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New Zealand CANOEING & RAFTING

33 WINTER 1984

New Zealand Canoeing & Rafting Magazine

PUBLISHED BY THE NEW ZEALAND CANOEING ASSOCIATION
P.O. BOX 148 DRURY SOUTH AUCKLAND N.Z.

The NEW ZEALAND CANOEING ASSOCIATION is the administering body of canoeing, kayaking and rafting in New Zealand. Although individuals may be members of the Association, the majority of paddlers are members of the Association through membership of a local paddling club. Those clubs are as follows:

ARAWA CANOE CLUB	P.O. Box 13 Christchurch
AUCKLAND CANOE CLUB	P.O. Box 3523 Auckland
GARDEN CITY CANOE CLUB	36 Linwood Ave. Christchurch
GISBORNE CANOE & TRAMPING CLUB	P.O. Box 289 Gisborne
HAMILTON CANOE CLUB	P.O. Box 9497 Hamilton
HAURAKI KAYAK GROUP	P.O. Box 3580 Auckland
HAWKES BAY CANOE CLUB	Flat 18/ 412 Whitehead Road Hastings
KAIMAI CANOE CLUB	P.O. Box 2354 Tauranga South
KUPE CANOE CLUB	P.O. Box 3768 Wellington
NELSON CANOE CLUB	P.O. Box 793 Nelson
NEW PLYMOUTH KAYAK CLUB	P.O. Box 6 New Plymouth
NORTHLAND CANOE CLUB	130 Beach Road Onerahi Whangarei
NORTHSHORE CANOE & YOUTH CLUB	35A Taharoto Road Takapuna Auckland
OTAGO CANOE & KAYAK CLUB	P.O. Box 5404 Dunedin
PALMERSTON NORTH CANOE CLUB	P.O. Box 1126 Palmerston North
RIVER CITY CANOE CLUB	P.O. Box 129 Wanganui
ROTORUA CANOE CLUB	P.O. Box 1484 Rotorua
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HUKA FALLS CANOE CLUB	54 Pataka Road Taupo
WESTLAND CANOE CLUB	37 Bright Street. Cobden. Greymouth

'NEW ZEALAND CANOEING AND RAFTING MAGAZINE' is the quaterly magazine of the N.Z. Canoe Association and its member clubs. The editorial board of the magazine is entirely seperate from the N.Z.C.A. and the views expressed in the magazine do not necessarily co-incide with those of the N.Z.C.A. nor the Editors.

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SUBSCRIPTIONS and DISTRIBUTION ENQUIRIES should be addressed to: Publications
N.Z.Canoe Assn.
P.O. Box 3768
WELLINGTON

Subscriptions are $7.50 per year (4 issues). Mailed within New Zealand.

COMMENT

The Egmont Electric Power Board intends to seek from the Ministry of Transport, a grant of control over Lake Rotorangi. This is the new hydro lake formed behind the dam on the Patea River. The intention of the Board is to control activities on the lake and foreshore and would allow it to impose, for example, speed restrictions on boats as the wake of boats might cause erosion on the banks.

When the Patea Dam was initially proposed, there was considerable emphasis placed on the recreational advantages of the hydro lake - in effect, the Board claimed that the lake would provide a much-needed recreational resource and when opponents suggested that erosion from boat wakes would eventually mean limited recreational use, the Board claimed that this would not be so.

Two issues should concern us here.

One: If a scheme is 'sold' to the public on the basis of recreational use, what obligations should be placed on the developer to ensure that these uses should be catered for?

Two: Who owns the lake? The Ministry of Transport - Harbours and Foreshores section has the authority to control the use of all navigable waterways and to make regulations for the use of such waters. The Ministry has not the ability to actually administer all navigable waterways and so hands over this right to administer to local organisations by a 'grant of control'. So, for example, Lake Taupo and all rivers flowing into the lake have been given to the Department of Internal Affairs - Wildlife Division, to administer, and the Harbour Master at Taupo is given the authority to control users on the Lake and Tongariro River.

It seems to me that if a specialist group, such as a Power Board, is to have the right to control a resource, we can hardly expect an unbiased handling of the needs of users - whose needs will be met first? It seems to me that it is time that canoe clubs sought Grants of Control over their local rivers - for example the Kaimai Canoe Club could control that part of the Wairoa below Maclaren's Falls, and Palmerston North Canoe Club the Mangahao Slalom site. As canoeists and rafters are the main users of these river sections it makes as much sense that they control them as it does the Egmont Electric Power Board Lake Rotorangi.

Getting back to our Patea hydro scheme; I see that a month after the lake was filled seepage has been found from the limestone beneath the penstock slope - shades of Ruahihi and Whaeo? But why am I so interested in the Patea hydro? When the scheme was first discussed there was interesting comments made by both the Ministry of Energy and the Ministry of Works and Development - they said that all the 'safe' hydro options had been built and that in future hydro schemes would be built under increasingly more difficult conditions (slip prone country, earthquake risk etc). The Patea River is similar to the Mohaka, Rangitikei, and Wanganui Rivers - so what is learnt from building the dam on the Patea would be useful for the later developments planned for the larger volume Mohaka, Rangitikei, and Wanganui. We know that plans are well underway for the Mohaka, and we know that there has been some study done on the 'Narrows' on the Rangitikei (regarded as the cheapest option on this river). We also know of a proposed high dam at Atene on the Wanganui that will flood back to the Ohura River.

It seems to me that this growing trend for local authorities and ad hoc local committees to gain control of our resources and to administer them for 'our own good' is a bad omen of things to come - where will it all end? Are they really interested in looking after our interests? or is it that their own empire-building self interests come first? Next we will have to pay for them to administer and 'look after' our rivers for us!.

Graham Egarr - Editor.

COVER PHOTOGRAPH THIS ISSUE: Lucy Forde on the falls, Moawhonga River
Photographer was Max Grant.

Tokaanu to Taupo

ERIC TERZAGHI.

The long-awaited maiden voyage for the Nordkapp finally materialised the weekend of May 26/27 when I could be dropped off at Tokaanu and picked up at Taupo by Andre while delivering Donald Johnstone to Auckland Airport. Donald had just set off for another two month season on the Europa Cup circuit after having maintained a fairly vigorous training programme and convincingly defended his No 1 position on the New Zealand Slalom scene since returning to New Zealand last October. (We all wish him well.)

The forecast was for rain and thunder storms, but that kindly off while I was having lunch and watching the flock of black swans resident at the Tokaanu marina.

Rain squalls swept threateningly across the lake, obscuring all but the closest shores. Time to go and for the rain to commence - but not to worry. The first stretch is not very interesting, being low land and populated largely by tacky summer baches. Then came the beginning of the bluffs for which the western shores of Taupo are famous. At first not very high and densely clad with all manner of ferns and bush. As one paddled northward, the cliffs became drier, more exposed and quite clean of vegetation, until the spectacular heights of Kairangahape were reached. With the clarity of the water, the eye was led naturally from the sky line far above, by now cleared to a brilliant blue, down into the depths a seemingly equal distance below.

Rounding the corner, one entered the region called the Nooks, a series of very cosy sheltered little bays surrounded by low bush-choked bluffs - lovely to look at but no good for camping! As the day was wearing on, the bum was tiring, but each new corner brought only a fresh vista of steep bush, interrupted only by the occasional interesting bluff, until finally, towards dark, Cherry Bay appeared. This turned out to be a lovely little inlet with a level, sandy beach, tucked in well back from the lake. A pleasant, dry night was spent, interrupted only by screaming and fighting possums.

The Sunday brought brilliant blue skies and rather different landscapes. Large streams flow into the lake at the long sandy beaches of Wanganui Bay and Waihaha Bay, which are reputed to have interesting water falls to be seen by paddling upstream a couple of kilometres. As Taupo was still a long way off, these were given a miss for this time, but will definitely be visited on the next Taupo cruise.

The north shore assumed yet another aspect. While still ringed largely by bluffs, the vegetation was again rather dense, with many very large old beech (?) trees growing dramatically out of rocky nooks, their massive root systems spreading out over near-vertical faces. In other places, a rather different rock than the argillite, which dominates the Western Bays, appeared, which created a more shallow lake edge. One particular small and very protected bay on Kawakawa Point was sprinkled with tiny islands, each with just a tuft of grass or a small bonsai-like tree perched precariously on its pinnacle of crumbly aggregate of various hues of brown, orange and dull yellows. Below the water level, the lake bottom appeared to be great slabs of the same sort of rock, but shattered, to create deep chasms that disappeared into the crystal clear depths.

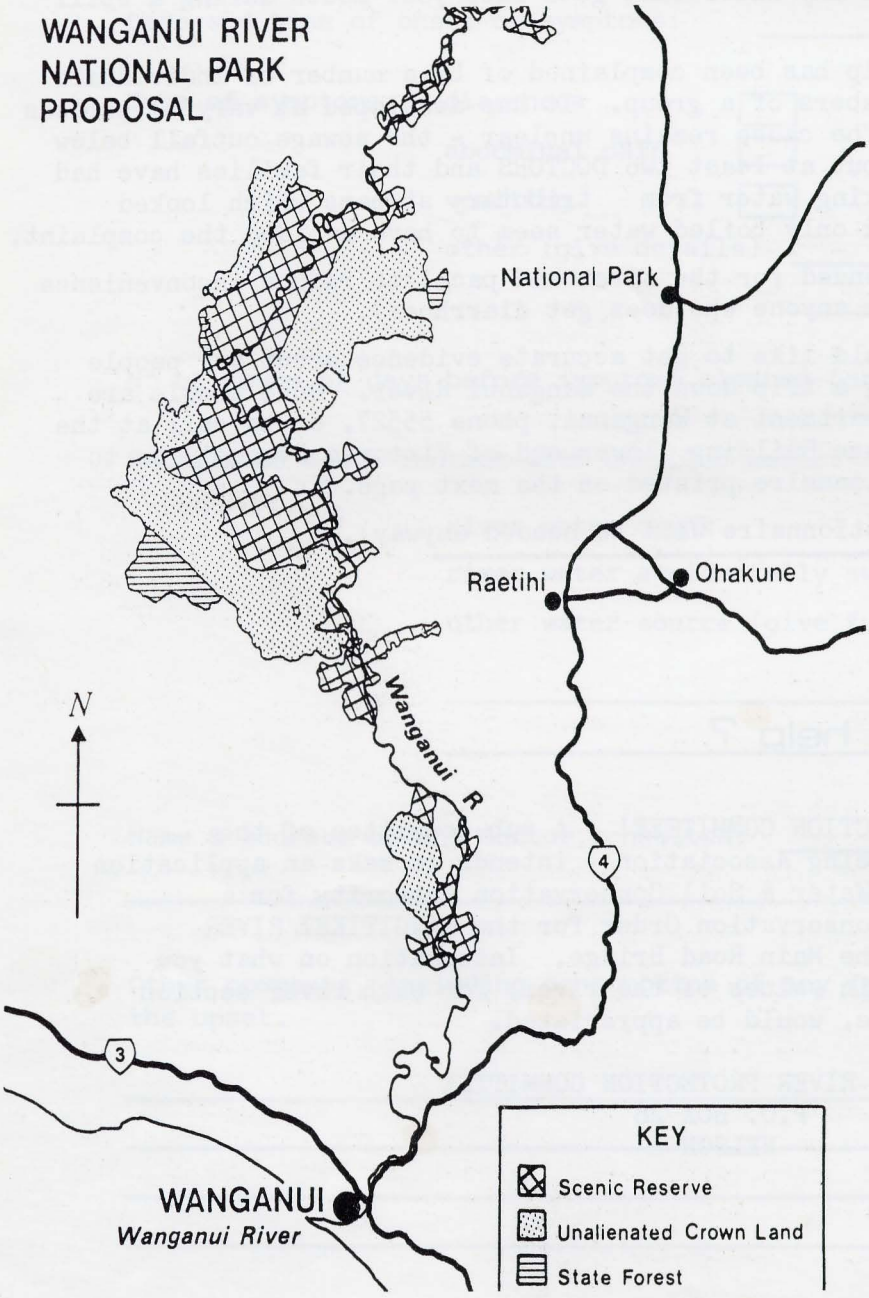
Towards mid-afternoon, the last point was rounded, the arms and shoulders were beginning to complain and the final five kilometre stretch to Taupo passed uneventfully, aside from having to compete with considerable sail and power boat traffic, which mercifully had remained concentrated in this corner of the lake. A brew-up of hot tomato soup, with melted cheese, on the beach, plus dry clothes, was a most welcome and (I think) deserved end to a fine trip.

80 kilometres covered in about 10 hours paddling time.

THE WANGANUI PARK ?

The National Parks and Reserves Authority believes that the 79,000 ha (approx) of reserves, crown land, and state forest land boardering the Wanganui River meets national park criteria. The Authority has now resolved to consult with the Wellington National Parks and Reserves Board on the matter of applying for a National Water Conservation Order to protect the river itself, and to finalise the boundaries of the proposed National Park for the Wanganui River susequent to making a recommendation to the Minister of Lands for the establishment of a National Park.

The study of the Wanganui for National Park status began in 1975. A preliminary assesment was completed in 1980, and a year later the Authority decided that there was a prima facie case for a National Park. A detailed examination of the area was then carried out which endorsed the proposal and a report was then issued for public comment. A total of 1219 submissions were received on the proposal of which more than 65% were in favour of the proposal, nine submissions were opposed to the idea, and the remainder gave qualified support for the idea.



The park proposal excluded the river itself and a large number of the submissions suggested that either the river ought to be included, or that it ought to receive protection consistent with the National Park status of the land along the banks, hence the suggested application for a National Water Conservation order for the river.

The proposed National Park would be significantly different than any other park as it would afford protection to the largest remaining area of lowland native forest (the existing parks are for the most part based on high alpine regions whilst the lowland areas have tended to have been settled and the land cleared.) and it would be centred around New Zealand's most historic and scenic rivers.

The river was once of great importance for tourism - the guest house at Pipiriki recorded 12,000 visitors in 1905, but numbers declined between the wars and has only slowly recovered.

National Park status will ensure that the area will remain as a tourist and recreational asset to the country.

CANOEING DOWN THE WANGANUI RIVER?

ENJOY YOUR TRIP - A FEW WORDS FROM THE MEDICAL OFFICER OF HEALTH.

The use of SAFE DRINKING WATER can be absolutely vital to an enjoyable journey. Experienced canoeists make a practice, every night, of BOILING UP TO 5 MINUTES ENOUGHT WATER TO LAST THEM THE NEXT DAY. This obviously requires you to take suitable pans for boiling, and to have LARGE CONTAINERS FOR CARRYING A DAY'S WATER SUPPLY.

DO NOT: drink unboiled water from the river;
" " " " side streams;
" " " " rainwater or any other supplies along the river;
clean your teeth with unboiled water;
splash water into anyone's face;
put your head under water when swimming;
rely on water sterilizing tablets to make water safe for drinking - they will kill bacteria but are unlikely to be effective against all viruses which can cause diarrhoea;
fail to spit out any water that gets into your mouth during a spill on the river.

Diarrhoea during a canoe trip has been complained of by a number of individuals and sometimes by several members of a group. It has developed at varying periods after leaving Taumarunui. The cause remains unclear - the sewage outfall below that town may play a part, but at least two DOCTORS and their families have had similar symptoms after drinking water from tributary streams which looked clean! Those who have drunk only boiled water seem to have avoided the complaint.

(Lomotil tablets are recommended for the first aid pack, to reduce inconvenience of frequent forced stops for anyone who does get diarrhoea).

The Department of Health would like to get accurate evidence about any people who develop diarrhoea during a trip down the Wanganui River. Such people are requested to contact the Department at Wanganui, phone 55527, or to call at the Health Office (State Insurance Building, lower end of Victoria Avenue), or to complete and post the questionnaire printed on the next page.

(The information on the questionnaire will be needed anyway).

Can you help ?

THE 'RIVER PROTECTION COMMITTEE' - A sub-committee of the New Zealand Canoeing Association - intends to make an application to the National Water & Soil Conservation Authority for a National Water Conservation Order for the RANGITIKEI RIVER from source to the Main Road Bridge. Information on what you think are the main values of the river, for each river section you regularly use, would be appreciated.

SEND TO: RIVER PROTECTION COMMITTEE
P.O. BOX 26
NELSON

To: The Medical Officer of Health
PO Box 645
WANGANUI

QUESTIONNAIRE: DIARRHOEA CONNECTED WITH WANGANUI RIVER CANOE TRIP

Name and address: _____

_____

_____

Date and time left Taumarunui: _____
(or other starting point - give name of place)

Date and time of onset of symptoms: _____

Type of symptoms: diarrhoea ☐
abdominal pain ☐
vomiting ☐
other (give details) _____

_____

N° of hours or days before symptoms cleared (or date): _____

Details of mouth contact with unboiled water:

		Date
river water drunk	Yes/No	_____
river water accidentally swallowed:	Yes/No	_____
other water source (give full details)		_____

_____

_____

Name & address of any doctor consulted: _____

_____

Other comments, including consumption of any food which might have caused the upset.

_____

_____

_____

_____

Signature: _____

Date: _____

Magnificent Motu

KEN MERCER - Ruahine White Water Club

It's Good Friday, 3.00 pm, and the sun is actually shining - occasionally. 8 rafters and 4 kayakists are rushing around unloading vehicles, inflating rafts, erecting tents. Over the edge and down a hill is flowing water, murmuring quietly to itself - The Mighty Motu. Why is it so small?

After a final adjustment of air pressure, the vehicles depart. We who are left re-arrange the innumerable packets, tins and bags, light a fire and enjoy the best mutton stew ever tasted. Darkness descends, so into the tents we retreat.

At 10.00 pm, a disturbance awakes us. The drivers who, with only two short breaks, have been on the road since 6.30 am, now look distinctly haggard. Aspirins are called for, they don't want tea, but when a billy full of still warm stew is produced, it is gulped down.

Daylight reveals a misty drizzle which persists erratically over the next three days. After breakfast a mountain of gear is reduced into 2 drums, 5 soft bags and 4 kayaks. The theory of the rafts carrying everything has gone out the door. Nobody seems thirsty so a third bottle of wine is poured on the ground and several cans of beer left by the road.

The rafters have a difficult time on this section, snagging on rocks in the shallow shingle rapids and drifting more slowly than the kayaks through the long pools. At one o'clock I stuff a billy in between my legs and with Colin, paddle hard for half an hour. We stop at a sheltered spot where firewood has remained dry under a bank. A cheery fire greets the others when they arrive. Lunch consists of bread, cheese and corned beef, washed down with Milo.

Towards evening, as three of us again go on ahead to find a campsite, we encounter a group of five deer on the riverbank. Colin remains behind to warn the hunters in the party, but when we drift closer they race across the river and disappear. 15 minutes later, Chris notices a track leading up from a shingle bank, investigation reveals a well-hidden River Runners bivouac - complete with fireplace and sinkbench - alas, no sink but who cares? Everybody is jubilant when they arrive; as darkness descends, another mutton stew is prepared and slides down to fill a space.

Next morning, the party suffers a mutiny. We don't manage to hit the river until 10.00 am. Indications are that there is one hour's paddle to the beginning of the top gorge - according to the map, the gorge itself takes a further 8 hours. Some mental arithmetic shows one hour too few of daylight. Neville adopts a wait-and-see attitude, however, the general consensus is that we should stop at the last campsite, at the gorge entrance.

We paddle some distance and come across a large log damming the river. Neville takes the photos, pointing to the middle of the vee. Colin leads, his stern is sucked under, pushing his bow high into the air. I paddle hard, drop over into the boil and I am spat out towards the right where unseen lies a rockgarden. There is nothing to do but tip the boat on its side and slip through.

Still no sign of a campsite; however, the banks continue to close in, the rapids get steeper and another party of four canoeists with one solo raft catch us up, assuring us that we are indeed inside the gorge. We don't believe them until confronted by a narrow, foaming drop, confined between granite walls - Bullivants Cascade. Colin leads, then Chris and Neville, then my turn. A knot forms deep within me.

Is my spraycover on correctly? Are both my hands the same distance from each blade? Perhaps an unseen rock lies in my path. I cut out and slip over the edge, water splashes high, then into the eddy I flick. No sweat!!

Rapids merge together while the afternoon draws on. Neville thought he could inspect the Slot without walking too far. He missed his eddy, managed to cross

to the left of the river and cut out halfway down the chicken chute. A good place for photos, anyway. Louise and Karen and their crew can make it, so we position strategically with rope and advice. Keeping straight over a one metre drop they then paddle hard left, hit the buffer wave on the large rock in the middle of the river, and slip right, backwards to the Slot. It being narrower than they are, we throw the rope, which Louise expertly catches with her neck, seven chiefs shout commands and they are pulled in safely.

Raft number 2 decides to line down the left bank as far as possible, then ride the first drop. This they muff completely, 3 swimming past Neville. We three remaining paddle down without incident but Robin is still isolated, with Neville, on the left bank. After some tricky climbing and more rope work, she is reunited with her crewmates.

This one rapid delayed us a further 1½ hours but we knew the end was in sight. Shortly afterwards, a major tributary, the Mangaotane, confirms our position, and brings in more water. The following hour, we enjoy a real roller coaster ride down easy, although exhilarating, rapids. Unfortunately, the sun is setting, and Robin is getting cold. 15 minutes before darkness, the valley opens at Otipi Road, where camp is made. Being tired, we eat the day's lunch, still untouched, and crash at 7.30 pm. However, at 10.30 pm, we all wake with a desparate craving for Raro. Some kind soul fetches water but it rapidly disappears, so they have to make a second trip. Finally, the dry thirst goes and we settle down.

The last of the mutton stew is Monday morning's breakfast. Perhaps seeing it for the first time put us off - now it appears as grey, mucky stuff with bones and other lumps. Packing up is still slow but 9 am finds us on the river. This section is similar to the Utiku stretch on the Rangitikei, although with considerably more water. Graeme shoots a couple of goats on the hillside. The small kid is secured to the back of the raft, tonight we'll have goat stew. Our lunch stop is an established campsite, across a gravel flat.

The lower gorge creeps up on us mid-afternoon with Tongariro-style rapids. With these, we creep up to the edge, either waving the rafts to go on down or to pull over while we inspect on foot. Directions are then relayed back and the rapid is run.

We all look carefully at Double Staircase rapid. It is graced by two parallel waterfalls cascading down the hillside opposite. The rafters decide to run this first, then photograph us. Unfortunately, raft number one miss their chosen route, slip down a chute that we on the bank cannot see, and Robin, in the front, is dislodged by an overhanging rock. We see them emerge as Captain Steve clutches her lifejacket, finally hauling her aboard when the rapid eases. A different route is chosen by number two raft; they and the kayakers complete it successfully.

We exit the gorge but have difficulty finding a campsite, inspecting every likely-looking open area. It is nearly dark and I have found a marginal space on the left bank; Chris continues down and across the river. We wait a short period of time until he returns, running back upstream, waving his arms jubilantly. He has discovered a tremendous campsite, set in trees with a fireplace, surrounded by rough benches. In pitch darkness, we erect tents and cook tea. Unfortunately, the goat was a casualty of a rocky bluff earlier in the day.

Camp is aroused early next morning with a shot from Graeme's cannon, followed by a crashing sound, then a thump. Another goat, which was grazing peacefully on top of the cliff opposite our camp, has fallen victim to the .270.

The river that day dragged on, especially for the rafters, but it was warm and sunny. Late in the afternoon the bridge is sighted. We're glad to reach it, but as rafts are deflated and gear unpacked, sorry to finish an unforgettable trip. Given the chance, I'd go again tomorrow.

The Search and Rescue Organisation at Opotiki have been concerned for some time about the number of call-outs for people missing, or thought to be missing, on the Motu River. To assist Search and Rescue personnel, they suggest that a short '2 Minute Form' should be filled out and left either with the Matawai or the Opotiki Police Stations. It is the policy of the Opotiki Police to check the list of parties on their clipboard, and to check the vehicles at the main road bridge. Should they be aware of any party overdue, or suspected of being in need of assistance, they will organise a helicopter check on the river, weather permitting.

It is therefore essential that if parties complete the form, they should also notify the Opotiki Police when they get off the river. The Police point out that all parties pass through Opotiki on their way home and it would require very little time to drop into the station or to slip a note under their front door (right hand side) to inform them that you are out safely.

Party leaders are requested to take a copy of the enclosed '2 Minute Form.", so-called because it takes 2 minutes to fill in, and USE IT, please.

MOTU RIVER TRIP 2 MINUTE FORM

To assist Search and Rescue personnel should trouble arise, it would be appreciated if the following information could be supplied.
This sheet should be left at MATAWAI or OPOTIKI POLICE STATIONS prior to departure.

Members of Party	Age	Lifejackets	Wetsuit	Address	Ph No
Leader					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Date: _____ Time: _____ Place of Departure: _____

Date of estimated arrival at Motu mouth: _____

Number, colour and type of craft used: _____

Predominant colour as seen from the air: _____

Has any of your party been down the Motu before? _____

Number of days food carried: _____

Have you Topographical maps: OMAIO N70 MOTU N79

Party First Aid Equipment: YES/NO. 46 metres (150') rope YES/NO.

What are your vehicle arrangements? _____

Description and Registration No:- _____

Name and address of person who is to contact Police if party overdue: _____

Please advise Opotiki Police before leaving area after trip, verbally, by leaving a note, or by telephoning 577 Opotiki.

BOOK REVIEW

OUTDOOR FIRST AID - MOUNTAIN SAFETY MANUAL 14.

Price $4.50 from NZCA Publications, P.O. Box 3768, WELLINGTON.

It has always seemed to me that first aid manuals tend to be very similar, but then I suppose that first aid has not really changed all that much over the years and a general first aid is not likely to get into the more exciting areas of medical research and development. Most first aid books, however, are written for the general user whereas this book is aimed specifically at the outdoor person and for that reason is of particular interest to canoeists and rafters.

The book is set out in what might be called 'priority order' - that is, it covers basic life support and the urgent things to be done upon coming across an accident. It then goes into specifics of wounds, shock, and environmental problems (dehydration, hypothermia and cold water survival). SAR procedure is not forgotten.

In its 126 pages, little is left out that outdoor people would need to know. It does not waste time on the esoteric art of putting on a 'band aid' or bandage although I do think that a diagram for applying a triangular bandage might have helped. The suggested list for the first aid kit is, for once, practical and explains the uses of all those fancy tubes of ointment and pills it recommends you carry.

The manual covers areas not normally covered by other first aid manuals. For example, under wounds and bleeding, it mentions the problem of bleeding piles and what to do - a little-mentioned problem that tends to afflict outdoor people more than the average citizen. There is a detailed section on foot problems, including 'immersion foot' (otherwise known as trench foot and a problem that affects more rafters than we care to acknowledge.) Naturally, hypothermia gets good coverage and it's up-to-date; dehydration, heat exhaustion and heat stroke are also given equal importance. If you have done any long distance paddling in mid-summer on a polluted river or on the sea, you will be aware of the importance of this subject.

The last chapter covers the problem of decision-making and responsibilities of leaders, what to do in the event of a death in your party and a form for sending out messages for rescue operations. You don't usually find this in other first aid manuals and it is vital information.

I do have some grumbles, however. Firstly, the illustrations are rather crude and not up to the standard of other Mountain Safety publications - cost was a factor, I am told. However, some of the illustrations are irrelevant to the text, some try to introduce a touch of humour and fail to do so, and, mostly, the illustrations take up valuable space that a better illustration, or more information, might have used. For example, a whole page is used to illustrate the incorrect way to extract a tooth - it is meant to be funny!!

In the section on Cold Water Survival, there is an illustration of rafters huddling to retain body heat - in a river! - when clearly the correct action would be to get out of the water. This is an example of a totally wasted illustration - you could almost say, a misleading illustration - more so in that the text talks about the HELP position for lessening body heat, but fails to illustrate or explain what is meant by this. An illustration here could have been of assistance.

I hope these failures can be corrected in later reprintings. However, for all these faults, this is still the best outdoor first aid book on the market and all the more valuable because it is New Zealand-oriented. You won't find snake bites covered but it does tell you about katipo spiders, the tree nettle, and possum bait poisoning. Drowning and cold water survival make it particularly relevant to paddlers. You shouldn't be without this book.

Graham Egarr.

A Sobering Thought

From University of Canterbury Canoe Club

Many of us, especially those people who have paddled for some years, can become a little unthinking of the power that all rivers have. Here is an account of an experience that an ex-University of Canterbury Canoe Club canoeist, Tim Densem, would rather not have happened.

Tim was trailing a group of beginners, led by Mike Savoury, down an easy river just outside Wellington. The level was up slightly, but there was nothing sinister about the river; everyone was enjoying themselves. Mike led the beginner group past a bluff, cutting the corner a little to avoid the wave coming off the wall. With everybody past, Tim decided to have a little play in the circulating eddie fed by the surge coming off the bluff. He tipped over in the small whirlpool, and failed to roll up after several attempts.

After coming out of his boat, Tim was circulating for some time semi-submerged, finally being sucked out of sight. Twenty metres downstream he re-surfaced, unconscious and face down in the water, his lifejacket just showing above the surface. He was pulled from the water by Sue, who opened his airway by arching Tim's neck back and clearing his tongue away from his throat.

Tim started breathing again.

Points To Ponder:-

While Tim was circulating in the whirlpool, there was little anybody could do. Nobody had a throw-bag or throw-rope immediately available for use.

It would have been silly for anybody to have jumped in to try and save Tim. Even for an experienced person in a canoe it could have ended in a double tragedy.

This is what happened last summer on the upper Rangitikei, when a boatman in charge of a raft of passengers dived in to rescue a person caught in a recirculating eddie - he was wedged under a log and drowned. The swimmer was eventually thrown clear of the eddie, unconscious but revived with C.P.R. (Editor's note).

Although Tim probably had his lifejacket done up, you can be assured that in the same sort of situation, if your lifejacket isn't fastened properly, your jacket will float but your head will be under water!

Lifejackets need absolute maximum flotation to work properly.

The double fatality on the Aorere in January, 1980, was similar - two paddlers caught in severe turbulance and thrown clear unconscious. However, in the case of the flooded Aorere, nobody could get to the bodies to revive them - a sobering thought indeed. (Ed.)

FOR SALE

One 'Eclipse' kayak. Made by Perception of Marlex - a cross-linked polyethylene. Fully customized with mini-cell pillars and padded seat and thigh grips.

$700 ono.

Contact: John Hillhorst, Phone:- 42016 Havelock.
c/o Cobham Outward Bound School,
Private Bag,
PICTON.

Nelson's Wairoa & Lee Rivers

ANDREW MOFFATT.

Both the Wairoa and Lee Rivers are tribuatries of the Waimea River - the river that lends its name to the large estuary of that name, and forming the Waimea Plains, principal horticultural area of Nelson.

The Wairoa contains the Wairoa Gorge, which is a much-used canoeing river by the local club because of its fine rapids, and it has both high scenic value and road access for its complete length. The rapids are up to grade lll, all of which are diverse in character with many being technically tight and tricky. There are plenty of nice deep pools for the canoeist who is into swimming.

In places, the Wairoa flows through gaps of around 1½m in width, providing turbuland water. One rapid, known as either the 'Gauntlet' or the 'Squeezer', is of this type, reminiscent of the Motu Slot. Other rapids are tight staircases. The 'Slip' rapid is one such staircase, formed three years ago by a hillside falling into the river. It has a fast-flowing lead-up to it with a sharp right-hand bend forcing the paddler away from two huge boulders and down through a narrow gap. You must look at this one before paddling it.

Eventually, the Wairoa meets the Lee River Valley which has a bridge over the confluence. The lee, at first sight, is a slow-flowing, picnic, swimming-hole type of river where families escape to on a hot summer Sunday afternoon. But, hiding behind the empty beer cans and burnt barbeque sausages are thrills, spills and a really great section of white water which is at its peak after a good rain.

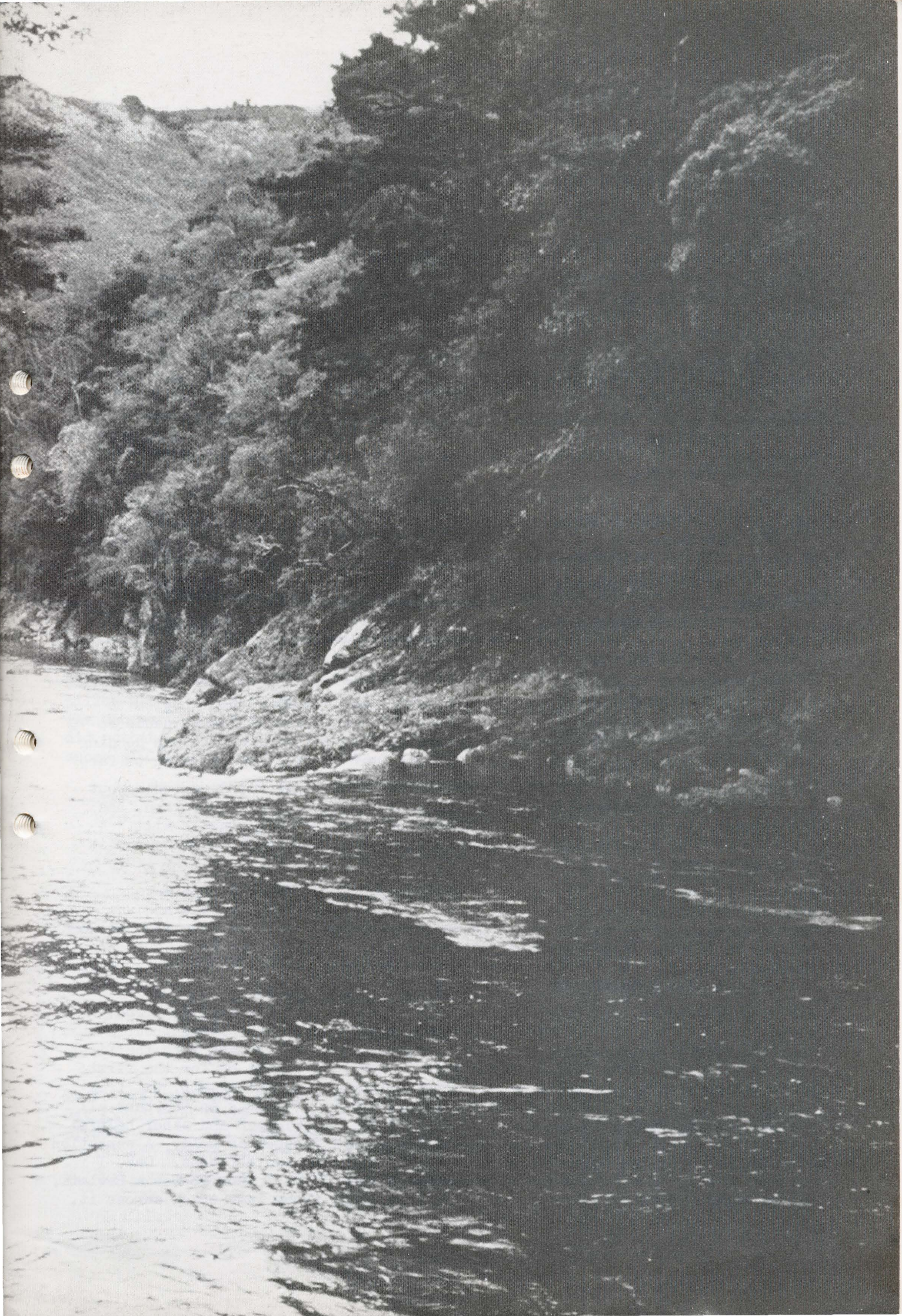
The start of this canoeist's Disneyland is past the quarry, through a locked gate and down some 500 metres of road to the Lee Hut Track and the river. The road eventually meets the river again 2½ km later.

The upper Lee is one long series of Grade 2-3 rapids of sharp drops and vertical mazes of rock and water. The river drops steeply through gaps a metre wide and forward vision is greatly reduced. I find it best to watch some brave fool go first then take another route. A river well-suited to paddlers who like quick decisions and loads of rocks (best to use a tupperware boat!)

Both rivers are only 12 kilometres out of Nelson city (2 km from Brightwater) - you can do both in a single day.

ACCESS: Take the main highway south from Nelson, turn left at the Brightwater DB Tavern (first on the left past the Wairoa River Bridge). This road will take you up the Wairoa Gorge itself. A road to the left off this Wairoa Gorge Road will take you over a bridge and on up the Lee River. Get-in points are numerous but the most common put-in for the Wairoa is at the Forest Service Picnic area well up the valley.

The photograph on the next page is of the Upper Wairoa River - photographer is Bevan Walker. People wishing to run the gorge and wanting local information on flows etc. should phone Bevan - Brightwater 390. Bevan is president of Nelson Canoe Club.



Winter on the Taeiri

DAVE PILDITCH

Despite winter's icy grip on land and water, a few hardy souls are still out there paddling, swimming and defying the elements. The other weekend I joined Michael Cox and Dave Kirk on a lower gorge trip. There were no other takers from the Club but out on the river it was quite crowded. First we ran into Al Wood and the Yellow Submarine, complete with crew. For those who don't know the Yellow Sub, it resembles a patched-up kiddies paddling pool and is living proof that, if you are crazy enough, you can run rivers in anything. Then we met four lunatics riding a bunch of inner tubes down the pipeline. However, the tubes spent most of the time on top with the crew underneath. They didn't seem to find lifejackets or helmets necessary.

Next, we came across Mackay's commercial raft complete with Brighton surf club drivers. They were having such a good time that they were pulling the raft back up the chute at Bum Rock just to get extra runs onto the buffer. The Yellow Sub had an inversion at this point. The day was magnificent although the sun had no heat in it, and was barely on the gorge for more than a couple of hours. Finally, a jet boat appeared on the scene and Bum Rock was starting to look like the Octagon at lunchtime.

So then we come to Queen's Birthday Weekend. Craig Kennedy and Bill Wilson came up from Invercargill and the indefatigable 'Paul-how-about-a-trip-on-the-Taeiri-Corwin' came down from Christchurch. Add Tony, Dave, Les and myself and we had an upper gorge trip on our hands.

7.30 a.m. in the Octagon and the pigeons, had there been any, would have woken to the sound of Polish incendiary devices disturbing the dawn. This seemed like a good time to leave so with a quick check on the river level at Outram, 104.86 for the record, we were soon on our way to Hindon to leave a car and then on to Sutton. A circle of sunlight lit up the white frost coating the Middlemarch plain. Icicles were hanging from the willow branches over the river.

Cold water in the face fairly took the breath away. Those without pogies to protect their hands were already in trouble. First it was Bill with hands so cold he couldn't grip the paddle. A missed roll as a result and he was heading back for the cars, too cold to carry on. How were the rest of us going to fare?

Castle Hill was high but straightforward. Everyone ran it blind, watching out for the few small holes on the way through. Five years ago, when Warren, Les and I first did this section, we spent over an hour portaging Castle Hill. I did another 3 or 4 trips before getting brave enough to run it. Now we run it blind in mid-winter. Such is progress!!

Another hour downstream. I was still quite comfortable in my long-sleeved neoprene jacket and pogies over the hands. Paul had broken a paddle and was forced to roll on the broken end. Everybody else was looking a bit blue, so we stopped to light a large fire and get some heat back in our bodies. Caution! Don't heat neoprene booties in front of the fire with feet still in them. When the heat finally gets through you know all about it.

And so we pushed on. The weak early morning sun had been replaced by cloud which soon gave way to light drizzle. Above Boxcar, Tony was having trouble with the cold. Rather than get out and inspect, he went straight into the first stopper blind, backward looped on the second, and with pogies on for the first time, missed his roll. Tony's second worst swim ever was the result, but from behind, it looked like it could qualify as the worst. The boys on the bank all yelled, "Go on, Tony's in trouble," - "Go left," - "Go right," and other helpful things. So I went centre and got done in the second stopper as well. A sensation of being hit over the head with a police long baton had two efftects. One, I got such a hell of a fright that I rolled back up. (Yes, I know it was a Pawlata, but it worked, didn't it?) Two, my helmet now has a three inch crack across it.

At the bottom, Tony had managed to rescue himself and apart from cold and a few bruises, was none the worse for wear. The others negotiated Boxcar without incident and 20 minutes later, we were restoring ourselves on hot coffee back at the car.

Conclusions and some thoughts on keeping warm:-

Everybody felt the cold pretty badly, to the extent that nobody wanted to do the Lower Gorge the next day, not even Paul! I wore woollen long johns and a woollen singlet under my wetsuit. My wetsuit top had 2mm sleeves and 3mm body. It did not restrict my arm movement of chafe under the armpits. I believe that keeping the arms warm is pretty important. Unless your arm muscles can generate enough heat on their own, the blood supply to the extremities is cut off by extreme cold and it becomes very difficult to paddle and to maintain co-ordination.

Keeping water from running down inside is also important. My paddle jacket has a tight neoprene collar and cuffs which are very effective at keeping water out. However, I like Dave Kirk's neoprene jacket which has nylon gussets around the shoulders allowing good arm movement and also has a high collar with Velcro fastening to keep the water out. It is made by O'Neill.

Keeping the hands warm is a major problem. Dave Kirk and Craig Kennedy paddled without any protection but I don't think I could have. Pogies give remarkably good protection and my hands were never too cold, even using an aluminium shaft paddle. The disadvantage is that they do restrict you a bit. Rolling with them on is more difficult, but with practice, you get used to them and they take all the pain out of cold water paddling.

Remember all that commotion about 8 months ago when hundreds of fish were killed when the Tui Dairy Company discharged waste into the Mangatainoka River. The Manawatu Catchment Board, who are supposed to prevent such things happening, did nothing about it. So along came the Wellington Acclimatization Society and successfully prosecuted the dairy firm who were fined:-

1. $1,500.00 for detrimentally affecting fish.
2. $ 250.00 for detrimentally affecting food for fish.
3. $ 400.00 for discharging without a water right.
4. Plus solicitors fees and court costs.

Congratulations, Wellington Acclimatization Society.

KAYAK PLANS

There has been interest expressed in the kayaks that Ian Milne built for his Dusky Bay Expedition (Story in Issue Number 27). Ian has now prepared a set of plans for plywood stitch and tape construction with a comprehensive set of building notes. Copies are available from Ian for $15, or from the NZCA publications.

Ian Milne's address: 124 Richardson Street,
St Kilda,
DUNEDIN.

Dams on the Mohaka?

GRAHAM EGARR.

RIVER DESCRIPTION: The Mohaka is one of the better rivers on the North Island's East Coast as far as canoeists and rafters are concerned. In the upper reaches, above the Napier/Taupo Road, access is over private land and is not easy. This section of the river is easy boating (grade 11) but very scenic.

From the Napier/Taupo Road down to the Waipunga River where access can be had on the right bank via Waitara Road, the river is swift-flowing without major rapids. From the Waipunga confluence down to the Te Hoe confluence we have a river of medium difficulty with grade 111 rapids a short distance before reaching the Te Hoe River.

The Waipunga River, accessible off the Napier/Taupo road, offers an excellent technical grade 111 trip with very steep and tight rapids. Best to use a plastic kayak for this trip although a good paddler can run it without damage in a glass boat. Avon Explorer rafts regularly run the river except in late summer low flows.

The difficult section of the Mohaka is the stretch from Te Hoe to Willow Flat. Long Rapid, a grade 1V rapid, lies about one quarter of the distance down from Te Hoe to Willow Flat. The river profile drawing shows a very steep gradient at this point. Other grade 111 rapids lie upstream of Willow Flat. From Willow Flat the river eases again to grade 11.

THE DAM SITES: Three dam sites have been decided as viable - investigation work has been going on for some considerable time.

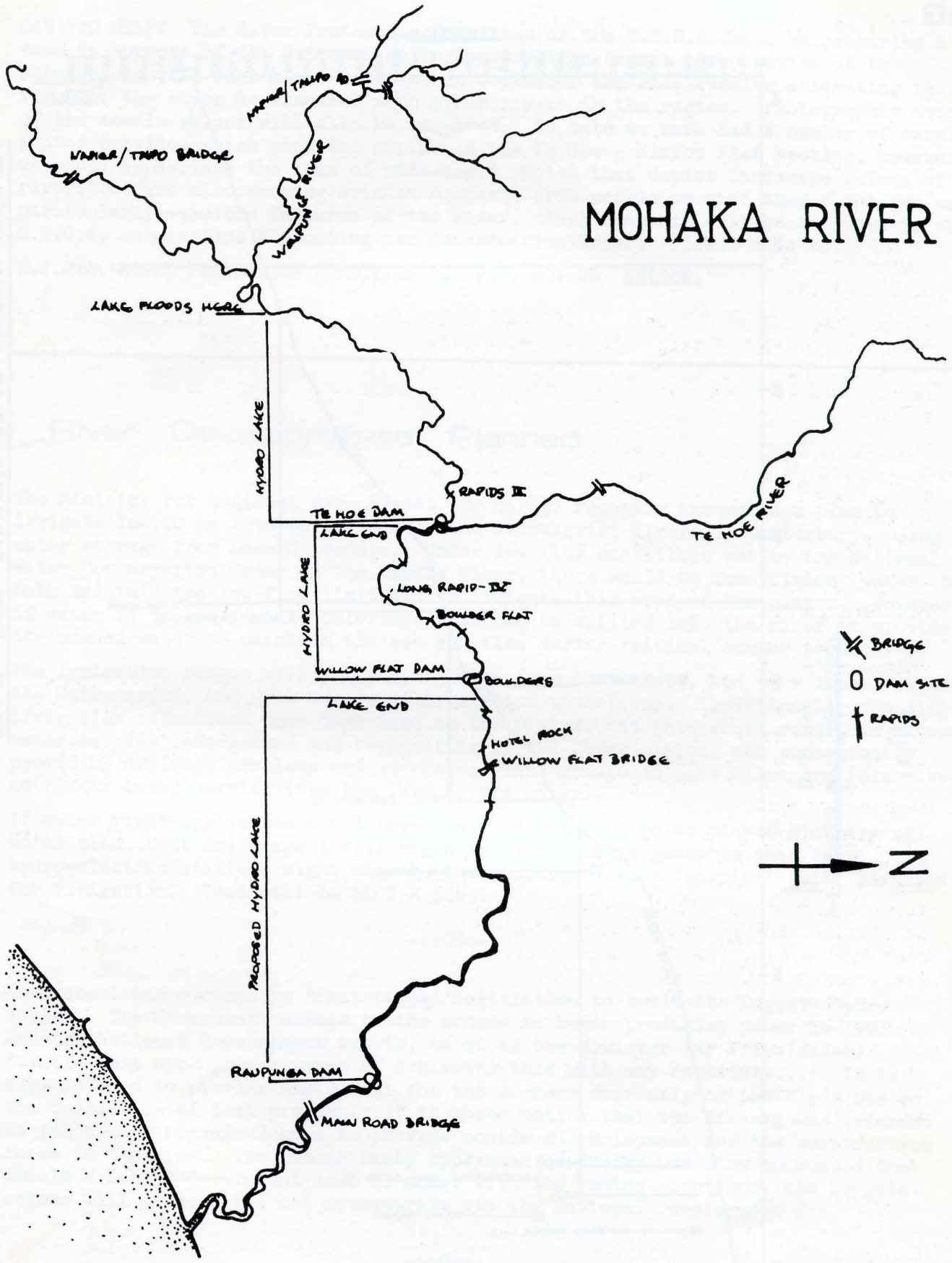
These sites are: 'Raupunga', 15 km from the river mouth and a short distance upstream from the main road bridge.

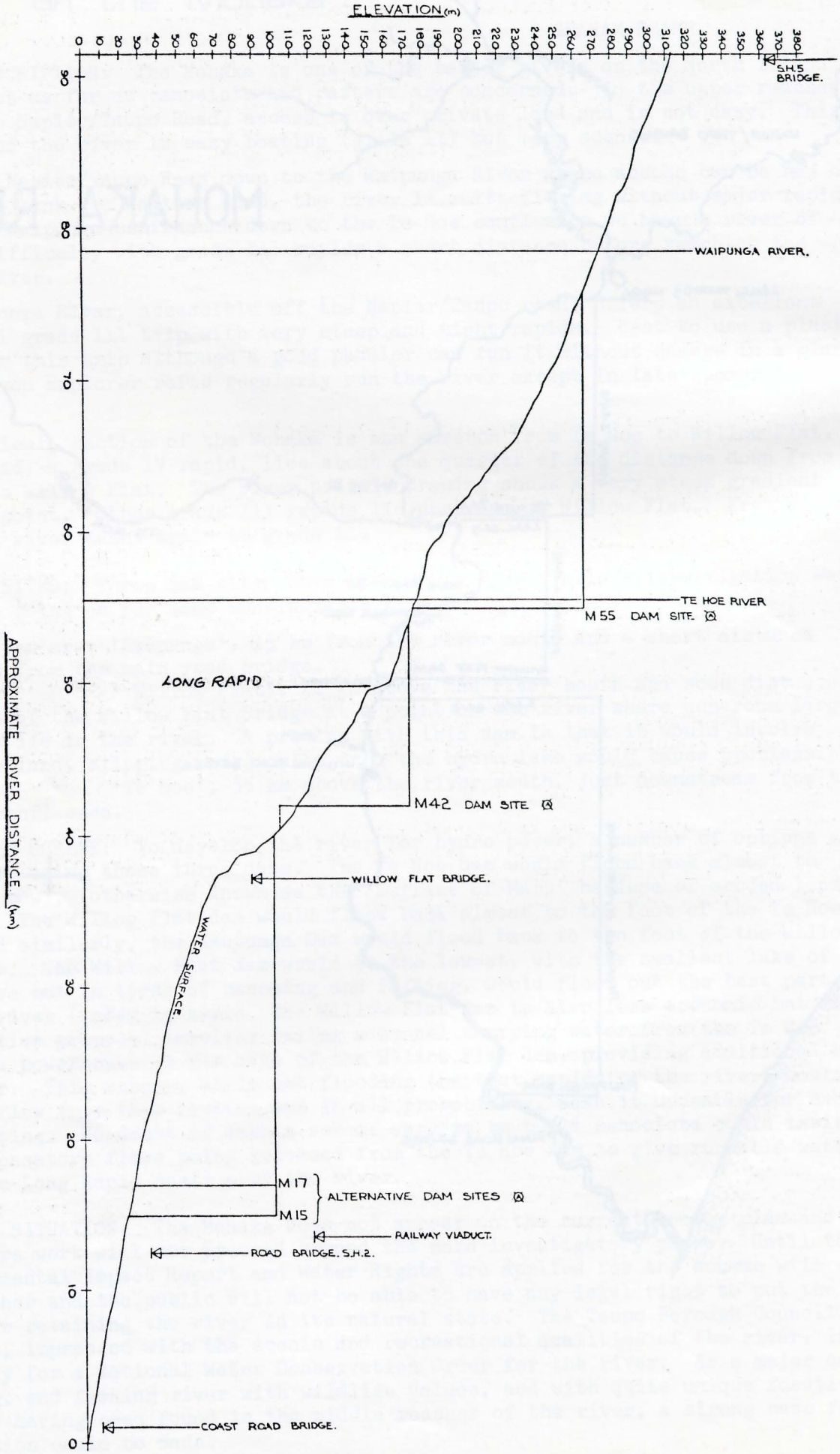
' Willow Flat', 42 km above the river mouth and some distance upstream of the Willow Flat Bridge at a point on the river where numerous large boulders lie in the river. A problem with this dam is that it would involve unstable land, slipping and erosion into the hydro lake would cause problems.

'Te Hoe', 55 km above the river mouth, just downstream from the Te Hoe confluence.

THE POWER SCHEME: To develop the river for hydro power, a number of options are available using those three dams. The Te Hoe dam would flood back almost to the 'ox bow', (otherwise known as the 'Surface of Mars' because of eroded land-forms.) The Willow Flat dam would flood back almost to the foot of the Te Hoe dam, and similarly, the Raupunga Dam would flood back to the foot of the Willow Flat Dam. The Willow Flat dam would be the lowest, with the smallest lake of the three but in terms of canoeing and rafting, would flood out the best part of the river (refer to map.) The Willow Flat dam is also less economic but an alternative proposal involves taking a tunnel carrying water from the Te Hoe dam to a powerhouse at the site of the Willow Flat dam, providing additional head of water. This scheme, while not flooding the best rapids of the river, would divert flow from this section and in all probability, make it unusable for canoeing and rafting. No doubt if such a scheme were to be built canoeists could insist on compensatory flows being released from the Te Hoe dam to give runnable water over the Long Rapid section of the river.

CURRENT SITUATION: The Mohaka does not appear on the current energy plan and therefore work will not proceed beyond the mere investigatory phase. Until the Environmental Impact Report and Water Rights are applied for the scheme will get no further and the public will not be able to have any legal right to put their case for retaining the river in its natural state. The Taupo Borough Council, however, impressed with the scenic and recreational qualities of the river, intends to apply for a National Water Conservation Order for the river. As a major canoeing, rafting, and fishing river with wildlife values, and with quite unique fossil remains having been found in the middle reaches of the river, a strong case for protection could be made.


MOHAKA RIVER
NAPIER/TAUPO RD
NAPIER/TAUPO BRIDGE
WAIPUNGA RIVER
LAKE FLOODS HEAD
HYDRO LAKE
RAPIDS III
TE HOE DAM
LAKE END
TE HOE RIVER
LONG RAPID - III
BOULDER FLAT
HYDRO LAKE
WILLOW FLAT DAM
BOULDERS
LAKE END
HOTEL ROCK
WILLOW FLAT BRIDGE
PROPOSED HYDRO LAKE
RAUPUNGA DAM
MAIN ROAD BRIDGE
BRIDGE
DAM SITE
RAPIDS
N



MOHAKA RIVER PROFILE SHOWING DAM SITES

CAN YOU HELP? The River Protection Committee of the N.Z.C.A. will be preparing a case in support of the National Water Conservation Order. Preparation of the submissions will take place sometime in September and will involve estimating the value of the river as compared with other rivers in the region. Photographic evidence of the scenic values will also be required. To date we have had a number of excellent photos provided which show the rapids of the Te Hoe - Willow Flat section, however, we would appreciate the loan of wide-angle photos that depict landscape values of the river. We are also seeking written comments from people on what they think are the particularly valuable features of the river. Such comments will be included in the N.Z.C.A. submissions supporting the Conservation Order. Please send to:

N.Z.C.A. RIVER PROTECTION COMMITTEE . P.O. BOX 26 NELSON.

River Developments Planned

The Minister for Regional Development (Mr Birch) recently announced a plan to irrigate 100,00 ha between the Rakaia and Waimakariri Rivers in Canterbury, using water storage from Lake Coleridge. Under low flow conditions set by the National Water Conservation Order on the Rakaia River, there would be insufficient water to both maintain the low-flow limit and to irrigate this area of the plains. However, if water is stored in Lake Coleridge this can be spilled into the river to provide the needed water to maintain the set low-flow during critical summer periods.

The irrigation scheme will use pumped water from the Rakaia, and to a lesser extent, the Waimakariri, and will use spray irrigation techniques. Traditionally flooding irrigation techniques have been used on the plains, but this would result in excessive water seeping underground and reappearing in the lower plains, and consequently providing drainage problems and excessive plant growth in Lake Ellesmere (dissolved nutrients being carried into the lake by the water).

If water right applications and investigation work all go to plan (Ministry of Works plan, that is) stage I will begin in 1988. It is possible that small hydro-electric stations might also be incorporated to use 'surplus' water diverted for irrigation. Cost will be $100 M plus.

-ooOoo-

Government has decided to 'fast track' legislation to build the Luggate Hydro scheme. The Government wishes to the scheme to begin producing power in 1991 and the National Development Act is, to quote the Minister (Mr Friedlander) '...the most appropriate means of achieving this with any certainty...' It is also inteded to provide employment for the workers currently on the Clyde Dam on the completion of that project. It is worth noting that the Kawarau was intended to follow the Luggate Scheme to provide continued employment for the construction force in the area. The Labour Party spokesman on Energy has also announced that should a Labour Government come to power with the coming elections, the Luggate scheme will proceed but not necessarily via the National Development Act.

-ooOoo-

Manganui-A-Te-Ao

From Ruahine Whitewater Club Newsletter.

"My, isn't the river low," was the initial reaction, as per-usual, from the bedraggled gang of canoeists in conference on the banks of the mighty Manganui-a-te-ao. Wade cheerfully suggested driving even further upstream to a previously unpaddled stretch, and to lengthen the day by carrying right on to our campsite at Ruatiti. The three loyal fibreglassers, John Snook, Rich and Lucy, turned noticeably green at this news, and the long, windy drive while looking into an impenetrable gorge (no walk-out), didn't help. We finally arrived at the god-forsaken spot, ate an early lunch and climbed into frozen (in some cases literally) gear.

Dave Stag decided wisely to give this unknown quantity a miss, and Leo and a few others nobly hopped into cars to accompany him to the usual getting-in place.

So we clambered into the snow-fed waters, and paddled off into the morning sun, expecting a raging, log-jammed waterfall with no way of getting out. The many rapids were exceptionally rocky, reminding me a little of the Ngaruroro at low flow, although ten times steeper. This gave John and Lucy an added challenge to keep their boats unblemished; Rick had piked and was in a plastic boat. The main problem was reading a periscope to peer down the rapids with, as once you chose a route from the top, you stuck to it or ran out of water. But apart from a disagreement Ken had with an over-possessive eddy, I'm afraid to say that we caught up to Leo without any of the usual entertainment.

This was, more-or-less, the trend for the rest of the day with the rapids becoming bigger and more exciting, but still survivable. Of course, that doesn't count the scheduled 'get-stuck-leaning-upstream-against-rocks-and-get-pulled-off-by-Max' routine from Lucy, and a rather spectacular tasting of the water by John Frost in a hole.Finally arriving at a camp, a set of cold wet rats crawled up the banks hoping for the haven of warmth from their clothes. This warmth was not to be found by some that night, and personally, what with cramped tents, hard ground and frosty air, it was the most unconfortable night I've ever experienced. So it was not surprising to see many early birds busily cooking a three-course meal in the morn. Wet gear was hastily stuffed into cars, boats were taped and thrown onto the vehicles. (Note: May this day be remembered as the day when sensible Ken finally flipped by stacking at least 6 plastics on his Ute.)

This glorious day was to be occupied by the braving of the grade 6+ flat paddle on the <u>lower</u> reaches of the Manganui-A-Te-Ao. Alistair and the two O'Connors suggested they drive, and were envied in their position by many bored-to-tears paddlers.

Even as we set off, the large party split into two. The first group waited for over an hour, while scoffing lunch, for the rest to catch up. We finally met the muddy Wanganui, which was such that it was hard to know whether to turn left or right coming into it. Far from a rest for tired arms, the waters stretched ahead as far as the eye could see, like a flat desert. This was torture for those with leaky boats. At the slightly high level, we passed over the usually grade 2 rapids without so much as a friendly wave to see.

The intolerable conditions were endured for about 2 hours, with only occasional jet boats to break the boredom. The Wanganui has permanently been crossed off my list of rivers to be done. I'm sure the drivers never felt so welcome as they did that grey day at Pipiriki. Strangely enough, the day was enjoyable, but will never be repeated by yours truly, if it kills me!!

HE WAKA TETE HOU

A NEW CANOE FOR

MAORI CANOE RACING

INTRODUCTION

The WAKA TETE HOU (the new waka tete) is a one-design racing class of Maori canoe, administered by the NZ Taniwha (Dragon) Boat Association, for sporting and cultural use in New Zealand and abroard.

The 12m (40ft) canoe is of traditional Maori form and appearance, built of modern materials and designed to be readily transported by road.

The Waka Tete Hou Project has been established with these aims:

— To provide, throughout New Zealand, canoes built to the waka tete hou design - to Maori groups, schools, sports clubs, community groups and firms - for competition, recreation and education.

— To hold an annual International Festival of Waka Tete Hou Racing, with teams from around New Zealand and from other countries, much on the lines of the Dragon Boat Races and others held in Asia and the Pacific.

— To take waka tete hou to other festivals - for example the Festival of South Pacific Art and Culture, the Ngaruawahia Festival, the Auckland Anniversary Regatta, and Dragon Boat Races in several countries.

Underlying these aims is the intent to foster a revival of the use of Maori canoes - to get them (or their replicas) back on the water in numbers to be seen and appreciated, and to make them again a natural part of the scene on coast, lake and river.

At the same time the opportunity will be taken to investigate the performance of this classic form of boat, and to rediscover the art of sailing a Maori canoe, without putting at risk the real waka taua and waka tete still used on the water.

The waka tete hou came into being by the efforts of people from:

The North Shore Canoe Club, whose third place in the 1983 Singapore Internation International Dragon Boat Races inspired them to set up similar racing here.

The Traditional Small Craft Society, with design and boatbuilding skills, and a long held interest in Maori canoes.

The Ngati Mahuta of the Turangawaewae Marae, who have a strong tradition of preserving and practising the arts of carving and canoe building.

Air New Zealand, who have financed the building of the prototype waka tete hou, and will fly it to festivals overseas.

SPONSORSHIP

The Waka Tete Hou Project proposes to finance the providing of canoes by a system of sponsorship of individual boats by companies, business houses and community groups.

Those wishing to obtain or sponsor a waka tete hou are invited to write to the NZ Taniwha (Dragon) Boat Association Inc., the organisation set up specifically to administer the Waka Tete Hou Project.

The NZ Taniwha (Dragon) Boat Association,

35A Taharoto Rd., Takapuna,

Auckland 9, New Zealand.

Further information from Gerry Maire, Telephone 458 661 Auckland.

The name of the sponsor will be carried on the topstrake on each side of the canoe.

TE WAKA TETE HOU

The New Waka Tete.

Designed by Neil Beken, who also built the prototype, the waka tete hou is very much a traditional Maori canoe in form.

The design brief called for a boat comparable in size and power with the Singapore Dragon Boat with a length of about 12m and carrying 20 paddlers, a steersman and a timekeeper, and capable of being broken down for transport by road.

Deciding the shape of the canoe involved a lot of work in researching the literature and studying several waka tete and waka taua in museums around New Zealand, including taking off the lines of two of them. (The lines of a boat are a graphical representation in two dimensions of the three dimensional shape.)

Refer to the drawings and the brief notes on Maori canoes below.

Maori names in parentheses.

Hull (hiwi): Built in three sections with bolted joints to be easily dismantled for transport by trailer, three roofracks, or 747 cargo pallet. Topstrakes built integral with underbody. Prototype of glued-strip wood construction, subsequent boats in GRP, finished to resemble the traditional dugout hull. The flat bottomed hull common on the Wanganui is used for ease of handling on land.

Topstrakes (rauawa): The rauawa of a waka tete are not carved, but may be painted with an appropriate design and with the name of the sponsor. (The prototype waka tete hou is named "Air New Zealand" and has the airline's koru motif repeated along the rauawa.) The design may be painted directly onto the rauawa, or onto separate panels fixed to it.

Carvings: The carved pieces at bow and stern are less ornate than the intricate pierced work of the waka taua with which most will be more familiar. The figure-head (tete) is a head without body or limbs - it is this that gives this type of canoe its name. The sternpiece (tau-rapa) is a plain but elegant upright on a carved base.

The tete and taurapa for the prototype were carved by the carvers of Turangawaewae, in heart kauri.

Paddles (hoe): The traditional Maori paddle is used, with pointed blade and offset shaft. The after (thrust) face of the blade is flat and the forward face rounded.

The steering oar (hoe whakatere) also has a pointed blade, but is much longer and does not have the shaft offset.

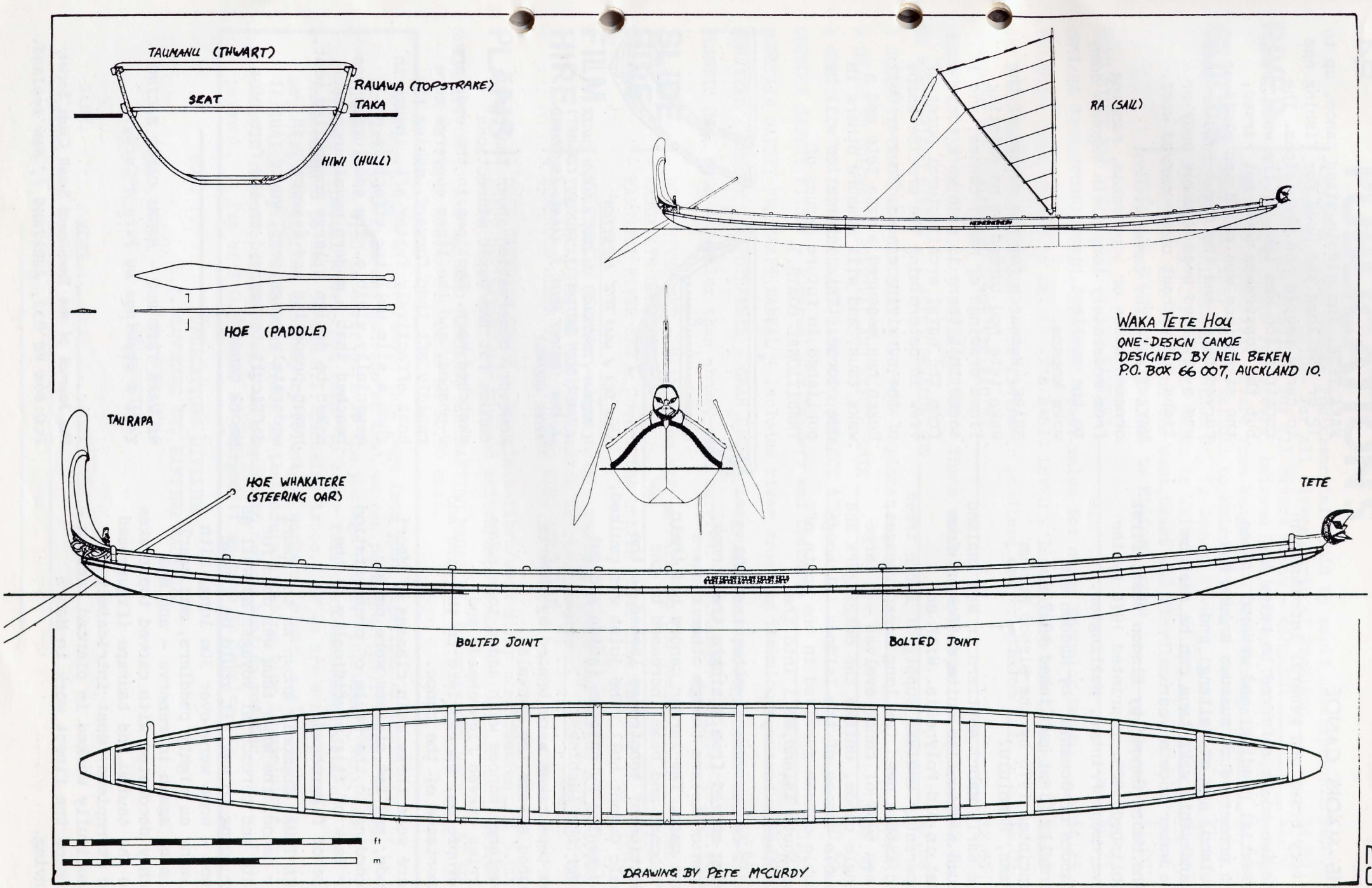
Sail (ra): While the waka tete hou is intended primarily for paddling, an auxiliary sailing rig is provided. The sail is of the ra kautu or upright type, triangular, with the apex downwards. It is permanently lashed to its mast (tira) and spritboom (titoko), and is raised and lowered complete with its spars; when not in use it lies on top of the thwarts between the two rows of paddlers. The sail is made of tanned cotton, representing the woven flax of the ancient Maori sail.

Specifications

Length of hull	12m	40ft
Waterline length	11m	36ft
Beam	1.2m	4ft
Waterline beam	1.07m	3ft 6in
Draught	360mm	14in
Depth amidships	600mm	2ft
Displacement	2065kg	4550lb
Weight with gear	365kg	800lb
Sail Area	$5m^2$	$54ft^2$

Paddles: 1.3m (52in) long, blade 125mm (5in) wide.

Crew: Steersman, fugleman, 20 paddlers.


TAUMANU (THWART)
RAUAWA (TOPSTRAKE)
SEAT
TAKA
HIWI (HULL)
HOE (PADDLE)
RA (SAIL)
WAKA TETE HOU
ONE-DESIGN CANOE
DESIGNED BY NEIL BEKEN
P.O. BOX 66 007, AUCKLAND 10.
TAURAPA
HOE WHAKATERE
(STEERING OAR)
TETE
BOLTED JOINT
BOLTED JOINT
ft
m
DRAWING BY PETE McCURDY

THE MAORI CANOE

A very brief and general introduction:

The two books referred to below are essential reading, and several canoes are preserved in museums around New Zealand, and at Waitangi and Ngaruawahia waka taua can be seen on the water once a year.

"The Maori Canoe" by Elsdon Best, first published 1925, reprinted 1976 by the Government Printer, Wellington.

"Canoes of Oceania" by Haddon and Hornell, first published 1937-9, reprinted 1976 by the Bishop Museum Press, Honolulu.

The early Maori settlers in New Zealand found a situation quite different from that in old Polynesia. With an apparently endless supply of large trees and little need for long ocean voyages, a new type of canoe evolved - a large single canoe, unlike the outriggers and double canoes of the Islands (although double canoes survived in the south of the South Island well into the nineteenth century).

Maori canoes were dugouts, the hull being carved from a single tree trunk, often of totara though other timbers were used. The larger canoes had their freeboard and beam increased by the addition of topstrakes lashed to the basic dugout hull. The joint was caulked, and sealed by battens inside and out under the lashings.

The topstrakes were braced by thwarts lashed across the gunwales.

The large canoes with added topstrakes carried carved figureheads and sternpieces, appropriate to the size and importance of the canoe.

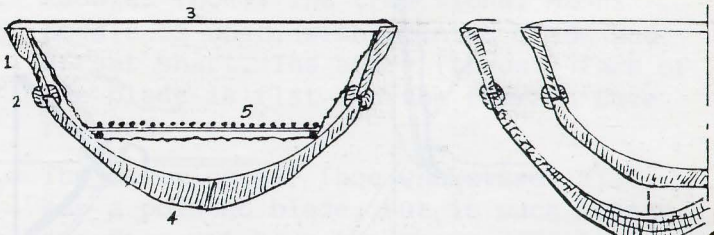
There were three main classes of Maori canoe, and the classes were named according to the style of ornamentation (or lack of it); specifically by the type of figurehead.

WAKA TAUA. Commonly known as the Maori war canoe, the waka taua was used for state and ceremonial voyages as well as for going to war. It could be a huge canoe - some were over 30m long, with as many as eighty paddlers, and nearly as many again in reserve - and was richly decorated with carved topstrakes and the tauihu and taurapa (figurehead and sternpiece) most intricately and beautifully worked in pierced carving - perhaps the finest work in Maori carving.

WAKA TETE. The middle-sized canoe, up to 12 or 15m long and used for fishing and to carry people and provisions. The construction was that of the waka taua, but the topstrakes were not carved, the sternpiece was solid and plain on a carved base, and the figurehead or tete was a stylised head without body or limbs and without other carved work.

WAKA TIWAI. The canoe without ornamentation or topstrakes, ranging from moderately long plain dugouts down to the smallest river canoes such as the waka kopapa.

SHAPE. Research for the design of the waka tete hou turned up no existing lines drawings of Maori canoes, and it seems that there is much work to be done from the naval architectural point of view in determining the precise shape of the surviving canoes. However Neil Beken has measured a waka tete and a waka taua, and will measure others in due course. (This information will be published in future issues of TRADITIONAL BOATS.)



WAKA TAUA & WAKA TETE MIDSECTION

1. RAUAWA (TOPSTRAKE) 2. TAKA & PAEWAI (OUTER & INNER SEAM BATTENS 3. TAUMANU (THWART) 4. HIWI (DUGOUT HULL) 5. KARAHO (SUSPENDED FLOOR GRATING)

However, observation shows that most canoes fit the basic midsections sketched here. Sections in the ends are V-shaped, and the lines converge more rapidly aft than forward, making the boat effectively fatter aft, though in such a slim hull the effect is not especially visible. The conclusion was reached that a modern naval architect, asked to design a large monohulled boat, human-propelled and seaworthy in moderately rough seas, would find it difficult to improve on the form of a Maori canoe.

HE WAKA TETE HOU - MAORI CANOE RACING
Text & drawings by Pete McCurdy.

FROM
The Journal of the Traditional Small Craft Society
P.O.Box 78 033, Auckland 2, New Zealand.

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