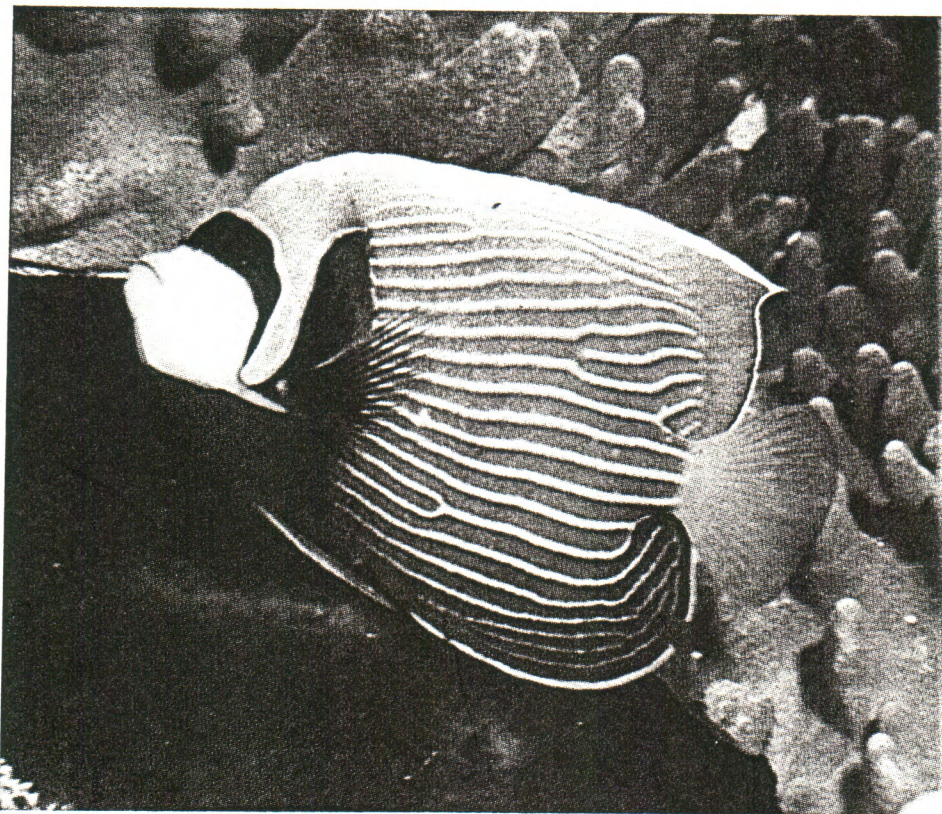


***SOUTH PACIFIC
DIVERS CLUB***



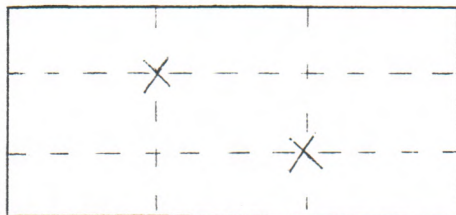
W E T R A G

OCTOBER 1993

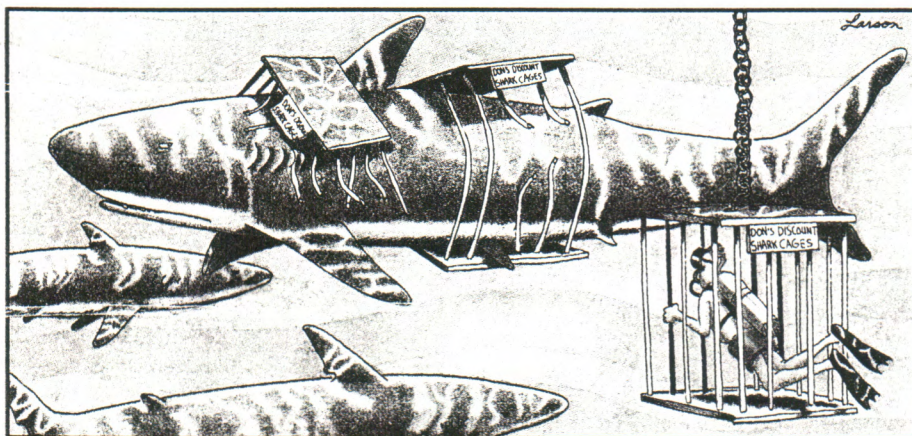
PHOTOGRAPHIC TIP FOR THE MONTH

Some professional photographers recommend that when shooting photos, place the points of interest at an "imaginary intersection of the thirds".

This is best described by a drawing:



*Contribution from: Brian Colwell
S-D-D-C Photographic Officer
1991-1993*



UNDERWATER TRIVIA

Did you know the Nikonos camera system originated with Jacques Cousteau !

He first conceived of a compact, self-contained 25mm underwater camera in the 1950's. Cousteau's design became known as the 'Calypso'. This design was later sold to Nikon and has since undergone 5 major evolutionary changes, culminating in what some say is the world's most advanced self-contained underwater camera.

Source: "Nikonos Technique"

STOP
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PLEASE NOTE THAT AT THE NEXT CLUB MEETING
ON MONDAY 18 OCTOBER
THERE WILL BE A CLUB DEBATE AND VOTE ON
WHETHER TO HAVE A "MASTERS" SECTION
FOR NEXT YEAR'S
UNDERWATER PHOTOGRAPHER OF THE YEAR COMPETITION.

MEMBERS & GUESTS ARE ENCOURAGED TO
ATTEND, TO ADDRESS THIS MEETING
AND TO GIVE THEIR OWN POINT OF VIEW
ON THIS ISSUE.

A FINAL DECISION IS TO BE MADE
ON THE NIGHT
BY UNANIMOUS VOTE OF MEMBERS.

ALL MEMBERS & GUESTS ARE WELCOME.

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GUEST SPEAKER AT OUR NEXT CLUB MEETING

ON MONDAY 18 OCTOBER

A REPRESENTATIVE FROM KODAK
WILL BE ADDRESSING THE CLUB
AT THE NEXT MEETING.

HE WILL BE DISCUSSING THE LATEST RELEASE
OF KODAK TECHNOLOGY:

THE KODAK VISUAL C.D. DISK
AND
ALSO DEMONSTRATING FEATURES OF
THE NEW EKTACHROME UNDERWATER SLIDE FILM.

=====

STOP PRESS.... STOP PRESS STOP PRESS

=====

LAST MINUTE ADDITION TO NEWSLETTER

DIVE REPORTS ON THE NIGHT DIVE / SHORE DIVE & CLUB BOAT DIVE FRI. 24th, SAT. 25th & SUN. 26TH SEPTEMBER

- NIGHT DIVE AT GORDONS BAY - FRIDAY

3 divers turned up. Leo Mayer, Leo Bergman and Paul Wildish. Went to the wall and found plenty of nudibranchs and coral shrimps. The viz. was great and plenty of sea life. After the dive we went to the Clovelly RSL to have a great feed and a lite ale. A few dollars lost on the pokies.

- OAK PARK SHORE DIVE - SATURDAY

Leo Mayer, Joe, Ben, Brian C. and Michael Latimer turned up at 9.00 a.m. to find a glassy sea and a light breeze blowing. We knew it was going to be a good dive and we weren't disappointed. 30 ft. plus viz. - we swam for miles. Plenty of gropers and smaller sea life. Found the Caves. It was well worth going on the dive.

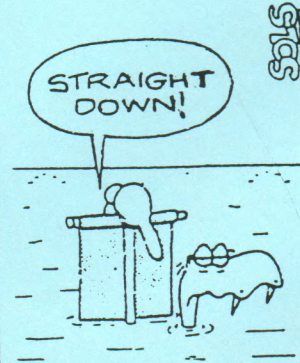
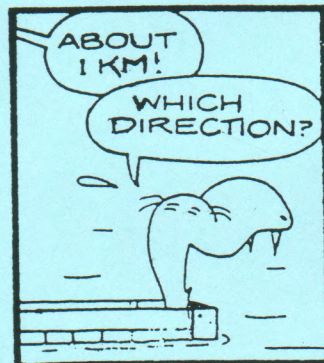
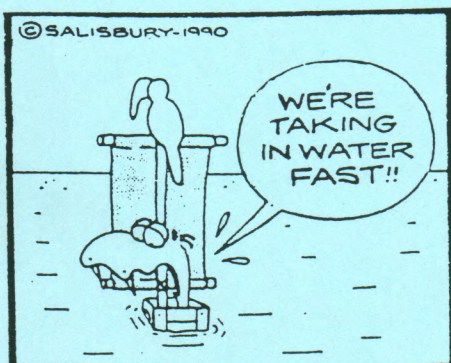
- DEE WHY WIDE BOAT DIVE - SUNDAY

3 boats turned up with room for seven divers plus 3 owners. A bit of confusion as to what dive site we would go to (as we'd heard reports that it was dirty), but after looking for the "lost reef at Manly" we headed to Dee Why Wide. Again we had great viz. The site has plenty of swim throughs with gorgonia and sponges growing on the walls.

After the dive we headed to Doyles for chowder soup. It went down well. Highly recommended after a dive. We finished up at the Watson Bay Pub for a little refreshment.

One comment heard:

*"How could the Olympic Committee
have a vote to choose the Games City;
the others just don't compare
to Sydney on such a great day !".*



STC

**MINUTES OF MEETING HELD
ON 20 SEPTEMBER, 1993
AT BANKSTOWN SPORTS CLUB**

Meeting was opened by Leo Bergagnin (Club President) at 8.15 p.m. with the new Committee being introduced. Terese Mayer (Secretary), Leo Mayer (Treasurer), Joe Ingegneri (Dive/Social Organiser), Paul Wildish (Photographic Officer), Michael McFadyen (Publicity Officer).

APOLOGIES: Ron & Jenny Mines, John Fowden, Lynn Keller, Rick Latimer, Michael Latimer, Ilona Kandilas, Wendy & Michael Cufer.

WELCOME TO: John Szwecow, Robyn Hewitt, Charles Hewitt, Paul Aram, R. Phillips and D. Bilbow.

MINUTES FROM MEETING 16 AUGUST, 1993:

Minutes of the previous meeting were read by Terese Mayer and accepted.

COMMITTEE POSITIONS

Leo Bergagnin (Club President) discussed the Club's Incorporation Rules under Section 12 regarding vacant Committee positions. Section 12 of the Rules state that "the Committee may appoint a member of the Association to fill the vacancy".

In this case the Committee were approached by Paul Wildish and Michael McFadyen who both expressed an interest in the two vacant Committee positions. Therefore Paul is now Photographic Officer and Michael is Publicity Officer.

INCOMING CORRESPONDENCE:

Ryde Underwater Club "Surface Interval", Uni of NSW "Devious Undercurrents", UTS "No Douts", URG Bulletin, Brisbane Waters Aqualung Club "Demand Valve Vibes", Sydney University U/W Club, Trans Nuigini Tours, Divers International Publishing, Revesby Workers Club - re 1994 Auditorium hire fee.

OUTGOING CORRESPONDENCE:

Secretary's letters to Bankstown Sports Club. Newsletters to J. Szwecow & B. Hedges.

TREASURER's REPORT:

Leo Mayer gave the Treasurer's Report.
Accepted by Brian Colwell, Seconded by Martin Kandilas.

PHOTOGRAPHIC OFFICER's REPORT:

Paul Wildish introduced himself as the new Photographic Officer. Paul briefly spoke on the possibility of minor rule changes to the Photographic competition.

Leo Bergagnin briefly discussed the approach to possible A/V changes (e.g. whether a "Masters" Section is warranted). This matter is to be decided on at the next Club Meeting.

Leo B. mentioned Paul Wildish and Michael McFadyen are preparing some suggestions for minor re-wording of the rules.

DIVE / SOCIAL ORGANISER's REPORT:

Joe covered the Club's suggested diving and social dates:

- **Monthly Friday Night Shore Dive** is on this coming Friday 24 September. Divers to meet at Thompson's Bay Car Park by 7.00 p.m. Members to contact Leo Mayer (708 5742) by the Wednesday/Thursday night before.
- **Saturday's Shore Dive** is to be at Oak Park this Saturday 25 September and divers to meet up at 9.00 a.m. Again, members to call either Joe or Leo Mayer by the Thursday/Friday before if you are interested in doing the dive.
- **Club Boat Dive** on SUNDAY 26 SEPTEMBER will be at the DEE WHY WIDE. MEETING AT THE ROSE BAY WHARF AT 9.00 A.M. Boat owners and divers to contact Joe (018 862 328, 743 3710) or Leo Mayer (708 5742) A.S.A.P.
- **4-W-Drive Weekend** to Yerrandari. The dates suggested of 25/26 September will probably be changed. *[Later in meeting trip was postponed (again) till November].*
- **Montague Island:** The next weekend is set for 9 & 10 October diving off Alan Hocking's boat. Contact Joe A.S.A.P. so he can confirm bookings.
- **Jervis Bay Weekend** is for 13/14 November and staying at the Huskisson Caravan Park *(the one nearest to the Pub)*. Boat owners and divers who are interested in going should contact Joe or Leo Mayer A.S.A.P. We have to make a firm booking soon. (Bookings are for the Friday/Saturday nights).

Prices for accommodation are: If 5 people share a **CABIN** its \$62.00 (i.e. \$12.40 p/p). Couples in **CABINS** are \$50.00 per night (i.e. \$25 each). Each Cabin has shower/toilet/kitchen facilities. **VANS** are \$42.00 (for 2 people), or **TENT SITES** are \$13.00 a night.

- **Club B-B-Q's:** The next B-B-Q is for SATURDAY 6 NOVEMBER AT 3.00 P.M. [Our hosts will be Karin Smith & Peter Booth: 60 Fountainbleu St, Sans Souci.
- **Christmas Party - 4 December:** The Club's Christmas Party will be at the same location as last year - with everyone meeting at Gunnamatta Park, Cronulla (at the southern end of Nicholson Street).

Martin then told us a comical story about one of the Club's Xmas party's a few years ago on the Bundeena ferry and also about
"Terry missed the ferry Mansfield" !

- **Undersea Explorer:** 9 - 16 October. \$1,150 ex Cairns. Visit the Cod Hole/Coral Sea. There were only 2 spots left at the time of the meeting for this Barrier Reef trip. Please call Joe A.S.A.P. if you are interested.
- **Lady Elliot Island:** February 1994. 6 Days, 5 Nights. Cost is \$555.00 for the island's "free diving" package in February staying in the Tent/Cabin accommodation. This price includes all food and return flight from Bundaberg. Children under 7 are half price.

Please contact Leo Mayer on **708 5742** for further information / brochures.

WRECK DIVE COURSE:

All 3 Wreck Diving courses are now fully booked. The dates are:

- October: 14, 16 & 17;
- October: 28, 30 & 31; and
- November: 18, 20 & 21.

Venues for the Theory part of the Wreck Course will be at:

- Martin's house for the first course: at 1 Jade Court, Georges Hall.
- Leo Mayer's house for the second course: at 123 Ashby Avenue, Yagoona.
- Joe Ingegneri's house for the third course: at 7 Alfred Street, Concord West.

Arrangements for boats are to be co-ordinated with Joe.

All those people listed for the course are to call Joe for further details.

DIVE REPORTS:

Michael McFadyen and John Fowden were recently up at the North Solitary Islands and did 4 dives over a Saturday/Sunday. There was about 15-20 mtr. viz and they had excellent diving. They saw grey nurse sharks and could hear hump back whales. They also saw a hump back whale about 10 ft. away from their boat.

Leo Mayer reported on a recent dive on the Tuggerah with Rick Latimer, George Nichols and Lynn Keller. There was about 20 ft. visibility. Besides the usual wobbys, apparently Rick saw a seal swim by.

John Beddie dived Jervis Bay last weekend. At Wreck Bay there was about 15 mtr. viz. John also told us about a dive site south of The Arch about 40 mtr. off shore. It's a flat rock about 8 ft. across with tunnels going through it. (*Did someone say it was called 'the brothel' ?*).

D. Bilbow spoke about his recent trip to the Tweed Heads/Coolangatta and Byron Bay areas. They saw whales, turtles, etc., and the water temp. was about 20 deg. plus.

DIVING THROUGH SCHOOL HOLIDAYS:

John Beddie is looking for a dive buddy through the school holidays over September/October. If you're interested, please call him on 603 7584.

GENERAL BUSINESS:

Some points about the Wreck Dive course were discussed.

John Beddie asked if an Equipment Servicing Course could possibly be arranged.

Leo Bergagnin mentioned that Rob Palmer will be giving a talk on CAVE DIVING at Sydney University on 9th November. Please contact Leo B. for information.

GENERAL BUSINESS (CONTINUED):

Brian Colwell made a suggestion of putting something in the newsletter about members voting at the next meeting on whether to have the AV. He believes that although the Club has enthusiasm, he asked whether the Club gets enough out of it.

Leo Bergagnin stated that the new Committee have not considered cancelling the AV Night. As far as the Committee is concerned we are unanimous that the A/V will still go ahead and we believe that most members don't want to see it go. However, it may possibly be held at a different venue and there may be minor changes to the wording of the photo comp. rules.

Terese Mayer mentioned that other venues are being looked at and their costs compared. There is the possibility of saving \$1,000 by changing venues.

Martin mentioned how a few years back the entertainment officer of Bankstown Sports Club would not turn off the 'footlights'. This point is to be followed up.

Leo B. brought up a point about the present competition. At the moment (without a 'Masters'), there is no restricted access to sections of the competition. A newcomer can strive hard to try and beat the better known underwater photographers and that this can make their win more meaningful to someone coming up the ranks.

Martin mentioned that ROBERT BALLARD (discoverer of the Bismark and Titanic) is having a lunchtime talk at the Hotel Nikko on Monday 27/9/93. Apparently it's already sold out.

If anyone is interested, Martin can arrange to buy Robert Ballard's book 'Ghost Ships of Guadacanal' at a 25% discount. Call Martin on **725 7808** if you are interested.

It was pointed out that there was a misprint with the date of the AGM meeting in the September Newsletter. Please note that it is meant to read as *16 August, 1993*.

RAFFLE:

First prize of a trip on Max Western's Sea Tamer II was won by Paul Breadner. Thanks to Max for the prize. Contact numbers for bookings on the Sea Tamer II are **567 2658** or **018 280 791** for the **B^oAT PHONE**.

Second prize of a bottle of grog was won by Robyn Hewitt.

GENERAL:

Leo Mayer showed an edited collection of slides covering Lady Elliot Island, Cairns, the Bunker Group while on the Undersea Explorer, Morton Island and Sydney diving. Leo's 'flat fish' got better reviews this time around ! *[Remember the George Roberts comp. ?]*.

Paul Wildish then showed us his 'unedited' slides of his recent trip to Eden diving the tugs. There was some good coral growth and the vertical shots of the tug were quite interesting.

MEETING CLOSED at around 10.30 p.m.

DATES FOR FUTURE CLUB MEETINGS

18 / 10 / 93
 15 / 11 / 93
 20 / 12 / 93 (Informal)
 17 / 1 / 94

Club meetings are held every third Monday of each month
 at the Bankstown Sports Club,
 Greenfield Parade, Bankstown
 at 8.00 p.m.

Come early and enjoy a meal at the bistro.

The meetings are usually in the Emile McDonald Function Room.
 (Please check at Reception if function room has changed).

COMMITTEE MEMBERS

POSITION		HOME PHONE NO.	WORK PHONE NO.
PRESIDENT:	LEO BERGAGNIN	517 2853	557 5477 (018) 419 457
TREASURER:	LEO MAYER	708 5742	---
SECRETARY:	TERESE MAYER	708 5742	227 1677
DIVE ORGANISER / SOCIAL ORGANISER:	JOE INGEGNERI	743 3710 or (018) 862 328	286 4000
PHOTOGRAPHIC OFFICER:	PAUL WILDISH	567 1334	668 9211
PUBLICITY OFFICER:	MICHAEL McFADYEN	558 8181	585 6454

ALL CORRESPONDENCE SHOULD BE DIRECTED TO:



**SOUTH PACIFIC DIVERS CLUB
 P.O. BOX 823
 BANKSTOWN NSW 2200**



BOAT OWNERS HOT LINE



If you're interested in a dive, why not call any of the Club's boat owners. Club members with boats usually go out most weekends (weather/tides depending), so why not give them a call. This way, you wont miss out on your next dive. (Contributions towards fuel are appreciated).

Telephone No's:

JOHN BEDDIE	603 7584 (H), (046) 201 746 (W)
B.J.	709 5535 (H).
PETER BOOTH	529 3818 (H).
PETER JERMYN	708 2309 (H).
MARTIN KANDILAS	725 7808 (H & W).
RICK LATIMER	645 4405 (H), (018) 647 329, (042) 615 631 (W).
LEO MAYER	708 5742 (H).
RON MINES	602 9851 (H), 602 3544 (W).
BOB NICKLING	645 2315 (H), 648 3442 (W).
ROBERT RUBESA	740 6571 (H), 695 2063 (W).
MAX WESTERN, SEA TAMER II	567 2658 (H), 018-280 791 (W).

DIAL A DIVE BUDDY

*HAVE YOU FELT LIKE GOING FOR A DIVE
BUT HAVEN'T HAD A DIVE BUDDY HANDY ?*

*WHY NOT LEAVE YOUR NAME AND DETAILS WITH JOE,
CLUB DIVE CO-ORDINATOR, AND HE CAN PUT YOU IN
TOUCH WITH OTHER CLUB MEMBERS WHO ARE LOOKING
FOR A DIVE BUDDY.*

CALL JOE ON 743 3710 (H) or 018-862 328 (W).



DIVING ACTIVITIES

SATURDAY SHORE DIVES:

CONTACT: JOE (018-862328 b/h, 743 3710 a/h) or LEO MAYER (708 5742 a/h)
by Thursday / Friday before.

NIGHT DIVES: (tides & weather depending)

WEDNESDAY NIGHT DIVES

CONTACT B.J. on 709 5535
by Monday / Tuesday before.
Go "rock hopping" with B.J.
or maybe a Boat Dive on
Max Western's Sea Tamer II.

SATURDAY NIGHT BOAT DIVE

CONTACT PETER BOOTH on 529 3818
Wednesday nights between 5.00-7.00 p.m.
or Weeknights around 9.30 p.m.

FRIDAY NIGHT SHORE DIVE

LAST FRIDAY OF EACH MONTH

CONTACT: LEO MAYER (708 5742) by Wednesday/Thursday before.

CLUB BOAT DIVES

SUNDAY AFTER EACH CLUB MEETING

Dive locations advised at Club Meetings.

CONTACT: JOE (018-862328 b/h, 743 3710 a/h) or LEO MAYER (708 5742 a/h).

DATES: 24 OCTOBER (Diving "South Head Reefs")	21 NOVEMBER	23 JANUARY
(Meeting at Rose Bay Wharf 9.00 a.m.)	26 DECEMBER	27 FEBRUARY

DIVING WEEKENDS AWAY

1. MONTAGUE ISLAND

9 & 10 OCTOBER

TOTAL COST: \$155 per person, includes 4 boat dives.

Accommodation included: 2 storey waterfront, 6 bedroom house with 2 bathrooms

BYO food, bed linen & towels.

CONTACT: JOE (018-862328 b/h, 743 3710 a/h) A.S.A.P.

2. JERVIS BAY WEEKEND

13 & 14 NOVEMBER

Staying at Huskisson Caravan Park.

VANS (\$42 - 2 people, \$4 each extra person), CABINS (from \$50 for couples).

CONTACT: JOE (018-862328 b/h, 743 3710 a/h) A.S.A.P.

FUTURE WEEKENDS AWAY

PORT STEPHENS and SEALS ROCKS

Details yet to be finalised.

**WRECK DIVE
COURSES**
(S-P-D Club members only)

OCTOBER: 14, 16 & 17 and 28, 30 & 31
NOVEMBER: 18, 20 & 21
Theory — Thursday night, Saturday/Sunday — Practical.

SOCIAL EVENTS

CLUB BAR - B - Q 's:

FIRST SATURDAY OF EVERY SECOND MONTH

CHECK WITH:

- JOE (018-862328 b/h, 743 3710 a/h) OR
- LEO MAYER (708 5742 a/h)

Dates:

WHERE EACH B-B-Q IS BEING HELD AT.

6 NOVEMBER - Karin Smith/Peter Booth's - at 3.00 p.m.
60 Fountainbleu St, Sans Souci

5 FEBRUARY

2 APRIL

4 DECEMBER - XMAS PARTY: Gunnamatta Park, Cronulla

4 JUNE

4 - WHEEL - DRIVE WEEKEND:

Sat. & Sun. 27 & 28 NOVEMBER

4-W-D trip to Yerrandari, including Limeburner trail and others.

This was the location of our first 4-W-D trip. Facilities available such as water & toilets at camp site. Contact Joe if you would like to participate, even if you don't own a 4-W-D, there are often lots of spare seats.

CONTACT: JOE INGEGNERI (018-862 328 b/h, 743 3710 a/h)

DINNER & WINE TASTING

HELD EVERY 3 MONTHS AT THE BANKSTOWN R.S.L. CLUB

NEXT DINNER: FRIDAY 26 NOVEMBER

at 7.00 p.m.

\$30.00 PER PERSON

(price includes 5 course meal + wines).

**CONTACT: JOE (018-862328 b/h, 743 3710 a/h)
or RICK LATIMER (645 4405 a/h)**

CHRISTMAS PARTY B - B - Q

**SATURDAY 4 DECEMBER
AT GUNNAMATTA PARK, CRONULLA
(at the southern end of Nicholson Street)**

**IF YOU HAVE ANY SUGGESTIONS TO ADD,
PLEASE CALL EITHER JOE OR TERESE
TO SEE ABOUT PUTTING IT IN THE NEXT NEWSLETTER.**

OCTOBER 1993

SUN	MON	TUE	WED	THU	FRI	SAT
31 WRECK COURSE					1	2 SHORE DIVE "The Monument" Kurnell *** NBD
3	4 Labour Day (N.S.W. S.A.)	5	6 *** NBD	7	8	9 SHORE DIVE MONTAGUE ISL. ***
10 MONTAGUE ISLAND	11	12	13 ***NBD	14 WRECK COURSE THEORY (at Martins)	15	16 SHORE DIVE WRECK COURSE ***NBD
17 WRECK COURSE	18 CLUB MEETING (Bankstown Sports Club)	19	20 ***NBD	21	22	23 SHORE DIVE ***NBD
24 CLUB BOAT DIVE (Meet at Rose Bay)	25	26	27 ***NBD	28 WRECK COURSE THEORY (at Leo M's)	29 FRIDAY NITE SHORE DIVE (at Oak Park 7.00 p.m.)	30 SHORE DIVE WRECK COURSE ***

DIVING NOTES:

Montague Island 9/10 October - Contact Joe (018-862 328, 743 3710) A.S.A.P. for details.

Saturday Shore Dives - Contact Joe (018-862 328, 743 3710) or Leo Mayer (708 5742) for details.

Saturday 2/10/93 diving 'The Monument' Kurnell.

*** NBD = Night Boat Dives - Contact B.J. for Wed. (709 5535) or Peter Booth for Sat. (529 3818).

Club Boat Dives 24/10/93 - Diving the 'Reefs at South Head'. Meet at Rose Bay Wharf (suited up & ready by 9.00 a.m.). Bring the family/friends & we'll all meet up & have a B-B-Q at Camp Cove after the dive. Contact Joe for details.

Friday Night Shore Dive 29/10/93 (Last Friday of each month). Meeting at Oak Park (suited up by 7.00 p.m.). Contact Joe (018-862 328, 743 3710) or Leo Mayer (708 5742) for details.

Wreck Courses: 14/16/17 & 28/30/31 October. Check with Joe for details.

NOVEMBER 1993

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2 Cup Day (Melbourne)	3 *** NBD	4	5	6 SHORE ___ DIVE CLUB B-B-Q (Sans Souci)
7	8	9	10 *** NBD	11	12	13 SHORE ___ DIVE JERVIS BAY *** NBD
14 JERVIS BAY WEEKEND (Huskisson C/Park)	15 CLUB MEETING (Bankstown Sports Club)	16	17 ***NBD	18 WRECK COURSE THEORY (at Joe's)	19	20 SHORE ___ DIVE WRECK ___ COURSE ***NBD
21 CLUB BOAT ___ DIVE WRECK COURSE	22	23	24 *** NBD	25	26 FRIDAY NITE SHORE ___ DIVE DINNER (RSL Bankstown)	27 SHORE ___ DIVE 4-W-D TRIP *** NBD
28 4-W-D TRIP	29	30				

SOCIAL / DIVING NOTES:

Club B-B-Q: 6 November, 3.00 p.m. at Karin & Peter's: 70 Fountainbleu St, Sans Souci.

Jervis Bay Weekend away 13/14 November - Staying at Huskisson Caravan Park.

Contact Joe A.S.A.P. (018-862 328, 743 3710) or Leo Mayer (708 5742) to book your place.

4-W-Drive Weekend Away: 27 & 28 November. Contact Joe for details.

Saturday Shore Dives - Contact Joe (018-862 328, 743 3710) or Leo Mayer (708 5742) for details.

*** NBD = Night Boat Dives - Contact B.J. for Wed. (709 5535) or Peter Booth for Sat. (529 3818).

Wreck Course: 18/20/21 November. Check with Joe for details.

Club Boat Dive 21/11/93 - 1 group doing a Wreck Dive. For others there will be a Club Dive on the Osborne Shoals. Contact Joe (018-862 328, 743 3710) or Leo Mayer (708 5742) for details.

Friday Night Shore Dive 26/11/93 (Last Friday of each month). Meeting at Ship Rock (*tides depending*) (suited up by 7.00 p.m.). Contact Joe (018-862 328, 743 3710) or Leo Mayer (708 5742) for details.

GREAT BARRIER REEF HOLIDAYS

1. 7 DAYS ON THE "UNDERSEA EXPLORER" (EX PORT DOUGLAS)

ORGANISED BY JOE INGEGNERI, PHONE: 743 3710, MOBILE: (018) 862 328

DATES: 9 - 16 OCTOBER, 1993 (7 DAYS).

Diving the Cod Hole and the Coral Sea, including the Ribbon Reefs and Osprey Reef.
21 dives are scheduled, including night dives.

The "Undersea Explorer" is an 80 ft. steel purpose-built dive vessel with an easy access dive platform. The accommodation consists of private twin berth air conditioned cabins. There is also a lecture/briefing room, spacious dining room and huge sundeck.

COST: \$1,150 (Club discount) up to 10 divers.

NOTE: Cost is ex Port Douglas.

2. LADY ELLIOT ISLAND (off Bundaberg, Queensland)

FEBRUARY 1994: FREE SHORE DIVING on LADY ELLIOT ISLAND

**** FROM ONLY \$555.00 PER PERSON ** SPECIAL PRICE FOR 6 DAYS / 5 NIGHTS**

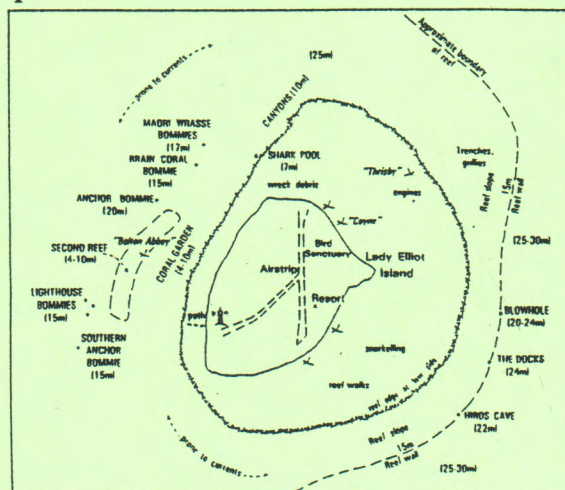
Includes return scenic flight from Bundaberg, tent/cabin accommodation and all meals and free shore diving.

Lady Elliot Island is probably one of the most 'untouched' coral reefs in Queensland and has spectacular dive sites. Dive with Manta Rays and turtles, see the island's rich variety of coral gardens, underwater topography and seemingly endless fish life. Shore dives are straight onto the Great Barrier Reef where you can discover sites like the Canyons, the Anchor Bommie, Pirates Cave, Gropers Grovel, Heroes Cave, The Lighthouse Bommie, Mystery Reef and Sunset Drift.

Club Member, LEO MAYER (TELEPHONE (02) 708 5742 (A/H), is co-ordinating numbers for a group booking to Lady Elliot Island for February 1994. (Firm dates yet to be worked out).

If you are interested, please contact Leo. Brochures and further information are available at the monthly meetings or Leo can mail these to you if required.

LADY ELLIOT ISLAND DIVE SITES



SOUTH PACIFIC DIVERS CLASSIFIEDS

CLUB SHIRTS (WITH COLLAR) AND EMBROIDED WITH CLUB LOGO

A LIMITED SUPPLY OF COLLARED SHIRTS WITH
S-P-D's CLUB LOGO ARE ARRIVING SOON.

COLOURS ARE BLACK, WHITE & BLUE.

PLEASE PLACE YOUR ORDERS WITH LEO
BERGAGNIN. PRICE IS \$30.00.

ROBERT BALLARD's BOOK "GHOST SHIPS OF GUADACANAL" AT 25% DISCOUNT.

IF YOU WOULD LIKE TO BUY THIS BOOK
CONTACT MARTIN KANDILAS (ph: 725 7808)
OR RICK LATIMER (ph: 645 4405).

PENNY & DOUG SMITH's ADDRESS IN FIJI

IF YOU FEEL LIKE WRITING A LINE TO
PENNY & DOUG, THEIR ADDRESS IS:

PENNY & DOUG SMITH
C/- CHIEF ENGINEER
SHANGRI-LA's FIJIAN RESORT
YANUCA ISLAND
PMB NAP 0353
NADI INTERNATIONAL AIRPORT
FIJI

DIVE GEAR FOR SALE (CONTACT PETER AFTER 22ND NOVEMBER ON PH: 708 2309)

Peter Jermyn has the following diving equipment
for sale after 22nd November.

Wetsuits:

- Second Hand Moray Challenger Size 4 Wetsuit. 5 mil.
Long John & jacket with attached hood: \$POA.
- As New: Moray Pro Size 5 Wetsuit. 5 mil.
Black. \$550 neg.
- Moray 175 Semi Dry. Size: Large. \$550 neg.

Tanks:

- Sea Hornet 95 cf. alloy scuba tanks X 6.
\$280 neg. with boot & mesh included.
All less than 1 year old.

PETER JERMYN's DIVE GEAR (CONTINUED)

(CONTACT PETER AFTER 22ND NOVEMBER
ON TELEPHONE: 708 2309)

VIDEO EQUIPMENT

- Sony V700 HI-8 Video Camera.
18 months old.
- With a Sony 75 mtr housing to suit.
- Plus accessories.
- \$POA.

UNDERWATER CAMERA EQUIPMENT

- Sea Tite Housing with a Nikon F3. \$POA.
- Sea Tite Strobe plus Slave. Dual power.
Price Negotiable. May sell as individual items.
- Nikonos II with compatible strobe fittings
(could be used as spare).

LENSES

- 55 mil. Macro Vivitar Lens.
- 24 mil. Sigma Lens.
- 35 mil. Nikonos.
- 28 mil. Nikonos with Viewfinder.

ACCESSORIES

- Extension ring & dome port to suit lenses.
- Compatible fittings to Sea Tite housing.
- Sekonic Light Meter.
- Extension arms & accessories.
- Nikonos spares.
- Cast base plate.
- 3 to 1 macro tube.

The Coral Polyp

Marine Parks



Great Barrier Reef Marine Park Authority



Architect of the Great Barrier Reef

Coral reefs are the only major geological features which are built by plants and animals, and the Great Barrier Reef is the largest group of coral reefs in the world.

The architects of this enormous construction are tiny animals called coral polyps, which by building a skeleton of limestone and by dividing to form new polyps create the living structures known as coral colonies. A coral colony is not a group of individuals living together for the common good, but rather the result of growth and division of an original founder polyp. Coral colonies provide the framework around and within which live all sorts of reef animals, such as fish, worms, starfish and molluscs. Dead corals, bound together by their own limestone and that of the skeletons of plants known as coralline algae, make up a reef. Over thousands of years, coral growth, death and cementing build a reef many metres thick, with a veneer of living corals and a myriad of associated plants and animals.

The coral polyp

The polyp has a simple structure. If you are familiar with anemones on the sea shore, you will have an idea of what a coral polyp looks like. It is a soft cylinder of tissue, closed at the bottom, and with a mouth surrounded by tentacles at the top. Inside is an open stomach cavity, partitioned by radiating strips of tissue. The coral polyp is related to jellyfish as well as to anemones, and like these, its tentacles contain tiny stinging cells. It also has a skeleton, which is outside, or rather underneath. During the day, most polyps withdraw into their skeletons, which can then be seen as cylindrical containers, called corallites. Polyps in a colony are connected by extensions of their tissues, even of their stomach cavities, so that they are in constant beneficial communication.

Types of coral

Coral colonies occur in a great variety of shapes and sizes. The general appearance of the colony depends on the way individual polyps build their skeletons and how they bud off new polyps. A mushroom coral, for example, is a single enormous polyp whose skeleton shows the central position of the mouth with radiating divisions (called septa), giving an appearance like an upturned mushroom with the stalk plucked off. In some corals with many polyps the positions of individual polyps are shown by separate corallites. In the brain corals, polyps divide without forming complete walls, so that long lines of polyps have a common wall around them. Staghorn

corals have branches formed by one single polyp growing longer and longer, budding off new polyps around its top as it extends. In many corals the polyps (or their skeletons, the corallites) can be easily seen, but some corals have tiny polyps which are barely visible to the naked eye.

The shape of the colony is further moulded by other influences such as wave action, currents and exposure of the colony at low tide. Corals living at the waveswept edge of the reef, for example, have a generally lower, sturdier form than those living in sheltered reef lagoons.

Colour

The colour of reef building corals comes from pigments in the tissues of the polyps. When a coral colony dies (for example when it is taken out of the sea)



Central mouth and radiating septa of a mushroom coral



Great Barrier Reef
Marine Park
Authority



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only its white limestone skeleton remains. Some animals also known as corals have skeletons which are black, red, blue or other bright colours. These are various relatives of the 'true' corals, but they do not play a substantial part in the building of reefs.

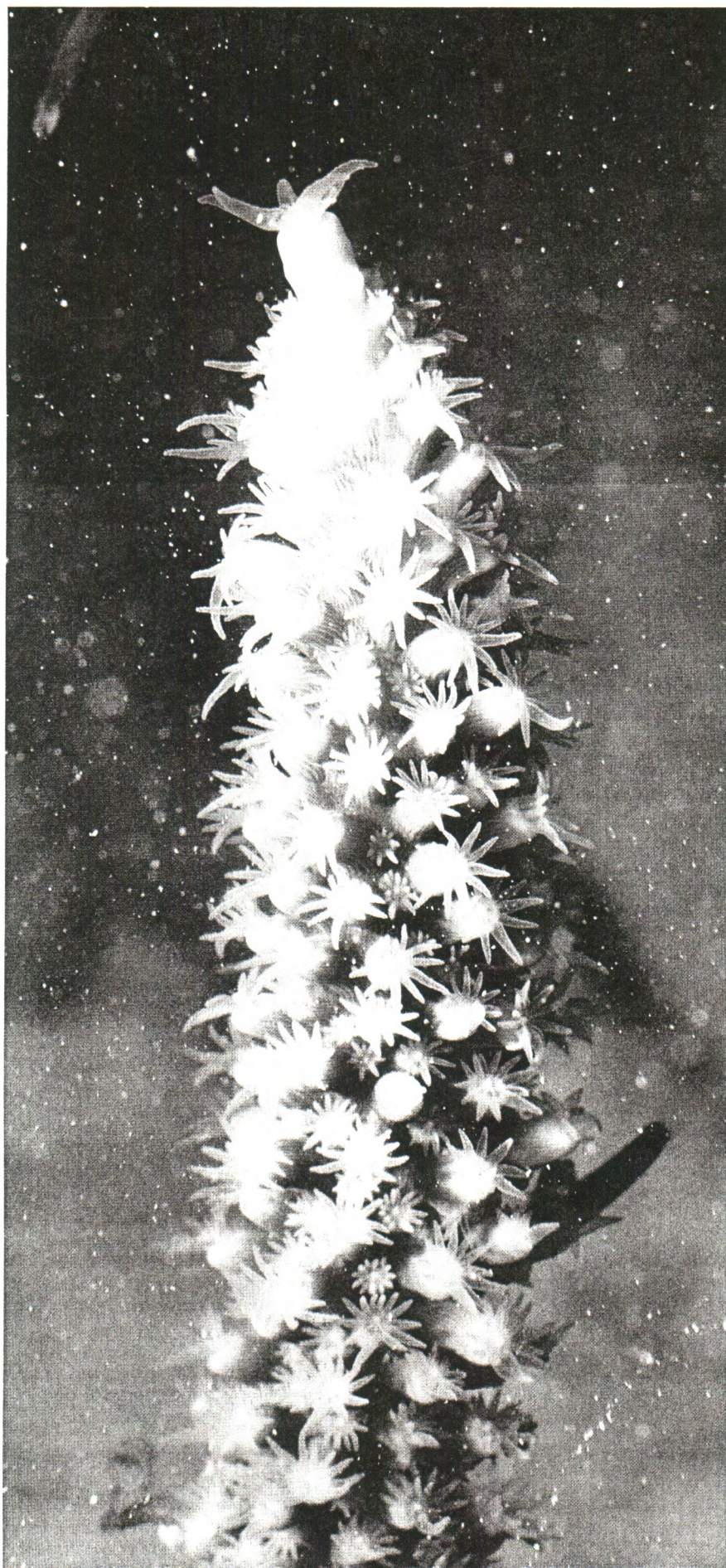
Hidden helpers — the zooxanthellae

The success of corals as reef builders is due in part to a remarkable association with tiny single-celled plants called zooxanthellae which live in the cells of the polyp tissues. The zooxanthellae, like other plants, harness energy from sunlight to manufacture materials necessary for their own nutrition and reproduction. In doing so they make use of carbon dioxide produced by the coral, and in return they pass some materials back to the coral. Their presence greatly enhances the rate at which polyps create their skeletons. This mutually beneficial association, called a symbiosis, creates supercorals — reefbuilders — of what would otherwise be insignificant small colonies.

Feeding and growth

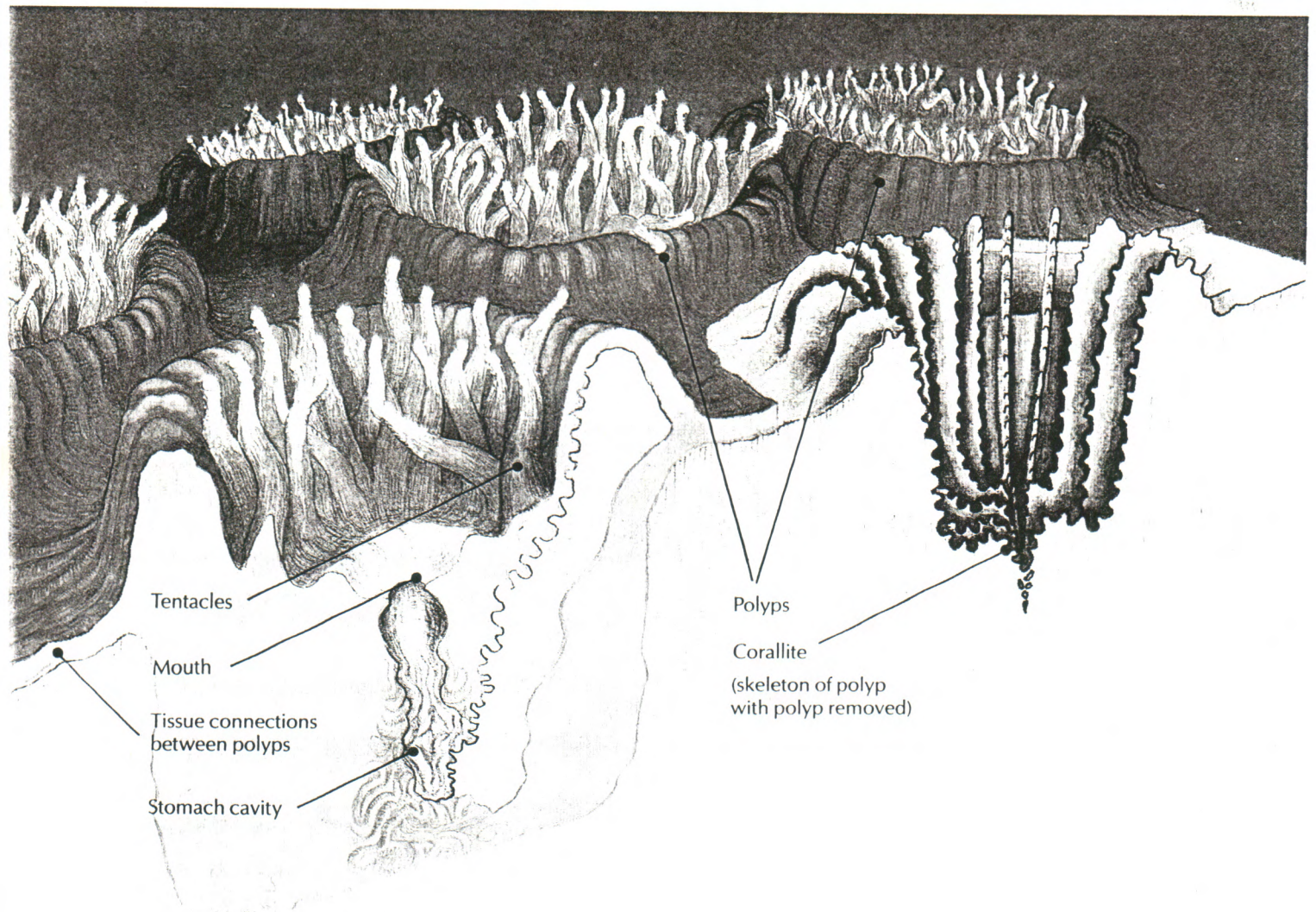
Corals feed by extending their tentacles armed with stinging cells and catching microscopic floating animals from the waters around them. When the tentacles encounter an animal (such as a shrimp, or an early larval stage of some other reef animal) the barbed darts of the stinging cells are fired to paralyse and hold the prey. Then with a graceful bending motion the tentacle passes the morsel to the mouth. The prey is broken down in the polyp's stomach and through the connections between polyps it becomes part of the nutrition for the whole colony. Sometimes corals also use nets of mucus to ensnare bacteria and small animals. Organic materials in the seawater passing into the polyp may also supply some nutrient needs.

In corals which grow as sheets or layers, new polyps are added on around the edge of the colony. Branching corals grow by adding new branches as well as extending existing ones. In mound-like colonies, new polyps are added within the surface of the mound, as the colony grows, polyps pull themselves upwards and lay down a new 'floor' of skeleton. The thickness of the floor depends on weather conditions and other factors, so that accumulation of layers of floor over the years provides a calendar, somewhat like the rings in a tree trunk. The layers of floor allow the age of the coral to be estimated, and unusual events in its history to be noted.

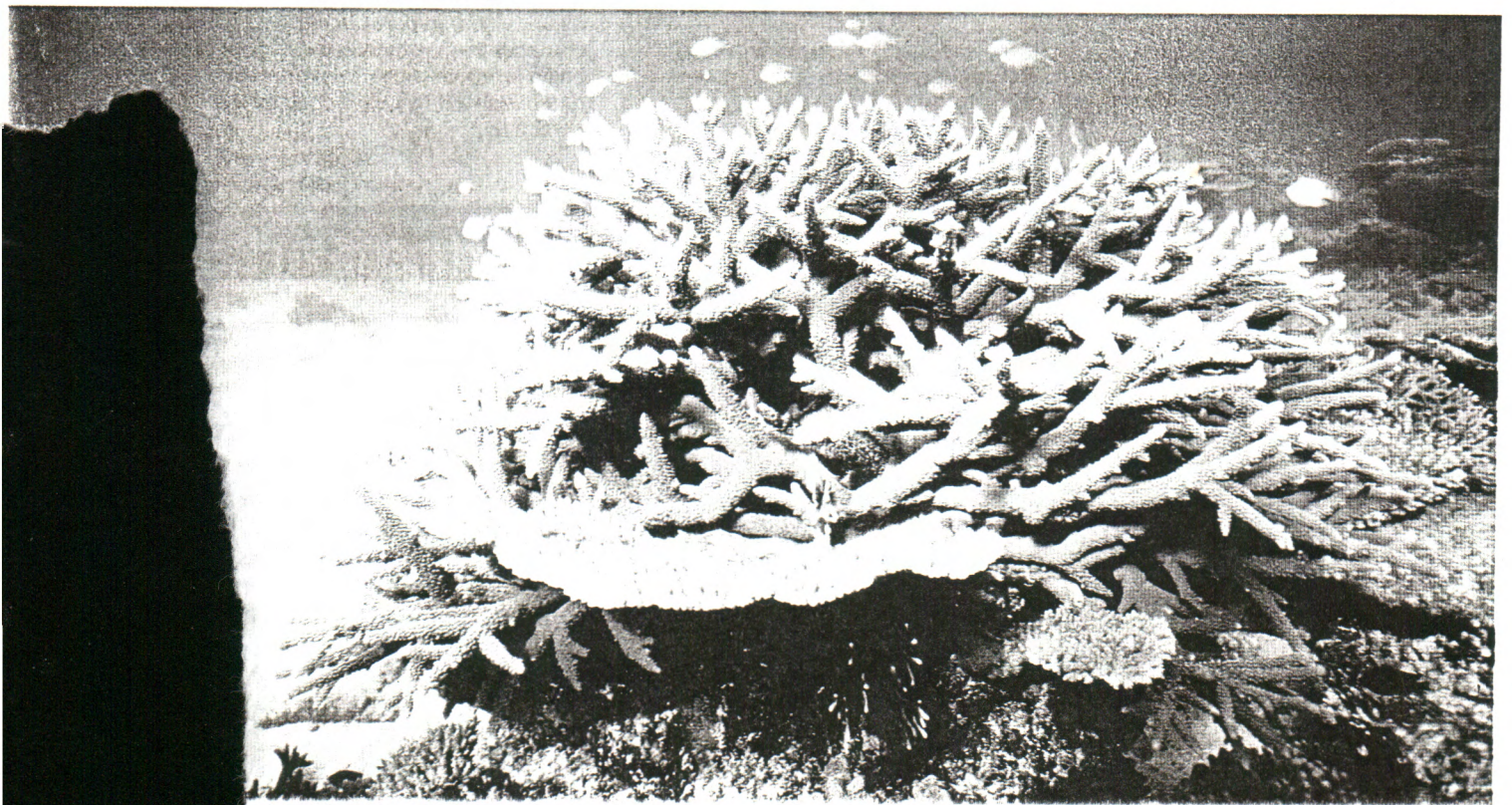


This staghorn coral is feeding by extending its tentacles and catching tiny floating animals.

The Coral Polyp



Cross-section through a living coral colony.



How corals reproduce

Coral polyps reproduce sexually by producing male and female cells (sperm and eggs) which unite to form tiny rounded larvae called planulae. In some corals, separate colonies have either all male or all female polyps. More often each polyp is both male and female, and releases a bundle of eggs and sperm into the seawater on only one or two nights each year. Many corals reproduce this way on the same nights each year in late spring or early summer. In a few corals, eggs are fertilized inside the polyps, and planulae are brooded to be released over long time periods.

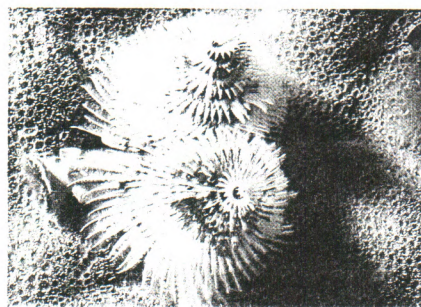
The tiny planulae float in the surface waters for a short time, then each swims down to find a suitable spot on the hard reef surface where it will change into a polyp and begin the process of forming a colony.

Because they are made up of many polyps, coral colonies can also reproduce asexually, that is, parts of the colony which break off can survive as separate colonies. This happens most often with branching corals, although

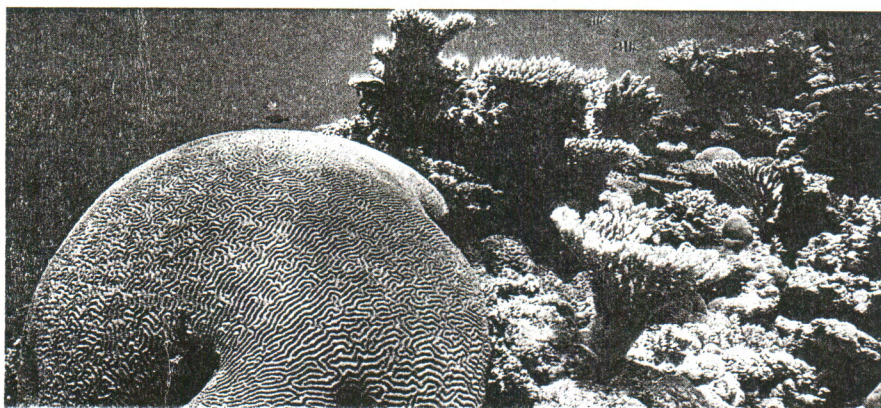
some novel methods, such as producing separate buds, occur in some rounded colonies. This type of reproduction is especially useful in places where there is not much solid space for the settlement of planulae, such as the sandy floors of reef lagoons.

Friends and foes

The interactions of corals with other organisms are many and varied. Many animals shelter within live coral colonies. Sometimes polyps adjust their skeletal construction to accommodate tube worms, barnacles, mussels and even



These tube worms, *Spirobranchus* sp., build their tubes within living coral colonies.



In brain corals long lines of polyps have a common wall around them.

Author

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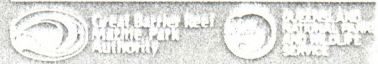


A veneer of living corals covers the reef rock formed by the growth, death and cementing processes of corals and algae.

tiny crabs and shrimps. Mobile animals of the Reef seek shelter and food within and around the boundaries of coral colonies. Since there are many polyps in a colony, individual polyps or groups of polyps can be eaten, damaged or even nudged aside without the loss of the rest of the colony. Few predators are large enough to eat whole coral colonies. However, large animals such as the crown of thorns starfish and some parrot fish, when in large numbers, can do so. Corals also have ways in which they deal with intrusion by other colonial animals, including other corals, sometimes drawing up 'battle lines' with their neighbours, sometimes growing up or away in another direction.

In size and beauty, the Great Barrier Reef dwarfs all things constructed or contemplated by man. It is a miracle of engineering, a living monument to nature's amazing architect — the tiny coral polyp.

Marine Parks



Further information may be obtained from:

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