# PRICE 1/‘SNORKEL’ 

Official Organ of the Underwater Spearfishing Association of Victoria Vol. 2, No. 7



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Official Organ of the U.S.F.A.V.

## Vol. 2, No. 7

NOV., 1954
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All copy should be sent to The Editor, Don Brown, 61 Kerferd St., East Malvern, before the 18th of each month. Responsibility is accepted only for Editorial comment and opinion.

Advertising matter only to N . Welsford, 63 North Road, Oakleigh.


## WHAT'S ON

- Nov. 28. - First Aggregate round at Point Lonsdale.
- Dec. 2. - Social at Y.M.C.A. at 8 p.m. .Films and details of the Christmas competition will be given during the evening.
- Dec. 12 - Second Aggregate at Mornington.

The solution to a long-felt need in the U.S.F.A.V. at last appears to be looming on the horizon.

Steps are being taken to form a special aqualung group for club members, and are the result of several letters to The Editor. The best of these are published in this edition.

Many enthusiasts have been building their own aqualungs during the winter months. A few are possibly as good as those currently retailing at $£ 60$ and more. But unfortunately many have been undertaken with little or no technical background and are a oneway ticket to Davy Jones.

Competent instruction in the building of self-contained breathing units, lectures on all aspects of underwater activity - both theoretical and practical - and organised outings have thus become a necessity.

The possibilities for such a group would be unlimited. Of course, rigorous tests for members - and their units - would be essential. Several sub-groups could eventually be formed to probe every avenue of underwater research and exploration.

Our Association is held in high esteem by the general public. This has only been achieved through the fine co-operation of members in sticking strictly to the book. We do not then, want the U.S.F.A.V. to hit the headlines in a Coroner's report.


## OUR COVER

Photography expert Bill Young perched atop a coral bommie 'neath the sparkling waters of the Great Barrier Reef.

## HOW TO BE A SPEARMAN

Now that there are more and more newcomers to the sport of spearfishing, perhaps a little timely advice would be in order regarding equipment.

The would-be spearman must have these five essentials: mask, snorkel flippers, gun, and a flair for telling lies. The last mentioned could almost be classed as the most important of all as this ability will stand him in good stead on the many occasions he comes out of the water without fish.

Unless you have money to spare you can forego the expense of buying a mask as it really isn't necessary except for seeing. The majority of spearmen include in their equipment a lead belt. The main idea seems to be: wear a half-pound of lead for every stone of your weight and cover all exposed parts of the belt with gadgets for scaring sharks, saving lives, repairing and loading guns, etc.

Flippers, as you will see, are the quickest method yet devised for getting an agonising attack of cramp. They are also handy for swimming.

The snorkel or breathing tube is an attachment devised to enable the wearer to breathe a mixture of air and salt water - it could even be likened to the carburettor of a modern car. By breathing this mixture of air and water, thirst is overcome and the spearman can cruise for longer periods!

As time goes by the spearman will accumulate a great variety of equipment. But he must always be sure of this one point - if he is getting. pullovers and long you-know-whats to wear in the water he MUST BE SURE that they are the most ragged, disreputable, and patched objects that he can lay his hands on. This is almost as essential as the ability to lie. No self-respecting spearman would dream of entering the water in a neat and tidy outfit in good repair - No Sir!
Finally, I would like to warn prospective spearmen to taken ALL other spearmens' stories with a large bucketful of salt. When they tell you about the mighty catches they have had, automatically reduce all totals by half and chop six feet off all the sharks that you hear about.

This applies until you gain a little experience in story-telling yourself. Then you can stand there face to face with other spearmen and lie until you're black in the face, but their fish will still be bigger, better and more abundant than yours. Good fishing, KAYBEE.


## OPENING DAY AT RICKETT'S POINT

Sunday, October 24 saw the official opening of the Victorian season at Rickett's Point.

Unfortunately the conditions were far from ideal, with visibility extremely patchy - at times non-existant - and a water temperature of 53 deg. F .

Our President, Bill Hartrick, walked off with the total points trophy 15 points with two butteries of $5^{\frac{1}{4}} \mathrm{lbs}$. and $1 \frac{1}{4} \mathrm{lbs}$. - and the biggest fish trophy.

Peter Coutts was the best junior with a $3 \frac{1}{4} \mathrm{lb}$. and two 1 lb . butteries.

Continuous rain eventually discouraged the large gallery of interested spectators. However, given good conditions, the large crowd that came along to see the fun would auger well for the next meeting, a social at Point Cook on November 7.

## MOORABBIN CLUB

The first General Meeting of the Moorabbin Sub-branch was held in the Library Hall, on July 12. Twentysix members and visitors attended.

The office-bearers for the coming year are as follows -

President: Tim Evans.
Vice-Presidents: Roy Howell, Bruce Paxton, Frank O'Keefe.

Secretary: Jim Gardner.
Publicity Officer: Ivan Fox.
The members of the Social Committee are: Bruce Paxton (Sec.), Roy Howell, Les Borthwick, Kevin Donovan, Laurie Horton and Bill Morton.

The club started the 1954-55 season with a credit balance of $£ 22 / 11 / 10$, which is a good figure for a small club.

For the last three meetings we have been very fortunate in having many demonstrations of new equipment by the President and members. These included frogman suits, spring and CO2 guns, aqualungs, new types of masks and flippers and a wide range of other equipment.

The demonstration nights were well attended and much discussion took place as to the merits and disadvantages of the gear shown.
(Continued on page 12)


Peter Coutts with the $31 / 4 \mathrm{lb}$. butterfish which helped him win the Best Junior trophy on Opening Day.


## IT'S COLD OUTSIDE

Oh, brother! How cold can it get? John Lucas compiled some interesting temperature figures around the Bay while most of us were snuggling between the sheets.

May 1 - 62 deg. F.; June 19 51 deg. F.; September $26-59 \mathrm{deg}$. F.; October 24 (that memorable day!) -53 deg. F.

Somehow it seems to us - and several others - that on this last date the temperature must have been overestimated by about 53 deg . F.

## Technical Section -

# UNDERWATER PHOTOGRAPHY 

## By BILL YOUNG - Part I

Ever since man has been able to penetrate the world beneath the surface of the sea he has strived to capture the aquatic beauty he has seen. With the development of the aqualung a great field has opened to the enthusiast.

The problems encountered in carrying a camera undersea are entirely different from those met on the surface. Many factors have to be taken into consideration, such as low light intensities or the varied colour balance and the underwater haze.

Other secondary problems, involving waterproofing of the case and controls are no less real. Personal ingenuity must be used to solve these.

## CAMERAS

The first subject we will discuss concerns cameras. The heart of any camera is its lens system. In underwater work an important factor is the focal length. For a given negative size, this quantity determines the field of view of the camera, whether it be a wide-angle, telescopic, or normal.

Just what constitutes a wide angle lens for any camera depends to some extent on the manufacture and purpose of the camera. A normal movie lens has a narrower angle of view than a normal still lens, for

If it is possible to interchange lenses on a camera, the most suitable for underwater purposes is nearly always a wide-angle type. The use of this lens will make it possible to take $95 \%$ of all pictures without a change of focus. This is a very worthwhile aim, especially in midocean unmanned photography, where a big depth of field becomes absolutely essential as subject distance is often unpredictable.

A useful way to find the true depth of field of a camera is to take a few photographs in a swimming pool, the rectangular lines formed by tiles and lane markers serving as a precise test chart.

## FILM SIZE

The factors which determine the best camera film size are very much the same as on the surface. Cost, availability and the ease of manipula-
tion of controls are the prime factors concerned.

The larger the film the larger the camera, hence the waterproof case. For professional work the larger film sizes more than outweigh the disadvantages of bulkier equipment since larger and more finely grained prints result.

For this article it may be desirous to discuss the $35 \mathrm{~m} . \mathrm{m}$. camera, as dealing with all sizes may lead to confusion.

## THE 35 M.M.

In a $35 \mathrm{~m} . \mathrm{m}$., it is wise to have a camera that readily accepts a wide variety of lenses, wide angle, normal and so forth, plus lenses of extreme aperture for photography under minimum light conditions.

A camera that automatically resets the shutter as the film is turned is a definite advantage. The standard frame $35 \mathrm{~m} . \mathrm{m}$. uses film spooled with 36 exposures per roll.

This is an important factor underwater, as it allows more pictures to be taken at once than with any other commonly available film size, thus reducing the number of times the camera must be brought topside and opened.

Nearly all underwater colour photography is done with $35 \mathrm{~m} . \mathrm{m}$. , the small 2 ', x 2 ', slides being well adapted for small projectors. The fine definition and low cost make 35 m.m. all but the universal choice.

In his next article, Bill Young will explain the different types of film suitable for underwater photography, and the varying conditions which necessitate different exposures.

## SEEN AT THE POINT

Everyone was cheerful, in spite of the rain. get wood for a fire. Very few "let George do it."

The boys bucked in to trying to demolish a huge $\log$ - bare handed - had to be seen to be believed . . . A few uncovered barbs were lying about. We don't want casualties. If your barb doesn't unscrew, pull a flipper over it when putting your gun down . . . Would like to see everyone with a float. Apart from holding your fish, it can be a lifesaver in the event of cramp or exhaustion . . . The "sign on" sheet is not only a check on competition fishing periods. It's also handy to know who is in the water, and who has come out. Be sure to "sign on" before entering and "out" when you leave for each fishing period. Unless your name is registered, your fish is not eligible for the comp. . . . Surf skis, etc., are to be used only as a float in competitions. Using them as a means of transport will disqualify you . . . Bill Hartrick has a rather tattered snorkel that someone handed in . . .

Considerable interest was aroused with a pair of plastic sandals that were worn under the flippers of one member. These would seem to be the answer to that ever present problem of cut feet.

The sandals were simply a sole of plastic with a single strap over the foot. Enquiries found that they are apparently available in only one size at present - medium size (about fives) - but larger sizes will be produced shortly.


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# PROGRESS OF ANNUAL CONVENTION 

## Preparations for the Third Annual Australian Spearfishing Convention at Queenscliffe from December 28 to January 3, are nearing completion .

Official passes will be issued to financial members who, with their friends, will be the only ones allowed in the Convention area.

All financial members interested in attending the Convention - the biggest yet - should immediately contact the Honorary Secretary, A. W. Taunton, 11 Tilba St., West Essendon, W. 5 , advising the size of their party and the number of camp sites required.

There is a possibility of tents being available for the early birds, and as the camp will be held at the height of the bush-fire season, the scarcity of wood indicates the use of a primus stove. Each camper will need at least two blankets and plenty of mosquito repellent.

## WE FISHED THIS SPOT

A most delightful spearfishing rendezvous with a wide choice of game is found at Eden, situated at Middle Head on the shores of Twofold Bay on the New South Wales coast.

Shaped roughly like a figure 3 , Twofold Bay comprises North and South Heads and Middle Head.

The road into North Head is only a track, blazed by rock-hoppers in their lust to cast a cork where no man has been before.

After finally breaking through the scrub you emerge on a high headland with the crystal clear waters of the Bay on one side and the churning ocean on the other.

Fish ranging from blue groper, luderick, morwong, drummer and others too numerous to mention are here for the taking. There is no need to cruise around yards from the shore - just quietly drop over the ledges into 10 feet or so of water and line up your target.

Water temperature is about the same as in Victoria, judging by the rate of time in water to amount of shivering done afterwards.

Middle Head, only a stone's throw from the township, has fish and crays a-plenty in its underwater grottos.
When a stiff southerly is blowing, South Head may be reached by boat and a good day had in placid waters. There is no direct road skirting the Bay because of the Towamba River,
but there is a turn-off to South Head some 15 miles south of Eden.
Eden has a fairly large population, the majority being direct descendants of whalers and fishermen. These latter still supply the main source of revenue, and a modern cannery exports the large quantities of tuna caught off the coast.
There are two hotels, many shops, service stations and good camping grounds at both Eden and Boyd Town.

Easter is undoubtedly the best time to holiday along this section of the coast. Constant off-shore breezes make places like Pambula, Merimbula and Green Cape as flat as the proverbial board.
Only two sharks were sighted during a two-week camp of fifty or so spearies at Boyd Town last year. One oversized noah was spotted by Ray Cameron, who promptly wore his new seal-skin out in what appeared to be a dignified retreat. The other was one of those discouraging cleaving of the dorsal fin through the water as the writer was about to take the plunge.
"MADDIE"

## EDITOR'S MAILBAG

## 55 Burwood Road, <br> Hawtharn F.? <br> 

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Umy used a rew tmes. comprete with case and accessories, £48. N. Bell, 85 Wattle Valley Road, Canterbury. WF 1848.

WANTED TO SELL. Two 26 cubic feet capacity cylinders for $£ 10$. Tested and painted, filling facilities available. J. Lucas, 58 Eirene Street, Yarraville.
 ing base with glass panel and fish compartment. 63 North Road, Oakleigh.

[^0]
# EDITOR'S MAILBAG 

55 Burwood Road, Hawthorn, E.2, October 16.

Dear Don,
Increasing activity in the use of self-contained breathing equipment has introduced a need for an affiliated group of U.S.F.A.V. members, desirous of attending outings and discussions to promote interest and experience with such gear.

Manufacturers have indicated that a large number of units will be in use this season in Victoria alone, and a section devoted entirely to this specialised form of underwater activity would be of mutual benefit to those members who already own equipment or are contemplating the possibility of "aqualunging," under maximum safety supervision.

Further, a section could be included in the competitions to permit participation on an equal level, as of course an unfair advantage is gained by the use of aqualungs if competition with snorkelites is permitted.

Congratulations on the excellent presentation of the current "Snorkel."

Yours faithfully,

> Bruce Owen.


## SPOT ADS.

WANTED TO SELL. "Porpoise" aqualung unit in as new condition. Only used a few times. Complete with case and accessories, £48. N. Bell, 85 Wattle Valley Road, Canterbury. WF 1848.

WANTED TO SELL. Two 26 cubic feet capacity cylinders for $£ 10$. Tested and painted, filling facilities available. J. Lucas, 58 Eirene Street, Yarraville.

14 Cudmore Street, Essendon, October 25.

Dear Don,

In the past the U.S.F.A.V. has helped many underwater enthusiasts to enjoy their chosen sport to the full. It has also made skin diving in this State free from public disfavour. Members of our Association have played the game and stuck to the constitution.

But since the introduction of selfcontained breathing apparatus, the help to members in this field has been rather small. There is little opportunity for guidance or warnings on the "traps for young players."

Most of the breathing kits being made now are virtual death-traps. Unless something is done in the Association to combine these enthusiasts into a special group, where developments and types of units can be discussed with members of greater experience, a fatality must be expected in the near future.

This may sound harsh judgment, but I think you will realise that many cannot afford lungs at the present market cost. They will also tend to rush completion of their own units so as "to be in the swim."

If accidents occur, the U.S.F.A.V. will at once make headlines in a way that is not wanted. To preserve the existing high standard, I suggest that immediate steps be taken to form a group for studying diving principles, equipment, photography or exploration.

Hoping to hear more in this field in the near future.

Sincerely yours, Bill Young.

WANTED TO SELL. A 6' x 3 ' floating base with glass panel and fish compartment. 63 North Road, Oakleigh.

WANTED TO SELL. Brand new "Torpedo" mask, seal skin, slightly used flippers. Owner re-equipping. Best offer. UL 1733.

## THE HARMLESS SNAPPER SHARK!

There seems to be a growing tendency among people lately to dismiss the Snapper shark with a wave of the hand and a sneer saying: "It's only a snapper shark!"

I think it's about time we cleared up the identity of this fishy type just in case a few careless people come to regard him as another sleepy, harmless fellow like the Wobby. (Although friend Wobby woke up a bit last summer and took a couple of bites out of spearmen.)

The Snapper shark is known under a variety of names to different people. To the scientific type he is Isuropis Mako; to the amateur fisherman he is the Snapper shark; to the professional fisherman he is the Blue Pointer, and to the big game fisherman he is the Mako!

The Snapper shark is known as such by the amateur fisherman because he is in the habit of "removing" hooked snapper from the line as they are being hauled in. He abounds in snapper grounds where he hunts happily for hours on end.

He has also got the playful habit of grabbing any small boat that annoys him by the keel and giving it a playful shake (much to the occupants concern). This, fortunately, is rare.

The big game fisl.erman revels in the ferocious fight put up by the Mako shark, which measures 13 feet or more and weighs from 600 lbs . to 1200 lbs. (The Australian record is 690 lbs.) In New Zealand he is one of the only three fish recognised as game fish.

Notable points in the identification of this shark are: extremely pointed nose, eight rows of jagged teeth, bright-blue back, silvery white belly and an almost equally lobed tail. These points will be useful if ever you stick around long enough!

As a game fish he is usually very hard to kill. One small specimen hooked off Albert Park, towed three men in a launch for three hours before it was landed. When measured it was only five feet in length and weighed 50 pounds. You can imagine the strength and tenacity of a large one.

My reason for writing this is so that any spearman who is told by well-meaning locals that: "the only shark around here is a snapper shark," will know just what company he is keeping.

A tiger shark is a tiger shark, a bronze whaler is a bronze whaler and a grey nurse is a grey nurse, but friend Mako is known by so many names that sooner or later someone will be careless enough to be caught with their cold-water suit down. Don't let it be you!

## KAYBEE.


Spearfishingy Hooles!!MODERN SPEARFISHING. A new 1954 bookby IvanovicPrice Post$25 /-\quad 1 / 6$
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## Feature

## ADMIRALTY DIVING GEAR

Following several queries on the subject, our Patrom, Lieutenant-Commander M. S. Batterham has written an exhaustive and authoritative article on how a new diving dress or improved breathing apparatus is introduced into the Service.

The Torpedo, Anti-Submarine and Minewarfare Division of the Naval Staff of the Admiralty receive information from various sources that a new piece of apparatus is required to carry out some specific job. Suppose that in this instance it is a shallow water breathing apparatus.

## PREPARATIONS

The Division go into the matter very carefully, decide the performance that will be required from the apparatus, investigate whether some existing apparatus can be modified, find out the total number that will be required and whether production can be carried out without interference to production of existing apparatus. When they are finally convinced that the apparatus is necessary they issue a Staff Requirement which lays down the required performance.

The matter is now taken up by the Underwater Warfare Department, whose business it is to produce the "hardware" for all underwater warfare. As it is a diving matter, the requirement is turned over to the Superintendent of Diving, who has his headquarters in the Admiralty Experimental Diving Unit, situated in H.M.S. Vernon, at Portsmouth.

The requirement is looked into at first purely from the theoretical aspect. Calculations are made as to the amount of gas that will be required for the diver to breathe, whether a reducer will be required and of what sort, the size of the canister, the type of harness and the total weight of the apparatus. If it is then found that the Staff Requirement cannot be met, the best answer is worked out and returned to the Naval Staff in the Admiralty for their approval. Should they approve of this modified apparatus they will then issue a Staff Acceptance.

As soon as agreement has been reached between the Staff and the
production department, the Superintendent of Diving can go ahead and produce a prototype of the apparatus. It may be that some new prinsiple is involved and that the Superintendent of Diving requires advice on the physiological aspect. In this case he consults the Royal Naval Physiological Laboratory at Alverstroke. This laboratory is responsible for all the human and animal experiments which are necessary in order to investigate any naval problem concerned with physiology.
When the theoretical work has been completed a prototype apparatus is built up in the Superintendent of (Continued on page 12)

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## Book Review -

## MODERN SPEARFISHING

By VANE IVANOVIC

This latest book on the trends of spearfishing cover all angles of the sport, from the choice of gear to methods of spearing and descriptive comments on self-contained breathing kits.

The author first takes us on an extensive underwater tour describing the various types of sea-beds encountered, though these are mainly in the Northern Hemisphere. However, these are much the same as our own hunting grounds, and detailed descriptions are given of the various fish likely to be seen.

## EQUIPMENT

Selection of the various types of equipment, hand spears, guns, flippers, masks and cold-water suits are competently and authoritively described, with recommendations for the different gear to be used on each particular type of ground.

The newcomer to spearfishing is told of the best fishing methods and ways of diving, plus a lot of general information. Advanced methods are explained for more experienced enthusiasts.

## AQUALUNGS

A very interesting chapter is devoted to self-contained breathing appa-
ratus, and is invaluable to all aspirants to underwater sport. Vane Ivanovic gives the reader inside information on various aqualungs, and the depths and times of immersion that can be used with safety whilst using the equipment.

A graph of this time-depth ratio is included and should be an essential item for all underwater men regularly making dives below 30 feet. The graph is simple, easily copied, and the times can be quickly worked out.

A list of different fish is given, describing the colour, shape, feeding habits and depths of water peculiar to each.

This book can be thoroughly recommended to anyone who is interested in marine life, and is a must for both the beginner and the advanced spearman.

Our copy, at $25 /$ from -
The Technical Book and Magazine Co., 295-299 Swanston St., Melbourne. A.W.T.

## Personal Pars

Ever seen a fully grown spearman break down and bash his head in despair against the rocks? Vince Lee did when he forgot to remove the cork on his spear-tip and was confronted by an enormous buttery intent on committing suicide.

Dragging crayfish barehanded from their 'oles has nothing on the art of catching tin snips. According to Bill Hartrick you "sneak up from behind, using every piece of rock and weed as cover. Now comes the tricky part, when great skill is needed. As soon as you are close enough, lunge out and grab the snips while they are shut. To cook them, just boil in water
with a half-brick, and when it is soft, throw away the snips and eat the brick. (This method is good for Rickett's Point only.)

A move against late-hours and week-end trading is to be made in the Williamstown area following recent Sunday purchases by prominent spearmen.

Noticed at opening day - one lad entering the water in a pair of brightly coloured pyjama pants. Was he still recovering from the night before or is it the latest trend in underwater clothing from Paris?

## Diving Gear

(Continued from page 10)
Diving's workshop and is put through stringent laboratory tests. It is probable that modifications to the theoretical design will be necessary and these are carried out and tested. When it is believed that a good apparatus has been produced, diving trials are put in train to see that theory is confirmed by actualy underwater practice. Once again modifications will almost certainly be necessary.

## PRODUCTION

When the prototype is working correctly a development contract is taken with a manufacturer, who is told to produce a small number of sets for further tests. He has to think ahead to the time when he will be told to produce hundreds or thousands of sets, and it is therefore necessary that every component part in the apparatus shall be capable of mass production in the quickest and cheapest manner.

Finally a "trial order" of say, one hundred sets, is ordered and these are sent to sea for a six-months' trial. This trial is to ensure that the apparatus works correctly and is comfortable to use, and will also stand up to sea conditions and will be simple to maintain. At the successful conclusion of the sea trials a specification is drawn up saying exactly how each component part is made and what it is made of. In addition, the performance to be obtained from the apparatus is rigidly laid down.
This specification is then sent round to the various firms that specialise in the production of this form of equipment and they are asked to tender for a contract. When the tenders are received in the Admiralty they are examined by the Department of Contracts and the most suitable firm selected. Production is then put in hand and the new apparatus is sent to sea.

## BUS BOOKINGS

All bus bookings for various social and championship events must be sent with the correct fare to the Hon. Secretary, A. W. Taunton, 11 Tilba Street, West Essendon at least four days before the outing.

Fares for trips to Point Lonsdale, Flinders, Portsea and similar distances are - Seniors, $17 / 6$, Juniors, $12 / 6$. To Mornington and similar distances - Seniors 15/-, Juniors, 10/-. Members will be notified in advance if transport is available for each outing.

## ARRIVING SOON! SENIOR SPORT PENGUINS

## Moorabbin Club

(Continued from page 3)
Our second excursion for the season will be to Flinders on November 21. Any members of the U.S.F.A.V. wishing to attend should contact the President, Tim Evans, South Road, Moorabbin, or the Secretary, Jim Gardner, 26 Towerhill Road, Glen Iris, before November 18.

There were 28 finacial members at the last meeting on October 11, and quite a number of visitors are contemplating joining the club.

With the Convention looming ahead and the summer almost upon us, we are looking forward to a prosperous spearfishing season.

> Jim Gardner,
> Honorary Secretary.

## 

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