

MOBSAC

april 1980



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NOTE FROM THE EDITOR

I would like to thank all the contributors and the journals that were plagiarised. Much to my amazement I had very little trouble getting articles from people (generally only after a week of continuous pestering and threats). I hope you get as much enjoyment from it as I have in putting it together.

ELAINE MURPHY

Cover: From a photo by PAUL MALLIN



UNIVERSITY OF NEW SOUTH WALES BUSHWALKING & MOUNTAINEERING CLUB

OFFICE BEARERS 1979/80

<u>PRESIDENT:</u>	Mike Drew (663 1905)
<u>VICE PRESIDENT & WALKS SECRETARY:</u>	Andy Blakers (399 5610)
<u>TREASURER:</u>	Ken Wilson (30 7352)
<u>SECRETARY:</u>	Judy Johnson (95 1428)
<u>CONVENORS:</u>	Bushwalking - Mike McClusky Rock Climbing - Dave Wagland (46 2541) Canyoning - Bill Blunt Skiing - Greg & Sue Cave (476 6530) Mountaineering - Bruce Spry (524 5560) Orienteering - Peter & Robyn Tuft (698 8640)
<u>SPORTS ASSOCIATION REPRESENTATIVES:</u>	Peter Rigg (663 4488) Bruce Spry (524 5560)
<u>N.S.W. FEDERATION REPRESENTATIVES:</u>	Rob Jung (858 3740) Rob Evans (412 2449)
<u>SEARCH & RESCUE CONTACTS:</u>	Caves Tufts Bruce Spry
<u>GEAR CUSTODIAN:</u>	Peter Rigg (663 4488)

CLUB GEAR

This article contains an inventory of club gear as at the end of February, 1980.

BUSHWALKING GEAR

PACKS 2 Frame sacks
1 Alpine sports day sack
2 Green day sacks

SLEEPING BAGS

1 Kiandra
1 Synthetic

TENTS: 2 Paddies 3 man tents
1 Flinders Rangers 3 man tent

COMPASSES: 5 Silva

CANYONING GEAR

ROPES: 1 120 foot laid nylon
2 95 foot laid nylon

ABSAILING:

5 sets (2 screwgate crabs + piton)

TWO HARPOONS

ONE LILO

SKI TOURING GEAR

SNOW TENTS (only to be pitched on snow to protect the floors)

2 2man Ce-Ab 2 poles each
1 3man Ce-Ab 2 poles
1 Paddies snow tent no poles
1 Bergans Ignell 2 man 1 set black poles
2 Force 10 2man with poles
2 Taiwan tents 18 white fibreglass poles each.

ICE CLIMBING GEAR

CRAMPONS: 3pairs size 2
1pair size 1

FIVE ICE AXES

TWO DEAD BOYS

ROCK CLIMBING GEAR

21 Hexentrics
11 stoppers
15 Assorted trail Hexes
2 Maes
2 Piton Hammers
1 Pair Cloggers

SAFETY HELMETS 1 Ultimate, 3 Compton Elimber, 3Joe Brown.

ROPES: 9mm, 11mm.

WAISTLINES

CARABINERS.

24 HOUR ORIENTEERING OR ROGAINING

Rogaining is an activity which involves a team of 2 to 4 persons navigating to as many checkpoints as possible within 24 hours. You may think that it only appeals to masochists (and you're probably right) but it is a satisfying way of testing navigation, endurance, and other bushwalking skills (like how to light a fire when you get lost at night).

The club normally enters at least one women's and one men's team (last year had 2 of each) in the Intervarsity Rogaining. This year's event is to be hosted by New England University in August. Another event which is open to the general public hopefully will also be on later this year.

Some highlights that can be enjoyed:

- (1) Collisions with electric fences at night.
- (2) Being left in the dark when the torch breaks (it was also misty and no moon).
- (3) Wombats (the growling variety).
- (4) A herd of cattle stampeding towards you in the night (these were disturbed by another team at the other end of a paddock.)
- (5) Being shot at by angry farmers.
- (6) Being laughed at by friendly farmers.
- (7) Wading through streams to avoid scrubby banks.
- (8) Climbing a long steep hill only to find that the checkpoint is on the next knoll).
- (9) Following a road (which doesn't exist according to the map) in the wrong direction for 5 hours.
- (10) Walking off the map.
- (11) All members of the party losing their maps.
- (12) Aching joints and muscles.
- (13) 24 hours of rain.

Now that I've convinced you that rogaining is good fun, why not consider going in the I.V. or the open 24 hour event.

ROEYIN TUFT



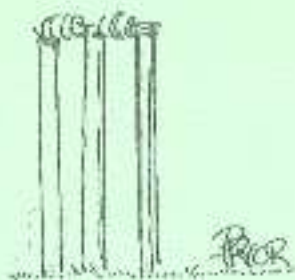
**OUTDOOR EXERCISE,
THE DEADLY ENEMY OF
CULTURAL ACTIVITY**

Jan Wharton



"One danger to a sound and healthy public spirit in Australia is the inordinate appetite for sports and amusements. Outdoor exercises . . . are excellent within rational limits; but man in a civilised state has capacities for something more, and lives under obligations to use his capacities for much higher objects"

**Sir Henry Parkes,
1892.**



*"I talk to the trees,
But they don't listen
to me"*

Anonymous lunatic.

" . . . the world is divided into Indoor People and Outdoor People. The first are a society's Mozarts, Rembrandts and Patrick Whites; the second are its Genghis Khans, Boston Stranglers and Jeff Thomsons. Exercise is anathema to the brain cells of Indoor People"

All of us have suffered righteous ear-bashings from grieved grandparents, telling us incredible lies about the huge distances they were wont to walk in the days before the invention of that Work Of The Devil, the internal combustion engine.

A 300-mile round trip to an outside dunny, a hike across the Brindabellas and back every day to attend school whilst carrying several hundredweight of encyclopaedias was nothing to their generation. "It did us good", they wheeze, in a tone that suggests that every subsequent generation has been a generation of physical and moral weaklings.

It comes as a nasty shock to have to take similar sermons from those energetic souls responsible for Canberra's 'Life, Be In It' campaign, and from those parliamentarians who have lent their support. They are not of the gnarled generation, but their moralisings on the virtues of rugged exercise in the Great Outdoors have that familiar geriatric and evangelical ring.

'Life, Be In It' is one of those clever, invulnerable slogans. Like 'Don't Kick Kitchens', to disagree with it is to sound like an opponent of all that is Right, and Good and Decent and Australian.

Bovine

This is why the counter-campaign of the ACT branch of Friends Of Sluts (headquarters Leithargy House) has received so little publicity. I thought that their 100-Kilo spokesperson, Mrs Bobo Hoak, made a very good point at her sparsely-attended press conference when she argued that outdoor exercise was the deadly enemy of cultural creativity.

Would Michelangelo ever have got anything done if his society had been forever badgering him to go and take his bovine neighbours for long walks? Imagine Leonardo da Vinci, his brush loaded with paint, all set to put the finishing touches to the Mona Lisa's enigmatic smirk, when suddenly . . . Bashi! Bashi! Bashi! at the door and in pour his ghostly neighbours to drag him down to the nearest-oval to kick a ball around!

For the world is divided into Indoor People and Outdoor People. The first are society's Mozarts, Rembrandts and Patrick Whites; the second are its Genghis Khans, Boston Stranglers and Jeff Thomsons. Exercise is anathema to the brain cells of Indoor People.

At my school the obese and the anaesthetic suffered terrible atrocities at the hands of Mr Ribershishe, a games master with an unspeakably low IQ. They were made to play rugby, naked, in howling hailstorms, and then stay in after school and do a million pushups. His victims all went on to be great men of letters, archbishops, and professors of Old (and sometimes even New) Norse.

Goliath

Sparta was a nation of Mr Ribershishe's and Sorely Lassons but was

culturally eclipsed by neighbouring Athens which was peopled almost exclusively by poets and dreamers and by orators like Demosthenes, whose notion of violent exercise was the opening and shutting of his mouth. The Litewalk aficionado would have us all like the Spartans, a nation of Outdoor People. They would turn us into phisistines.

The Bible's Phisistines have won this deserved reputation for hostility to the more aesthetic dimensions of life because of Goliath, their leading intellectual. If ever there was an Outdoor Person par excellence it was young Goliath.

Picture him now . . . lumbering energetically down to the nearest Canberra oval, all 5 cubits (more than 3 metres) of him, carrying a spear the size of 'a weaver's beam', wearing a coat that weighs "five thousand shekels of brass", and with a voice that put the wind up the Israelites and which carries from Civic to Queanbeyan on a still night. Such people do not play the viola in string quartets, or scribble sonnets in praise of the nightingale's song.

There is, however, one species of Outdoor Person who avoids phisistism; but the Litewalkers, with their egalitarian insistence on going for walks with hateful neighbours, have ganged up on him. He is the lone walker, the pale aesthete who wanders o'er the tea with a beard full of beautiful and profound thoughts without the distracting fear that his despicable dog will savage a skylark or his vandalistic kiddies uproar every defoddl in sight.

Wordsworth and Coleridge were habitual lone walkers. So was that complex German, Goethe, who claimed that one day he met himself coming in the other direction. But the most famous lone walker of all was the great thinker and writer Jean Jacques Rousseau, not an Irishman, as his name might suggest, but a son of France. It was Rousseau who wrote the lone footslogger's Bible, 'Reveries Of A Solitary Walker' in 1765.

Rousseauesque

Rousseau, in spite of his ingalitarian approach, could well become the Litewalker's patron saint. It was he, you recall, who threatened that mankind might have to be "forced to be free". Given time he would have got round to insisting that we should be "forced to walk" too. There is something earthy, evangelical and Rousseauesque in the Litewalker's insistence that exercise will Do Us Good.

I did join the Litewalkers on the evening of the 4th. But only because I was terrified that a uniformed Fun Squad might beat on my door and ask me, through clenched teeth, why I was not outside doing myself Good. "We have ways of making you Be In Life, Sir".

Should you dare to be indoors one evening, putting the finishing touches to your latest symphony, don't ignore that thunderous knock on the door. It may be your meek, inconsequential neighbours, but on the other hand it might be Goliath. If he wants you to go for a jog in the park then go. He's terrible when he's angry.

ROARING JELLY

PROGRAMME NOTES

At the Club B.B.O. in May, the musical group "Roaring Jelly" will be inflicting itself upon those attending. Forewarned is forearmed, they say, and for the sake of unsuspecting Club members, here are the programme notes pertinent to the group.

Curricula vitae

Lead recorder player: Robyn Puffed, qualified as a recorder player at the Further Mongolian School of Metallurgy. What has that esteemed institution to do with recorder playing, you might ask! So did we! Robyn's repertoire is quite extensive, and runs to yak-calls. And so, what might appear to the uncultured as a discordant note is really a charming little yak-call, skillfully worked in ad lib, to add some ethnic flavour to an otherwise questionable performance. This is Robyn's second season with "Roaring Jelly".

Lead recorder player: (note no-one plays second anything in Roaring Jelly): Maestro Andreivich Blakovsky was forcibly defected from the famed Vladisvostoch Recorder Quintet while on tour to Liberia, in 1973. (The orders from Moscow were quite explicit: don't bring him back!). The Maestro then conducted a triumphal tour of the snake charming schools of Greenland, coming then to Nepal, and finally the squalor of Canberra and Sydney. A Latin American influence can be detected in the Maestro's playing, reflected in a different sense of rhythm to the rest of the rest of the group (NB. the word is different, not wrong!) As this is his first season with "Roaring Jelly", one can hope for the best.

First, Second, and Third Violinist (N.B. three positions means three lots of pay!): Maurice Fitzcatshowler claims descent from the legendary Irish fiddler Paddy Fitzcatshowler, who was shot by the British in 1834 for his musical abominations. Maurice continues in this grand tradition his playing being mentioned in last year's Amnesty International Report as an example of "cruel and unusual punishment." Maurice exhibits a superior disdain of the written note; this does cause some problems with the remaining members of the group. Some of Maurice's unique stylistic interpretations may also result from his use of yellow Klister ski wax on his bow. Maurice claims in some way to lead the group succeeding Attila the the Hun, who retired with a nervous breakdown.

Premier Guitar Player: If Grandissimo Maestro, Brucesco Sprung, won the under 7 egg and spoon race at the Sutherland Hospital Fete in 1962: this overpowering achievement was the highlight of his musical career, which has progressed steadily downhill ever since. Brucesco is the world's greatest living exponent of the Anglo-Franco-Germano-Russo-Spanish-Groeco-Kurdish-Turko-Indian guitar style: indeed, he is the only exponent of this style in the world.

Lagerphonist: a devotee of the punk school of lagerphone playing, Peter Puffed is currently bludging at the taxpayer's expense on an Arts Council Grant of \$15,000. In full cry, he is quite a site to behold: hair dyed screaming pink, ice-axe through his nose, ice-screws through various other appendages, and specially sharpened crumpons to add to finishing touch. Perhaps this attire helps him fend his way through the thousands of screaming fans who attend his every public performance.

Lead Guitar Player: on tour at the moment from the Munich Looney Bin, Michael Hoffnung spends most of the performance in a battle to the death with Bruceco Spring, over who is the better player. This arrangement suits everyone, since then neither of them can play. The whacks and blows add a suitably syncopated bass to the percussion section.

First Guitar Player: So most of the actual guitar playing is done by Jeanette McDonald-Duck triumphal gold medallist at the Cobar West Eistedford in 1968. Jeanette favours Flamenco style for her Irish Jigs, and does Scottish Airs blue-grass style.

Flautist: discovering at age that she was a rhythmic and tone-deaf, Joan Judystone decided on a musical career, finding "Roaring Jelly" to be the best vehicle for displaying her remarkable talents. At age 20, it was pointed out to her that you blow in the other end of the flute; whether this has improved her style, is unclear.

Mouth-organist: Ian O'Belch, who was described by the music critic of the Balmain Trendy as "having a propensity to gestalt-prone hypercognition of the id." We haven't a clue what this means, but include him anyway.



CHOCS

by Tony Mills

The purpose of this article is to make available to the climbing world in general the outstanding results of the intensive research that has been carried out at an undisclosed place in the southern hemisphere, which are about to revolutionise the whole concept of alpinism, ice-climbing and the logistics of high altitude climbing.

The subject of this research is what are scientifically referred to as Consumable Pitons and Belays. The basis for this research is a fact that has been known to climbers of all nations for many years, but has hitherto been totally overlooked. It is, in its simplest form that, as the ambient temperature decreases so the texture of chocolate becomes harder and more rigid. Anybody who has attempted to eat a bar of chocolate, or God forbid, a Mars bar, in the middle of a Scottish gully, will bear witness to this. Surely we could use this phenomenon to our advantage.

The research team selected a variety of proprietary brands of chocolate and later other sugar based confections, and carried out stress resistance tests on them when they had been hammered into ordinary granite cracks, in a varying range of temperatures. The results summarised on the accompanying graph were astounding.

We can see that the standard sized bar of Cadbury Milk Chocolate yielded a strength of 4,000 kg at -12°C increasing to an astonishing 8,000 kg at -25°C , whilst Galaxy despite being "so full of milk it almost moos" yields a maximum stress factor of 2,500 kg at -18°C . This inherent weakness in this product is probably due to its high fat content.

Chocolate Aero Bars were disappointing despite their lightness and it is expected that this is due to the format of the bar, rather than the holes in the material, although there does seem to be little control over the thickness of the walls surrounding the holes perhaps if this were standardized the walls would improve. The Milky Bar far from the insipid object suggested by its appearance

proved to be the strongest at high temperatures, seeming to retain its strength even though it has become rather soft and flexible. It is difficult to see when in snow though. We have recently moulded the chocolate into a range of conventional piton shapes called Choco-pegs, but with the exception of the blade pegs we have found that the normal shaped blocks of varying thickness gave the better performance.

Tests with conventional boxes of Milk Tray led to interesting discoveries with the many shapes. When used as nuts, these Choco-Chocks as we may call them, seem certain to supersede their orthodox aluminium counterparts. In particular the walnut whiff is proving to be a very versatile shape. The urp and iurp are sure also to be superseded by the chocolate drop, in two sizes, known for short as the BURP (Bits-sized Ultimate Reality Piton) and the SLURP (Succulent, Lickable, Ultimate Reality Piton). The great thing about these is that the heat created when hammering the BURP in causes the chocolate to soften and then, as the heat dissipates, weld itself on to the sides of the crack, giving much greater holding power than the conventional piton.

Thus far we have only mentioned the rock-climbing applications in low temperatures of these commodities, but probably their real importance is in ice-climbing. This is due to the natural surface adhesion between chocolate and snow and ice, which is much greater than for any of the normally used alloys. Thus relatively small chocolate bars with holes bored in the centre make excellent dead-men when placed horizontally or vertically in the conventional T-shaped slot, which however needs to be very much smaller than usual, thus saving time and effort. We shall be producing in the near future a selection of Chocolate Snow-men, although you may choose to bore (or chew) your own holes. The second major innovation in ice-climbing came from our second line of research, where we did not test pure chocolate items but what we termed Mixed Material Munches (in min's for short).

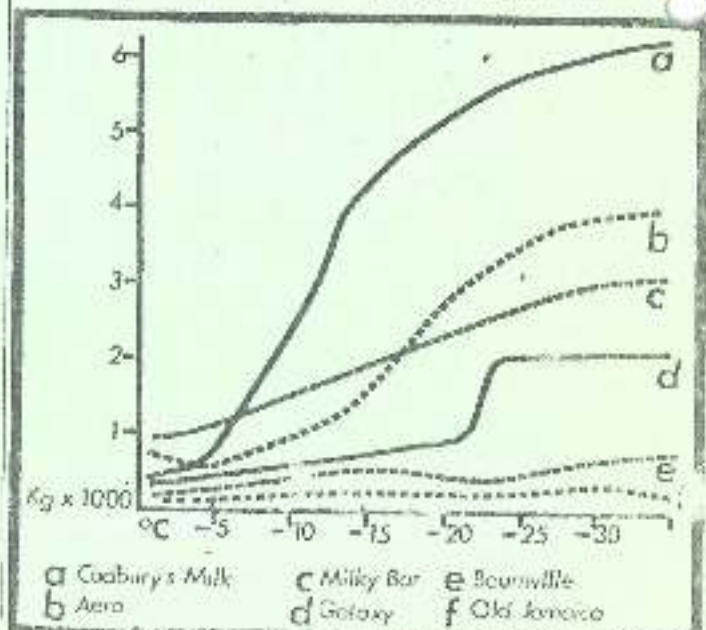
These included all-time favourites such as Mars and Bounty Bars, only the former of which is it necessary to describe due to its popularity in mountaineering circles. In short the Mars bar may be hammered into even the hardest ice slopes providing a small placement pit is created first. Once fixed it provides an ice piton of unprecedented holding power, giving three times the holding power and strength of any previous piton or screw and in a range of temperatures and ice types. It probably owes its great strength to the reinforcing strip of toffee which becomes extremely strong at low temperatures (Another advantage of Mars bars is, if the ice dinner-plates, you can always use the dinner-plate to eat the Mars bar from). But, to be serious again, Mars bars are difficult to remove but this difficulty can be overcome for practical purposes by the simple expedient of the second chewing off the protruding portion, and providing that alternates leads are employed, each climber will receive his fair share of sustenance whilst in action, thus removing the necessity of time-wasting lunch breaks. Further, should retreat be necessary there is a ready supply of food available on the way down. It is worth mentioning here that the reader should avoid the use of (a) dark chocolate and (b) mixed bars such as Old Jamaica, Fruit and Nut, and the like, at all costs. These are dangerous, their strength is only in their flavour.

These discoveries have far reaching consequences

when considering high-altitude logistics. No longer is it necessary to haul huge quantities of useless aluminium and steel as well as tons of food up the mountain. All that is necessary is to balance the number of Mars and chocolate bars so that the summit assault camp can balance security against starvation ideally using the last bar on the summit. (Perhaps Rowntree will produce giant Mars bars for use as snow-stakes). Of course on the way down no huge amount of metal need be left behind, the mountain can be cleared by simply eating. Thus no longer will emaciated skeletons arrive at base camp, no longer will whole camps endure the privations of insufficient food when storm-bound. On this point, we did test sugar based confections, particularly Kendal Mint Cake, and produced a reasonably successful type of mint-flavoured angle (Mangles) but on the whole we recommend the use of Kendal Mint Cake simply "sitting on the top and nibbling, looking at the world below" etc.

To conclude, this research offers up ideas for many future possibilities: are the insulating qualities of candy floss superior to those of felt for inner boots or Fibrefill and down for sleeping bags; would Brighton rock provide a material suitable for ice-axe shafts, adjustable in length by chewing of course; should we carry rucksacks with a refrigerated compartment to keep things hard during the walk-in or hut-grind? The possibilities are endless.

Perhaps one day in the future, we'll all be climbing the frozen Lemonade Springs en route to an ascent of "that big Rock Candy Mountain".



One of our club members (Mark Foster) turned 21 recently, and I could not let the artistic license of his father's impression of him slip into obscurity.



DRY YOUR OWN

If you're a carnivorous bushwalker, this article is for you. It is a cheap and simple way of coping with the problem of providing meat after the first or second day of a bushwalk. Do you ever scan the shelves of dehyds with mounting frustration, looking for some meat product reasonably cheap yet appetising and nutritious? Your eyes light on the Mountain House rack where they are tempted by such delights as Tuna a la Neptune and Scrimp Creole (conscientiously passing over the blackberris with granola and other dessert delights): truly tempting, until you realise that you could dine in a restaurant for less money. Next comes a sight to warm the cockles of your wallet: Rosella catering packs, cheap fare even if you eat double or triple serves; but if you actually buy a packet you will realise that finding the meat is like a S & R operation, and the victim is usually dead on discovery anyway, drowned in a flash flood of farmhouse spew. So what do you settle on? Yes, it has to be Alliance again. More meaty and more palatable than Rosella, less extravagant than Mountain House - a good compromise.

But you can do a lot better yourself. For a couple of hours work you can make your own tasty dried meat, using a traditional Indonesian recipe. The result is tasty and keeps very well (I've eaten it 15 months after preparation, although it was admittedly losing some of its fresh spicy tang by then!) If you follow the instructions carefully, it is quite safe and can be stored at room temp. The nasties are kept at bay by the high salt content and the spices. The resulting product is chewy, rather pleasantly so, and can be stewed up (or curried) to soften it a bit, but it will never get as tender as commercial preparations. It is however, substantially cheaper and very tasty. Try it and see what you think.

INDONESIAN DRIED SPICED MEAT

1 kg lean beef with all fat trimmed off (the tenderer the cut, the tenderer the final product, but even gravy beef works fine).
5 tbs vegetable oil
2 cloves garlic, crushed
½ tsp grated green ginger
2 tsp ground coriander
1 tsp ground cumin
1 tsp trasi or blachan (Indian or Malaysian shrimp paste)
1½ tsp salt
1 tsp sambal ulek or 1 chopped fresh chilli (hot)
6 tbs dark soy sauce
2 tbs tamarid liquid (can use lemon juice or vinegar)
3 tsp palm nyar or raw sugar.

Cut steak into very thin slices (1/8" - ¼" thick) up to 5cm long and 2cm wide. Heat oil in large saucepan or wok or cast iron frying pan. Fry garlic, ginger, coriander, cumin and trasi for 1 minute, then add salt, sambal ulek, soy sauce and tamarid liquid. Add meat and stir - fry till coated with spices. Reduce to simmering heat, cover pan, and cook gently for 30-35 minutes more, stirring occasionally. Continue if necessary till liquid has dried up (but don't let it burn). Now spread the meat in a SINGLE layer in 1 or more baking dishes or trays. Put in low oven (125 degrees C or 250 degrees F) for 30 minutes or till almost black on top. Turn meat and continue cooking a further 20-30 minutes. Meat must be cooked till quite dry and very dark brown all over. Oil should be visible on the pan where it has seeped out of the meat. Make sure meat has no oil on it, cool and store.

The spices can be varied a bit to taste but don't cut down on salt, soy sauce, garlic or chillies, as these are probably all important preservatives.

Retrospective

Memories fade and the sharp edge of dreams blunt themselves against the brick walls of life's realities. And though certain incidents and places stand out most clearly from all of past experiences, even these may become hazy round the edges when compared with the physical being of places as they are revisited. It takes the physical reality of being; the pain of broken limbs and uncertainty of future abilities to make one consider one's achievements of the past. Even when seen in black and white, (or colour in the event of using Ektachrome) I find it hard to believe that I have actually done such things as climbed in New Zealand, or Australia for that matter.

I don't know how I got into all this. Just turned up at a meeting one night and there it was.

"What do you want to do?" asked this guy called Paul who was the president.

"Just climb, I guess", says I slumping further into the orange plastic chair so that no one else can see me. I guess what really got me interested was the mystery and glamour of dangling by a nylon thread. At least that's what I thought it was like.

And what is it really like. Damned hard work if you ask me. Pretty basic stuff but a lot of sweating and straining. And what do you get out of it? That depends very much on how much sweating and straining you do. In fact I would say that the amount of personal satisfaction is directly proportional to the sum of the sweat squared plus the cube of the intramuscular cohesive strain. Then again there are all the side benefits. Like people for instance. The more involved you get, the more people you meet, and that's what it is all about isn't it.

People!

If it wasn't for all the people, I would probably have given it all away long ago and taken up something like Engineering (but I did that anyway).

So to the future. Where does it lead? Who really knows but there's a lot of rocks I haven't seen yet. And a lot of snow that hasn't even fallen from the sky. Lots of places really do get a grip on a person. Places like South America, Europe, The Himalayas. Maybe even New Guinea or even Antarctica. All this of course depends on the people who want to go. That's most important.

Last, but not least of all, there's me. What has this club done for me. Well, (thinks about three days) ... I guess (meaning I'm not terribly sure about it) this club has helped me to meet some very nice people, including myself. Because while the body was sweating and straining, the mind had a chance to slip into neutral and find out about this person it was living in. What's he like? Why don't you come on a trip some time and find out.

Anyway, this is getting us nowhere, so I'll just say thanks to all the people who have been or will appear in my dreams and memories.

Bruce Spry.

BEGINNERS TRIP

WENTWORTH FALLS TO KATOOMBA (the hard way)

15-16 March 1980

The journey was designed to be a simple and enjoyable one for nature loving beginners - nothing more than a pleasant and stimulating stroll in the Blue Mountains. Each wide-eyed beginner carried his weekend rations, survival campstyle, with a view for optimum lightness, as had been advised by many an experienced bushwalker. On the other hand, expecting a simple trip our wise leaders carried such knee-buckling items as rock melons, pineapples, kilograms of grapes, corn on the cob, honey, cartons of orange juice, slabs of cheese, loaves of bread, and so on. In any case, the journey proved more than even they had bargained for.

The morning of day one brought spectacular views of Mount Solitary and the surrounding countryside, with a pleasant trudge down a well-established forestry road towards the Valley floor. Leaving the track at the base of the cliffs, we bush-bashed through the midday heat towards Kedumba creek.

Here our ascent of Mount Solitary began. Trustingly we followed our beloved leaders, complaining little as the gradient of the land became steeper and steeper, and the melon-filled packs became heavier and heavier. Eventually the gradient could only be described by the word 'vertical', and our easy beginners trip gradually slipped from 'medium' to 'hard' as nightfall neared. Somehow, it seemed, the right path had become lost.

In desperation we camped in an unplanned, inforsaken spot somewhere between the top and bottom of mount Solitary. However, morale lifted as experienced walker and beginners respectively brought forth milk, honey, and baked beans for the night meal.

Early next morning more cliff-face stunts up 'The Col' brought us to the summit of Mount Solitary, where we encountered many breathtaking views of the mountains as we hiked across the plateau to lunch in our originally planned campsite at Chinaman's gully. By now our weak beginners bodies were fairly exhausted, driven only by the promise of iced chocolates at Aroneys cafe, shining before us like the image of the Holy Grail.

The final leg of the journey was a relatively easy stroll along the base of the cliffs towards Katoomba, where most of us gave in to the luxury of the scenic Railway, followed by that well-earned rest at Aroney's.

All in all it was a journey we, as beginners, are not likely to forget. After taking on this walk, new recruits may discover that they didn't really like bushwalking so much after all.

COLLETTE DOCHKOV &
REX NALLIS

Fearless Participants: Nick, Andy, Dave, Rob, Veejay, Chris
Lea, Collette, Rex.

A Typical Beginner's Walk

Another of those classical beginner's walks that deserve a special place in the club's annals. Ever since I can remember, the march beginner's walks have always proved disastrous. Hardly any beginner has stayed on. You are wondering why? Look at the track record.

MARCH 1971. A typical beginner's walk. Proposed route: Mallow Gin to Splendour Rock down Yellow Pup to Komangaroo clearing. Actually we had a hasty route change when we found ourselves at Knight's Deck and stumbling down to the Cox's, arriving at the clearing just before nightfall. MICK BENDILI was a victim.

18 MARCH 1972. A real easy lilo trip. A day for a lady. We started at 0900 hrs expecting to finish at 1700 hrs. Yes we did finish, at 0100 hrs the following morning after liloing/walking most of the night. A bottle of champagne was opened to celebrate. DAVE SANDERS remained.

MARCH 1972. How much easier than the Budawangs can you get? After wandering round and round the same road in pouring rain with a dozen leeches stuck to you, somewhere near THE VILLES, you tend to wonder. The beginner's were too tired to comment. ABE MACQUELL and BOBBO MOSEY were impressed though 23-24/3/74. Another Budawangs bundle" such stalwarts as Reddell Leslie were there to help, however what can you do when the valleys are flooded, the rain pouring? Crossing the flooded Clyde New Zealand fashion was very instructive.

16/3/75. Range Ck. This time a change of tactics. Instead of weekend trips, a Doree Loo followed by a day trip. The weather was perfect, the B-loo good fun, the company fair raiders. What could go wrong? We had no rope to descend the waterfall, not realizing that a clever manoeuvre was required. SUE KURRIE was suitably enchanted.

27-28/3/75. Budawangs. How the beginners are becoming wary. Only one ventured to come along with W + DLT, Annie + John G, Greg G, George Catchpole and me. You guessed. It poured. It poured more. And it poured even more. At some stages we were up to our waists in the grassy plateaus. To cap it all John punched a hole in the sun of his Concertina. Never Dave (?) again.

ACTUAL
SIZE After all these disasters I went into hiding in Europe to escape the wrath of irate club members and dwindling membership. 1980. The dawn of a new decade. New promises and fresh hopes. Positive attitude and another beginner's walk.

To start a disastrous petrol strike upset the very carefully laid plans. Nonetheless: Rex Wallis, Collette Douchkov, Chris Podler, David Backhouse, Selparajah V.J., Robert Spence, Lea Dixon - Smith and Andy Blakers ventured to come. The day dawned superb, the company pleasant, the road back along Kinn's Tableland short and the descent to Nedzha Ck. without incident. Soon the climb up Mt SOLITARY was getting steepish. 45° grassy slopes are not ideal easy terrain to inexperienced walkers. Slowly, painstakingly we inched our way up ... to be delighted beneath the cliffs. A small, sort of flat site beneath an overhang was found. P leahags were laid and a crackling fire lit. Dinner was enjoyed by all on one litre of water till next (?) water supply. During the night you had to keep crawling back up as you gradually slid downhill. The panorama was superb, the stars magnificent and the picturesque sunrise shattered by Andy's alarm clock!

The walk up THE OOL was easy. As we progressed towards Katoomba, the track improved tremendously so that by the end, everyone was trotting along, pain and stiffness doused by the springs pushing from the rock. The scenic Railway was a welcome sight to seven hot, tired, stiff, weary, dirty and aspiring walkers. Perched throats easily quenched by rounds of iced chocolates and memory of a free iced chocolate slanted by Mr John Aroney considering the amounts drunk by a certain party member renamed for his iced chocolates drinking spree?

Nic Bendili

SEMICONSCIOUS ON THE COLO

"Just an hours walk to a beaut beach on the river" - that was the lure used by our native guide to entice our party of innocent foreigners to the Colo Valley at Cance Creek. We didn't know what stern stuff oz bushwalkers are made of.

It started well enough since we found the right jeep track off putty road past Colo Heights but then the overladen car was not going to proceed very far on the track. So we walked, and nice enough it was too, for the first two hours. But why did three or four navigators never seem sure of our position? A well, the sidepath was clear enough - 3 stones piled on each other marking a route straight down the valley side. An hour later with no sign of the track, front or back, we suspected that three rocks in a pile means "no way, sport".

Scrubbashing is a peculiar form of torture that Australian bushwalkers derive dubious and mysterious pleasures from. The gleeful shouts from our leader did little to still the sense of rebellion as our happy little group stumbled over hidden logs, started back from prickly thorns and swore and sweated our way onward.

Finally we staggered onto a creek bed and proceeded down stream picking our way delicately between waterworn boulders and recently collapsed tree trunks. Slowly we began to notice that the scenery was beautiful but still we weren't convinced. Then suddenly there was an opening and from a rock ledge we could see the river, sparkling in the sun. We almost sprinted to the sandy bank, dropping packs, cloths and water bottles on the way, pulling off boots in haste. Then splash into the cool cool water. It was a wonderful spot and our lunch was eaten while looking around at the beauty of the river running through the gorge.

Not for long though, before we were herded up and marched fearfully in a homeward direction. But we finally found the correct path and as we strode along the jeep track under the bright start, what do you know? we had enjoyed ourselves.

The lucky participants - Alan, Jenny Harvey, John McDonald, Paul Heron, & Elaine Murphy.

A LITTLE STORY

"Oh Hora, Oh Hora" she cried. "My Lacy came undone, and I tripped and fell and spragged my ankle!"

Things looked grim. It was entirely possible that before nightfall old Nick would have her. There we were, high on a cliff at the exit of the Caves which we three spelimen had been exploring.

"Jung man" said the Hardy old mountain guide, "Mark my words - we're in trouble" How far away the morning seemed. We had set out in good spirits, climbing up thru the Meadows to the Hylands above. Now we were up here on a ledge a Burning hot January day with an injured person - no longer the Spry, Bonney young lady who had been trying to Tuften herself up in preparation for her expedition to Mt. Hagen in New Guinea.

"I'm so Hirsty" she said at length, "and I dropped the water bottle. All we have is a couple of Fosters." Her words brought me back to reality. I quickly dabbed some medicines on her ankle and made her comfortable.

"We must get off the mountain by dark or we'll meet St. Peter in the morning" muttered Charlie.

"Granted, said I, "But what can we do?" Make a stretcher?"

"Yes", said he, "Its all we can do."

Frantically we worked thru the heat of the afternoon to Jung Rigg something to carry her in.

But as the day Drew to a close, Charlie said "I'll be Blunt - I don't think we'll be finished in time" We sat exhausted on the rocks as the sun slipped over the horizon. Suddenly I realized what we must do.

"perhaps we can Sparkes a fire! Have you got matches? Mine arn't in a very Andy place" "By Georgevits, you've got it "my companion cried. "Quick, gather some of those prickly Thorntons - they should burn well". Soon a heavy Paul of smoke hung around our precarious perch. Would anyone notice it before night fell? We watched and waited as it grow dark around us, Suddenly we heard the sound of a Basset Hound baying in the distance, and dimly made

out a Laurie moving up the mountain path. Help had arrived, more than enough to Porter our injured friend off the cliff. Soon we were back at the farmhouse, relaxing on soft cushions and quaffing Megs and Megs of tea. It was good to be alive.

REBSLA

One recent Tuesday I was talking with Elaine Muroky and we both expressed considerable doubt that we would be able to survive the city rat race another week. What we needed was something to inspire us, a Bushwalk with a Bluebird.

Initially we were considering a walk in the Blue Mountains, but finally decided to go - to Mountain Lagoon which is off the Bell road, near Bilpin. Michael Hora joined the expedition so the four of us (Elaine, Michael, myself and the Bluebird) set off at the crack of dawn on the following Saturday (just past 7.30).

We arrived at Mountain Lagoon around 10am and set off by foot along a fire trail which lead to Toobie Creek. The vegetation along the side of the creek was rather thick but we were able to walk along the creek's bed. The water level varied from ankle to knee deep, with the occasional section requiring tin toes if you wanted to keep your Addidas joggins shorts dry.

We planned to camp Saturday night at the junction of Toobie and Cabbage Tree Creek which was only a few hours down stream. This meant we had plenty of time to enjoy the walk, have a lazy lunch and a midday (1.30) swim. The afternoon's walk consisted of a bit of scrub, a lot of enjoyable rock hopping and the odd flat section of river bank. Michael won the rock hopping prize, showing us a clear set of heels.

I had been to the campsite four years before (on that occasion walking up from the Colo) and I am have over zealously praised the spot when describing it to Michael and Elaine. When we arrived, it took us a short while to convince them of this fact and that this was really it, etc. I must admit that it was not as I had remembered. The previous trip was by first bushwalk and I suppose my campsite, where one could sit and rest could easily seem superb.

Formally the campsite is very ordinary, but there is a strong feeling of isolation which I find very appealing, especially as the location is so easy to reach. A small clearing covered in beach sand, gallons of fresh water, a tonne of wood for a roaring fire, gourmet food (anything can be carried for one easy day) and a few good walking companions will satisfy me any time.

We again got away bright and early Sunday morning (around 6am) heading up Cabbage Tree Creek, with Michael surging to the front. He again showed us what rock hopping is all about, (although initially we nearly missed the creek). After a short while we left the creek and started a trudge up a ridge which lead back to Mountain Lagoon. Surprisingly we all enjoyed the climb and were rewarded after two hours with excellent views and the sight of level ground.

The top of the ridge is only about an hour from a fire trail but this proved to be very frustrating. The top was covered with really thick vegetation which was a real battle to push through. There were no landmarks that we could head towards, so all we could do was to follow a general bearing and to keep to the highest point of the ridge, which in this section was a fairly level plateau.

We all enjoyed the trip very much and I am keen to do it again soon (perhaps in another four years). We arrived back at Mountain Lagoon around 4pm and as always the 1988 Datsun "Bluebird" was faithfully awaiting our return.

SKI TOURING: MT HOWITT VIA THE BLUFF

This is perhaps familiar territory to Victorian ski tourers, but for NSW people it provides a skiing environment spectacularly different from that available north of the border. The area is located east of the wellknown resort of Mt. Buller, and is reached via Mansfield.

The main feature of the trip is the high narrow ridge from the Bluff all the way to Mt. Howitt and beyond. There is little scope for side trips or variations of route, and the return must take the same path as the outward trip, but this is compensated by the spectacular drops on the N.W. side of the ridge. The Bluff and Mts Magdala and Howitt are particularly impressive.

Terrain varies from near-razorback ridges to gently rolling tops. The most technically difficult section is the ascent and descent of the Bluff itself, which is very steep and rocky. Skiing here is quite impossible - careful scrambling over rock and snowgrass with perhaps a little pack hauling vary the normal ski touring routine. Virtually all the rest of the route is skiable, given reasonable snow, with the possible exception of the S.W. side of Magdala which, though smooth, is very steep. There are some very good runs on the other side of Magdala (though beware of Hells Window, and impressive gap) and on Howitt. There are also some thrilling parts of the narrow fire road which forms the central section of the route.

There are huts at Bluff Saddle and N.E. of Mt. Lovick - both rather grotty stockmen's shelters. There is however ample scope for camping, even in quite unlikely places. A broad shelf on the back of The Bluff is very attractive, and other possibilities are beside the track between Bluff Hut and Mt. Lovick and on Square Head Ginny (all these have water). There is also the grandiose but smoky hut at Macalister Springs just beyond Mt. Howitt.

The return trip would be an easy 4-5 days, but could easily be extended by spending more time (up to another 3 days) around Mt. Howitt (day trips to The Crosscut Saw, Snowy Plains, etc.)

Details of access and route information can be found in "Bushwalking in the Victorian Alps" by Melbourne University Mountaineering Club. If weather or inclinations make it desirable to avoid the somewhat hazardous ascent of The Bluff itself, the book mentions other possibilities for access.

While in the general area, it may also be worthwhile to visit Mt. Cobbler and Mt. Speculation to the north, accessible from Cobbler Lake, in turn accessible by reasonably robust conventional vehicles from the Dandongdale Valley. Both Cobbler/Speculation and Bluff/Howitt provide excellent and extensive views of the surrounding rugged country, as well as Mt. Buller just across the Howqua Valley.



6.1



KOMMENG RIVER TRIP - (2days-circuit)

KANANGRA REGION.

Fantastic Cascading falls of immense size, cool crystal clear ponds with water stilled, all of this amidst large open Gorge of stubborn rock imperturbable to the influences of violently flowing stormwater, except for the gradual smoothing of formations about the Gorge. This Gorge setting and interesting landscape make to my opinion one of the most enjoyable two day trips in the mountains.

The river is best accessed from the range track, approximately 2km down the Kanangra track towards Kanangra Walls with mind of entering the river at the spectacular Morong Falls (To extend the trip it may be worthwhile to enter via surprise ridge near Chardon canyon or (Ben Nevis hock much higher up). Proceed down the Gorge through the inspiring rockery of Morong Deep, camping areas are sparse, one of the best being at a point where you meet an immense square boulder sitting amidst rock debri. The next day proceed on to Missery Ridge, ascending and then walking on a bearing to intersect the Uni Rover Trail, follow this out to meet the range track and thence the trip is completed.

GRANT HYLAND

Slopes of King William swaying in a black breeze:
we watch from iced up windows, days passing
soon fleece invades the quartzite amphitheatre,
flakes of snow floating on the dark lake below:
Ice on moss and shredded lichen, boulder grey;
cold toes stubbed on wandering roots of wood,
feet slipping in pebble grained clay,
and boulder and flower climb the lost gullies.

Damp cushions spread over the ground;
above, twin meshes cry for another soil:
'Huey', the Cloud Gatherer, covers 'Pelican' and 'Ossa',
light flicking over the forest canopy:
Once again, roaring mist fills the frozen amphitheatre,
water torrents thunder down the black quartz;
Smoke drives us out from the little hut,
sleet fills the air, a storm fire outside.

Darkness pounding drops onto the clay,
tea-leaves and noodles washed into mud:
The latch is closed, a candle flame points upwards:
lie awake in the pits, sleep becoming transitional;
Wind waves shower 'Tahune' with heavier rain:
Dawn is not expected, only grey narwhals,
dreams rolling over into hut life;
Aye, its a real west coast blanket!

Gear

A load of old rope (from Clisber & Rambler August 1979)

The German Alpine Club has been testing 2000 metres of ropes, chosen from all manufacturers on the German market. Both new ropes, and ropes of various ages and usage were tested. Some of the 11mm up to four years old had only been in use for short periods and did not appear to be damaged.

After comprehensive testing, the club came up with this statement: "We have no alternative but to recommend that under no circumstances should rope over four years old be used for climbing - not even top-roping." The report says that since 1965, the German Alpine Club has recorded 11 breaks of 11mm rope, three of which broke at karabiners. Six instances of wear-breakage were also recorded.

This statement will no doubt raise some eyebrows here, where old ropes are only discarded with great reluctance, owing to their high cost of replacement.

THE CONTINUING STORY OF NODDY IN WONDERLAND (A FANTASY?)

Welcome to the first installment of Noddy in Wonderland. The story begins when little Noddy, who is tending his vegetable patch in his home in Hobbiton, is caught up by a big silver bird and whisked away to a far off land. Noddy searches aimlessly for the secret door which will lead him to the land of forgotten hopes and eventually home.

In his search for the door Noddy has travelled from the house of God's Son to the High Hill of the one who prepares food and then to the town of many transvestites.

Noddy sighs "Oh well, Pardon. We'll soon be out of this bush." For two days Noddy and his pet Pumpkin have journeyed through the dark and murky forest of the Fiery way and, finally, see the light at the end of the tunnel.

"What luck!" cries Noddy as he sees the friendly face of the stranger Kiri who transports him to the place of high mountains which grow from the water. Here Noddy hires a boat and rows out to search for the magic door.

Unsuccessful here, Noddy again calls on the stranger, Kiri, to transport him to the place by the lake. The Te Anau rabbit lies sleeping by the lake, waiting for the new dam to rise on another time. So Noddy lies down to wait for the new dam to come.

When the dam came Noddy found himself among the tall white rocks. The rabbit had worked its magic and flown Noddy many days journey while the darkness lay around. Soon he would be crossing the snows to the Long Enchanted Forest, but the day was glorious and he needed to rest after the trials of the Fiery Way.

BUT NOW WE MUST LEAVE THE STORY TO BE CONTINUED

Druce Story

III OGC

How Rigidly we take for granted what we have,
Yet when we have not then despair becomes our soul,
for when we have not,
then we can not,
And if we can not,
then we are not,
then we may as well be not,
But if we be not,
then what is there to say we ever were?
and if we never were....

But this spans not the logic that we have,
for all of us have time and space to use,
And use it well for neither stay the same,
Though our worlds wind softly far apart,
Used be it well if one may touch another's heart.

BRUCE SPRY

THE SIGNATURE OF GLACIER ICE: NO. 2

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Geologists study mainly old materials and features, such as rocks, fossils, landforms, etc., and must often calculate the ages of these materials and features. Furthermore, terminology can often be a problem because not enough time may have elapsed for material to be properly identified geologically. For example, when does sediment become rock? When does a dead animal or plant become a fossil? One of the related questions in this context concerns local material or void excrement. When does it become coprolite? The following account summarizes preliminary results of my research on this pressing issue, as it relates to the study of foreign material in glacier ice.

There are several obvious sensory tests that can be applied in order to resolve the latter question. The touch test and the smell test would settle the matter quickly, in many cases, but the issue becomes more complex when other factors are involved. For instance, the excrement of polar explorers has been preserved for more than 75 years in Antarctica in a sort of deep freeze environment, particularly when buried by snowfall and incorporated in glacier ice.¹ In other cases, on bare rock, it may be exposed and have become merely desiccated and is not a coprolite.² Aside from the question of desiccation, when buried in glacier ice or left exposed on rock, a more basic problem in Antarctica is that of longevity. Excrement is not treated as sewage usually is in temperate and tropical climates, and, because of the low temperatures, bacteria cannot function in order to convert it into something else. Paucity of soil and the permafrost make burial in snow-free areas essentially impossible, e.g., in places like Wright and Taylor Valleys³ west of McMurdo Sound. However, frozen into a glacier and thus buried as in rock, has it then been transformed from excrement into coprolite? Even if 75 years is not enough of a time

requirement, time is not pertinent in the question because the material would stay essentially unchanged from the moment it became frozen until it melted out of the glacier, perhaps thousands of years later. At a future time, then, geologists and glaciologists, drilling into the Antarctic ice sheet and attempting to recover ice cores tens of thousands of years old in an effort to study past climates,⁴ would inevitably encounter human excrement (coprolite?) of the same age as the ice surrounding it. It would have become trapped in the ice soon after deposition, and moved slowly downward through time as later accumulation buried it. Presumably, if the excrement was thawed, its identity would become known immediately through the touch and smell tests mentioned earlier,⁵ but the current name for the material would be problematical. Could excrement have been transformed into coprolite, and then back to excrement?

Another test, of course, is the presence (in excrement) or absence (in coprolites) of viable organisms. This test has been applied to the excrement of explorers from Antarctic expeditions of 1907-09 and 1913-17.⁶ Samples were taken from pump letrines in 1961 at the expedition's camps on Ross Island, and analyzed for organisms. Several kinds were found, and the smell test verified that the samples were indeed from the letrines (there was no odor until the samples had been thawed). An independent study (unpublished) of similar specimens shows the same kinds of organisms found by Meyer *et al.* The results are graphed in Figure 1, a normal distribution curve (which, coincidentally, is also the vertical cross-sectional form that the material assumed as it was being deposited—see Figure 2). However, this time period is insignificant when compared with the age (early Pleistocene) of active bacteria-like microorganisms (presumably not from human excrement) that were found in rock cores recovered from Antarctic permafrost a few years ago.⁷ If bacteria can survive in a dormant state for as much as 1 million years, think what this could mean to the unwary glaciologist studying particulates

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from ice cores several thousand years from now when paleo-excrement is thawed from ice samples. Because of a loss of immunity through time, the resultant bacteria might decimate the world's human or animal population with a plague.¹⁸

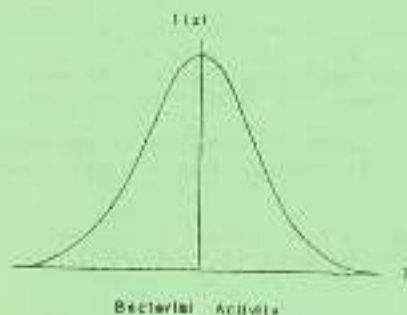


Figure 1. Normal distribution curve of bacterial activity in thawed feces.

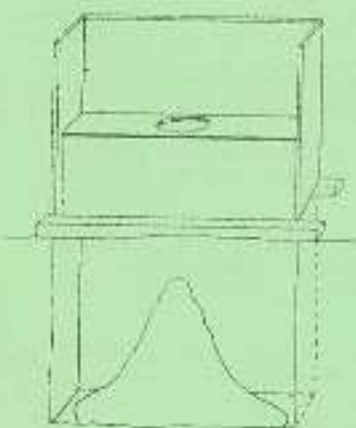


Figure 2. Catwalk degree of curpative seed by polar expeditions.

In later independent studies (unpublished) on the 1950 samples, also worth noting is the discovery of what was thought to be sperm in some of the feces.¹⁹ Aside from its value as a good party story, the latter discovery has led to a proposal for a feasibility study of Antarctica as a sperm bank, due to the deep-freeze conditions available for storage.²⁰

A complicating factor of this research has also added in the problem of definitions. Many of the earlier polar expeditions, as well as a few modern ones, have used

dogs for transport of field parties. Unless tethered away from the site of the field party (urine, sledge dogs will occasionally eat human feces (coprophagy), as well as their own, because of the contained undigested fat that the dogs crave in their diets.²¹ This amounts to recycled excrement, complicated by the fact that the end²² product is a mixture of human and animal excrement, hence, what to call it? Furthermore, regardless of the mixture question, does additional alimentary use and processing change the characteristics of the material?²³

Further research is expected in shed light on this problem of semantics, although continuation of the project is dependent on the success of a research proposal that is now being prepared.²⁴ to be submitted to NSF's Program Manager for Geology (or Geology? Microbiology? Sanitary Engineering?).

Useful Vocabulary of Research Terms and Expressions

No. ———	Are you ——— or?
Oh, ———	—————
That's ———	Oh ——— or that.
————— in a struggle	Get your ——— together.

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- "Work when you work," and "There's not much work left."³
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- Was anyone unexpected—the explorers were away from civilization for a long time.
- As well as a parallel supply of expert engineers.⁴
- Novy, M. W. M., 1965. Field observations of dogs on Antarctic expeditions. *Antarctic Survey Bull.*, no. 7, p. 55-67.
- That is this kind of an article is unavoidable.
- Recall the aforementioned story about the Russian body taking about 12 hours to convert food into excrement, but an Army cook being able to do it in 20 minutes.
- With a subject like one, I can't seem to think of a personal use, but will except the "Golden Pledge Award."

TOP BEGINNING CLIMBERS

Climbing is considered a sport by climbers, a way of life by fanatics, and suicidal by non-climbers. Your adherence to the following simple hints will probably not make you a great, or even very good climber, but it will help to make the sport fun for you.

1. There is no social distinction in climbing. Wealth or position count for nothing. There are only (1) leaders and (2) frustrated leaders or followers.
2. Contrary to common belief, the rope is not thrown, shot, or lassoed up the cliff. It gets there because it is tied to the intrepid leader. So are you.
3. A climb leader personally reserves the privilege of tying the rope about the waists of all females climbing with him. The trip leader reserves the right to check ropes tied around all females.
4. It is considered good form while climbing not to knock rocks down. If you insist on doing so, your leader will ask you to retrieve and replace them as we do not wish to rebuild the cliff before each use. If the rock you do knock down hits a climber below, you will be expected to retrieve and replace him in so far as possible.
5. You will please refrain from drinking alcohol while actually engaged in climbing. Under no condition may you do so without first offering some to your leader.
6. The number of bathrooms is limited. The Management, and every last one of the other climbers, will keenly appreciate your conducting yourself with the utmost delicate decorum with your beauty and comfort.
7. It is judicious not to brag in advance to your fellow climbers and leaders about how you climbed the Matterhorn one-handed in a raging storm. Let them ask you. Pride is said to go before the fall, and in climbing it goes after as well.
8. Don't be dismayed if the leader of your rope is a young woman. She isn't yours.
9. The simplest and most inclusive rule for good climbing technique is this: Always treat the rock as you do the office wall or stairs at the Christmas Party. Keep at arm's length.
10. Please try to remember that, while on the rocks, your rope leader is an unquestioned authority. This rule is without exception - even if you think you're better than him/her or are married to him/her, or both.
11. There is no rule against bragging about your exploits when you return to your earthbound associates on Monday.

David Miller.

THE RAIKATURI RANGES

A thousand kilometres West of Ayres Rock is a little known area called the Raikaturi Ranges. Massive granite peaks, remnants of a huge high altitude plateau in Devonian times, rear 5000 metres into the sky, and in the centre is an icecap, one of the few regions of permanent snow in Australia. The mountains were first seen by Haast in 1857 on one of his famous expeditions to find the inland sea, whose main tributary is indeed the Raikaturi river. He described "a lofty series of snow capped peaks rising in the far distance from the barren, burning sand, the thirst and misery. Raikaturi is an aboriginal term for unapproachable. It seems likely that the mountains were not visited by aborigines since the region lost its forest after the last ice age, as there is virtually no water for a distance of 500km in every direction. The Raikaturi river in fact disappears underground for this distance, and its re-emergence near Wimpey is a well known tourist attraction.

After Haast so nearly lost his life attempting to reach the mountains few people visited the area for many years owing to its utter barrenness. It wasn't until 1910, with the advent of cars, that the first detailed exploration took place, by a party led by John Banks. The Party included several prominent climbers including Longstaff and Husbands, and by approaching up the gorge of the Raikaturi access was gained to Longstaff Col, after a very hard climb. From here the geography of the central ice cap became apparant. The ice cap is a sort of snow lake, being a glaciated internal drainage basin, roughly circular in shape and about 25km in diameter at an altitude of 4000 metres. Massive granite peaks ring the basin, rising to above 4800m in places. The ring mountains are drained on the southern side by the Raikatur River, and on the North Eastern and Western sides by the Johnson and Kimberley Rivers. Numerous glaciers flow outwards from the ring mountains, but in the north the ground is very steep and they are short. However in the South, the direction that Bank's party approached from, subsidiary peaks provide a large enough area to feed a good sized glacier, which Husbands and Longstaff climbed along to reach the col at its head. They named the glacier after Haast, the first white man to see the Ranges. The central snow lake is dotted with number of peaks, but dominating all is a massive central pillar of rock rising nearly 1200m above the glacier, and called by its discoverers Mt. Ramani after Bank's wife. Access from Longstaff's col proved impossibke due to danger from icecliffs, & since the world wide retreat of glacial ice over the last 70 years, Longstaff col can no longer be reached except with excessive objective danger.

The first party to reach the snow lake was led by Eric Shipton in 1932 and included both Odell and Tilman, all three of Himalayan fame. They approached from the West up the Kimberley glacier and fixed ropes down to the snow lake. After 3 weeks exploration they proved that indeed the whole region was an internal drainage basin, a conjecture that had caused considerable controversy at the Royal Society which had funded the expedition to settle the question. Several of the higher peaks in the ring mountains such as Diodi, Kimberley and Kalanka were climbed and the ice cap was officially named Snow Lake. However, Ramani proved much too steep and difficult and Shipton had to leave the best prize to a later climber. It wasn't until the late fifties when techniques developed at Yosemite in America to climb their 1000 metre vertical granite cliffs became available that serious attempts on Ramani could be made. The first pair to the summit were Joe Brown and Tom Patey. in 1962 via the south ridge and south west face. Just as they reached the top a storm closed in, and they spent two desperately cold days and nights huddled in a little cave half way down the south ridge without food or water. Since then the peaks has been climbed many times, by all three ridges, and two of the faces have also been climbed. Because of the utter remoteness, any climbing in the Raikaturi's is dangerous and several people have lost their lives in circumstances that would not have been serious closer to "civilization".

Two years ago I had a chance to go to Raikaturi. The remoteness and wildness and loneliness of the Raikaturi mountains had long appealed to me, so of course I jumped at the opportunity. Like Shipton we approached from the west. Although it was spring, (to avoid the summer North West Monsoon) the week it took to drive to the Kimberley glacier was one of the hottest and most uncomfortable I have ever spent. Such utterly barren desert! At least we had views of snow capped peaks on the last two days. It took a further 10 days to shift all our supplies up the Glacier to Kimberley Col where the climbing began. So at the end of September we five (Pru Bryce, Ellie Shan, Paul Watkins and myself plus Jan, the dog) found ourselves completely alone in the ring mountains with 5 weeks supply of food and equipment.

Owing to record snowfalls that winter, progress was very slow over Breakheart Pass and down to Snow Lake, as everything was covered by metres of soft powder. Fortunately things were better down on Snow Lake, and we gleefully swapped our snowshoes and climbing boots for nordic skis. The three weeks we spent in Snow Lake must be three of the best weeks in my life. Terrific company, cold packed powder snow, stable cold weather with only the occasional bad day and absolutely stunning scenery were ours. Above all the complete aloneness was the key to our enjoyment. It bound us all close together in defiance of the hard ice and a rock and the cold wind and snow and burning desert surrounding us. We skied on every fine day, and climbed Kalanka and Ginera in the ring Mountains and Minets, Tupoto and Thomson which rise from Snow Lake. We clambered to the top of the north pillar of Romani and as a finale managed to climb Rilliandra, a lovely 5050m granit upside-down ice cream cone shaped peak just to the North West of Longstaff Col. We lived on the top and watched the sun set into the desert through the Breakheart Pass and rise in the east in glory over the top of Longstaff col.

The days passed as in a dream; sometimes together, sometimes alone silently gliding over the perfect whiteness of the little hills and valleys of the snow lake; lying back in the snow and gazing in awe at the majesty of Romani dominating the sky; schussing down the slopes of little mountains carving telemark sine curves through half metre deep powder snow; awaking at dawn to utter silence and the delicious coolness and blinding brilliance of another fine day; listening to the wind fretfully playing at the tent guys in the aftermath of a blizzard; squeezing each others hands for joy of living, no words being necessary to communicate our contentment; and at end of day, skiing west across a halving orange snow, every little contour picking out in vivid colour the reflection of our sun as it rode down towards the horizon. Never can I forget..... Alas, all things must end but neither the shock of discovery of the loss of one of the fixed ropes, nor the terrible descent of the Kimberley glacier in a storm nor the fortnight spent struggling across a desert turned into a mud bath by an early and severe north west monsoon can take away the happiness of the time we spent in the Raikaturi Ranges.

DANNY MALONE APRIL 1980

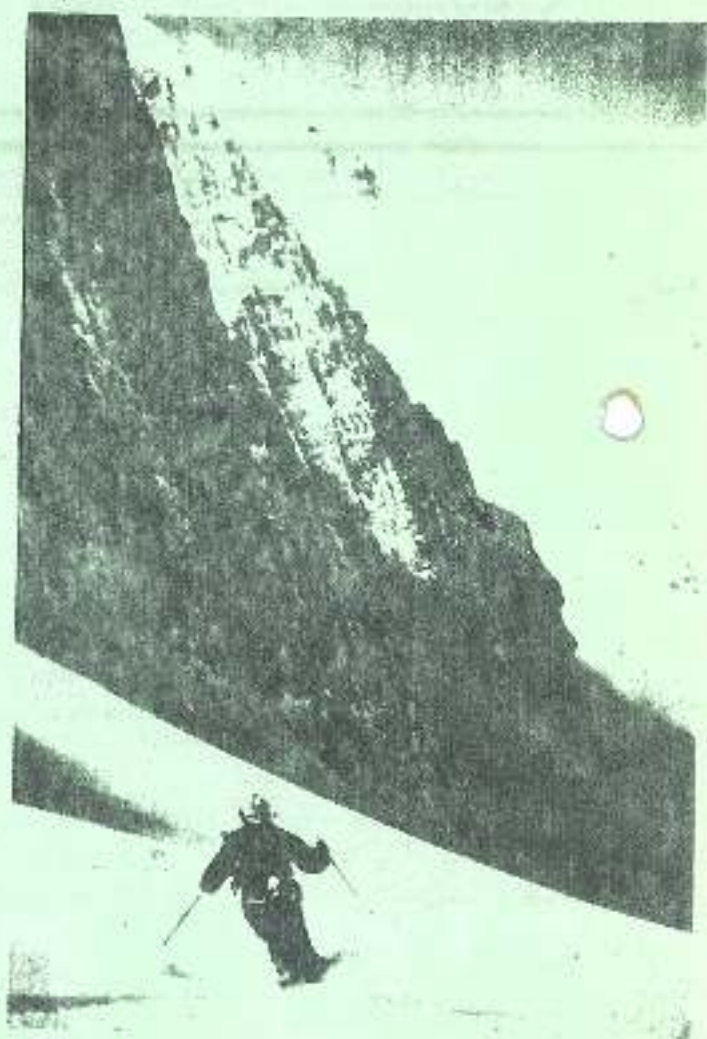
Don and Ellie
at Kimberley Col.,
The North West
Monsoon approaches.





From Jupoto looking North along the Ring Mountains
to Kalanka, Snow Lake is on the left.

Paul leads the way down
the bottom slopes of
Rilliandra.



HERON ISLAND

Two of the club members (Tony Bishop and myself) were lucky enough to spend a week on Heron Island in December last year.

Heron Island is a coral cay in the Capricorn Group, situated at the southern tip of the Great Barrier Reef, 340 miles north of Brisbane and 45 miles off-shore. The cay is about a mile in circumference and is on the north-western side of a flourishing coral reef. The reef is very extensive (about 10 miles around the perimeter) with a fauna of exceptional diversity.

We stayed at the Heron Island Research Station which is jointly owned and operated by the University of Queensland and the Great Barrier Reef Committee. We were part of a group of 20 which had been organized by the Zoological Department to do some research on the Island.

We drove up to Gladstone in two days and went by boat to the island. We thought it would be nice to camp by the Glasshouse Mountains on the first night (just past Brisbane) so consequently had quite a long drive in rather hot weather. We got to the Glasshouse Mountains, well, on the highway which goes by them, only to find out that we didn't actually know how to get to them. So at 11pm, after driving all day we tried to find somewhere to camp.

We ended up on a little dirt track just off the highway and had a pleasant night listening to trucks going by all night and fighting off mosquitos as it was a sort of swampy area, obviously we had used our bush craft skill to pick a good spot.

We woke up early (surprise, surprise) and went for a quick walk to see if we could get closer to the mountains - we weren't successful.

We arrived in Tanum Sands (a beach area a little way from Gladstone) late that afternoon, and set up camp in a caravan park by the beach. After driving all day in incredible humidity it was with an almost religious ecstasy that we were contemplating a swim. We took our towels and some books (we were going to just lie in the sun and read after our swim) and dumped them on the sand and went for a swim. The water was incredible - it was really warm, almost unpleasantly so, anyway, certainly not refreshing. All of a sudden we realized that the tide had been going in rather quickly and the patch of sand where we had put our belongings was now under water. Luckily some kids had noticed and rescued them for us, but not before they had been swishing in water for awhile. As we didn't fancy lying on wet towels reading soggy books, we retreated back to the caravan park. The shower we had there was cooler and more refreshing than the swim.

However, we did have a pleasant dinner on the beach, we lit a campfire and ate jaffels filled with sand.

We met up with the others in Gladstone the next morning and started loading up the boat. We arrived at Heron Island at sunset after a very pleasant day on the water. It looked very beautiful with a wreck they use as a breakwater in the foreground and the sunset as backdrop.

We were then told the good news, they were almost out of freshwater. We were only allowed to use it for drinking, we had saltwater showers and had to use salt water for washing up and unfortunately to cook the spaghetti in one night.

The whole island is covered in pisonia trees (a quite appropriate name as it turns out, as they are filled with nesting white capped noddy's and mutton bird nests, which are semi-disguised large holes in the ground - quite adequate to fit one foot in.

Once the sun goes down the mutton birds start up - they are incredibly loud and sound like a whole group of babies howling and also other sound effects that I'm too shy to mention. This lasts all night while you are trying to get to sleep after covering yourself with insect repellent to keep the hoards of mossies and other interesting biting things away. It reminded me of the jungle movies you see on T.V. except I was actually living it.

After dinner that night we all went out to inspect the turtles as they were coming out to lay their eggs. There were two sorts - loggerheads and green turtles. A conservative weight of an adult Australian green turtle is 156 kg! It was incredible to watch them make a tortuously slow route up the sand and then to dig their nest - they had very powerful flippers. On Heron Island they have estimated terrestrial predation on hatching as 4-5% and there is no egg predation. In that respect Heron Island is pretty unique.

Although watching the turtles laying their eggs (they looked like ping pong balls) is interesting the novelty soon wears off - although the guys ever seemed to be asking the girls to come and look at the turtles with them.

We spent a gruelling week, snorkling in the morning, lazing about in the middle of the day, working in the afternoon and socializing attending seminars at night.

In the mornings we got the boat and went out to the edge of the reef and the snorklers went snorkling and the divers, diving. It was really spectacular, the fish were vividly iridescent and whole schools of them would just swim around you. The water was really teeming with fish and that with all the beautiful coloured corals and sponges below you made it an overwhelming experience. Each time I went snorkling I saw a shark which you got used to but I guess it made you take a close look around you all the time. They were mainly white tips and about 4ft, but they looked incredibly sinister. The rays also looked sinister - I remember one of the first times I went snorkling we came across about 8 rays all swimming towards us (I thought they were supposed to sti quietly on the bottom), I was petrified and couldn't understand why my partner was still happily going along until we surfaced and he told me they were harmless.

I also learnt to fish - something which I had never done before I must admit I never caught anything, although twice I had the line betton off. Once was when we were coming back from fishing and I suspect the guys were trying to get rid of me, they gave me a fishing line with the head of a fish for bait and so I skull dragged it, which was all very well until a shark came by and bit the whole thing off.

All in all, it was rather a fun and eventful week and it was with much regret that we left. I can still remember the taste of the barbequed fish (that the others caught) what we ate on the last night while listening to Bob Marley. It was really strange to be back on the mainland, I remember vividly stopping at a petrol station and going to the loo and finding they had fresh water coming out of taps! It seemed such a wasteful luxury. It's amazing what you can adapt to.

Unfortunately the trip back was marred by us having a car accident in which we managed to write the car off. We ran into a 1300 lb bull and a cow on the main highway, just past Ipswich at full speed. By a miracle no one was hurt, and despite what you here about Qld. police, they could not have been more helpful or kind - they even found and drove us to a hotel at 2.30 in the morning.

Oh well, hopefully I'd get back sometime, it would be rather a nice place to work for a couple of months.

P.S. But why was Tony wearing bandaids over his nipples???

FLAINE MURPHY

During December 79 I was on a sight-seeing trip around Europe with my family. On Boxing Day we happened to be in Garmisch-Partenkirchen, a little resort town in the south-east of Germany. The town is famous because it is where Hitler had his secret hideaway called 'Eagle's Nest', and it also serves as a major skiing and climbing centre for Germany. The peak 'Hoher Goll', which overshadows 'Eagle's Nest' is small by alpine standards (8590'), but is accessible as a day trip from the town. Keen on doing some mountain climbing, I caught the chairlift up to Jenner Station early in the morning, and there the episode began.

At Jenner I met an American soldier who couldn't believe I was going climbing just with a plastic bag and an axe inside, especially on a misty day. He almost convinced me not to go but I was soon forbound. Keith was left behind, his hot breath foggng up the window.

Fortunately the approach ridge had some old tracks to follow, but I was still hesitant going for a mountain that couldn't be seen. Perhaps the soldier talked some sense for I had no axe or crampons, just a pair of smooth soled boots. The reason for this was that climbing gear was not hired out during winter. Nevertheless I pressed on, waiting for breaks in the cloud.

Eventually I gained height, breaking through the cloud layer into a still sunny day. To the south, the Austrian Alps extended to the horizon like islets in a churned up sea. Nearby some Chamois's were grazing on a patch of snowgrass. It looked like a good day.

After some time in knee deep snow, the 'D-Suns' were becoming quite uncomfortable. This necessitated moving onto a rib of scree and rock. Unfortunately the limestone slabs stopped within several hundred feet of the summit, leaving a short expanse of hard ice. Paine in no mood for ice-skating, I retreated back to the scree.

Another possibility was looked at - a 40 degree slope of ice linking the summit rocks. I moved up slowly, kicking really and Karate-chopping to gain fingerholds. Soon I was out of control, pedalling like a little demon towards an island of rock. The slope above gradually steepened, causing some heart-stopping little slides. Finally there was little choice but to turn back and downclimb the pathetic rockholds. Being so gripped up at the time I took off the snowlasses and put them in my mouth. During a shaky move they fall out and slithered all the way down to Austria!

Gaining rock, I clambered down to the scree, where I sat on a boulder to calm down. Below, a tiny bounding figure broke my gaze, stumbling and swaying as it moved. I kept on staring until a fellow with spectacles and waist-length hair stopped ahead, snuffling of whisky. We said hello to each other.

He replied "You have just climbed mountain, ja?"

"Er, no ... my boots can't grip the ice, too hard to kick steps. Are you going to the top yourself?", I asked.

He began laughing, "Oh, I just came up to look around. You see, I left friends down at the bar."

The climber spoke excellent English for a drunk Bavarian. It was a miracle he had got so far from Jenner Tavern, especially hearing the way he described the approach ridge that separates Germany from Austria: "You see, I put one foot down and I'm in Austria, then the next foot goes down and I'm in Germany again!!" (demonstrating the tight rope waddle).

We talked and strolled around for a while until he decided to get back

to the bar. After noticing another route, I tried for the summit again, this time on steep ice-plastered rock and grass. Traversing diagonally on mixed ground I watched the Bavarian recede into the distance. Soon the loneliness became engulfing, and normally easy moves became frantic. It seemed an eternity before I reached a sloping ledge to rest on, the sun getting lower and the wind picking up. There was definitely no time to reach the summit.

Even though the last cable car was at 5pm, it would have been easy to relax there and absorb the whole setting till nightfall. As the sun's rays became more oblique, long shadows streamed out across the cloud tops. Occasionally an aircraft would buff up a cloud like a setting sprinkler. It was extremely majestic but I had to return to Jenner before dark.

With some remaining concentration, 150 metres of technical ground was reversed to safety. I can't remember much after that, except for sinking into a thick mist, sladdine endlessly, getting lost many times, and finally coming across a group of skiers near Jenner. A queue had formed for the last set of cablecars, and the tavern was almost empty. Covered in ice, I aly on the bench until someone woke me up. Then we descended to earth.

We were no fools. Geoff and myself had suffered a week of hutsitting at Frenchmans Cap and two days of fruitless climbing at Coles Bay. As a last resort we went in search of Bob McElhan, local Ben Lomond climber. After a day of hitchhiking we found him on a farm at Forster; a day later we were driven up to the cliffs.

Bob craftily swung the lock around the bolt on the door at the Scots College Hut. The door was pushed open to a luxurious interior, but he explained, "If anyone asks you if you know Bob McElhan, tell 'em you've never heard of me. You could tell them Ken Raspberry sent you, and also how he told you to break into the hut! I've got to keep a low profile because all the clubs and conservation groups are trying to charge me with breaking and entry, trespassing and stealing. I don't know why, but its possible I'm the most hated person in Tasmania!"

He then pointed out some of the routes on the huge dolerite walls which surrounded the plateau. We felt humble. Bob headed for the car, saying, "Well boys, you've got the best weather this summer. Make the most of it! I'll come and pick you up on Sunday morning. See you then!"

We crashed quite early but got very little sleep due to the overwhelming noise of the hungry wildlife: possums on the roof, the Devil outside the door, and inside, boards of little rodents scratching the fat from the frying-pan.

On Tuesday morning we staggered like Zombies up the grey scree to a line called 'Fierce Archer of the Downward Year' 16. This climb required some crowlling up a wide corner crack, then an easy overhang to be turned. A neighbouring route, 'Brave Sheep' 18, was tried but an imposing wall made of titting, sloping holds forced us to try something easier. In the event we walked past 'Lords' 14, the intended climb, and unknowingly put ourselves on a new route. Geoff took the lead and wandered up a triangular slab, followed by 3 more pitches to the top.

The next day, 40 minutes of boulder-hopping took us to 'Eress Flutes'. Half a mile wide and 600' high, this cliff abounds with steep columns and cracks. We picked a buttress called 'Rock-A-Day-Johnnie' 18, a sustained classic with the top pitch as crux, and no other pitch easier than 15.

Nice corners and chimneys led to the second pitch, a short overhanging off-width which gained a chimney. I wriggled up the body-sized crack destroying a camera lens in the process. The chimney eventually closed up, so some thin face moves joined a bottomless corner and face climbing to a towering pinnacle detached from the face. Really airy bridging finished at a small sloping ledge on the arete.

I sat on belay while Geoff continued up the next classic pitch, eagles soaring above. Hundreds of feet below, the scree was another dimension, and further out, the rolling hills fused into an intense blue sky. I ran through to the last pitch, and with Van Harrison sailing through the mind, I bridged and jammed up parallel cracks laid like railway lines to the summit.

On Thursday we walked further east to a cliff known as 'Heathcliff'. Here the columns come out at right angles to the wall forming many fine face routes. Both of us tried a Ben Maddison death climb called 'Lost Dreams and Found Dreams in America' 17. Already a pitch up, you step out onto a slightly overhanging wall, and with sheer faith fall up on large brittle edges for 20 feet without protection! Instead of this I led up a better protected route ('Tubular Honey' 18) that offered 3 excellent, exposed pitches.

'Snake Buttress' was the venue on the fourth day. This is the broken up cliff east of the 'Pavillion', offering less serious, shorter climbs. We moved up a mossy groove called 'Sweet Surrender' 15, then avoided the top scramble pitch to do a technical crack climb called 'French Kisses in a Darkened Dorsal' 18. Geoff led this 4-star classic leaving a line of 'Friends' up the crack. Later we moved to the 'Pavillion' and scrambled up an easy Buttress.

At 2AM the following morning the door jolted as the bulk of Reg Harron tried to force his way in. Reg and his friend, Mick, had been eating out at Laureston that night. Like Bob McMahon, Reg is another sinister and shady character of Tasmania, with a reputation as a big eater. Memories of staying with Reg in Christchurch, N.Z., went through my mind - 2 hamburgers, ice cream and a milkshake for a midnight snack! Then the death drive around the city in a crash - start 1940 vintage without brakes!

Saturday could well have been a rest day, if it wasn't for the fact that we were leaving on Sunday, and also I wanted something hard. Above the hut lies the 'Jerry Jeff Walker Buttress' with a spearing 350' line called 'Brother Jack Strain' 20. It was chosen because it was the closest climb to the hut.

After 30 feet of thin crack and a nuzzle onto a loose sounding block, I arrived at the only resting spot. Some hard finger-licking up an overhung section finished in a closed off sentry-box formation. Resting in an awkward jammed position, I tried a number of times to bridge over the top. A misleading photo on the cover of 'Thrush' had a photo of Ben Maddison in the same position, although in reality he escaped off left. Finally I tried the left-hand exit and frenetically pulled up a finger crack to the belay. That day it was incredibly hot and my head pounded with heat-exhaustion. Geoff came up having trouble ripping out some protection. This was to be our last climb, wasted as we were.

Under the effects of sunstroke, the final scree walk was a nightmare. We collapsed into the hut like battered war victims. After waiting most of Sunday, Reg Harron appeared in place of Bob. A quick drive back to the farm and we were soon eating omelettes, washing the lichen off and watching late night movies.

Imagine a country covered from end to end in snow. Further, imagine a place where the temperature has not been within 1°C of melting all winter, and where green stick must be abandoned in favour of special green in order to glide on the perfectly dry powder. Dream of the quiet swish of skis along a conifer lined trail, with birds singing in the branches, or skiing for kilometre after kilometre across a starkly beautiful plateau straight into the setting sun, followed by a magnificent schuss down a steep track to the valley 300m below. Savour the utter quietness of a mountain peak alone at dusk far above the treeline. All of this and more is early February in Geilo, a town halfway between Bergen and Oslo. There are drawbacks, however. The most shocking thing is the temperature. The first week I was there was perfectly clear and calm. At 5am the temperature was generally around -23°, and as low as -26°. It usually rose to about -16° by late afternoon, but on several days it never got about -20°. The only "warm" days were the last two when it snowed, bringing the temperature up to -11°.

After several painful encounters, the cold forced modifications to normal Snowy Mtn battledress in order to keep warm such important places as ear lobes, eyes, nose tip and knees. Normally I wore a curing singlet, skivia and wool shirt, Dachstein mitts, balaclava and army trousers. For down hill stretches my parka was donned. After one particularly long and cold schuss a burning sensation caused me to devise a means of protecting more adequately a man's best friend. (We all know what to do with a frost-nipped extremity, don't we!?)

Another drawback was the cost. Full board at the Youth Hostel cost \$19/day and ski hire costs were \$24/week (!). Early February is a little cold to tent out. Perhaps with prior organization a trip from hut to hut could be arranged with the association responsible for hut maintenance, and this would cut costs considerably as well as providing greater variety of skiing than is obtainable by staying in one place.

The area around Geilo consists of a barren plateau with sharp local relief similar to Ramshead Range. At about 10km intervals steep sided flat bottomed glacial valley are carved into the plateau on the tops the wind has necked the snow quite nicely, but in the valleys skiing would be quite a dog thru knee deep snow but for the hundreds of kilometres of compacted tracks. Snowpole lines join villages 10 to 15 km apart in a vast network all over Southern Norway and generally one can find a convenient set of tracks to follow wherever one wishes to go.

Just about everyone skis in Norway. Old ducks ski across the lake to visit friends, young racers fly around the tracks and whole families together with children in sleighs pulled by daddy and dogs set out on picnics. Norwegians are refreshingly healthy and I saw very few overweight people. Everyone speaks English, so language is no problem. While I was in Geilo the Winter Olympics for handicapped people were held. Blind people competed in Nordic racing events, skiing with a "seeing eye" to guide them. One amputee, no amputee and one leaped skiers raced thru the Slalom events, while toboggan races were held for no leaped and no leaped one amputee people. The village resembled a sanatorium, or some sort of spare parts bank (the competitors being the donors) during the games!

Skiing in Norway is superb and highly recommended. But Australian skiing also has its attractions. The temperatures are more modest and it is possible to ski below the treeline without having to stick to tracks as our snow is wetter and more compact. And importantly for students, costs are low in the snowies. I suppose that the ideal solution is to marry off a sister to a ski instructor somewhere in a northern Europe and stay with them for a month or so each northern winter. That way there is only 3 months between ski seasons. Roll on winter!

*Put it in a warm place.

HILL WALKING IN SCOTLAND

"Take to the hills" - that is the advice to all Australian bushwalkers who find themselves in Scotland. Not only because there are so many hills but also because the lowland walks are too tame after years of scrub - bashing.

Scotland's hills are low by alpine standards, the highest, Ben Nevis being only a little over 4,000 feet (sorry, 1,343 metres). But the bottom of the hill is often close to sea level so that there is quite a climb for a short day walk.

Where should you go? Scotland is a small compact country with good roads and half decent public transport. So it is easy to combine 4 or 5 good hill walks in a week. One suggestion follows.

Start from Glasgow and drive or take the bus the twenty miles to Loch Lomond at Rowardennan. This tiny village is on the "bonny banks" of Loch Lomond in the Queen Elizabeth Forrest Park. It has a youth hostel and a pub, so what more do you want? Walk uphill from the carpark to start on the track to Ben Lomond (974 metres). The climb is mainly on an obvious path, leading through forest at first and then across the open hillside. Three hours climbing should get you to the ridge below the summit. Here there are impressive views to the north over the carrie. Follow the ridge for the last 400 metres to the top and sink down thankfully to have lunch and take in the splendid views across the Loch to the west, down to the River Clyde 30 miles south, and to the north - hills and more hills. To return, retrace your steps or scramble down the west side (the Loch-side); both routes will lead to the pub.

The next mountain to climb is not far away, as the crow flies, but is longer to reach on land. It is Ben Arthur, known to everyone as the Cobbler because of the shape of the rock outcrop on the summit. Take the train or bus to Tarbet and walk round the beach at the head of Loch. The rocky crags of the Cobbler loom above but the walk is very gentle until the paths disappear and some rock scrambling is called for. Although slightly lower than Ben Lomond, the Cobbler makes for an energetic climb but once again the views are good.

From Tarbet take the train or bus north to Fort William. The route is through some beautiful Highland countryside and although road and rail choose different paths both end up in Fort William, which is a pleasant town on the shores of the sea loch, Loch Linnhe nestling beneath Ben Nevis. Despite being the highest mountain in Britain, Nevis is not the hardest for hill walkers and there are several routes to the summit. Pay close attention to the weather or you are liable to climb 4000 feet for 360 degrees views of the inside of a cloud.

From Fort William catch the bus to Pitlochry. For a change of pace, stroll round the dam and try to see salmon swimming up the fish ladder, or climb Beny Vrackie (the local hill) or perhaps visit the local malt whisky distillery for a guided tour and a few samples (highly recommended!).

The next hill walk is to Schiehallion, a beautifully symmetrical mountain (1083 metres) lying between the valleys of the Tummel and the Tay. Approached from the north-east, Schiehallion provides a very enjoyable walk with a bit of rock scrambling thrown in.

After Ben Lomond, the Cobbler, Ben Nevis and Schiehallion, What next? Leave the Highlands via Perth and Stirling and visit Edinburgh, or return to Glasgow by way of Aberfeldy and Callander

with the chance of Ben Lawers, Ben Vorlich and Ben Ledi for the energetic? As we said in the introduction, there is no shortage of hills to be climbed, and this article has not mentioned other regions of Scotland that are attractive. So, on your next trip you can try the Cairngorms, the Isle of Skye and Wester Ross. All have hills worth tramping up.

Alan and Jenny Harvey.

BUSHWALKING IN HAWAII VOLCANOES NATIONAL PARK

John Macdonald

Zoology Department

University of Auckland, N.Z.

I was born and raised in Hawaii, and did my first bushwalking on the routes described below. Since then, I have walked in many other places, but these remain some of my Favourites.

Transportation and Accommodation

Travellers passing through Honolulu International Airport have several options: they may treat it as another delay on a tiring trans-Pacific flight, try to bluff their way into the VIP lounge for free grog, and disappear on the next plane as ordained by their APEX tickets. Or, if they have planned a stopover, they may take in the tourist attractions and beach of Waikiki, go surfing at Makaha or SCUBA-diving at Hanauma Bay. The bushwalker needn't forgo such pleasures entirely, and there are a number of excellent walks in the vicinity of Honolulu for those that cannot wean themselves from the fleshpots.

However, for the dedicated bushwalker with the foresight to plan for an extra week or two, I would recommend a visit to the island of Hawaii (southernmost and most recent of the Hawaiian Islands), locally known as the Big Island, about 320 km southeast of Honolulu. Hilo, the largest town on the Big Island, is served by several airlines - a one-way fare will cost about \$50. Rental cars are available in Hilo, and there is usually some sort of bus service. Hawaii Volcanoes National Park (HVNP) is centred 50 km SW of Hilo, at an altitude of about 1200 m near the summit of the active volcano Kilauea. Hotel accommodation is available at the Volcano House, and cheaper cabins are available at Namakani Pa'io (the site of an early 'alien internment camp' in WWII). Groceries, booze, stove-fuel and petrol may be purchased at one of the general stores in the Volcano settlement, just off the main road about 3 km N.E. of Park Headquarters. There are post offices at the Volcano House, and at the Volcano settlement. Maps, guide books, camping permits and general information may be obtained at the Park Headquarters. For more detailed information, and a brochure describing the Park, write to: The Superintendent, Hawaii Volcanoes National Park, Hawaii 96718, U.S.A.

Climate

The climate of Hawaii depends largely on altitude and exposure to the northeasterly trade winds. At all levels, the islands tend to be cooler and wetter on the windward side. At sea level, the climate is similar to Sydney in the summertime, with temperatures on the order of 30°C. The humidity is generally much higher than I have experienced in Sydney. As you ascend the mountains the temperature drops and rainfall increases, so that at 1200 m, the climate resembles that of Auckland, with rain and drizzle common, temperatures below 20°C, and occasional frosts in mid-winter. Most of HVNP is located in the SW rain shadow area, where the climate becomes drier, even desert. On the tops of the mountains, above 4000 m, the climate becomes alpine, with temperatures up to 15° on a sunny day, but usually dropping to near freezing at night (mean temperature around 7°C). A rainy day at these altitudes can easily lead to hypothermia. In winter, the mountains are often covered briefly with snow down to 3000 m.

Walking Trips

A variety of short 1/2-day hikes are available in the vicinity of Kilauea Caldera, its sister crater, Kilauea Iki, and the relict rain forest of Kipuka Puauu. Many of these are self-guided trails, with pamphlets to explain biological and geological features. They are pleasant walks, and well worth the time, especially in gaining a feel for the terrain and climate. For more ambitious bushwalkers, I shall outline three longer walks, which usually require more than one day.

(1) The Sea Coast

There are several routes to the coast from the Kilauea area. The usual route begins at an altitude of about 800 m at Kipuka Nene, which is reached by a side road from the Chain of Craters Road. It is important to carry water - a liter apiece - on this walk. The first 3 km of the track are more or less level, toward the E among the large trees of the Kipuka (a kipuka is an island of relict forest preserved between more recent lava flows). Upon leaving the kipuka, the track turns sharply to the S, and plunges down the first escarpment, the Poliokeawe Pali. From here and to the coast, the trip is generally hot and dry. The track roughly follows the fence-line of the old Ainahou Ranch, which has since been engulfed by HVNP. About 5 km down, the track descends the large Puuec Pali; runs briefly E, then bears W around the end of the uplifted fault block of Pu'u Kapukapu for a final 3 km to Halape, which lies in a bright green patch of beach morning glory, dominated by the 300 m cliff of Pu'u Kapukapu on its landward side. There is a shelter and water at Halape, although the National Park Service warns that the water should be boiled or otherwise treated before drinking. This is probably mainly for their protection. The shelter is a roof and 3 walls, which can be used for sleeping, but you would probably be more comfortable sleeping in the open. Rain is unlikely. The waters between Halape and its offshore islet, Keaoi, are ideal for snorkeling, as is the shallow bay about 2 km further W. The stumps of palm trees protruding from the water mark the site of the former patrol cabin, which was submerged by a fault subsidence of about 2 m during a big earthquake in November 1975. Two persons were killed in the accompanying tsunami. About 70 m inland from the palm stumps is a large crack containing a brackish water pool, which makes a refreshing dip to rinse off the salt water. In an emergency, this water is also drinkable.

Another route to Halape begins at Hilina Pali, at an elevation of 600 m, about 10 km further down the road from Kipuka Nene. This is a hotter and drier route. The track immediately descends the 300 m escarpment of Hilina Pali, and proceeds easterly across flat lava beds and grassland toward Pu'u Kapukapu. At a distance of about 6 km from the base of Hilina Pali, it intersects the Kipuka Nene track as it passes around the eastern end of Pu'u Kapukapu. One can vary the route by going cross-country; Pu'u Kapukapu and the palis form such distinctive landmarks that it is impossible to get lost. The view from the top of Pu'u Kapukapu is spectacular. It is possible to descend the seaward face of Pu'u Kapukapu, either down the cliff face, or down a long talus slope about 2 km W of Halape, but neither route is safe. Many Hawaiian cliffs, particularly those formed by faulting, consist of sheared thin layers of basalt and are continually crumbling and breaking away.

A third route to the sea is via the Ainahou Ranch along a disused 19th century road which was used for hauling passengers and freight to the Kilauea area. The terrain is very similar to that along the Kipuka Nene trail. The Ainahou track reaches the coast at Keahou Landing, and a coastal track leads westward to Halape, about 4 km away.

On leaving Halape, you may return by any of the above tracks, depending on your arrangements for transport. The Kipuka Nene track is the least onerous. Alternatively, you may walk out along the coast to the Kalapana road, a distance of about 15 km. This track passes close to Apua Pt., site of an old Hawaiian settlement, and of an 1868 shipwreck. Little of the wreck now remains. Beyond Apua Pt. the trail crosses new lava flows from eruptions along the Chain of Craters Road, which has been cut by the flows, and only recently reopened. Much of this portion of the Hawaiian coastline consists of low cliffs (2-5 m) so it is difficult to get into the water, and even more difficult to get out without a 10 km swim.

(2) The Ka'u Desert

If the hot coastal lowlands haven't dampened your ardour, you may wish to try the Ka'u Desert trail, which runs from Kilauea to the western end of Hilina Pali. You may pick up the trail near the Park Headquarters, or at the western edge of Kilauea, near Uwekahuna Bluff. Again, a flask of water is essential. The trail follows the SW rift zone of Kilauea volcano, and runs parallel to a line of vents and fissures. Early stretches cross new lava and cracks formed by recent activity. This part of the desert was used as a firing range during WWII, so beware of unexploded shells if you leave the track. About 10 km from Kilauea the track reaches a branch point at Mauna Iki, a small shield volcano formed in 1920.

This side track, starting at the Ka'u Road, is an alternative and easier way of walking through the desert. It passes an area known as the 'Footprints' in which are preserved the footprints of an Hawaiian army, overwhelmed by an ash cloud from a rare explosive eruption in 1790. The shelter encloses examples of the footprints, and has a water-tank. Unprotected footprints may be found nearby - please avoid walking on them or otherwise defacing them. Dried mudballs (pisolites) weathering out of the ash beds are fossilized raindrops, evidence for the heavy rain which accompanied the ash cloud.

From Mauna Iki, the track continues over smooth pahoehoe lava flows erupted in 1920, then over prehistoric flows. After passing to the W of some large cinder cones, the Kamaka'ia Hills, about 10 km SSW of Mauna Iki it turns suddenly to the E to cross a prehistoric rough a'a flow. About 1 km beyond this flow the track joins a trail from Hilina Pali and turns back to the SW toward the Pepeiau Kipuka, where there is water and a shelter. A few years ago, the water tank was in bad repair, so it would be a good idea to check on the water supply at Park Headquarters before leaving. Pepeiau makes an ideal site for a camp, with views of the coastal lowlands from a few hundred meters below the shelter. From Pepeiau a trail leads along the top of the pali to the Hilina Pali roadhead, a distance of about 6 km.

(3) Mauna Loa

One of the finest walks in Hawaii is the Mauna Loa trail, which runs a distance of 29 km from the head of the Mauna Loa road (2040 m) to Mokuaweoweo Caldera (4000 m). At least three days should be allowed for this trip, although it has been done in a marathon stint of one day. Check beforehand at Park Headquarters to find out what other parties are on the mountain, unless you are equipped to sleep outside. Cabins at Pu'u Ulaula (Red Hill: 3050 m) and Pendulum Peak (4050 m), on the rim of Mokuaweoweo, are furnished with Coleman stoves and lanterns, cooking and eating utensils, blankets and bunks. A good sleeping bag is more comfortable than the blankets. Check at Park Headquarters to see that supplies have not been pilfered. Take sufficient white gas (or Coleman fuel) for your needs, as

fuel supplies are not maintained. As in the desert, carry a full water bottle. Warm clothing and a waterproof of some sort are also necessary.

From the roadhead the trail runs N on the level through a grove of Koa (Acacia koa) and then subalpine scrub for about 200 m, turns NW, passes through a gate, and begins to ascend gradually. From here to a bit above the 7000 ft. (2134 m) marker, the trail is overgrown and badly eroded, and it is possible to lose the route. Between 7000 and 8000 ft. (2438 m) the vegetation becomes markedly reduced in size and thickness, and the soil becomes thin. At about 8000 ft. the last stunted ohia trees (Metrosideros polymorpha) are seen, and a bit above 8000 ft. most shrubs and grasses disappear entirely. Red and yellow ohelo berries (Vaccinium spp.) grow along the trail here, as well as in the Kilauea and Ka'u Desert areas, and are good for trailside snacks. Isolated ohelo plants are found surprisingly high on the mountain. About 8700 ft. (2650 m) the trail ascends a ridge and comes into view of Pu'u Ula'ula (the smooth red cone straight ahead!) and other cones of the NE rift zone. If the weather is foggy or rainy, the stretch of trail around 9500 ft. (2900 m) can be hard to follow. The Red Hill rest house (10,024 ft.: 3055 m), with bunks for 6 and floor space for another dozen, if need be, is one of the oldest buildings in HWNP. It was originally constructed in 1916 by a troop of cavalry from Kilauea Military Camp. The stables were N of the cabin, opposite the loo, and patches of grass persist in the enriched scoria.

Unless you are accustomed to working at high altitudes, you should stop for a night here. At this altitude, the atmospheric pressure is reduced to about 70% of its sea level value, and the availability of oxygen is reduced accordingly. Shortness of breath, dizziness, headaches and even nausea are common symptoms of altitude sickness, and can often affect those in good physical condition more severely. Full acclimatization takes several weeks, but even a single night is a help. The affliction can become particularly distressing above 11,000 ft. (3353 m), but must simply be endured - it usually gets better in a day. If you have an unbearable case, it can quickly be cured by returning to lower altitudes.

While acclimatizing at Red Hill, walk to the top of the cone. In good weather, there is a splendid view of the Volcano and Ka'u areas to the SE, while to the NE, Hilo is visible beyond the wooded bulk of Kulani Cone. To the N, the Humu'ula Saddle separates Mauna Loa from its sibling, Mauna Kea (4205 m). To the NW, Haleakala, on the island of Maui, is often visible in the distance. The white domes near the Mauna Kea summit are astronomical observatories, placed there because of the outstanding viewing conditions. The celestial view from the top of Pu'u Ula'ula is also outstanding - you can see more stars than you knew existed. Meteors are regularly seen, especially during peak seasons such as the August leonid shower.

The bog (loo) at Red Hill is notoriously draughty, and the Men and Women signs usually don't mean much. Do not emulate un-named predecessors and strive for centrally heated comfort using white gas. The results may be spectacular, and warm, but how do you explain a singed bum or burnt-out loo?

Unless you decide to patter about at Red Hill for an extra day, you should begin your trek to the summit fairly early the next day, as the effect of altitude will slow you. At 3000 m your capacity for sustained work has already been reduced by 16%, and will fall an additional 3.2% for each 300 m you ascend. Don't plan to travel at your normal sea level rate.

From Red Hill to North Bay, the trail follows a line of vents and cinder cones marking the NE rift of Mauna Loa. In good weather, the route can be followed without a trail, but the walking would be exceedingly difficult. Most of the major cones can be seen from the top of Red Hill before you leave. The first cone to appear, about 4 km up from Red Hill, is Pukauahi, which serves as a spectacular frame for photographs of Mauna Kea. The 11,000 ft. marker is just uphill from Pukauahi. Just below 12,000 ft. (3658 m) the Dewey Cone (named for the U.S. admiral at the Battle of Manila) exhibits a characteristic black angularity to the right of the trail. The cone erupted on July 4th, 1899. Above 12,000 ft. the trail begins to cross new lava, then passes the prehistoric Pohaku o Hanalei and Steaming Cone, both to the left of the trail. There is a waterhole about 12,500 ft., located in a partially collapsed lava tube which passes under the trail. Above this, you pass vents from the 1935 eruption. Finally, just above 13,000 ft. (3962 m) you reach North Bay, an extension of Mokuaweoweo, 14 km from Red Hill.

The sudden panoramic view of Mokuaweoweo is worth the misery of the last 3 km. This is a good spot for a long rest and a late lunch.

Follow the track about 50 m down onto the first ledge in North Bay and find a spot in the sun. The concrete foundations to the right of the trail make a good place to stretch out. These mark the earlier site of the summit rest house, which was moved to its present location at Pendulum Peak after the 1940 eruption threatened to engulf it. No helicopters then - every single bit had to be packed all the way from Kilauea on men and mules. If you're short on water ascend the trail again and follow the track leading off to the north for about 200 m. A sign marks the water hole, just before you reach a rock shelter, on the left side of the track. Climb down into the narrow crack, and there should be water and ice at the bottom. There are many of these water holes around the rim of the caldera, and once you know what to look for, you will probably discover more unmarked ones.

If you have plenty of time and are feeling fit, drop your pack (but take a warm shirt) and follow the northern track for about 4 km to the summit on the W rim of Mokuaweoweo. I usually save this for the next day, and proceed directly to the rest house. If you do go on to the summit, the track soon turns W, then S, and parallels the caldera rim. The summit (13680 ft: 4170 m) is marked by a large ahu (cairn) and is on the brink of a 200 m precipice, with lava flows of different colours and textures from 1933, '40, '42, '49 and '75 spread out on the caldera floor below. You are now at the top of the largest single mountain on earth. Mauna Loa rises 29,000 ft. (8840 m) from its base on the ocean floor. Directly opposite you, about 2.5 km away, is the rest house at Pendulum Peak.

From North Bay, the rest house is a distance of about 4 km. The track leads down onto the floor of North Bay and crosses a new lava flow (ca. 1975) of shelly pahoehoe. This can be hard on the shins if you leave the track: you tend to break through the crust and drop 20-30 cm. On older lava the trail passes close to the rim of a pit crater, Lua Poholo, before once again ascending the caldera rim and running parallel to the rim for a final 1.5 km.

The rest house, clad inside and out with galvanised iron, can be quite cold. It has bunks for about 10 persons. The crater rim is only 30 m to the west, so make sure you're fully awake before you stroll out in the dark to commune with nature. Water is obtained from a water hole about 400 m S of the rest house, with a trail and a sign to mark it. Another water hole (unmarked) is about 100 m N of the cabin, but in a very narrow crack.

Standing on the caldera rim, the summit is directly across from you to the W. To the left of the summit, on the caldera floor, is the black cone of the 1940 eruption. Still further to the left, the red and olive of the 1949 cone spills over onto the SW rim. The dark brown-black flow filling most of the SW half of the caldera is a'a from the 1949 eruption, while the NE half of the crater is dominated by the black pahoehoe of 1940. Mauna Kea is visible over North Bay, and you can get a good photograph by ascending the hummock of Pendulum Peak (13278 ft.: 4047 m), on the crater rim just S of the cabin. The low rock walls just S of the cabin mark the site of a tent camp set up at Pendulum Peak in 1841 by Lt. Charles Wilkes, Commander of the United States Exploring Expedition, which also visited New Zealand and portions of the Antarctic coast. Wilkes mapped Mokuaweweo, and made gravity determinations. Many have searched unsuccessfully for a rock inscription left by his party; it may have fallen into the caldera. The shattered blocks of rock in the vicinity of the rest house are debris from a prehistoric explosive eruption.

If you don't sleep well, this is a normal complaint for the first night. You may wish to spend the next day exploring, circumnavigating the caldera, and visiting the summit. Or, if you've had enough, start back to lower elevations. The 29 km downhill from Pendulum Peak to the Mauna Loa roadhead can be easily covered in a day, with a brief stop at Pu'u Ulaula for lunch. A leisurely two-day descent can be very enjoyable if you have the time.

I hope that those of you who try these walks get as much enjoyment from them as I have over the course of about 25 years.

MAP LEGENDS

- (A) Locations of the eight major Hawaiian islands. Ni'ihau, near Kauai, and Kaho'olawe, near Maui, are closed to visitors.
- (B) The island of Hawaii, showing the locations of the five volcanoes that make up the island, and indicating the region covered by Map (C).
- (C) South east Quadrant of Hawaii, showing tracks described in text.

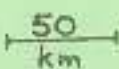
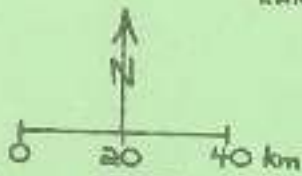
Abbreviations:

- AR: Aieahou Ranch (water).
 - FP: Footprints (water, shelter*).
 - HA: Halape (water, shelter).
 - HP: Hilina Pali (water, shelter*).
 - KH: Kipuka Mene (water, shelter*).
 - KP: Kipuka Pu'aulu (water, shelter*).
 - MI: Mauna Iki.
 - MR: Mauna Loa roadhead (water, shelter*).
 - NB: North Bay (waterhole).
 - NP: Namakani Pa'io (tourist cabins).
 - PE: Pepeiau (water, shelter).
 - PH: Park Headquarters (water).
 - PK: Pu'u Kapukapu.
 - PP: Pendulum Peak (water, shelter).
 - PU: Pu'u Ulaula (water, shelter).
 - S: Summit of Mauna Loa.
 - VH: Volcano House (hotel, restaurant, bar, post office).
 - VS: Volcano settlement (general store, bottle store, petrol, post office).
- (* denotes picnic shelter, not intended for overnight camping).

HAWAIIAN ISLANDS



A



B

