

DUKE
LIBRARY

1987

BASE

OUCC
CUNVICENTE
EXPEDITION
1987

BASE CAMP
LOG

1987

WE WERE :-

OXFORD UNIVERSITY
CAVE CLUB
LIBRARY

Smith
14
2

Sonathu Coop :-

[Signature]

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[Signature]

Wald Biersack

[Signature]

Munel Egerton

[Signature]

Paul B...

[Signature]

Mike Bern...

Phil Sargent

[Signature]

William Stead

[Signature]

[Signature]

Martin L...

Graham Naylor

[Signature]

[Signature]

[Signature]

[Signature]

Silvia

Graham Ponder

[Signature]

[Signature]

WED. 8 July '87

Don & the Van & JC went to Oviedo to do Official Things, and to Cayas to fill our 5 empty Gaz-Containers.

The day dawned wet & claggy just like yesterday, but after a while the dim silhouette of the Upper Bar could be seen - better than when we arrived when even the Maria Rosa was lost to view.

A day spent taking nearly everything up to Ario.

Lots of people did lots of carries ^{ie} up the mountain today, though I'm the path.

What's the Use of Wearing Damart
Cags and mags you buy in K-mart
Gortex sox are just for Piss-Farts!
Better far is SKIN!

Expose it on the mountain

Dip it in the fountain

Burn it to

A darker hue

By marching in the sun until you're fainting

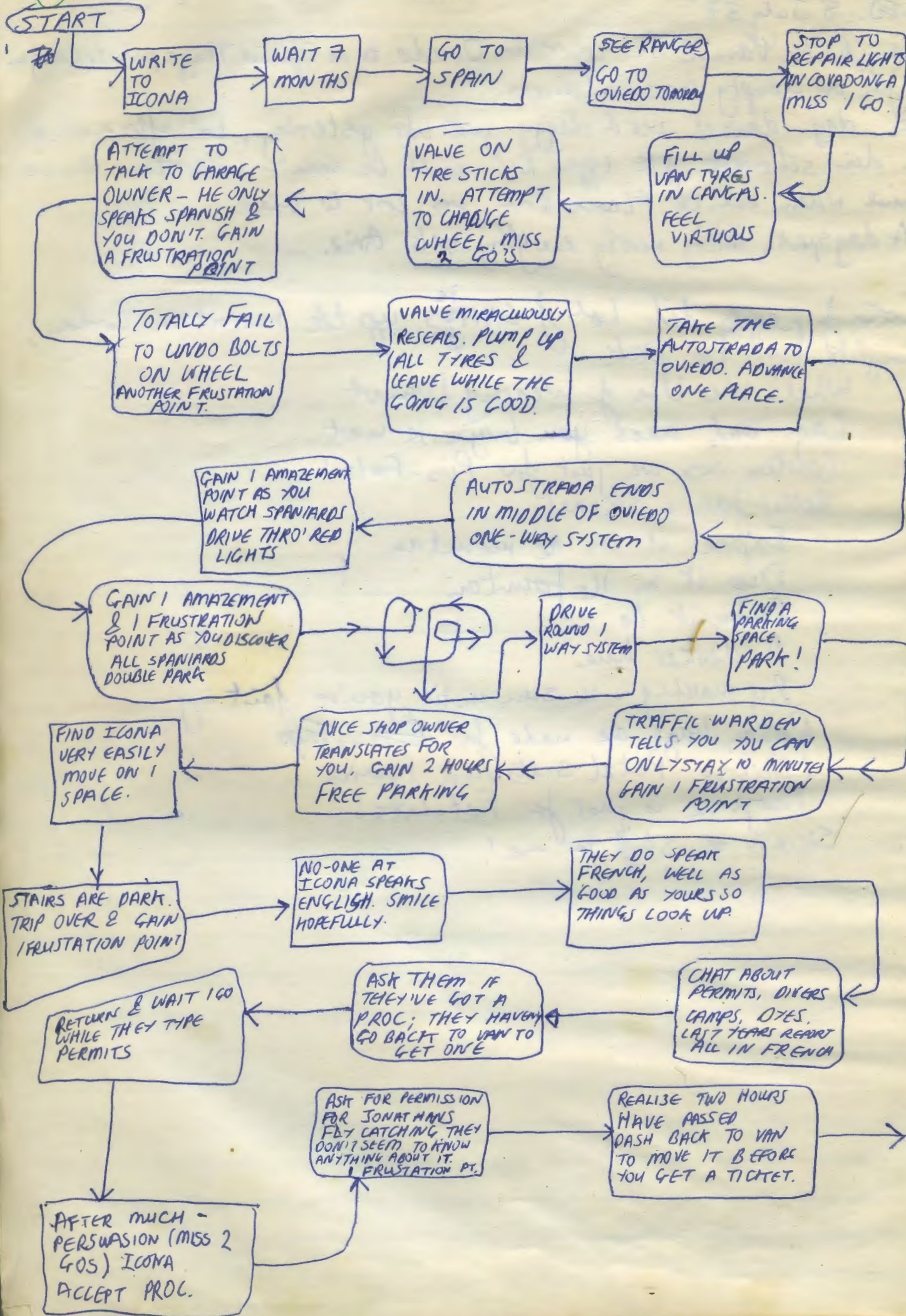
Rohai bags are made for Sissies Fags

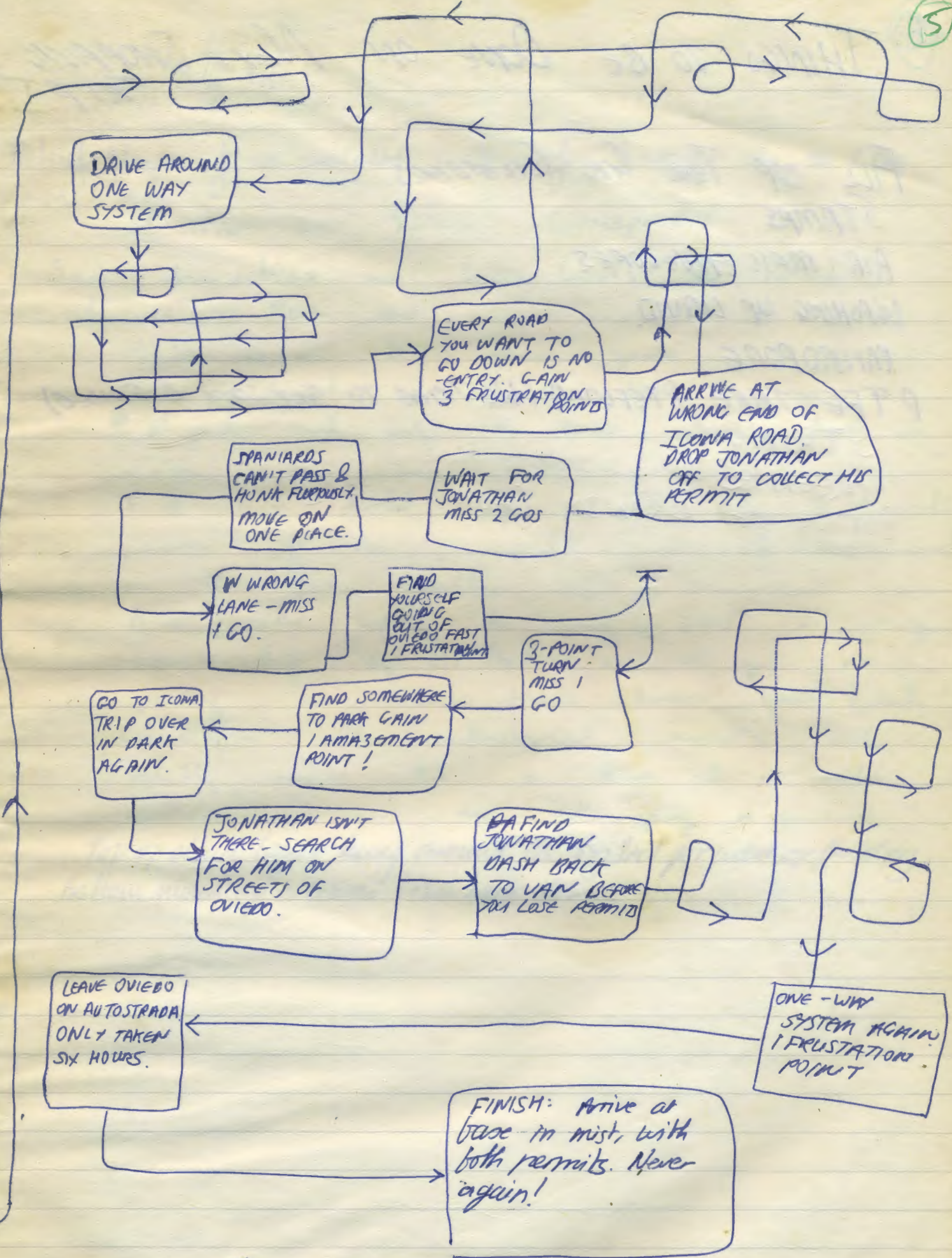
Likewise Petzl suits and Funnis

Neoprene is just for Fetishists!

SKIN's the stuff for me!

THE ICONA GAME





San & Jonathan.

⑥ THINGS TO BE DONE ON NEXT SHOPPING TRIP I

FILL UP TWO GAS CYLINDERS.

STAMPS

AIR-MAIL ENVELOPES

WASHING UP LIQUID.

MICROPORE.

P TFE TAPE (TEFLON) (WE TRIED TO GET SOME & FAILED)

STRING

GREENIES

BOTTLE OF BRANDY (FOR NEIL)

Thursday July 9th.

A brief glimpse of the snow clad peaks before breakfast when the Clay moved in again
From our Science Correspondent.

Some observations on Snow levels. for future reference ~ From our

1987 is a low snow year

The W shaped snow field above top camp is shaped and only the snow above F20 is visible from any distance.

F 38 has dried up with only 2 small pieces of ice, a puddle at the bottom and on the far wall.

Arctic water supply is very slow, so may even dry up (!) And as of yet no promising new snow fields have been found. Consultation with meteorological experts will probably reveal this is due to a mild winter or a very hot spring + summer.

Top of cloud layer hung around the Bigsod for most of the day. Bottom moved up to Bobras & then back down.



Mountain from Base Camp

Scott

SHOPPING LIST. II

Washing up bowl ✓

Tights X

Small plastic bags X

Loads of veg. ✓

Dry stuff (eg pasta) ✓

Anything else. ✓

Need to get these
→ very small.

(14)
the yellow van set out across the vast regions of space known as the Picos de Europa, in good spirits on the afternoon of ~~the~~ a sunny day having fortified themselves on the aliens larger (full guarantee to make you visit the quarry).

With suspicious ease the relevant gorge was located but upon attempting to penetrate down into the ~~the~~ depths ~~whereupon~~ wherein the water flowed they were attacked not only by sharp rocks, stinging nettles & thistles but the long wet grass upon the steep slopes ensured that the well padded bums were put to good use.

Eventually the resurgence reached and bombs deposited the final onslaught to reach the cave caused the hikers to tremble as they navigated their ways up & down sheer slopes with large drops below.

At this point, the world through which they trekked determined to seek its revenge and surrounded the hikers in thick mist. Immediate return to the yellow van was imperative so they zipped up to the top of the valley, panting & trying not to look down too often and then used a piece of straw (and not a bootlace) to set them off in the right direction through the mist. (They had foolishly forgotten a seemingly useless item, that consists of an oscillating pointer, usually known as a compass). At long last a pasteur's hut was stumbled upon & the direction of home enquired. After seemingly being directed through an angle of 90° , it gradually transpired that they were retracing their steps. By the luck of the yellow van another two pasteurs turned up & more incomprehensible directions given as well as a brief escort. ~~up~~ The hikers were no longer surprised when yet another pasteur's hut appeared as if by magic out of the mist & ^{after} a further arm waving & much relief the path

home discovered.

Other useful items required:

- pasteur homing in device, saddle to encourage donkeys to take you home, Bonis to lessen the pain of climbing down & then back up.

Summary

Went to Hoya de la Madre & got lost coming home.

ILLUSTRATION



The 15th July

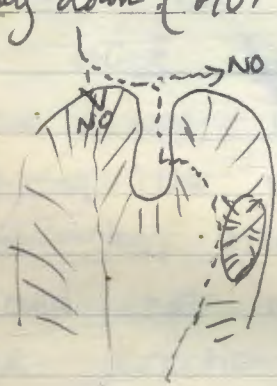
(17) Martin L., Philip S. & Graham N. Walked down the

Caral de Trea successfully in 2 1/2 hours to the Caves Gorge path, (20 minutes from Cain). Of that 2 1/2, 1/2 was spent looking for caves. The route is very simple but all the critical junctions are unmarked. Margaret picked us up in Casmanena after a few jobs with Dani, Chalkey, Mike, Dave, Graham Proudlove.

SILVIA G.P. ^{may be} is not coming directly to Lagos from the Caves when the NPC expedition finishes, he may walk up to the village Bulnes first.

CRITICAL POINTS ON TREA PATH (NB the Fuente is 2/3 of the way down)

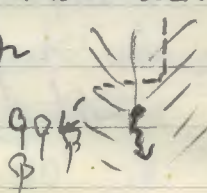
- (1) walk nearly to Jaltayan from Arico along the yellow dots, turn left when you see an arrow pointing back to ARICO (labelled ARICO) just at the foot of Jaltayan.
- (2) Go down not across at the top of the Trea Valley, at SECOND NOT the FIRST way down (MUY PELEGROSO)



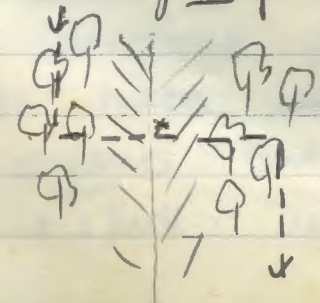
Adalberto writes:
 The woods above Cain contain, by report, many little black burning insects. These are best avoided, not least because, for obscure reasons related to cell mediated immunity, they (also!) can make you go blind.

John

- (3) Don't go down to the Fuente, the path crosses across the TOP of the fuente, about 20m above it. (~~Marked by yellow dots?~~)
 Do NOT follow the streambed AT ALL.



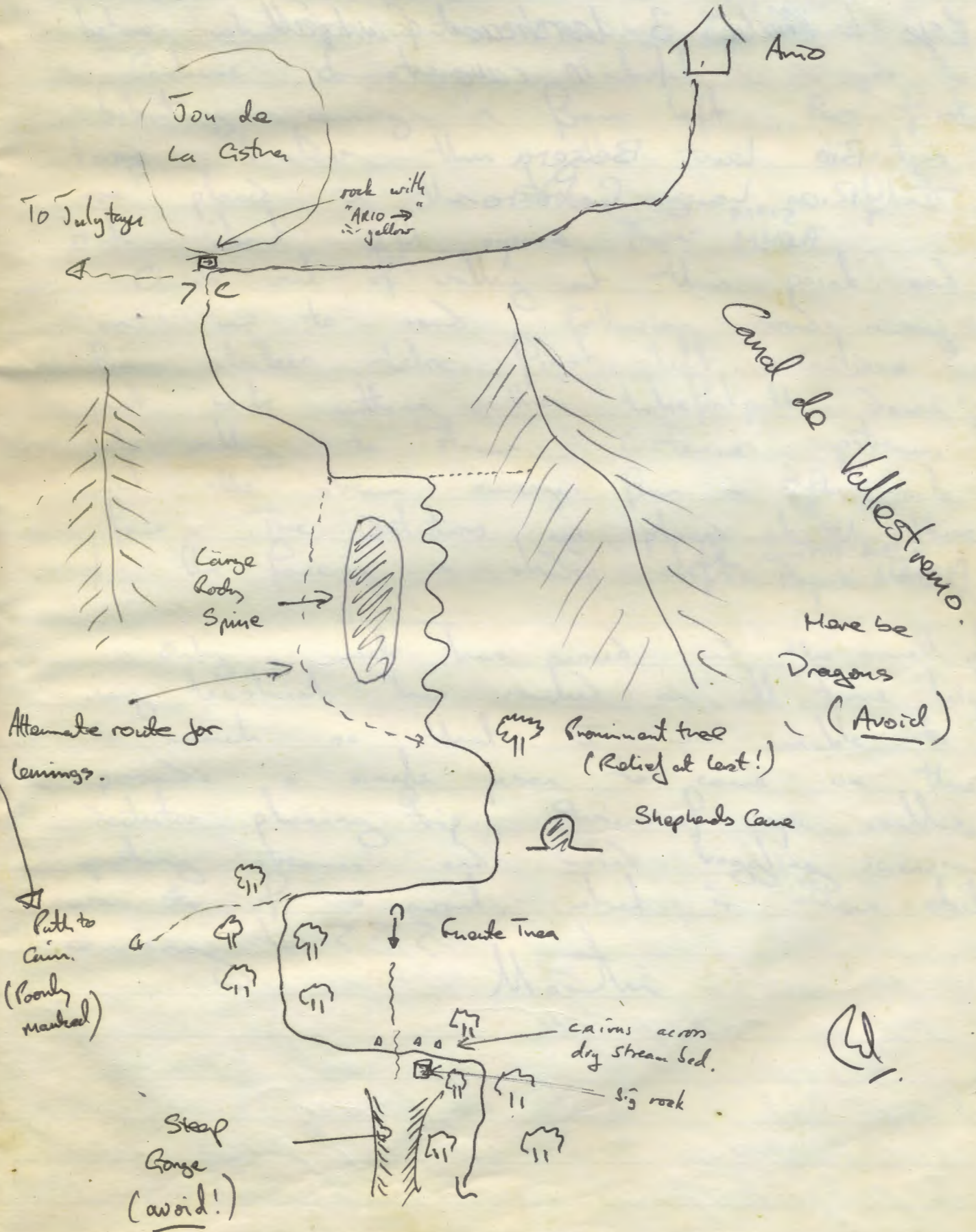
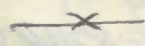
- (4) This path immediately goes into a wood. Take the left fork; the right fork leads to a poor path directly to Cain.



Path crosses stream from one wood to the other. Crossing at stream marked by stone cairn.

- (5)

The path is earthy rather than rocky for nearly all its length, so in wet weather it is VERY slippery & tiring. It is unbelievably steep.



Canal de Vallestromo.

Have be Dragons (Avoid)

Prominent tree (Relief at least!)

Shepherds Cave

Fractal Trees

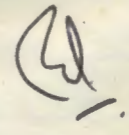
cairns across dry stream bed.

big rock

Steep Gorge (avoid!)

Alternate route for leavings.

Path to Cairn (poorly marked)



(15)

DYE DETECTORS - CONTROLS SUMMARY

- I Cubembo. 2 in resurgence
 2 upstream of resurgence

- II Hoya La Madre 3 downstream of waterfall
 1 in cave.

- III Rio La Beyeria
 Rio La Caldera

Dye Detectors

Wed. 15th July

Follow Rio la Beyera from top end of
 huge Enol to first large tree. Both detectors
 are about 30 feet downstream of tree just
 below where water resurges. ^{control} MM1
^{Proper} MM1A

Continue downstream about 70 yds to
 tributary coming in from left. Pass first
 large boulder then the two detectors
 are placed in the stream near ^{control} MM2
 rock about 2ft square. ^{Proper} MM2A

Climb out of valley at this point and
 on up to road. Following road away
 from lakes take first left. Continue
 past rock cutting then take first path down
 into valley to stream. Continue upstream
 until the stream emerges from a 7ft rock
 face. The detectors are placed at the base
 of the face in a shaded cleft. ^{control} MM3
^{Proper} MM3A

Only a week has passed and the smell of
 my tee shirts has reached an all time high.
 So much so that I was unable to
 persuade a single person to come on this
 detector placing trip. Stories of epic walks,
 sporting streams and mind boggling scenery
 was ~~the~~ of no avail, what is this club
 coming to ????

Martin

(17)
15 July ICONA CONTINUED.

A couple of the guardias forestal came poking around the camp & found Tombaris' net that they didn't like. I explained that we did have a permit for it although it was probably at Aho. I suggest we leave the net unmade in the green tent. Then they came & said we had too many tents so after a brief discussion I hitched down to Covadonga to show ICONA. Got a lift in a dormobile at End. Bouncing around ~~in~~ on a mattress in the back of a van with about 2' vertical room while accelerating down to Covadonga is exciting in any the least. Actually got through to ICONA & made myself understood. I spoke to the fluent french speaker & we should have permission for 8 tents here although she didn't think it necessary to send ^{us} a new permit, so I said she would inform the guardias forestal of the changes. Hopefully this is the last draught of the permit saga, altho' somehow I think it may not be.

SOME SUGGESTIONS FOR NEXT YEARS APPLICATION.

- ① Calculate exactly what date you'll arrive in Spain & ~~state~~ tell them a week earlier than that. ICONA claim they post permits to arrive just before we leave & on the 1987 prospectus, I gave 13th July as starting date.
- ② Estimate n^o of tents you're likely to need at each ~~camp~~ camp. Add 2. Double the number. On our permits, we have permission for the number of people requested but only half the number of tents requested.

(18)

15 July 1987 CANGAS

Met Mr. Mornflake in Cangas with the YUCPC Landrover he gave us instructions to find the YORK composite. Currently they have just got down to the main campsite at -740m in M2 and are setting it up for an 8-person campsite. The limit of exploration last year was at -940m (and they are thinking about having a 2-man advance pushing camp too). At -900m it suddenly goes Big as opposed to small & gribbly for the ~~map~~ way down there.

Here are the instructions for the YUCPC surface base:

- ① Go to Cangas
- ② Turn left just before the bridge, the road to RIANO
- ③ Go 30km along this road, turn LEFT towards SOTO DE SAHAMBRE
- ④ Go through village (lots of zigzags)
- ⑤ In village take WOODEN SIGNPOSTED DIRECTION TO VAGABAÑO
- ⑥ This is an 8km distance, poor road, very slow
- ⑦ Goes through forest; when reach fields at top go STRAIGHT (~~as~~ main track goes right)
- ⑧ At next fork go flat & to the ~~left~~ right a bit through lots of yellow flowering bushes. After 200 yards you find YUCPC camp.
- ⑨ Show walk to YUCPC top camp.

16th + 17th July.

It rained a lot. Mel walked to Covadonga, 2 Yorkies came by (inc. Kev Senior). They haven't reached last year's limit yet ^{in M2.}
It rained but not quite as much on 18th July.
Mel a nice Scottish girl
Santia.

P.S. It did rain just as much on the 19th
Notes for survival at base.

The air beds are now ~~an~~ imperative for use at night as the tents are about to sink in the water - always check you know where the distress stores are

19th

(19)

July: Domingo Sol.

Awoke at Ario to rather a shock, there were no clouds & there was the fondly remembered Sun. The result of this was a mass attack of sunstroke & everyone decided they had to go to Cangas for lunch to celebrate. This was very fortuitous for Phil, Manuel & I who needed Sherpas to bring our stuff down 'cos we've got to go tomorrow, so the three of us are now drying out base camp, boots & clothing. Lagos is not as crowded as most Sundays & I can't hear a single radio.

See you all at the 'reunion' on 1st Aug 2000
8pm at The Kro Grande. p.s. Bring your children!
grand

20th July

Quote - says Margot to the squeals + giggles coming from Martin (Mays) + Lynus tent "It's easier if you're both in the same sleeping bag."

Last night Simon the cyclist (one of the two who taught us zank on the ferry) arrived. Many frobes were thrown (& missed) much vino tinto + gaseosa was drunk, much zank was played (we got pinned wet fell over we crawled into ~~out~~ our pits & didn't reappear for many hours.) Simon left to cycle 100 miles to Santander this morning - I don't know if the hangover will help, but I'm sure the morn'flakes did.

(20)

A Walk on the Dark Side

It was a dark and misty evening, (especially dark). Eleven shadowy figures left the Maria Rosa, stumbling & staggering through the quarry. People slipped into the mud, people fell into the quarry, people crawled over each other in the slime, slipping and slipping their way back to the tents (or at least where they thought the tents might be). Sherry, having been ~~roughly~~ ^{bravely} tackled brought down by a particularly filthy Paul, began to sputter profanity. Pesetas bickered over the muddy field. "I've lost everything, I've lost everything" she spluttered through the mud.

Only 'surefoot' Graham made it back to camp, without incident and was soon rounding up the mud encrusted covers, valiantly battling his way through the swamp, picking up vital items and guiding people back from the quarry.

Eventually eleven wet, filthy, slimy creatures made the tents, crawling up from the pools of water, and climbing up out of the quarry. Graham, ever the conscientious one, threw water over everyone, before they slowly fell into a deep ~~sleep~~ coma.

Addendum: Dan was completely pissed and the above account is a travesty of justice. Dan lead most of the party into the quarry displaying a complete lack of direction and common sense. Even Muriel novice expeditioneer

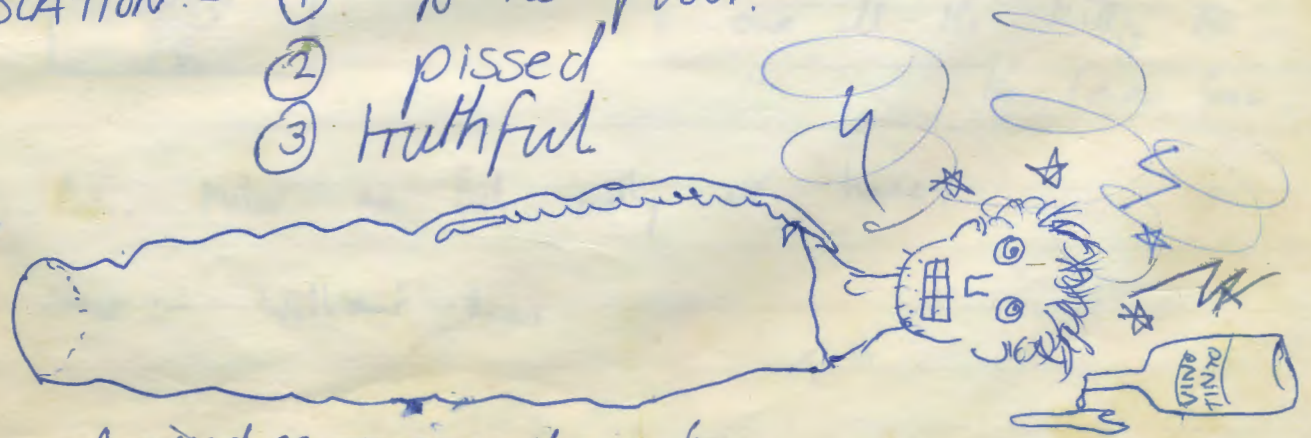
knew which way camp was and tried to point ^{out} the correct direction to the drunken Dan. Dan expedition leader extraordinaire knows everything and so ignored Muriel's pleas and they both plunged to their almost death as they fell into the quarry.

P.S. I was helping Sherry back to the tents when she stumbled and pushed me over and then fell on top of me. After picking myself up and then dragging Sherry to her feet ① we spent 5 minutes desperately trying to stay on our feet in the quagmire till Graham arrived with a light.

P.P.S. I was completely sober ② and the above is an entirely truthful ③ account.

PPPS He was entirely pissed and the above is an entirely truthful account

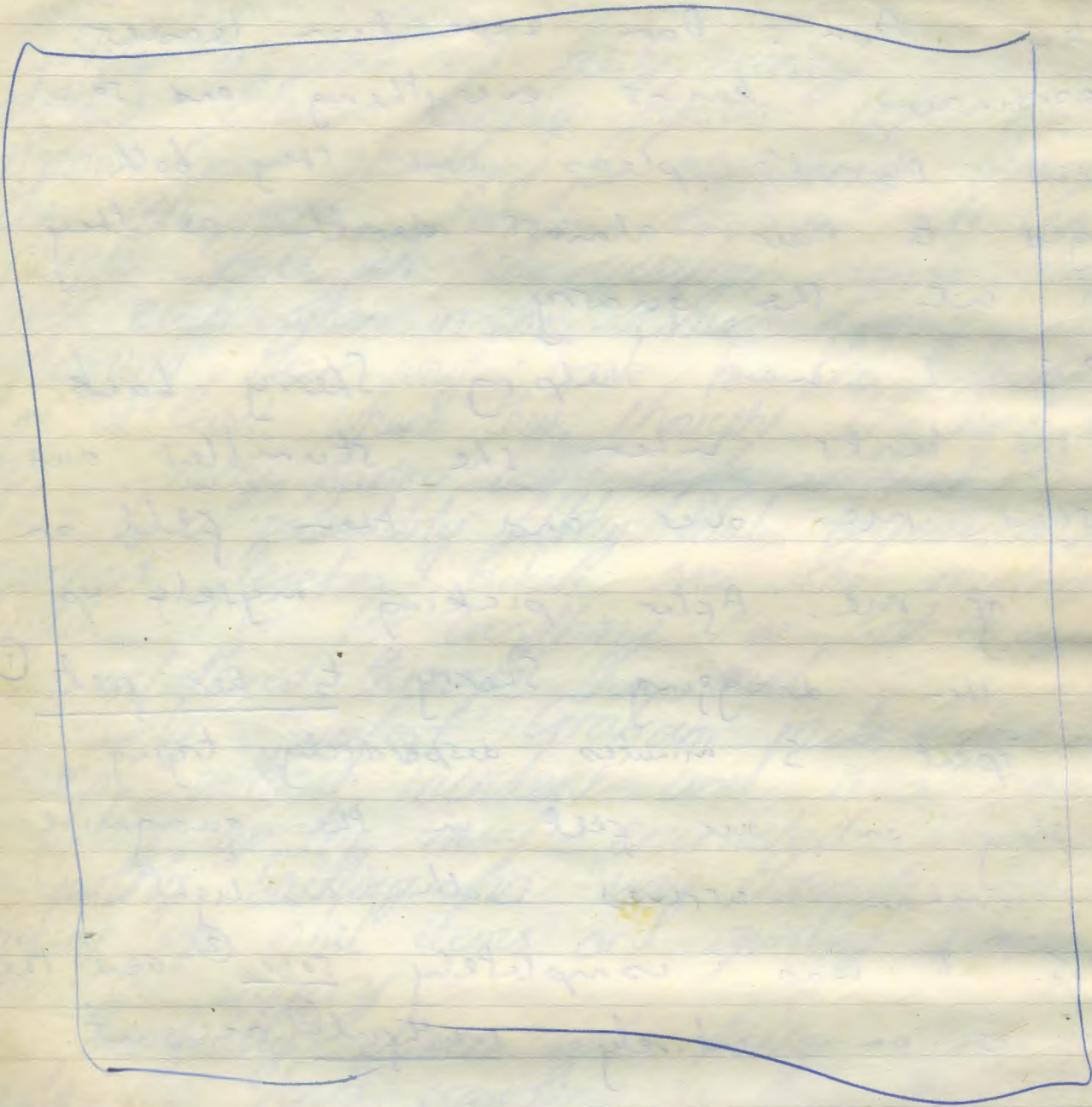
TRANSLATION:- ① to the floor.
② pissed
③ truthful



A pissed cover on a sleeping bag - Any resemblance to any persons living or dead is ~~not~~ purely intentional.

22

A Short Interlude:



23/7/87

MIKE, HARRY, TOM, BILL ARRIVE!

GRAND expectations of caving deep --
 no go - climb high - whats left to do?
 Wonder about feeling like you want something to do -
 beers + brandy + beards - I hate the beards - There is
 a reason to do Naraujo - we want to do something
 We spent 2 day to get here - with minor interruptions
 it was un-impressive. There we 2 weeks in sick to
do something. There are reasons 2 go beyond the
 redactions. Fuck there's nothing like excitement.

Harry "Honking on Wobblies" Moss

I expect to go easy and what do I get?



Another day older +
deeper in ~~debt~~ debt

Dan don't you ask me to
walk too far

I owe all the kitty to
the love bar...

Aah. Make me feel really at home,

Next :- Williams' knees.

T.H.

MOAN, MOAN MOAN ...

Enclosure

Yes ... its the moment you've all (not) been waiting for... my food moans have finally made it into print.

① I am still alarmed at the rate we're getting thro' sponsorship cave food. I don't think this is very fair on those folk coming out for the end of expedition.

To alleviate the problem, I've taken a little under half the remaining cave food at base (so there is still loads at base & at Aro) and put it in two bags, the first to be opened on/after 1st August, the second to be opened on/after ninth August.

② Kellogg's Cornflakes & Rice Krispies. As far as I'm concerned, anyone can eat these anywhere provided they've checked with the first. These are bus bread, pasta, mamflakes etc so he may eat rather alot of them.

cos they taste bloody

Why anyone isn't head over heels with the taste of Mamflakes I don't know.....

③ Thank for your co-operation in matters above!!

~~Where~~ Where hides the sun?
Dew drop on maple leaf
Reminds tree
Of thy mothers grief

A. Allen @ 2/7

A note on explanation for those who can be bothered. This kikau (6, 4, 6), written in the mist, concerns the metamorphosis from damp to dry, and is

blatant plagiarism of Blake's 'The caterpillar on the cabbage leaf', reminds all of the mother's grief. which balks of the transition between caterpillar and butterfly, via the short lived stage of pupation (mist → sun). (25)

25th July: Manolo is pissed as a fart and bought us all drinks in the bar.

A Night at the Opera:

One may not realize this but O.U.C.C. is a pretty keen club and the idea of spending even one evening not at Ario or Top camp appeals most members. And so, it ~~was~~ came to pass in the year 1989 that almost all of the expedition members were at Lagos, ^{but} ~~and~~ this unusual event was only a prelude to an incredible series of events, only some of which can now be told.

At 6pm the 20 members climbed aboard the yellow van and drove slowly towards Grijon. On arrival all the members changed into evening dress. The men ^{were} resplendent in their spotlessly clean and superbly ironed D.J's. The ladies looked stunningly beautiful in their Bruce Oldfield designed dresses. The one blemish to their immaculate

awful.
No they don't...

turn out
~~not~~ was old lag Martin May who

(26) ~~only had to be dressed as pirates complete with~~

was dressed as Long John Silver complete with parrot. The American Express cards were flourished and the party filed into the best seats in the house and sat down to listen to a performance of La Boheme. As the opera was approaching the climax of the 2nd act ^{most} of the audience disappeared into a vast abyss where once the rear stalls had been. The performance continued undisturbed but the attention of the ~~ranked~~ masses of O.U.C.C. could not resist the possibility of rescue. By throwing the theatre manager over the edge the pitch was revealed to have a seven second drop and ~~soon~~ Martin M. dashed out to fetch Boris. The rapid departure of MM left the parrot with no place to perch and it alighted on Monsieur Laverty's beard and promptly started nest building. On Martin's return Boris was belayed to a seat with ~~was~~ a tapeⁿ back up round an ~~was~~ wicket, and thrown down the pitch in the sende old lag Dan "No good, phase. We're cavers" Mall claimed first descent and ~~claps~~ changed quickly into his dry cleaned or SRT gear. A few minutes after going over

The edge, a torrent of abuse emerged from the pit as Dan tried to release his bow-tie which was jammed in the rock. After jettisoning the bow-tie Dan continued down and reached the bottom after free hanging descent of 170m. The floor ^{of the} shaft consisted of small angular rocks sloping down to a too tight rift. After relaying this information ~~to those above~~ via his personal walkie-talkie to those above, ~~and~~ Dan attached his ~~pr~~ motorized ascenders and reached the top 2 minutes later. Dan quickly disrobed his SRT gear and returned to his seat to enjoy the rest of the performance. While Dan had been down the shaft the other members were unpacking the surveying droid which was ~~then~~ thrown down the shaft. After impact the recall button on the control box was pressed and the droid returned safely 5 minutes later. Once the performance was over all the expeditioners rushed down to the river to submerge ^{and tulipan} into each other's hair and to indulge in weird party games with an emphasis on ~~the~~ sadomasochism.

The mad
Caver

(28)

The Tale of Manolo - The Poor Peasant Boy.

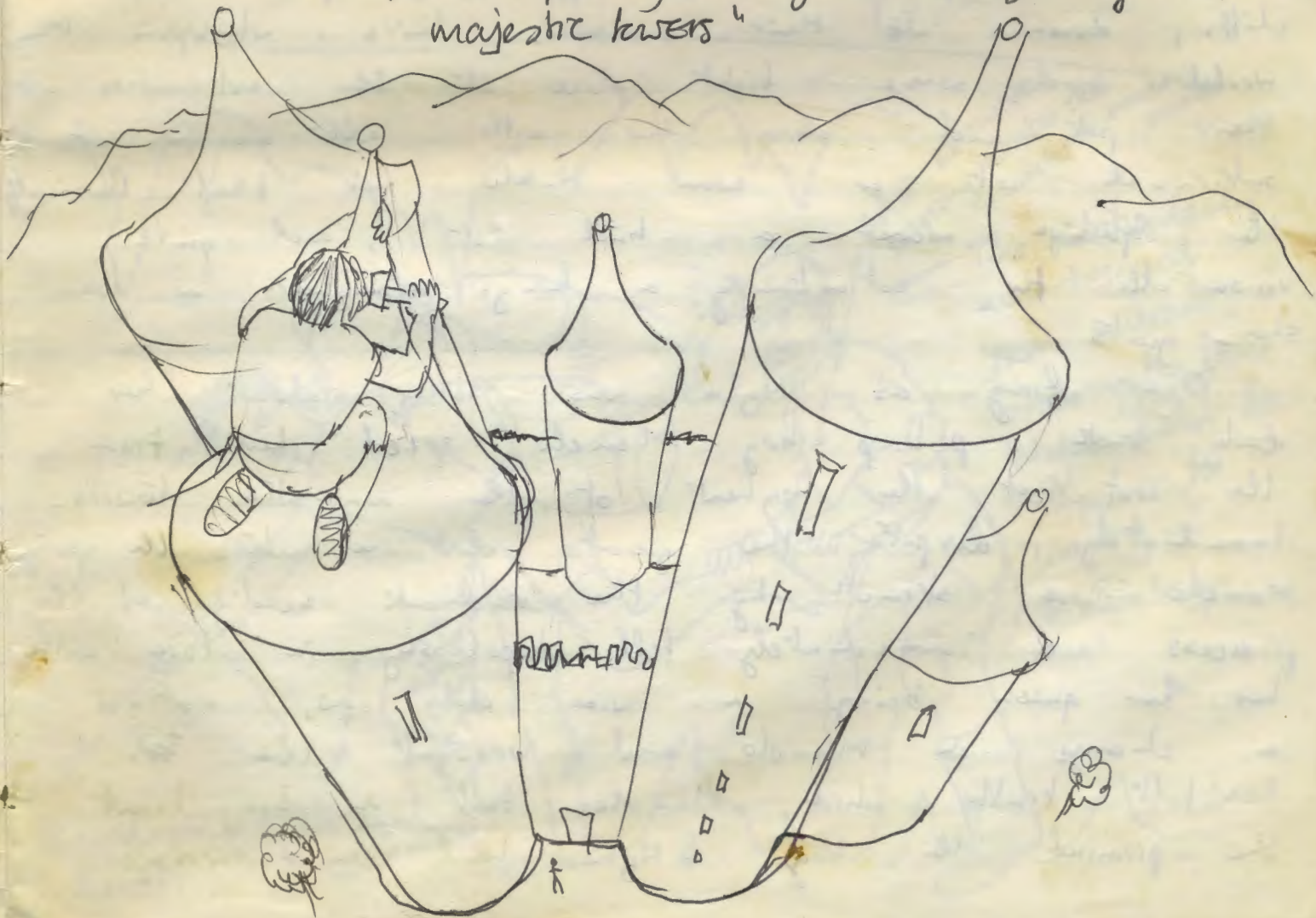
Once upon a time, a long time ago, there lived in the kingdom of Pastaricos, a humble peasant boy, whose name was Manolo. He lived with his mother and his father and his goat, Jose, in a humble peasant cottage near the coast of the kingdom, a small humble peasant village called Wibadisella. One day tragedy struck when Manolo's poor humble peasant father was taken away for non-payment of taxes by the king's men (really it was for being caught committing unnatural acts with Jose) so poor, short, humble peasant boy Manolo had to support his poor humble peasant (from now on p.h.p.) mother by going away to the king's city of Vlasio up in the high mountains. There he would bring in the bacon mending the roof of the king's palace, for p.h.p. Manolo was skilled with his hands.

The boy Manolo was sharp and quick witted and soon won the trust of the king Solius and his good wife Ariadne, such that they allowed him to sleep within the palace's walls. But the palace was a sad place for the king's only daughter, Nyla had been taken hostage by a ragged band of ill repute who lived down the mountain side. This ragged band of ill repute spent all their time in dark, dank, wet places, where they would creep around on all fours and sleep with buffaloes. They had hard heads with a single eye in the centre, and emitted fire and noxious fumes, so could be smelt for miles around. Their skin was hairless

"Mando the Jolly
Pleasant Boy with
Jose the bugged
Goat"



"Mando repairing the roof on the highest of the
majestic towers"



(20)

and of a texture akin to plastic, and they had thick rubbery lower limbs, which ~~is~~ featured their one distinguishing characteristic a red Dunlop emblem. These strange creatures described as Spelios would haunt the king and queen by sending Nyln to within sight of the high, majestic towers of Vlaris to fetch water from the mighty spring which flowed from a copper pipe. So she would not escape she ~~so~~ she was bound hand and foot with a strange secretion proposed by the Spelios called Bluewater. When they felt they had not water to satisfy their drooping, slobbering throats, or just to amuse themselves they would drag her back, down the bouldery mountain slope, down through all manner of unpleasant waste products left by the herds of domestic animals which floundered around the palace city, down sheer slopes and precipitous cliffs, down into their cavernous lairs, whereupon they would find some tight place at the extremities of their pits and abuse her with all-manner of satirical wit or even tickle her feet. Basically the Spelios were a bad lot, and quite unsuitable for entertaining a king's daughter or even she-goats.

One day as Nyln was setting about her daily task, p.h.p boy Manolo spied her from the roof of the highest of the majestic towers. Immediately, despite the great distance to the spring, Manolo was stricken by the radiant beauty of the princess and immediately fell hopelessly in love with her. The queen, being a wise old cow, noticed a change in Manolo and wrought the first heartfelt truth which Manolo tells in his heart. She promised the boy to Nyln hand in marriage

"Manda having his sex
fair knocked off by
the radiant beauty of
the fair Nylu"



Radiant
Beauty

Nylu bowed
under the weight
of the water

Manda atop
his majestic
tower spies
the fair Nylu



Note extensive
scarring on outer skin
- this is one mean
spell

The particularly
evil + squat
Yam Nitram
tormenting the fair
Nylu whilst forc-
ing her to
carry 6
tacklebags

Nylu forced
to wear
DIRTY
shorts

* Apologies to Lynn from
sherry.

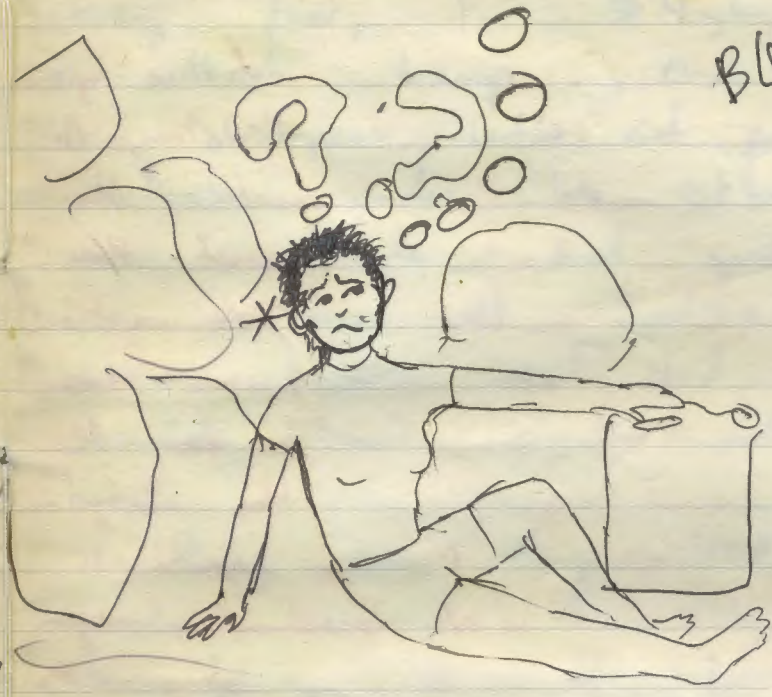
should be he able to trick the Spelios into returning the fair Nylm.

So armed with only his quick wit and a rope protection Mando ventured into the Spelios territory. As it was day he was quite safe to approach the spring since the dark, smelly Spelios feared the bright light of the sun, or more usually the mystical aura of the Pastirius mist, as these were known for their cleansing properties. There he waited for the fair princess, who duly turned up with the orange and blue water containers. Fearing the worst he spoke to her in his native tongue, but which produced a response of pure confusion in the fair Nylm. Being sharp-witted he realised that she had spent so long in the presence of the Spelios that she no longer understood her own language. Their gruff talk and exceptional use of short, ugly words, especially by the hardened female of the band Merys

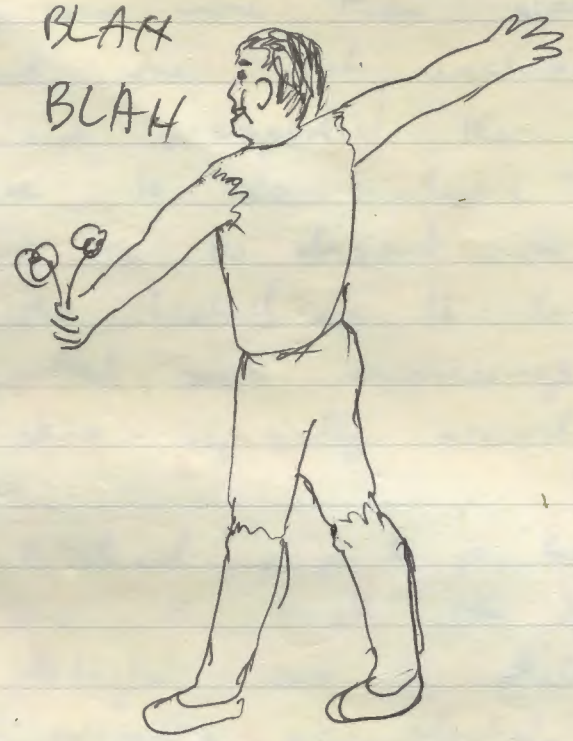
still being quick-witted he realised the only way to effectively communicate with the fair princess was using the pretty alpine flowers of the region. Despite her orders or dead Nylm gruffed. The meaning of this single gesture "I am a prat", and by means of sign language a bond of trust and friendship quickly developed between the p.h.p Mando and the fair Nylm.

Meanwhile on a group of travelling rogues had returned from rape and pillage in the neighbouring kingdoms, including the raketich Nirad and the terrible Nitram twins. Their return heralded a split in the ranks in the Spelios as they had returned to find that their younger brother Yam Nitram had been deposed by the hated Ecom Nad, a particularly shaggy example of the species, known now only as Mad

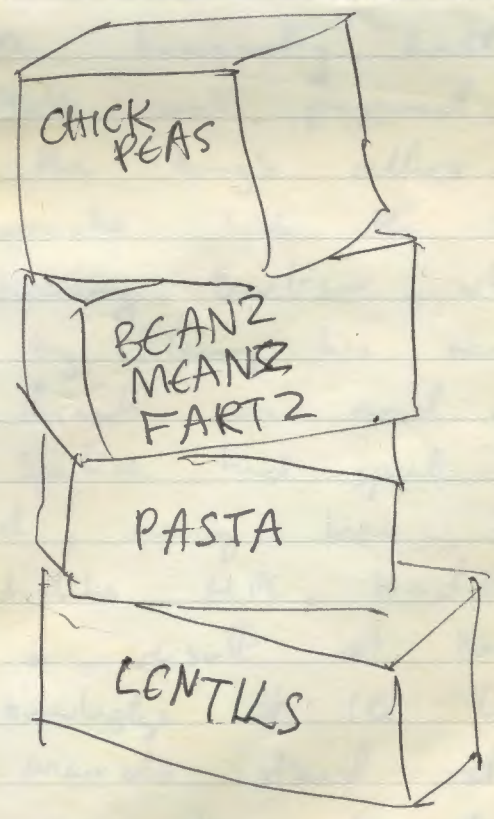
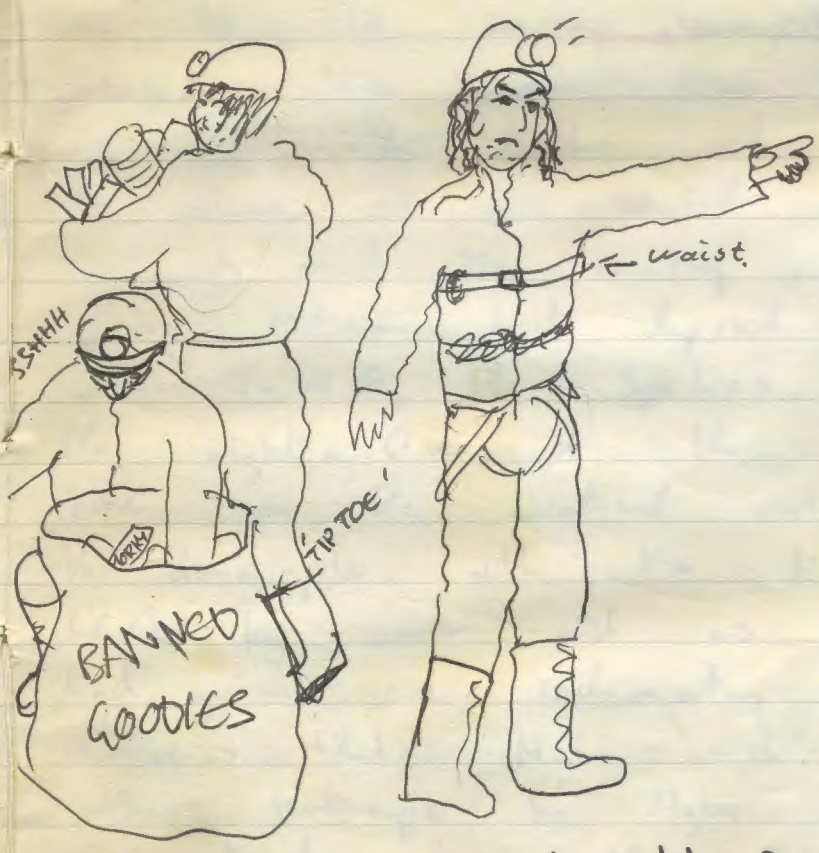
WOT A COMPLETE PRAT!



BLAH BLAH
BLAH BLAH



* - even more apologies to Lynn from Sherry



"The New Mad Nad directives"

Nad. This heurpde of a spetio had been mercilessly abusing poor, fair Hgln, even more than slowly dim-witted Lamp. Mad Nad who lived exclusively on chickpeas, lentils and ~~pot~~ rice, expected the poor creatures under his influence to do similar. This mean attitude had given rise to dissent in the lower orders of Spetios who looked up to Yam Nitram however Mad Nad quelled such murmurings by shredding their plastic outer skins especially around the huns.

Being very sharp-witted in deed, p. h. p. boy Mando realized the only way to break the Spetios into giving up the fair Hgln was to dull their senses with copious amounts of alcohol. Not only was wine they were used with their food but also with their money so Mando would have to use his last potato to bring this about. He invited them to the massive, majestic banquet hall of Vlassio where much vino tinto was prepared, brought up from the depths of the king's cellars. Despite the absence of gin-soaked wreaths like the the Sone's Songerg's and the ranting, fuming Bert-ser, whom the young Nitram had deposed by lacing his neat meals with T.M.F., the Spetios drank on and on through the night. One of the Spetios had spent some time on the avatrad world, moving from dung-pile to dung-pile with the fish-like HPC, Maddi the Levix by name and as a result of these excursions had gained some rudimentary knowledge of the language of lastirius. Whilst Hgln and Mando stared at each others knees, for Hgln was not allowed to raise her head above the table, he would grant these messages between them. Mando told her of his plans for her escape, his unending love for her,

the heat of her eyes and her cheeks. However he was not quite sharp-witted enough to spot the flaw in his plan since ^{Nadadi} ~~he~~ was not translating word for word; and ^{was} relaying the escape plan to that Mad Mad. For example when talking of her rosy cheeks Nadadi would tell Nylu of his unbridled passion for hamsters, or the interesting way in which his testicles were lob-sided.

As dawn broke and the last Spelios crept away dragging Nylu down to their daytime lair's for more abuse of a sarcastic nature, Mando searched his pockets for his last potatoe and paid off the bill. Still he was separated from his beloved Nylu, still he would spend sleepless nights worrying about her fate, still his love would be unrequited, still Nylu would think him a complete prat.

How will Mando make her understand?

How will Nylu escape the grips of the dreadful Spelios?

Why does Paul B bother coming to Spain?

To be continued in

A reply from fair Nylu?

277 - - Names conceived whilst pissed

36

← P12

← P40

Chokes

Dig

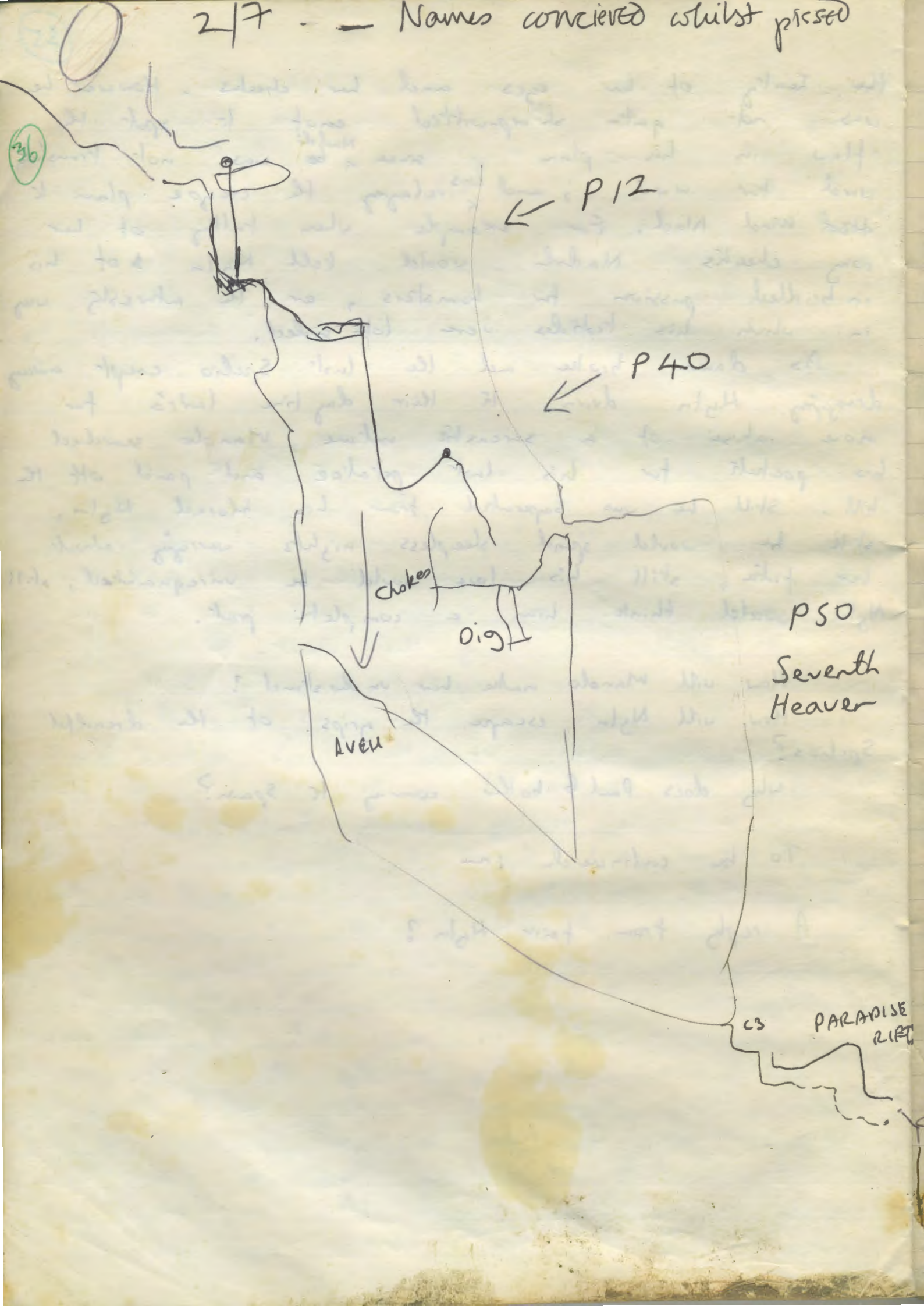
P50

Seventh
Heaven

AVENUE

C3

PARADISE
RIFT



Thanks for a brill, fantastic, wonderful, ... etc
mushroom & red bits omelette this morning (Martin).

SHOPPING LIST IV

- Envelopes.
- Jackplug.
- TDA 2030 ?
- Sticky tape for blasters.
- Plasters.
- Cras. (Refill bottles).

oops!
 ↓
 you illetéramte Sagger

28/7 : Oū ^{sont} ~~est~~ Monsieur le Cratchetty
 et Mademoiselle Squik squik.

28/7 Here! 6pm Saturday
 → 12.00 Tuesday.

Is this a record?
 12 hrs = Paris,
 12 hrs = Casadonga
 A long time look at Ivun.

"M le C" ?

Modern Classics of Science Fiction presents:-

Vacher Attack.

Earthman Cooper had been guarding the command module of Space station "Base Camp" against the dangerous aliens of the planet Picos, the bipedal humanoid Spaniards, and the aggressive Vachers. The Spaniards were a docile lot who would keep their distance from the intrepid Earth man (+ earthwomen), and were no problem unless provoked, as happened when the Starfighter class ship "Yellow Van", collided with one of their family cruisers whilst entering hyperdrive on the hair-raising Picos No Los Lagos Run.

The Vachers were a different proposition, these two headed beasts had antisocial tendencies. They would lumber around the command module, bellowing & clanking and terrorizing the earth colonists. They were mischievous and would often leave foot-prints in the Base space station and steal or mindlessly vandalize the stores and equipment.

Space Navigator Cooper had been charged with a nerve-racking task, to prevent the alien invasion whilst the remaining colonists, those which had not disappeared in the night of the planet Picos, hoped to find a suitable region for habitation, near the new landing bay at Aris. After bolting down all the hatches and a brief tour of the module to check for alien activity he retired to his bunk.

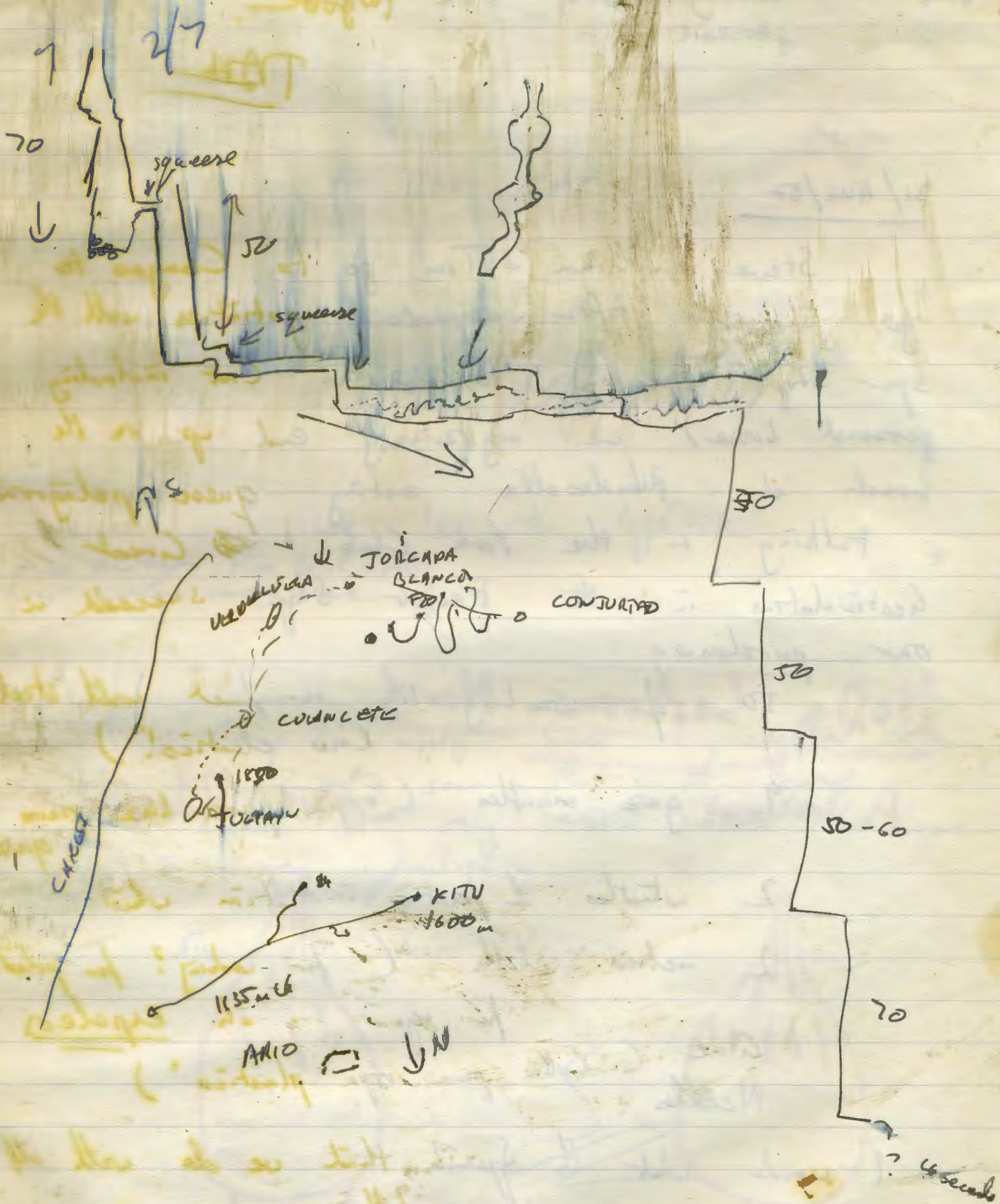
Next morning he awoke suspecting nothing out of the ordinary. A heavy layer of space cloud had enclosed the space station, so at first he had difficulty finding his bearings. The food

boy was intact, so relieved he moved out to the kitchen quarters to prepare a breakfast of ^{fried} eggs on space bread. To his ~~horror~~ ^{horror} he saw the huge gash which had been rent in the 2m thick alloy wall. The Vachers though simple most know how to operate titanium lasers, for nothing except a titanium laser would break down the amazing molecular construction of the kitchen's outer shell. Fortunately the kitchen only held non-Vacherite supplies such as Marafake Oats + eggs, however they had reeked merry havoc as they sought things more suitable to their palates. The refuse receptacle had been discharged all over the floor and several chairs broken into. The Vacher had however found what these diabolic alien ~~with~~ ^{found} crave most for, the last loaf of bread - the process and heat its reek.

And the backward stank in the doorway.

J.C. P

A Sketch for the benefit of the Polish Visitors



73

now know the point for "Dove Cave"
and "Catering", only I've forgotten.
CATERING

TAA

July!

31/AUG/87

Steve William & Tom go to Cangas to go 'shopping'. After desperate negotiations with the Spar Shop, spending 16,000 ptas (not including personal booze) we mysteriously end up on the beach at Ribadesella eating queso petigrosso & talking to the Lark Club. Great Gesticulations in the Ferret Shop succeed in our purchasing:

- 50m of washing line reinforced with steel ("no elastico!")
- 9 gas mantles ("ropa para luz para gas")
- 2 whistles (frantic imitation whistling)
- 2 metres cloth ("for washing? for potida? for repair -- ah espeleos")
- Glue. ("Cola para ropa plastico")
- Needles

1 wonder what the Spaniards think we do with all this clutter?

Steve

York News - M2 Sotteded at 980 metres!



A BIG GAP



In which we move the campsite
Jon's ribs don't get much better.
We survey + photograph 2/7



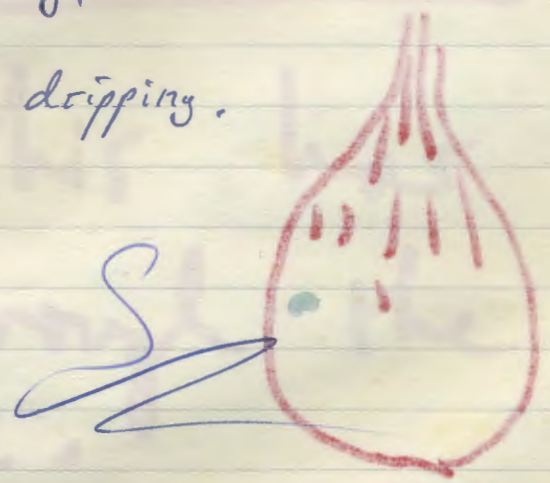
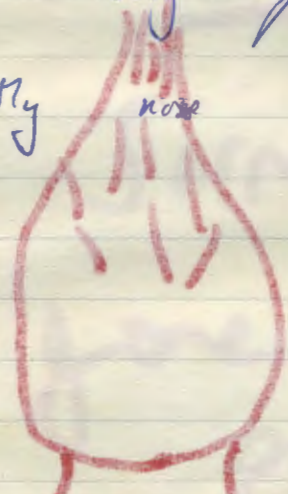
We lose the logbook!

Jon fixes airbeds, stove tent, lighters
and hangs lighters everywhere.

4/8/87

Camp is misty. Since I walked down
this a.m. I saw that the top of
the cloud is only 20m above the layers,
the is very frustrating.

My nose keeps dripping.



Jon attempts to salt stone, applies to
those who find him in the top mountains
etc from now on

~~Handwritten scribbles in red ink at the bottom of the page.~~

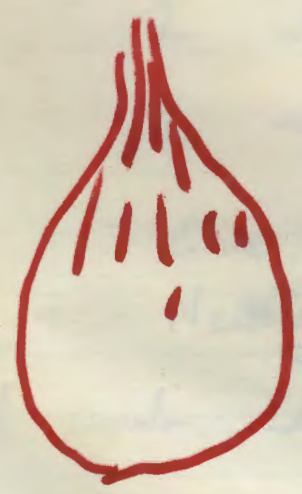
(16) Anyone who wants to continue the fixing of airbeds + testing in end can borrow my snoring gear from the gear green tent in the blue boot bag - anything lost (slipper sink) shall have to be replaced!

A Dragon by Paul (aged 2 1/2)

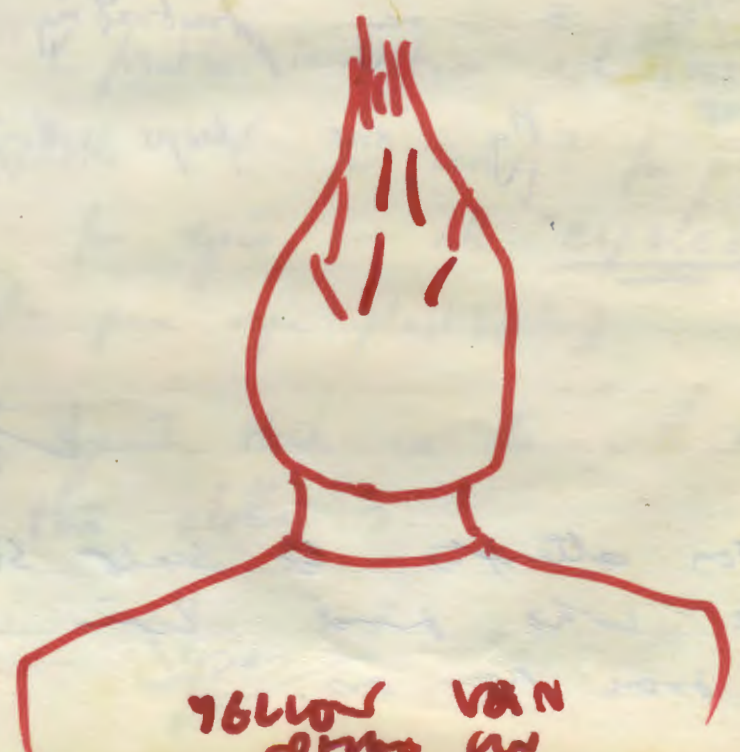


Nashy Cartoons No 1

A Coconut



Steve Roberts



YELLOW VAN
CROSS W

Steve "haircut" Roberts wanted me to write that I've put the 92-octane petrol from my fuel can into -

-@. the Yellow Van spare can

- (b). a Sigg bottle.

Thank you.

T.A. Houghton.

p.s. Sorry this has gone through the page.

Paul is a complete wassock and has lost / mislaid / misplaced the following items

~~My camera (Praktica MP3 SLR)~~
My petal zoom (not marked / grubby / green straps)

probably in the back of tent.

A red cervicente T shirt

A new style yellow van T shirt

A white handkerchief (v. grubby)

Lots of pairs of socks (about 3 1/2)

A couple of pairs of shreddier

and his checkbook etc which is still in green tent!!

As above but Neilr Gear:-

One 2nd edition Yellow Van Speleo T shirt

One thick loop knitted blue sock

One thin light brown sock

One pair size 6 wellies cut off - if these dont turn up could someone put a pair in

All gear in large pink inferspart bag now in gear tent.

748

~~_____~~

O. H.

Who the hell is R. C. Rinne
and why did he owe the
Expedition \$39.48 ???

HELP!

Jon T.

I've worked it out now!!
(how you?)

7th August '87

9am Attempted to start Yellow Van to take Lynn & sherry to Arica. Failed miserably & Klaus used Ewald nobly came to the rescue in his car. Duty saw them off, bus now to Headage now at 11am & running late. Stop on way back & bought Bunnitex, flashlight batteries + 50 Kg Carbide, considerably improving the Kitty (No more big shops for a while.) Bought food for Los Lagos & put it in wooden boxes. DO NOT TAKE FOOD FROM THESE BOXES TO ARIO.

After lunch jump-started yellow van from Ewald's car. Leads proved dodgy & were re-crimped by J.T. Raa engine hard ^(cist) for 15 mins to recharge battery somewhat. Will try to drive down hill once to charge properly one road clears. Until this has been done DO NOT USE STEREO.

(Be very careful switching off stereo anyway - this was probably the cause of the flat battery.)

William

Yeah, the yellow van strikes again. At 11.30pm yesterday Steve, Dave & I set out from the bottom of 2/7 after a jolly good survey trip. Thoughts of tortilla and beer at the Rio Grande spurred me on. 300m down and the saliva was already beginning to run, yum yum my turn thought. 6.45 and we were on the surface to a beautiful foggy morning. Just after 7am I started down, autopilot was on and by 8.20 I finally staggered into the food tent at Los Lagos for refuelling. I had done it. Bottom of 2/7 to Los Lagos in 8 hours fifty mins and the Rio Grande well within my sights within the next few hours. Then that yellow heap of a vehicle which I'm sure has a personal grudge against ~~me~~ me refused to start. Ewald's car came to the rescue but you guessed it not enough room

(50)

ever for this shattered wreck of a person.
One day I will get my revenge on
that car but for the moment I
shall just have to be satisfied with
trying to rust it, by pissing up its wheels.

Harbin.

8/8/87 Saturday

PISSING DOWN

We are in the Maria Room
Eggs Chips YUM YUM.

+ Beer

+ Brandy

+ More Brandy

- Coffee

+ it's STILL PISSING DOWN

So web we drove to the bar in the

Yellow Sun.

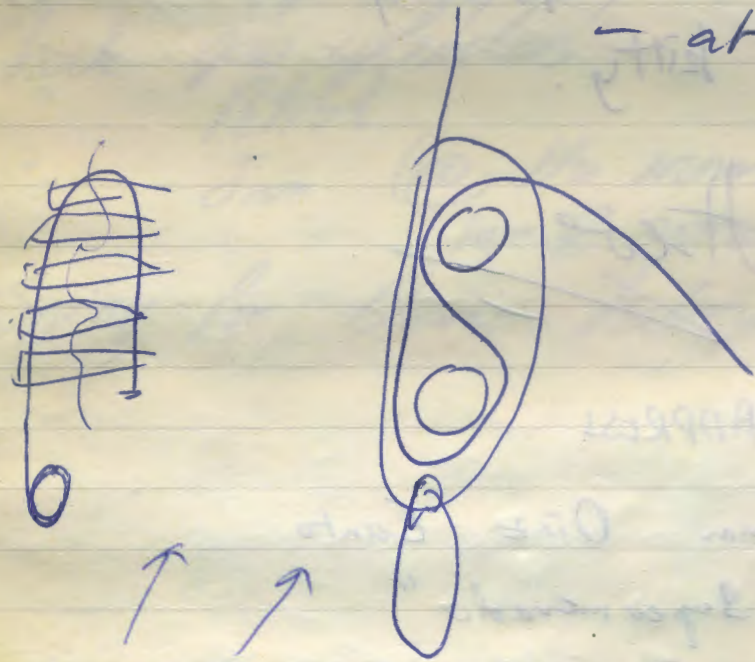
Quote from Dan

"What Beautiful eyes you've got."

To what was he speaking? A clue, he also said 'what floppy ears.'

Give up?? Another clue: It was not on Martin's to Cap. & he was stroking it!

It's so said the car has just switched its electric lights on - at 3:30 pm!!

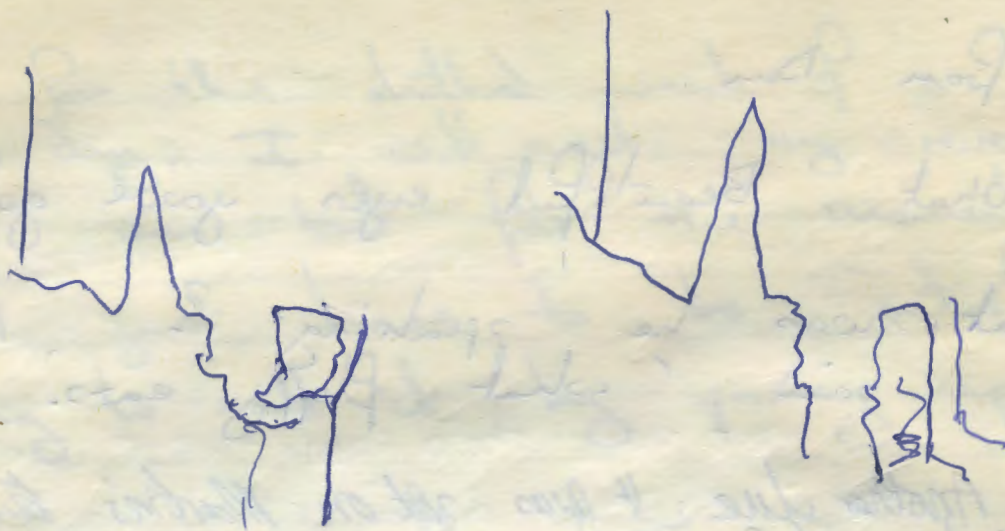


Which descender lasts longer down 2/6 2/7?

Answers as a postcard to F. Petal, 2, rue de Crottes, Grenoble

16:10 & it's still raining water pouring down the inside of the sheeting of the Maria Rosa. Thunder roars. More beer, forget the mud!

52



Please Stamp & Post These Letters

wrap. (No stamps left!)
+ I will owe kitty.

Ave

SPAR SHOP'S ADDRESS

Sr. D. Ramm Díaz Canto

"Spar^a Supermercado"

[The Square]

Caymas de Ouis

etc.

Owing to weight of rucksack, I have not taken up a bottle of gas. ∴ The one that I took up today is the only active one. Can next carry up take up a spare bottle?

S/

Next Shoppers - 17 inc envelopes!!

SHOPPING LIST V (carry it's a rather large one)

- Envelopes.
- Tea? (if cheapish)
- Check gas cylinders
- " Petrol

Jam (@ the moment theres loads at top & some @ base)

Spring for Davie's helmet (light set.)

all (II)

(54)

9th August 1987.

About 8am, I was slowly waking up from a rather long sleep. In fact I'd been asleep since 5pm the previous day. Somebody snuffled next to me. Strange, no-one had come down from Top Camp yesterday. I rolled over and tried to go back to sleep. Whoever it was had a very bad cold & sniffed closer and closer to me. Finally they came and licked my face. ~~I was brought out of~~ I leapt off sleep and found myself face to face with a small white & brown dog. He jumped round & round. Barked a couple of times & then curled up next to me.

(exit one fantasy)

9th August.

Back at Los Leaps again. Very stupidly I have ~~just~~ wrecked my head on a non-fluke tin probably wrecking the last pushing trip. What a pratt I feel. El doctor Paul has bandaged me up but I'm sure I shall die. I have my meccano set to the engineering department, my cuddly toys to the generation game, all my tee-shirts to Dan (on request), all other belongings may be auctioned on behalf of the 1988, we're going below 2k exp! (It may buy them a model or two).

! IMPORTANT NOTICE !

55

- ① I have lost my keys.
- ② They are on a "silver" dippy keyring
- ③ There is £10 worth of ^{reward for} ~~deposit~~ keys ~~on it~~.
- ④ I ~~would~~ will be eternally grateful if they are found.

Dan.

9th. Decided to visit the poles at their base camp. Dave and Tony had taken up the horizontal position so I ventured out into the fog on my own. After getting lost a few times I eventually reached their circle of tents. Three poles were home plus a German they had met. Yes, this is yet another German from Munich!! That makes four Munich persons here that we know of, has Gaeohart set up a tent, is the morphogenetic field getting so strong the pics will be swamped every year by the citizens from Munich, who can tell, it's another mystery of the unexplained.

When I got to the poles camp they all grinned at me, kept patting me on the back and calling me "killer". Apparently they were impressed by my guided tour of the pics and work was totally crashed the next day. For your information

the day in question it had been agreed - that I would walk with one of the poles from the lower lake up to their top camp, then across the pass Juan Gonzalez to our top camp, down to Arica and from there back to the lakes. On a search of a day this was a pretty brilliant walk.

But to the present, needless to say the poles gave me supper and I got mildly unsteady on the foot so fishing my way home was more fun than getting there. At 12.30 the bar was still open so I bought some milk which was duly drunk before going to bed.

Note to Dan! The poles buy rock anchors from the petal factory at cheaper prices than we buy them so if they need some they will be very happy to return them next year. Their cave is now 500m deep but has landed in a very large, unstable, boulder chamber so they are not sure if they need them but will tell us if they do.

10th

A new creature is on the brink of discovery in the quarry at Los Lagos. It's strange deep throaty call has been heard for many weeks. Young Spanish ladies had to be escorted to the quarry by their men for fear of this creature. Now in hope of catching a glimpse of this creature cameras are also taken into the quarry. Unfortunately as they near the scene of the calls an Englishman appears having obviously frightened away the animal, ruining the chance of getting a good photo. The hopes of many a would be nature lover has had his hopes dashed by these clumsy ingleses.

The moral is "beware, not only are young couples wandering through the quarry deeply gazing into each others eyes but now the job of having a job is made harder by them bringing their telephotos into the quarry to record the beautiful scenery!!"

12:42 Pedro's owner arrives, but where the fuck is Pedro now!!

Man attempt to rid himself of the smell which follows him down the hill J.T. washes self and, armpits and T-shirts, on detaching notes the smell still follows ∴ herse one rucksack drying on washing line!

58

later with

York arrives;

Martin arrives;

Pedro arrives;

Martin takes Pedro to bog

York go shopping in cargo

Tom drinks left over wine and gets
nosed.

Rules of his Lager Campsite

1) On arrival, all campers will be
interrogated for 90 mins by a parkie.

2) On successful completion of forms in
quintuplicate, all campers will be
issued with:

a) A permit to camp for 48:00 hrs

b) A cassette. This must be
played continuously from 8am to 2am.
This year, campers can choose between

i) Dive Stronks Live

ii) Supertramp

iii) White Oldfield.

Playing of any other music, apart
from out-of-tune guitars, is
strictly forbidden.

FUCK OFF STEVE

ICOMIT

Shopping list

Tea.

Stamps

Decent

Coffee

Spam

M.B.L.

Spring

Dum! Flat.

Fresh

Fruit. + Veg.

Envelopes

Zumix.

(+ nuts)

Nice Sa of chocolate + a $\frac{1}{4}$ kg of Cabrelos for Steve
(he will pay)

Bread

Jam.

Other Staff. / A.O.B

Silvia "Oh dear, trapped again!" Dacre

Martin "Better a bang than a fall" May

Tuesday evening.

After everyone left for And I found ~~some money~~ ^{some money} on the grass outside the orange tent. It is now in a yellow tubigrip box in one of the plastic bags in the kitchen tent.

60

Stamp 1st

Stamp
Duck

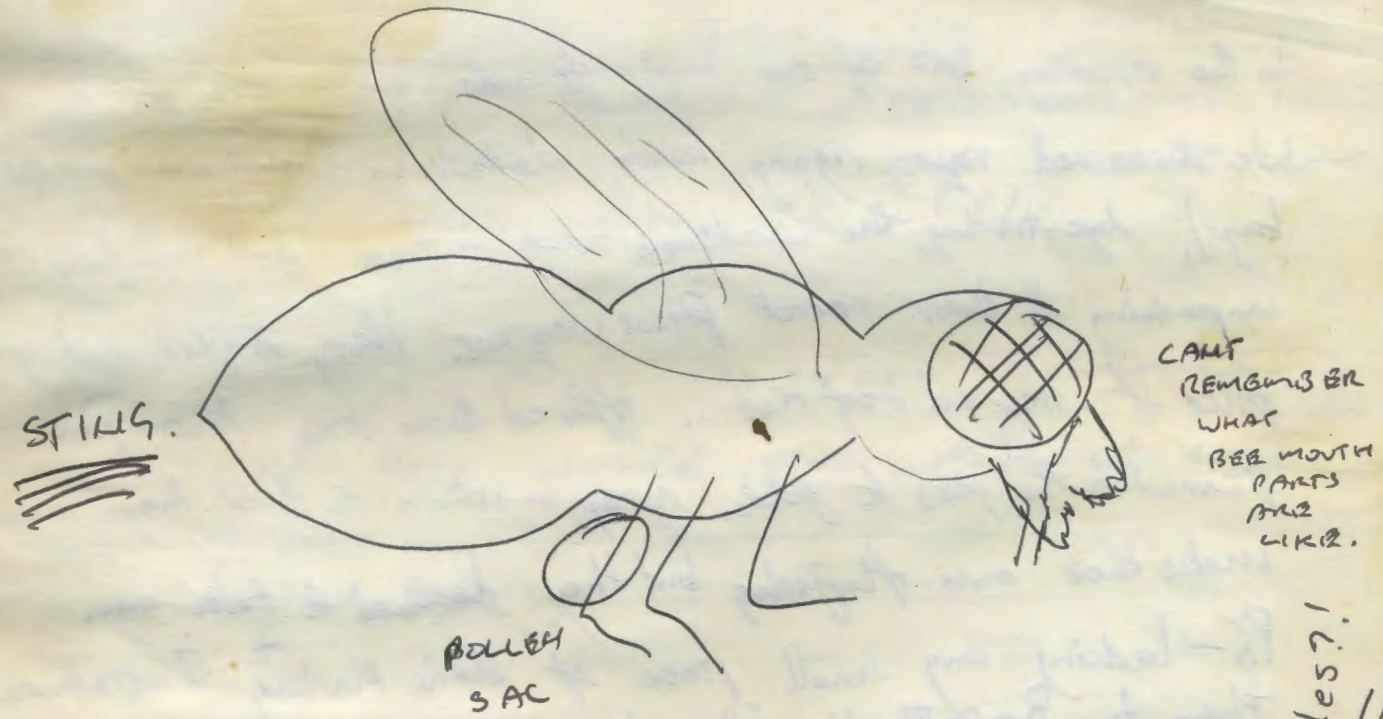
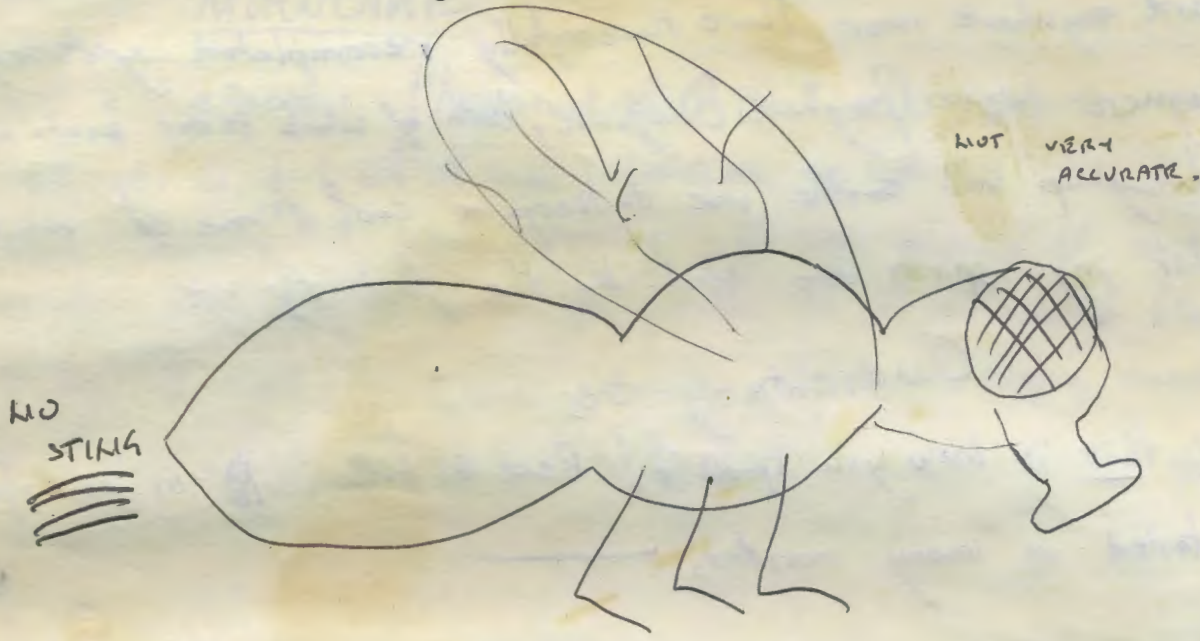
Dear Gerhard,

Most of your comments are complete crap.
 An amateur naturalist with a small amount of knowledge is
 likely to rarely if ever accurate and in this case has
 made 4 major errors.

Smallman

The difference between Hoverfly (Eristalis hennard) and the honey bee (Apis something labialis).

61



i.e. NOT MUCH

or the males? sit.

Actually, the most readily noticeable difference between hoverflies and bees (before you're stung) is that with the former (as with most flies) the eyes touch on the forehead

whereas with bees they're well separate. (Also hoverflies normally sport brighter colours since they're pretending to be wasps, not bees.)

(62) 13/8/87 Lonely day at base camp. Only 200 cars, half a dozen coaches, Lower Bar buzzing with comercio, and no ICONA guard anywhere near. Have successfully recompleted yesterday's Bolognese into Spaghetti Bolognese, both of which tastes quite nice. Washing up will enable me to keep a cool frame of mind, whilst my spirits are lifted by the first sip of

Cuarenta-y-tres

(yes this is how you spell it! Read the bottle... ~~it~~ - or learn Spanish) I've fasted in many months. _____ ydl

In the evening, two of our Polish friends came over for a visit. We discussed ropes, rigging, knots, detackeling (chalking vs. powdering with bags), dye tracing, the Covadonga blood miracle... and then they started unpacking all their secret Picos weapons: Ham, pickled red peppers, piles of stewed beef tins... offered them some Mornflake tins, peanut butter jars & golden syrup in return so that they could make their own flapjacks, but they declined to take any.

PS - lading any small piece of blade Marlow^{or}, I introduced them to Boris The Man Himself, along with the story of how he got his name.

^{ydl}
* (more precisely, not being able to recognize one dusty piece for what it was in the poor light of a headtorch)

Care - the left ring of the left stove has a tendency to leak unless you turn it off very firmly.

19/8/87

This morning's recipe, while waiting for the Lower Bar jeep to return with fresh bread:

63

MORNCAKE

Heat a generous (!) amount of oil in a frying pan - molten marg will also do, but oil is nicer. Crack an egg into it and immediately start scrambling it whilst pouring $1\frac{1}{2}$ egg's volumes of mornflakes into it. (You want to have opened the tin in advance.) Keep stirring, it won't stick together anyway. Add salt, pepper, smooth peanut butter and Polish tomato puree to taste!

U.W.

14th

I had to happen - now the bronish Super-weapon is release: VIDEO cameras in our toilet - now get your own instant tape of nature's most basic self!!!

If any one finds my Cosic Thermometer wotth at base, could they put it some-where obvious.

Tom D

A Tip for the training of next years novices - knot ^{change overs} ~~to~~ as from the looks of the ropes down so far the longest length we will have is 15m!

8:30 One of the Uona guard with a gun just came out asked me some questions in Spanish - I looked blank and now hes gone off - am?

Dave "you screw them in to turn them on"

1-5 / 81 '87 Calicumbro via Trea, Pat & Cain Steve R., Paul C., Dan, William

As all the gear had been carried down from the caves we decided to have a "day off" with a relaxing stroll down to Trea. Left at about eleven in humid haze & began the long tramp down, & down, down a bit more, slip scramble. The path was usually fairly obvious, we've copied the Aro map into the front of this book. At Trea we found the dye detector had been burst & so was pretty useless. I had gathered some algae from resurgence in the hope that it may have absorbed dye. Met Thomas plus other Germans who told us of ~~the~~ dye dye trails of small insects that dropped from the trees & burrowed into you. Paul reassuringly told us that they caused no harm if they burrowed into the guts but could cause blindness if they didn't.

Those of us who had them (P & W) donned bracknit trousers, the rest of us resolutely pulled up our socks & we carried on down. Luckily we weren't attacked by the insects & made it darn to the Care's path safely... well almost. I managed to bust my ankle badly about 20 yds from the gorge path; ~~but~~ the rest of the party escaped unscathed.

Walked upstream to Cain, pausing only to dunk our heads in the stream to the amusement of the Spanish tourists. Went for a "quick" bite at the bar at Cain. We were there for 2 hours, 90 minutes waiting to be served. This place is

not worth visiting - particularly on a bank holiday!
Raced back down the gorge to Culambo for
a quick look round:-

We only had 2 hours, so, forcing William
(in retreat) through the canal first. In fact the canal
is a doddle in a ferry - retreats, neoprene boots, etc
not required. The pretty bits are good! - It is a
good job the entrance isn't Swiss, and it is guarded
from gookles by the canal, or the formation would
have suffered by Sally by now. We headed on in,
up a climb where I had to search hard for
enough bottle to go up (down was easier).
until we found a - sample or two (not the devices'
sample). Had fun recognizing the photo's bits.

Avoiding a greasy climb on the way back,
I performed a greasy traverse above (I thought)
2-3 feet of flintstone. Just as I was noting that
the last handheld was mad, Paul said "I wonder
if you would fit down that hole?" "Hmmm??",
I replied pre-occupied with my position, then
whoosh! Experiment proved that

- (a) the floor was further than 3 feet down
- (b) muddy handheld fell off
- (c) I wouldn't quite fit through the hole.

"I am as long as you from a place of safety," I thought.
But could only go out in order to enquire as to my
position as it was breaking in half that was
preventing me slipping through --- the stocian? 50' below??
I was fished out - it was observed that
my toes must have been virtually touching the floor of the
pot. Good job I didn't fall in head-first.
I also fell off the path down to the
resurgence.

As William had typed the dye down 2/7, he was persuaded (with no difficulty) to guard the gear while Paul, Steve & I descended down to the resurgence. We found the detector in the resurgence without too much hassle - Steve, Paul took some photos of Steve naked, jumping the detector. I wonder if he has stole him?

The detector upstream proved more difficult as it involved swimming for several yards in the icy water. As I supposedly knew where it was, I had the pleasure of an evening dip - the water's lovely once you're in!! No sign of detector so had a new one on to an obvious toy & swim back to the others. A brisk walk up to the path warmed me up, returned to find William hadn't EATEN

Att THE CHOCOLATE!
By now it was nine o'clock, & as we'd arranged to meet the others at Cama Meña at nine we left at high speed. 100 minutes to the bar. I was v. slow walking down the steep bits as by my ankle didn't like being on ~~the~~ ground that wasn't totally flat.

Dave & JC, (who had driven the van round to meet us) had been in the bar since three (it was about 11:30 when we arrived.) Our hearts bled for them - unfortunately it had been too hot to do anything but sit in the bar and eat & drink!

Surv.

18/8/87

(67) end

F - 2" and Counting

The previous days frantic carries bring almost everything down. As many people arrive after dark, and as we all go to the main house (with live guitarist; for once, quite nice music even if the lyrics remain mysterious), the campsite this morning looks like the entire contents of an army surplus store have been dropped at random over meadow grass. YUK!

The smell in the kitchen tab has got worse.

STOP



Postcard from Ursula Collie



郵便はがき

AIR MAIL
PAR AVION

OCCC
do Dan Mace
hista de Correos
Cangas de Onis
Asturias
SPAIN

100
NIPPON
13.VII.37-12-18
JAPAN

Well I walked up Mount Fuji in the
 drizzle & rain,
 Picked up my necklace, walked back down
 again,
 I climbed 3776m of Japanese hill,
 And the people I met said 'Aho kenna
 goijin komatsukorodo :itai
 nanakiterunokana kkaas my soul":


富士湖ホテル
 山梨県河口湖町船津1 ㊦401-03
 TEL 河口湖<0555>-72-2209(代)

Letter from Nicola Dollimore

Hilman Person Hall
Talbot Square
London W2 1TT

10th July 1987

Dear Everyone, does not seem to be a very good way of beginning a letter so p'raps
I'd best start with "Nombres!" Beyond that, my Spanish degenerates into food/drink
ordering and post office/bank communication so you will have to do with English I'm
afraid.

How's it all going then? Gong covers? Pickled livers? Bunk backs? Morn)lake Phobia?
It would be nice to hear what you're all up to / down to / not up to so's I can
stop pondering and guessing you moves from here in Britain. In Part, a great deal of
the last week has been spent thinking "I wonder what they're doing now..." This is always
a sure sign of the thinker being jealous.....!

The weather's still holding out in Britain - most people looked like pickled lobsters
after last weekend's freeze. Any scope for me getting fanned has been severely restricted due
to this statistics teaching/demonstrating I've been doing though... I've actually thoroughly
enjoyed it and was very sorry to say goodbye to everyone today on the last day of the course.
Last night we all went out for a Chinese and then drinks which was very enjoyable - they're
all really nice people and it was lovely to go out eat, chat, drink and be sociable with
them for a change, rather than be answering a constant barrage of questions about χ^2 tests,
non-orthogonal models or two-way ANOVA! Anyway - that's that all over with so it's
now down to the hideous process of beginning my dissertation. Yuck!

How did you do in Indo Martin? I've been keeping my eyes peeled in the
newspapers but haven't spotted it yet. ^{p.s. Since writing this I've seen it... Congratulations!} Mind you my
first thing in the morning when I crawl downstairs to paw through the papers is an endless
depressing search for jobs. Having ruined the first half hour of my day it's time to frantically
stuff statistics notes in my bag and hustle downstairs and peddle off into the frenzied chaos of
London traffic... Try it sometime, it's a great way to wake you up in the morning!

Apologies by the way for the writing - this is being written on a coach up
to Manchester and the jiggling is not conducive to "best" handwriting.

Has anyone heard from Ukey? How's she getting on?

Did you buy the faithful "bag of books" on Expedition again this year...

I doubt you've got a copy in there but if any of you can get hold of it, I highly
recommend "News From Tartary" by Peter Fleming. It's a superb book written
by Peter Fleming about his journey from Peking to Kashmir in India in 1935.

- 3,500 miles! It's superb. The only problem is that it makes you feel very bored
and dull - rather like the Crake brothers tale of cycling to the centre of the Earth in the
Gobi desert by bicycle. There are some pretty bizarre people around in this world.

Anyway - I diverge. This missive (spelling?) probably lacks the spontaneity
of letters written from Spain but the Expedition letters are usually written by a bunch
of drunken, if tired, cows in the surprising surroundings of the Pecos. (Mind you,
perhaps "inspiring" is the wrong word) for the small & squander of Lagos during the
Posters Festival... Almodad, on its own, does add a certain something to letters
(even if its only illegibility) and this letter is unfortunately written when I'm completely
writing sober.

Oh well, we must be getting close to Lancaster now - the scenery outside is at least
getting bumpy and interesting. I have a horrible suspicion we will be like
Moght - which will only increase the volume and frequency of my stomach rumbles
which is complaining about ~~the~~ its recent neglect...

Hope the yellow was behaving itself and that everything goes well. Please write -
I'd love to hear from you all. Happy camping!

Nicky

P.S. The other night I roasted the Success of the Expedition. Unfortunately it was with
my last drop of Guaranty Ties. Any chance of diverting "molting" a bottle underneath the
ropes this year & I'll pay whoever when they get back? It would be very much appreciated!

Please circulate this letter around the camp
and news of the party!

29th July 1957 - 12.00 am

Dear Everyone,

Ugh..... my resistance to alcoholic invasions of my body is obviously not what it used to be..... I have been trying to reconstruct the likely events of yesterday evening by piecing together the evidence scattered around my room and have concluded, ~~but~~ from the three mugs on the side, that Mike + Cathy must have had tea up here before leaving although I don't actually even remember them being here at all. It was one of those very enjoyable evenings which started out in a very sober way with a respectable pint after work. Unfortunately I can't remember anything after leaving the pub - we must have come back by tube as my bike does not appear to be here and I assume Mike + Cathy saw me to my room..... ~~except~~ how embarrassing I really mustn't drink Raddles quite so enthusiastically in future... There are my student/O.U.C.C. days of gross excesses of T.H.F. and Harvest..... 4 pints of Raddles and I'm now sezzled. (Mind you - good job considering the price of beer in London!) ~~Wishes~~

So actually, my thoughts turned this morning to all you lot and your likely state of liver pickling. How is it all going at the? Summer seems to have come + gone back here in Britain... hope its better where you are.

Good news - I've got a job! - Research Assistant at St. Mary's Hospital Medical School in London (just round the corner from where I am now in Paddington). The department's main area of research is into the relationship between social factors, health utilisation and other factors. Sounds a very interesting job although the Department is somewhat sober. They ^{seem} a bit too workaholic for my liking but we'll see... Anyway - I'm very pleased - especially as I managed to get a delay of starting date so I can grab some holiday after finishing my MSc and before starting work. Not that October is ideal weather wise for holidaying! Hope to go to Malaga Province to visit Ania + Kai - 2 people I met out in India who live in a retired park in Malaga.. Should be good. I'm looking forward to the break already! 12 months continuous work/study is getting a bit much! Only problem now is finding

By air mail
Par avion

Aérogramme



26P

Royal Mail

Oxford University Cove Club
Lista de Correos
Cangas de Onís
Asturias
N.SPAIN

Sender's name and address

Nicola Dollimore
Lillian Person Hall
Talbot Square
London

Postcode W2 1TT

An aerogramme should not contain any enclosure



accommodation in London which won't break the bank. The contracts only for a year initially which suits me down to the ground. I'll also be able to finish paying my mother back and some of my other debts!

In the meantime however, I've got to get this wretched dissertation done so I'd best stop rambling and get on with some work.

PARTY by the way (as per usual!) Friday night of BCRA conference at my mother's house - (11th Sept I think) - 25 Sire House village, Manchester Road, Haslingden Rossendale, Lancs Tel 0706 228841. Please bring bottles + pigs. Can anyone who sends out invitations to the BCRA conference also send out notes about the party and maps? (someone somewhere in the club has a photocopy of the map to get to my mum's house - ask Dave H or Paul) Looking forward to seeing you all there. Hope the cougars going well. Lots of love
Nicola

Letter from Fred Wickham

Kandrian High School,

Hola Curingas, Hombres y

P.O. Kandrian

Mujeres Duros, Que tal.

W.N.B.P.

Papua New Guinea

Yo soy aqui en P.N.G. despues 2 1/6.

Cinco meses y yo soy muy bien, Pero tengo
ame escribir ahora en Pidgin bikos mi no
kan tinkim plenti bikpela Spanis nau. Mi stap
long liklik haus long giran bilong High
school. Disola ples emi gutpela tru. De emi
tot tru, na i gat plenti dirwai (tree)
bilong weounr long school. Long si i gat
plenti naispela pis, ~~at~~ na sapos ya laik
keikai (ask Andy Riley) ol, ol i gutpela tru.

Anyway this is a pretty good place. The school is
on a hill overlooking the bay, set amongst groves
of weounr. The sea is full of coral and tropical
fish. Snorkelling is fantastic. Mind you I don't
get much time off. I work from about 6.30
am to 10.30 pm 7 days a week during
term and in the holidays. But the teaching
is good. The kids round here are keen,
enthusiastic, well behaved, responsible,
self reliant. The school grows a lot of its own
food and keeps pigs and chickens. At the moment
we are finishing off building the drains for the
new mess, and cutting a ~~part~~ area for a
netball court at the side of a hill. (Pretty
major job). Of course there are no cooks or
cleaners or ~~eng~~ gardeners employed. As well as
being head of science I am head of games? I must

be the worst basketball player in New Britain, but I give
 it a crack. There are some pretty big caves around
 here, but I haven't had time to go down any
 yet. However on the way back from lusevice training
 next week I am planning to walk across New Britain,
 instead of flying. It will probably be safer. Flying
 round here is pretty precarious. Well my bread is
 just about to start the first rising (I make my own)
 so I must go. Send me a postcard or a plate of
 Fabada. When is the book coming out? Tell my parents
 to send me a copy when it does. Mañana Sol FRED.

Fold flaps before moistening gum. For maximum adhesion, press down for
 a few seconds. If anything is enclosed or any tape or sticker attached, this
 form must bear postage at the rate for Air Mail letters.

The Kalangar (Eclotus roratus) is found anywhere throughout the lowlands of Papua New Guinea. They grow about 40 cm long and make plenty of
 noise as they fly. It is considered that the female bird is more striking than the male. The mostly red female is seen on the left and the predominantly
 green male is shown in flight in the stamp area.



PHILATELIC BUREAU
 PO BOX 1,
 BOROKO,
 PAPUA NEW GUINEA

Everyone can't visit Papua
 New Guinea but you can
 get to know the life and
 history of our country
 throughout our postage
 stamp issues.
 For particulars write today
 to ...

SENDER'S NAME AND ADDRESS

WICKHAM
 KANDRIAN HIGH SCHOOL,
 P.O. KANDRIAN,
 W.N.B.P.
 PNG.

KALANGAR
 Eclotus Paper



PAPUA NEW GUINEA
 AEROGRAMME



PAR AVION

AIR MAIL

Dan et Al.
 Duce
 Lista de correos.
 Caugas de Ouis
 Ashinas, SPAIN.
 COUNTRY OF DESTINATION

Dan Mace
OUCC

**Oxford University Cave Club
1988 Expedition**

Picos de Cornión, Asturias, España

Surface Survey Project

First Informal Announcement

July 1989

Building upon the surface survey carried out by Marcus Wandinger with the aid of Gerhard Niklasch during the OUCC Conjurtao Expedition 1986, a more comprehensive mapping project is now envisaged for 1988. The following gives an outline of what is being contemplated.

The main aim will be to produce a thorough photogrammetric survey of the caving exploration area in the Picos de Cornión assigned by the Federación Asturiana de Espeleología to OUCC, including detailed surface features and taking into account as many known caves as possible. The results will be digitized and represented as 2D and 3D computer-generated images. Lists of coordinates and one or more large-scale maps will also be produced. They will be made available to OUCC, to the F.As.E., and to other interested institutions and exploration groups.

The project will be supervised by the Photogrammetry Chair (Prof. Dr. Finsterwalder) and the Geodesy Chair (Prof. Dr. Schnädelbach) of the Geodetical Institute of the Technische Universität München. It should give one or two graduate students an opportunity to produce a Diploma thesis. Marcus Wandinger will be involved at least during the evaluation phase, and Gerhard Niklasch will coordinate the field work.

All field equipment will be provided by the Geodetical Institute, as well as computing facilities and software for the subsequent evaluation. Transport from Munich to Spain and back will be by car. Customs clearance and insurance will be arranged through the German Chamber for Industry and Commerce. The field work will be fully integrated into the running of the OUCC 1988 Expedition. All field members will be adequately equipped and insured for camping and working at high altitude. It goes without saying that local laws and regulations, in particular the conditions implied by the Covadonga National Park camping permits, will be strictly obeyed.

Time permitting, the survey might be extended to cover (parts of) adjacent exploration areas. The caving groups concerned will be contacted in advance, and will of course be supplied with all the results obtained.

At this early stage of planning and preparing, your comments and suggestions will be particularly welcome. Please feel free to contact me at either of the addresses below:

Gerhard Niklasch

Gerhard Niklasch
Project Coordination

Mathematisches Institut der
Technischen Universität München
Postfach 202420
D-8000 München 2
Federal Republic of Germany
Tel. (089)2105-8204

*
Fouquéstraße 12
D-8000 München 60
Federal Republic of Germany
Tel. (089)830201

Oxford University Cave Club Cuvicente Expedition 1987

CAVER - HEAL THYSELF !

A guide to the medicines herein

WARNING - A lot of the stuff in this box is powerful juju indeed. Refer to the "Drugs - how to use them" sheet **Before** taking anything other than aspirin! Items marked ** are quite drastic and should only be taken in dire emergency, after consulting a doctor. If it's that bad, maybe you should be in hospital.

<u>AILMENT</u>	<u>DRUG</u>
SHITS	Codeine Phosphate Lomotil Rehidrat (replaces lost fluid)
PAIN	Aspirin Paracetamol (Panadol)
Watch it ! Aspirin causes gut bleeding and overdose of Paracetamol is very nasty indeed.	Codeine Phosphate (?) Feldene **
FESTERS	Try Savlon FIRST Daktarin **
RASHES	Try Savlon FIRST Eurax
BURNS	Cold water, use burn bags, or leave exposed to harden. Keep clean (Savlon).
NASTY EYES	Polyfax
HAY FEVER	Piriton Phenergan
ANTIBIOTICS	None of these to be used trivially. Bactrim Dalacin ** Flagyl ** Floaxapen ** Hismanal **
ECZEMA	Betnovate ** (see Dan if no Doc.)
CAN'T SLEEP	Alcohol ? Oh, all right, try Mogadon
DRU	

Oxford University Cave Club

Cuvicente Expedition 1987

DRUGS - HOW TO USE THEM

- 1,2 BACTRIM For Cystitis. One tablet twice daily, for five to seven days. Two tabs for bad goes.
- 3 BETNOVATE, BETNOVATE-C Powerful steroid ointment. Do not use except under qualified supervision. Do not use for rashes. Do not use for burns.
- 1,3 CODEINE PHOSPHATE For shits. As Lomotil.
Also - it's a good painkiller - better than aspirin / paracetamol (but it bungs you up!).
- 1,2,3 DAKTARIN For athletes foot. Wash feet thoroughly and dust with powder or cream with cream.
- REHIDRAT For the shits. Make up and drink to replace lost fluid.
If you run out, make your own:
1 litre boiled water
1 tablespoon sugar
1 teaspoon salt
Cheers!
- ERYTHROMYCIN For really bad sore throats. One tablet 3x /day for five days.
- 2 EURAX Use for itchy rashes, NOT if they're oozing or blistered.
- 2,3 FELDENE For severe pain. Take one per day.
- 1,2,3 FLOXAPEN Anti-microbial. For infected wounds and boils. One capsule 4x /day. If infection is not better after three days go onto Bactrim.
- 1 FLAGYL Specialised antibiotic, qualified use only. One tablet 3x /day, for 7-10 days. **NO ALCOHOL.**
For:- certain types of diarrhoea or vaginitis (thrush).
- 1 HISMANAL An antihistamine. One tablet /day.
- 1,2,3 LOMOTIL For shits, if it's really inconvenient. If you've got the shits, something in there wants to come out. Use with caution and not for long periods (ie. more than a few days).
- 1,2,3 PIRITON, PHENERGAN Antihistamines (for hay fever).
Use piriton first, then (if it doesn't work) phenergan.
Phenergan is also good for a night's sleep, if you don't mind sleeping the day after as well.
DO NOT MIX WITH DRINKING OR DRIVING
- 2,3 POLYFAX Eye ointment. Apply to inside of eyelids 3x /day.
- 1,2 POLYCROL FORTE For indigestion. Take one.
- 1,3 MOGADON Sleeping pills. Take a half or one and not before driving!

90
87

87
80
2810

NEEDS, SUPPLIES AND PRECAUTIONS

In a temperate climate the average adult needs a minimum intake of 2,500 ml of fluid per day. In the tropics the basic requirements of water may easily rise to 10 pints per man per 24 hours, plus one extra pint per man for each hour's work. Arduous work in extreme heat and high humidity may require 25 pints per man per 24 hours. This may double with very hard work. The best indication of the urgent need to drink more water is a sudden loss of weight after sweating. The first week in intense heat is often the most dangerous and you must make yourself drink even if you do not feel the urge to do so, and you must add kitchen salt to your food.

All water for drinking, cooking and teeth cleaning; indeed any water that passes your lips, must be sterilized. Approach to this problem will depend on the size of your expedition. For the small expedition sterilization can be best and most effectively done by bringing water to the boil and keeping it boiling for 5 minutes at sea level. Add one minute for each thousand feet above sea level.

WATER PURIFIERS. Most tablets available in Britain rely for their effect on the liberation of free chlorine. If the water to which you add the tablets has much sediment in it, and in particular protein, chlorine will be mopped up by the foreign matter and will not be effective. If your water therefore is full of dirt you must filter it first, for instance through fine gauze, or if you have nothing else, through a handkerchief. On a small scale, water can also be sterilized by filtering through a Millbank bag (though many find these bags a d. nuisance. The RGS including J-J among them). These bags can be obtained through Johnson-Progress Ltd., Carpenters Road, Stretford, London E15 2DF. Sterotabs 12 per gallon, or Puritabs 12 per jerrycan, or one per litre, or Puritabs Maxi one per 25 litres will sterilize the water. It should be remembered that chlorine tablets on their own will not rid the water of giardia or amoeba. Iodine is a more effective disinfectant. The water, however, must be at least

20°C (68°F) for chemical methods of purification to be effective. Two drops of 2% tincture of iodine per quart will sterilize. It is a nuisance to have to carry tincture of iodine around. An alternative is to have an ounce bottle filled with iodine crystals. If this bottle is filled with water and allowed to stand, a saturated solution of iodine will be made, and if the supernatant is added to a quart of water and allowed to stand for half-an-hour that water will be sterile. It is, however, imperative to make sure that the crystals do not fall out of the bottle, for the crystals in an ounce bottle, if taken at once, represent a lethal dose. In practice, pouring the supernatant through a filter into the water to be purified makes sense. Tablets of tetraglycine hydroperiodide are safer and more practical. They are not easily available in this country.

FILTERS. Reliable filters which allow a water supply for four to five people a day, if kept up, can be obtained from Portacell Ltd., Cannon Lane, Tonbridge, Kent TN9 1PP. Telephone no. 0732-364-411. Large expeditions may have to rely on complicated methods for cleaning their water. For instance, the RGS Kora expedition in 1983 had its only water supply from the Tana River, the sewer of Kenya. We pumped water from the river into a thousand gallon sedimentation tank, and the supernatant from that was again pumped into a smaller 200 gallon tank for further sedimentation. The thousand gallon tank provided water for showers and washing of people and clothes. From the 200 gallon tank we drew off water which was put through ceramic filters, and the resulting fluid was treated with Puritabs. The sterilized water is pretty unpalatable, but for the faint-hearted there are fruit flavours that can be added to take the sting out of it.

Despite the nasty taste, there is little doubt that if the water can be drunk cold, much of the unpleasantness goes out of it. It is therefore, in a hot climate, essential to have water bags. They are usually made of stout canvas and there is a slow oozing of water through the wall of the bag, and evaporation keeps the contents deliciously cold. The Army has a splendid large

bag, and if you can obtain an ex-Army bag so much the better. Canvas bags can usually be bought in most hot countries for tying on the front or on the side of your landrover. Remember to allow at least a week's supply of water for each member of the expedition, as well as water for your landrover, or your beasts, if any. Make sure that every member has his own personal water-bottle. This should preferably be a litre (2 pints) aluminium bottle, covered with felt or similar material. This cover is not there to make it more beautiful, or to disguise it, but so that it can be soaked in water and the contents be kept at an acceptable temperature on the same principle as the contents of the water-bag is kept cold. If you travel by landrover, do not have one enormous tank, but preferably many large jerrycans, say each holding $4\frac{1}{2}$ gallons. If you rely on a single large tank and it is holed, all may be lost. Before you set out you must clean all the containers thoroughly with boiling water. Make sure that every member of the expedition has his own beaker. This should preferably be of aluminium or similar metal and not a plastic beaker, which has a nasty habit of breaking. Plastic water-bottles get brittle in intense heat and if dropped they crack very easily.

Throughout tropical and sub-tropical areas of the world, in the far-East, in the Indian sub-continent, in the Middle East, in Africa, in South and Central America North of Rio there is a risk of schistosomiasis. In the far-East this is caused by S. japonicum, whereas S. haematobium (the cause of Bilharzia) and S. mansoni are prevalent in the Middle East, Africa and the Americas. These worms live in a host, a snail, and all fresh water should be looked at with suspicion, unless it is very fast flowing or unless it is alkaline and there is no vegetation, and so no snails. Sea-bathing, which has other hazards such as stings from venomous creatures and sharks, presents no risk of schistosomiasis. Do not wash your clothes in schistosome infested water. If you discover that you accidentally have bathed or paddled in infested water, go to your doctor after your return and ask him to carry out a blood test for the presence of schistosomiasis. If you pass blood in your urine, you should go urgently so that

it can be looked at for the presence of eggs of bilharzia. If at the time you went swimming developed "swimmer's itch", it is also important that you go because some people develop an itchy spot where the worm goes through the intact skin. A blood test may show the presence of the worm in you before you fall ill, and treatment is now very effective.

SALT . For the first week or two after arrival in a hot climate one or two teaspoonfuls of salt per day extra to home needs are required for acclimatization. In hot countries always take some salt at all meals. Take ordinary table salt. Avoid salt tablets which are costly and usually pass through the gut without being absorbed. Take it in fruit juice or add it to the first course. Apart from this, after acclimatization it is only necessary to add two level teaspoonfuls of salt to each gallon of drinking water following sterilization, immediately if feeling exhausted, when thirst requires ten to twelve pints of water per twenty-four hours to be quenched, or if you get diarrhoea. The salt should be foregone if there is not sufficient water to match it.

REPEAT: Do not use salt tablets or emplets

Dioralyte and / ^{Rehidrat} are commercially available salt and glucose mixtures that in the right proportions will replace the salt you may lose if you develop diarrhoea. If you have not got any of these two preparations, a tablespoonful of sugar to each teaspoonful of kitchen salt is an acceptable alternative.

FOOD AND DRINK Expeditions are advised to take all the food with them they can, especially protein, i.e. meat, soup, and dried tinned milk, because such foods are scarce, often infected, and expensive in hot countries. The importance of an adequate protein intake cannot be overstressed. If you take a lot of physical exercise and do not eat sufficient meat, you will break down your own muscles, lose weight and end up weak and inefficient. You may get intractable diarrhoea. Pack some supplies to make occasional attractive meals: they are great morale boosters.

All local meat, whether flesh, fowl, or fish, and all local vegetables should be carefully chosen and prepared, and thoroughly cooked.

The pressure cooker kills all germs and makes tough meat more easily swallowed. Fresh fruit should be chosen with great care and lettuces avoided. Dates, grapes, etc., have fragile skins and are easily infected. All fruit should be washed in sterilized or boiled water, wiped and peeled. Fruit from trees should also be carefully washed to remove any possible pesticide. Tea, coffee and soup are excellent in hot countries. They are clean, and soup can be well salted and remain palatable. Local milk, ice cream and fruit juices should be avoided. Bottled soft drinks with metal caps (but not those with corks) are safe, though the necks should be rubbed well after the tops have been removed and before drinks are consumed. When cooling a drink, place the ice outside and not inside the container. Alcohol, if consumed, should be taken only after sundown. Those who take, buy and prepare their own food are far less likely to get ill than those who dine out. If dining out is unavoidable, well-cooked, hot foods should be chosen and salads and ice cream rigorously avoided. Wash the hands with soap impregnated with antiseptic (such as Derl) before preparing or consuming food. Those who get 'dysentery' should not cook food. It is often a good plan to engage a cook locally. He will advise where to get food. If you decide to eat local food, eat it as the locals do, do not try to "improve on it" by using parts the locals reject. (Cassava juice may literally be lethal, for instance, for it contains cyanide). Do not, however, expect everything to be "sanitized for your protection" as our American cousins have it. You can offend by refusing hospitality, and a little bit of dirt never did anybody much harm. Most of us have a little free hydrochloric acid in our stomach. This will kill a few very nasty germs, but if you eat too many, some will get through to the gut and do you in. It therefore stands to reason that you are likely to get away with eating a pound of tomatoes or cucumber

salad, because the surface of those vegetables is relatively small, whereas a pound of lettuce, watercress or the like, has a two to five hundred times greater surface and therefore potentially two to five hundred times more unpleasant pathogenic organisms on them.

Remember that most vegetables in third world countries are egged on with human dung.

SUN It is wise to keep your head covered in blazing sun. Many people find that an old-fashioned white floppy sunhat is pleasant. There is certainly no need to have a Victorian cork helmet. It should be left to Colonel Blashford-Snell to wear one for identification purposes.

In very strong sunlight, and particularly at high altitude where there is a lot of ultraviolet light, or by the seaside, or in arctic or antarctic parts, it is wise to have a piece of cloth hanging down over your neck from your hat or you may find that your skin gets terribly burnt.

In hot climates light cotton clothes are best; white clothing has been shown to reduce the solar heat load by half, so choose white or nearly white clothes to reflect the sun and keep you cool. Ex-army surplus stores often have amazing bargains. Do not, however, buy clothing that looks too military. You could be mistaken for a guerilla. Only some can tolerate nylon, terylene, or other manmade fibres, because they tend to cause heat rash. They also become extremely smelly and nasty very quickly. You should consider wearing the local garments. When local people wear shammis, dish-dashas, gabis, or similar white wraps, buy one and wear it. They are cheap and effective. In tropical countries and scrub country long trousers are obligatory, not least to prevent cuts and scratches which so easily get infected, but also to reduce the risk if you were unlucky enough to get bitten by a snake. You ought to have good sunglasses in hot countries or where there is a lot of sun and ultraviolet light in deserts or in snow. Two pairs of sun glasses are needed for mountaineering, tinted goggles for deserts. Make sure that you buy decent sunglasses; they must be able to keep out ultraviolet rays.

Chance's guaranteed Crookes British glass is what you want. In England you

may like to wear skin-tight jeans. In a hot climate this is fatal. Wear trousers that are generous at the bottoms and clothes that are generally full and loose. During the first week or so of your stay in a place with a lot of sun, keep everything covered except your face and hands until you are acclimatized. (Remember that if you shave a camel of its hair its water loss doubles!). If the climate is hot and wet, short sleeved shirts and shorts are best.

In any event tan slowly on every trip, especially early on. Uvistat cream or RoC total sunblock cream should be used every four hours on all exposed parts. It is important to use Uvistat lip promade for lips crack very easily when there is a lot of ultraviolet light about. Remember that wearing long sleeves and long trousers are useful against flying insects after dusk and it cannot be repeated too often that injuries to the skin in scrub country and jungle should be avoided at all costs.

LEECHES. If you are going to a rainforest where there is likely to be a lot of leeches, have a small bottle of industrial spirit. Dab the leech with this and it will fall off. Do not pull it off or you may leave the head behind and the wound will get infected. Do not try and kill with a burning cigarette.

Women should pack trousers in the kit. Give your vehicles a tropical roof, i.e. two roofs, one two inches above the other, with air, which is an excellent non-conductor, between, to keep the heat out, and paint the top a glossy white. Do not drive too quickly into the heat, halt several times on the way to get acclimatized. All climates are possible without heat illness for resting man, it is work in hot or humid climates that does him in. So avoid exercise, including vehicle maintenance, in the heat of the day, and avoid hard work for the first week in the heat while acclimatizing.

FOOTWEAR. Boots - well-fitting leather boots with corrugated rubber soles are unbeatable for comfort in any kind of rough terrain. Take a pair of light canvas shoes for wear in camp.

HEATSTROKE This is an emergency. The sufferer is usually very hot (some individuals sweat little and are particularly apt to get heat stroke unless

precautions as outlined are taken) with a fast thready pulse. They may be delirious or even unconscious. Get their temperature down quickly. Immersion (not drowning) in a stream or cold tub is ideal. Otherwise wrap in wet newspapers and keep pouring water on them. Evaporation will lower the temperature. Give plenty of fruit juice or water with one or two teaspoonsful of salt to the pint, for these people are usually very dehydrated. Get back to base and if in doubt seek medical help as soon as possible.

August 1985

Bent Juel-Jensen
University of Oxford

STINGS AND BITES BY VENOMOUS CREATURES

by David Warrell, Tropical Medicine Unit, University of Oxford.

Rabies

Rabies or hydrophobia (literally fear of water) is a virus disease of mammal's which is usually transmitted to man by a dog bite. Although dogs are the most important source of human rabies worldwide, each country has its own particular vector species, such as cats, wolves, foxes, skunks, mongooses, vampire bats (Caribbean and South America only) and insectivorous bats. Rabies occurs in almost every country: the fortunate exceptions unclude Antarctica, Australia, Scandinavian countries (except Denmark), Malaysia, New Zealand, Japan, Britain and some smaller islands. It is especially common in parts of South America, The Indian subcontinent, Thailand and the Philippines. The disease probably causes at least 15,000 human deaths each year.

Rabies virus can enter the body in a number of ways. Virus in the animal's saliva can penetrate skin that has been broken by a bite or graze; and can penetrate unbroken mucous membranes, such as those covering the eye and lining the mouth and nose. Very rarely the virus has been inhaled; for example, from the atmosphere in bat-infested caves. Transmission of rabies from human to human must be excessively rare, but recently four patients developed rabies after receiving infected corneal grafts. After the virus has entered the body, one of two things may happen. The virus may be killed by antiseptics or immune mechanisms before it does any harm; or, it may spread along the nerves to reach the brain where it multiplies and causes an inflammation (encephalitis) which is almost invariably fatal. The incubation period (interval between the bite and the first symptoms of encephalitis) is usually about two months but can vary from four days to many years. The earliest symptom is itching or tingling at the site of the healed bite. Later the patient may develop headache, fever, confusion, hallucinations, and hydrophobia. Attempts to drink water induce spasm of the muscles of breathing and swallowing associated with an indescribable terror. Death supervenes after a few days of these terrible symptoms. In a rarer form of rabies there is spreading paralysis without excitement or hydrophobia. There have been only three known survivors from rabies encephalitis: they were treated with intensive care.

Since the outlook for victims of rabies encephalitis is so hopeless, prevention is of paramount importance. People involved in high risk occupations such as cave exploring, animal collecting and veterinary medicine can be protected by pre-exposure vaccination with human diploid cell strain vaccine (HDCSV). At least two injections one month apart and yearly boosters are required. Stroking stray dogs, keeping wild carnivores as pets, and other unnecessary contact with mammals should be assiduously avoided in areas where rabies is endemic. Irrespective of the risk of rabies, mammal (including human) bites and scratches and licks on mucous membranes or broken skin should be cleaned immediately. First scrub with soap and water under a running tap for at least five minutes. The best antiseptics are 40-70% alcohol (gin and whisky contain more than 40% alcohol) and tincture of iodine. Mammal bites are frequently contaminated by a variety of micro organisms other than rabies virus, so a doctor should be consulted. Immediate thorough cleaning of the wound is of the utmost importance in preventing infection. Secondly, rabies should be considered if it is known to occur in the area. The decision whether or not to give post exposure vaccination and rabies immune serum is made by a doctor. Ideally, it is based on examination of the bitten animal; but usually this is not possible. The species of animal; its behaviour; the circumstances of the bite; and, in the case of a domestic animal, when it was last vaccinated; are useful pieces of information. This decision must be made as soon as possible by a doctor working in the area where the bite occurred. On no account should it be delayed until the patient returns to his own country. Recently developed vaccines such as HDCSV are potent and safe. They require fewer injections than the older type of nervous tissue vaccine which was given on at least 21 consecutive days under the skin of the abdomen. The old "Semple" vaccine deservedly earned a reputation for being dangerous; HDCSV carries none of these risks. Timely cleaning of the bite wound combined with vaccination and use of immune serum has proved very effective in preventing rabies.

Note on attacks by large animals

Large animals, wild and domestic, should be treated with respect; they may

not be as tame as they look. Lions, leopards, hyenas, domestic dogs, elephants, hippopotamuses, buffaloes, domestic cattle and domestic and in particular wild pigs and even rams have been responsible for occasional human deaths. The health hazard posed by sharks has been well publicised recently. Crocodiles claim many human lives. It is extremely foolhardy for travellers to bathe in rivers regarded as dangerous by the local inhabitants. A Peace Corps worker in Ethiopia did this in 1967 and was promptly killed and eaten by the resident crocodile.

Bites and stings by venomous animals

Travellers in tropical countries usually have an exaggerated fear of snakes, scorpions and other venomous animals. Certainly most parts of the world, especially the tropical regions, harbour animals with potentially lethal venoms. But local farmers and children, rather than travellers suffer. Thus snake bite is a major cause of death amongst some tribes of the Ecuadorian and Brazilian jungles, and among the inhabitants of some parts of Burma; and many children die of scorpion stings in parts of Mexico and Algeria. Yet the author knows of no case of a European traveller being killed by a venomous bite or sting.

Before travelling to a tropical country it is worth finding out about local venomous species, and trying to discover if there is a national centre for antivenom production, supply and treatment. The use of antivenom (also called antivenin, antivenene, or anti-snake-bite serum) requires medical training. If an expedition is going to an extremely remote and snake infested area it might be wise to collect some antivenom from the regional centre, provided you have facilities for keeping the antivenom cool and that there is someone in the party who has been trained to use it safely. Otherwise rely on local medical services; but enquire about them in advance. Before buying antivenoms manufactured in Europe, seek expert advice about their effectiveness against tropical species.

Snake bite

Snakes never attack man without provocation and so the risk of snake bite can be reduced as follows. Avoid snakes and snake charmers. Do not disturb, corner or attack snakes and never handle them, even if they are said to be harmless or appear to be dead. Even a severed head can bite! If you corner a snake by mistake, keep absolutely still until it has slithered away: snakes strike at movements. Never walk in undergrowth or deep sand without boots, socks and long trousers; and at night always carry a light. Never collect firewood or dislodge logs and boulders with your bare hands, and never put your hand or push sticks into burrows or holes. Avoid climbing trees or rocks which are covered with dense foliage, and do not put your hand on sun-baked ledges you cannot see when climbing. Never swim in rivers matted with vegetation.

Treatment of snake bite.(a) First aid - to be given by the man-on-the-spot

1. Reassure the patient who may be terrified by the thought of sudden death. The basis for reassurance is that only a small minority of snake species are dangerously-venomous to man. Even the most notorious species, such as cobras, often bite without injecting enough venom to be harmful. The risk and speed of death from snake bite has been greatly exaggerated. Lethal doses of venom usually take hours (cobras, mambas, seasnakes etc.) or days (vipers, rattlesnakes and other pit vipers etc.) to kill a man - not seconds or minutes as is commonly believed. Correct treatment is very effective.
2. Treat pain (and anxiety) with paracetamol tablets in doses of 0.5-1.0 g for adults.
3. Immobilise the bitten limb with a splint and arrange immediate transport to hospital, dispensary or to the expedition medical officer.
4. If the snake has been killed take it along with you: it is useful clinical evidence, but must not be handled with the bare hands even if it appears to be dead.

5. Avoid traditional "boy scout" remedies which do more harm than good.

DO NOT apply a tourniquet (ligature or tight band) unless you are absolutely certain that the snake is one whose venom contains a dangerous neurotoxin (for example cobra, krait, mamba, coral snake, Australian snake). If a tourniquet is used it must be tightly applied above the bite - around the upper arm or thigh. To avoid gangrene it must be released after thirty minutes.

DO NOT suck at the wound, cut it with a razor blade, introduce potassium permanganate crystals or interfere in any other way.

DO NOT give aspirin which may cause bleeding.

DO NOT give antivenom which can be dangerous and should be administered only by a doctor, nurse or dispenser with emergency drugs available to deal with serum reactions should they occur.

If you have your own supply of antivenom take it with you to hospital where the doctor or other trained staff can give it.

(b) Medical treatment of snake bite: advice for the expedition medical officer

Absence of local swelling four hours after a bite by a viper, rattlesnake or other pit viper suggests that no venom was injected and that no further treatment is necessary; but bites by snakes with neurotoxic venoms (mambas, kraits, cobras, seasnakes etc.) may not cause any local swelling.

Indications for antivenom treatment

1. Bleeding from gums, nose, alimentary tract or any other site distant from the bite itself, which started spontaneously after the bite.
2. Failure of the patient's blood to clot if placed in a clean, dry glass tube and left undisturbed for 30 minutes.
3. Massive swelling involving more than half the bitten limb.
4. Signs of nervous system involvement such as extreme drowsiness or unconsciousness, drooping eyelids, difficulty in swallowing and breathing, and pain, stiffness and paralysis of skeletal muscles.

5. Signs of heart involvement such as low or falling blood pressure, unusually slow pulse rate or irregular rhythm and an abnormal electrocardiogram (if such a luxury is available).

N.B. ANTIVENOM SHOULD NEVER BE GIVEN UNLESS AT LEAST ONE OF THESE FIVE SIGNS IS DEFINITELY PRESENT.

Slight local swelling alone is not an indication for antivenom.

Never give antivenom unless you have adrenaline (1 in 1000 solution, dose 0.5 ml by subcutaneous injection) available to treat severe reactions to the antivenom.

Choice of appropriate antivenom

Before giving antivenom make sure that its range of specificity includes the snake that has bitten your patient. A grasp of Latin scientific names is useful e.g. Naja - cobra, Dendroaspis - mamba, Bungarus - krait, Bitis - giant African vipers, Echis - carpet viper, Crotalus - rattlesnake. It may have been possible to identify the biting snake; or its venom may have produced a diagnostic clinical sign, such as incoagulable blood caused by the carpet viper in Africa. Otherwise, a polyspecific antivenom with activity against the principal venomous species of the region is used.

CAUTION Do not give antivenom that is opaque: the change from a clear to cloudy solution indicates loss of activity and increased danger of reactions. Expiry dates can be ignored provided that the solution is crystal clear. Manufacturer's instructions included in packs of antivenom are often highly misleading!

How to give antivenom

For maximum effect, antivenom should be given directly into a vein. Slow intravenous infusion (2 ml per minute) has been successfully employed, but the safest method is probably a slow intravenous infusion of venom diluted approximately 50/50 in sterile isotonic saline. The initial dose depends on the type of antivenom, species of snake involved and severity of symptoms, but a typical starting dose is four or five 10 ml ampoules. This is repeated after a few hours if the life-

threatening condition such as bleeding or weakness of the breathing muscles is not cured. Start the infusion at the rate of about one drop per second watching for signs of an antivenom reaction: namely, fever, itching, skin rash, vomiting, breathlessness and wheezing, increase in pulse rate and fall in blood pressure. If this happens, stop the infusion and give 0.5 ml of 0.1% adrenaline by subcutaneous injection: this can be repeated after about ten minutes if it is not effective. After the patient has recovered from the reaction, reassess the severity of the signs of envenoming. If these are still serious continue antivenom slowly. If there is no reaction aim to complete the infusion in 30-60 minutes. Reactions are likely to be particularly severe in those who suffer from asthma, eczema and other allergic disorders.

Only in extreme circumstances should medically unqualified people give antivenom. Intramuscular injection into the upper outer quadrant of the buttock can then be used, but antivenom is less than 1/10 as effective when given by this route. Firm pressure should be applied to the site of injection to prevent bleeding.

(c) Treatment of complications

1. Massive external bleeding or leakage of blood and tissue fluid into a swollen limb may leave the patient with an inadequate circulating volume. Transfusion with whole blood or plasma expanders may be needed.
2. Respiratory paralysis may require mouth-to-mouth or more sophisticated forms of artificial ventilation.
3. Secondary infection may be introduced by local surgery at the bite site. Patients with infected wounds and those with local gangrene should be treated with antibiotics and a tetanus toxoid booster. Gangrenous tissue should be excised surgically and the skin defect covered immediately with split skin grafts.

Note on spitting cobras

In Africa and parts of South East Asia there are populations of cobras which can spray their venom forward from the fang tips for a distance of

several metres. This is a defensive reaction. Venom entering the eyes or landing on other mucous membranes may cause severe local pain and watering and can result in ulceration of the cornea. Treatment is the same as for any chemical injury to the eye. The eye should be irrigated with generous volumes of any bland fluid available (water, milk or even urine!). Pain-killing drugs such as aspirin can be given by mouth. Ideally, the eye should be examined by a doctor, antibiotics such as chloramphenicol or tetracycline eye ointment instilled for several days and the eye closed with a dressing pad.

Venomous marine animals

Sea snakes are encountered mainly by fishermen in the tropical waters of South East Asia. The principal symptoms of envenoming are drooping eyelids, "lockjaw", pains, stiffness, tenderness and paralysis of skeletal muscles, passing of dark urine (myoglobinuria) and cardiac complications related to hyperkalaemia. Treatment is as described above.

Venomous fish

Many species of fish have venomous spines on their gills, fins or tail. Stings occur when the fish are handled by fishermen or are trodden on by bathers. Some species attack swimmers and scubadivers around coral reefs. There is immediate severe pain and swelling at the site of the sting. Severe systemic effects may follow: these include vomiting, diarrhoea, sweating, irregular heart beat, fall in blood pressure, spasm or paralysis of muscles including respiratory muscles, and fits.

Treatment

Forewarned is forearmed. If your expedition has an extensive programme say on coral reefs, try to get maximum information about dangerous species locally. The venomous spine, which is often barbed, should be removed. Local symptoms are rapidly relieved by immersing the stung limb in water, as hot as can be borne by the patient. Alternatively, 1% lignocaine or some other local anaesthetic

can be injected, for example as a ring block in the case of stung digits. Specific antivenom for some of the most dangerous species is available in some parts of the world. Patients may require mouth-to-mouth respiration and external cardiac massage. Atropine (0.6 mg. by subcutaneous injection) should be given if there is a very slow pulse rate and low blood pressure.

Jellyfish, Portuguese men-of-war and other coelenterates

Contact with the tentacles produces lines of very painful blisters. The venom of some species, such as the notorious sea wasps or box jellyfish of tropical waters can cause severe systemic effects, including heart failure.

Treatment

Adherent fragments of tentacles must be removed before more of their venomous nematocysts can discharge. Vinegar effectively inactivates the penetrating nematocysts, whereas many of the remedies that have been recommended in the past, such as methylated spirits and other alcohols actually stimulate massive discharge of nematocysts embedded in the patient. Antivenom is available in some of the worst affected areas such as Australia. Severe cases may require mouth-to-mouth respiration and cardiac massage. The venomous spines and grapples of some sea urchins can produce similar effects and may become deeply embedded in the skin. Ordinary sea urchin prickles are absorbed quite rapidly provided they are broken into small pieces in the skin. Only if they have penetrated into a joint or if there is evidence of infection is surgical removal necessary.

Poisoning from ingestion of fish and shellfish

Extensive feelings of "pins and needles", paralysis, itching, diarrhoea, vomiting and shock can follow a few minutes or hours after eating various molluscs and fish. A very large number of species in many parts of the world can cause these symptoms at various seasons of the year. Famous examples are pufferfish, barracuda, tuna and mackerel. Treatment attempts to eliminate the toxic material from the gut by promoting vomiting and diarrhoea with emetics and purges. Some symptoms may respond to antihistamine drugs and bronchodilators,

but in severe cases assisted ventilation will be required until paralysis of the breathing muscles has worn off.

Venomous Arthropods

Stings by bees, wasps and hornets (Hymenoptera)

In normal people many stings, probably hundreds, would be required to introduce enough venom to cause death. A man in Rhodesia survived more than 2,000 stings. But about ¼% of the population is hypersensitive and could be killed by a single sting. The development of hypersensitivity is suggested if there are progressively severe local reactions to successive stings; or systemic symptoms such as tingling, skin rashes, swelling of the lips, flushing, dizziness, collapse, wheezing and unconsciousness within half an hour of the sting.

Prevention and Treatment

In future, it may be possible to confirm hypersensitivity and desensitize the patients using purified venom. People who know or suspect that they are hypersensitive should be taught how to give themselves a subcutaneous injection of 0.5 ml of 0.1% adrenaline and should carry this with them. Alternatively, they can use a Medihaler epi two puffs. They should wear a Medic-Alert tag in case they are found unconscious (Medic-Alert Foundation, 9 Hanover Street, London. W1R 9HF. Tel: 01-499-2261).

In tropical countries, especially Africa, rock climbers and other travellers have occasionally been attacked by large swarms of angry bees, and some fatal falls have resulted. Some of these accidents could have been prevented by making local enquiries. Thundery weather is known to upset bees. In the face of an attack, the best tried method of evasion seems to be immersion to water. The climber should appreciate that a fall is probably the greater danger. After securing himself he will have to rely on protection afforded by anorak, haversack or tent. The principal effect of multiple stings in the non-hypersensitive subject is histamine overdose; so the use of antihistamines

such as chlorpheniramine maleate ("Piriton") is appropriate.

Ants, Beetles and Caterpillars (especially the brightly coloured hairy ones) can cause local pain, inflammation, nettlerash or blistering on contact.

Spider Bites

Potentially dangerous spider bites occur mainly in the Americas, Africa, the Mediterranean region, and Australia. The most notorious genera are *Latrodectus* (black widow spiders) and *Loxosceles*. These spiders are brown or black and have bodies about 1 cm long. *Latrodectus* venom affects nerves, muscles and heart producing cramping pains, weakness, sweating, salivation, fever, nausea, vomiting and convulsions. *Loxosceles* causes severe local necrosis, dark urine (haemoglobinuria), blood clotting disturbances and kidney failure. Deaths are unusual except amongst children. Bites usually occur when the victim lies on a spider which has crept into his bedding. Antivenoms are manufactured in countries such as South Africa, Australia and Brazil where spider bite is an important medical problem.

Scorpion Stings

Dangerous scorpions occur particularly in North Africa, the Middle East, Mexico and South America. The fatal cases are usually children. Most stings are not life-threatening but cause excruciating pain with little swelling. Powerful neurotoxins in the venoms of dangerous species have an action on the autonomic nervous system and muscles including the heart.

The severe local pain is treated by injecting 1-2% Lignocaine, but a powerful analgesic such as pethidine injection may be required. Severe systemic symptoms should be treated with antivenom.

Other Venomous Invertebrates

Bites by some tropical centipedes can be dangerous as well as painful, while some millipedes can squirt irritating defensive secretions. There is no specific treatment for either of these menaces. Many species of soft and hard ticks can inject a paralysing toxin while they suck your blood. If a member of your party becomes progressively weak it is important to search for

the tick in hairy areas and to detach it as soon as possible: the symptoms should then subside.

Invasive arthropods

Various tropical flies have larvae which invade human tissues or are merely blood sucking.

Larvae of the Congo floor maggot (Auchmeronyia luteola) live in the floor of huts. They attack humans who sleep on the ground and suck their blood, exciting local swelling and itching. Larvae of the human bot fly of Southern America are deposited on human skin through which they burrow causing a boil.

The Tumbu fly (Cordylobia anthropophaga) occurs in most parts of Africa. Eggs are laid on the ground, or on soiled clothing. The larvae penetrate human skin producing a small boil.

Gravid females of the tiny jigger flea (Tunga penetrans) burrow into the feet; especially around the nail beds, soles, and interdigital clefts; and produce small discharging abscesses with local swelling and inflammation. These fleas occur in the Americas, Africa and India.

Treatment

Involves asphyxiating the intruder by covering the skin with paraffin, killing it with Lysol or chloroform and squeezing or winking it out with a needle. Apart from discomfort, the danger of these invasions is secondary infection, and even tetanus. The traveller can help to prevent these problems by being circumspect in his choice of sleeping places; wearing shoes; and, in the case of Tumba fly, by thoroughly washing and ironing dirty clothes.

OXFORD UNIVERSITY EXPEDITIONS

IMPORTANT INSTRUCTIONS

DIARRHOEA. Much of the diarrhoea encountered in foreign parts is due to change of diet. Some is due to infection. Prevention is important and half the battle is won by taking simple precautions. Travellers often show a remarkable lack of common sense. Spanish pears may be luscious, but if a Spaniard eats 8 large Spanish pears he will get diarrhoea, so eat fruit in moderation. If you do eat fresh vegetables or fruit make sure that these are washed in water purified with Sterotabs (or Puritabs). Salads that include green lettuce are particularly hazardous. Vegetables are often manured with human dung, and those with a large surface (such as lettuce) are particularly dangerous. You have a little free acid in your stomach, it will cope with a few nasty germs, but not with a lot. Cucumber and tomato salads are relatively safe. If you get diarrhoea, take codeine phosphate, two 30 mg tablets every 4 hours until the diarrhoea has stopped, or take Lomotil, 4 tablets at once, and then 2 tablets four hourly until the diarrhoea has stopped. You may have been given Imodium (loperamide): take two capsules at once, and then one every time you have a motion until you seize up. If none of these stop the diarrhoea and you are feeling ill, and particularly if you are passing stools with blood and mucus, take Septrin or Bactrim (cotrimoxazole) two tablets twice a day for five days. You may have been given trimethoprim instead of cotrimoxazole. You should take 200 mg twice a day. You may have been given Amoxil (amoxicillin) 250 mg capsules. Take two, four times a day for five days. If this does not clear the diarrhoea you must seek medical help. Septrin or Bactrim should not be taken by people that are hypersensitive to sulphonamide. Amoxil should not be taken by people who are hypersensitive to penicillin.

OTHER INFECTIONS. Do not use antimicrobials recklessly. If you have boils and a raised temperature, or infected wounds, or you think you have pneumonia or bronchitis it is reasonable to take a drug. For boils and infected wounds use first clindamycin. The capsules are 150 mg. Take one capsule four times a day. If you are no better at the end of 72 hours, take Septrin (or Bactrim) two tablets (or capsules) twice a day for five days. (Remember that the latter must not be given to people who are hypersensitive to sulpha drugs). Do not give both drugs at once. If you are in doubt you must seek medical advice.

Some of you may be given flucloxacillin (Floxapen). This is also useful for infected wounds and boils. Take one capsule (250 mg) four times a day. If the infection is not better after three days go on to Septrin or Bactrim as above.

HEAT EXHAUSTION AND SUNSTROKE. Keep your water and salt requirements in balance (see other sheet).

ANTI-HISTAMINES. These drugs suppress allergic reactions of various sorts and are useful in suppressing nettle-rash, itchy skin conditions, hay fever, and to some extent mild asthmatic wheeze. Remember that they all, but to a varying extent, tend to make you sleepy. Do not drive if you are at all drowsy. You may have two drugs, Pro-Actadil and Phenergan. Each tablet of the former is of 10 mg, the latter 10 mg or 25 mg. Some may be given Piriton, *Hismanal 1/day*

1 - 4 times/day
PRO-ACTADIL is suitable for use in the day time. One once a day may be adequate but one may be taken at night and morning if necessary.

PHENERGAN the most powerful antihistamine, is likely to make you sleepy, so take preferably at night. Do not take if you are driving. The 25 mg tablet is very potent. *1 per time*

PIRITON 4 mg tablets. A useful drug for moderate allergy. Take one every four to six hours.

ECZEMA. With irritating skin conditions, use Betnovate cream locally or Euras, Vioform and hydrocortisone cream. Both contain steroid and an antiseptic.

DISINFECTANTS. For cuts and scratches use tincture of iodine unless you are hypersensitive to iodine. Bigger cuts may be washed out with Savlon. A sachet of Savlon concentrate will make a pint of disinfectant ready for use.

MOTION SICKNESS. Marzine tablets, 1 every two to four hours, or Dramamine tablets, 1 every two to four hours, help most people.

SORE THROATS. Most are not due to bacteria and a soothing gargle with some soluble Aspirin (Disprin) usually takes the worst agony away. If the throat is dark red and very sore it is possible you may have a bacterial infection and if you have a fever, take clindamycin (150 mg capsule) or erythromycin 1 ~~hour~~ times a day for five days.

3

SLEEPING TABLETS. You have been given Mogadon (nitrazepan) 5 mg or Rohypnol (flunitrazepam) 1 mg. ^(1/2) One will send the average adult off to sleep. If one does not work you can safely take two or even three.

N.B. Keep these tablets safely and ensure that they do not fall into the hands of children or irresponsible people.

HEADACHES AND OTHER PAINS AND ACHES. You have been given paracetamol tablets. Take one or two tablets every four hours.

As an alternative use soluble aspirin, 2 tablets, which may be taken every four hours. Cut the dose if you get ringing in the ears.

For severe pain: take Feldene (piroxicam) one a day.

INDIGESTION. Use Gaviscon tablets, chew or suck one or two as often as necessary. Polycril Forte (one)

SUNBURN. Avoid going into blazing sunshine or working by the sea unless you have used Uvistat ointment on the exposed part of your body, and pomade (lipscreen) on your lips.

MOSQUITOES AND FLIES. If you are in an area where there are tsetse flies, black flies (*simulium damnosum*), or a lot of anopheles or aedes, you must use a mosquito net. Both in the Tropics and Arctic and Antarctic mosquitoes can be a nuisance. They will descend in their millions from nowhere and you should have a good mosquito repellent. The best is a mixture of 2-ethyl-1-3-hexandiol (94 G/l), 56.4 ml and N, N-diethyl-m-tolamide (99.7 G/l) 6.3 ml and industrial methylated spirit 66 O.P. to 1 litres. It can be bought in America and Sweden. The Swedish variety is known as Djungel Olja 3 x 6. Do not put it in the eyes or in the mouth.

In some parts of the Arctic tiny flies can be a great nuisance, crawling into the ears, eyes, mouth and nose. Insect repellent does not work on them, but the local population usually will be able to advise you. In Greenland you should go to the Royal Greenland Trading Company (KGH) and buy a very fine mesh shopping bag, put it over your head and wear mittens. This works. Do not put a polythene bag over your head: you stand a reasonable chance of asphyxiating very rapidly.

TYPHUS. If you are going to areas where you are likely to encounter rickettsial disease (epidemic typhus, tick typhus, scrub typhus, Rocky Mountain spotted fever) you may be given a supply of tetracycline. If you get a fever (particularly following a tick bite) take two, 4 times a day for a week, and then one, 4 times a day for a further week.

INFECTED OR RED EYES are usually due to a conjunctivitis caused by a bacterium. Optrex is not very useful. Use Polyfax or tetracycline eye ointment 3 or 4 times a day. Put a little snake of cream on the turned down lower eyelid. Put the upper eyelid over it and massage gently. This should clear the infection in the course of a couple of days.

ATHLETES FOOT. This can be particularly tiresome if you have sweaty feet. Wash your feet thoroughly and dust the feet and socks with Mycil or Daktarin or some similar antifungal dusting powder.

FLEAS AND LICE. Dust your clothes and sleeping bag with flea powder (kills pests on pets and undergraduates!). Go to the nearest pet shop and ask for dog flea powder. Hunt for fleas and lice on you. If badly bitten use Betnovate or Synalar cream or Eurax cream.

TAPEWORMS AND ROUNDWORMS. For tapeworm take Yomesan (niclomaside 500 mg) four tablets, chew well and wash down with water. A cascara tablet should be taken as a purgative. For roundworm take Vermox (mebendazole 100 mg) one night and morning for three days.

AMOEBIASIS. If you think you have got amoebiasis (bloody diarrhoea) take tinidazole 2 gms (four tablets) every morning for three days and then Furamide, one tablet (of 500 mgs) three times a day for five days, or Flagyl (metronidazole) 800 mg three times a day for four days instead of tinidazole. AVOID MILK AND MILK PRODUCTS FOR SIX WEEKS. No alcohol whilst you are taking tinidazole or metronidazole.

HIGH ALTITUDE. Note that above 8-10,000 feet the contents of full tubes of ointment will shoot out under pressure. Unscrew cap with care. You may be given Diamox 500 mg twice a day to counteract mountain sickness.

GENERAL NOTE.

It is important that drugs not used are handed in to me for use of future expeditions, or burnt. They could be dangerous particularly for children and in foreign parts any expedition refuse is often avidly collected by the locals. If you have a deserving local medical centre, by all means give remaining drugs to them. We want the drug cases back.

Bent Juel-Jensen.
University of Oxford.
Trinity 1986.