ADVANCED SEA KAYAK CLUB

NEWSLETTER NO.74

JULY 1989

J. J. Ramwell
7 Miller Close
NEWPORT
Isle of Wight
PO30 5PS

EDITORIAL

I was out on the Solent yesterday morning visiting the old forts. The sun was shimmering on the wavelets and a gentle breeze helped to cause them. A simple outing - we didn't even bother using sea kayaks, just a couple of battered old slalom boats - so what's the point? This, that after over 25 years paddling, some of it done among some of the world's 'hot spots', our 'simple' trip still caught my imagination. Mind you, had it been raining and cold I suspect an extra couple of hours in bed would have caught my imagination instead!!

Our plans to take **almost** 40 young people (17-18 years) to North Norway proceed apace. Thanks to Nigel Dennis we staged our briefing/training weekend at the Anglesey Sea and Surf Centre and, with the generosity of the local centres, we had sufficient kayaks to get everyone on the water - it was very much appreciated and I suspect that post expedition Norway we will have converted many of the youngsters to sea kayaking. We shall be using VCP WEEKENDERS and most of them will be returning to the U.K. in November after six weeks use and will be for sale complete with spray deck and paddle for £275. Should you be interested then contact Lt. Col. (Rtd.) P. Steer. B.S.E.A. at R.G.S., 1 Kensington Gore, London, SW7 2AR.

Next year sees the International Rally on the Ile de Re on the south-west coast of France. This event is staged every second year and is great fun - a laid back, relaxing holiday type expedition around the island. It is scheduled for the 2nd to 10th June 1990 and I shall be taking a minibus and trailer and 10 paddlers with wives, children and/or girl friends - if you want to be one of these paddlers let me know and send along £10 deposit per head. Once I have sufficient takers I will price the whole thing and split the cost between us all.

In my last editorial (May 1989) I mentioned the oil pollution disaster of Prince William Sound which occurred on Friday, March 25th of this year by the spillage of 10 million gallons of crude oil by Exxon Valdez.

The Alaska environmental community - many of whom are sea paddlers - have launched their own fund to be used as a reserve for clean-up, research and monitoring of the Alaska marine environment. From their literature .....

"Remember the sound of the loon, eagle, kittiwake, oyster catcher, murre, sea otter, whale and the sound of the ocean itself lapping on the beaches and crashing on the headlands, ebbing and flowing; the life blood of the planet".

If you want to help, buy a "REMEMBER THE SOUND" lapel badge at $5.00 each from:-

ACF/PWS CLEAN UP FUND
Alaska Conservation Foundation
430 W 7th Avenue 215
Anchorage, Alaska 99510, U.S.A.

Eric Totty writes, "I particularly liked the article on Marine Nature Reserves. Many people (including ASKC members, are unclear about the exact requirements and extent of restrictions on access. There can be no doubt that

a large party of noisy youngsters could have a disturbing effect and would not be welcome, but the lone paddler (or group of three) with a membership card of a Nature or Wildlife Trust should be welcomed as having a genuine interest and as a supporter of N.C.C."

From the pages of the Spring Marine Conservation Magazine.

A management plan for the sea - 'Bureaucratic', 'unco-ordinated' and 'short-term' are all words which have been used at some time to describe the way the U.K. plans and manages the use of its coastal and offshore waters. Because of its concern about this situation, the Marine Conservation Society, with grant aid from the World Wide Fund for Nature, has started a study on coastal and sea use management in the U.K. The work will be taking place throughout 1989 and will be undertaken by MCS's Dr Susan Gubbay, and lead to the publication of a draft management plan in early 1990. A vital part of the project will be interviewing as many organisations as possible about the problems they face in marine management, and exploring examples where good practice has helped to overcome difficulties. With this input, it should be possible for the Society to draft guidelines for a long-term strategy for the management and sensible use of our seas.

Putting paid to plastic - Since January 1st it has been illegal to dispose of any plastic at sea. Added to this, other forms of garbage can only be discharged at sea under strictly controlled conditions. These significant developments are the result of the coming into force of Annex V of an international marine pollution convention (MARPOL). The garbage now has to be deposited at special reception facilities which have been set up at ports and harbours.

The Department of Transport has produced a poster to publicise the new regulations, and free copies of both A2 and A4 size posters are available from C. J. Underwood, Department of Transport, Marine Directorate, Room 5/51, Sunley House, 90 High Holborn, London WC1V 6LP.

New forum links heritage coasts - The Countryside Commission's 'Heritage Coast' programme took a significant new step in the autumn with the setting up of a Heritage Coast Forum. The new group will encourage links between the 40 different Heritage Coast areas, as well as with other organisations, to help maintain the value of these 'areas of undeveloped coast of high scenic quality'.

The forging of new links can already be seen in the make up of the steering committee, which includes representatives from the English Tourist Board, the National Trust, the Nature Conservancy Council and the Sports Council, as well as the Marine Conservation Society. Heritage Coast wardens are already taking a keen interest in marine issues and, with MCS involved in the steering group there should be plenty of opportunity for the Society to give them further encouragement.

Seal deaths down - but for how long? As seals have dispersed over the winter months, the number of reported deaths from infection with the morbilli virus has fallen. However, there are fears that the death rate will rise again as common seals start to congregate in the late spring and early summer.

In recognition of the problem, the Government has used its powers under the Conservation of Seals Act to prohibit the killing of seals all year round instead of just in the breeding season. A significant omission, however, is that the ban does not extend to grey seals in Scotland, which make up about 45% of the world population. As seals are difficult to identify in the water,

this may result in the fully protected common seal being shot as well. Furthermore, seals can still be shot under licence and the new prohibition does not affect the right of any fisherman or fish farmer to shoot seals near his nets or tackle to prevent damage.

Whale watching - We have received an increasing number of enquiries about where to go whale watching. Most of these opportunities are in America, but here are some contact points:

Air Canada, P.O. Box 58, Freepost,
Leatherhead, Surrey, KT22 OTD
Oceanic Society Expeditions, For Mason Center,
Building E, San Francisco, CA 94123
Nicholas Day, Controller, Special Projects,
Cox and Kings Travel Ltd., St James Court,
45 Buckingham Gate, London SW1E 6AF

HOW YOU CAN HELP

DOG WHELK SURVEY - TBT is just one of many chemicals that find their way into the seas around Britain. It harms a great variety of marine animals and puts the health of our seas at risk. Dog whelks are the most sensitive animals to the presence of TBT that we know, as well as being important animals on rocky shores in their own right.

That is why we need to know what state Britain's dig whelks are in. We need to repeat the surveys that have been carried out over the last few years to see what changes are taking place.

HOW YOU CAN HELP - You can take part in the dog whelk surveys around our shores. These surveys are very straightforward, for those of you who have not taken part in a dog whelk survey before, and full instruction sheets are available. The time we would like you to do the survey work is around the spring tides in March/April, so get in touch with us as soon as possible!

FURTHER INFORMATION is available in back issues of Marine Conservation, Issues: Spring '87, Summer '87, Autumn '87.

CONTACT Simon Hayter at MCS in Ross, who will be co-ordinating this project.

LET CORAL REEFS LIVE - Coral reefs are some of the world's richest marine habitats - and, like so many global habitats, they are under threat from man's activities. We must do what we can to protect them. The Marine Conservation Society is particularly concerned about the curio trade, which takes thousands of tonnes of choice coral per year.

We hope that, by collecting information, we can encourage countries that supply and import coral to regulate this trade so that no lasting harm will come to the precious reefs around the world.

HOW YOU CAN HELP - Fill in the curio trade postcard. Make the curio trade leaflet work for us. Send a donation to the 'coral campaign'.

YOU CAN READ MORE about the trade in coral, and what you can do to help the Society, on pages 40/41 of this issue of MARINE CONSERVATION.

CONTACT: For curio trade postcards and leaflets, contact the MCS Office.

SHARKWATCH - Many species of fish have been exploited to the point of extinction simply because we do not understand enough about the way they live. Will this happen to our sharks?

We are organising two basking shark tagging expeditions in 1989 which will help us to discover more about their life history.

HOW YOU CAN HELP - We need your records of shark sightings.

We need experienced boat handlers to help us get to the tagging areas (Salcombe and Firth of Clyde).

We need funds for this project. Can you help raise funds and, at the same time, gain public support to help us protect these gentle giants?

YOU CAN READ MORE about basking sharks on page 42 of this issue of MARINE CONSERVATION.

CONTACT MCS for further details

CASTLES FOR CLEAN BEACHES - The poor health of Britain's beaches has drawn people's attention to the threats to our shores and seas.

The Society will launch a major campaign this summer to increase public awareness even further of the work the Marine Conservation Society is doing to help Britain face these problems, and to find better ways for us to use our marine environment The Society needs much wider public support and you can help by taking part in this campaign.

HOW YOU CAN HELP - This summer, let the Marine Conservation Society benefit from your talents - in design, architecture, constructions, planning and photography!

Build a Sandcastle! - simple or elaborate. Then take a photo and send it, with a donation, to the Society. This will give you an automatic entry into a major PRIZE DRAW. If you are in a local group of MCS, organise a sandcastle building day on the beach and be an official photographer.

CONTACT Anne Scott at MCS if you have an idea for organising a sandcastle event at your local beach. Ask us for posters and leaflets.

VANDER-MOLEN TRUST

Last week, friends and relatives of the late Paul Vander-Molen collects together in the Society to unveil a memorial photograph, which is to hang in the Society, and to hear Sir George Bishop, past President of the Society, pay tribute to the major contribution Paul made to exploration during his career - particularly in his encouragement for disabled explorers and the pioneering of new techniques. Many will recall Iceland Breakthrough, his journey across Iceland using microlights, snowcats and kayaks. Paul died of leukaemia in May 1985. Since then, his parents Jack and Muriel Vander-Molen have worked tirelessly to continue Paul's work through a trust - the Paul Vander-Molen Foundation - which raises funds to assist leukaemia research and treatment, to further encourage those with disabilities to join expeditions and to support explorers in their bid to pioneer new expeditions Jack is keen to help anyone who could benefit from the Trust and you can get in touch with him at The Model Farm House, Church End, Hendon, London NW4 4JS

ASKC SHOP

ASKC Stickers @ 35 pence each
ASKC Letter headed notepapers (A4 size) @ 50 pence per 10 sheets
6th Sea Kayaking Symposium Report 1987 @ £2.50
T-shirts - small/medium/large/X-large, yellow or black @ £5.00 each
Sweat-shirts - small/medium/large/X-large, black only @ £12.00 each
ASKC Ski hats @ £3.50 each
"Sea Kayaking", book by John Dowd @ £8.95 each

From: Mr A. T. W. Watts, 2 Victoria Cottages, The Street, Halvergate, Norwich NR13 3AJ. 26th May 1989. 0493 700193 NORFOLK

Dear John,

Please place the following advert in the next issue of the ASKC Newsletter.

NORDKAPP HM Sea Kayak, fully expedition rigged, C-trim rudder, Chimp foot pump, H.J. Self Rescue paddle tubes, Twin Seal spray deck, Very good condition. Bargain at £450.

HUNTSMAN Sea Kayak, VCP hatches, Chimp hand pump. Reasonable condition at £100.

TENT Ultimate Tramp 1, very good condition £50.

SLEEPING BAG Buffalo Double fibre pile, very good condition £50.

Thank you for your help; keep up the good work.

Regards, Arthur Watts

From: John Hinchliffe, 25 Kingfisher Gardens, Selsdon, Surrey CR2 8QY
01-651 6235 21st April 1989

Dear Mr Ramwell,

I am interested in teaming up with two sea kayakers for a weekend trip to paddle across to France and back. I would be grateful if I could use the ASKC Journal to establish contact with interested parties.

Thanking you in anticipation.

Yours sincerely, John Hinchliffe

From: Paul Airey, Nelson Centre, Anglesey. Co-opted member of BCU Sea Touring Committee

RSPB Reserve - South Stack

The new Warden of the RSPB reserve at South Stack is Alastair Moralee. He is keen to encourage a good working relationship between canoeists and the Reserve. With the start of nesting and breeding on the cliffs he has contacted me with regard to the voluntary restriction on paddling close in to the cliffs

between South Stack Island and Penlas Rock between February and the last day of July The RSPB understand the need to paddle under the footbridge at South Stack given unfavourable tides and/or weather but would request that in reasonable conditions individual paddlers and groups keep well out from the base of the cliffs.

Can I also remind readers of the voluntary restrictions around the National Nature Reserve at Llanddwyn Island, Newborough Warren. This is during the shag and cormorant breeding season also February-July, or the small islands lying off the western end of Llanddwyn. The area is closely monitored during the season by Nature Conservancy Council Wardens.

Lastly, the Skerries no longer houses Lighthouse keepers as the station is now automatic; however, the island is habited during the nesting season by an RSPB Warden. For more information before undertaking a trip, please visit the RSPB Reserve at Elen's Tower, South Stack, Holyhead, especially if you intend to land.

Many thnks for responsible paddling.

Paul Airey

From: A. J. Ford, WO1, ACU Coaching Representative, Army Mountain Training Centre, Silberhutte, BFPO 27. 19th May 1989

Dear John,

In response to Kenneth McCormick's letter in the ASKC May '89 Newsletter concerning my article on 'Fishing from Kayaks', I can only say that we have only had one encounter with bears.

Whilst we were sitting eating breakfast one morning in the Goletas Channel a Black Bear approached within 10 metres of us. It quickly left the scene when pots and pans were rattled. From its look of surprise and the speed with which it left the scene we can only assume it had not noticed our presence.

We are not permitted to carry firearms, but do have flares at the ready should a bear persist; otherwise we live in the hope that our party of up to six is sufficiently large for a bear not to wittingly approach us. As for reducing the smell of fish around our kayaks, we rely on mothballs being left in the cockpits, and wash as much of the kayak off at the end of each fishing session - perhaps we have just been lucky. I might add that the fish are stored in plastic bags during transit and the bags are washed out and hung to dry each evening.

We may be better stowing bags holding our fish on the after deck - it is a problem we hope to solve in June when we hope to carry out a circumnavigation of the Queen Charlotte Islands.

On another point, I wrote to you in February about the vexed question of inherent buoyancy in sea kayaks, and of a suggestion of inviting a speaker from the Department of Hydrography to speak at the Symposium in October. I have heard nothing further from you on these matters.

Finally, what a thrilling venture the joint Alaskan/Soviet expedition highlighted in your editorial sounds. Let us hope it opens the way to future expeditions to the Russian shores and further research on the kayaks of the area (should there be any remaining with the Chukchi). I could easily have been persuaded to abandon my own expedition for 1989 had there been a chance of joining Doug van Etten. Yours Aye, Tony

The following is a letter sent to SEA KAYAKER magazine which they failed to publish. The author, Stan Chladek, has asked me to publish in ASKC Newsletter.

Dear Sea Kayaker,

I am replying to the article "Superior Trouble" in the Winter 1988 issue of Sea Kayaker, which reprinted parts of two reports written previously by Greg Martin (Great Lakes Sea Kayaking Newsletter) and by me (Advanced Sea Kayak Club Newsletter). I laud your efforts to analyze these two incidents, however more accurate conclusions could result from a prior discussion with me as I was intimately involved in both incidents. Unfortunately Sea Kayak never tried to contact me and discuss the reports. I like to believe that several erroneous statements appearing in your article were due to lack of communication. Therefore, I want to set the record straight and provide readers of Sea Kayaker with the facts and my point of view, so both incidents can be put into a proper perspective.

The first of the two events reported occurred in the Apostle Island archipelago, off Sand Island in May 1987. I was first to start from the beach on mainland toward Sand Island and heading a bit windward of my destination to compensate for wind drift. There was no storm and no need for a compass reading since the crossing is very short, about 2.5-3 miles and all on water protected from the northeastern wind. I noted that Greg was unusually slow, and since paddling was easy, I stopped only on nearing Sand Island, in a clear view of the campground. Meantime, as I was waiting for Greg, Tom and Steve passed me and paddled further toward the exposed Swallow Point. In retrospect, I think (it is easy tp be clever "in retrospect") that this was a moment when I made an error. I should have tried to stop Tom and Steve. Then Greg arrived and talked to me. Therefore, your assertion that ".... the visually handicapped individual (referring to me) strings off strong on the wrong course during the storm ... you have a great potential trouble" is incorrect. Greg did not lose contact with me, there were no stormy conditions during the short crossing, I did not strike the wrong course, and even though I am nearsighted, I did see the Island, because I was only 200 yeards from it and it is some 3-4 miles wide.

As Greg said, the conditions were becoming more juicy as we rounded Swallow Point. We encountered a full blast of northeastern wind forming large waves in which he later capsized.

Now, regarding the towing of Greg's swamped boat - I knew that this was going to be a marginal operation in <u>any</u> boat not just in <u>narrow</u> Norkapp as you point out. None of the towing rigs would have served completely satisfactorily in the unusual complex situation I was in, with a heavy swamped kayak in tow, close to undercut cliffs in large reflection waves. Your suggestion that it was possible to hold a tow rope in hands is almost absurd in my situation. How could I paddle with one hand in big breaking waves to clear the cliffs and to tow a swamped kayak with the second hand? No matter which towing rig one uses they are all potentially dangerous, if a capsize occurs, because of possibility being entangled in a line. That was precisely what happened to me. The Sea Kayaker's suggestion that I should have had a back-up system, after I "failed" to roll, being choked by the line, is rather preposterous. Could Sea Kayaker suggest an alternative, short of James Bond type of rescue with Helicopter? Well, Sea Kayaker says that "most sea kayakers rarely roll in emergency ... specially with their heads in icy water"! I find it a rather amusing statement, considering how many people roll regularly on sea kayaks in cold water. My belief, based on 30 years experience is that the <u>Eskimo roll is the best rescue available to a sea kayaker</u>. In fact, I do not dispute the necessity for a back-up system, but none of them existed in my situation near Sand Island cliffs.

The second event took part about a year later off the northeast shore of Lake Superior. All of us judged conditions well paddleable, except Shaun who stayed on the shore. Of course it was very cold, but the seas were not really bad. The most difficult part was breaking through the surf. Bruce made a mistake in not emptying his kayak after the previous attempt to break out. It became a factor in his later capsize. We made an error after accomplishing Bruce's rescue: since we all had tow rigs, we should have set up a tow formation. This way, David wouldn't be so tired doing all the towing and we would not have separated.

Now to the last point the editorial mentioned: Why don't I carry a paddle float? Simply because I don't trust it in difficult situations. As far as I am concerned, the paddle float gives people a good chance to rescue themselves under relatively easy conditions; it is not an easy method to use in heavy seas. I believe that I am not likely to flip under easy conditions, and if I do, I trust my roll. I tend to believe that Howard Jeff's paddle tubes are a much more dependable alternative to self rescue that a paddle float. Nevertheless, I would always prefer group rescues, if possible, to solo methods, since they are much more reliable. Under extreme conditions, it is really each man for himself, and other methods of rescues than Eskimo roll are impractical, if not impossible.

I hope that these remarks will clarify the facts. Also, I want to state my opinions, no matter how controversial they sound to Sea Kayaker. As "Superior Trouble" was aired in your recent issue, perhaps it would be fitting to publish an article about the rapidly growing sea kayaking activity in the Great Lakes area, including the strong instructional program.

Stan Chladek, Bloomfield Hill, MI

Open letter to: Mr Joe Nangle, Weare, NH

From: Stan Chladek, 3721 Shallow Brook, Bloomfield Hills, MI 48013.
11 April 1989

Dear Mr Nangle,

I refer to your letter printed in the Spring issue of Sea Kayaker, commenting on 'Superior Trouble', an article published in the Sea Kayaker Winter '88-89 issue.

Of course it was a hoax - both stories. Here's why:

(1) I was never asked to contribute to the article in Sea Kayaker, and never consented to its publication, even though I received a letter from the editors thanking me for my help.

(2) I knew nothing of the article until I saw it in print and I wrote immediately to the editors pointing out the distortions within their report. They did not see fit to publish my letter. Instead they published yours.

(3) You were hoaxed twice. Once when you noted the contents of the article, and once again when you understandably failed to notice the sly personal attack on my character, carefully hidden within the text.

(4) This attack was continued in the reply to your letter from the editors. I have <u>never</u> run an ACA (American Canoe Association) instructor certification course at our Great Lakes Kayak Touring Symposium at Traverse City MI. The editors' statement that I did is totally untrue. Note also the idea

floated by them, that running an import business in some way affects my integrity and, therefore, makes me less suitable to be involved in instructions.

Also, they imply that because of the fact that I was twice involved in incidents, as a rescuer, and because I enjoy paddling on rough water, I am unsuitable to instruct kayaking, and moreover that the respected organization as ACA even appoints me in this capacity! Too bad for students if I teach them how to rescue themselves or how to roll! Too bad for those who listen to my presentations on symposia and workshops!

(5) Maybe we should remember that the editor of Sea Kayaker also runs an import business and is involved in the manufacture and retailing of kayaks.

You have every right to be concerned about the 'Superior Trouble' article - it was a distorted version and you were sensitive enough to ralize something was wrong.

What is also terribly wrong is the lack of integrity of the editors of Sea Kayaker. This is not the first (nor the last?) time that foolish personal attacks have been disguised as serious statements.

I hope you see this letter. Obviously it will never appear in Sea Kayaker - unless there is a flicker of conscience within their editorial office!

My unpublished reply to the Sea Kayaker article is available on request. My original article called "Icemen of Lake Superior" was published in Advanced Sea Kayaking Club Newsletter and ANORAK. My address is given above.

Best Wishes in kayaking.

HOW THE WIND DOTH BLOW .....

Invisible and elusive, yet enormously powerful, the wind can unleash its energy in storms which create massive destruction. But the power of the wind can also be harnessed by man and put to good use

Written by Charles Tyler

Weather, as we know it, would be inconceivable without wind. It is this movement of air which, in part, generates and distributes rain, moderates temperatures across the globe, and cleanses the atmosphere. Though there are many local variations and quirks of wind speed and direction, the global picture of prevailing wind patterns is highly predictable. Essentially, wind is created by a discrepancy in air pressures; air will flow from areas of high pressure to 'fill' low pressure areas. Due to the heating effect of the sun, hot air (for example over the equator) rises, creating a low pressure area; cooler low-level air, drawn in to replace it, creates surface wind.

The Northeast and Southeast Trade Winds, which blow towards the equator are the result of this, and deflected by the Coriolis effect of the Earth's rotation. The warm air which rises above the equator moves out towards the poles, cools, and falls back down creating high pressure areas known as the Horse Latitudes about 30° north and south of the equator. This circulation is known as the Hadley Cell. Two other weaker circulations - Midlatitude Cells and Polar Cells, operate in the higher latitudes (see global diagram) and create prevailing Westerlies and Easterlies.

But wind is not just restricted to air movements near the surface of the earth. Although it is only the lowest few kilometres of the atmosphere that directly affects man, the entire atmosphere is a turbulent sea of air. Winds blow in different directions at different heights, and some of the fastest winds are found at altitudes of 30,000-45,000 feet. The average speed of these 'jet streams' is between 60 and 115 miles per hour (classed as hurricane force at ground level), though jet streams exceeding 290 mph have been recorded.

Jet streams which blow from west to east are located in the upper reaches of the Polar Front, the interface between the Polar and Midlatitude Cells (see global diagram). The strength and permanence of these winds (which can substantially cut the flying time from the USA to Europe if an aircraft manages to get carried along by them) is related to the abrupt drop in temperature along the Polar Front. Subtropical jet streams, also blowing from west to east, are found highabove the Horse Latitudes, at the edge of the tropics; these tend to be stronger in winter when the temperature difference between temperate and tropical air is greatest. Other seasonal jet streams are found over the poles during the dark winter months, and a 'reverse' (because it flows from east to west) jet stream forms at the tropopause over the Indian Ocean and Africa during the summer.

The Polar Fronts, which occur around 60° N and S are zones of extremely turbulent air. This is the 'battleground' where the cold air moving away from the poles collides with the warmer temperate air masses moving away from the equator. These zones are marked by great swirling eddies, which chase around the mid-to-high latitudes.

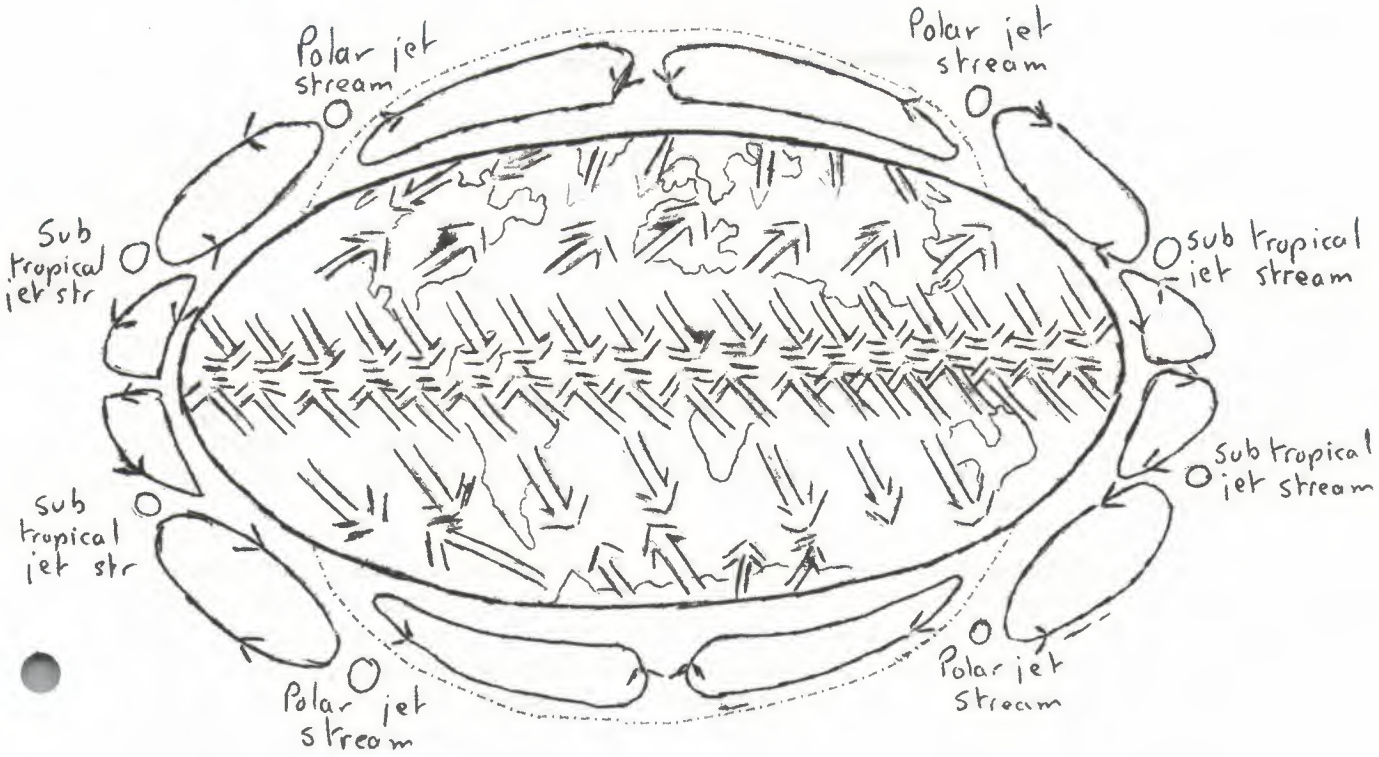
These cyclonic and anti-cyclonic wind patterns are created by the effect of the Coriolis force deflecting winds that are moving from high to low pressure areas. The pressure gradient, and the deflecting effect of the Coriolis force balance each other, and the air curves its way from the high pressue area to the low pressure area in a rotary fashion. In the Northern Hemisphere the Coriolis force deflects the wind to the right, and thus it spirals out from a high pressure area in a clockwise (anticyclonic) fashion; air drawn into a low pressure centre is also deflected to the right and is drawn in with an anticlockwise (cyclonic) motion. The opposite is true in the Southern Hemisphere.

The cyclonic depressions which frequently pass over the UK are typical of the Northern Hemisphere but in the Southern Hemisphere, with no land masses to break them, windspeeds of 100 mph often build up over the expanses of the South Pacific. Such monster storms are the most powerful weather systems on earth, and their diameter can reach 1,000 miles or more.

Despite their size, the destructive power of these storms is nothing compared with the savage onslaughts that typify their smaller cousins, the hurricanes and tornadoes. In terms of destruction potential, tornadoes take first prize, though about the only thing they have in common with the great storms of the temperate zones is that they are rotary. Certainly, they are nothing like as big (often being merely a hundred metres in diameter) and a single tornado vortex may exist for only a few minutes.

Tornadoes are funnel-shaped vaporous vortices, with extremely high winds rotating around a vertical axis. They are usually associated with thunder storms, or squall lines, and start with slow rotational forces within the storm clouds. After rotation has started, a whirling tendril may extend down out of the cloud, growing longer until it makes contact with the earth or sea. Tornadoes that occur over water are called waterspouts.

The damage wrought by these extraordinary phenomena is partly due to the high wind speeds (up to 300 mph), and partly the suction set up within their



vortices. The most terrifying stories of tornadoes have come from the USA where 'twisters' are a relatively common occurence. One area of land in particular from Texas to Missouri - is known as Tornado Alley, because of the inordinate number of tornadoes which touch down and wreak havoc each year.

These storms are often multiple-vortex tornadoes, with several 'mini-twisters' of extreme violence surrounding the main central vortex. A strong one will destroy almost anything in its path; the power of tornadoes should not be underestimated. One which struck Texas in 1970 lifted a 41 foot-long fertilizer tank, weighing over 10,000kg, and dumped it three-quarters of a mile from its original position There are also reports of steel girder bridges being ripped from their foundations, an entire house being lifted and carried for two miles, and one instance of a church steeple being carried for 15 miles! Fortunately, the relatively small diameter of tornadoes means that damage is very localized: there is a case of half of one house being completely destroyed, while the other half remained intact.

While the great tropical hurricanes which frequently make the news headlines are not as violent as tornadoes, the damage that these can cause is much more widespread because of their greater size and long life. Each year tropical hurricanes result in more lives lost than all other storms. Tornadoes are the smallest, shortest lived and most vicious of the rotary winds; the monster storms of the temperate zone are the biggest, longest lived and least vicious. Hurricanes fit somewhere between the two, though they have more in common with the temperate zone storms than with tornadoes.

Hurricanes are born in the steamy late summer environment of the tropics, when sea temperatures are at their highest. A sea temperature in excess of 27°C is needed for a hurrican to form. At this temperature vast quantitites of water evaporate creating high-energy thunderstorms, which are the starting point for further development into a hurricane. Near the equator, the Coriolis force is weak, and on its own is not enough to start a cluster of thunderstorms rotating. However, if two wind currents happen to move side by side, the faster one tends to curl around the other. If this curl is anticlock-

wise in the Northern Hemisphere (clockwise in the Southern Hemisphere), it will add to the Coriolis force, and the combined effect may become strong enough to start a cluster of thunderstorms spinning.

Once this has happened there is a good chance that it may develop into a hurricane The thunderstorms, revitalized by an influx of moist warm air, form and rotate around a deepening low pressure centre, known as a tropical depression From this, it is a small step to becoming a hurricane.

As pressure continues to drop in the 'eye' at the centre, the rotating clouds and winds are drawn inwards, and the speed of rotation increases. Initially, the diameter of such a storm may be several hundred miles, but by the time it has contracted to, say, 50 miles in diameter, the swirling winds will have achieved hurricane speed. While it stays over tropical waters it may intensify further, fuelled by the heat and water vapour from the sea which whirls around the side walls under the pull of a powerful suction created by high jet stream winds above.

In the Northern Hemisphere, there are four major tropical hurricane breeding grounds: one either side of the Central American isthmus, where the main season is July to October, one in the Bay of Bengal (where such storms are called cyclones), and one in the South China Sea/Northwest Pacific, (where the storms are called typhoons). In the Southern Hemisphere, there are two main hurricane areas: the Southwest Indian Ocean and the Southwest Pacific/Australian area. The main season here is December to April, being the Southern Hemisphere summer.

From their source, such hurricanes usually move in a west/northwest direction (southwest in the Southern Hemisphere), and contain enough energy to drift into the mid-latitudes, where they tend to move northeast (southeast in the Southern Hemisphere). As we discovered in October 1987, they can even cross the Atlantic and get as far northeast as the UK.

Hurricanes that move away from their source are usually named, and are now tracked by satellite. During the 19th Century, only the most vicious storms were named, but it is now standard practice to name hurricanes sequentially on an alphabetic basis Hence, the first of the year in each hurricane zone may be called Anna, the next Bruce, Charlotte, and so forth. Between 1953 and 1978 only female names were used, but in 1979 feminists managed to persuade the World Meteorological Organization to use men's names as well). Atlantic hurricanes rarely get to the letter 'M' (13 per year), while the Eastern Pacific often gets to the letter 'P'. In the Western Pacific, typhoons are so frequent that the whole alphabet may be used up in a year.

Hurricane Gilbert, one of the strongest Atlantic hurricanes ever recorded, smashed its way through Jamaica, Mexico and on towards Texas, making hundreds of thousands homeless and running up a repair bill of almost a billion dollars. Much devastation is caused by the storm surge - the huge waves which accompany the full blast of the hurricane as it approaches a coast.

Recently, there have been worries that as the world warms up as a result of the greenhouse effect, tropical hurricanes could become more frequent and more damaging. Certainly, there may be more energy available if global temperatures increase. More of the world would be above the magic 27°C necessary for hurricanes to form for longer periods of time if tropical waters warm up. Dr Phil Jones, of the Climatic Research Unit doesn't see any sign of this occurring yet. "I think there have been more intense hurricanes than Gilbert," he said. "There have certainly been hurricanes which have caused more damage in the past. Gilbert was a bad one, but there were equally bad ones in 1980 - David and Alan, for example. I don't think they are occurring with any greater or less frequency than they have in the past."

Of course it all depends how you measure the severity of a hurricane. There is little data about how deep they get, because it is obviously dangerous flying through hurricanes just to see what the pressure inside is. From a point of view of how much damage they cause, this depends on their track, and how well prepared people in the path of a hurricane are.

"It's very difficult to quantify these things and say 'this is the worst storm' or 'they are becoming more frequent'. I don't think that is the case. There have been more during 1988, but in terms of the 1980sm there have not been more during the whole decade than during past decades. There is no real trend, and if there is a trend, you have got to be sure it is not just better reporting; until the advent of satellites, there were obviously events which occurred without our knowing about them."

ON CAMP STOVES by Clive Tully from Geographical Magazine

HOT GOSSIP

"Oh look, the cook house is on fire." Our trek leader's casual comment nearly interrupted my cup of tea. And indeed, that shepherd's hut in the Garhwal, purloined as a base for our cook and his helpers, had flames and smoke shooting through its thatched roof. Fortunately, the fire was extinguished without further disruption to our evening meal.

Then there was the celebrated time on a winter back-packing trip when my stove refused to light in sub-zero temperatures and gale force winds - even inside the tent! I used up a bottle of priming meths, normally enough for a couple of week, wore a groove in my thumb from extended use of the lighter, and when we finally reached what might have been the critical moment - the promise of enough heat to brew a cup of tea, the bloody thing flared, nearly engulfing the tent in a fireball

Under more controlled circumstances, fires are the essential element in providing hot food and drink. Provided you have an adequate supply of dead wood, a traditional open **camp fire** can be quite pleasant, and in some places, pretty useful at warning off inquisitive animals. They're fine, too, when people clear up the mess the next morning. An awful lot move on, leaving their little circle of stones and charred ground ready to spoil the wilderness experience for the next person.

For most purposes, a stove is a much more efficient way of cooking your food in the wild, and it's a heck of a lot tidier than the time-consuming and rather unreliable open fire.

Most stoves are made to burn a particular type of fuel, and here you have to decide just what fuel you intend to use. Travellers visiting all corners of the globe will discover that airlines tend to frown on your carrying butane cartridges. If you're likely to be visiting somewhere where the supply of cartridges is doubtful, then it's probably best to go for a petrol stove. Fuel for that is available virtually anywhere.

METHS

Meths is convenient to use. It smells great, but tastes horrible! It's good for stoves, though, because it doesn't need priming, nor does it have to be pressurized. It'll bring a kettle to the boil noiselessly, if a little slowly, and leaves no nasty lingering smell if spilt. Stoves designed for burning meths (Trangia, Optimus Trapper) are weatherproof and very stable. On

the minus side, meths is rather a sotty burner and you tend to get through your supplies of fuel fairly quickly.

It can also be quite difficult to obtain. Whilst you can get it from most hardware stores in the UK, there are places where you may either be asked to sign the poison register, or you may not be able to obtain it at all. It's generally available in plastic bottles from $\frac{1}{2}$ litre upwards, and for safety's sake it's best to transfer the contents into a metal container such as a Sigg or Markill fuel bottle.

The Trangia is probably the best known of all meths burners. The aluminium body surrounds the pot or kettle, shielding the flame from the wind, whilst the ventilators in the bottom half of the body can be turned into the wind, feeding the flame from underneath, and producing the famous Trangia roar.

In a similar vein is the Optimus 81 Trapper, except it does have an interesting plus - if you knock it over, it doesn't flare up. The meths is stored in absorbant padding inside the stove, so if some clumsy twit kicks the thing over, it's still safe, and it doesn't even go out!

PETROL

A number of stoves on the market burn automotive petrol - that is the leaded petrol we still use in our cars in this country - although built primarily for use with 'white gas', the unleaded variety used in the States. Now, of course, it's much more widely available here in Britain.

Environmental considerations aside, burning leaded petrol clogs up the burner, which needs frequent cleaning. Some stoves have built-in jet pricking needles, which makes an otherwise fiddly and messy job straightforward.

Petrol stoves do need a little practice before you can drive them proficiently It also goes without saying (although I am saying it here!) that you should never use a petrol stove inside the tent. Apart from the fire hazard there's also the danger of carbon monoxide poisoning.

On the plus side, it's fast when you want to boil water. A pressurized petrol stove on full throttle will blast away at such a rate that its burner glows red hot!

Many petrol stoves are built into a compact metal box, with the burner and a small fuel tank sitting side by side - these do tend to be rather heavy though. The Optimus Hunter and Shinabro 170 GR are good basic petrol stoves, and the Optimus Climber (Svea 123) a compact, cylindrical lightweight stove. Coleman's Peak 1 stove has an "X" shaped windshield built into the burner, which improves efficiency.

Multi-fuel stoves, such as the Optimus Ranger, generally give you the choice of petrol, paraffin and meths. Although horrendously expensive, the American multi-fuel MSR X-GK stove is a great favourite of mine. Along with its even lighter brother, the MSR Whisperlite, its main advantage is that it's much lighter than most petrol stoves. Instead of having a built-in fuel tank, the burner connects to a fuel feed and pump unit which screws into a standard Sigg fuel bottle. Since you have to carry a fuel bottle anyway, why not use the same one for the stove's reservoir, and save weight?

The burner itself is very squat, and with the fuel tank acting as an outrigger, the stove is extremely stable.

PARAFFIN

Paraffin has to vaporize before it burns efficiently, so the type of stove which burns it is pressurized, like a petrol stove. The fuel itself is reasonably cheap and easy to obtain. It is rather smelly, though, and once spilt, won't evaporate readily. The stove needs a volatile fuel such as petrol or meths to prime it, or alcohol paste, which is available in tubes. Once burning, paraffin provides a good hot flame.

You can get stoves which burn just paraffin, but I don't see much point in buying them. Better to get a multi-fuel stove, so that you can burn more efficient fuels, but have the capability to use paraffin when that happens to be the only stuff readily available.

Then, of course, there's dung. Sanctuary say their Wilderness Stove burns anything from bark and pine cones to dung. Basically, it's a ventilated pot which contains whatever combustibles you can find, with a battery driven fan beneath it which speeds up the airflow to get the stuff burning.

The main thing is that you have to balance convenience against boiling speed. Butane is generally quick and easy to light, but slow to cook. The other fuels require more care, but the reward is a quicker brew. Do bear in mind that with any stove burning petrol, diesel, paraffin, turps, avgas or whatever - until the burner heats up and the fuel starts to vaporize and burn properly, it can flare up, so make sure this part of the operation is performed outside the tent. Once it's burning properly, and this usually only takes about 20-30 seconds even on a cold day, you can bring the stove under cover of your open bell end, but never inside the tent!

GAS

Liquid butane gas burns cleanly, is cheap, and comes in a variety of pressurized cartridges. Most stoves are designed to be used with one size, although some made for resealing cartridges can take different sizes. Butane doesn't need priming, so the stove lights instantly. But as the fuel uses up, the pressure in the cartridge reduces, so cooking times get longer as the gas dwindles Butane burners are affected by the wind, and the liquid gas becomes less willing to vaporize when it's very cold. Ironically, it works better in sub-zero temperatures at altitude, where low air pressure counteracts the effects of the cold.

Resealable cartridges offer more flexibility for backpackers. With its valve and threaded connection, the cartridge can be removed from the stove for ease of transport, or can be swapped for a fresh one once the flame starts to get a bit lazy.

Pure Propane burns without any loss of performance below freezing. Primus and Coleman both do propane cartridges, but there are disadvantages. The problem with propane is that the pressure at which it can be stored in liquid form is much higher than butane, so consequently the container needs to be heavier. However, propane and butane are available in a 40/60 per cent mixture which works very well in low temperatures, and is available in most standard sizes of cartridge - making virtually any gas stove suitable for winter use.

NEW SELF-HEAT MEALS FOR EXPEDITIONS

Pre-cooked meals are nothing new but one that self-heats and tastes good is something original. In the last year a new collection of dishes have

have appeared under the brand name 'Hot Dish' and these have proved to be eminently suitable for certain types of expedition. The attraction is that the meals are of high quality, high nutritional value and have a shelf life of two years. The calorific values of the nine meals range from 50Kcals (Vegetable Casserole) to 707Kcals (Bangers and Beans).

Over the counter these meals come in an aluminium foil container within a cardboard box that also contains a heating tile, plastic cutlery and a serviette. Ideal for the fisherman, camper, cyclist or climber queuing for his turn at Stanage. Just pull the tab on the igniter, the temperature rises to 1300°C, and eight minutes later your meal is ready to eat and the tile will keep it hot for 20 minutes.

In 1988 these meals were tested by expeditions in the contrasting environments of Spitsbergen and the desert of South Jordan. Food preparation in deserts needs to be simple, quick and not too demanding of water because the light goes fast, temperatures fall quickly and water may be limited in supply. To reduce weight the Harrow Jordan expedition went without the tiles and cardboard packaging opting only for the foil containers. Four of these could be heated at once in a large cooking billy, and the boiled water used to make mashed potato and hot drinks. You could argue that the 300gm meal was heavy but not when the water saving, simplicity and deliciousness were taken into account. To eat 'Hot Dish' meals every day would be a luxury. The expedition kept them for treks and periodic 'goodies' days to add variety to the regular dehydrated foods.

In Spitsbergen the thinking was different. In addition to the Hot Dish, the team took two heating tiles because they anticipated that at temperatures below -10°C extra heating would be required to partially thaw the product prior to reheating. As it turned out the temperatures never fell below -10°C and the idea was not properly tested. To take the whole meal and its tile on a long trek would be heavy and extra calories would be needed to supplement. Nevertheless the team felt that the appeal of the dishes was sufficient justification to use them as a tasty interlude to other foods. The only problem that they noted was the disposal of the foil and heating tiles after use in what is a fragile environment.

DETAILS OF 'HOT DISH' CAN BE OBTAINED FROM HOT DISH, INTERNATIONAL HOUSE, LANGTHWAITE GRANGE, SOUTH KIRBY, WEST YORKSHIRE WF9 3AP (0977 43681/49242).
TONY ESCRITT AND MIKE HAMMOND

FALMOUTH TO ST IVES BY NORDKAPP

There were a number of reasons why I was delighted to be invited to join a small but select group of paddlers who were planning to canoe from Falmouth to St Ives during the first week of August.

Firstly, although a canoeist for two years only I had always fostered the idea that sea touring was one of the more pleasurable aspects of the sport. Having competed in a couple of slalom events and completed the Devizes to Westminster among other marathon events and thoroughly enjoyed them, they are competitive. White water canoeing is exhilerating but suffers problems of access and anglers.

Secondly, whilst the rest of the party were seasoned sea kayakers who had done the Western Isles, the Pembrokeshire coast and Lundy Island on several occasions, my total experience in a sea kayak was two recent days at Lulworth Cove.

Finally, this was a part of Cornwall with which I have a special affinity having been born in a house on top of the cliffs at Mullion almost 40 years ago.

The participants on this particular trip were:-

West Norfolk Canoe Club:
- Trevor Riches, Joint Expedition Leader, support stroke demonstrator
- Trevor Wadsworth, Camp-site finder
- Robert Howlett, Fittest paddler, lightest boat and equipment "but I always have everything I need"

Blackwater Valley Canoe Club:
- Jonathon Butt, Joint Expedition Leader, fisherman, medical orderly
- Jerry Rogers, Cornish language and local knowledge expert, estimator of time to nearest pub, expedition diarist

To ensure a complete understanding some words which may not have an immediate meaning for someone who is not Cornish are given below:-

Cornish	English
'10 minutes'	A period of time lasting up to an hour and a half
Freetrader	Smuggler
Emmet	Holidaymaker (Lit. ant)

Day 1 - Saturday, 30th July

After shuttling a car to Carbis Bay we eventually launched from Swanpool beach at 1.45 p.m. in bright sun and an offshore wind of about Force 4-5. Rock hopping in the lee of the shore whilst experiencing a bit of a chop when crossing the bays was a perfect way to start our trip.

It was while crossing Maenporth beach that we met a novice windsurfer who was losing a battle with the strong offshore wind and having great difficulty in tacking back to the beach The two Trevors towed him the 800 yards and saved him a walk of about 20 miles from the other side of Falmouth Bay.

Soon we turned in towards the Helford River and now met the head wind on an incoming tide producing the short stumpy little waves that break over the bow and soak the paddler. A matter of 20 minutes or so saw us at Helford itself and a break for a cream tea then followed before turning back towards the sea. The time being 5 p.m. a campsite was becoming a paramount importance.

We paddled up Gillan Creek to Flushing in search of a suitable place to no avail and so moved on to Nare Point where a disused coastguard hut looked like a possibility as a last resort. Whilst cruising down to Porthallow, Trevor Wadsworth spotted a green patch about 20 feet above the rocky shoreline which from 50 yards gave the impression of being a four star site where we made a tricky landing on rocks being washed by a swell of a couple of feet.

Having set up camp and eaten it was a mere '10 minute' walk to the Five Pilchards in Porthallow to mull over the first days paddle.

Daily mileage - 14
Cumulative mileage - 14

Day 2 - Sunday 31st July

The wind had dropped to a Force 2 and still blew offshore while the sea was smooth with slight ripples and swell. At 10.45 we set out for Kynance Cove the intended halt for that night.

Having launched Robert "I have everything I need" broke a rudder control line. For a brief moment it was contemplated whether or not to run a book against the chance of Robert having some repair line. However that evening Trevor R. helped him out of his predicament.

Off Manacle Point (named after the notorious reef which is the graveyard of many a ship) we saw our first seal basking on a rock. He was in the water and watching us before cameras could be brought to bear. Crossing Coverack Bay we ran into a short squall and it was heads down with eyes screwed against the rain being driven straight into our faces. However, by the time we landed for lunch on the beach it had cleared.

Soon we were on the way again past Kennack Sands to Cadgwith, a particularly attractive fishing cove, where a regatta had attracted a large crowd on the clifftops.

The benefits of a canoe soon became even more apparent as we explored a number of caves on this part of the coastline. Back paddling out of one a large and very colourful jelly fish came into sight. The consensus was that it was one of the more unpleasant variety and apart from taking photographs we kept it at paddles length. A less expected sight was that of a young fox on the rocks at the foot of cliffs some 200 feet high. He was so intent on his errand of sniffing out limpets and seaweed that he was well on his return up the cliff before he turned and saw us - something that would have been impossible had we been in a motor boat.

With the sky brightening we gently paddled past the Lizard and Cadgwith Lifeboat Station and Church Cove, Landewednack. The church is the most southerly on the mainland and its pulpit is the scene of the last sermon to be given in the Cornish language.

At 4.30 p.m we rounded Lizard Point just as the tide was beginning to flood. After a brief photo call with the usual crowds in the background on the cliffs we moved on through some small overfalls to Kynance Cove where Jon (SI) managed to carry an inflatable dinghy up onto the beach with him.

Camp was established at 6.30 p.m. once the emmits had left the beach. The daily ritual of a '10 minute' walk to the local hostelry took some members of the party over an hour to reach the bar in the Lizard Hotel.

Daily mileage - 18
Cumulative mileage - 32

Day 3 - Monday, 1st August

The group left Kynance on a flat calm sea, no wind and under a roasting sun. Rock hopping and cave exploring brought us to Mullion Cove, another unspoilt fishing cove, where we took our lunch break.

After a pleasant hour we left the cove and quietly paddled past Polurrian cliffs where the other members of the party were invited to stand in their canoes and pay homage to the house where I was born. On the basis that even on a mirror-like sea it would be tempting providence too far they all declined.

On to Poldhu Point where in 1902 Marconi first sent a wireless signal across the Atlantic and so gave birth to the age of radio and high speed communications and technology.

Off Podgwinnian Point, at the southern end of Loe Bar, Jon, endulging in a spot of fishing, caught a pollock. A few moments later Trevor Riches and I, encouraged by Robert, played on the break line. Inevitably along came the swell to catch us out and having been left high and dry on the beach I turned to see Trevor upside down and quite obviously getting wet. Clearly this was a highly advanced technique, for landing on a beach, to which one doesn't aspire until he reaches the ability and heady heights of an SI. What tricky manoeuvre, I wondered, does a coach employ?

Safely back on the water again and the party paddled into Porthleven to replenish stores. Half an hour later and in close formation the paddlers left the harbour and headed towards Rinsey Cove.

Half way there and Trevor W. had done his stuff and found a campsite on a grassy bank just a few feet above a secluded beach. This was a five star site in that a stream tumbling over the cliff provided cold running water.

Whilst unloading the canoes Trevor R. had the misfortune to cut his leg open on a particularly sharp piece of quartz. In no time Jon had bandaged and dressed the wound to the extent that Trevor was able to walk the '10 minutes' to the Ship that night.

Daily mileage - 13
Cumulative mileage - 45

Day 4 - Tuesday, 2nd August

Another scorching hot day with a northerly to north-east wind of Force 2. Still blowing offshore which if it held its direction would be a following wind down towards Land's End.

Having breakfasted and struck camp we were on our way at the comparatively early hour of 10.15 a m. and heading towards Prussia Cove where 200 years ago the renowned freetrader John Carter operated under the pseudonym of King of Prussia.

On to Marazion and St Michael's Mount where we just managed to cross the causeway seconds before the falling tide left it exposed. After lunch we turned south-west towards Mousehole. The wind on this stretch was now cross following and the most awkward direction for a rudderless boat. Although Trevor W's sea king was also rudderless he had a very pronounced fin under the stern to help keep him on the straight and narrow. The other three Nordkapps all had rudders and I was continuously sweep stroking on the right for the next hour while my left paddle only got wet while putting in the occasional left hand stern rudder to counter the yaw of the boat. That stretch of the journey convinced me that the next boat I have will be complete with rudder.

Mousehole had dried out on the exceptionally low spring tide and no attempt to land was made. Now with the wind behind us we made good progress to Penberth Cove where Trevor W. found the next campsite. From the sea the likely spot for tents looked inviting although there was a slope of about 45°. The landing, however, was something else with the shoreline consisting of huge boulders of up to 10 feet in diameter, and rocky outcrops.

Carrying a fully laden sea kayak vertically some 20 or 25 feet over rocks and small cliffs after a days paddling is certainly character building. However, it was not long before everyone was hacking at thistles and brambles

to make a clearing for the tents. All this was followed by the evening's '10 minute' stroll to Treen and the Logan Rock pub.

Daily mileage - 18
Cumulative mileage - 63

Day 5 - Wednesday, 5th August

Penberth Cove being east facing was basking in bright sun by 6.30 a.m. and I was now beginning to doubt stories of previous sea trips in heavy seas and pouring rain that soaks tents and sleeping bags and of being storm bound on Lundy in winds so strong that it took two people to hold Jon up while he took a wind speed reading.

After launching we paddled round Logan Rock (the stone on top of the cliffs not the public house) and into Porthcurno where the open air Minack Theatre is to be found. A few moments photographing the backdrop and we moved on down the coast.

Rounding Gwennap Head and Land's End came into sight for the first time. Lunch was taken in Mill Bay - a secluded sandy beach just short of the headland itself. A seal studiously watching all the time.

Lunch over and we paddled out to Longships Lighthouse 1 1/4 miles offshore. Approaching the rocks and dozens of seals could be seen and although they dived into the water they came much closer to us than any others had done. Moving in single file as quietly and calmly as possible between the rocks a head would suddenly appear and swim between us.

While rafting up for a photo session with the lighthouse in the background our presence was noticed by the Trinity House maintenance men who invited us in to look around. We were just assessing the best landing place when a young seal surfaced and played with the toggle on Trevor R's bow before diving down again.

A very pleasant 1 1/2 hours was spent in the company of Brian, Richard and Ian while they showed us around the lighthouse which they were in the process of refitting now that it had become a fully automated operation, the last keeper having left some two months earlier.

The Scilly Isles, 27 miles to the south-west, could clearly be seen from the helicopter pad, the vertiginous height of which, at 140 feet above sea level, provided food for thought of the desperation level of someone who has to jump 200 feet from an exploding oil rig. It was from this vantage point that Trevor W. spotted a likely campsite at the northern end of Whitesand Bay.

We left the lighthouse at 2.30 p.m. and gently threaded our way through seals, rocks and a tide rip to land back on the mainland. Once again it was a question of waiting for the emmets to leave the beach before setting up camp and while Trevor W. and I sunbathed the other three walked back to Land's End.

Daily mileage - 13
Cumulative mileage - 76

Day 6 - Thursday, 4th August

Although it was warm the day was dull and overcast while the moderate sea state 4 provided the largest swell encountered on the trip so far. The slight south-west wind provided little help in our paddle against the tidal stream.

On leaving the beach behind us we followed the usual routine of rock hopping to Cape Cornwall where we encountered our first overfalls of the day. Much personal excitement but the others were fairly cool about it all.

We were now passing one of the major tin mining districts of byegone days and the spectacular locations of the engine houses right on the edge of the cliffs was cause for further photographs to be taken. On leaving Botallack and Levant, whose very names have passed into mining folklore, to our right I informed the group of their various tragedies and successes. Their workings extending up to 3/4 mile out to sea were actually directly underneath us at this point.

Off Pendeen Head the overfalls were between 12 and 15 feet high and breaking. This was real excitement and while we enjoyed the surfing opportunities our progress over the land was very slow. This is a rugged coastline and with no obvious campsites. The rare sandy cove, under water at high tide, is backed by sheer cliffs 150 to 200 feet high.

Approaching Gurnard Head Trevor R was momentarily consulting his chart when a swell caught him unawares. A deep support stroke soon had him upright again but because Robert and Jon had not witnessed the event he repeated it a few moments later.

Past Zennor Head, with no sign of the mermaid who lures sailors and canoeists to their doom on the rocks, and soon Porthmeor beach at St Ives came into sight. Having restocked food and water we left the harbour of St Ives at 3.30 p.m. and set out for a quick sprint across the bay the Godrevy Point and our last campsite. The sun had by now returned and the 200 yards of dragging the fully laden canoes across the beach was hot, difficult and tiring work. The expedition was now officially over and the evening was spent in the Pendarves Arms in Gwithian just '10 minutes' away discussing next years trip.

Daily mileage - 24
Cumulative mileage - 100

Friday, 6th August

The short journey back to Carbis Bay and the cars was prefaced by a circumnavigation of Godrevy Island and its lighthouse

My lasting memories of sea kayaking are of total pleasure as we quietly moved down the coast at one with the natural world and having access to places inaccessible from the land. It really is a special kind of freedom and I, for one, can't wait for next years trip.

From: ANORAK, The Magazine of North Atlantic Kayakers

Kayaking the Nain Area of Labrador
Bill Farthing, Bangor, Maine

On July 14th 1988, I stood on top of Mt. Thoresby, on South Aulatsivik Island, about 30 miles north of the village of Nain in nothern Labrador. From the 3000 foot summit I looked east over hundreds of icebergs floating down the Labrador Current from Greenland and dozens of barren islands of the Nain Archipelago. To the south Thoresby sloped gently downward, past dozens of ponds, to Kolotulik Bay eight miles away. To the west I could see Port Manvers Run, the channel between Aulatsivik and the mainland through which we had paddled the day before, and on the mainland was the shining peak of Man-O-War Mountain, at 3200 feet, the highest mountain in this part of Labrador. To the

north a steep cliffside dropped directly to the water, and I could see low, sandy Thalia Point, a place with Inuit campsite ruins that we planned to visit in a few days. In the distance to the northwest lay the majestic Kiglapaits - the saw tooth mountain range - with dozens of snow-capped peaks.

Standing on top of Mt. Thoresby was the culmination of a dream that had started three and a half years earlier. Early in 1985 I had signed on for a sea kayaking trip in the Nain area, to be led by Tony Oppersdorff. For five months I had spent several minutes each day standing on the back stairway of my house, examining the topographic maps of our planned route. As it turned out we were unable to reach Nain that summer due to ice conditions, so we switched the trip to southern Labrador. The southern trip turned out to be a great trip (see my article in ANORAK, April 1986). But I continued to dream about seeing northern Labrador, where the Inuit people live and the scenery is more spectacular. For personal family reasons I couldn't get back to Labrador for another three years, and during that time I stopped frequently to look at my set of maps, which grew to an area 9 feet high by 5 feet wide covering all of northern Labrador. Mt. Thoresby became the symbol of my quest, since it is the highest mountain on my planned route around South Aulatsivik Island. My companions on the trip were Tin Smith, 35, a businessman/carpenter from South Berwick, Maine; Ken McCormick, 42, a real-estate salesman from Birchrunville, Pennsylvania; and Frank Roberts, 55, a zoology professor at the University of Maine. Tin and Ken were new friends, whom I met through a trip notice placed in ANORAK. I had known Frank for several years as a university colleague.

The group mustered at the Goose Bay airport on July 6th and on the 7th we flew to Nain in a Labair charter flight. (Due to some misinformation from Labair we had failed to book tickets on a regular Labair flight, and the flight was full when we tried to buy ticks on the 6th. The coastal boat was behind schedule due to a late ice-out this year.) At Nain we assembled the two Klepper doubles on the beach, watched part of the time by curious Inuit children. After a fried chicken supper at Jenkin's Restaurant ("Our Only Competition is Your Home!") we paddled across Nain Bay to Rhodes Island. There was plenty of daylight left for setting up camp at 9.30 p.m. Then Tin took off by himself on a rugged little climb up the nearest hill, where he had a spectacular view up Nain Bay to the setting sun.

In the morning as we were leaving the island we saw a small whale, probably a Minke. Paddling up Port Manvers Run, we got a fast ride through a narrow place called First Rattle. The RCMP ranger at Nain had told us that we would have to portage there because of big standing waves, but we luckily arrived at an optimum time, about one hour before high tide. That night we camped near Webb Point, where Tin caught a fine arctic char.

Establishing a pattern that we were to continue through the trip, we stayed two days at our first campsite before moving on. We placed a higher value on hiking and exploring the land than we did on paddling every day and trying to cover as many miles as possible on the water. The landscape near our Webb Point campsite was mostly a spruce tamarak forest; the ground was covered with reindeer moss. Exploring the nearby area we saw several white crowned sparrows; this proved to be the most common bird species in the forested areas where we travelled. I never tired of hearing their spring songs, with so many variations on the main theme by different individuals. In the forest I heard a white crown making a distress call, and when I investigated I discovered the cause: a rare hawk owl, which was perched in a spruce tree. I got a good look at it, with its grey face framed by dark eyebrows and side-burns; it looked back and forth between me and a black-backed gull that was flying and squawking overhead, but it seemed to ignore the sparrow that was putting up such a fuss in a nearby tree. Later in the day Frank showed me a pair of semipalmated plovers; they made their broken-wing display and led us around the grassy area near the shore, and we never did find their nest. A flock of red-breasted merganzers raced past overhead.

On the 10th we paddled to the west end of Webb Bay and camped on a long sandy glacial moraine. The area is beautiful; the grey cliffsides of snow-capped Mt. Lister reminded us of Ansel Adams' photographs of Yosemite Park. A hike up a nearby 1000 foot peak gave us our first high view of the glacial landscape of Labrador: mountain peaks ground smooth, broad valleys, moraines, and lakes and ponds everywhere. There is nothing I like better than hiking above timberline. You don't have to go far to get above timberline in inland Labrador, and on the outer coast timberline - the tundra - begins at water's edge. We saw a variety of pretty little tundra flowers above timberline, and white crown sparrows living in the foot high patches of black spruce krumholz. Curious Canada jays followed us through the woods on the way down Back at the campsite we saw a lone caribou, whose tracks we had seen in the sand that morning; we wondered how he got separated from the herd. We never saw the herd, though we were told that caribou herds do sometimes come down to the shore of Nain Bay.

The 12th was the most miserable day of the trip, weatherwise. It was cold, rainy and windy as we paddled out of Webb Bay. After all, this was just about two weeks after ice out. (It might have been better to start the trip later in July, when the weather would be warmer; at least we had little problem with mosquitoes during the first week.) We stopped at the Webb family cabins on the north-west corner of the bay, since the ranger had told us that Mr Webb liked company and would probably invite us in for tea. But Mr Webb wasn't there, so we paddled on in the rain. It was so gloomy that we couldn't see the red on a pair of red-throated loons. That night we were comforted by a good hot supper (lentil chili and bannock bread) cooked over a campfire. A trail of large, fresh bear tracks in the sand kept me a little bit on edge that night. The next morning we paddled up the north arm of Port Manvers Run, past Inuit graffiti sprayed on a rock ledge, past glaucous gulls on nesting ledges, through Second Rattle, to Mill's Cove at the foot of Mt. Thoresby. On that beautiful afternoon it felt good to bathe in a freshwater stream, then relax in the sun and watch the glaucous gulls fishing in the cove, their white wings contrasting beautifully with the dark grey cliffsides. That night, when we saw a black bear near our campsite, I thought that maybe Ken was right to bring a folding shotgun for protection, though luckily we never had any trouble with the bears. The next morning I saw a pair of robins in the woods; this is about the northern edge of their range on the east coast.

With the climb of Mt. Thoresby behind us, on the 16th we paddled to Port Manvers proper, at the north end of the run, where we camped near a beach not far from a beautiful 200 foot waterfall. There we encountered two geologists who were prospecting for platinum; we did not wish them good luck. The next day Frank and I hiked up a broad valley, while Tin and Ken hiked the ridge top. On our hike Frank and I encountered the first of several palsa bogs, characterised by numerous hummocks about two feet high, with puddles in between. We could usually keep our feet dry by hopping from one hummock to the next. In the bog we saw water pipits and horned larks. Further up the valley we saw two dozen Canadian geese on a pond. The tundra was so attractive that it was tempting to keep walking north to the main ridge of the snow-capped Kiglapaits, about 12 miles away, but we had to turn back as we were not equipped for it. On the way down we had a rough time beating our way through head high alders on the steep slope above the campsite. Frank and I got separated, and it occurred to me that if I were to break a leg in the dense alders I might never be found - I couldn't be seen either from land or from the air. It took a while to find a safe way to cross a roaring mountain stream on the steep slope. It was a relief when I finally got safely back to camp. Tin and Ken and Frank caught some codfish to go with supper; the last fish of the trip.

On the 19th we paddled down Port Manvers, passed a flock of surf scoters, and stopped at Thalia Point where we saw several rings of rocks, tent

whistle sound that I had never heard before. Zipping just two or three feet above the surface, it seemed that a white wing patch was always visible on their rapidly beating wings. I figured out that they must have a white patch on the bottom, as well as on the top, of the wing. (Later my photos confirmed this.) I reminisced about an occasion only a month earlier when I had stood at the edge of a cliff on Mt. Desert Island, Maine, and looked down on diving guillemots; their white wing patches enabled me to clearly see how they use their wings to swim under water to catch fish. When we finally got to Paul Island I was beat. It had been a hot, cloudless day, and I don't do well on such days. Wearing an immersion suit didn't help any. I should have drunk more water during the day. But when it cooled down that evening I could fully appreciate the beauty of the valley where we were camped. Of the mountains and cliffs all round us, Frank said: "There is more good rock climbing on Paul Island than in all of New England." And Paul Island is only one of the more accessible parts of northern Labrador.

On Paul Island Ken and I did one of the most memorable hikes of the trip. On a perfect summer day we walked about a mile up the valley, at the edge of a large palsa bog, then worked our way up about 1/4 mile through a dense forest to get above timberline. We stopped for lunch as the foot of a high, black cliff from which house-size rock slabs had split off. From the top of the 800 foot high ridge we looked back down on the bog and saw that a flock of about 80 birds had settled on a mound that we had passed earlier (probably black ducks, but we couldn't be sure from that distance). Then we climbed a rounded peak about 1200 feet high. Its surface had been polished smooth by glaciers and it was strewn with boulders from one to five feet in diameter, left behind by the glaciers. All around us were similar dark, rounded, boulder-strewn peaks. We worked our way along the ridge top until we came across a beautiful clear, cold snow-melt pond, where I took a very short swim. At the end of the ridge we looked out to sea at icebergs and other islands, and we looked down a 500 foot cliff to our campsite. Then we realised that there was no safe way for us to get down from there. We had to retrace our steps along the ridge, half way back to where we had started from, before we found a place to scamper down, using our hands and backing down in some steep places. It was an exhilarating hike.

At that point we were nearly back to Nain, and we had finished the main trip that we had planned. I had allowed for a few paddling days being lost due to bad weather, but that didn't happen, so we had a few days left before our scheduled flight out on August 1st. We decided to stop in Nain to buy some extra food, to increase both the variety and size of our meals. Then we paddled up almost to the head of Nain Bay for more exploring, and on the way back we spent two days on Barth Island. Finally on the 31st we paddled across Nain Bay, through the roughest seas of the whole trip, back to Nain. We stayed in the hotel that night, and repacked our gear in preparation for the morning flight back to Goose Bay.

Having been to Labrador two times, southern Labrador (Cartwright to Charlottetown) in 1985, and northern Labrador in 1988, a comparison of the two trips might be of interest. The southern trip had more exciting moments, for three reasons: first, we saw lots of whales and icebergs up close; second, we had more windy days and rough seas to make the paddling exciting; and last but not least, it was particularly exciting just because it was my first trip on the Labrador. The fishing was better in '85 and the friendliness of the local people added to the enjoyment of the southern trip. I enjoyed paddling my fibreglass single in '85 more than I enjoyed the slow Klepper folding double in '88, but we couldn't have flown to Nain with the fibreglass boats, and the doubles have safety advantages. The northern trip had sources of satisfaction of its own: the landscape was more dramatic, with real mountains rather than mere hills, and we did a lot more hiking and exploring on the northern trip. Also there are old Inuit campsites to visit in the north and my new interest in

rings left by Inuit hundreds of years ago. A few miles to the north lie what are said to be the oldest surface rock formations in the world, about 3½ billion years old. Finally we paddled through the gap into the Labrador Sea - on the outside at last. We were greeted on the outside by black guillemots ("sea pigeons"); they are my favourite seabirds back in Maine, and their antics flying around us in Labrador endeared them to me even more. The sea swell made the paddling conditions interesting. In fact it was one of the few times of the trip that we had any significant action in the water; the Labrador weather was unusually calm most of the time during our trip. But shortly after we arrived at barren Jonathan Island a fierce wind came up. Tin used some flat slab rocks to build a fireplace and managed to start a driftwood fire and cook spaghetti, while the rest of us worked together to pitch the tents in the wind. The next day we explored the island, which had a big palsa bog in the middle, occupied by several pairs of water pipits. From the north shore of the island we could see almost a hundred icebergs, while other barren islands lay to the east and south. I don't know why I find this barren land so attractive. The landforms? The big sky? The feeling of being back in time?

On the 21st we paddled to nearby Sculpin Island, which was one of my main destination goals of the trip. A couple of years earlier I had read about a trip to Sculpin in the 1920's, when they investigated what they believed to be Viking ruins. More recent archaeological investigations have concluded that they are in fact the ruins of Inuit campsites, from several different periods of Inuit culture. Besides tent rings both large and small, there were some low (2 or 3 foot) walls. I wondered whether one large rock circle (15 foot diameter) with a smaller ring inside (near one edge) might have some symbolic significance? Sculpin was apparently a campsite for Inuit seal hunters; the currents keep the water open there later in the fall, when other areas are already frozen. After exploring Sculpin for a couple of hours we paddled to the head of Kolotulik Bay on South Aulatsivik Island, stopping along the way for photos of a grounded iceberg. The next day Ken and I portaged a boat about /4 mile to Kolotulik Lake where we hoped to catch some fish, but we had no luck. In the outflow stream we collected several pieces of Labradorite, a semi-precious mineral that reflects a beautiful blue light in the sun. That night, with no wind, the mosquitoes were vicious. Actually we didn't get bitten very much since we kept covered with long sleeves, bug dope and head nets But it was quite a nuisance to have them swarming around in clouds. The next morning when I awoke, I thought a light rain was falling, but it turned out to be thousands of mosquitoes that were trapped between the tent and the rainfly.

On the 23rd, after a morning fog lifted, we paddled out of Kolotulik Bay and down the east side of South Aulatsivik Island. We stopped at a small fishing village across from Little Black Island, where we saw several Inuit men, women and children on a fishing boat that was tied up at the dock. "How is the fishing?" we asked. Maybe it was the wrong question. They were not friendly, and they did not want to talk with us. We heard later that this family, though not outwardly friendly, would have helped us if we had been in trouble. Our general impression of the Inuit people we met on the trip was that, except for the children, they simply are not interested in us. Maybe they have seen enough outsiders that they wish we would go away. It was quite a contrast to my 1985 trip on the south coast where the local people (mostly white settlers) were very friendly and curious about us, and often invited us to tea. That night, further down the coast, Tin and I climbed a hill from which we had a beautiful view of icebergs and islands in the golden light of the setting sun.

On the 24th we continued south to Paul Island. By this time we had adjusted the foot braces so Tin could sit in the stern seat and have room for his long legs. In the bow seat, with no responsibility for steering, I could do more daydreaming and birdwatching. I was fascinated by the flocks of guillemots. As they flew circles about us they made a very high pitched

birding added a new dimension to the second trip. The one thing I might have done differently on the second trip, if I had known we would have good weather and extra time at the end of the trip, is that I would have paddled north from Thalia Point, around Cape Kiglapait, to explore the Kiglapait mountains. But all in all, both trips were great. Only a trip that combined the best features of both could be any better. There is no doubt in my mind that Labrador is the premier sea kayaking area in eastern North America.

ANNOUNCEMENT

Beginning with the first issue of Anorak in 1989 I would like to write a safety column. If you have any personal experiences where you or others were endangered while kayaking, please contact me. If you do not want your name used, that wish will be honoured, but please relate the story so others can benefit from your experiences. Also, if you have heard of other incidents or accidents, pass on the information and I will try to track down the story.

Tim Hodgens,
7 Mill Road, Westboro, MA 01581
508-366-9245