1986 Queensland School Marine Resources

from school visits by Bob Moffatt



BENOWA + KeeBM + Mekki sie Workens





Education Out of Doors

R. Simson Principal, Maroon Outdoor Education Centre



A her at the Centre acquaints students with some of the skills needed to handle the aper Cats before they sail out across Maroon Dam.

Introduction. Maroon Outdoor Education Centre (MOEC) is situated on the north shore of Maroon Dam near Boonah in south-east Queensland. It lies close to the rugged and picturesque mountain country of the Scenic Rim. Nearby are the Mt Maroon and Mt Barney National Parks.

Facilities. The buildings purchased from the Water Resources Commission in 1972 following completion of work on the dam were converted for use by the Centre. The rooms cater for four occupants, and each contains wardrobes, study tables and beds. Blankets, pillows and crockery are provided. Students must bring sheets, pillowslips, cutlery and personal items.

Detailed lists are sent to each school as a booking is made.

A new student accommodation complex is presently under construction. It is anticipated that the units, built in natural timbers to an attractive modern design, will be put into use during 1981.

At present there is adequate accommodation for 120 students. Apart from the dining room there is a library and lecture/discussion area, recreation hall, tennis court and other playing areas.

Staffing. The staff of eight teachers includes specialists in biology, geography, orienteering, sailing, canoeing, and rockclimbing.

Availability. The Centre is available for use by both secondary and primary State school groups. Private groups and tertiary institutions may also use it on weekends and in school vacations, according to availability. At certain times during the year in-service courses for teachers are offered.

Philosophy. The broad educational philosophy on which the Maroon Outdoor Education Centre is based has three major premises:

- (a) that through appropriate environmental experiences students may be led to increase their awareness and knowledge of the environment, and adopt positions which reflect an affinity for the environment and concern for its care.
- (b) that through appropriate adventure experiences students may be led to see the worth of a range of challenging, non-competitive individual pursuits which are environmentally compatible and that through these pursuits students may achieve a heightened self-awareness and an improved self-concept; and
- (c) that through a community living experience students may be led to analyse some of the social forces operating on individuals and groups, realise their own contribution to social relationships and understand the contribution of others, and adopt a new position of confidence in personal relationships.

It is further believed that the objectives associated with this approach are best achieved through a residential group experience which is non-competitive, non-threatening and supportive, and which involves individuals who are warm, sympathetic and understanding.

Aims. Working through this philosophy, the Centre aims to:

- expose individuals to environmentally compatible outdoor pursuits;
- (ii) create an increased awareness and knowledge of the environment and a commitment to environmental quality;
- (iii) develop improved personal relationships among students and between students and their teachers;
- (iv) help train teachers (both State and independent) who are capable of designing and conducting successful outdoor education programs;

- (v) act as a resource for groups wishing to develop outdoor education programs; and
- (vi) establish, by example, practical standards of safety in a variety of outdoor adventure activities.

Programs. Overall programs are designed following consultation between the visiting school and the Centre. Where schools feel competent to suggest program elements, and where these elements fit the workings of the Centre, they are incorporated. Some schools may even wish to plan their whole program using Maroon staff as resource people. It is true, however that permanent staff know the local scene very well and have expertise which makes program modules developed at the Centre successful. If a school has not visited the Centre previously and has little knowledge of programming, the Centre can provide a model program, tailored to fit the needs of the particular age level of the students.

Visiting staff are invited to prepare a three-hour or a one-and-a-half-hour module, and run it themselves. This needs to be prepared prior to the visit, and guidance by MOEC staff at that stage is readily available. Schools which have provided teacher expertise in the past have conducted successful programs in first aid, resuscitation, astronomy, environmental art, pottery, creative writing and bush drama.

Rainforest Studies

D. Burchill Malanda State High

The rainforest patches readily accessible to Malanda State High and used in geography lessons are the small, heavily logged sections adjoining the school grounds and the Lake Eacham National Park. Both of these areas were logged in the district's early days of settlement and in the case of the Lake Eacham patch, logging continued until about fifty years ago. Over the years man's activities opened the canopy and led to the introduction of species exotic to the area, e.g. acacias and lantana, together with the accelerated growth of some light-seeking species.

The patch near the school is used for

Year 8 geography as an introduction to the rainforest environment. Depending on the weather conditions:

- Students stand in the sun on the edge of the rainforest to discuss the vegetation around and in front of them.
- 2. They move about two hundred metres into the rainforest where they remain silent for a few minutes and note down what they can feel and hear. Discussion of the differences between the area inside and outside is then held. The major differences include:
 - · temperature
 - · light intensity
 - moisture presence
 - sounds lack of normal street sounds and the presence of a range of birdsong
- Students then carry out a variety of activities:
 - (a) sketch the base of a large tree (showing buttress roots);
 - (b) touch bark noting texture and temperature, do bark rubbing using paper and grease crayon or charcoal;
 - (c) sketch or rub leaf shapes to display the variety of form and size, feel the texture of young and mature leaves on the same tree shrub:
 - (d) describe depth and formation of litter on the forest floor, suggest reasons for the very little that occurs (over-populated with scrub turkeys);
 - (e) look straight up to estimate the area of canopy cover.

Year 12 students studying the Man and the Environment unit use the Lake Eacham National Park to study the variations in forest response to the different ways in which man has made an impact in the area. These range from areas cleared for Rest and Recreation (R & R) camps during the second world war to areas only selectively logged. Using appropriate instruments students measure variations in temperature, humidity and light penetration between different parts of the forest and the outside environment. They make accurate counts of life form varieties and differentiate between indigenous and exotic rainforest plant species (in Year 8 these are identified for

It is hoped that by participating in these environmental studies Years 8 and

12 students will begin to understand how delicate the balance of nature is in a rainforest environment, and appreciate the consequences of man's impact on such an area and the need for conservation.

A Service with a Message

A. Lloyd Publicity and Information Officer, National Parks and Wildlife Service

To achieve a stable system for man to live in harmony with nature rather than in conflict with it, priorities and attitudes must change so that resources are used to the benefit of all living things. This one message the National Parks and Wildlife Service tries to convey to students in Queensland.

Established in 1975, the Service plays a key educational role in conserving the natural world by arousing student awareness of the delicate balance and complexity of our environment. Brochures, posters, maps, audio-visual programs, displays and lectures form the basis of the Service's communication process. Special kits have been prepared for use in schools, and on-park programs are held from time to time.

As part of its intention to step up its nature conservation program by actively encouraging young people to make a greater commitment to environmental protection, the Queensland Government recently released a new film entitled 'et's Live in Harmony. It takes a critical at man's impact on the natural world and calls for reshaping of community attitudes to ensure that the preservation of flora, fauna and natural features of the landscape are taken seriously into account in all future land use programs. Eventually, it is hoped to produce give-away records of the film's audio-visual soundtrack, together with support literature, which will be available to schools requesting them.



Compiled in the office of the Co-ordinator of In-Service Education (Secondary) and published by the Information and Publications Branch.

Marine Centre opens soon



Wynnum High School's Marine Studies Centre is rapidly taking shape.

The new building was necessary to house the special equipment for the Applied Marine Studies Course introduced by the school this year for students in Year 11. It is expected the building will be ready for occupancy immediately after the school holidays.

Teacher in charge of Applied Marine Studies, Mr Dave Mitchell, said the building will house the five power boats owned by the school which will be used in the boating section of the course.

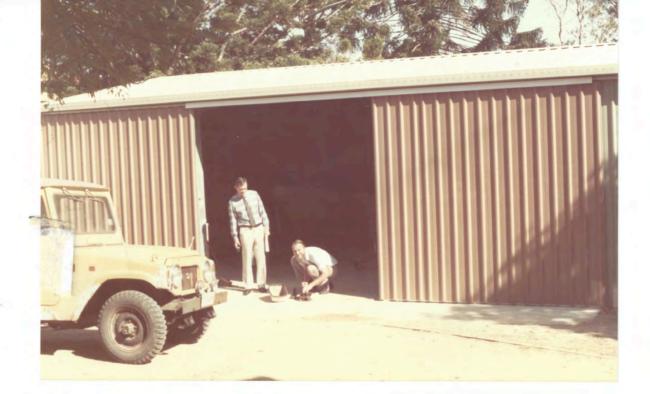
"As well, the building will house the marine CB radios, kayaks, charts, compasses and other navigation equipment. Classes will also be held in the centre", he said.

Students taking the course are taught water safety skills and survival techniques, navigation and boating as well as use of radios. As a result the school has had to build up a stock of valuable equipment. Some of this was supplied to the school through grants from the Education Department but a substantial part of the cost has been met by the Parents and Citizen's Association. The course is seen by them as a significant new thrust in Year 11 subject offerings.

The new centre is being funded by the P and C Association with a dollar for dollar subsidy from the Education Department. It has dimensions of 13m by 7m with steel frame and coloured steel sheeting with two large sliding doors at the front. The building sits on a concrete slab and is sited near the Music/Science block.

What makes the construction even more special is the fact that it has been carried out by students of the school as part of their work experience. They have been supervised and assisted in the project by teachers from the school's Manual Arts Department," said Mr Mitchell.

Dean Johnston and Michael Price of Grade
11 at Wynnius Migh School are hard at it for
work experience aring construction at the
Centre.









DANE, Mirdell

COOLUM 1986









CALOUNDRA 1986





Caloundra riding high

LEAVING the surf (right) after completing their heat in the Queensland State Secondary Schools Surfing Association's (QSSSSA) State titles are Noosa District State High students Kylie Williams (left) and Susan Stokes.

The titles, held at Duranbah Beach just south of Tweed Heads, attracted about 100 competitors from Gympie to the border.

Each year, the State's top secondary school surfers endeavour to win the prestigious Mark Richards Shield for their school. (Mark Richards, one of Australia's most renowned surfers, having won the world surfing championship four times in a row, is patron of the QSSSSA).

This year, Caloundra State High won the shield in a cliff-hanging finish to the three days of competition.

'lt was a very close competition from start to finish with Caloundra High just scraping in ahead of favourites Palm Beach-Currumbin', Association president Steve Thompson said.

'Caloundra took out the junior teams' competition, and Maroochydore won the senior section.'

Rodney Brimms of Keebra Park



State High scored well to win the boys' open champion trophy and Bridget Van Kolch of Noosa District High won the girls' open championship.

A State team, consisting of competitors from the winning junior and senior schools as well as three additional 'all-star' surfers, will compete against teams from the other States in the national titles at Kiama in New South Wales.

Mr Thompson paid tribute to the sponsors of school surfing — Ansett Pioneer and Kellogg — for their support of surfing.

'But the underlying aim of the competition and the sponsorships is to achieve greater surf safety', he said.

'In any decision-making involving the schools' water safety courses or surfing competitions, the "bottom line" is always safety.'

S. R. Hampson, Government Printer, Queensla



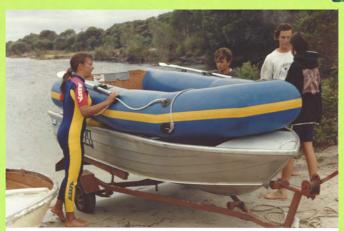








KAWANA WATUS





BURNSIDE 1986





SUNSHIME COAst BLI BLI "Annex"





Burnside Briefs

industries.

IT'S official. Burnside High School's Marine Studies Program is under way for 1986, with the launching of two catamarans, rebuilt by the students, and two aluminium dinghies.

The launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on Thursday on the banks of the launch was held on the launch was held was held on the launch was held was held was held was held was held was h The launch was held on Thursday on the banks of Maroochy River at Bli Bli. This course provides an interesting study of our local area and its marine

In attendance were project co-ordinators Derek
In attendance were project co-ordinators Derek
Foster and Peter Bradford, Member for Cooroora
Gordon Simpson, Regional Director of Education
John Dwyer and participating students

THIS year Burnside has the largest number of mature aged students (10) since the school opened. They are in years 11 and 12 and feel that Burnside is more "geared" for their needs than other Coast schools. Most returned to gain their senior certificates in order to continue on to tertions etudice on to schools. Most returned to gain their senior certificates in order to continue on to tertiary studies, or to

LAST week a team of marine students competed in the regional sailing championships at Hervey
Bay. Two Burnside sailors, Matthew Ryan and Shamus Stevens, collected third place in the multi-hull division a creditable affort for their first connecting division, a creditable effort for their first competition, winning them a place in the forthcoming State

John Dwyer, and participating students.

better their employment prospects.

Maritime course starts

BURNSIDE High School's new maritime studies course will be launched today.

Course co-ordinator Derek Foster said the course would examine leisure pursuits and environmental issues, as well as providing a valuable pre-voca-tional background for the students.

Mr Foster said only Year 11 students would take the course this year, but it would be offered to them as Year 12s next year.

The official launch of six boats by Cooroora MLA Gordon Simpson and Brisbane North Region director of education John Dwyer will be at 1 pm today at the course's Bli Bli headquarters.

• ABOVE: Catering for the recent launch of Burnside High School's marine course are hospitality course students (from left) Amanda Brown, marine course are nospitanty course students (from left) Amanda Brown, Kylie Croxon, Janelle Stewart, Kristina Tenlen, Toni Doman, Stephen Egan and Angela Shipard.

MARITIME STUDIES MAKE A SPLASH

School launches boating course

BURNSIDE High School's new maritime studies course officially took to the water yesterday.

Water yesterday.

After a brief ceremony at Bli Bli involving Cooroora MLA Gordon Simpson and North Brisbane Region director of education John Dwyer, some of the 29 Year 11 students studying the course set off on the Maroochy River in the two dinghies and four catamarans they will use for the next two years.

Mr Dwyer said it was the first such course in the region, which covers most of the Sunshine Coast down to Brisbane.

Yesterday's launch represented the fruits of a year's preparation.

Parents, students and guests attended the launch, inspecting displays set up by the students on the fields they will cover.

Course co-ordinator Derek Foster said not all the time would be spent on the water, as there were theoretical aspects to it as well. However, at least 50 per cent of the time will be in practical learning in areas such as power boating and sailing, safety, fishing and first aid.

By the time the students have finished the course at the end of Year 12, they will have earned a speedboat licence, Australian Yachting Federation and TAFE certificates.



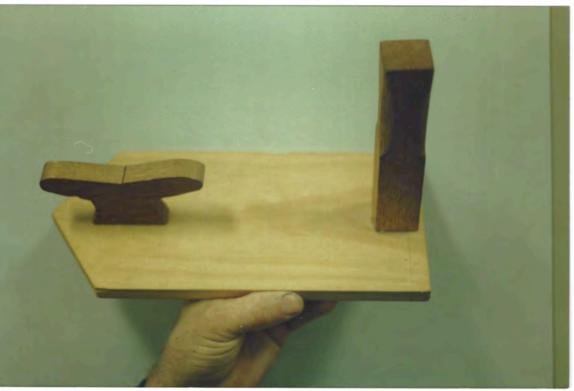
ABOVE: Burnside High School student Melissa Dyson, 15, starts the ontboard motor on her dingliy
as schoolmates Shane Smith, 15 (left), Shane Montague, 15 (bow) and Jason Barkle, 15, steady the boat
as part of the school's maritime studies course.











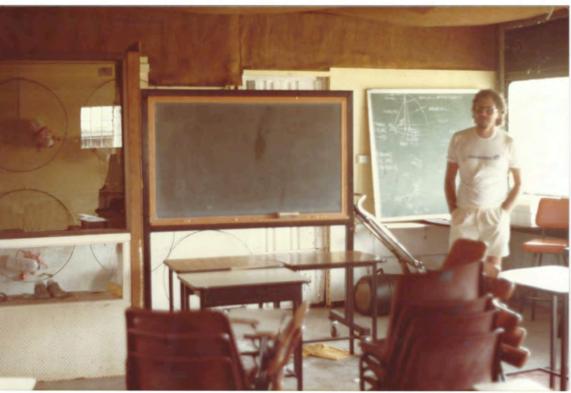














GYMPIE 1986









MARYBOROUGH 1986





MARY BOROUgh





BOAT
THILER at
PRESENT in
DAVE Claridge
BACK YARD

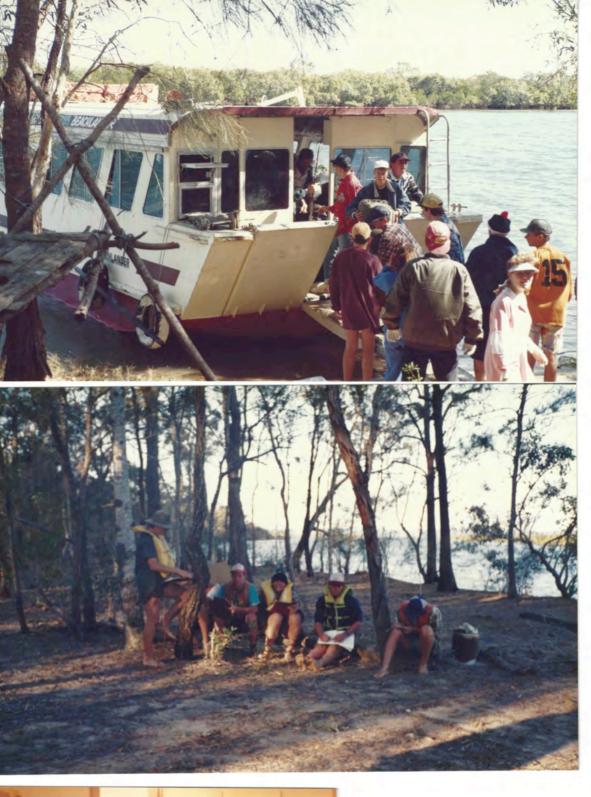


Students test out radio skills



MARY BolougH

Maryborough State High School students (from left) Lesli Andersen, Jason Walker, Kim Parker and Adrian Thompson can't wait to load the marine band radios on board their boat and test their marine skills. The radios were paid for by the Education Department and marine studies students will be taught how to operate them correctly. The radios will also be used on school camps.





HERVEY BAY 1986





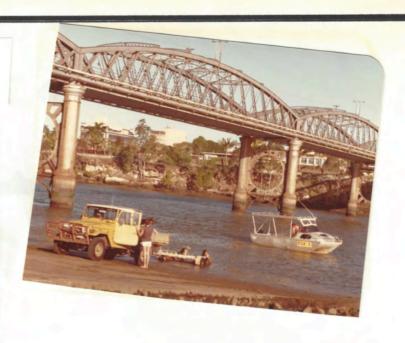






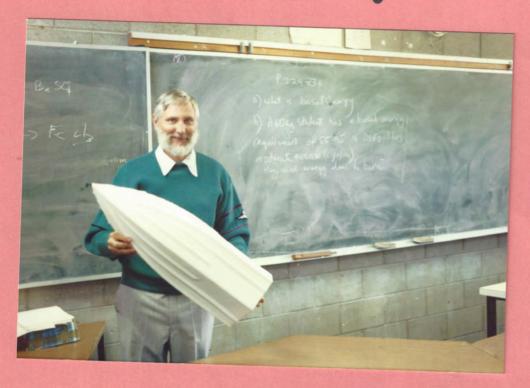
BUNDABERG 1986







John Colosa









MACKETY MACKETY.



PaulSurptur

MIRANI





















Fibreglan Fish.
Plaster Work 1. Wash fish with spange son and detergent 2. Rive off detegent 3. Wipe dry with cloth or paper towelling to reverse all , line.
+ Place his on side Last buried i sand
5. Fill would cavity with clay
6. Place his in realitie pontion
whole side and overlap sides by 2 t 3 cm
8. Pour plester over fish, gently quivering plaster into all parts
9. Allow to dry
10. Remove fish from would
Fibreglaving Cantion - catalyst wed in fibreglaving can cause blindren in 3 seconds it not washed out — wear safety goggles!
. Clear mould of any bits and pieces adhering - wooh and let dry thoroughly.
2. Brush on a thin layer of release agent 3. Using a brush paint on a layer of resin 4. Allow this layer to dry

5. Mix more resin

6. fint on more resin and work in Fibreglan matting - work in well to remove bubbles.

7. Allow to dry

& Renove From mould

a. Trin up and paint!



Ashnure 4214. Sindey Bob, Hope this brief into is sufficient. Thanks for all the goodies delivered to us

all greatly appreciated Look boward be seeing you again soon Cheers. Rong

MACKAY 1986



















Close up of went used & raise & lower We small grey pole slides down inside of the larger pole. When upright it is secured by the balt + landle in the centre of the pole

Bower



















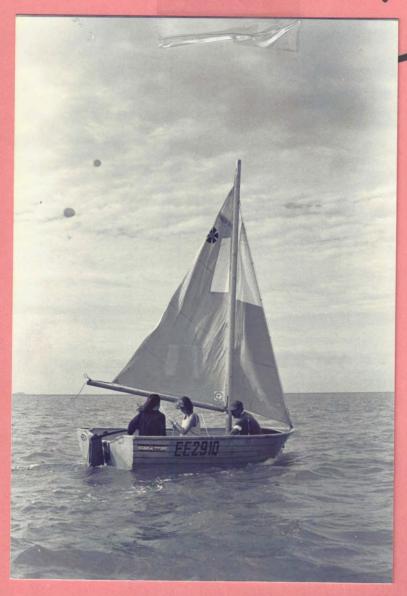








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PIMULIS 165







NORTHERN COURIER



FRESH CRAYFISH FOR LUNCH

If everything goes according to plan then Cpl Russell Hecker of 2 Fld Supply and Staff Sgt Ray Browne of 2/4 Delta Co could be enjoying fresh red claw crayfish for lunch whenever they please. Their sons, Darryl Hecker and

Their sons, Darryl Hecker and John Browne are part of a project at the Heatley State High School, to grow and study the Queensland marron, under the watchfull eye of

Dave Mason (Senior Subject Master).

An expanding world population and diminishing wild commercial fisheries are causing supply shortages in most seafood product lines.

Increasingly aquaculture is supplementing and eventually may replace traditional fisheries.

Significant and necessary

developmental work is being conducted in North Queensland by James Cook University, AIMS, The Queensland Department of Primary Industries and a number of commercial organizations.

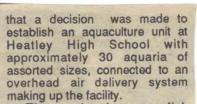
Skilled and knowledgeable employees will be required to service the expanding industry in future years.

It is against this background

From left to Right, David Dunn, Lyell Bramley, Darryl Hecker and John Browne with two of their red claw crayfish being studied at the Heatley State High School.

April 1990

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The red claw crayfish (sometimes known as the Mitchell River crayfish and Tropical Blue crayfish) lives in the freshwater streams of Cape York Peninsula and has great potential as a gourmet dish in Queensland restaurants.

Being delicious to eat, easy to grow and low in cholesterol makes the crayfish a natural for the consumer market.

The red claw grows well in captivity and the specimens at the Heatley High thrive on a steady diet of Pal dog food but can do equally as well on chook food pellets.

The meat yeild of the crayfish is the highest of any freshwater crayfish in the world with the tail and claws constituting about 60% of the animal.

They can grow to 60 grams in six months, 250 grams in two years and have a maximim size of around

450 grams with a length of approximately 20cm

They sexually mature during their first year and can have multiple spawnings per year, eg. three to five clutches during the summer months.

Clutches vary depending on size and age of the female but generally around 500 young per clutch can be produced.

A study conducted by John Browne, K. Melchert, S. Williams and M. Bishop at Heatley High has shown the the crayfish "growfaster, breed more often and produce larger offspring in heated water and subject to prolonged light exposure".

Although lending themselves to commercial production on a large scale, the crayfish can be grown at home in the back yard in small tanks or fish ponds and with a little planning a continuous supply of cray fish could be maintained.

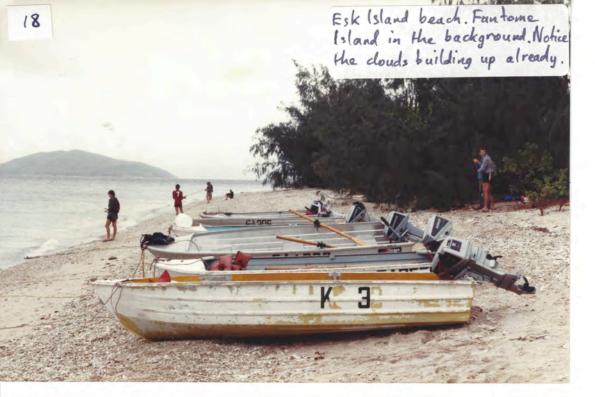
If any of our readers would like any further information I am sure that Dave Mason or the students of the Biology Class at Heatley High would be only too happy to assist.

Owen Strange













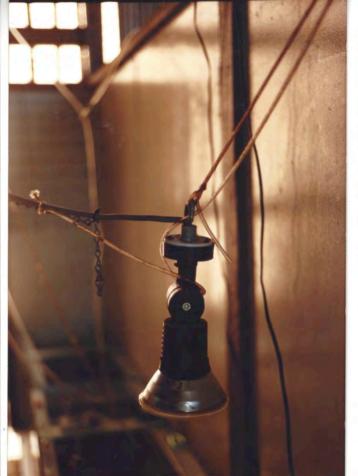


























TOWNSVILLE 1986

MESA





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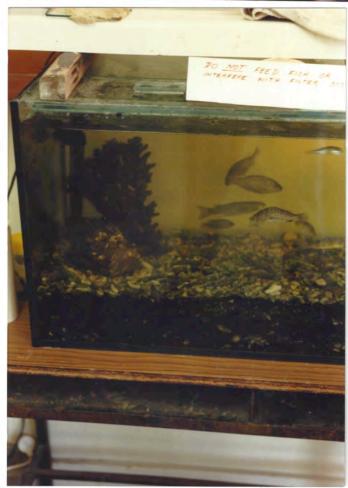
























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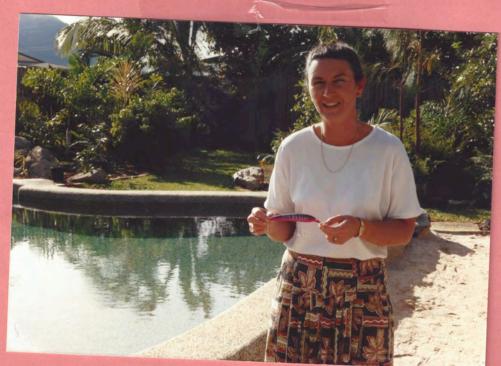




CAIRNS 1986 5 M174 FIELD

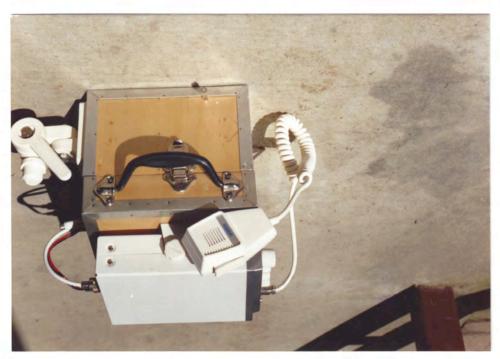


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BAMAGA 1985





THURSDAY ISLAND 1985





