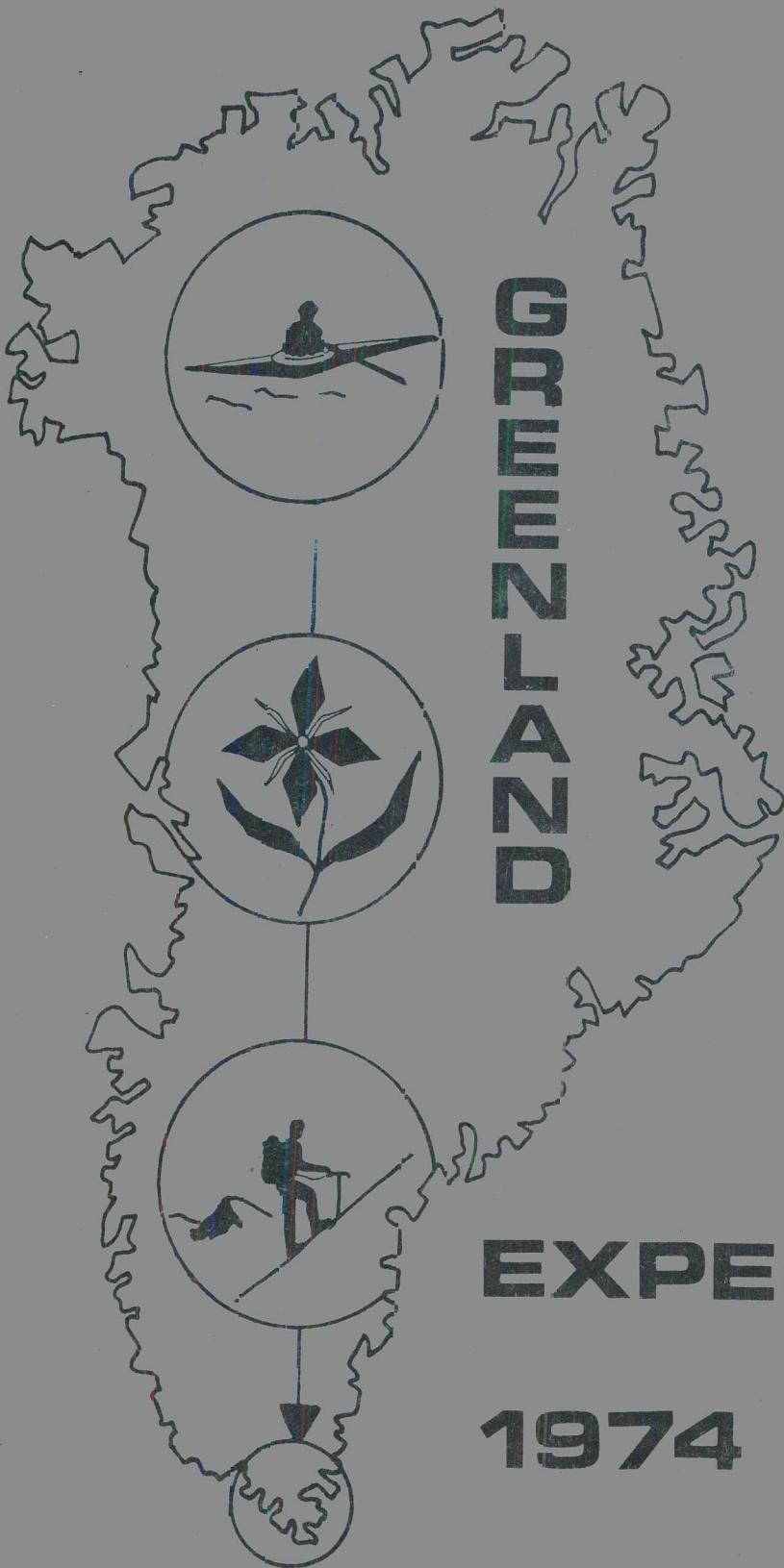


CAMBRIDGE SOUTHERN



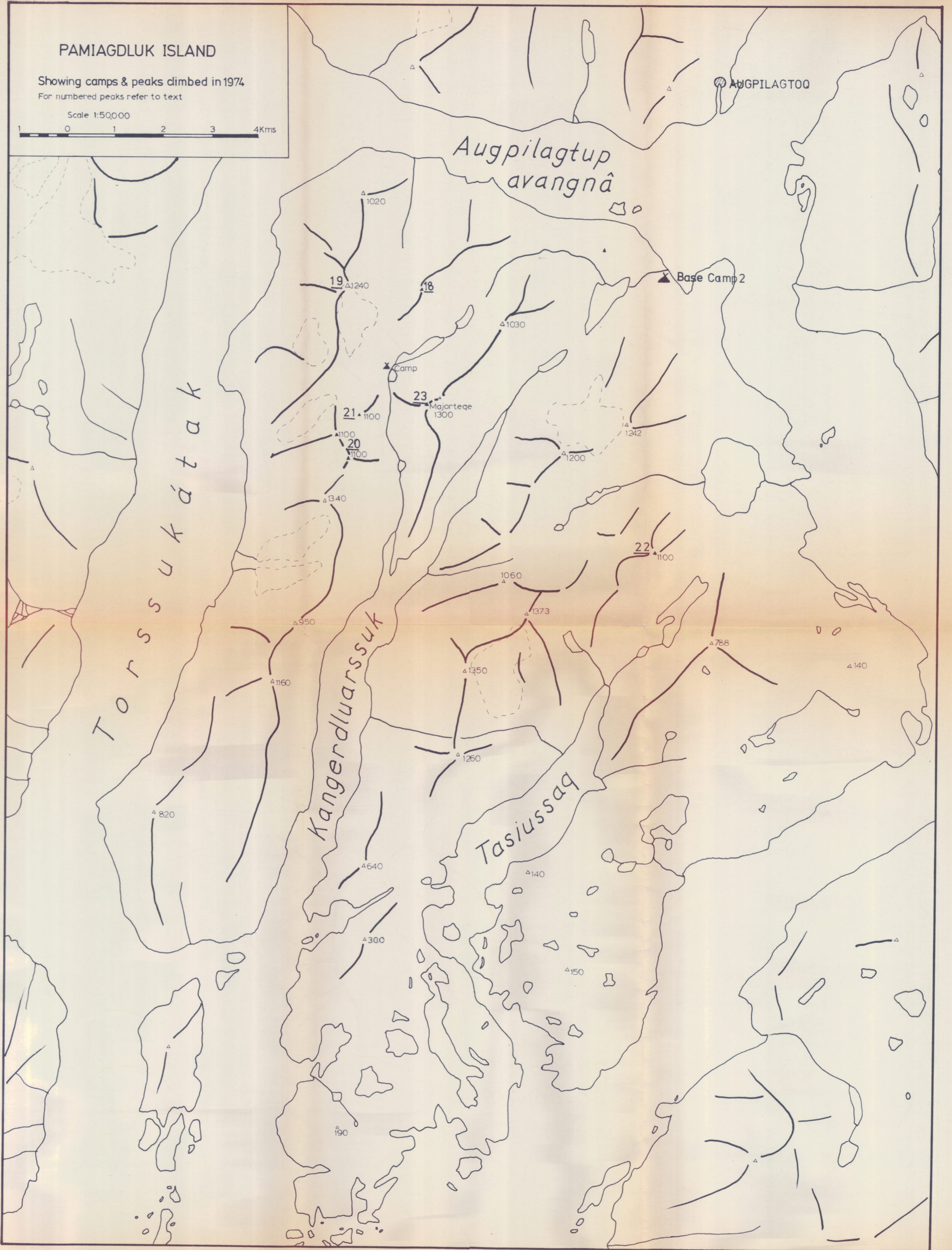
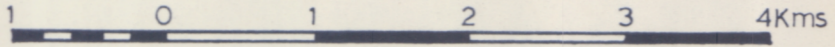
EXPEDITION

1974

PAMIAGDLUK ISLAND

Showing camps & peaks dimbed in 1974
For numbered peaks refer to text

Scale 1:50,000



**CAMBRIDGE
SOUTHERN
GREENLAND
EXPEDITION**

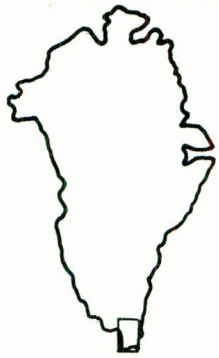
1974



Above: The members of the expedition. (Standing) Dave, Susie, Jeff, Rick, Greg, Gordon. (Sitting) Phee, Ineke, Tim.

Below: View north to Peak 1300m during the traverse of the ridge.

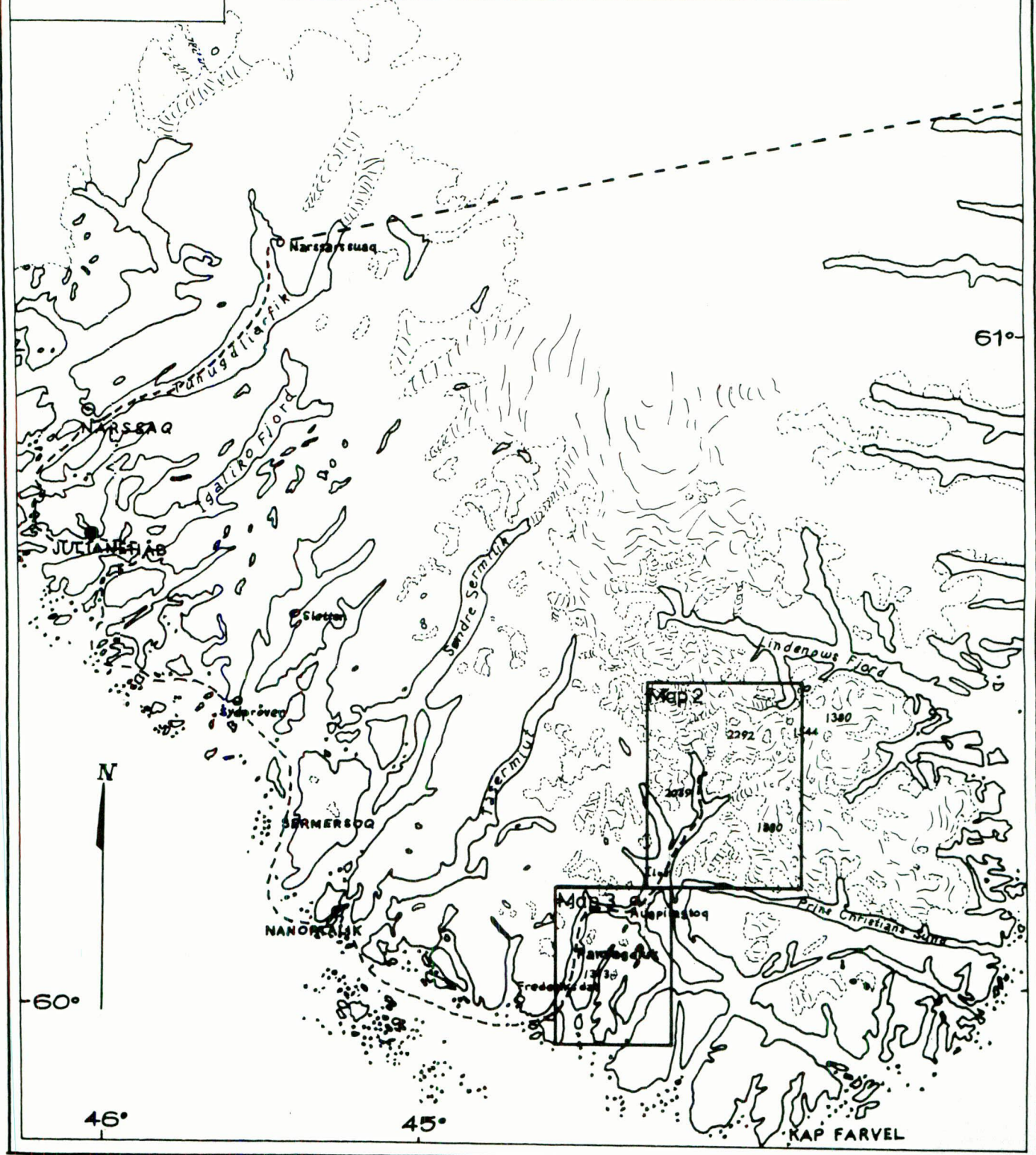
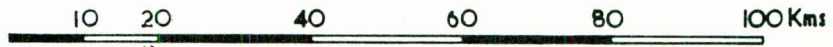




CAPE FAREWELL REGION

Showing areas visited

Scale 1:1,000,000



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Maps as Frontispiece and Endpapers

CONCISE EXPEDITION TIMETABLE

July 16 - Left Cambridge
July 17 - Flew Glasgow - Reykjavik
July 18 - Flew Reykjavik - Narssarssuaq
July 20 - Ferry Narssarssuaq - Julianehaab
July 23 - Ferry Julianehaab - Nanortalik
July 24 - Nanortalik - Igdlorssuit.
July 25 to
August 13 - Operating from Base Camp I
August 14 - Igdlorssuit - Niaqornaq
August 15 to
August 27 - Operating from Base Camp II
August 28 - Niaqornaq - Augpilagtoq
August 29 - Augpilagtoq - Nanortalik
August 30 - Nanortalik - Julianehaab
August 31 - Julianehaab - Narssarssuaq
September 3 - Flew Narssarssuaq - Reykjavik
September 4 - Flew Reykjavik - Glasgow and
returned to Cambridge.

EXPEDITION MEMBERS

- Rick Hoare - Graduate Electrical Engineering student, Pembroke College. Leader.
- Phillipa Hoare - Computer Programmer. Food and Botany.
- Greg Moseley - Geologist. Deputy Leader
- Ineke Moseley - Librarian. Food and Botany
- Dave Cornell - Graduate Geology student. Darwin College
- Susie Cornell - Undergraduate BA student. Ornithology.
- Jeff Moeller - Graduate History student. Selwyn College. Treasurer.
- Gordon Hickson - Undergraduate Anthropology student and Army Officer, Corpus Christi College .
- Tim Hurrell - Undergraduate Engineering student, St. Johns College, Dinghy expert.

INTRODUCTION

or Everything You Ever Wanted To Know About Expeditions, But Never Dared To Ask.

The best laid plans of mice and men, as the old adage runs, are wont to go astray, and this expedition was certainly no exception. In October 1973 Rick and Greg started looking into the feasibility of a trip to the Staunings Alps of East Greenland. There was a lot to be said in favour of a project to those mountains - the University Explorers and Travellers Club had been associated with no less than four expeditions to the Staunings in as many years, and we felt that another visit should be made using the accumulated knowledge which so much work in one area must naturally create. In addition, Dr Keith Miller, who had led several of these expeditions, worked in the same department as Rick and was readily available for further information.

But it became clear in November that we were fighting a lost cause. In recent years, the Danish Ministry for Greenland had become increasingly strict about whom it allowed to visit the east coast areas, and whereas the University had a respectable name and permission would almost certainly be forthcoming, there were two major factors to be overcome. Firstly, we would be obliged to wait until the very last minute before we were officially notified that we had received clearance from the authorities to go to Mesters Vig, and secondly, and in our opinion, more seriously, we would have to scrap any ideas of a mountaineering holiday and become scientists, as the Ministry took a dim view of "sporty" types in a place as isolated as the Staunings. Sporty types increased the possibility of an accident, accidents meant helicopters, and helicopters meant a loss of schedule to the mining company which operates from Mesters Vig, the only airstrip near the range.

Clearly we needed a change of plan, but man is a persistent beast and we adopted a compromise instead. During November Rick acquired eight scientists to add to the already large number of 12 climbers. The idea was that the boffins would screen the sporties, and perhaps raise a few bob for the cause, while the climbers did the heavy work and

route finding. But 20 people was too many; too much food; too many problems; and definitely too big a budget. The expedition was axed as a joint venture, leaving the scientists to continue to the Staunings on their own.

So as December drove us in to the fires and Christmas trees of another yuletide, we were back at square one. It was time to start again and throw a six, and by an extraordinary stroke of luck, that was what happened. Rick had invited Tim and Jeff to join the new group, but was still wondering where to go, when he happened to come across a photograph in a back issue of the Alpine Journal showing a range of massive granite peaks and glaciers. No area was given, but a search through the articles revealed that the peaks were in, surprise, surprise, Greenland. Not only Greenland, but southern Greenland. And it was common knowledge that although the Danes were wary of expeditions to the east coast, the south was a different matter altogether. The insurance would be less. And there were scheduled flights to nearby Narssarssuaq. (Four times a week in the summer). And there was a ferry from the airstrip to Nanortalik, which was on the edge of the mountain area itself. And there was less pack ice on the south coast.

A probe through the Scott Polar Library revealed a list of about a dozen expeditions which had visited the area in general. But right in the middle of the whole show lay the Ilua Fjord (the 'Central Fjord'), and there was only one recorded visit by climbers, the 1956 French Expedition. Suddenly it all seemed so simple - we had relatively cheap and direct access, there was no permission problem, there were unlimited peaks to climb, and the fishing was rumoured to be terrific.

In February 1974, the Cambridge Southern Greenland Expedition was properly born. With the first hints of spring, the best laid plans of mice and men came out of hibernation, and the real work began.

EXPEDITION ACTIVITIES

After the trauma of packing food night after night for several weeks, and resisting the temptation to try everything it came as a positive relief to load everything into a hired van and drive the whole shooting match to Glasgow airport. It was however, less of a relief to have to drive the van back to Cambridge! However, all nine of us finally left Cambridge on the 16 July and two days later we were in Greenland.

Flying into Narssarssuaq we found Herr Aage Barsted the Station Leader waiting for us. He was extraordinarily helpful and rapidly organised the removal of us and our ton and a half of belongings to an old warehouse about a hundred metres from the dock.

Narssarssuaq being a somewhat uninspiring place (at least at the beginning of the expedition) we were very pleased to board the KGH*ferry (everything is run by the KGH) the Taterak, for the four-day journey to Nanortalik. I say 'four-day' journey, although two of these days were actually spent in Julianehaab - the home port for the Taterak. We spent these two days walking in the hills behind the town in glorious, hot sunshine and large hordes of midges, the curse of Greenland. Back on the boat for the one-day trip to Nanortalik we indulged in an orgy of photography - icebergs, a quick seal hunt (unsuccessful) by the crew and the island of Semersoq, surely a climbers playground of the near-future.

Nanortalik held a very pleasant surprise in the form of Graham Hudson. Prior to leaving we had been corresponding with Graham, who was a "left-over" from the Leicester Polytechnic Expedition of 1971. He now proceeded to delight us with both his hospitality and efficiency. Having organised a truck to move us and our gear to a shed near his house, he fed and watered us (or rather Elsa-Marie did) and he had already arranged for a fishing boat to take us to our Base Camp at the head of Ilua Fjord.

So on the 24 July we started on the final leg of our outward journey on the 'Bodvi', a fishing boat. And very exciting it was too. As we chugged up

* Kongelige Grønlandske Handel

the fjord between the island of Pamiagdlok and the Torssukataq coast we were constantly amazed and thrilled at the fantastic spires and the huge rock peaks that seemed to overhang the narrow channel. Rounding the northern end of Pamiagdlok and passing the tiny village of Augpilagtoq we were soon having our first views of the area we were to operate in. Despite the evidence of the aerial photographs we were beginning to wonder whether our base camp site actually existed until we rounded a headland and the river delta we had chosen finally came into sight. Having chosen the exact location of our camp we rapidly unloaded our goods and chattels and waved good-bye to the Greenlanders on the Bodvi. It had taken us just one week from Glasgow to Base Camp surely a record for Southern Greenland Expeditions!

Our chosen site is known to the local population by the name of Igclorssuit. This, roughly translated, means 'big house' and is a reference to the ruins of a Norse homestead which is reputedly present (I say reputedly, as we were unable to find any conclusive remains although our investigations were somewhat desultory). The Norsemen had inhabited Southern Greenland from around 1000 AD for about 4-500 years and many sites are known and have been investigated (Refs 1 and 2). In 1884, Gustav Holm had camped here and had in fact crossed the col behind our camp and descended to Lindenows Fjord as had Richard Bogvad in 1932 (Refs 3 and 4)) Both these enterprising explorers were testing a legend that "savage and cruel people" would cross the mountains to raid the Greenlanders living in Lindenows Fjord in times past.

More recently the 1956 French Expedition had briefly camped here and snatched the two obvious mountaineering plums - Pt 2292 and Pt 1791 (See Map 2) which rise abruptly on either side of the valley. But we were in fact the first expedition to spend any length of time in the Kangersuneq qingordleq.

We rapidly settled in, and the day following our arrival three reconnaissance parties set out to test the access to various areas where we particularly wished to climb.



Above: Two of the girls fording a melt stream on the plain near Base Camp 1.

Below: "Majorteqe" seen from the west. The route takes the left hand skyline.



Before leaving Britain we had blithely (and somewhat naively) assumed that we would be able to find a route up the main glacier which reaches the sea at the head of the Kangersuneq qingordleq. In this hope we were fairly soon disillusioned. The snout of the glacier ended in ice-cliffs of 40 - 50 metres and although Dave and Tim spent some hours attempting to by-pass the cliffs by climbing around on the true left bank, it soon became obvious that our 'motorway' into the interior was not even a footpath.

However, Gordon and Greg had been more fortunate. The route taken by Holm and Bogvad proved still to be easy and the rounded nunatak at the head of the valley provided a good view of the glacier basin on the Lindenows Fjord side of the mountains. From here it would obviously be possible to climb several of the peaks surrounding the basin and that would certainly keep us busy for some days.

Consequently six of the party moved two tents and quantities of food and gear up into the vicinity of the col - at first on the west side of the col but later in the glacier basin to the east.

During this period of a week or so several previously unclimbed summits were climbed by Gordon and Jeff, and by Rick and Greg.

Meanwhile, our honeymoon couple (Dave and Susie) accompanied by Tim, had taken the boat and visited the opposite side of the fjord and found a feasible route up the valley between points 1951 and 1610. All three made the ascent of Pt 1610, and then Tim and Dave were successful in making the first ascent of Pt 2100 forestalling the French, who climbed it from the west, by a few days.

Phee and Ineke, in between spells of botanising and cooking bullied Tim into kicking steps up the peak immediately behind base-camp and were then most disconcerted to find a surveyors beacon on the summit.

Despite the positive aspect of this period it was discovered that unfortunately the rock (largely high-grade metamorphics) was incredibly bad. Consequently most of the peaks climbed were by snow and ice routes of moderate difficulty, and while it was satisfying in itself

to climb new peaks we had hoped to be able to complete some routes of high quality. Being planned on a flexible basis, we therefore chose at this stage to make a trip of a week or so into the area between Nup Kangerdlua and Prins Christians Sund. Oblique aerial photographs of this sector indicated that there were some very large peaks with high vertical walls which could give some very impressive routes. Consequently we used the boat to move seven of us plus gear to a site at the foot of the valley which leads up to an obvious snow col to the south-east. This gave access to the range of large peaks we hoped to climb.

Rick and Greg were the first over the col and to their consternation discovered that the rock on the nearest summits was, if anything, worse than any they had seen previously. Not wishing to tell the others without actually trying it out, they climbed a 300 metre buttress next to the col. It started well on good granite but after 100 metres they reached the rock which forms the basis of all the larger peaks. This may be loosely described by the term 'vertical weetabix' and only after six epic pitches of execrable rock did they manage to reach the ridge and descend to meet the others on the col.

It really was a most beautiful spot and while the majority of the peaks appeared unobtainable by anyone without a strong death-wish there were one or two summits that presented obvious routes. Accordingly Gordon Jeff and Tim reached two summits (finding a surveyors beacon on one) and the Hoares and Moseleys climbed a third. After climbing this peak a somewhat exciting boat-trip was made down the fjord to Augpilagtoq, a village of 200 souls, in order to arrange for a fishing boat to come and fetch the whole expedition and move it to the island of Pamiagdruk which had so excited us on our journey in. The reasons for this move were varied - the quality of the rock, the impossibility of the two main glaciers and, perhaps the most important, the fact that the island had made such an impact on us.

Of the move, perhaps the less remembered the better. The boat was exceedingly small and thus very overloaded. The slightest move by any of us tended to have alarming repercussions - and then the piston rings needed replacing halfway through the trip! But finally we arrived at our

destination and found a very pleasant site for our Base Camp II next to a clear running stream. The site of this camp is known as Niaqornaq to the local populace.

We thus entered on what was, in many ways, the most enjoyable phase of the expedition. The island is not large, while the peaks tend to be lower (up to 1370 metres) and the glaciers smaller. However, what it lacks in size it makes up for in quality. The walking is superb, the fishing good (we had caught nothing at our previous base) and the rock forming the tremendous spires on the island is sound, solid granite.

Thus our two weeks operating from this base were extremely satisfying. Several peaks were climbed and one route was made, to climb the peak of Majorteq, that really added the cherry to the cake. This peak of 1300 metres was at first dismissed as being impracticable but, as is often the case, Rick and Greg finally convinced themselves that it would be a piece of the proverbial and started out at three one morning to test the theory.

Having soloed up snow as steep as any climbed on the trip with only one axe and no crampons, a gully of loose basalt blocks was climbed to reach the saddle at the foot of the north ridge. Here to their great relief it was found that the rock was indeed sound and abounding in enough cracks to make it a real pleasure to climb. However the Great Referee in the Sky decided otherwise on the first occasion and after three pitches the combination of drizzle and lichen forced a retreat after nearly causing something a good deal more drastic. A rope was left fixed in order to avoid having to re-climb the second and third pitches. By this stage, the summer was well advanced and the weather proceeded to prevent a further attempt until it began to look as if the mountain would have to wait for another year. Eventually it became necessary to at least recover the rope and other gear which had been dumped and so, leaving the tent early ('just in case') a further attempt, much complicated by powder snow on the north facing slopes, was made. The weather turned out fine and after some fun and games on the first pitch (with no fixed rope and much ice) the route was pressed home to a successful and extremely satisfying conclusion.

After this final climb the weather finally cracked up and it was only at the last minute that a boat was able to fetch us from Niaqornaq and take us to Augpilagtoq in time to catch the Taterak. In this we were much helped by Jan Jorgensen with whom we spent a very pleasant evening prior to the journey to Nanortalik, Julianehaab and finally Narssarssuaq where the smorgasbord at the Arctic Hotel was fully able to cope with our expedition trained appetites. Perhaps Narssarssuaq is not so uninspiring after all!

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- 3 Holm, G and V Garde; Om de geografiske Forhold i Dansk Ostgronland Meddelelser om Gronland v. 9 No. 2 1889 pp 159-168
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Above: High camp on the col, in the mountains to the east of Ilua Fjord.

Below: View to the south from a high camp in the snow basin to the east of Base Camp 1.



CLIMBING SUMMARY

Numbers refer to peak numbers on maps 2 and 3.

- 1 Peak 1560m (estimated height): Rick and Greg: 27 July
The Peak lies on the ridge between 1791m and 1580m and was climbed by accident while attempting 1791m. From a camp near East Col, a way was found to the saddle west of 1580m. From there, the ridge was followed on mixed rock and gravel to the summit. Grade III.
- 2 Peak 1560m : Gordon and Jeff : 28, 29 July : Unsuccessful
From a camp on the col between 2282m and 1560. Beyond this col to the north was a sheer crevassed drop down to the icefield surrounded by Peaks 2282m, 1560m, 1500m, 1040m, 1290m, and 1660m. An easy scramble up the scree on the east slope and across a narrow snow ridge to the main massif. About 10 pitches were achieved ranging from diff to VS. First attempt was stopped by a steep grade IV ice gully. The second attempt went beyond this ice gully, but an impasse was reached higher up. The whole ascent was very dangerous due to loose rock.
- 3 Peak 1610m: "Honeymoon Peak" : Dave, Susie and Tim : 29 July.
From a camp near the saddle between peaks 1610 and 1951m, a snow slope on the south flank was followed to the summit. Grade II.
- 4 Peak 2100m : Dave and Tim : 30 July,
Making an early start from the same high camp, peak 1610m was traversed and a way found up a snow slope onto the shoulder of Peak 2100m. From there, a long gentle snow slope led to the summit. This was the highest peak climbed on the expedition. Grade II.
- 5 Peak 1500m : Greg and Rick : 31 July
From a camp in the snow basin to the east of East Col, an early start was made and the peak climbed by its steep but avalanche-free west ridge. Grade II ice. The high shoulder was crossed, and a final 50m of rock scrambling brought the pair onto the north end of

the flat summit platform. From there, the snow ridge to the south was traversed for half a mile to a prominent snow peak (unmarked on the survey map), estimated height 1415m.

- 6 Peak 1685m: (Sulugssugut or the Fish's Fin; incorrectly marked on the survey map as 1791m) : Rick and Greg : 1 August
From the camp as for Peak 1500m, a way was found through the crevasses onto the glacier lying under the north west face of Peak 1685m. A steep ice couloir was climbed above before breaking out left onto an ice face to avoid the summit cornices. Once the ridge was reached an easy traverse to the summit followed. Grade IV ice.
- 7 Peak 1650m : (estimated height) : "The Bullet" : Greg and Rick
1 August. From Peak 1685m, the snow ridge was traversed to the north until the east buttress of 1650m was reached. The final 150m of rock proved to be loose but not difficult. Grade III.
A descent was made into the snow bowl to the north east. Considerable difficulty was experienced crossing a line of large crevasses at the head of the valley, but thereafter the route was easy.
- 8 Peak 1420m / 1460m : Ineke, Phee and Tim : 1 August
From Base Camp 1, this peak was climbed without difficulty from the north west. A large beacon on top indicated that this was not a first ascent.
- 9 Peak 1290m : Gordon and Jeff: 2 August
From a camp in front of the rock buttress to the south of 1290m, on the icefield. Across a severely crevassed snow field between 1660m and 1290m, and then a good snow climb, Grade III, up the south slope. This led directly to the last 150 metres of easy rock to the summit.
- 10 Peak 1040m: Gordon and Jeff : 2 August
From 1290m along a long snow and rock ridge connecting the two peaks. A rock scramble for the last 100 metres up a dolerite dike.

- 11 Peak 1130m : Gordon and Jeff : 3 August
From the camp in front of 1290 across the snow basin towards 1544 a zig-zag snow route to the east face. The climb was hindered by a complete white out. Traverse round to the north side to an easy diff. climb to the summit.

- 12 Peak 1660m : Gordon and Jeff : 4 August
From the camp at the base of 1290m again. First half of the ascent was to the lower NW snow ridge leading up to 1660m, having crossed the snow field between 1660m and 1290m. A severely crevassed and crusty snow ridge across to the north slope, the south face dropped straight down to the icefield.

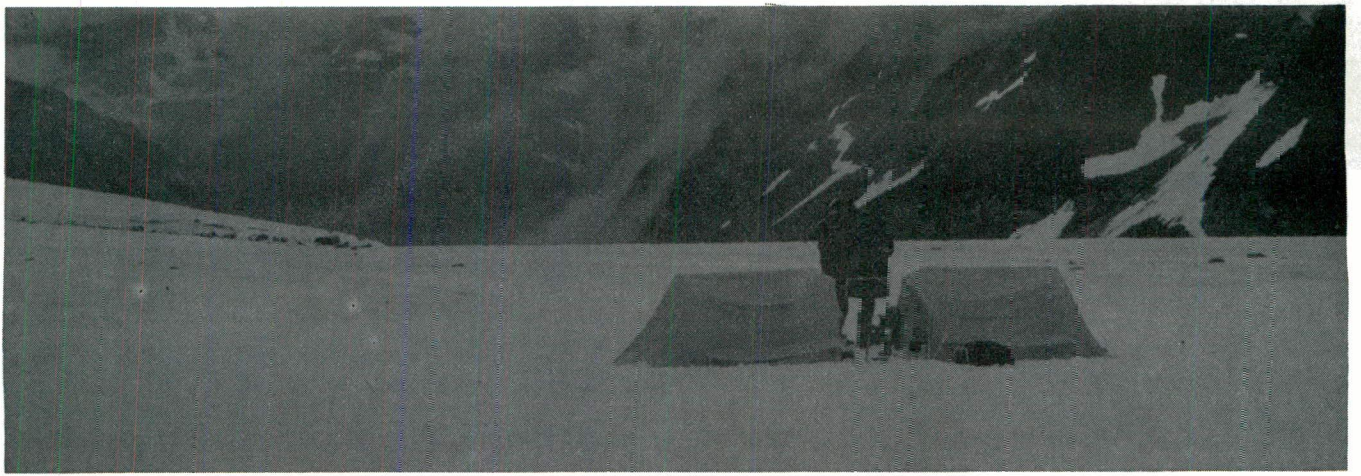
- 13 Peak 1590m: Gordon and Jeff : 4 August
Ascent in a sudden unexpected snow storm. A partial descent of 1660m north slope followed by a westerly traverse across the U-shaped basin of Peak 1590m. There was evidence of heavy avalanching across our path. The final ascent was up the NW snow and ice slope Grade IV. Some confusion in the low cloud and snow about the true summit - both were climbed before a hasty retreat.

- 14 Peak 1380m: Gordon, Jeff, Tim : 8 August
From a high camp on the col to the west of Peak 1471m. A lengthy walk across a long snow field leading west towards 1840m and 1880m (very impressive 600 metres of sheer crumbling rock). Ascending a snow slope between 1380 and 1880m, and then up the cinder-like west slope to the summit.

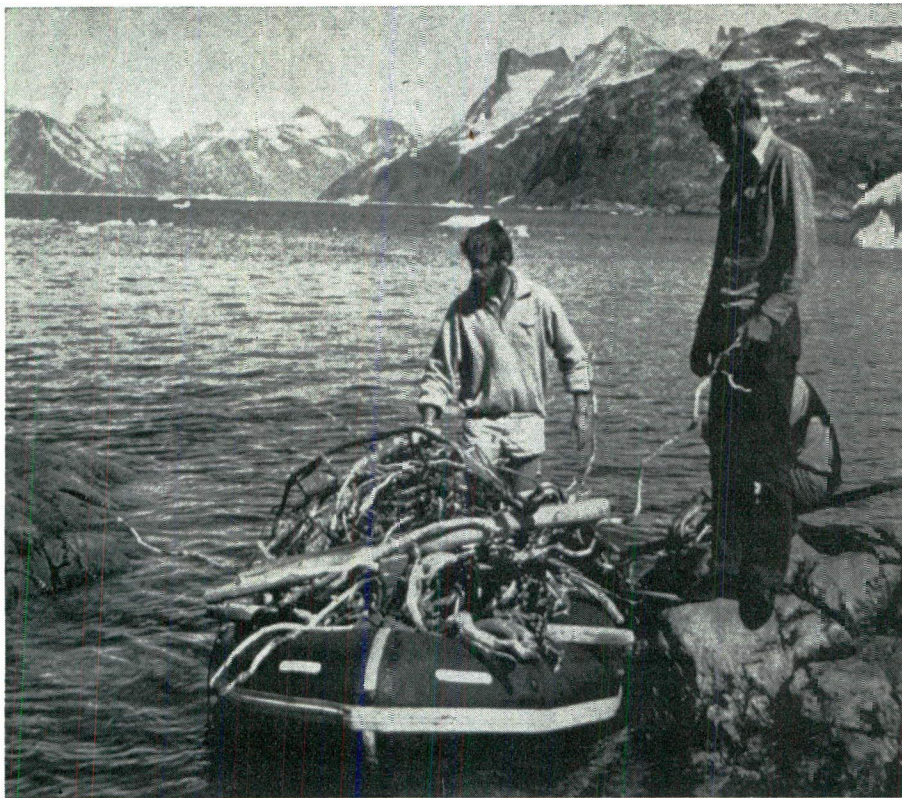
- 15 Peak 1050m : Gordon, Jeff and Tim : 8 August
Between Peak 1880m and 1380, an easy rock scramble with a view from the summit across to Prins Christians Sund.

- 16 Peak 1380m: Ineke, Phee, Greg and Rick : August 8
This peak, situated in the central area, east of Ilua Fjord, was climbed by its gentle north west ridge.

- 17 Peak 1471: Gordon, Jeff and Tim : 9 August
Ascent from high camp on west col - up the unclimbed west ridge and across a delicate ice field. First ascent in 1946 by the north east slope directly from the Kangerdlua fjord. Grade III.
- 18 Peak 1150m (estimated height) : Gordon and Tim : August 12
From a lake side camp to the north of 1300 and east of 1030. Ascent via the south slope - a slushy scramble. Both summits were climbed. Descent attempted by the Grade IV snow and ice slope to the east. After one fall a traverse south off the slope over a cornice and descent via the same route.
- 19 Peak 1240m : Gordon, Jeff and Tim, : 15 August unsuccessful
From the lakeside camp in front of 1150m. Ascent by the south west slope to the hanging glacier, via the glacier to the south west face of the mountain. A v. diff. climb led to a row of gendarmes which led ultimately to the summit. The ascent was stopped by a Grade IV ice gully which had to be crossed without crampons. Descent to the camp via the glacier avoiding the rock.
- 20 Twin Peaks 1100m (estimated height): Gordon and Tim: 20 August
From the lakeside camp south east up a long scree slope to a glacier. Ascent over the glacier via an ice gully on the west side to the col. Easy rock ascent to both summits. Magnificent view across the fjord to the east and out to sea.
- 21 Peak 1100m (estimated height): Greg and Rick; Gordon and Tim: 20 August
This peak, lying due west of Peak 1300m, across the valley, was climbed via its northern side. Grade I.
- 22 Peak 1100m : Gordon and Tim : August 19
From the second base camp round the island to the south west to the lake Anordliuitsoq. Up the valley to the north of 1100m to the magnificent amphitheatre at the end of the valley. Cutting up through a region of huge boulders on the east slope. Via a long easy snow slope to the south east col and over onto the south



Above: High Camp
near the East Col,
above Base Camp 1.



Centre: Collecting
driftwood after a
storm on Pamiagdlok.

Below: View north
from Base Camp 1
to the terminating
glacier.

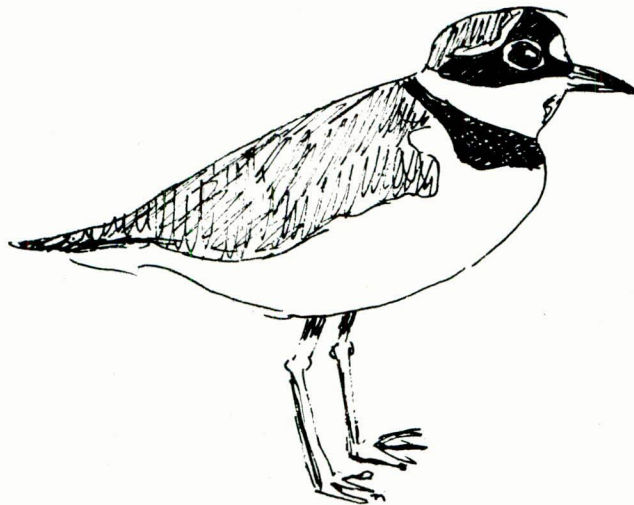


side. A difficult snow gully led to a rock and snow walk to the summit. Descent of the south side by 400 metres glissade and then down to the lake to the west by a dangerous gully with a lot of loose rock.

23 Peak 1300m : (Majorsteqe or the Steeply Rising Ground) : Greg and Rick : 24 August.

Unquestionably the most difficult ascent of the trip, the peak was first attempted on 17 August. A route was made up the snow slope from Winter Valley to the west, and hence up the black dyke to the north saddle without ropes. Grade III. Above, some 80m of mixed V.S. and A2 on good rock was climbed, before bad weather and slippery rock forced a retreat. A fixed rope was left to avoid climbing the A2 pitch again.

After a week of storms, a second start was made on 24 August despite fears that there was too much ice plastered on the face. But a hot sun soon removed much of the problem and the summit was reached via the north ridge at 4.p.m. after 11 superb pitches, mostly of V.S. and A.1. Grade VI, 400m.



A BRIEF HISTORY OF CLIMBING IN SOUTHERN GREENLAND

Jeffrey Moeller

Greenland has the greatest continuous range of mountains in the world, yet expeditions for purely climbing purposes have been rare until very recently. Early polar expeditions did not entail the exploration of mountain ranges or the climbing of their peaks. For that matter the inaccessibility of Greenland is another factor why Erik Hoff, co-founder of the Danish Mountaineering Club, has compared climbing in Greenland to "the Golden Age in the Alps, when one pioneer after another opened up the climbing possibilities among them". The country has only been open to progress since 1924.

There are three areas of interest to climbers in Greenland : the east coast between latitudes 66 and 75 ; Cape Farewell; and the west coast between latitudes 66 and 72 . All have been opened up within the last fifty years.

The first recorded expedition to the Cape Farewell region was a Danish expedition in 1936-38, led by Herr E. Wegmann. They achieved numerous small ascents. Then in 1946 survey teams from the Danish Geodaetiske Institut entered the area and set up prominent landmarks on the east side of Sermilik Fjord. Three known peaks were climbed by these teams.

Not until 1956 were any major ascents made. Under the leadership of Claude Maillard, a French expedition climbed sixteen peaks, all first ascents, in the vicinity of Ilua Fjord. Some of these peaks, which ranged up to nearly 2300 metres, were of a high order of difficulty.

Maillard's graphic account in the 1958 Alpine Journal and the impressive photographs accompanying it inspired the first British expedition to southern Greenland, led by G.S. Sutton. The concluding words of Maillard's article captured the mood which subsequent expeditions were to re-echo : "In this range of peaks, mountaineering and other challenges are closely intermingled in a unique way those who wish to experience the same joys we did won't be disappointed by Greenland's mountains".

Sutton intended to reconnoitre the mountains in the western part of the Cape Farewell area and to climb as many peaks as a seven week stay would permit. Botanical and geological specimens would be collected by other members of the party. The expedition was based in Nanortalik, on advice given by Maillard; their climbing was done around Tasermiut Fjord and on Sermersoq Island. Among their most impressive achievements was the ascent of Aiguille de l'M (1600m), which had four pitches of Grade V .

The next British expedition was the first of several from the University of St. Andrews. Led by J.D. Pitts, eight men, six of them active climbers again centred their activity around Tasermiut Fjord. They planned to spend four to six weeks in the area, but excessive pack ice caused delays and allowed only three weeks to be spent in the neighbourhood of the Fjord. Three peaks over 1530 metres and four over 1450 metres were climbed.

The following year, Roger Wallis, a member of the 1960 expedition, led another party back to the same area. Their objectives were mainly scientific. Bad weather, the bugbear of nearly every expedition to visit Cape Farewell, severely curtailed climbing opportunities and took its toll of the eleven weeks that they planned to spend in Greenland. However, two peaks over 2000 metres and seven over 1300 were climbed.

An Austro-German party under the leadership of T. Dürnberg entered the upper region of Sermilik Fjord in 1962. They achieved 38 first ascents and made an unsuccessful attempt to traverse the Ice-cap from the west to the east coast.

An attractive brochure advertising excursions to east Greenland warns the traveller that an old Eskimo saying is "Seeing Greenland once means forever returning". The saying aptly describes the tendency of expeditions to visit southern Greenland one year, assess the climbing possibilities and then to return another year to make the experience a complete one. This was true for both Wallis and Dürnberg. In 1972, two

members of the Leicester Polytechnic expedition succumbed to the allure of southern Greenland and stayed on rather than return to England.

Dürnberg's second expedition in 1966 achieved the first ascent of Patuersoq and the traverse of the Ice-cap from west to east. However, on the return journey three men fell into a crevasse 40 metres deep, but were able to climb out on their own. Two of them were able to walk to Narssarssuaq despite their injuries, but the third was rescued by helicopter.

There have been seven expeditions to Cape Farewell between 1968 and 1972 and each of them has built on the experiences and reports of the previous ones. The 1968 Irish expedition led by Joss Lynam was largely organised for climbing, but work in the form of botany, surveying, physiology and geology was also carried out. Their bout with bad weather was the most serious of any expedition : the initial journey from Narssarssuaq to the Tasermit Fjord took 17 days due to heavy pack ice; the return journey took two days. Nevertheless they managed two first ascents of peaks over 2400 metres, the most impressive being Cathedral. Although the final pitch on this peak was good granite (Grade V), the Irish were forced to retreat near the summits of two other peaks due to poor rock conditions. Their experience would be duplicated by subsequent expeditions who were to find rock conditions poor on some peaks, but excellent on the vertical faces.

The 1971 University of St. Andrews Expedition, the 1972 Leicester Polytechnic Expedition and the 1972 Greenland Expedition were blessed with periods of good weather, as their impressive lists of ascents demonstrate. In the southern area of Tasermit Fjord, the St. Andrews group made 28 first ascents during six weeks from mid-July to the end of August. The 1972 Greenland trip led by Roger Smith climbed 28 peaks, two previously reached by a 1971 Austrian team, three by the 1946 survey teams, the rest first ascents.

The second accident in the area occurred during the 1971 Club Alpin Française Expedition. They had chosen the Lindenows Fjord region only after failing to obtain permission to visit the Staunings Alps in



Above: On the summit ridge of the "Fish's Fin", 1685m.

Below: Looking east toward Kangersuneq quingordleq and Base Camp 1 on the plain.



East Greenland. Three members of the party were injured in a climbing accident and, after a lengthy and costly rescue, all members were evacuated in late August. However, they had previously succeeded in climbing the very impressive Apostolens Tommelfinger and two other peaks. This peak was also attempted (by the East Face) by an Italian party in 1973.

Despite bad weather and unpredictable rock conditions, the sustained interest in serious mountaineering around Cape Farewell should continue. Erik Hoff has captured the reasons which continue to draw expeditions from several foreign countries : "In these distant regions, the Greenland mountaineer cannot avoid being a pioneer, despite the fact that his modest activities naturally cannot be compared with those of the famous Greenland explorers. But although his activities and climbs are possibly completely lacking in scientific value and often appear to the general public as lacking in common sense, his personal experiences will be so rich and unforgettable that they more than weigh up the hardships and privations which accompany an expedition to desolate areas".

NOTE

The information in this section has been gleaned from various reports in the Alpine Journal, Mountain and various other journals. Our thanks is given to the authors of these reports as they certainly helped in the preparation of our trip.

BIRDLIFE IN ILUA FJORD

Susie Cornell

Knowing that many migrating birds breed each year in Greenland, Dave and I were very much looking forward to this expedition from the aspect of birdwatching. So imagine our disappointment, when we realised that Cape Farewell was too far south and that most of the waders breeding in Greenland migrate farther north to within the Arctic Circle, to breed where they have the advantage of 24 hours feeding time per day. Another possible reason for the lack of birdlife in the greater number of Greenlanders in the west and south who shoot any animal or bird they see, as a source of food. We were visited one day at Base Camp I by two such Greenlanders, who had been shooting young Iceland Gulls from a colony nesting about 2 miles from our camp. They had collected a number of dead birds, among them several of these immature Iceland Gulls, and a few young Black Guillemots, which apparently make very good eating!

The presence of a colony of Iceland Gulls meant that there were other sounds around us other than the constant rumble of glaciers. We first discovered the site high up on a very steep cliff, rising straight out of the fjord, when Dave, Tim and I took the dinghy up to the head of the fjord to investigate the glacier which flows into the sea at that point. There were about 800 birds altogether, many of them immatures, still in their darker plumage, gathering in groups on icebergs or on the sea. No wonder they were such easy prey to the Greenlanders! We concluded that they fed partly at least, on small sand shrimps, as our investigation of their regular feeding ground yielded nothing else that was living except a solitary Ringed Plover which obligingly allowed Tim to photograph very successfully. To our delight, we, at this time, sighted a pair of Kittiwakes practising their flying acrobatics above our heads.

Apart from the occasional Black Guillemot bobbing up and down in the water, and shyly hiding from us behind icebergs, most of the other birds we saw actually frequented our camp. A host of young Lapland Buntings were never far away, and often sat on a nearby rock to wonder at these strange beings that had invaded their privacy. Wheatears are also common - I came to think of them as the 'sparrow' of Greenland. Larger, and with a slightly brighter plumage, the Greenland subspecies was a most

attractive visitor to camp. More occasionally, we saw Snow Buntings - again, adults, and more often their young as well. These very attractive black and white birds we invariably encountered farther away from our camp, usually a little higher up.

Tim had already sighted one or two Redpolls on the ridge across the valley from Base Camp I, but I had not been lucky enough to see any. However, towards the end of the expedition, whilst on Pamiagdlok Island, Dave and I did sight 3 of these delightful birds one day whilst on a day trip around part of the island. A common enough bird one might think but we were thrilled to see them.

Several members of the expedition were lucky enough to see a Ptarmigan and her family of young, on Pamiagdlok Island. Dave and I only spotted the mother in the beginnings of her winter plumage. These birds seem to be relatively common, but they too, are the target of the eskimo gun, as are the solitary Ravens we saw and heard high up around the mountain tops.

One evening on Pamiagdlok Island, Dave and I were camping about 6 miles from base camp at a very beautiful round lake. We had been fishing, and had caught a few Arctic Char. We went down to the lake to clean them and noticed, in the half light, two birds on the lake. They were moving cautiously and slowly away from us, and although we would like to think that these were Divers from the shape of their silhouettes, we were unfortunately unable to identify them positively.

The only Eider ducks that we were to see in Greenland, were plastic decoys in a store in Nanortalik. Eiders obviously make good eating, for we saw not one during the whole of our stay in Greenland.



Sketch: Majortege, seen from Winter Valley.

FLORA

Phillipa Hoare and Ineke Moseley

The flora of the region was studied by three amateurs, two of whom had very little knowledge of basic botany. In fact, the two writers developed a real interest in botany as a result of the varied and colourful flora that was found there.

We had done nothing in the way of research into the kind of plants that we could expect to find in the area. This would obviously be advantageous if one had the time and facilities.

In the field we were constantly amazed at the profusion of flowers. We had with us Richard and Alastair Fitter's book, *The wild flowers of Britain and Northern Europe*, which we used to identify some of the plants that we found. Back in Cambridge we had the Scott Polar Research Institute Library in which to complete our identifications.

The accompanying notes and drawings of some of the plants that were identified are intended for the amateur, in the hope that they might act as a stimulus to learn more about the flora before he arrives in Greenland.

The following abbreviations designate the areas in which the plants were found:-

- N Narssarssuaq
- BCI Base Camp I, Kangarsuneq quingordleq
- BCII Base Camp II, Pamiagdulk

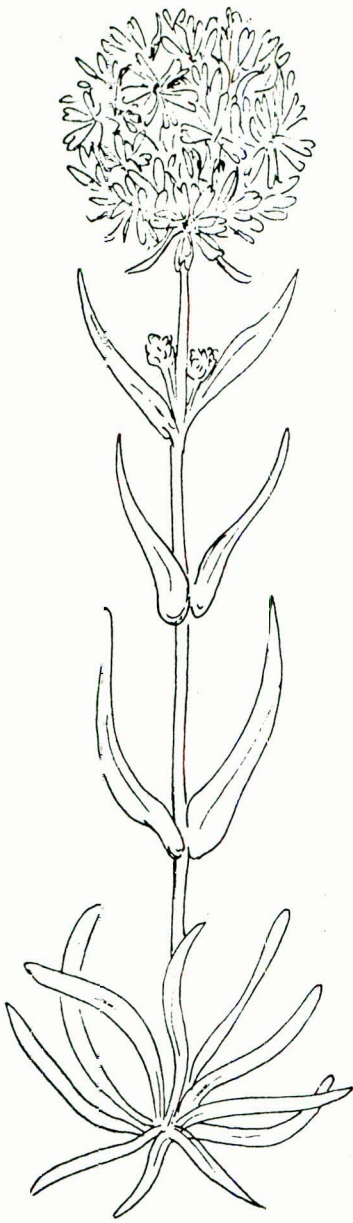
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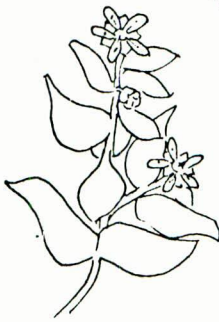
Note

Any botanist who reads these notes is asked to remember the amateur status of the writers, and to excuse any errors

- 1 VISCARIA ALPINA (Syn.: *Lychnis alpina*) Alpine catchfly
Short perennial with a basal rosette of lanceolate leaves. Stem erect with several leaf pairs, ending in a compact shortly-branched cluster of pink flowers, petals deeply notched.
Found in rock crevices, herb-slopes and scrub. (N BCI & II)
- 2 HONKENYA PEPLOIDES Sea sandwort
Short plant with creeping rhizomes and ascending-erect loosely tufted stems. Leaves oval, fleshy, hairless. Flowers greenish-white.
Found on sandy ground, especially near the sea. (BCI & II)
- 3 CARDAMINE PRATENSIS agg. Cuckoo flower
Medium, hairless perennial. Leaves pinnate. Flowers variable - large petals, white or lilac.
Found in marsh, salt-marsh, also in shallow water of small lakes and pools. (BCII)
- 4 EUPHRASIA OFFICINALIS agg. Eyebright
Small, green, semi-parasitic, hairy annual. Often well-branched. Flowers white, often tinged with violet, or with purple veins, or a yellow spot. 2-lipped, open-mouthed, the lower lip 3-lobed. Flowers in leafy spikes with broad toothed bracts.
Found on grass-slopes. (N BCI & II)
- 5 SEDUM ROSEA (Syn.: *Rhodiola rosea*) Roseroot
Short, hairless perennial, with a thick, scaly, odorous rhizome. Cauline leaves, thick, serrate, blue/grey. Inflorescence of yellow 4-petalled unisexual flowers.
Found in rock crevices, herb-slopes and heaths. (BCI & II)
a) showing plant with yellow flowers
b) showing plant in seed - leaves and stem turn reddish.
- 6 CAMPANULA ROTUNDIFOLIA Harebell
Slender, hairless perennial. Leaves linear. Blue funnel-shaped flowers in racemes or solitary.
Very variable in Greenland.
Found on dry grassland and heaths. (N BCI & II)



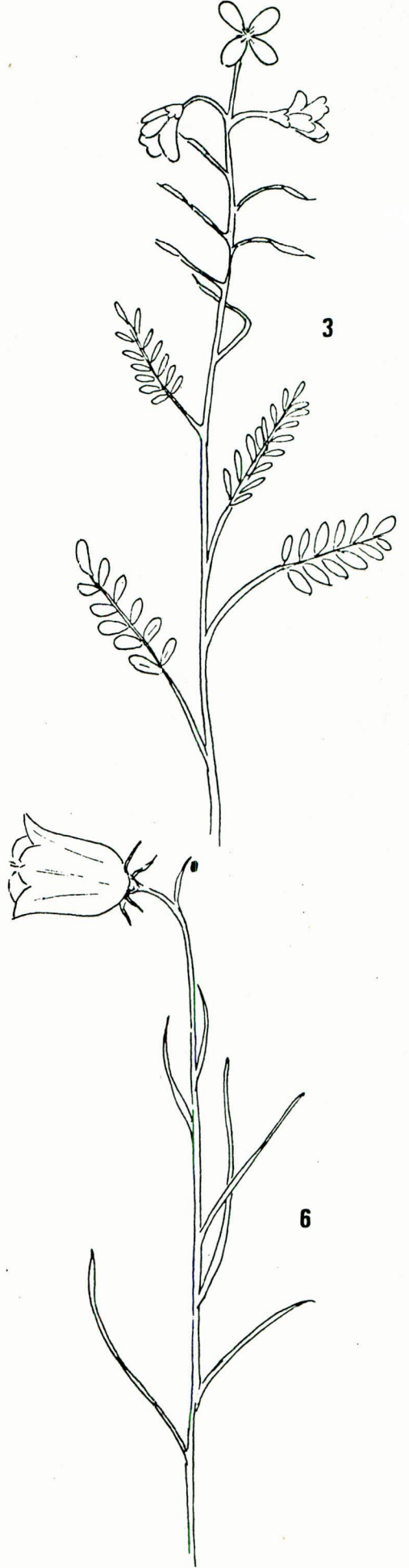
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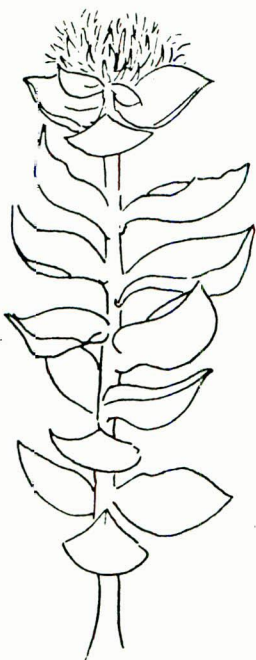
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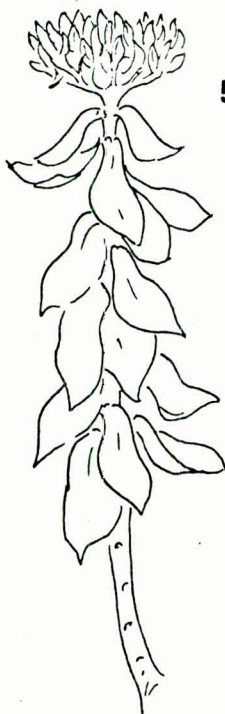
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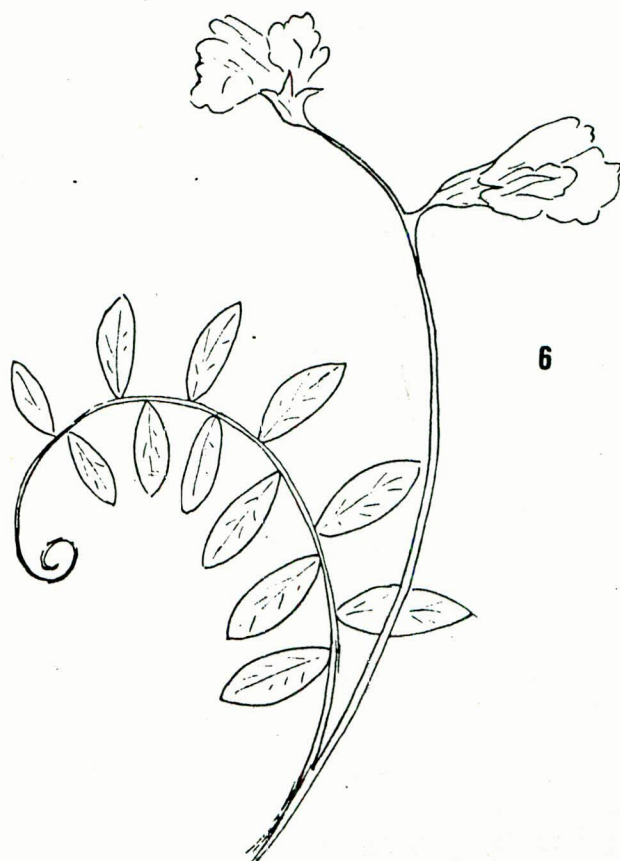
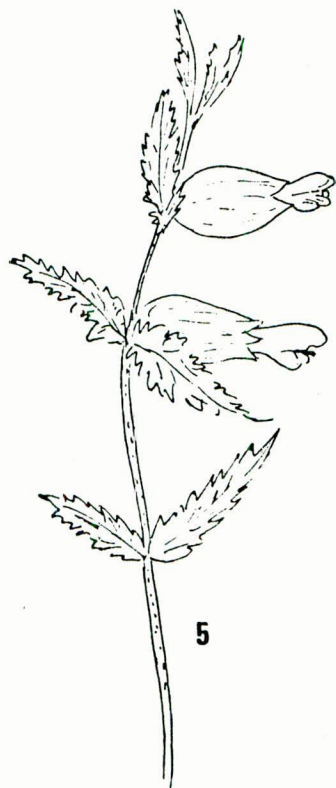
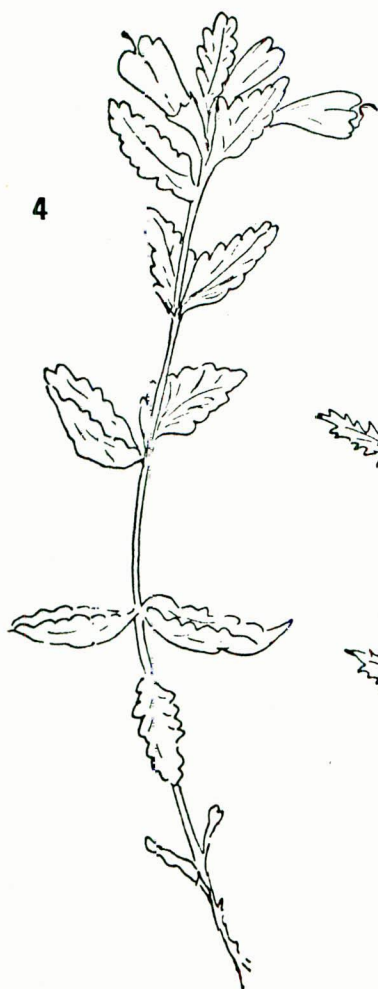
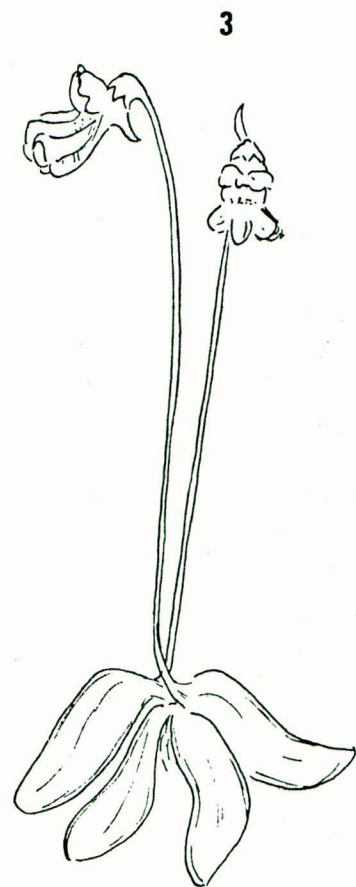
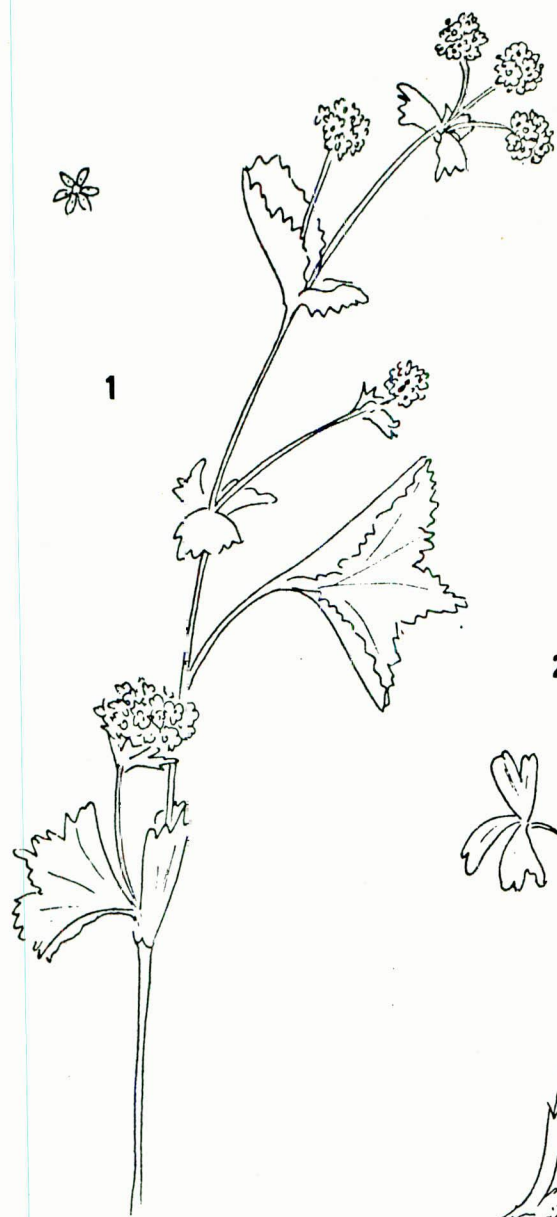
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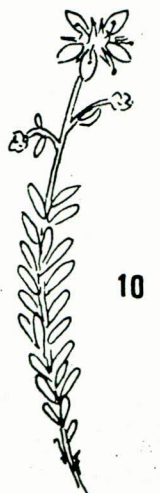
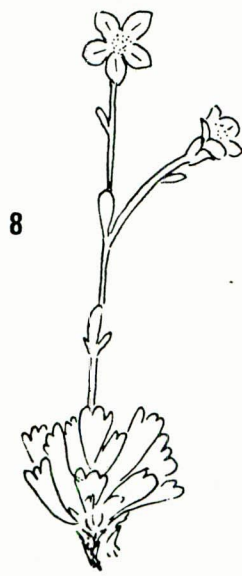
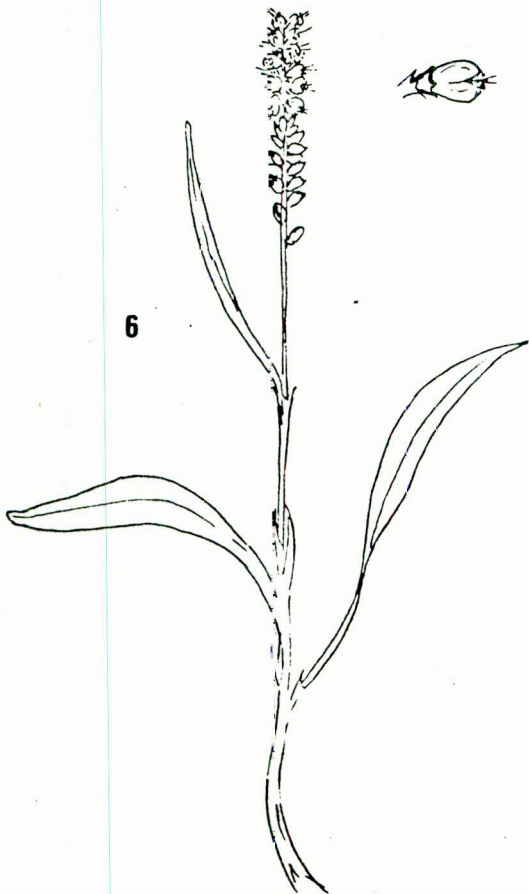
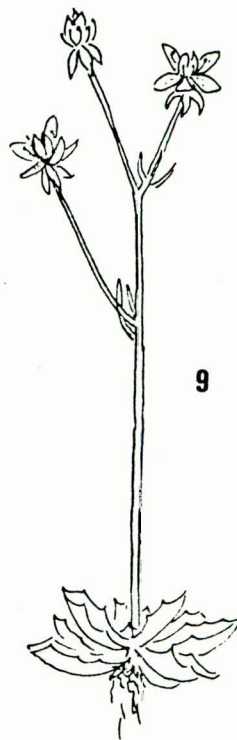
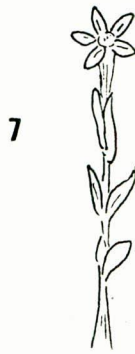
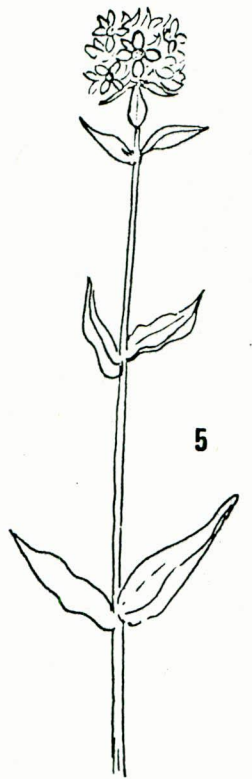
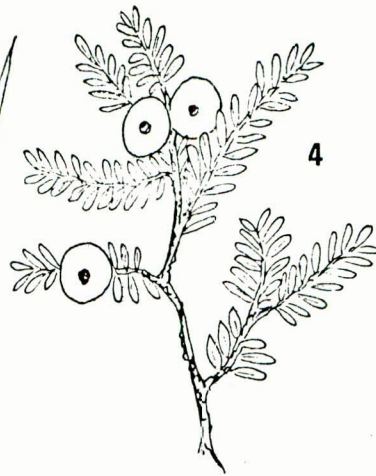
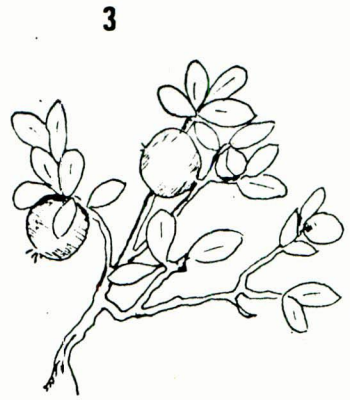
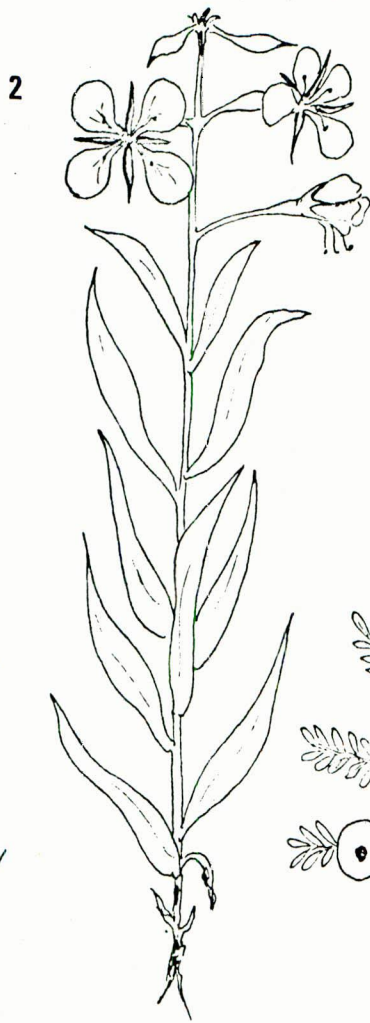
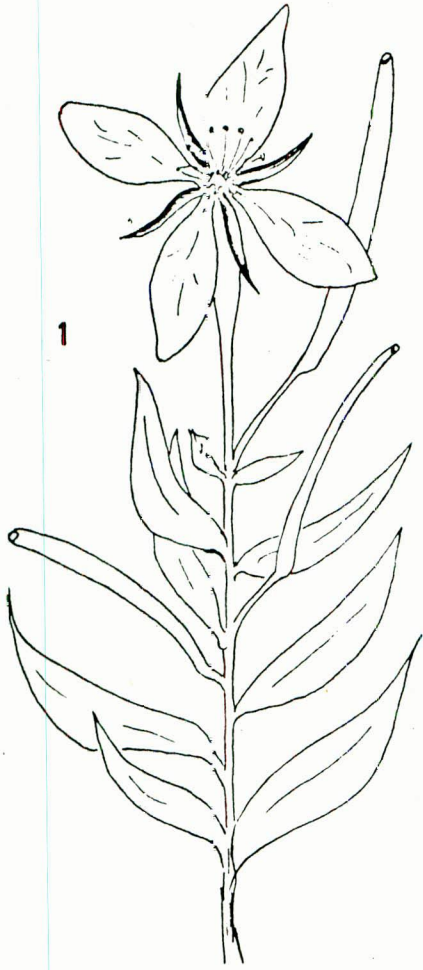
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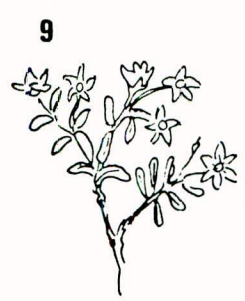
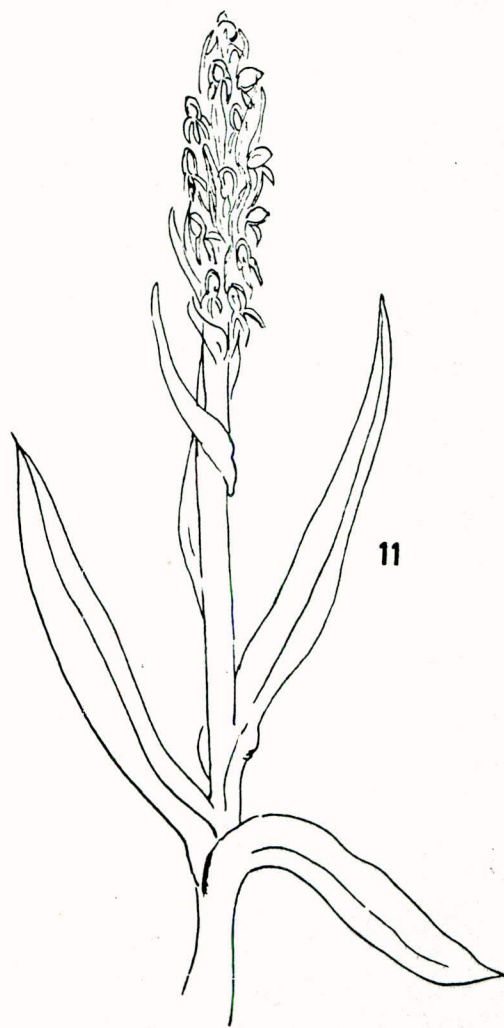
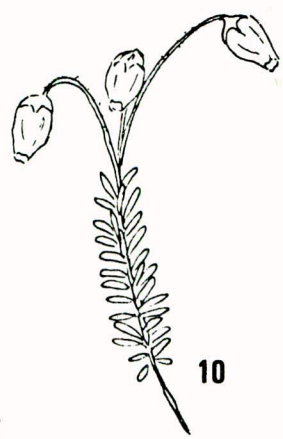
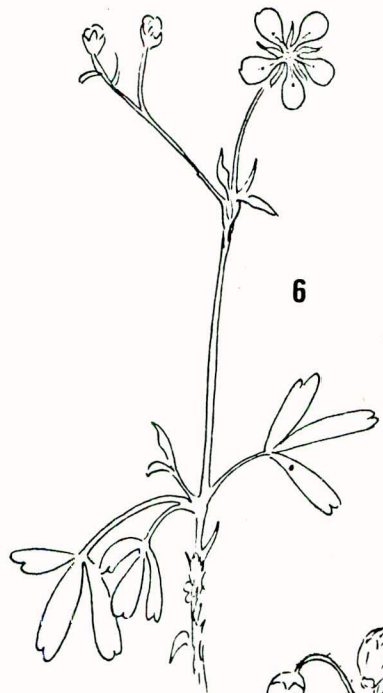
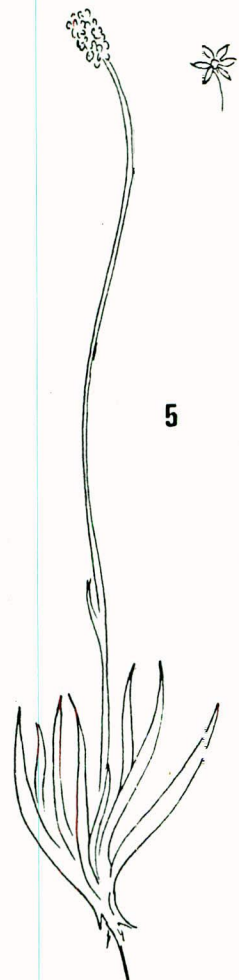
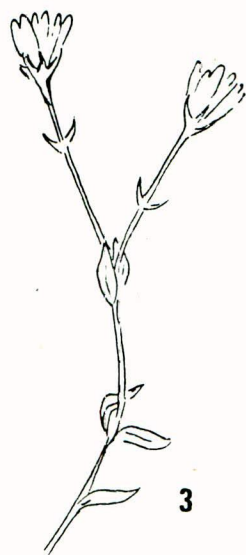
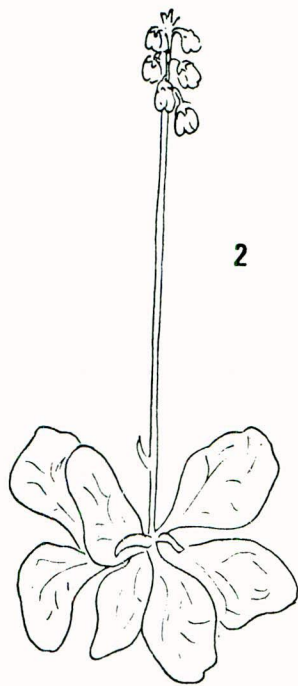
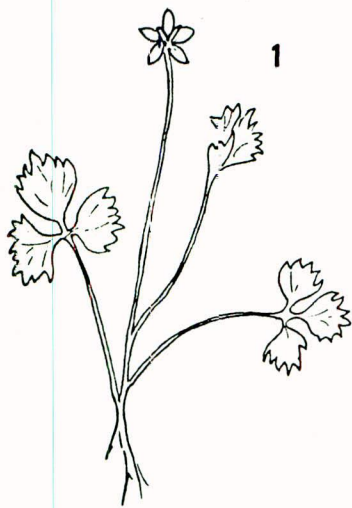
- 1 *ALCHEMILLA VULGARIS* agg. Lady's mantle
Several microspecies found in Greenland. Perennial. Leaves palmately lobed, green on both sides. Flowers small in loose clusters, with an epicalyx but no petals, sepals green, anthers yellow.
Found on dryish grassy slopes. (N BCI & II)
- 2 *ALCHEMILLA ALPINA* Alpine lady's mantle
Palmate leaves, divided into 5-9 narrow lobes. Leaves dark green above, covered with silvery/grey hairs below. Flowers similar to above.
Found on dryish grassy slopes. (N BCI & II)
- 3 *PINGUICULA VULGARIS* Common butterwort
Rosette of oval, light green, sticky leaves. Calyx 5-lobed, 2-lipped. Corolla violet, 2-lipped with an acute spur. Insects which are trapped by the viscid leaf secretion are digested and absorbed.
Found on heaths, moist ground and in marshes. (N BCI)
- 4 *BARTSIA ALPINA* Alpine bartsia
Low, semi-parasitic perennial. Plant erect with unbranched stems. Cauline leaves, opposite, ovate, the upper ones violet coloured. Flowers dark violet, 2-lipped, open-mouthed, upper lip hooded, lower 3-lobed.
Found on herb-slopes and luxuriant heaths. (N BCI & II)
- 5 *RHINANTHUS MINOR* agg. Yellow rattle
Green, semi-parasitic annual. Leaves oblong to linear, toothed, unstalked, opposite. Flowers yellow, 2-lipped, usually open-mouthed with 2 purple teeth, in loose leafy spikes.
Found on grass-slopes. (N BCI & II)
- 6 *LATHYRUS JAPONICUS* Sea pea
Prostrate, fleshy perennial, stem angled with bluish tinted leaves. Racemes of 4-8 rather long flowers with red-violet standard, blue-violet wings and keel.
Found on beaches and heaths. (BCI & II)



- 1 EPILOBIUM LATIFOLIUM (Syn.: Chamaenerion latifolium) River beauty
More or less hairy perennial. Leaves lanceolate, fleshy, usually having a bluish tint. Flowers deep purple, petals varying in size and shape.
Found on riverside gravels and sands. Ubiquitous. (N BCI & II)
- 2 EPILOBIUM ANGUSTIFOLIUM agg. (Syn.: C. angustifolium) French Willowherb
Similar to above. Leaves narrowly oblong-lanceolate. Conical terminal raceme of deep purple flowers.
Found on gravels and grass-slopes. (N BCI & II)
- 3 VACCINIUM ULIGNOSUM Northern bilberry
Much-branched erect or procumbent dwarf-shrub. Leaves ovate. Flowers solitary or in clusters, white or pale pink. Berries dark blue, sweet, edible.
Found on heaths and bogs. (BCI & II)
- 4 EMPETRUM NIGRUM agg. Crowberry
Prostrate mat-forming or erecter tufted evergreen under-shrub. Leaves oblong, densely spaced. Flowers pink, very small. Berries glossy, black, juicy and edible.
Found on heaths and bogs. (BCI & II)
- 5 VERONICA ALPINA Alpine speedwell
Short perennial, with ascending-erect, pubescent branches. Leaves oval, bluish-green. Cluster of deep blue flowers with a white eye.
Found on herb-slopes or snow-patches. (N BCI & II)
- 6 POLYGONUM VIVIPARUM Alpine bistort
Short unbranched, hairless perennial. Leaves narrow, lanceolate, tapering at base. Inflorescence a spike with pale pink or white flowers at the top and red bulbils below.
Found on snow-patches, herb-slopes, heaths. (BCI & II)
- 7 GENTIANA NIVALIS Alpine gentian
Slender annual with a few erect branches. Basal leaves oval. Azure blue flowers.
Found on grass-slopes, dry places in coastal areas. (N BCI)
- 8 SAXIFRAGA STELLARIS Starry saxifrage
Low, sparsely hairy plant, with leafless stem, rosette of short-stalked, toothed leaves. Few-flowered inflorescence. Petals white with 2 yellow spots at the base.
Found on wet/snow patches, by springs, along streams. (BCI & II)
- 9 SAXIFRAGA PANICULATA Livelong saxifrage
Short, tufted plant with oblong finely-toothed leaves in numerous rosettes. Stem upright with a few small leaves. Inflorescence open with spreading branches and numerous white flowers.
Found in rock crevices. (N)
- 10 SEDUM ANNUM Alpine stonecrop
Low hairless annual/biennial. Stem erect, much-branched. Leaves short, linear, flattened on both surfaces. Flowers short-stalked.
Found on sunny cliffs, stony places and herb-slopes. (N BCI & II)



- 1 COPTIS TRIFOLIA Goldthread
Low, thin-stemmed herb. Yellowish creeping rhizome. Leaves long-stalked, divided into 3 broad leaflets. Flowers white or whitish, 5-7 petals, solitary.
Found on scrub and heaths rich in mosses. (BCI & II)
- 2 PYROLA MINOR Common wintergreen
Low/short perennial. Leaves in a basal rosette, rounded. Flowers spherical, white or pale pink, in a stalked spike. Style straight, shorter than stamens, not protruding from flowers.
Found on herb-slopes and in scrub. (BCI & II)
- 3 STELLARIA LONGIPES Longstalked stitchwort
Annual/perennial herb. Stem erect. Leaves linear, often with a bluish tint. White stellate flowers, usually solitary.
Found on heath and moss rich vegetation. (BCII)
- 4 CERASTIUM FONATUNUM Common mouse-ear
Very variable. Low/short, slightly hairy perennial, with sterile vegetative shoots. Flowering stems erect. Flowers in umbel-like inflorescence. Petals deeply notched.
Found on herb slopes, willow- and birch-scrub. (BCI & II)
- 5 TOFIELDIA PUSILLA Scottish asphodel
Low/short, rather slender, hairless perennial, unbranched. Stem erect. Leaves flat, sword-shaped, usually all at base. Flowers creamy yellow in a short dense spike.
Found on damp heaths and bogs. (BCI & II)
- 6 POTENTILLA TRIDENTATA Cinquefoil
Low/short perennial. Leaves leathery, trifoliate, evergreen. Creeping rhizomes. Flowers white with few-many flowered raceme.
Found on rocks, dry gravel and sandy places. (BCII)
- 7 HARRIMANELLA HYPNOIDES (Syn.: Cassiope hypnoides) Cassiope
Prostrate mat-forming undershrub. Leaves crowded, needle-shaped. Flowers white or pale pink, bell-shaped, solitary, drooping.
Found on snow-patches. (BCI & II)
- 8 SILENE ACAULIS Moss campion
Low hairless, slightly woody perennial. Forms mat-like cushions, often covered with solitary pink, fragrant flowers.
Found especially in fell-fields. (N BCI & II)
- 9 LOISELEURIA PROCUMBENS Wild azalea
Prostrate much-branched, mat-forming dwarf-shrub. Leaves small, opposite, evergreen. Flowers small, pink.
Found on open heaths, fell-fields on acid soils. (BCI & II)



- 10 *PHYLLODOCE COERULA* Mountain heath
Low/short perennial with ascending upright branches. Leaves linear, flat, evergreen. Flowers in terminal clusters, purple, urn-shaped.
Found on heaths with medium snow cover. (BCI & II)
- 11 *PLATANThERA HYPERBOREA* (Syn.: *Habenaria hyperborea*) Northern green orchid
Low/medium perennial with many ascending cauline leaves. Inflorescence a spike with dense or somewhat scattered flowers. Flowers greenish sweet-scented.
Found on luxuriant herb-slopes, alluvial banks, damp peaty or turfy areas. (N BCI & II)

FOOD

Phillipa Hoare

Any expedition, and ours in particular, usually proves to be the ideal place for experimental cooks, a) because there is always plenty to experiment with and b) because whether the result is good, bad, medium or horrific, it is sure to be eaten. Our experiments ranged from Greg's steam puddings that never steamed, to Rick's raisin bread that hardly ever raised and Ineke's chocolate fudge that everybody glugged with a great big gludge.

Gordon was particularly sceptical as to whether we would be able to bake fresh bread, but almost every morning the mess tent/bakery smelled like heaven and by lunch time every last morsel had usually been snacked, unless somebody managed to hide the odd slice for toast at breakfast the following morning. But then there was tea ... and cakes! Yes cakes courtesy Greg, Dave and Susie. Two-toned chocolate and vanilla cakes in concentric rings (I have the slide to prove it), fruit cakes and chocolate cakes with orange Rise and Shine icing. And sometimes scones and pancakes with bilberry jam. Don't for heavens sake forget to mention the bilberries - bilberry jam, bilberry cordial, crushed bilberries, bilberry pie and stewed bilberries - all marvellous inventions.

And supper oh that bloated feeling. Would it be Artic Char steamed in butter with mayonnaise and garlic sauce, or steak and kidney pie cooked in the oven with chips and peas, or horrors is it one of Tim's stews with added muesli for bulk? Rice pudding - did you really say we should open 6 tins, you must be joking. No its just that we love rice pudding and we haven't had it since last night. And finally cocoa - surely Jeff and Tim must have broken the world record for cocoa consumption on our six week trip in Greenland.

A happy expedition is one where the food is plentiful and this was certainly the case with ours. Yet we still managed to spend hours debating whether roast beef was better than fillet steak and wishing that we could have the opportunity there and then to prove it. All our long discussions were rewarded, however, in a lunch at the Artic Hotel Nassarssuaq, where we were treated to a never ending smorgasbord of exotic foods courtesy of Scandinavian Airways.

Quantities taken

The food was divided into two sections -

- 1) Base Camp food
- 2) Climbing food

The base camp food was packed into tea chests - one to be opened each week. Each tea chest had a strong plastic liner and all bottles and other breakables were put into smaller plastic bags. Everything arrived safely, although the boxes had some rough handling. The only breakage recorded was the peanut butter which was in a brittle plastic container.

The climbing food was packed into 2, 4 and 8 man day packs.

A 2 man day fitted into a 1 gall. icecream bucket

" 4 " " " " " 2 " " "

" 8 " " " " " 4 " biscuit tin + $\frac{1}{2}$ gall. icecream

bucket, in which the first lunch was packed.

When packed a 2 man day pack weighed 4- 5 lbs.

" " " 4 " " " " 9-10 lbs.

" " " 8 " " " " 20-22 lbs.

The plastic buckets proved to be quite waterproof. Each one was sealed with plastic tape and although they were left in the rain on several occasions, not many of them leaked. They also proved to be extremely useful. In particular if they were left filled with snow when one set off to climb for the day, the snow had completely melted by the time one got back that evening.

Each base camp box contained 20 man days of food and a number of luxuries. As it turned out we ate more meals from these boxes than we had planned and consequently had man day packs over.

Each Tea Chest Contained :

12 lbs Flour
1 lb 2 oz Powdered Egg *
½ gall Soya bean meat *
3 x 1 lb Porridge oats
2 pkts Force Wheat Flakes
10 lbs Sugar
1 lb 3 oz Peanuts
1 lb 3 oz Raisins
1 lb 3 oz Sultanas
3 tins Fruit
1 tin Baked Beans
2 x 2 oz Shippams Pastes
½ gall Cocoa *
2 x 1 lb Golden Syrup
½ lb Peanut Butter
2 x 1 lb Tins of Butter
4 oz Yeast
1 tube Tomato Paste
1 bottle Apple Wine
7 x 3 oz Packets of Muesli
5 pkts Rise and Shine
2 lbs Spaghetti
1 jar Marmite/Bovril
4 x ½ lb Tins of Marge
1 bottle Chutney
2 tins Complian
6 boxes Matches
3 x 7 oz Tins of Luncheon Meat
1 lb Tin of Luncheon Ham
8 x 15 oz Tins of Rice Pudding
1 bottle Jam
1 " Marmalade
3 x 15 oz Irish Stew
4 x 9 oz Bacon Burgers
4 x 9 oz Steak and Kidney pie

1 bottle Mayonnaise/Pickle
16 Oat Crunchies
1 box Parmesan Cheese
1½ lbs Edam Cheese
1 lb Coffee *
100 Tea-bags *
20 Servings Soup
1 lb Salt *
1 pkt Curry/Bolognaise Sauce Mix
1½ boxes Oxo cubes
1 pkt Sweets and Chewing gum
½ lb Dried Peas
½ lb Dried Beans
¼ lb Instant Mash Potato
2 Squeezie Lemons
10 pkts Crisp Biscuits *
1½ lbs Rice
1 box Daz (Soap Powder) *
1 small Fairy Liquid *
2 rolls Paper Towels
2 bars Fairy Soap *

* We had too much of these items.

Besides these items, we had a box containing a selection of spices. We also purchased 55 lbs of potatoes and 20 lbs of onions in Nanortalik at the same price as they would have been in the U.K. A side of bacon which we purchased in the U.K. lasted very well.

A 4 Man Day Pack contained :

Breakfast

8 x 3 oz Muesli
3½ oz Dried Milk (Complan was used)
6 Tea-bags
3 pint Coffee sachet
1½ lbs Sugar
2 T.S. Salt

Lunch

2 pkts Crisp Bread (1 Ryvita/Ryking, 1 Healthy Life)
½ lb tin Marge
2 x 2 oz Peanuts
4 oz Dried Fruit (Raisins, apricots, figs or dates)
1 x 2 oz Chocolate Bar
2 x fun size Chocolate Bars (e.g. Mars, Marathon)
24 Boiled sweets/toffies
½ slab Kendal Mint Cake
4 Lunches - A Shippam's meat/fish paste = 1 lunch
7 oz tin of Luncheon Meat = 2 lunches
7 oz tin of Tuna/Herrings = 2 "
5 oz process cheese = 2 "
4 T.S. Jam/Marmalade
1 pkt Rise and Shine
4 Chocolate Digestives
4 Oat Crunchies

Supper

+ 4 oz Soup Powder
8 oz Starch (Mash/Spaghetti/Rice)
6 T.S. Dried Veg (Peas/Carrots)
4 Main Courses - 1 smoked sausage = 2 portions
6 oz Batchelors Dried Meat = 2 portions
1 tin meat (15 oz) = 2 portions
4 Puddings - 1 instant pudding = 2 portions
8 T.S. Apple Flakes = " "
1 tablet jelly = " "
7 oz can of fruit = " "
8 T.S. Fifty/Fifty cocoa milk mixture

Useful points;

The oven for baking our bread was invented by Rick and consisted of :-

2 large billies (inverted)

baking dish (billie lid)

metal triangle (to keep the baking dish off the oven plate)

$\frac{1}{2}$ " thick aluminium plate placed on top of a primus

A medium sized loaf usually took 30-40 mins to cook.

Army biscuits can be used for the crumbs of apple crumble or as mashed potatoes.

The protein soya bean meat was extremely useful in Base Camp when we were cooking for nine. Mixed with a 'sauce mix', onions , garlic and herbs it was really quite palatable.

Take a whisk if you intend taking powdered egg - it is very difficult to get the lumps out with only a spoon and fork.

The smoked sausage in the man day packs kept very well and was a great treat for supper.

The Kendal Mint Cake tended to contaminate all the food in the man day packs.

THE DINGHY AND OUTBOARD MOTOR

Tim Hurrell

We took with us a seven year old Avon Redshank, rubber inflatable, borrowed from Birmingham University and a twenty seven year old Seagull 2 - 3 h.p. outboard motor, bought in Cambridge for £30.

The Dinghy

The inflatable dinghy was 12ft 6ins long and could carry over 1000 kilograms of equipment but it was difficult to accommodate much more than six people. Because it did not have a rigid transome, to mount the motor on, the engine tended to twist, the propellor forcing itself under the stern. The problem grew worse with a larger load. It was partly overcome by tying the top of the engine to the rigid floorboards. The boat had an extra layer of nylon re-enforcement to protect it from being holed by ice, that we could not always miss, as well as a wooden floor. We took oars and a puncture repair kit, both of which were necessary.

Simple mooring at sea was not practical for a number of reasons. The wind tended to blow the boat onto ice and rocks, and if it became strong there was a danger it could lift the boat out of the water. The boat was therefore carried ashore, tied down and rocks placed inside when not in use.

The engine

The 2 h.p. motor took the boat along at 2 - 3 knots at about 10 m.p.g. though in rough weather we could do as little as 5 m.p.g. Fuel tended to be dirty so a filter was installed in the engine and as an added precaution fuel was filtered when refilling the tank. The two stroke fuel mixture (10:1) was mixed on site. The engine was tied by a rope to the boat so it could be recovered quickly if it came away from the transome.

We took the following spare parts.

- 3 spark plugs
- 10 propeller retaining springs
- 4 spare jets for carburettor
- 2 needle valves
- 1 petrol filter
- 1 throttle cable
- 2 starting cords
- 1 set of contact breaker points

rubber washers to seal fuel system;
assorted nuts, bolts and split pins.

The spark plug was changed once, but the other parts were not used at all. Careful controlling of the jets could improve fuel consumption.

It is easy to sell engines and boats in Southern Greenland. Evinrude are very well established and a motor of 6 h.p. plus would have a ready market.

We took with us pliers, screwdrivers, spanners, of assorted shapes and sizes, and penetrating oil - all of which proved useful in the servicing of the engine and many other jobs.

It was a great relief to us, that despite the age of the equipment, no permanent breakdown occurred.

We would like to thank British Seagull for providing us with spares and giving us lots of useful information on running and maintaining the engine.

MISCELLANEOUS NOTES

The following notes are intended to be of assistance to future parties visiting the area. They are obviously only a rough guide and have no pretensions to completeness.

Travel and General Conditions

In the summer months there are four flights a week from Keflavik (Reykjavik) to Narssarssuaq - two with Loftleidir and two with SAS. We found SAS to be very helpful. After the end of August there are only two flights a week in and out of Narssarssuaq.

If it is intended to send food and gear to Greenland by sea the goods should be in Denmark by April at the very latest. It should be noted that many expeditions have had to wait up to three weeks for their equipment to arrive in Greenland owing to ice congestion around the coast. We air-freighted our food and equipment (at 57p per kilogram) but it arrived when we did!

The ferry runs the route Narssarssuaq to Augpilagtoq once a week (ice permitting). In 1974, it left Narssarssuaq on Saturdays, spent Sunday and Monday in Julianehaab and arrived in Nanortalik on Tuesday and Augpilagtoq on Wednesday. It should be possible to obtain the detailed schedule from the KGH (Kongelige Grønlandske Handel) in Julianehaab.

The KGH can possibly arrange boat transport from the last village in advance. The rates are fixed according to the size of the boat hired.

It would be possible to buy all food, fuel, etc., in Nanortalik (or, of course, any other main centre). However, Augpilagtoq is somewhat too small and one would probably not be very popular if one cleared out the village shop.

Firewood is not abundant in the inner fjords (brushwood only). Driftwood was readily available on Pamiagdlok.

We were advised to take a large (.303) rifle in case of bears. Fortunately we did not see any!

The fishing was very poor at our first base camp (too much fresh water and sediment) but fairly good around Pamiagdlok (cod in the sea near Augpilagtoq; Arctic Char in the rivers on the island). Spinners were most useful for catching Arctic Char and were obtainable in Augpilatoq.

Mosquito netting is a must - in tent entrances and on hats.

Equipment and Packing

The total weight of our gear and food was in the region of 1500 kgs. This was all packed in tea chests and strong cardboard boxes and banded securely. Each box weighed 50 - 60 kgs, i.e. such that it could be carried by two people.

Our climbing gear and clothing was Alpine rather than Himalayan in character, and proved more than adequate for the prevailing conditions.

No special rope for fixing was taken but we had enough extra rope to be able to fix the odd pitch.

We took enough tentage (in the form of Rafma tents) to be able to leave high camps in position while people came back to base. We also had a large mess tent (loaned by the Army) which proved very useful.

Paraffin primus stoves were used almost exclusively and we had no serious problems with them.

Medical

We took a fairly comprehensive medical kit (for which our thanks are due to Dr Hawtrey-May of the Explorers and Travellers Club, and Fenner) but fortunately it was not called into use at all. Apart from one stomach bug we were a very fit party.

And finally.....

THE WEATHER

For once we chose the right place! Southern Greenland had an exceptionally dry summer and 24 days of our total of 36 days at base camp were fine, sunny days while only 6 days were really bad. It might be noted that the weather in the inner fjords (ie. farther inland) is notably drier and sunnier than the weather farther out towards the Atlantic.



FINANCE

Jeffrey Moeller

1974 was the worst of times for any British expedition hoping to raise money. The miners' strike, the three-day week, two General Elections, the worst inflation for decades and an overall economic slow-down, could hardly have been forecast when we were estimating our expenses and expected income in December 1973. Even adding 10% of our entire budget to the final total in order to take into account 'unforeseen costs' was insufficient. Throughout this past spring we were seriously worried as to whether the expedition would raise enough money. Our grant from the Exxon Corporation was unusual. Its size and the open spirit in which it was given was deeply appreciated by all.

Then in July just as we thought all costs were met, the RAF decided to cancel an air-drop and an alternative to transporting all our food and equipment by air fell through. Personal contributions suddenly soared by another £70. Fortunately food costs were much lower than we had originally budgeted, thanks to the diligence of Phee Hoare and Ineke Moseley and the generosity of numerous companies. We were also able to cut our anticipated costs once in Greenland, but then found on our return that our parsimony in spending practically no money in Iceland had been to little avail. Devaluation cost us 30% of the currency we held when we converted back to Sterling!

The present balance reflects those final personal contributions and does not include expenses that are still outstanding. Hopefully after these have been met each person's total contribution will be reduced to approximately £180. It might be noted however, that expenses for personal equipment averaged over £100 each.

BALANCE SHEET (As at 30.11.74)

DEBIT

Air Fares (UK-Greenland)	£537.70
	+ \$2 500
Equipment (expedition)	126.97
Stationery & Printing	24.51
Freight	661.79
Expenses in Greenland and Iceland (food, ferry, hire of boats, etc.)	322.33
Insurance (required by Danish Government)	266.83
Medical Supplies	68.97
Miscellaneous (van hire, aerial photographs, etc.)	103.44
	<hr/>
	£2 125.54
	+ \$2 500.00

CREDIT

Personal Contributions	
9 @ £220	
others £48.52	£2 028.52
Exxon Corporation	\$2 500.00
Societies Syndicate	61.00
Gino Watkins Trust	100.00
Mt Everest Foundation	200.00
Selwyn College	40.00
Pembroke College	40.00
Carr's Flour Mills	5.00
G. Twogood	5.44
British Shoe Machinery	10.00
British Army	40.00
Sale of excess equipment	56.00
	<hr/>
	£2 585.96
	+ \$2 500.00

ACKNOWLEDGEMENTS

The Cambridge Southern Greenland expedition, like every other expedition, owes considerable thanks to a large body of individuals and organisations. We would therefore like to acknowledge our debt to the following people:

Our particular thanks are due to our two patrons, Eric Shipton and Keith Miller. Their help and encouragement were really appreciated. Other people who helped us with advice/encouragement were Phil Gribbon and Joss Lynam, both of whom have climbed extensively in southern Greenland. Miss Kristen Hollick of the Scott Polar Research Institute Library was a tremendous help to us. She unearthed several reports and articles which proved extremely valuable. Alan Wright of Birmingham University is due special thanks for the loan of the dinghy.

In Greenland, things would have been considerably more difficult without the help of Aage Barsted in Narssarssuaq, Graham Hudson in Nanortalik, and Jan Jorgensen in Augpilagtoq.

It is not possible in a report of this kind to thank all the individuals who gave up their time to help us. Nonetheless we would particularly like to thank the following: The British Embassy in Iceland; the Captain of the 'Taterak'; Club Alpin Français, Paris Section; Dr P Frierd; Derek Fordham; Mr R G Lloyd; Mr D Macaulay; Mr W McNair; Jörn Nielsen; Dr R Bainbridge, Dr R Stoddart and Miss Sue Wrenn of the Cambridge University Explorers and Travellers Club Committee.

Financially the expedition would never have got off the ground without the most generous grant from Exxon. This certainly saved the day when prospects were exceedingly bleak. Grants from the Mount Everest Foundation and the Gino Watkins Memorial Fund started us on our way, and additional grants from Selwyn and Pembroke Colleges, the Army (who also loaned us gear and Gordon!), Carrs Flour Mills, the British Shoe Machinery Co., Giles Twogood and the Cambridge Societies Syndicate were also of considerable assistance.

Many companies responded to our plea for help. Graham Tiso was particularly free with good advice and very healthy discounts, as were Ets Roger Egger (down gear) and Messrs Clog, Europeasure and Troll. The Treasurer has already mentioned how little actual cash was spent on food - this is due to the following companies who donated food to us:

Ambrosia Ltd	Rice pudding
Arjuna Health Foods	Dried fruit
British Sugar Corporation	Sugar
Beecham Group of Companies	Horlicks tablets, Dynamo
Bryant and May Ltd	Matches
Budgens	Assorted groceries
Cadbury-Schweppes Ltd	Dried milk, marmalade
The Chocolate Box	Chocolates
Ciba-Geigy Ltd	Araldite
John Dewar & Sons Ltd	Whisky
Dornay Foods Ltd	Instant mash
Drakes Sweet Marketing Ltd	Assorted sweets
Empress Products Ltd	Tin foil, plastic bags
Fibernyle Ltd	Plastic bottles
A C Finken & Co Ltd	Wheat flakes
General Foods Ltd	Instant coffee
Gill & Dufus Ltd	Cocoa, complan
John Haig & Co Ltd	Whisky
C & T Harris Ltd	Tinned meat
P J Hunter & Co Ltd	Muesli
Kenyon Son & Craven Ltd	Peanuts
Laurie & McConnal	Kitchen equipment
Lewis & Harris	Graindrops
Liptons Tea Ltd	Teabags
Mentmore Manufacturing Co	Ballpoint pens
Merrydown Wine Co Ltd	Apple wine
Metal Box Ltd	Biscuit tins
Morning Foods Ltd	Porridge oats
John Morrell & Co Ltd	Irish stew
Charles Nolan & Sons (GB) Ltd	Tinned butter
Palmer & Harvey	Sweets
Pasta Foods Ltd	Spaghetti
Prestige Ltd	Pressure cooker
Proctor & Gambol Ltd	Daz, Fairy Liquid, washing powder and soap.
Quaker Oats Ltd	Oats
Daniel Quiggan & Son	Kendal Mint Cake
Jim Reynolds	Sweets
Sherry House	Sherry
Shippams Ltd	Meat/fish pastes, Chunky Chicken Supreme
Spillers Ltd	Flour
Tampax Ltd	Tampax
Tate & Lyle Ltd	Sugar, golden syrup
Trebor Sharp Ltd	Extra strong mints
Typhoo Ltd	Teabags

Unilever	Tinned margarine
United Yeast Co Ltd	Raisins, peanuts, dried vegetables vegetables, rice
Universe Foods Ltd	Soya bean meat substitute, dried vegetables
Whitbread & Co	Pale ale
Whitworths Holdings Ltd	Raisins
Wholefood Centre	Dried fruit
F W Woolworth & Co Ltd	Assorted groceries
Wrigley Co Ltd	Chewing gum
Wye Plastics	Plastic containers

We would also like to thank the following for their help and advice in connection with food: Mr Gaffney of Tesco Supermarket; Mr Hall of International Supermarket and Mr Lockett of Van den Berghs

In addition, discounts were received from the following companies:

Behr & Mathew	Dried egg
Healthy Life Biscuit Factory	Biscuits
United Biscuits	Biscuits
T Wall & Sons Ltd	Tinned meat

Finally mention must be made of Pembroke College who allowed us the use of a room in which to pack, Twist and Whitley whose typewriters were used for this report and the Cambridge University Explorers and Travellers Club from whom the initial impetus was received.

