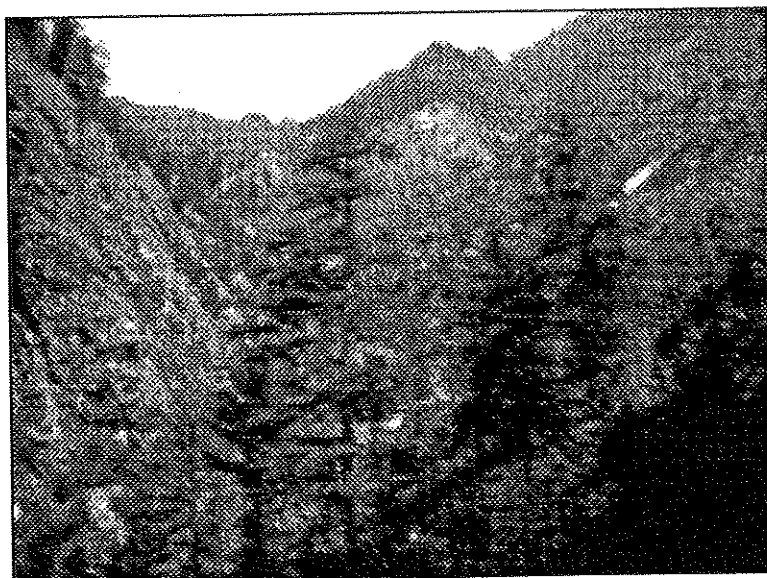
Photo 5: The Parbati River on route to Rasol

of the this weight. I suggested leaving some of our excess food in Kullu or Manali with the police or tourist authorities, but apparently this is not possible as corruption is rife and we would loose a lot of food during storage.

After leaving the river, the track up to Rashol started gently enough, through terraces cleared in the forested hill side. The valley narrowed and steepened for a short stretch before opening out again,

a notch in the ridge line, the route to the pass involved climbing above the village, gaining a ridge and following the crest of this ridge until the treeline was reached, then making our way through the trees and climbing the last few hundred meters to the pass. It looked so simple from down here. We had just to reach Rashol first.

As we neared Rasol, the landscape changed, the rocky slope we were ascending gradually gave way to



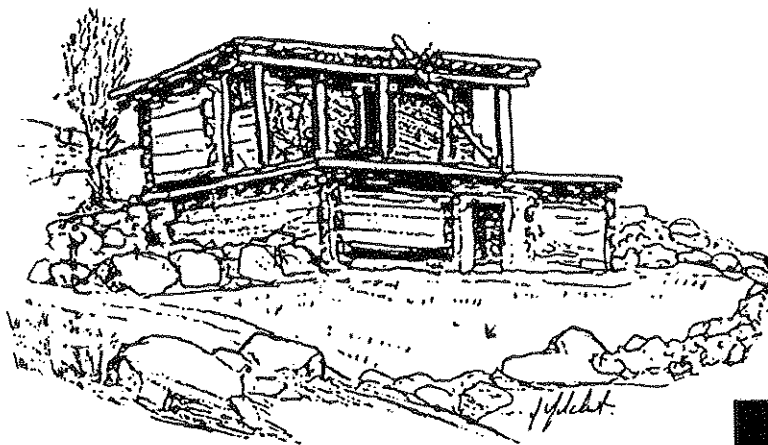
*Photo 6: The Rasol Jot (Pass)
(Notch on Right Hand Side of skyline).*

terraces, growing wheat, maze and vegetables. The midday heat was building up and fortunately we came upon a tea stall, apparently our progress was noted and a tea stall set up, the tea and omlettes were a life saver.

Continuing up towards Rasol, we could observe the harvest in progress, the wheat being cut by singing children and the women chafing wheat. The path through the terraces steepens as it reaches the village, after passing a dry stone dyke the track cuts along the steep remnants of a land slip before entering Rasol (2440m, about 3½ hours).

We were detained for three hours in Rasol by a fierce pre-monsoon storm, it seemed to rain forever. Luckily Ranjan, who lives and works in Himachal Pradesh and speaks a few of the dialects managed to talk a villager into letting us shelter under his veranda for the duration of the storm. Giving us the opportunity to see at close hand their houses and home life.

The method of construction appears to be a combination of timber and stone. It appears that a series of wooden cubes are joined to form the framework of the house. In the ground floor the spaces between the wooden supports on the outside are filled with stone, on the upper floors the stone is replaced by panels of woven wood filled with mud, though the better off used stone as much as possible. Protection from the elements being provided by what appears to be a layer of a lime type substance. The interior ground floor appears to be devoted to providing shelter for livestock, the upper floor appears to be a giant kitchen with alcoves for personal use. The whole structure being kept 'watertight' by giant



Sketch 1: Typical Architectural Style of houses in Kullu valley area.

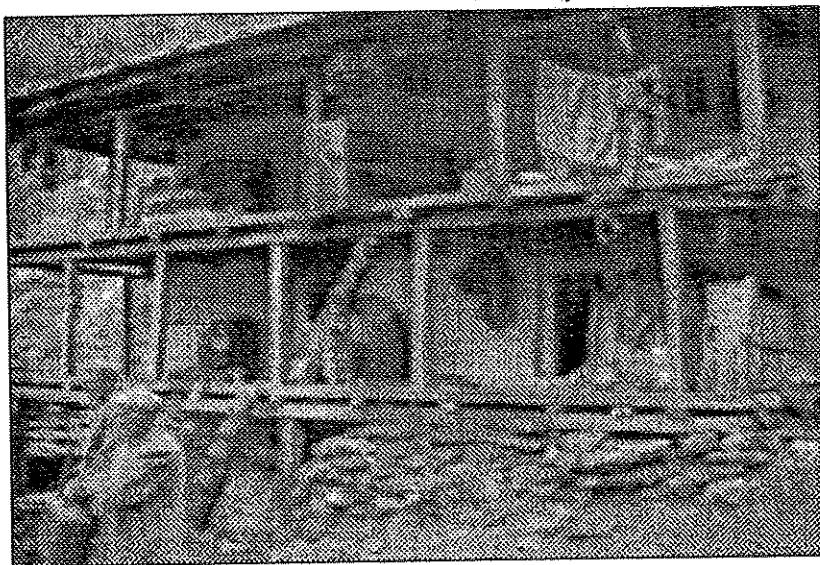


Photo 7: Typical house in Rasol.

slates. The people of this area manufacture their own clothes, every house has its own loom. Spinning being done by the women on portable spinners.

By the time we resumed our trekking, we knew we would not have enough daylight left to cross over the Rashol Pass that day. A quick change of plan was formulated, gain as much height before darkness, and camp below the pass. The walk out of the village was gentle to start with, we soon had our work cut out for us, after a short scramble we gained a twisty ridge that offered superb views of Rashol and the mountains behind, every time the clouds parted. This part of the

route appeared easier to ascend than descend. At the top of the ridge the track levelled off, and contoured along the headwall for



Photo 8: Cook in action.

about three or four hundred meters.

As this path re-entered the forest there is a slight climb, a small stream is crossed and the track passes a giant boulder. Here the Indian Youth Hostelling Association had set up a camp for participants in their Trans-Himalayan Trek. After passing this camp we continued climbing until we reached a clearing. Here



Photo 9: View from campsite below Rasol Jot.

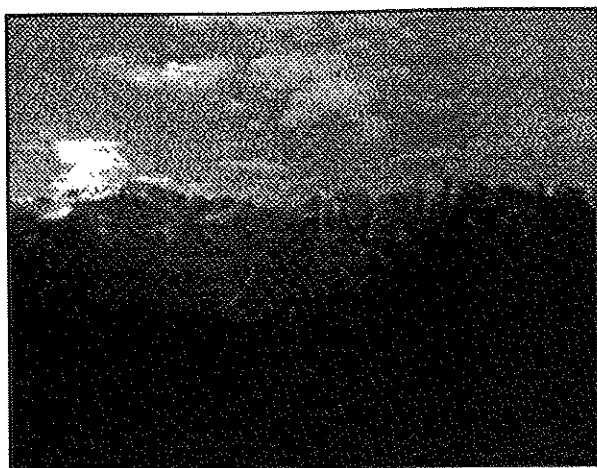


Photo 10: Looking into the Parbati valley from the Rasol Jot.

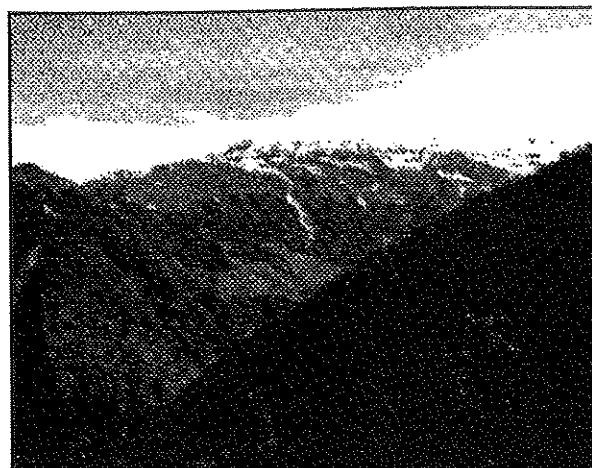


Photo 11: Looking into the Malana Nala from the Rasol Jot.

we set up camp, at about 2900m (about 4 hours walk from Rasol).

As tea was being prepared, we were invaded by sheep and goats. We invited the Gaddi shepherd, his wife and baby with whom we shared our meal. As the sun set the views across the valley were magnificent, with 4830m, 4637m and 4822m unnamed peaks being turned a magnificent pink before sunset.

The next morning we climbed to the Rashol Pass, (3260m, about 1½ hours from the campsite). After resting and enjoying the views, the mountains that we watched the sun go down on, and over the pass views of lush green fields leading down to pine forests. On the other side of the valley our destination could just be made out, the village of Malana, high up behind Malana a long ridge leading up to Consolation Peak (5232m).

Descending from the Rasol Pass into the Malana Nala (the translation of Nala is a valley with a snow fed stream in it), the going was initially steep but levelled out as the track went through high meadows. However as we approached the tree line the track descended steeply in places, we

had to be careful at this point as the rain started again and the path quickly became a slippery shute. Once in the pine forests the path snakes its way steeply down until a river is reached. It took about twenty minutes to cross, as the length of this stretch of river ran a crumbling snow bridge.

The rain was getting progressively heavier as we crossed the snow and reentered the forest. After a while we passed some Gaddi shepards, their calls to us were returned with friendly waves and smiles, unknown to us they were inviting us to share their fire, a man with a face like leather ran up and gestured us to follow him, so we ended up sitting around a fire with these friendly people, unable to communicate but exchanging smiles. We walked for about 2 hours, and spent 1½ to 2 hours with the Gaddi Shepards.

The rain in the meantime was getting heavier. We were glad to share the fire and keep warm until all the expedition members arrived. Using Ranjan to translate we repaid the Gaddi's with chocolate and cigarettes. Cigarettes are a good gift in the mountains, everyone smokes, even toddlers. There is a root that is rolled like a cigar and smoked,

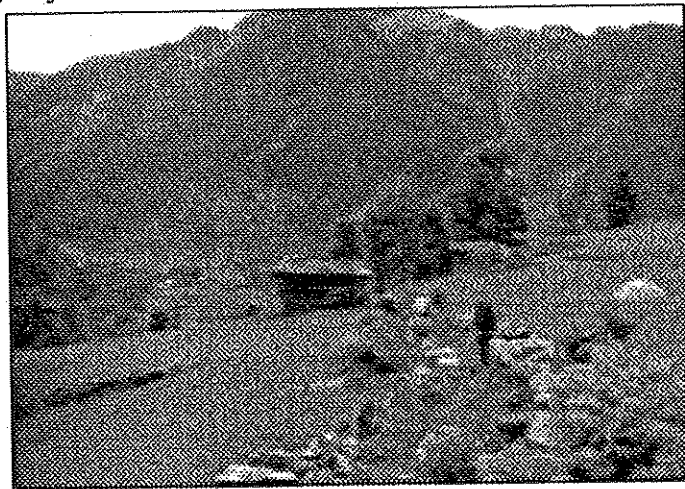
so American cigarettes are prized. Prices are cheap for American cigarettes, ten Four Square are 12 Rupees (about £0.21).

The rain finally stopped about lunchtime. After lunch we continued through the forest along a level but wet track, we were continually waiting for the Indian members of the expedition to catch up with us. The reason being their equipment or lack of it. On the two occasions that we have climbed in India, the Indian expeditions members have examined our equipment with keen interest. There appears to be no market for the high quality mountaineering equipment that we take for granted in Scotland. Gore Tex, fleeces and the clothing that is used in Scotland is relatively unknown for the average Indian climber. The standard equipment and clothing appears to be canvas plym soles called trekking boots, denims, shirts and jumpers. Rucksack are of an antiquated external frame variety with waterproofs being unknown or of thick waterproofed canvas or plastic. We found that when it rained the Indian members got drenched and if the tracks became too muddy then progress slowed to a snails pace partly for safety and partly to keep dry.

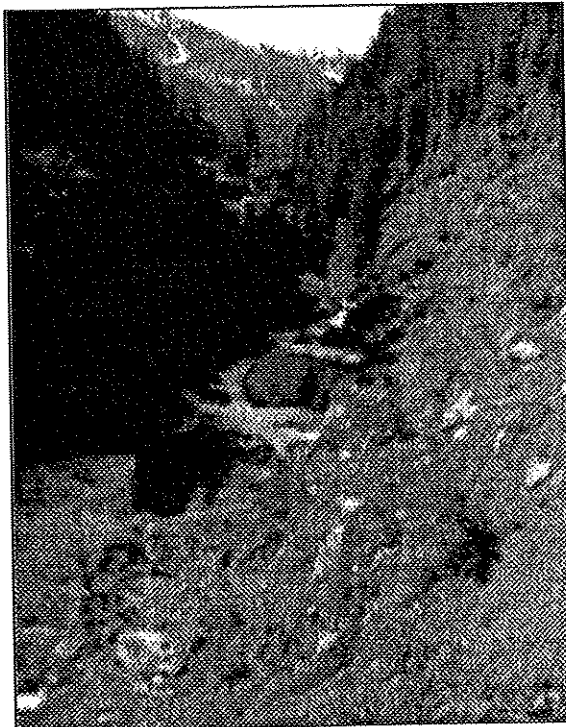


Photo 12: Malana Nala, leaving the forest.

The level track eventually left the forest and entered a lush green area with massive terraces, growing cereals, with a small cluster of houses. we continued along the track descending slightly. The track dropped suddenly down to the river and a well constructed bridge (about 1 hours walk). From the river the view up the valley towards the Malana glacier reminded us of the high valleys of Switzerland.



*Photo 13: Malana Nala-Terraced fields.
Malana village, left centre background. Chaderkahni Pass, notch left of centre.*



*Photo 14: Looking towards Malana Glacier
from bridge in Malana Nala.*

After crossing the bridge, the track climbs gradually. However a series of very steep sections ensures that height is gained quickly. The views down the valley start to open up now, revealing massive cliffs with what appears to be a wider valley in the distance. After the steep sections the path levels out again, upon turning round a spur the village of Malana can be seen sitting slightly higher up, with terraces working there way down to the river below. The track is fairly level up to the

village boundary (about 1 hour).

Malana (2652m) is not like any other village in the area, it is an autonomous village. The villagers refuse to pay taxes. Out of all the villages in the Kullu Valley area that we visited this is by far the poorest. The main source of income for Malana is from cannabis, every available scrap of land grows the plant which gives the appearance that it grows wild in the village.

In ancient times there existed many republics throughout the Indian sub-continent. In spite of the great upheavals of civilisation, the small republic of Malana, hidden behind the high ranges, has been able to keep intact its traditions, distinct

character and independence. There is no police and no interference from government administration whatsoever.

This isolated village has its own customs, language (which apparently is not related to any language found in Himachal Pradesh) and is governed by a parliament called 'Koram' which has two houses, the upper house consisting of elders with the headman being a type of president who decrees the village laws. These people are aloof, suspicious of outsiders, especially westerners and their marriage rites and customs are liberal, with no taboo on the number of times a person can get married. On approaching Malana you become aware of their different customs by the manner in which the villagers pass you on the trail, in other villages the locals are friendly and show a great curiosity in people that are so obviously different from them. But in Malana the greeting is different, with cries of "no touch, no touch" with the villager then totally avoiding you. If you touch a villager there is a 4000 Rupee fine (about £70), the soiled villager then has to perform a purification ritual which involves cutting a goats throat and showering himself with its blood.

Whilst we were there we were not permitted to take photographs in the village (the Jamlu Temple being the exception). Which was a shame as the houses have handsomely carved woodwork, most of which depicts soldiers in long armoured costume. The inhabitants, like the buildings were not allowed to be photographed unless a large cash payment was made to village headman. Ranjan found out that a group from Calcutta had their cameras smashed for photographing a child about a month previously.

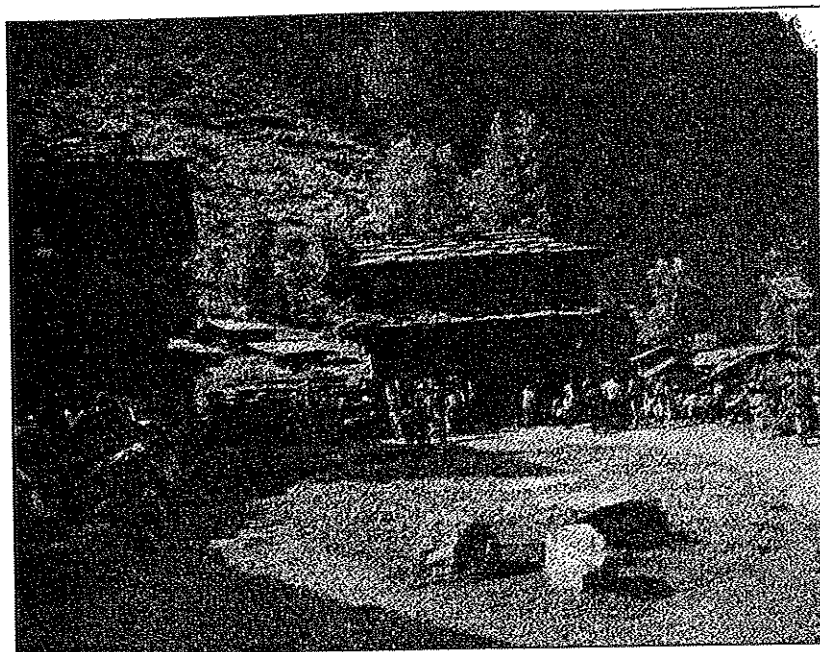


Photo 15: Jamlu Temple & Sacred Stones, Malana village.

Justice in the village is dispensed by the headman and two elders. The Village court meets in the centre of Malana, the judges stand on the sacred stones, outside the Jamlu temple while the court is in session, if found guilty the wrong doer provides a mutton meal for the whole village, where wealth is measured in sheep a fine of this sort is hefty.

The legends of the villages origin are interesting, and could in a way account for the obvious differences in people, language and customs of Malana as compared to the surrounding area. Local tradition states that the people of Malana are descendants from some of the soldiers of Alexander the Great who in 327 B.C. invaded India, reached as far as Malana. Some of the soldiers staying behind and marrying local women and developing the distinctive Malana culture. This story and the carvings intrigued us, on our return we looked up some books on Alexander the Great, we discovered that during his advance into India he reached the Beas River. Which runs through the Kullu Valley, and left India due to

the high desertion rate and near mutiny of his army. The carvings appear to depict Persian looking soldiers with round shields, very long spears and helmets, some of which enclose the face. Alexander conquered Persia and forced his army to adopt Persian dress, and the pike armed Phalanx was his shock infantry. Most legends have a basis in fact, could this be true?

Our accommodation that evening was on the village dispensary balcony. Ranjan, after much negotiation with the headman, and a payment of aspirin, obtained permission. The chance of staying in this village was too much of a temptation, though there is a campsite about 200m down the valley from the village. This balcony did have a plus side to it, the sunrise view the next morning was totally superb, with the sun rising above the Malana glacier and the silhouettes of the peaks providing a superb start to the day.

It was intended to spend a rest day in Malana, but we heard that the walk to Jari was through spectacular scenery, it was too

hard to resist exploring this route. Ranjan offered to accompany ourselves on this walk, the three of us set out early in the morning, after passing the campsite, the path literally plunges 800m down a cliff side, after this shock the trail continued fairly level along a gorge offering superb views. The rocks being sculptured by tumbling and cascading torrents of water. The walking was easy along a mule track, though there were short stretches where care had to be taken, especially where the track neared the water. Further down the valley the gorge opened up, the landscape here is lush on the lower slopes but devoid of vegetation higher up. We stopped by a small wire bridge for a snack, Fran remarked this was an ideal place to spend a few days camping. We continued down the valley until we reached the cantilever bridge that lead up to Jari. The walk up to Jari looked as though it would take another hour, along a jeep track. It took about 4 hours to reach this spot. Earlier on as we had just descended the cliff, a group of young girls from Malana passed us, when we had stopped

for a snack, they were returning to Malana carrying supplies, they had been to Jari bought stores and had lapped us. It is amazing the speed at which the villagers move at. The walk back to Malana was along the same route, the only difficulty being reascending the 800m cliff in fading light just before Malana.

Kullu valley is reached. This was to be a long day it took 7 or 8 hours to reach the evenings campsite. After leaving Malana the path headed gradually up the valley wall, taking us through a patchwork of large enclosed fields, growing cannabis. The path steepened as the villages meadows were reached.

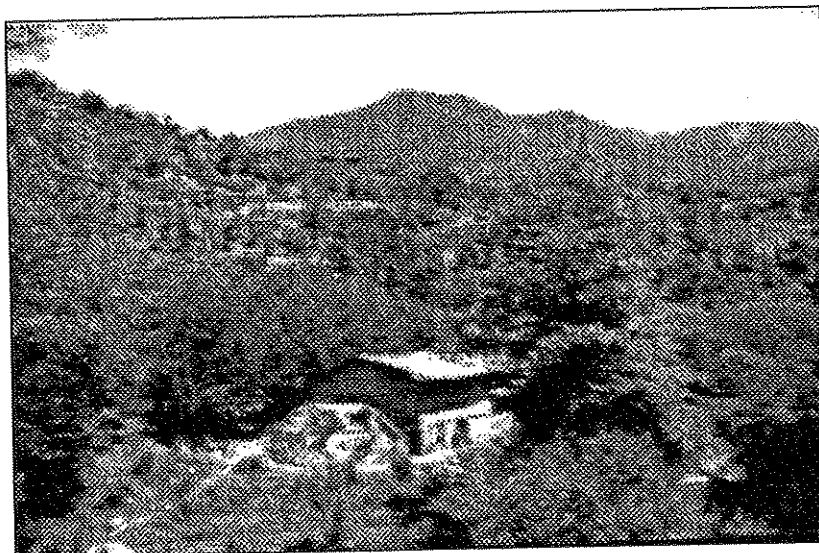


Photo 17: Farm at confluence of Malana Nala & Parbati valley.

The next part of the trek was to the Kullu Valley, by crossing the Chanderkani Pass to enter the Chhaki Nala a tributary valley, and following this until the

On the last 400m to the pass, the track swings around and then into a gully and there follows a hard climb up the gully (we discovered later there is a by-pass). At the gully exit the path zig-zags steeply up to the Chanderkahni Pass at 3660m. The route over the pass is tricky in places but following the cairns makes navigation easier. The views from the pass were spectacular, the upper Manali valley and the 6000m peaks of the Tosh Valley as well as the cluster of peaks around Hanuman Tibba in the Solang Nala, our ultimate destination could be seen, in between the clouds.

Over the pass there is a short steep drop down to the high pastures of the Chhaki Nala. The trail in the high pastures offers easy going after the rigours of the decent from the Chanderkahni Pass. There are a lot of good campsites a couple of Kilometres below the

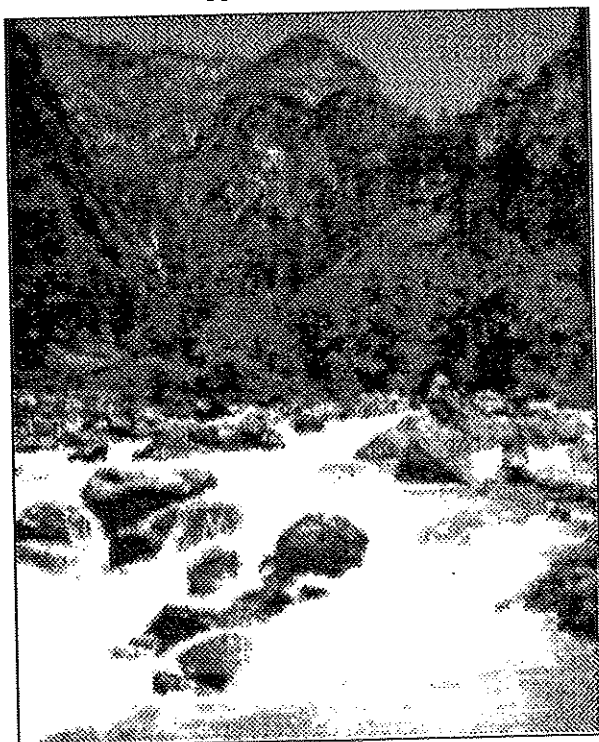


Photo 16: Malana Nala, near confluence with Parbati valley.

offering superb views (about 7 hours from Malana).

We rose early, to cover as much distance as possible before the midday heat. From the campsite the trail descends towards the treeline, the path is steep in places but otherwise there are no problems. Birch trees signify the approaching forest, though it is a while until the big trees appear, first large tracts of rhododendron bushes and meadows are crossed. (From observations using my altimeter the approximate figures for vegetation levels in this area are; Birches 3660-3700m, Rhododendron about 3600m, Firs and Conifers 3500m and Hollybushes 2100m). The path is easy to follow, but as this is a grazing area, trails go off in all directions so good navigation is essential. The path goes through the village of Rumsu, about 40 or 50 minutes out of Rumsu the track branches. The downhill branch was taken. The track gradually becomes more substantial as it passes through some well shaded forest eventually passing Roerich's cottage (a Russian avant-garde artist who stayed here in the 1930's) as it enters Nagar.

Nagar is situated on the left side of the river Beas, about midway between Kullu and Manali. Just outside Nagar there is a castle which over looks the Kullu valley. The castle was built in the reign of Rajah-Sidh Singh (16th Century), part of which now serves as a hotel.

The Kullu valley, which is 80Km in length and 205Km from Shimla, is known as the valley of the gods or apple valley and is famous for its beautiful scenery, apple orchards, flowered meadows and forests. All our Indian friends kept telling us that its alpine style scenery was unsurpassed any were

else in the Himalayas. According to legend (and now backed up by historical records) the original name of Kullu was Kuluta, which is mentioned in ancient Sanskrit texts such as the Mahabharata, Vishnu Purana and Ramayana. Local legends state the valley was called Kulantapith, which

we had missed the last bus. At about 11am we took the first bus from Nagar to Kullu. The journey along this small part of the Kullu valley showed us why this beautiful valley with its alpine scenery and orchards is also known as 'the valley of the gods' or 'apple valley'. During the bus

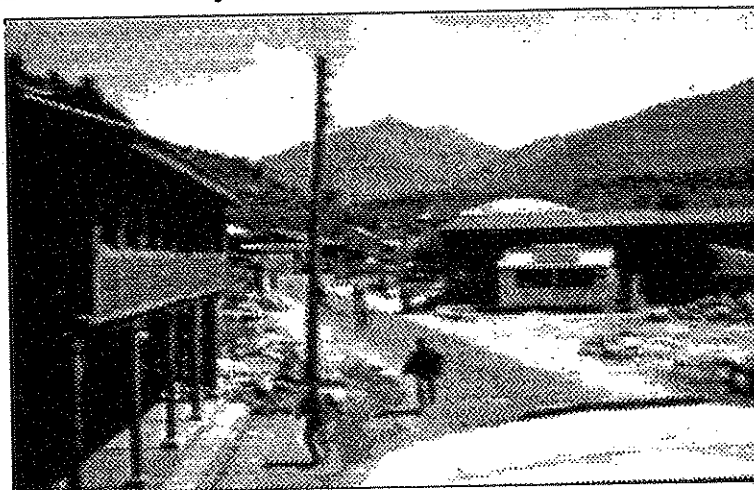


Photo 18: The Kullu valley from the roof of a bus

translates as 'the end of the habitable world'. Which seems an accurate description, for when we reached the Rhotang pass the Kullu valley appears green, fertile and hospitable and the desolation of Lahaul on the other side appears barren of life.

We now had rest days to look forward to. Though we had an extra nights camping at Nagar, as

journey the local people we spoke to were telling us that this valley has scenery unsurpassed anywhere else in the Himalayas. In Kullu we discharged the porters.

During our rest days we stayed in stayed in a hotel across the road from Kullu bus station. Kullu is a lot quieter than Manali, and cheaper too.

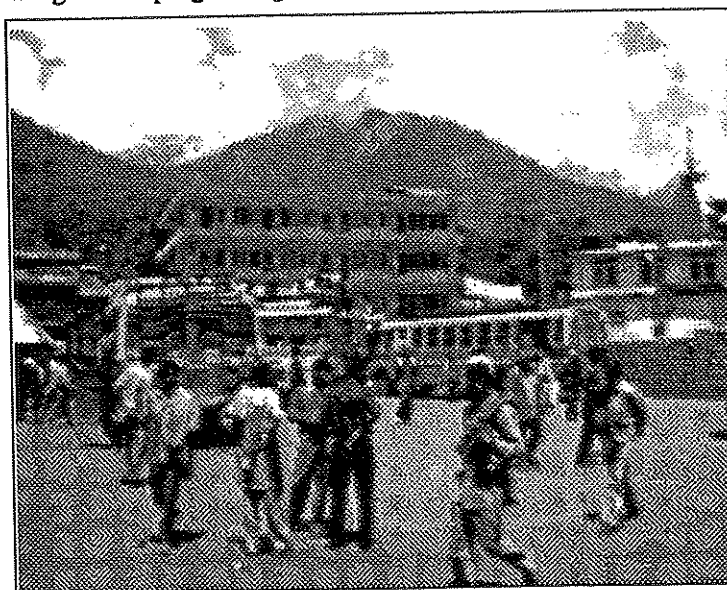


Photo 19: Manali Bus Station, where we hired our porters.

Though there is not a lot to see or do if staying in Kullu, it is an old trading centre. The area formed one of the oldest of the Punjab hill states and was founded in the first or second century A.D.. The original capital was at Jagatsukh, from where the Rajas ruled for twelve generations. It was then shifted to Nagar and in the 17th century, to what is now Kullu town.

expeditions business we had some time for sightseeing.

Manali is the centre for climbing, trekking and tourism for the valley. Because of this there is as much hustle and bustle as we found in Delhi (though on a smaller scale), which when compared to the surrounding countryside seems totally out of place.

Manali is also a pilgrimage centre for Hindus, the name Manali is derived from the words 'Manu' and 'Alaya' meaning home of Manu-father of mankind. In legend this was where the world was renewed after the great deluge. The legends also state that this is one of the first places the creator stepped on after creating the world. A good idea of the religious significance of the valley can be gauged from the fact that there are about six thousand temples in the valley and lots of religious festivals, one of which we were lucky enough to see. We only had the opportunity to visit one temple, the Dhungri temple, which is situated in a deodar forest overlooking Manali. The Hindu temple is dedicated to the goddess Hadimba and is a wooden temple constructed in a Tibetan style,



Photo 20: The Gods of Kullu

We visited Manali to arrange the next part of the expedition. After buying supplies, the expedition leader hired porters. The hiring of porters is always carried out in the bus station and for this reason, people seem to appear from all over the place. But as we were a small expedition only one cooks assistant and seven porters were hired. We then went to the Himalayan Mountaineering Institute to hire climbing equipment (see appendix three for details). After finishing the



Photo 21: Dhungri temple, Manali.



Photo 22: Religious festival, Manali

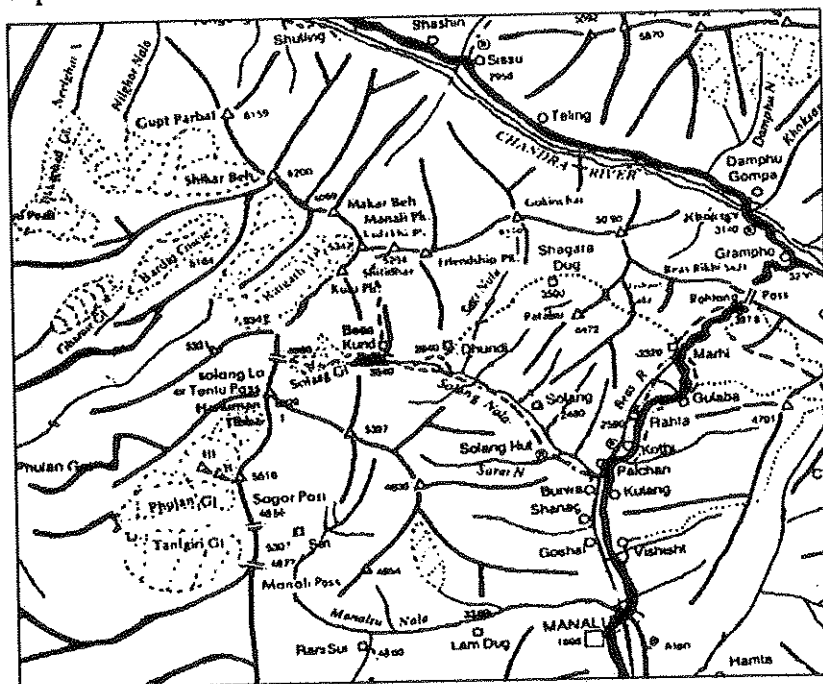


Photo 23: Religious festival, Manali

with a four tiered pagoda and superb wooden carvings depicting the animals of the valley, sadly most of which are now extinct or are unable to live in the valley. This temple is the site where Bhima, the Pandava of the Mahabarata, killed the cruel demon Hadimb. There is also a rather morbid legend that tells of how the ruler who ordered the temple built, cut off the hand of the artist who created the temple and carvings so that he could not duplicate his work.

to, as the snow was still being cleared from the road. We managed to ride on this bus Indian style, on the roof. The views were spectacular with amazing 360° views. The journey out of Manali crosses the Beas river, over a bridge covered in prayer flags. Initially the road is relatively flat, passing apple orchards and scattered dwellings. Once Palachan is reached the road appears to be convoluted as it starts to climb steeply towards Kothi, the last village in the valley.

The road at this point passes through thinning, mature old pine, deodar, oak and rhododendron. The effects of deforestation are being combatted here by the planting of poplar and willow near the treeline. Marhi, which is situated just above the treeline is a collection of restaurants housed in shacks, where hire of wellington and old fur coats seems obligatory for those tourists who have never seen snow, and travel to the Rhotang pass in order to see snow. The backdrop to Marhi is the steep grassy slopes leading to the snow capped pass.



Map 5: Upper Kullu valley, Rohtang Pass & Solang Nala/Beas Kund areas.

The Kullu valley is famous for shawls, carpets, woven handicrafts and clothes all at reasonable prices which can be bartered down. Unfortunately carrying rucksacks, all we could manage was a hat.

As we were to be climbing near the Rohtang Pass, the chance of visiting the pass (and helping with our acclimatization) proved impossible to resist. The porters were sent on to Palachan by bus and the rest of the group travelled by public bus up to about 3 or 4 Km outside Marhi, the nearest point to the pass that the bus went

We started walking at about 3400m following the road, twisting and winding its way up to the pass. The views down the Beas valley were superb with high snow covered peaks surrounding us. About two hours later we were approaching the pass.

On the final approaches to the pass, we were surprised to see tea stalls and sledges for hire. We were informed that the tourists who have never seen snow toil up to this point and spend most of the day here playing in the snow.

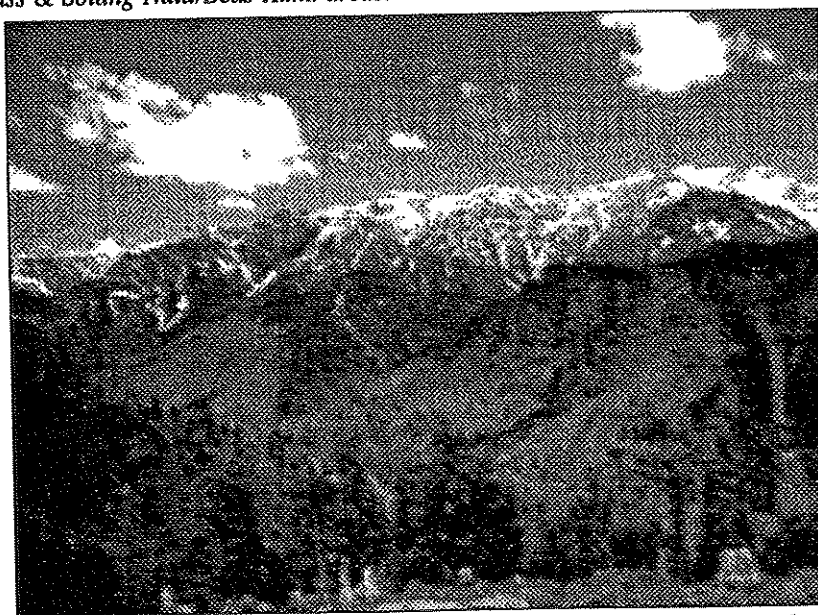


Photo 24: The Upper Kullu valley, viewed from above the treeline on the journey to the Rohtang Pass.

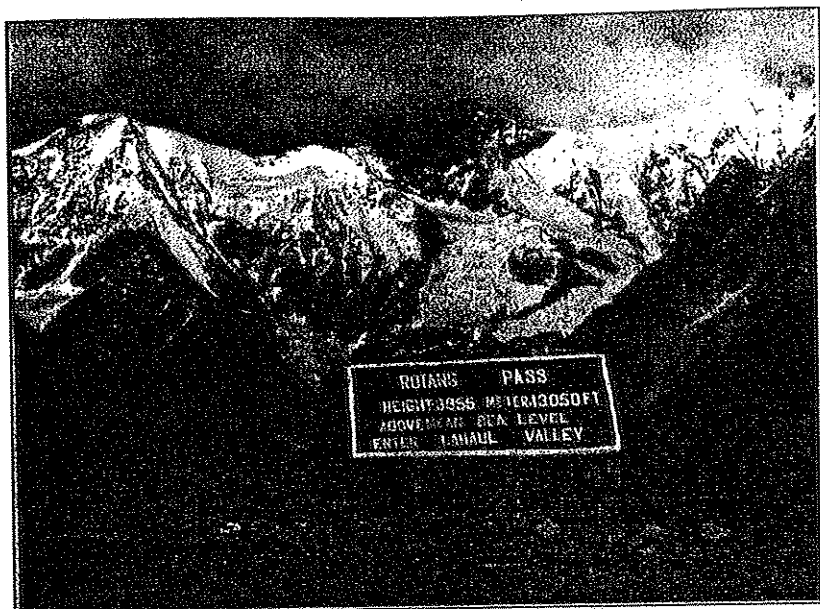


Photo 25: Plaque below summit of Rohtang pass.

The pass its self is an expanse of silent desolation, the only sound being the whistling of the wind, that cuts like a knife. Walking through the snow fields that led to the pass, we gradually left the visitors behind. Toiling up the final slopes, it was possible to imagine that this was the end of the inhabitable world.

The Rohtang pass on the Manali-Leh road, is open for less than three months in the year, from about the beginning of July to October. The 476Km Manali-Leh road crosses the Pir Panjal, the Greater Himalaya and Zaskar Ranges attaining a maximum height of 5304m, a road journey worth taking, though the wad of permits required is discouraging. The Rohtang Pass is 52Km from Manali and the pass itself is at an altitude of 3978m. Rohtang which translates as 'heap of dead bodies' is the windy watershed between the lush Kullu valley and the bare expanse of rock, snow and unclimbed peaks on the other side. This is the most Northerly reach of the monsoon, the Pir Panjal range effectively blocks the life giving monsoon, this is evident. in the contrast between the Kullu valley and Chandra valley sides

of the Rohtang pass.

Descending from the pass, was easier than expected, for the iced parts had now melted in the sun, the snow was melting fast here, it would not be long until the road would be open again. Even though the sun was glaring down on us, the wind was cutting right through us. This helped our progress down from the pass and we soon reached Marhi. However, as we descended the wind died down and the midday heat gradually built up.

Just outside Marhi, a tractor

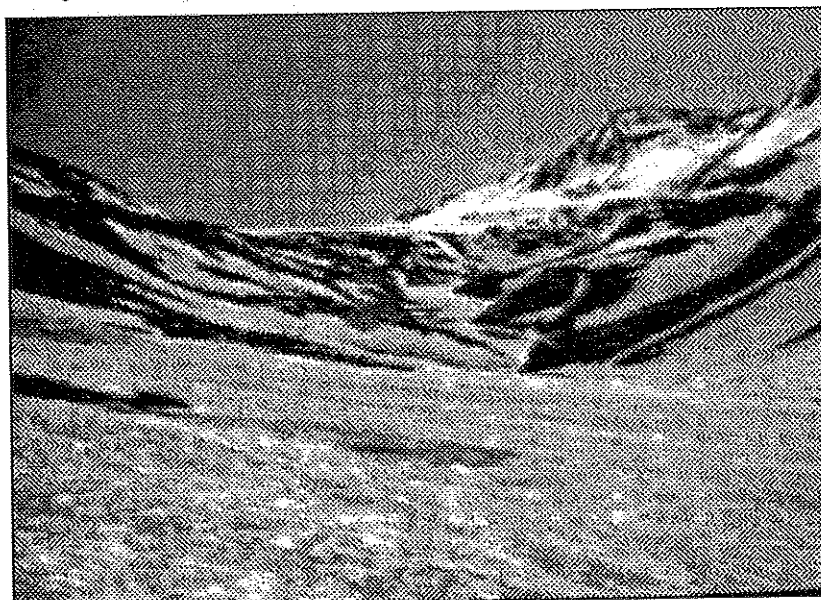


Photo 26: Looking towards the Rohtang Pass.

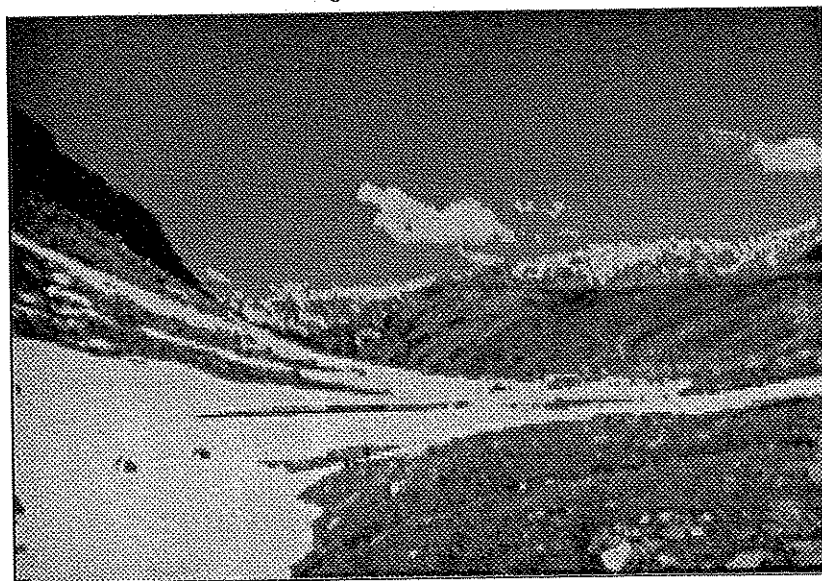


Photo 27: Looking towards the Kullu valley, from the Rohtang Pass.

towing a trailer passed us and we soon persuaded the driver (for a

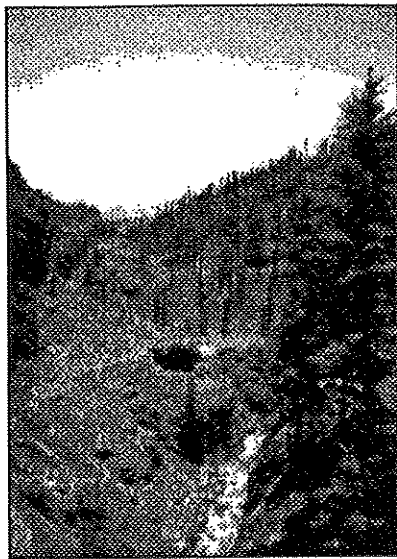
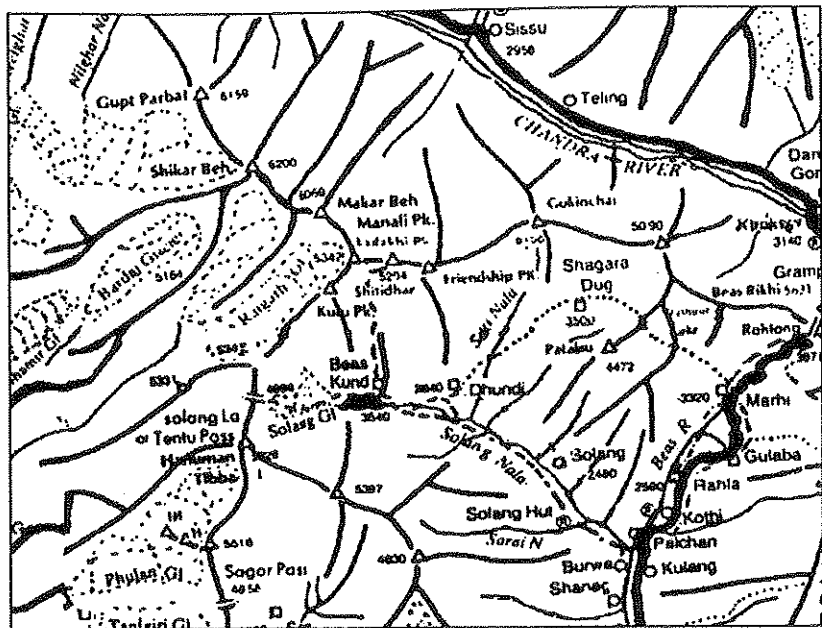


Photo 28: Looking towards the Rohtang Pass, from the upper Kullu valley.

fee) to give us a lift in the trailer. Personally I do not recommend travelling this way, the journey was a bone shaker, in a trailer without suspension on a pot holed road, though it saved a lot of time, and we were soon in Palachan meeting our porters and enjoying some tea.

Base camp for the summit attempt was to be set up in Beas Kund, after descending the Beas valley from the Rhotang Pass, the village of Palachan is reached. From here the land rover track was used to enter the Solang Valley and walk towards Solang. The village of Solang, strangely exists in two parts. The part we walked towards was the 'commercial' village, consisting of 'Hotels'. (Weather Permitting it is possible to travel by bus from Manali). We camped about two kilometres outside Solang (about 4 hours from Palachan). The campsite selected was about 20m off the track on a spit of land offering superb views along the Solang Nala.

The next day we travelled further



Map 6: Solang Nala & Beas Kund, climbing area.

up the Solang valley along the track until Dhundi was reached (about two hours). In the future it may be possible to arrive at this point by bus as test borings are being conducted in the Pir Panjal range at this point (this range runs along the line of the Rhotang and Hampta Passes). It is planned to drive a tunnel from here under the Rhotang pass, so plans are afoot to construct a metalled road. This plan will undoubtedly spoil the peace and quiet of the valley, but the economic benefits for the local

community will probably allow the scheme to be carried out, making access to Beas Kund easier. The track leading up to Dhundi is currently being repaired, as a flash flood in 1988 washed a large chunk of it into the valley downstream.

Dundhi, the last bastion of civilisation lies at the confluence of the Solang Nullah and the Seri Nullah. It is a collection of (Three) 'Hotels' where the last comforts of civilization; soft drinks, crisps,

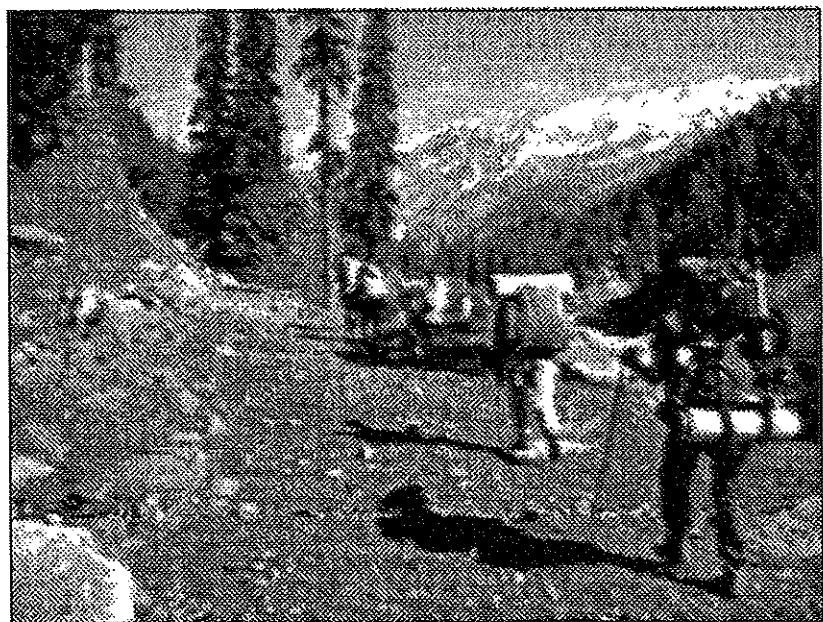


Photo 29: The Solang Nala, on route to Dhundi.

cigarettes and the ubiquitous omelets, rice and Dal can be purchased from enterprising Gurkhas.

The trail now heads up the Solang Nullah through bush and low vegetation. Crossing the river was easy as there was plenty of snow bridges to choose from.

The trail ascends through bush and low vegetation, gradually gaining height, the river is crossed about two hours out of Dundhi after the trail crosses some small badly eroded water channels which have the appearance of small ravines.

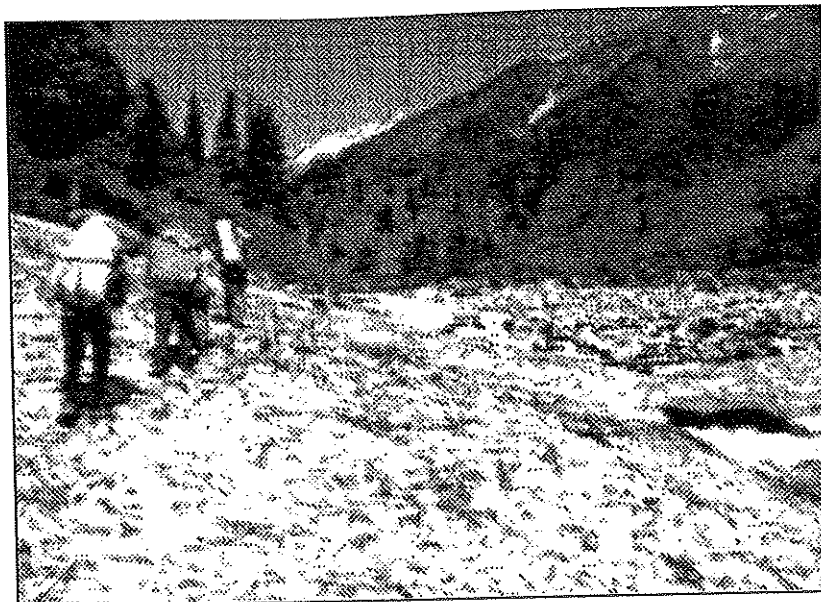


Photo 30: Porters approaching snow bridge, Solang Nala.

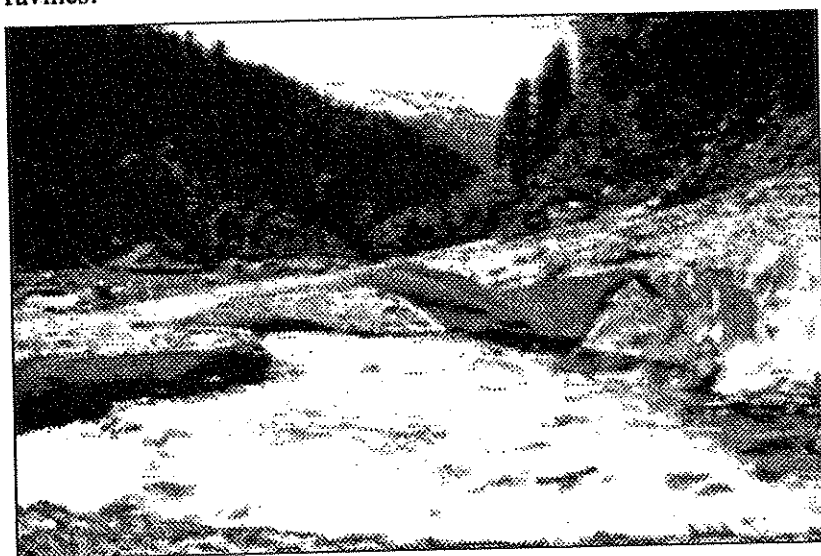


Photo 31: View downstream showing, snowbridges & lower part of Solang Nala.

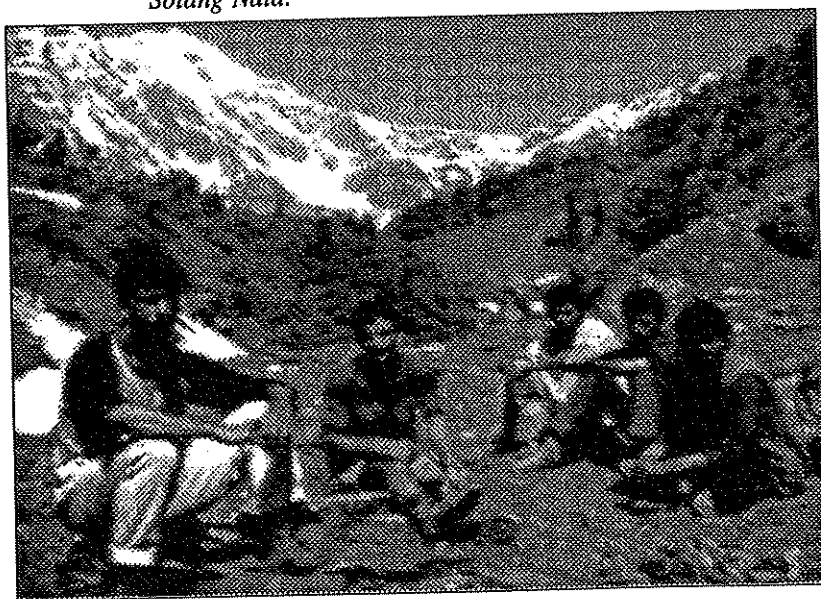


Photo 32: Porters having a break, before crossing river.

After crossing the river, the trail is less well defined. The route climbs steeply away from the river initially, but then climbs up the valley roughly parallel to the river.

The snowline was crossed at about 3000m, the snowline here was much lower than the area we used for acclimatisation.

After about five hours the base camp of Himalayan Mountaineering Institute, Manali was passed. The institute uses the lower slopes here to teach snowcraft and basic skills to their Basic Mountaineering course students. After passing the camp, the trail leads towards a series of moraines in the distance. In order to reach the moraines a series of snow fields were crossed.

Once across the snowfields the climb becomes progressively steeper, climbing a series of terminal moraines. the trail over these moraines is poorly marked by small cairns (no marks is more the point) and it became more maze like the higher we ascended. We would like to thank the unknown Indian climbers, participating in an expedition to Hanuman Tibba who guided us



Photo 33: View from start of snowfield of upper Solang Nala mountain in centre background Patalou (4472m).



Photo 34: Snowfield leading to Beas Kund.

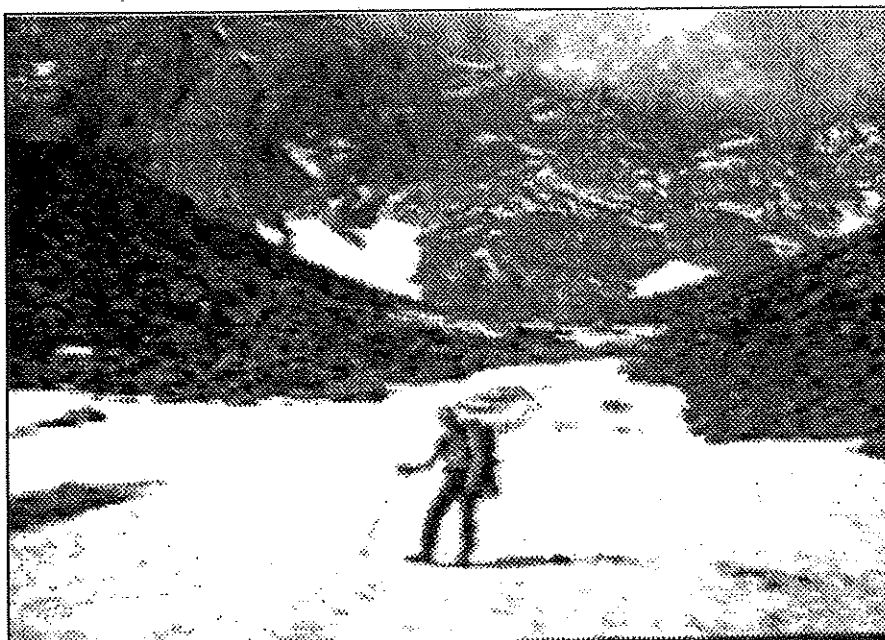


Photo 35: Start of moraines that lead to Beas Kund.



Photo 36: Enjoying the view from the crest of a moraine.



Photo 37: View towards head wall of Solang Nala, Beas Kund is to right of photograph. Solang La or Tentu Pass is in centre of skyline, to right is Kullu Peak.

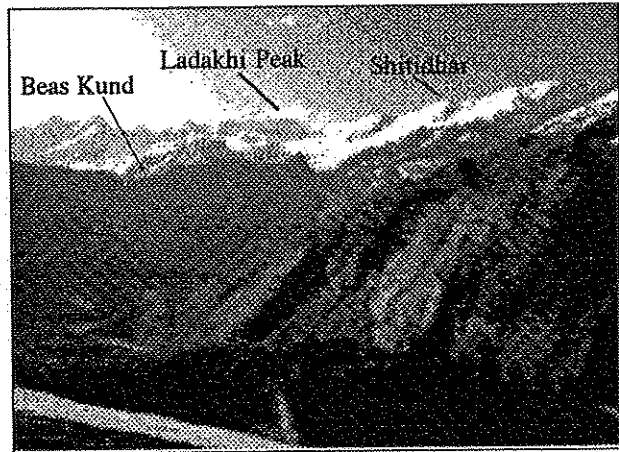
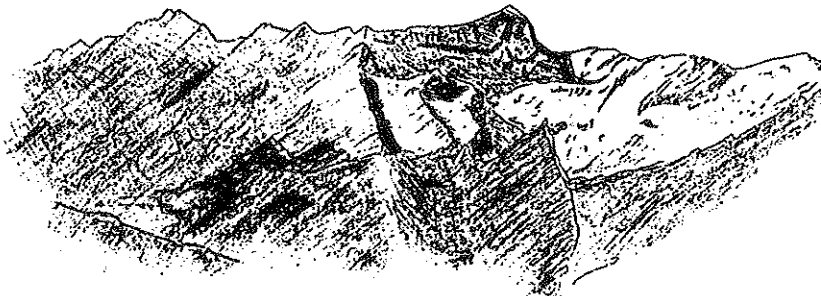


Photo 38: View towards Beas Kund.



Sketch 2: Beas Kund skyline from the Solang Nala.

through the maze when we took a couple of wrong turns and became separated from the group.

As we reached the top of the final moraine Beas Kund came into view.

2:00am, we were woken with a cup of tea and a smile. We forced ourselves to leave the warmth of our sleeping bags and step into the freezing air. After checking our gear, putting on crampons and harnesses we were off, across the

frozen lake.

The ascent we planned involved climbing to Shitidar's west ridge, and then gaining the summit along the ridge. We would then retrace our steps and gain Ladakhi Peaks East ridge and follow that to the summit.

We started by crossing Beas Kund until we reached the start of a long gully, which runs up towards Shitidar. The snow was rock hard at this time in the morning, so we would not need to worry about avalanches (yet) and we made good progress. Climbing the gully was not as hard as it had looked, when we were planning our route, the cramming effect of the 200m zoom lens probably accounted for this. The only difficulty encountered in the gully, apart

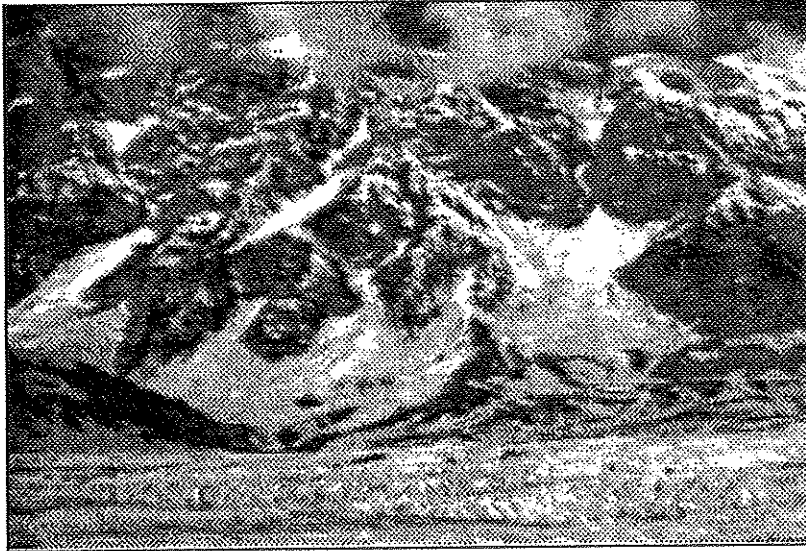


Photo 39: First view of Beas Kund.

Our first view of Beas Kund was breathtaking, it looked a perfect alpine setting, with high peaks surrounding the basin. Base camp was set up in the middle of this basin. The rest of the evening was spent setting up camp at 3560m.

The following day was declared a 'holiday' and we spent our time resting and soaking in the magnificent views, watching the avalanches and selecting our route. Towards the end of the day, our climbing equipment was brought out and checked over for tomorrow's ascent. Dinner that evening was eaten with anticipation, as menacing clouds were building up and the barometer was falling. The porters were telling us that the cloud patterns indicated that the rains were due soon. We decided to proceed as planned, and make the decision in the morning, if climbing would be feasible. So we retired to our sleeping bags early.

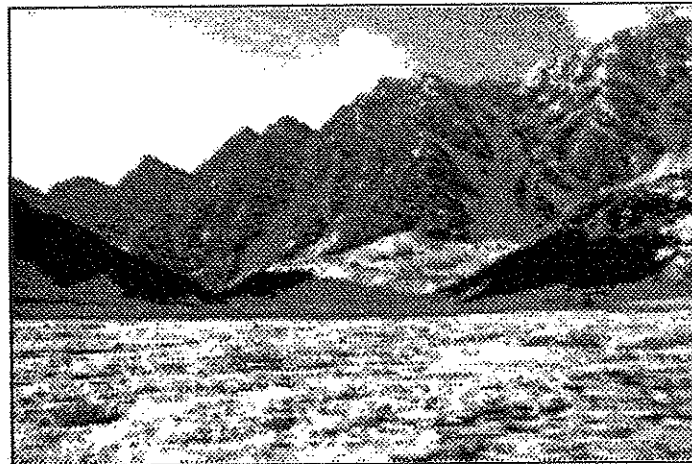


Photo 40: View from Beas Kund to Solang Nala, showing route into Beas Kund & moraines.

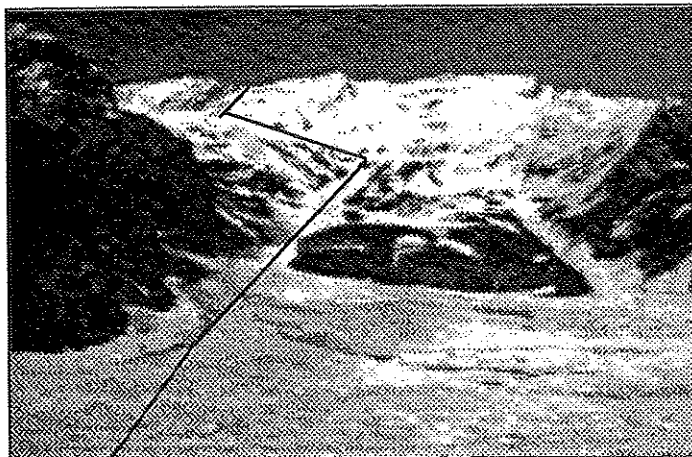


Photo 41: Shitidar from Beas Kund. Our route to the ridge is indicated by the solid black line.

from the altitude was the continual zig-zagging through avalanche tracks (at about 4000m) and debris.

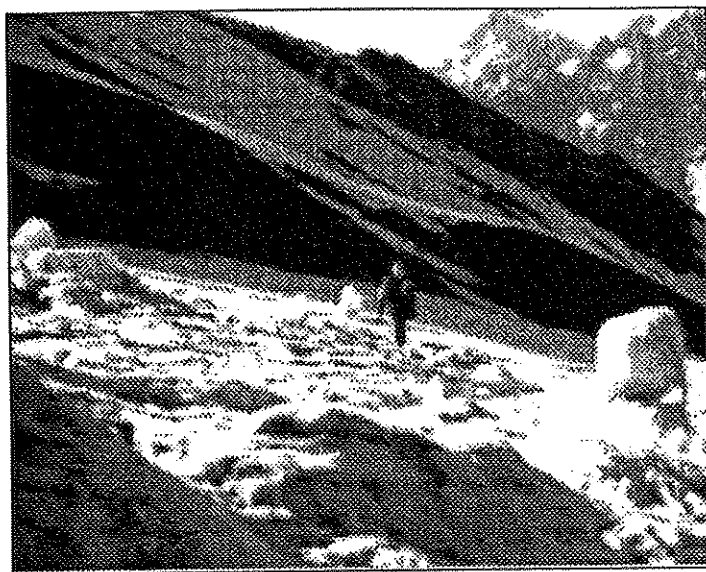


Photo 42: Crossing avalanche track, Shitidar.

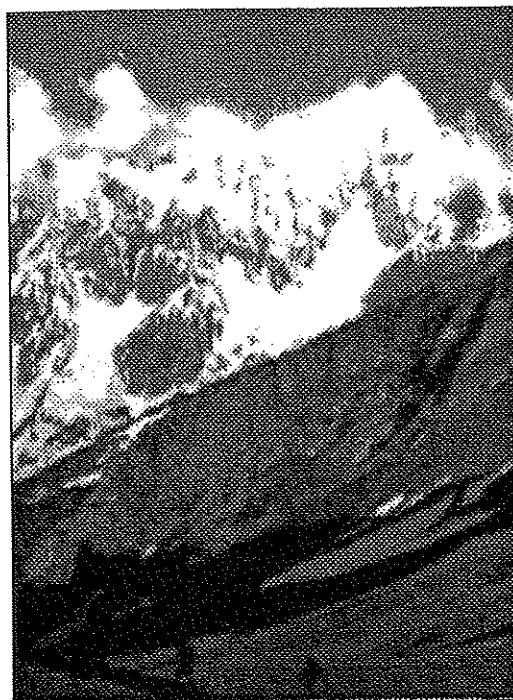


Photo 44: Climbers in gully, Shitidar.

The views into Beas Kund especially at sunrise were humbling, and through the gap above the top of the Solang Nala there was an astounding view of snowy peaks with Deo Tibba dominating the view. This was our first experience of climbing above the snowline in the Himalayas, and our senses were being continually overloaded by everything around us.



Photo 45: Shitidar, from gully exit. Line shows route to col.



Photo 43: Beas Kund at sunrise, with Hanuman Tibba dominating skyline.

It took us six hours to reach the exit of the gully, our altimeter only reads up to 4000m so distances in hours, give an approximation of height gained from base camp. The route now diverged to the left along mixed ground ending at a serac which lead to Shitidar's west ridge. This part of the route seemed to take forever, as with every step we could feel our heart pounding.

Eventually we reached the serac. After a good rest and debate about the route, we started to climb. The route we chose involved

climbing what could be best described as a crack up the serac, the climbing was similar to a Grade II/III gully pitch on Ben Nevis, though the altitude made it seem really difficult.

cornices, and there was some deep soft snow in sheltered spots. The route unfortunately took us through deep snow, which was very soft, the trailbreaker here puffing and panting as we headed

arguments for turning back was Fran quoting Don Willians , she had seen in a documentary 'The mountains will be here next year, boy. Make sure you are'.



Photo 46: Beas Kund from serac, Shitidar.

From the top of the serac there was a small snow slope leading up to the ridge. Walking along the ridge up to the summit we could hardly believe we were there. The ridge presented no difficulties. The views from the summit of Shitidar (5294m) were superb. A 360° panorama of mountains. Though in the distance towards the south there appeared to be a build up of heavy clouds, which Ranjan said was the fast approaching monsoon.

Descending along the ridge we soon passed the point where we climbed onto the ridge. The ridge running to Ladakhi peak is at best described as undulating. The route climbs slightly as it crosses some mixed ground, which slowed our progress, the ridge at the top of the rise broadens slightly and then descends past some small pinnacles. Apparently snow cover here varies greatly, some years the snow is deep with the ridge well corniced, other years it has a light covering. When we were on the ridge there were no apparent

towards Ladakhi Peak. All that separated us from the summit was a col and about 100m of mixed climbing. From the top of the climb there appeared to be a snow ramp leading to the summit.

We were now faced with a decision, we could attempt the climb, for we had the equipment. But it would certainly mean a night on the ridge, for which we were not equipped. Or we could be sensible and return to camp. We opted for caution. One of the

The views above the col were dominated by Ladakhi peak (5342m). Behind Ladakhi Peak lies Kullu Peak and the 5928m Hanuman Tibba, from which a ridge ran off connecting it to Kulu peak, from our view point we couldn't see this ridge or the mountains, though from Beas Kund this ridge and the Solang pass are visible. The corrie headwall created by the Raigarh Glacier contains Ladakhi Peak whose north ridge connects it to Manali Peak (5669m) onto Makar Beh (6069m). All the ridges in this area appear to be well corniced have a lot of loose rock and have a snow cover that varies from hard snow to slush.

We retraced our steps to the col and set up abseil anchors. From here we abseiled down the serac and retraced our steps back to base camp, arriving at about 7pm very tired, hungry and thirsty. The next day was spent resting and rehydrating ourselves.

After our rest day we explored Beas Kund area. Scrambling onto the top of the moraines gave a



Photo 47: On the ridge, Shitidar.

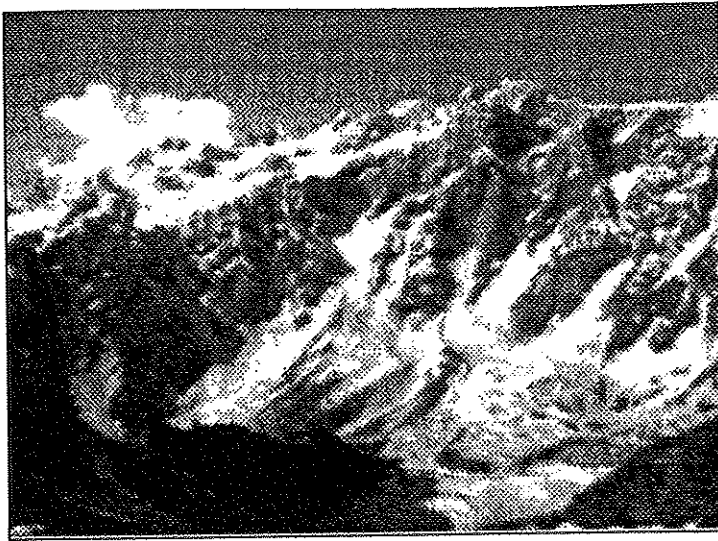


Photo 48: Beas Kund from the ridge, Shitidar.

different perspective of Beas Kund, as did the alpine plants that lived in between the rocks, showing some life in a lifeless white expanse. The moraines also gave a spectacular view of the retreat of the Solang Glacier. The Glacier itself is a dying remnant, though its size is still impressive.

The weather up to now had been kind to us, so we decided to spend one more day here before leaving, as the porters were getting uneasy about the prospect of the rains arriving.

Our final day in Beas Kund was spent bouldering and climbing some simple routes that we had seen.

We departed from Beas Kund after a leisurely breakfast, enjoying for the last time the magnificent views of Beas Kund. The route down initially took us through moraines, we then steeply descended the moraine slopes, bring us into snowfield, leading down the Solang Nala. Here we met a captain from the Jammu and Kashmir Rifles, there is an army cadet adventure camp near Solang, and regular soldiers are seconded here for training purposes, they also check on climbing/trekking parties papers.

Descending the Solang Nala is easy, so long as the Beas River is crossed at the first available snow bridge or boulders. The right hand

side of the valley is to be avoided, as further down the valley, it narrows and the right hand side becomes cliffs. Unfortunately we missed the crossings and ended up near these cliffs. To avoid retracing our steps, we abseiled a small cliff to reach a snow bridge and crossed the snow bridge.

Once on the left hand bank, there is a track that runs beside the river, we followed this track past the cliffs on the other side, the only difficulties on this part of the track were the buffalos that the Muslim Gujars bring to the higher slopes. These people inhabit remote valleys usually between 2500-3500m.

The river has to be recrossed in order to reach Dhundi, there is usually a snow bridge that crosses the Beas, at the end of the cliffs on the right hand bank. This snow bridge usually survives long after the others on the lower slopes have melted. Gaining this snow bridge is a bit tricky. If there is no way across, follow the track around into the side valley, here the army have built a Bailey bridge for access to the test borings. Fortunately for us the army captain we met earlier in the day joined our group and guided us across the snow bridge, he accompanied us into Dhundi and chatted to us

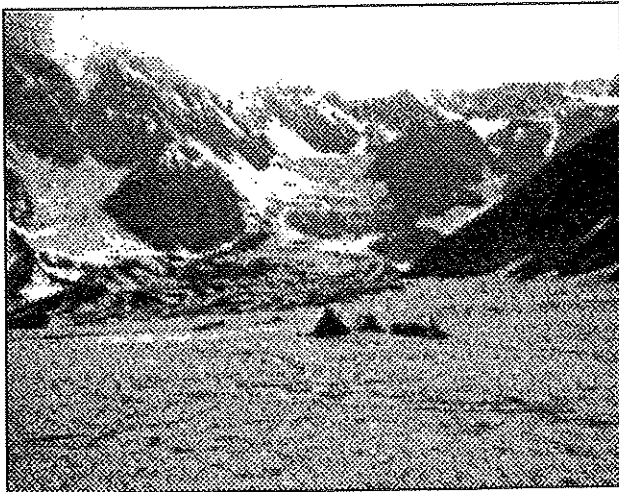


Photo 49: Campsite, Solang Glacier, Beas Kund



Photo 50: Beas Kund.

over some soft drinks. The track from the snow bridge to Dhundi goes through some birch woods before arriving in Dhundi. The captain also showed us how paper used to be made from the bark of the birch trees. In the past all temple books were made this way.

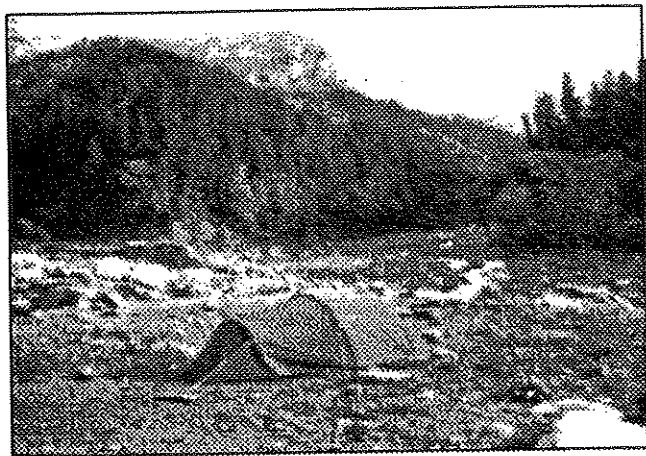


Photo 51: Campsite, confluence of Solang Nala & Seri Nullah.

Our campsite that night was at the confluence of the Solang Nala and a side valley, the Seri Nullah. The superb views were obscured by a storm, a reminder that the monsoon was nearing.

We returned to Solang along the Solang Nala. The route was along the track that we used on our journey up to Beas Kund. The only delay on this track was a traffic jam of sheep and goats. We reached Solang at about 1pm, and discovered that a market bus was due to go to Manali the following morning. So we camped on the

outskirts of Solang, amongst a copse of mature oaks.

The next day we took the bus into Manali. Our Indian friends returned the hired equipment to HIM, a task which took most of the day. They kindly offered to do

this so that we could sightsee. There was one task we had to carry out before departing from Manali, we found a Tibetan refugee camp and all the expeditions surplus food and fuel

was given to these poor but cheerful people.

That evening we took yet another overnight bus to Shimla. The journey itself was uneventful, though on arrival in Shimla we were one rucksack down. At some point during the journey someone had moved the canvas tarpaulin and cut the ropes that were lashing the rucksacks down. The expedition leader, V.N.Shukla's rucksack was gone (a gift from Scotland), though all he could say was 'I am glad that it was not one of yours, as it would of spoilt our visit to India.' A couple of hours later and after a visit to the police station, we were back in Shoghi.

Our friend Ranjan invited us to stay with his families guest at SATH, which his father runs. Ranjans father is himself an accomplished mountaineer with a wealth of experience (about 40 years worth, including time as a tutor on the High Altitude Instructors course, imagine



Photo 53: Loading up in Solang.



Photo 52: 'Traffic Jam', road to Solang.

teaching at 6000m on Kamet, while going to the summit) and qualifications. It was fascinating to listen to this gentleman, recall facts and stories in answer to our questions.

Staying with Ranjans family in Shoghi, for three days before our return to Delhi. Was a fascinating insight into Indian family life and customs. Our time was spent relaxing in their orchard garden

or in sightseeing.

The Shimla area contains some fascinating relics of the Raj, there is the railway and the places. Amongst the places visited was Wildflower hall, Lord Kitchiners summer residence when he was commander of the Indian army, the Woodville Palace Hotel once a palace and recently used as a set in *The Jewel and the Crown*, adapted from the *Raj Quartet* by Paul Scott, as was most of Shimla. Outside Shimla we visited Glen Urquhart, a beautiful valley with waterfalls that reminded us of Scotland. Further afield we visited Chali with its summer palace of the Maharaja of Patiala, now a hotel and the highest cricket pitch in the world, on which we played football.

However, all good things must come to an end and it was soon time to return to Delhi. We Were to take the mountain railway from Shoghi to Kalka, then a conventional train to Delhi (We would recommend to anyone visiting the area, to travel at least one way by train). The mountain railway was built to solve the logistical difficulties of access to Shimla. Before the railway when the capital (firstly Calcutta then Delhi) was moved to Shimla, hundreds of mules and porters shifted official files, luggage and

other paraphernalia into the mountains. As government grew more complex the annual exodus became bigger and more expensive. A railway was needed. Plans were drawn up in 1847, but it was not until 1891 that the railway opened to freight traffic, passengers being carried in 1903. The railway is a triumph of Victorian engineering, the railway being 96Km long and containing 103 tunnels and 24 bridges.

The train takes about five hours to journey from Shimla to Kalka, the pace of the journey being gentle, affording ample opportunity to take in the beautiful mountain scenery that unfolds at each turn. There are 18 tiny stations that the train stops at, each one a picture postcard of the past. For those interested in railways the narrow gauge railway operates using Neal's Token System. A token in a leather pouch is exchanged at each station. This token is inserted into the signals allowing operation of each section. Apparently this system is now only used here.

At Kalka we changed into conventional air-conditioned trains, this journey though fast, is totally devoid of character and

charm. After 4 hours we reached Delhi and the heat. We hastily retreated into our air conditioned hotel, which luckily had a fridge and satellite television, so watching BBC Asia we caught up on all the depressing world events.

As we were in the hotel waiting for the taxi, there was a short burst of rain. As we started our taxi journey, it started to rain heavily. Children and their parents

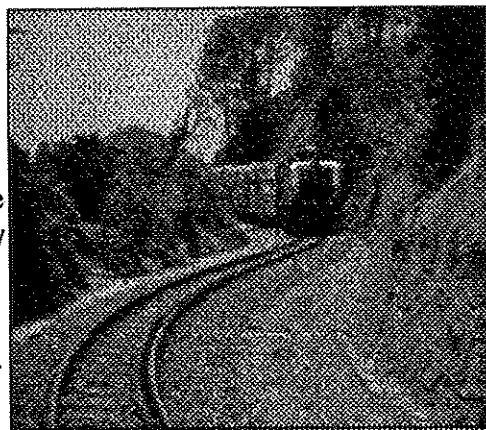


Photo 56: Shimla-Kalka narrow gauge railway.

danced in the streets then beat a hasty retreat indoors. This disturbed the taxi driver, for he stopped and a friend was taken on board. His job, to hang out of the window and manually operate the windscreen wipers. By the time the taxi reached the airport the monsoon was getting started.



Photo 54: Bridge & prayer flags. Manali.

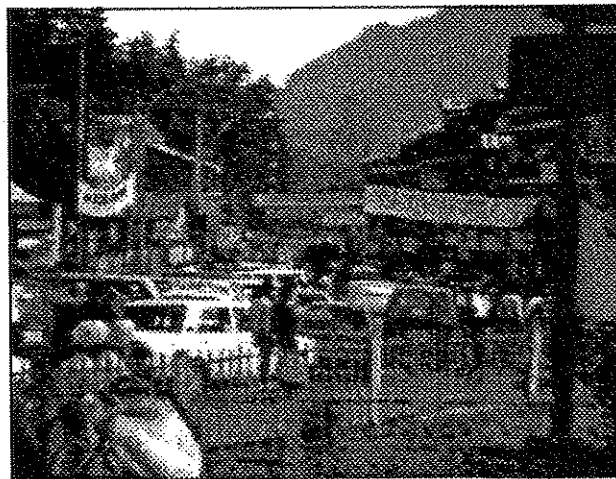


Photo 55: High street, Manali.

Part Three: Appendices

Appendix One

Table of events.

9 th June	Arrived Delhi 6am.
10 th June	Departed Delhi 11pm, Shimla.bus.
11 th June	Arrived Shoghi 8am, rest day,sightseeing.
12 th June	Spent day in Shimla (2130m), night bus to Bhuntar (1100m).
13 th June	Bus from Bhuntar to Manikaran (1700m). Walked to Kasol (1580m).
14 th June	Kasol to Rasol (2440m). Camped at about 2900m.
15 th June	Over Rasol Pass (3260m) to Malana (2652m).
16 th June	Malana-Rest day, walked down Malana Nala to Parbati Valley.
17 th June	Over Chanderkahn Pass (3660m) camped below pass at about 2900m..
18 th June	Walked to Nagar (1840m)
19 th June	Nagar to Kullu (1217m) by bus.
20 th June	Kullu
21 th June	Kullu/Manali (1896m)
22 nd June	Manali
23 rd June	Rohtang Pass (3978m), lift to Palchan walked to Solang (2200m).
24 th June	Solang Campsite to Beas Kund (3540m)
25 th June	Rest day.
26 th June	Climbed Shitidhar (5294m) and reached coll below Ladakhi Peak.
27 th June	Rest Day
28 th June	Explored Beas Kund area.
29 th June	Rock Climbing in Beas Kund.
30 th June	Walked to Dhundi (2840m), camped.
1 st July	Walked to Solang, camped.
2 nd July	Bus to Manali in morning. Night bus to Shimla.
3 rd July	Shoghi.
4 th July	Shoghi.
5 th July	Shoghi.
6 th July	Return to Delhi by train.
7 th July	Delhi
8 th July	Delhi
9 th July	Return to Scotland, 12:30am flight.

Appendix Two

Expedition Members

<i>Name</i>	<i>Age</i>	<i>Nationality</i>	<i>Occupation</i>	<i>Experience</i>
V.N.Shukla	46	Indian	Director, CEDT, Calicut India.	Basic Mountaineering Course - Nehru Institute of Mountaineering. Uttarkashi, Himalayan Mountaineering, Trekking over past twenty years.
Ranjan Thakur	25	Indian	Instructor SATH	Basic, Advanced, Search and Rescue Courses- NIM. Teaches adventure skills to children. Has taken part in several Himalayan expeditions, also enjoys rock climbing in HP.
Fran Gilchrist	27	Scottish	Senior Technician, Glasgow Polytechnic.	Dec 91 Garhwal , trekking Winter rock climbing , mountaineering. August 91 Pindos Mts,Greece- trekking, climbing. Jul 90 Atlas Mts, Morocco trekking and climbing Nov 86 Tour de Mont Blanc. June 1985 Backpacking in Norway. Scotland- Summer Hillwalking, Rock climbing. Winter Snow & Ice climbing, Hillwalking.
John Gilchrist	29	Scottish	Technical Officer, University of Paisley .	Dec 91 Garhwal , trekking Instructed Winter rock climbing/mountaineering. Jul 90 Atlas Mts, trekking and climbing. Aug 91 Pindos Mts, trekking climbing. April 84 Norway Rockclimbing. 82/3 Alps mountaineering. Scotland,Summer Hillwalking,Rockclimbing.Winter Snow Ice climbing, Hillwalking.
Dr N.K.Singhala	32	Indian	MO, Civil Hospital, Joginder Naggar,HP 176 120, India.	MMBS, Basic course HIM Manali. Expedition Doctor in 1991,90 Indian expeditions.
M ^{rs} Rajnana	40	Indian	Head, Microprocessor Labs, Indian Institute of Technology, Madras.	Adventure Course NIM. High Altitude Treks in Himalayas.
Amit Shukla	18	Indian	Student, IIT.	Basic Course- NIM.

Appendix Three

Clothing and equipment used for trekking and climbing.

This appendix is intended to give an idea of equipment that we took from Scotland for the expedition. We intended to travel lightweight and climb alpine style. Our past experiences travelling and climbing have resulted in us continually cutting down the amount of clothing and equipment used. The reason for this list, is to show that it is feasible to travel and climb light in the other side of the world. Without massive baggage trains of porters, if you are prepared to carry your own kit.

Johns Kit.

Basic Trekking Kit

Berghaus Pulsar 65L
Rucksack
Side pockets
Litchfield Hornet 2 tent
Ajungilak Igloo Sleeping Bag
Expedition Karrimat
Warm Hat
Bush hat
3 T Shirts
Fleece
Climbing Trousers- 2 pairs
Shorts
Underwear
Socks-3 pairs
Trail Boots
Gloves
Trango Extreme Jacket
Clothes washing kit
Personal first aid kit
Mug
Waterbottle
Mess Tins
Knife, Fork, Spoon
Toiletries
Head Torch
Towel
Penknife

Climbing Kit

Insulated Jacket
Helly Hansen Thermals
Fitzroy boots
Crampons
Ice Axe
Harness
Figure of eight
Screw gate karabs
Glacier Glasses
Gaiters
Inner mits
Over Mits

Extras

Manual SLR Camera
28mm & 50mm lens
Film
Walkman
Tapes
Batteries
Books
Notebook.
Casio Wristwatch/
Altimeter

Approx weight 27Kg

Frans Kit.

Basic Trekking Kit

Berghaus Pulsar 65L
Rucksack
Ajungilak Igloo Sleeping Bag
Expedition Karrimat
Warm Hat
Bush hat
3 T Shirts
Fleece
Climbing Trousers- 2 pairs
Shorts
Underwear
Socks-3 pairs
Trail Boots
Gloves
Baltero Mountain Jacket
Clothes washing kit
Personal first aid kit
Mug
Waterbottle
Mess Tins
Knife, Fork, Spoon
Toiletries
Head Torch
Towel
Penknife

Climbing Kit

Insulated Jacket
Helly Hansen Thermals
Fitzroy boots
Crampons
Ice Axe
Harness
Figure of eight
Screw gate karabs
Glacier Glasses
Gaiters
Inner mits
Over Mits

Extras

EOS 1000F Camera
35-80mm zoom lens
80-200mm zoom lens
Film
Walkman
Tapes
Batteries
Books
Notebook.

Approx weight 21Kg

Equipment Hired.

The following equipment was hired from the Himalayan Mountaineering Institute, Manali. The advantage of hiring equipment is that baggage allowances can be conserved. The quality of the gear hired can vary greatly, from new to well used.

100m 9mm rope
50m 11mm rope
3 long slings (2.5m)
4 short slings (1m)
Deadman
Snow stake
Selection of Karabiners

4 Friends, size 1-3 and an extra 2
9 Pitons - 3 shallow angle, 2 offset blade, 2 angles
2 leepers.
Hexentrics one set, size 7-9.
Wired nuts, one set from size 1-9.
2 drive in ice screws.

Appendix Four

Summary of expedition Expenses

Due to the complexities of changing money in India at the present (as I described in the main report) I have given all costs in Indian Rupees. As a guide, the rate of exchange on our departure from India was £1 to 57 Rupees.

Summary of Expenses.

Equipment Hire	Rs. 4,836
Provisions	Rs. 11,975
Travel/Transport	Rs. 6,035
Porters	Rs. 9,910
Peak Fees	Rs. 11,364
Miscellaneous	Rs. 8,680
	Rs. 52,800
Contingency @ 10%	Rs. 5,300
<u>Total</u>	<u>Rs. 58,100</u>

List of equipment hire charges

Item	Total Hired	Rate	Days	Cost
Karrimats	9	1.00	22	198
Sleeping Bags	9	7.00	22	1,386
Feather Jackets	9	3.00	10	270
Kit-Bags	9	1.00	22	198
Ropes	3	4.00	10	120
Pitons	9	2.00	10	180
Slings	7	1.00	10	70
Deadman	2	1.00	10	20
Karabiners	31	1.00	10	310
Karabiners	10	1.00	22	220
Friends	4	4.00	10	160
Hexcentrics	3	2.00	10	60
Wired Nuts	9	2.00	10	180
Ice Screws	2	3.00	10	60
2 Man Tent	2	15.00	22	660
Mess Tent	1	25.00	22	550
Tarpaulin (Canvas)	1	5.00	22	110
Shovel	2	2.00	10	40
Jerrycan (20L)	1	2.00	22	44
			Total	Rs.4,836

List of Provisions

(18 days on-camp cooking only for seven expedition members, one cook, one cooks assistant and seven porters)

Item	Quantity	Weight (Kg)	Cost	Total
Boiled Eggs	128	6.40	1.25	160
Cheese cubes	150	2.25	2.00	300
Bread	10	4.00	10.00	100
Chocolate	300	12.00	3.50	1050
Packet Soup	50	10.00	15.00	750
Packet Noodles	100	10.00	6.00	600
Biscuits	150	15.00	4.00	600
Lemons	40	2.00	0.50	20
Upma Mix		13.00	35.00	455
Jam		5.00	60.00	300
Cheese Spread		5.00	90.00	450
Wheat Flour		40.00	8.00	320
Rice		20.00	16.00	320
Dal		7.00	20.00	140
Cooking Oil		14.00	55.00	770
Shelled Ground Nuts		10.00	32.00	320
Cashew Nuts		3.50	200.00	700
Rasins		1.00	200.00	200
Boiled Sweets		0.75	25.80	20
Tomato Puree		5.00	25.00	125
Potatos		20.00	8.00	160
Onions		15.00	8.00	120
Shelled Peas		14.00	14.00	196
Carrots		3.50	10.00	35
Cabbage		7.00	10.00	70
Cauliflower		7.00	10.00	70
Green Dhania		0.70	50.00	35
Green Chillis		1.75	20.00	35
Tinned Meat		7.00	125.00	875
Milk Powder		16.50	60.00	990
Sugar		20.00	10.00	200
Tinned Fruit		25.00	40.00	1000
Tea Leaves		3.00	75.00	225
Sambar Powder		0.30	100.00	30
Garam Masala		0.35	100.00	35
Chilli Powder		0.35	100.00	35
Jeera		0.30	50.00	15
Haldi		0.35	50.00	18
Dhania Powder		0.35	50.00	18
Salt		4.00	2.00	8
Cleaning Powder		3.50	30.00	105
Totals		335.85Kg		Rs.11,975

Travel/Transport Costs

	Rate	Number	Cost
Delhi - Shoghi (Bus)	110	5	550
Cargo 500Kg			500
Shoghi - Shimla (Train)	20	9	180
Shimla - Bhuntar (Bus)	120	9	1,180
Cargo 600 Kg			600
Bhuntar - Manikaran (Bus)	10	16	160
Nagar - Kullu	15	16	240
Kullu - Manali	25	Numerous Trips	800
Manali- Marhi	45	5	225
Shoghi - Delhi (Train)	320	5	1,600
			Total Rs.6,035

Porter Costs

	Rate/day	Cost
Cook		2,500
Cooks Assistant for 7 days	90	630
7 Porters for 7 days	70	3,430
Cooks Assistant for 10 days	90	900
5 Porters for 3 days	70	1,050
2 Porters for 10 days	70	1,400
		Total Rs.9,910

Other Miscellaneous expenses

	Cost
Food expenses during travel, 5 days for 8 people, Rs.50/day.	2,000
Accommodation in Kullu (3 days) 8 persons Rs.20/day	480
60L Kerosene	300
5Kg High altitude fuel	400
3 Pressure cooker (Hired) x3	2000
3 Stoves (Hired)	1500
Cooking Pots (Hired)	2000
Total	Rs.8680