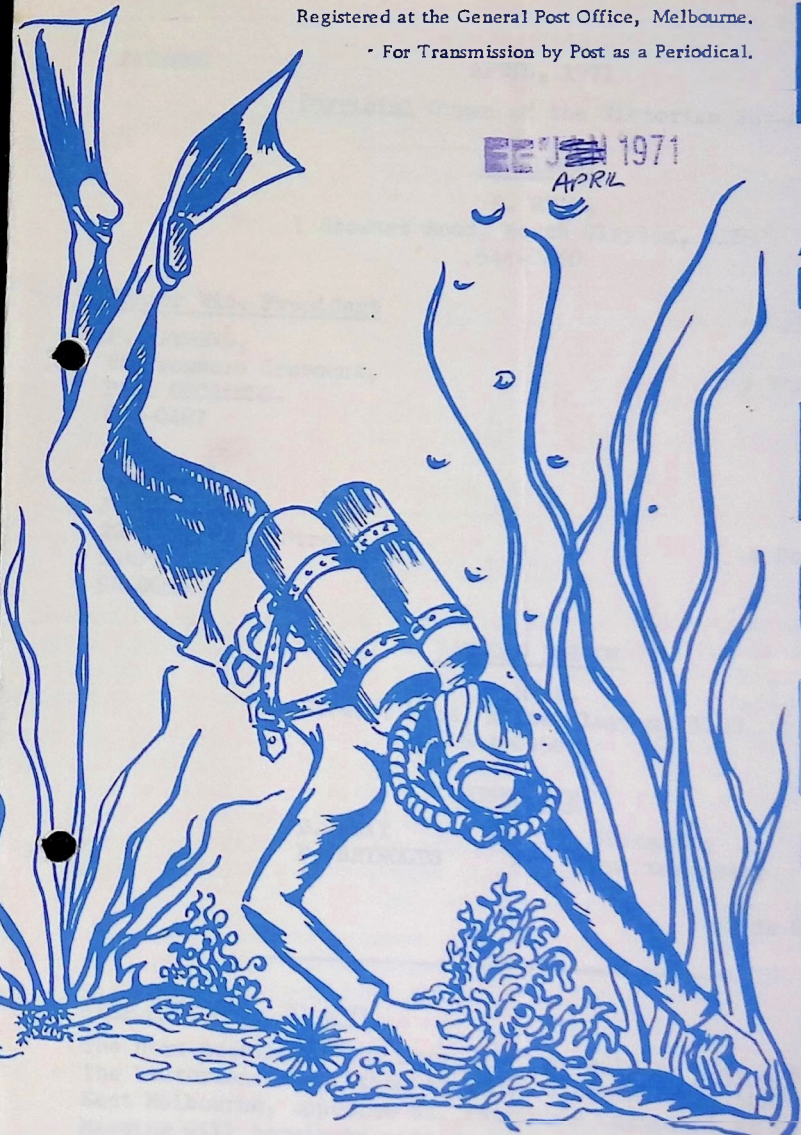


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FATHOMS



VICTORIAN SUB-AQUA GROUP

(Official Organ of the Victorian Sub-Aqua Group)

PRESIDENT

G. RYAN,
1 Stewart Road, North Clayton, 3168
544-0450

Senior Vice President

P. MATHEWS,
66 Frogmore Crescent,
PARK ORCHARDS.
870-0487

Vice President

B. JANSEN,
5 Torquay Avenue,
CHADSTONE
277-4388

Secretary

J. NOONAN,
22 Lagnicourt Street,
HAMPTON.
98-8650

Treasurer

A. CUTTS,
4 Powell Street,
RESERVOIR
478-3092

FATHOMS EDITOR

G. RYAN,
1 Stewart Road, North Clayton, 3168
544-0450

COMMITTEE

B. GRAY - Librarian
P. REYNOLDS - Quartermaster

:Life Member

CLUB MEETING - 20/4/71

The next meeting of the Group will be held on 20th APRIL, 1971, at the Victorian Association of Youth Clubs Hall, Gisborne Street, East Melbourne, opposite St. Patrick's Cathedral at 8.00 p.m. sharp. Meeting will terminate with General Business at 9.00 p.m. sharp.

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EDITOR'S REPORT

I would like to make mention in this edition that I have to appeal to all members to contribute to further editions by writing small articles of interest - as editor I think I should not have to appeal to members like this, especially as they are active and participating in the sport

Anything of interest on diving, political-wise, exploration of the seas, wrecks, new equipment, maintenance of, marine life, medical ... the list is endless, but a lot for one person to find and select, so not just for the next edition, but all editions I want your support and possibly we'll have a fairly good newsletter. There will always be ~~me~~ for -YOU- to advertise, sale of goods, when you are holding the next Bar-B-Q at your place, etc.

On another line of thought now, it seems we are having a "return" to the Dive Scene by many people, including some new members and old faces we haven't seen for awhile; is this mainly because of the dive areas selected, if so ring me after 6 p.m. with suggestions for future dives and we could include them for the year's diving. Boat trips it seems are of particular interest and are capable of attracting people to travel further, so by giving boat owners any assistance with their boats, transport of boats to the dive site, etc. we should have more successful boat trips.

OUTINGS - PASTPORT CAMPBELL WEEKEND - MARCH 6-8

Most of the 16 divers and families arrived at the camping ground on Friday night. Saturday morning strong he-men launched the boats by carrying them across the sand. Some stayed in the boatw while others drove cars to the Loch Ard Gorge to be picked up there.

After surfing back and forth outside the Gorge waiting for a break in the swell, the boats roared safely through with much holding of breath. The boat drivers picked up the other divers then waited for a chance to go out of the gorge towards the wreck.

The wreck of the Loch Ard is situated near Mutton Bird Island in 65' of surging water. Visibility was about 25'. The wreck is plainly visible as such - twisted metal and steel plates. The surge of the sea could be felt even at 65'. A few fearless divers were turned a delicate shade of green by the waves. Some even lost their lunches. On one trip the prop of one boat was caught in the rope of a cray pct. Big Al dived over and did his good deed.

On Sunday about 18 crays were caught by four divers in high seas. The weekend was a complete success and enjoyed by all, due to the attendance of so many divers and boats and perfect weather.

PAT REYNOLDS.

TUBE TRIP - EILDON - 21st MARCH

This outing was not with the usual equipment but with tubes, the arranged meeting place was Thornton at 10.30 a.m. Those who attended were Bill Gray, Doug Gray and Friend, Margaret Phillips, Max and Joy Davenport, Colin Bull and friend, Zolton and Beth Okalyi, Di and myself.

The water coming out of the pondage weir rushes out at a cool 40° so wet suits were a must, the water was excellent for chilling the odd bottle or two.

Nine of us entered the Goulburn River at approx. 12 noon for the contemplated trip down to Snobs Creek. Tgere they were, all competitors at the ready, sporting all shapes and sized tubes, some with bottoms lashed into them (raft base bottoms) mainly for the insecure types who thought the odd rock or snag might do a little "damage" or something, fat tubes, thin tubes and even a raft of

three small tubes - a supply raft of bananas, apples and the odd "Tube"? Within 100 yards of entering the river, three of us managed to get tangled and crash our way through the dead branches of a fallen tree and prepare for what was to come.

A few rapids were encountered on the way down and a remark was made that we had just passed Snobs Creek but alas we flowed onwards, at times really moving - then slowing to a crawl, quite a relaxing way to spend a day.

3½ hours later it was again remarked that we should be near Snobs Creek by now, when out of the scrubby came female voices - "over here" - "over here", immediately all male members thrashed, paddled and swam to the source of the cries in the hope that they were onto some thing, but again, alas, 'twas only the wives and friends to tell us we has passed Snobs Creek 2 hours back and that we were only 1½ miles from Thornton, after about 15 minutes of drying off and warming up waiting for the stragglers Bill and Marg, a tube floated serenely by without an occupant. Ah-Ha! wots dis - an immediate search is organised and cars go off in different directions on both sides of the river.

On meeting back at the place selected for the Bar-B-Q, the story unfolded that Marg and Bill who were tied together (tubes I mean), were floating downstream when a submerged branch separated the rope and Bill travelled down river whilst Marg travelled under and against the branch with the current pushing her under. Bill relea sed Marg and tried to hike back along the road in wet suits and bathers, people in cars thinking they were a couple of hoboes, would not give them a lift so they hiked about 2 miles until Max picked them up.

We all had a fine Bar-B-Q and then proceeded home for an early night. All told, a good change.

- ED.

NIGHT DIVE - BLACK ROCK - CERBERUS - 27th MARCH.

Once again the turn-up to dives is increasing and for a night dive, eleven to arrive was rather a good effort.

John Noonan brought his boat and ferried us all out to the hulk of 'Cerberus' at about 7.30 p.m. The water was surprisingly warm and visibility was approx. 7'-10', the dive was on and everyone paired off with the torches and started investigating. Zoltan and I decided to see how much extra life appeared at night and in our travels came across the usual toads, kelpies and even an eel; the shrimps were in abundance and were easy to pick out as their little pink eyes reflect and lead

you to them, the torch could be put right up close to them without them moving but a vibration or actual contact and they disappeared smartly - otherwise we did not see too much else.

Everyone was back in the car park at about 9.30 p.m. but most had something else organised for the night so the proposed bar-b-q did not eventuate.

A well patronised and enjoyable dive.

- ED.

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CUTINGS - FUTURE

Main Proposed Dives for first half of 1971.

APRIL 9-12th - EASTER - "WILSON'S PROM" 145 miles east of Melbourne, and if you haven't camped and dived here before, have no doubts, one of the best diving areas for fish and photography. LIFE JACKET DIVE.

APRIL 24-26th Long Weekend - MT. GAMBIER - 276 miles west of Melbourne. Divers mecca. LIFE JACKET DIVE.

JUNE 12-14th - "GREEN CAPE" - N.S.W.-VIC border. More on this dive in a later issue.

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NOTES

1. Any Club equipment, flags, boat ladders, club signs or anything else members have hidden away or forgotten that belongs to the Club, could you please return immediately to Pat Reynolds.
2. All fees outstanding for the last few months are still payable on hiring of tank, etc.
3. All library books overdue, or on your shelf at home, to be returned so an up-to-date list can be made.

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AQUACULTURE : FOOD FROM THE DEEP

In the past 100 years, the amount of food taken from the sea has multiplied more than tenfold, a rate in excess of global population growth. But the annual world catch - now about 60 million metric tons - cannot continue growing indefinitely. In fact, such sea staples as California sardines, Northwest Pacific salmon and Barents Sea cod - not to mention the beleaguered whale - are already rapidly dwindling. Contrary to the myth, Fisheries Biologist William Ricker recently warned in a National Academy of Sciences report, the sea is not "a limitless reservoir of food energy."

Urchins to Octopus. Fortunately, there is an alternative to harvesting food directly from the sea. By using artificial ponds, lakes, streams and even cordoned-off estuaries and bays to raise fish, man can give nature a helping hand. Fish farming is hardly new; as long ago as 475 B.C., a Chinese scholar-statesman named Fan Li wrote the first how-to-do-it treatise. But as marine biologists seek to exploit its full potential - especially as a way of relieving the world's chronic shortage of protein - water farming, or aquaculture, looms as an ever more important source of food.

The island-bound Japanese seem to be the most ingenious aquaculturists. Dependent on the sea for 60% of their protein intake, they have long led the world in growing oysters, shrimp and other aquatic delicacies. But lately, as their fisheries have become overtaxed and their world-travelling trawlers run into increasing opposition from foreign governments, Japanese researchers have been working overtime on breeding projects, experimenting with everything from sea urchins to octopus. To make fish more accessible to fishermen they have even taken to dumping old streetcars, buses and, most recently, concrete pipes into offshore waters in hopes of providing "aparto" (apartments) in and around which fish tend to congregate.

Other nations are not far behind. On the Chinese mainland, Fan Li's descendants have dotted the countryside with so many fishpond co-operatives that their annual production of carp and related fish (1.5 million tons) nearly equals the total U.S. catch. The Israelis, who have extensive breeding pools, learned that by injecting mullets with pituitary hormones they could cause the fish to spawn in captivity. Ordinarily the mullet - a popular tropical food fish - will spawn only in open water. Similar projects are under way on Taiwan, in India and at Hawaii's privately run Oceanic Institute, where scientists have just made an esoteric contribution to mullet cultivation. By stringing

out buoyant strips of plastic just below the ocean's surface, they have created artificial sea grass on which diatoms will grow. These single-celled algae constitute the basic ingredient of a young mullet's diet.

At the University of Washington, researchers have succeeded in breeding a so-called "supertrout", which outstrips its punier kin by gaining as much as two pounds a year and thriving in salt water. By cultivating the supertrout, as well as oysters and algae, Washington State's impoverished Lummi Indians are establishing one of the more promising U.S. aquafarms. The Oceanic Institute's founder, Taylor A. Pryor, whose researchers advise the Lummis, thinks similarly lucrative aquafarms can be set up all along the tidal areas of the U.S. Northwest, British Columbia and southern Alaska.

One of the more ingenious experiments in aquaculture has just begun on the Caribbean island of St. Croix. Conceived by scientists of Columbia University's Lamond-Doherty Geological Observatory, it is based on a natural sea phenomenon. In areas of the world where the right combination of wind, current and slope of the continental shelf occurs, cold water from the ocean depths sometimes churns up to the surface. Laden with nutrients from decomposed sea life that has settled to the ocean depths, these rising currents possess extraordinary fertilizing power. Once they reach the upper level of the ocean, where sunlight penetrates, they turn it into a garden of phytoplankton - the tiny floating plants that are the bottom link in the sea's food chain. Actually the "upwelling" occurs only in a few areas like the extremely rich fishery off Peru. Much of the rest of the ocean is what one scientist recently called a "biological desert".

To make such a desert bloom, the Columbia scientists are creating some upwelling of their own - in miniature. Dropping a 3½-in.-wide plastic pipe off the northern coast of St. Croix, where the Caribbean slopes off very steeply, they are siphoning up nutrient-rich, cold (41 F.) sea water from a depth of half a mile and feeding it into small pools, each with a capacity of 16,000 gallons. Within 10 days the pools teem with phytoplankton and become ideal breeding grounds for aquatic life. Last week the Columbia scientists "set" their first batch of young Chesapeake Bay and Long Island oysters in the ponds, where they should thrive on the bountiful food supply. Eventually the scientists hope to raise snails, shrimps and anchovies in the pools.

Useful Pollution. Some recent aquaculture projects actually

make use of pollution. In Southern Germany near Munich, the Bavarian Hydropower Co. is already reaping a profit by using sewage (rich in minerals) as a fertilizer in carp ponds. The idea is not entirely new; natives of West Java have long known that carp raised in streams filled with wastes grow unusually robust. There is only one caveat: the fish must be well cooked before they are eaten.

Thermal pollution can be equally useful. Not only trout but oysters and other shellfish have been grown more rapidly in the hot effluent from power plants. Indeed, one New York producer, who raises his oysters in the Long Island Lighting Co.'s cooling ponds, says that they reach full size in less than three years (v. four to five years normally). Even more spectacular results have been reported by the Scots. By placing sole and plaice in water discharged from an atomic generator, they have raised the fish in six to eight months (v. three to four years). The explanation: warm water increases both the metabolism rate and appetite of fish.

In the future, experiments in aquaculture will become even more dramatic. Japanese scientists have already proposed raising tuna - a fish that can reach a weight of several hundred pounds

WRECKS - CITY OF LAUNCESTON AND PENOLA

COLLISION AND TOTAL LOSS OF FORMER VESSEL IN THE BAY,
19th NOVEMBER, 1865.

The striking of these two steamers was probably the most spectacular and most talked about collision in the Bay during the 1860's, although another, two years later, also attracted considerable attention.

The City of Launceston, 278 tons one of the best and most convenient passenger steamers on the coast, started on Sunday evening, the 19th, with the English mails for Tasmania, and after going down the bay some 14 miles, was struck near the west channel in the main chains by the bow of the Penola, just coming up from Adelaide, at about 8.30 p.m. The cut-water of the latter vessel penetrated into the captain's cabin

The water rushed in, and the aft portion of the City of Launceston filled with water so that the vessel was nearly on end.

The Penola got off with the loss of her cut-water, the plates of which were nearly all torn away, and stood about fifty yards off the wreck. The night was calm, the water smooth, and the boats were got out to transfer the passengers and crew to the Penola. This was done under circumstances of great difficulty, there were a number of women aboard, no extra trouble arose. Strenuous efforts were made to stop the flow of water through the aperture made by the collision but without effect. The bulkheads gave away and about forty minutes after, she went on end. All on board her had by that time been saved and were brought on to Melbourne by the Penola, but had to be landed as they were for no luggage at all was saved. The mail box shared the same fate and remained in the sunken vessel for some days before being raised by divers. The following morning Captain Fergusonm Chief Harbour Master, proceeded in the steamer (Pharas) to the wreck and found her lying about $8\frac{1}{2}$ miles on the north side of the west channel lightship, right in the fairway. Her bearings were given as station peak W. by N. and the West channel lightship S.W. half W. She was about $13\frac{1}{4}$ miles from Gellibrand Point Lightship and her top gallant yard was above water. The sea was clear and her decks could be seen far down. Before leaving, Captain Ferguson placed a wreck buoy close to the spot and later a light to warn other vessels.

The agents of the City of Launceston despatched a tug and a diver advised authorities that the vessel was uninsured and worth about \$34,000. At the enquiry which followed on the 24th, the City of Launceston was held to blame for the accident. Captain Snewin's statement: We entered the Heads at about 7.15 p.m. on Sunday night. There was a light easterly wind blowing, and the weather was fine. There was a little haze, but the stars were shining brightly. We passed the West Channel lightship at about 7.40 p.m. and then steered North by East. At about 15 minutes past 8, I saw a bright light ahead. We kept on our course for about 5 minutes more, at the ordinary full speed which was $9\frac{1}{2}$ knots. We then eased the vessel and went on easy for about 5 minutes, with our helm a-port.

Not being able to see the approaching steamer's side-lights, although I saw her mast-head light distinctly, I stopped the Penola and the engines remained stopped for between two and four minutes. I then saw the red light of the approaching steamer about 2 points on the port bow. I gave the order to be easy ahead, the helm being still to port. Immediately after this I saw the approaching steamers green light, and I then gave the order to stop her, and "full steam astern" We then came into collision with the City of Launceston, striking her

on her starboard side near the main mast-abaft, I think. The engines were going full speed astern a minute or two before the collision took place, and at the time of the collision".

A notice to mariners published on the 21st stated the vessel lay about 8 $\frac{1}{2}$ miles from the lightship in 11 fathoms and was with her head to the westward. A further notice, published on October 3, the following year, mentioned that the funnel and masts had been removed and there was now 7 fathoms over the vessel.

The authors do not know whether the wreck was ever removed, but if not, then she would make a wonderful find for any skin diver today. Particulars: Single screw steamer of 278 tons, 80 h.p. Owned by the Launceston & Melbourne Steam Navigation Co.

Further investigations show that it lies directly where the Princess of Tasmania turns into the Channel near the Heads.

PAT REYNOLDS.

VICTORIAN SUB-AQUA GROUP MEMBERSHIP LIST, APRIL, 1971

Administrative Assistant, Postal Service Division, Royal Mail House, Cnr. Swanston St. & Bourke St., Melbourne, 3000

ADDISON, R.	- 24 Jonathan Avenue, East Burwood, 3151	232-3087
ATTWOOD, P.	- 13 Malmsbury Street, East Hawthorn, 3123	
ARMSTRONG, T.	- 2 Ege rton Street, Blairgowrie, 3942	
BEECHER, P.	- Lot 9 Corrigan Road, Noble Park, 3174	
BRETT, W.	- 100 Fawknor Street, Essendon, 3040	337-8735
BULL, C.	- 63 Neville Street, Carnegie, 3163	
Chief Librarian,	- State Library of Victoria, 304 Swanston Street, Melbourne, 3000	
COUSTLEY, F.	- Bligh Street, Rockdale, Q'ld. 4123	
CUTTS, A.	- 4 Powell Street, Reservoir, 3073	478-3092

Cont'd.

DAVENPORT, M.	- 118 Glenhuntly Road, Elwood, 3184	91-3473
DAVEY, P.	- 55 Martin Street, Heidelberg, 3084	45-5364
EVANS, W.P.	- 8 Anzac Crescent, Williamstown Library 3016	
DRURY, Mrs. N.	- 161 Beach Street, Frankston, 3199 (Foundation Member)	
FITZGERALD, T.	- Flat 4, Block 8, Saulbury Street, Elsternwick, 3185	
GRAY, W.	- 4 Pimm Court, Syndal, 3150	232-7220
HAYWOOD, J.	- 143 Willsmere Road, Kew, 3101	
HENSHALL, M.	- 32 Greendale Road, East Bentleigh, 3165	
HEATHER, B.	- 9 Jacka Street, West MacLeod, 3085.	45-5505
JANSEN, W.	- 5 Torquay Avenue, Chadstone, 3148	277-4388
KNIGHT, Miss J.	- Flat 6, 215 Alma Road, East St. Kilda, 3183	52-6250
LUSTIG, P.	- 8 Wells Street, Kew, 3101	
MAGUIRE, F.	- 2 Idel Avenue, Aspendale, 3195	90-3030
McBEAN, D.	- 25 Driftwood Drive, Glen Waverley, 3150	232-4894
McGOWAN, Miss D.	- 7 Leonard Street, Northcote, 3070	
MATHEWS, M. & P.	- 66 Frogmore Crescent, Park Orchards, 3114	870-0487
MORTON, L.	- Burwood Road, Ferntree Gully, 3156 (Blue Star Batteries)	
MORRIS, L.	- 131 Noone Street, Clifton Hill, 3068	489-9563
NOONAN, J.	- 22 Lagnicourt Street, Hampton, 3188	98-8650
PARTRIDGE, P.	- 29 McKinnon Road, McKinnon, 3204	
PHILLIPS, M.	- 3 Tricks Court, Syndal, 3150	232-9633
REYNOLDS, A. & P.	36 Mandowie Road, Glen Waverley, 3150	232-5358
RICHMOND, M.	- 47 Hinkler Road, Glen Waverley, 3150	
ROBERTSON, P.	- P.O. Box 69, Fanguna, Bouganville Is., T.P.N.G.	