act 26466

Ac

# THE NORTH Wales

96/7

TION

A Big Wall

Adventure

## Southern Greenland Expedition 1996

# THE NORTH WALES SOUTHERN GREENLAND EXPEDITION 1996

#### **OBJECTIVE**

The East tower of Nalumasortoq in the Tasermuit Fjord region of Southern Greenland near Cape Farewell and other peaks in the area.

#### CLIMBERS

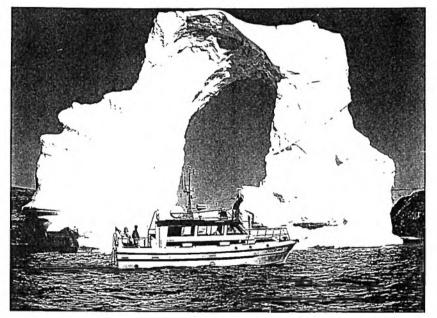
Nigel Shepherd Ian Wilson Louise Thomas Mike Turner

#### **CONTACT ADDRESS**

2 Glanffrwd Bryn Road Lllanfairfechan Gwynedd LL33 0SD

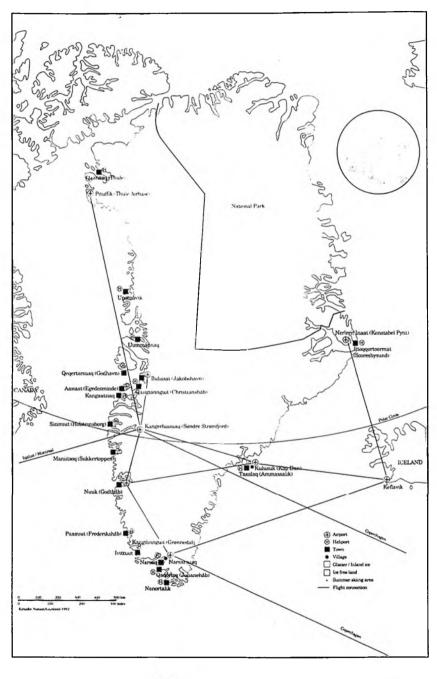
Tel & Fax 01248 680357

## Welcome to Greenland



## Summer 1996



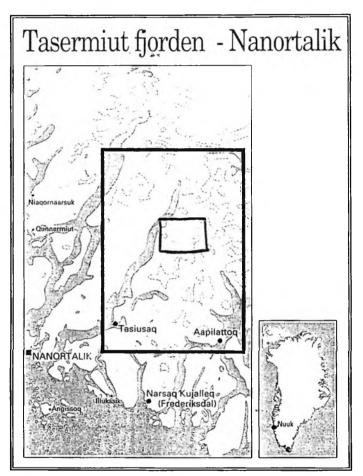




Norgård Mikkelsen a/s. Edited as at 20 March 1996. Photos: Greenland Tourism a/s / Lars Reimers, Lars Mjaaland and others

### Vandrekort Sydgrønland Hiking Map South Greenland Wanderkarte Südgrönland

Scale 1:100.000 interval 25 m.







#### KEY TO MAP

- The green shaded areas represent glaciers in the immediate vicinity visited.
- The orange shaded area shows the location of the Towers of Nulamasortoq
- BC denotes the two camps used as a base from which to climb.
- The dashed line indicates the approximate line of the path.
- The landing points marked on the shoreline are ideal depending on which side of the river a team wish to base themselves.
- The scale of the map is 1:100,000

GREENLAND

OBJECTIVES ; To climb new routes in the area of the Tasermuit fjiord.

ACHIEVEMENT; 700m new route on Nulamertorssuaq "Umwelten" Twid turner and Louise Thomas (3days) ED E5 A1.

Second ascent Moby Dick 1300m 9- A2, Ulamertossuaq Twid Turner, Louise Thomas(1st female ascent of Ulamertossuaq)

After a night of amazing hospitality in Copenhagen ( 4 of us were put up in a one roomed flat by a Danish climber and his 9month pregnant girlfriend,) we flew from Denmark into the desolate airstrip of Narsarsaq .

Thinking that we were heading for some far off remote culture we were surprised to be greeted with the strains of Scotland and England football teams singing "God save the Queen"

Negotiating our luggage had become a bit of a problem at Copenhagen but strangely nobody seemed to bother as we lugged our hefty sacks aboard the Sikorsky helicopter on the flight from Narsusarsaq to Nanortalik. A fantastic way to travel if you can afford it and you don't mind that stomach in the mouth feeling at every jolt and bump. 40min later we touched down in Nanortalik. Smooth so far but then it began to rain

We settled in to our little room above the tourist information and shop, well looked after by Rene. Rene is the tourist officer for Nanortalik. he is an excellent source of information and hires boats and equipment, provides accommodation and generally sorts things out. Outside the rain wetted window sat our deflated inflatable Avon boat, our freight was locked up till Monday and the main 2 shops were shut.

It rained sometimes hard some times light but it rained. We walked every lump bump and hill in and around

Nanortalik. Monday came with the winds, the shops opened, our freight was released and the ice floated in . The more we watched the more it filled the harbour. We were packed ready and stuck. Nothing was venturing out into the ice . So continued our wait everyday a new plan more hope but Monday, Tuesday, Wednesday passed with the ice laying siege to Nanortalik. Finally on Thursday ( a week since we left home) a fisherman from a village at the mouth of the Tasermuit Fjord reached Nanortalik and agreed to take us on his return journey and then on up to our base camp 30 km further into the fjord.

It was an exhillerating journey through the ice and into the gradually growing mountains. There is little that will prepare you for the impressive massive sweep of rock that is Nulamertorssuaq. Beginning only 500m above the water it then continues up for another 1300m where it appears to abruptly stop. It is easy to why it is called the El Cap of Greenland and as difficult to ignore.

Base camp was quickly established .The mosquitoes being every bit as bad as every one had described.

It is not a place to sit about and relax even with our Chinese paddy field mosquito hats.That evening Twid and I headed up the valley to reconnoitre the way and the possibility of a new line on the north face of Ulamertossuaq . After an hour of bush whacking we decided that firstly the path was on the other side of the river and secondly the North face was singularly unappealing.

We were inspired by this mountain and decided to pack climbing sacks and head up, convinced that we could see a line on the NW face left of the Austrian corner.

In the early morning we all departed in our opposite ways, bent under massive sacks. The other climbing pair Nigel and Ian were to attempt a new route on Nulamertorssuag further up the valley.

2 and a half hours later, hot and sweaty under our mossy nets we stood under the face . A short serious scramble up grassy rocks( we new there had been a reason for carrying ice axes and it was not for the glacier) took us to a leftward slanting crack line and the start of the climbing.

For 3 days we climbed and fixed ropes despite early starts and midnight finishes progress was very slow. 3 days and 300m of verticle height. The climbing was not often really difficult, technically but it was often on disintegrating granite. Moving to the cracks did not always provide security desired, as they were so filled with stunning little flowers, a botanists delight, a

2

climbers nightmare. We had reached a ledge at 300m The route did not feel like it was flowing, every inch was a struggle moving right and left to find a way through, gently over the rotten rock, furrowing amidst the moss campion for a crucial placement. Now from the ledge we could see up and left to a curving corner that arced to a roof, above uncertain ground that hopefully led to a ledge and then a corner that we could not see into but we hoped would continue to the top. The plan now was to move on to the wall and push up living from the porta ledge.

After another midnight return to base it was almost a relief to hear the wind and rain . More tired than we had thought the following day passed between sleep and packing. It still rained the following morning but that kept the flies at bay while we trudged up the hillside eager to get established on the wall. Surprisingly the lichen covered granite dried quickly as the clouds bubbled and dispersed in the afternoon. True to form even hauling proved a struggle with ledges to be dragged across, corners, roofs and loose blocks to be negotiated. If there was something to trap the bags it definitely would.

There is something disheartening in a climb that never hits you with a rush of adrenalin, that utterly fantastic feeling; be it from the climbing or the elegance of the line or the thrill of just being up there and was hitting with nothing surviving.This route but frustration. In the early morning we headed out up and left, by midday we were back at the ledge with high cirrus again showing to the west. Decision time we felt that we were forcing a line that felt contrived in its lower section and that the rock above was poor, the weather dubious and our time now limited. We felt that the top would provide a new line but requiring more resources, time and weather than we had available. То make best use out of our situation we moved right on to Moby Dick. In the time available we fixed 200m of rope, reckoning that would leave us about 800m of climbing. We slid to the ledge and lazed in the evening sunshine, for time th first relaxing ever, in warmth and daylight.Nothing else to do but recover for tomorrows exertions.

We woke at lam, the cirrus had dispersed. Night seemed little different to day with the exception of a large red moon. Today we would make our push.

5am we started. We would climb until we reached the top. Moby Dick is a climb that is meant to be . It takes an almost continuous crack system up a pillar in the centre of the face. The climbing generally ranges from finger, fist to offwidth. Long elegant pitches that feel like they are taking you somewhere.But the hardest climbing reserved over slabs and walls that link the route, ensuring that it is not for the feint hearted. Fortunately we were feeling anything but faint and we ploughed on upwards. With height came views out across the mountains, the ice cap and the weather. Again high cirrus had tracked in but this was more the pattern that we were familiar with. Ever increasing layers of clouds building as the storm approached.

Time began to blurr we had had no concerns about darkness but this night had a certain gloom about it. Two pitches to go. With relief we pulled on to a ledge the first for about 16 hours. One aid pitch and one horrible chimney to go. Darkness felt close and the rain began to spit gently. The aid proved to be easy and Twid launched off up the icy chimney that cut through the roof onto huge flat plateaux. Hesitation on this could have proved fatal as sticky rubber on ice are no fair match. The rope disappeared steadily and then rattled out at great speed . I could only assume and hope that we were up .With no more rope to give. I began to climb into the chimney pushing knees, elbows and bottom against the ice. Т squirmed my way up. Quite suddenly an arm flopped over the top and I joined Twid We were there. In the gloaming we attempted summit shots. Unable to see through the camera if we were in the picture or not!

Abseiling into morning through the grey of the Arctic night we reached the top of our fixed ropes, here our climbing rope jammed above. Too tired to care, we abandoned it for sleep.

The rain began with our descent it continued as we dozed wearily beneath the fly of the porta ledge. Disorientated by time we eventually roused ourselves and began the long process of freeing ropes and clearing the route. Late that Friday night we hauled massive sacks down off the snow and fully laden we staggered on down to base camp.

The next 2 days we slept and carried loads back to camp through the continuing wind and the rain. Our peace was broken by the arrival of Gerry Gore,Silvo Karo and Tony on a light weight trip; so light weight that they appeared to have forgotten most of their food! We shared supper and stories describing the towers that still hid in the cloud. Monday morning bought pictures to our words not quite as described as the faces were now plastered in snow.

The walk to Nulatorsussuaq took us up along a valley past the den of a family of arctic foxes who would visit our camp, then we continued on to coffee with Ian and Nigel. 4hours from base we dropped kit at the base of the snow and studied the walls of the left tower for a line to climb in our remaining days. The snow cleared quickly, Nigel and Ian moved up to the base of their route. We dumped our kit and headed back for food and the porta ledge.

An early start had little effect on our frustrating Tuesday, which was spent ferrying gear up and down the base of the left tower on steep collapsing snow, trying to find a line that we felt was climbable in our remaining days. Eventually exhausted and wet we scrambled into our sleeping bags at the foot of some fine cracks that appeared to rise direct to the dip between the left and central tower. To our left Gerry and Co. settled down in their massive three man hanging home. 8oclock radio time we called Nigel Unusually Ian replied sounding a little uncertain. After I had waffled on about our frustrations he began to explain their much more unfortunate situation. Nigel had taken a short but hard fall, catching his heel, flipping him on to his back. Over the radio Nigel sounded shaken and in pain. We offered our help to evacuate him and his kit.We were concerned that Nigel would require medical assistance. Fortunately he felt that he was bruised and not broken and just needed rest.We agreed to call in the morning for an update and decided that our best plan was to fix all our ropes and return to the foot of the wall just incase.

It was before seven when we heard the banging and crashing of Jerry on breakfast duty. It still baffled me that we could travel so many thousand of miles and be woken his booming tones!

It was cold starting. The sun did not hit the wall until mid morning.We sorted and shuffled attempting to stay sleeping bag bound until the very last minute. Our morning call to Nigel and Ian was made there was nothing else to do but start. The cracks were steeper and marginally cleaner than our initial encounter with Ulermatorssuaq. The line was clear and continuous, steep and strenuous.Twid moaned as I took my time leading and insisted he led the next 2. I fought with hefty sacks and the ropes that we hauled to fix. By 8 we were tired and only 200m up the wall.At a push we could muster 300m of rope. Too tired to do more we slid down the rope. There is alot to be said for abseiling into bed! As I brewed we discussed our options ; to fix the remaining 100m , to go for the top yet we were unsure of the exact distance. Finally we decided to move the ledge up 100 allowing us to fix to 400m up the wall to give ourselves the best chance of summiting in a push. We would fix tomorrow and push for the summit the following day. This had the risk that the weather was threatening every day with high cirrus. Fortunately each day so far it had dispersed.

Hauling our kit soon warmed us.I jumared 100m and started hauling the kit while Twid released it and followed it up freeing it as the bag managed to find its way into every possible jam. 100m up we left the haulbag and portalegde. Retrieving the spare rope we returned to our previous high point.

Directly above was a big roof but the cracks led out and up right past a few tottering pillars of rock that some how the route and ropes managed to avoid. It was early evening as we reached the top of а right facing of rope left Twid pushed back around corner.With abit an arete to see across the wall to the trio beavering to our left. It was a stunning view the wall resembling El Cap. We left them hammering away.Back to our hanging bed.Retiring was abit more of an ordeal this night.As I got pumped trying to improve the belay, Twid fought with the ledge that did not want to flatten.Food was running low as we had over estimated how fast we could climb and underestimated the length of the wall. We also found that we could only stomach certain foods such as "High 5" bars.Organising the trip we freighted out some food which included 200 High 5 bars. They appeared in every nook and stuff sack. They became the standing joke but now they were a life saver.

A 5am start.I was already awake.I wriggled to find the gas cannister kept warm down my sleeping bag and reluctantly but automatically began the process of brewing, the stove hanging a safe distance below the ropes, the canister cradled to retain its heat.Its a long process but worth it.

Brought to life by coffee and jumaring the climbing continued. Today was all or nothing.It was Friday our third day of actual climbing. The line took us up right into the base of a chimney. The chimney was mine. I felt secure squirming in its confines but then pulled out the top to nothing. My mouth dry I tettered down to the left and found an awesome belay with relief I declared I was safe. We began to sense the summit or may be it was just hope. Twid struggled with some deceptively hard ground it forced him down. Determination over took fatigue his face taught with effort he pulled right into even less likely looking ground. It went, he was up, we were up.A short lichen covered crack and the mountain disappeared. With no where else to climb we sat at a sharp notch. On both sides the ground dropped precipitously away revealing yet another unclimbed face perhaps another trip.It was 5.30 and sunny we shared the last High5 bar and just enjoyed being there.

Descending we cleared our ropes leaving only our abseil anchors. We descended above a perched boulder.

Twid gently put his foot on it, as our ropes would pull across it.No force was required as his foot touched, it simply rolled away.Crashing down hopefully missing our ropes.

We reached our porta ledge to find that this was the only victim of the boulder. There was a hole straight through. Deciding that this was not the best place to spend anther night we packed up and headed down.Twid headed down with the haul bag leaving me to clear the stance and bring the ropes.No sooner had Twid reached the snow when a huge rumbling came across the wall as boulders cascaded down. Obviously Gerry, Silvo and Tony had come across abit of loose rock.Or may be it was a cunning plan to lay their hands on our spare food! Anyway they missed. Dragging 300m of rope and a tonne of climbing gear I finally caught up with Twid at the toe of the glacier.Despite the stormy sky we were too weary to move and despite the rocky mattress we slept well. No supper and no breakfast, empty tummies woke us. The thought of walking all the way back to the glacier was enough encouragement for me to put a sack on my front and one on my back and carefully fall my way to Ian and Nigels base.

We breakfasted and arranged to return to collect some kit for them. Nigel seemed to be better but still in a lot of pain.Heavily laden we headed for home.An hour from our tent the rain began, it never really stopped.

Sunday was spent moving kit down to base. We searched for the trio on the wall but the noises had stopped the snow began. Later we found that they had topped out and descended in the early hours of Sunday.

All cleared up and waiting we made chapatties, Nigel found mussels by the shore, the rain fell. We were ready and waiting to go home.

#### INTRODUCTION

The Tasermuit fjord is dominated by the mountain Ulamertorssuaq which presents a 1200 metre wall and, the largest face in the region, Ketil about a 1500 metre wall. Both mountains have received considerable attention over the years and each has a number of routes. Away from these two popular faces there are many more possibilities. In 1995 an expedition from the UK climbed a line in between the west and central towers of Nulamasortoq, the highest peak in the region at 2045mts. The towers are actually a satellite of the mountain and there are three altogether. A Swiss expedition attempted the central tower in 1995 but were forced to retreat after about 8 pitches. They returned in 1996 to complete the climb which gave sustained aid climbing at about A4 with some free.

Our intention was to climb the East Tower which is the largest of the three. The mountain itself was first climbed by a French team in 1960.

The expedition originally comprised 6 members but unfortunately two withdrew at a late date due to other commitments.

#### **EXPEDITION DIARY**

June 14/15

Travel from Manchester to Copenhagen to Narsasuaq to Nanortalik

#### June 17/20

Began preparations to go into fjord. Boat wasn't ready and couldn't collect freight until Monday 18th. In the meantime the pack ice drifted in making movement out impossible. Spent time walking around the peaks of the island on which Nanortalik is situated. Stayed in bunkhouse accom arranged by Rene Nielsson of Nanortalik tourist service.

#### June 20

Finally got in by means of local fishing boat. 4 hour journey along fjord via Tasuisaq, a very small community that survives on fishing and sheep farming, the only livestock in the region. Established camp on shores of fjord.

#### June 21

Carried load up towards Nulamasortoq. Very hard going through chest high dwarf willow and boulders. Met Swiss/Italian/French team who were close to completing climb on central tower. Dumped gear then went up to have a look at the wall. Returned to fjord.

#### June 22

Having been told about a path made good time with second load, about 3 hours, to establish our BC. Wilson carried up to base of wall (2 hours) while Shepherd went back down for a second load. On return to BC met with Euro team who had had an accident. Assisted with carry back to camp.

#### June 23

Carried more gear up to base of wall and began climb. Superb jamming crack for 2 pitches (120mts) led to large terrace. Established a camp. Returned to BC

#### June 24

Bad weather. Rain and mist enshrouded all. Euro team departed leaving injured to await rescue. Around midday heard unmistakable throb of a helico. Had flown in 50mt visibility along river but had difficulty locating landing site. Eventually landed to pick up injured climber. A remarkable piece of flying particularly as helico was 24 seat Sikorsky passenger aircraft.

#### June 25

Misty and overcast but cleared in afternoon. Went back to wall with more gear and jumared to C1. Returned to BC

#### June 26

Back up with final loads to remain on the wall. Stunningly beautiful day. Climbed 3 more pitches all free around 5b/c English. Superb climbing on excellent rock. Fixed rope in place and descended to Camp 1.

#### June 27

Jumared back up with more rope and gear to leave at top of rickety flake. Next pitches looked like might be hardest on the climb - a groove with very thin

crack. Superb free climbing at around 6a with good protection. Rock excellent but flaky. Managed only 2 pitches. Fixed and returned to C1.

#### June 28

Rained in the night, pouring by early morning and dismal. Got very wet. No sign of clearing returned to BC.

#### June 29/ July 1

Miserable weather. Heavy rain & mist continually. Turned colder and snowed down to below BC (around 500mts). July 1st dawned clear but peaks completely encased in snow. By mid afternoon had cleared enough to justify return to C1. Arrived to discover ledge banked out with snow and gear totally buried. Took long time to dig it all out. Much of it was very wet despite being in poly bags etc.

#### July 2

Due to short time available decided now to go lightweight and try to climb with minimum of fixing etc. Took bivvy bags and food for 4 days. No haul sack. Jumared up to high point and prepared to climb on. Very hard aid climbing up a 15mt shallow groove barred the way into the next crack system. Poor nuts made it slow going. A few feet short of reaching more reasonable climbing an aid point pulled and Shepherd fell about 10 mts catching his toe on a foot ledge and flipping him upside down landing heavily on his back. Taking stock of the situation it became apparent that the injuries were serious enough to preclude continuing. The climb was cleared on the descent. Arrived back at C1 unable to continue due to discomfort. Decided to stay and descend the following morning.

#### July 3

Decided to try to get off in one go. Ankle and back were now very uncomfortable. (*Subsequently diagnosed as torn exterior ligaments and partially ruptured achilles tendon*) Abseiled back to glacier and dragged/carried everything with us. Took interminably long. Arrived BC in afternoon. Wilson did several carries from glacier to BC.

#### July 4/7

Time spent at BC trying to recover enough to walk down to fjord. Weather superb. Wilson spent 2 days exploring the area including the area around Ketil and carried a load back to dump it at the fjord. The weather remained perfectly fine throughout. On the 7th we packed up and headed back down to the fjord, once again carrying everything out in one go.

#### July 8

Got picked up by boat and taken back to Nanortalik.

#### July 9/12

Spent 9th in Nanortalik packing and sending freight back then 3 days travel to get back to UK.

#### LOGISTICS

*Flights* were arranged through SAS all the way from the UK. All SAS flights go through Copenhagen. There are no direct flights from UK to Greenland. The last stage of the journey from Narsasuaq to Nanortalik is by Helicopter the one hour flight costs around £250 return. Travel by boat is possible and is cheaper but takes two days each way.

*Freight* We sent most gear and some food out by sea. It took four weeks to get to Nanortalik. This is essential as baggage allowance on aircraft is insufficient.

*Food* we sent chocolate and wall rations out in the freight and some staple foodstuffs. There are two supermarkets in Nanortalik both of which can provide everything needed if necessary. Costs are however very high. Only cash is accepted. There is also a hardware store.

*Fuel* only petrol and Camping Gaz are available in Nanortalik. Freighting gas proved to be prohibitively expensive.

*Radio* two radios were taken to communicate between the climbing parties and in case of rescue. These were useful but not essential. A permit is required from Greenland Telecom.

*Medical* supplies are essential. We took antihistamine, anti-biotics and strong pain killers as well as anti-inflammatories. All of which proved useful.

Mosquitoes surround any living thing in dense clouds and bite through thick fleece with little difficulty. Repellent is essential but more importantly a head net for use all the time! They were horrendously bad at the fjord, tolerable at BC and almost non-existent on the wall. We found that Essential oil of Geranium was an effective, if short lived, repellent.

*Equipment* We took about 400mts of fixed rope, and 2x 55 mt climbing ropes. In addition we had 3 sets of friends including very large sizes, a set of hexes and 3 sets of wires. We also took along a selection of pegs but didn't place any. 8mm bolts were taken and two were placed where natural anchors were non-existent or particularly poor.

*Insurance* was arranged through the Personal and Travel Underwriters Ltd. For this part of Greenland it is not necessary to put up a bond against possible rescue costs as it is in East Greenland. This was very reasonable and about 1/3 of the cost of the BMC equivalent.

*Maps* on a scale of 1:100,000 to the region are available and are recent surveys with 'trails' marked on. (These are indications of the way only, nothing actually exists) Campsites are also marked as are sites of historic and archaeological interest.

#### USEFUL CONTACTS

Rene Nielson Nanortalik Tourist Service PO Box 160 3922 Nanortalik Greenland Fax 00 299 33442 Leman Freighting Bradford Office Dealburn Road Woodroyd Industrial Estate Bradford BD12 0QN

Greenland Telecom PO Box 1002 DK - 3900 Nuuk Greenland.

#### ACCOUNTS INCOME

	£	£
Sports Council	800	
MEF	800	
Sports &Arts	500	<u>2100</u>

#### EXPENDITURE

Air fares/travel	4100	
Boat to fjord (rtn)	700	
Freight	600	
Insurance	232	
Food	500	
Accomodation	350	
Film & processing	400	
Medical kit	70	
Equipment	1000	
Tel & Stationery	100	
Radio permit	70	
Radio hire	50	<u>8172</u>
Net cost of expedition		<u>6072</u>

#### ACKNOWLEDGEMENTS

The expedition would like to thank the following for their very kind support, help and advice.

The MEF, The Sports Council for Wales and The Foundation for Sports and the Arts -all for generously making grant aid available to us.

The Lowe Alpine Group for clothing and packs.

Karrimor for clothing, packs and Hi5 bars

Salomon (GB) for boots

Ian Dring for first hand advice on the region

Rene Nielson for considerable and always generous help in Nanortalik

Cambrian Photography Colwyn Bay

Doug Cooper for his excellent advice on planning trips to Greenland

Tim for picking us up from the airport

#### The Flora and Fauna

Overall the plants that we observed were remarkably similar to those found in the Alps. The most striking difference is that many were to be found at sea level that would normally be above 2500m in the Alps. The time of year that we were in the area is also significant to those species we were able to witness in bloom.

Down at fiord level there were maram grasses on sandy high ground and hummocks and also interspersed in some profusion were hair bells and wild Thyme. Dwarf Willowherb was also common. As the ground rose from the sea crowberry and some heathers mixed with dense cushions of moss and lichens. The dwarf willow began immediately too though the dwarf birch seemed to begin a little higher maybe around the 75m contour. At this level things became very interesting. Boreal (yellow), lots of willowherb and a curious plant with leaves like ladies mantle and a flower like blackberry blossom was prevalent. Away from the wildness of Tasermuit Bistort was In sheltered places from the wind the dwarf willow and birch also observed. particularly might reach a height of 5 or 6 feet. A pale green orchid could be found both on sandy soil and boggy ground near to the river but nowhere else. The marshy ground was alive with buttercups and a tasty edible celery like plant. (Subsequently identified as Angelica) There was an azalea with pale cream flowers set into leaf clusters which when rubbed gave off the scent of pine mixed with eucalypti. At about 150-200 m contour there were dense growths of willow mainly and birch too. Arctic cotton grass was in good supply in and around marshy areas. More prevalent here but also seen both lower down and higher was juniper. Also in this region I saw a very tiny spring Gentian. The flower heads were about half to a third the size of it's alpine relative. There were lush grassy hillsides very similar to the tussocky ground of upland Snowdonia - always missing were the sheep though I kept expecting them to appear at any time! Grass of Parnassus was also evident as was a rather pretty purple flower clustered on top of a long stem. Up to about the 500mt contour the vegetation began to gradually shown signs that it was sheltering from the extremes of weather. Two plants, one with tiny and delicate blue flowers the size of a match head and another kind of Boreal, purple in colour were also fairly common. Roseroot grew healthily and plentifully all with wonderful yellow flower heads. Crowberry and heather were dominant as too the willow and birch though now much closer to the ground (clearly sheltered places had some growth up to about 4 feet) The lichens, abundant below but now positively luxuriant in their prevalence displayed the most vivid colours when given a good soaking by rain or mist. In marshy regions there were starry saxifrage, purple saxifrage and another cup like saxifrage. Moss campion was in clear evidence and was seen as high as 1000 mts or maybe slightly higher. The mosses were a vibrant shade of green and soft pillows of it lay in swathes over any boggy area right up to permanent snow level at about 6-700mts. (certainly some glaciers reached this Willowherb clung on right up to edges of the glaciers but was not in bloom low) whilst we were in residence at higher elevations.

I saw little variety of bird life. Large ravens occasionally. Snowbuntings bountifully and a very pretty bird with a flash of orange on its head - perhaps a fieldfare. I caught brief sight of two birds that appeared to be carrion crows but the sighting was milliseconds only. Arctic hare was seen on one occasion and the lower campsite was visited by a young fox frequently both at dusk and during the day. It seemed to be foraging amongst the dense lichen and grass cover of lower altitudes.

In summary the region was much more alive with a host of plant life particular than I had been given cause to think. The meagre soil is similar to that of the European alps at altitudes above 2500m but is, on the whole, supportive of more ground cover vegetation. The root systems of the willow, birch and juniper spread far and wide seeking sustenance as do many of the other plants that thrive in the deposits from glacial debris.

Photographs of many of the plants and lichens are available to interested parties.

Nigel Shepherd

