

THE SEA DIVERS

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MAY 1990

MAY 1	OOO GENERAL MEETING PANCHO & WONGS 7 PM
MAY 6	0000 BEACH DIVE, VETERANS PARK, BOUILLABAISSE
MAY 10	OOOOO Executive Meeting Baxter's 7 PM
MAY 18-19	000000 Boat Dive, San miguel/Santa Rosa

JUNE 1990

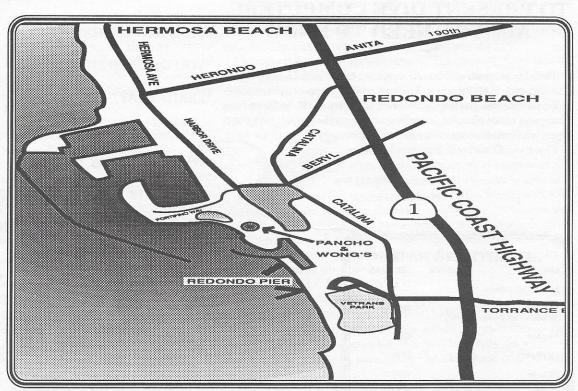
JUNE 2	OOO BOAT DIVE, FARNSWORTH BANKS/CATALINIA
JUNE 5	OOOO GENERAL MEETING PANCHO & WONGS 7 PM
JUNE 14	OOOOO EXECUTIVE MEETING BAXTER'S 7 PM
JUNE 30	OOOOOO BEACH DIVE/CAMPOUT, JADE COVE

JULY 1990

JULY 1-4	OOO BEACH DIVE/CAMPOUT, JADE COVE	
JULY 3	OOOO GENERAL MEETING PANCHO & WONGS 7 PM	
JULY 12	OOOOO Executive Meeting Baxter's 7 PM	
JULY 27/28	OCCOO BOAT DIVE, BEGG ROCK/SAN NICOLAS/SANTA BARE	BARA

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DIVERS DIRECTORY

POSITION	NAME	DAY PHONE	EVE PHONE
PRESIDENT/BOAT DIVE CHRMN. VICE PRESIDENT	ALLEN PARKER MICHAEL BORDEN	813-2955 813-4967	370-1657 372-7764
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WRITING FOR THE SEA DIVERS NEWSLETTER

If you would like to write an article for the newsletter or you have an idea to improve it please write to Editor Patrick Minor, P.O. Box 2415, Redondo Beach, CA. 90278 or call me at the above numbers. I am always in need of Lessons Learned articles and new graphics or cartoons. Inputs should be typed, but can be handwritten (not responsible for errors caused by illegible handwriting). I will also great fully accept computer files that are in a Macintosh standard format.

REPRODUCTION

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GENERAL MEETING

<u>General Meetings</u> are held at 7PM the first Tuesday of every month. A no host social happy hour, with free hors dourves precedes the meeting from 6 PM to 7 PM and a feature presentation follows the business meeting. The meeting is held at Pancho & Wong's at King Harbor.

EXECUTIVE MEETINGS are held at 7PM the Thursday the week following the General Meeting, at Baxter's in the Manhattan Beach Mall.

U. S. DIVERS REPRESENTATIVE TO PRESENT DIVE COMPUTERS, ALL YOU NEED TO KNOW

The May program will feature a representative from U. S. Divers, who will explain all there is to know about dive computers, then will take questions and give explanations on how they work. So if you have a computer or are planning on getting one or maybe just thinking about it, you won't want to miss this excellent opportunity to get all the facts. Thank you Dicie for this great opportunity.

Patrick Minor Newsletter editor

ADVERTISING RATES* SPACE PER YEAR 2 lines x 1/2 page** \$100 (Business card size - 10 max) 1/4 page \$25 \$250 1/3 page \$30 \$300 1/2 page \$45 \$450 One Page \$750 As space is limited we reserve the right to accept a limited number of ads. *Club members personal ads only

QUOTES ON QUOTES

"THAT'S NOT WHAT I MEANT"

"YOU QUOTED ME WRONG"

"I SAID THAT?"

"YOU'RE KIDDING — THAT WAS MY QUOTE?"

"WHEN DID I SAY THAT?"

"WHAT THE HELL DID I DO WITH THE QUOTES?"

"SOME OF THE QUOTES ARE NEAT, THAT'S WHAT I READ FIRST"

"DON'T QUOTE ME, BUT"



FROM THE EXECUTIVE OFFICE



There are five important items of note:

1) By acclaim at the April General Meeting the 1990 elected officials are:

President Allen Parker
Vice President Michael Borden
Treasurer Kathi McNally
Secretary Cathy Gale

In a related move, Scott Williams volunteered and was approved by the executive Committee to secede as Boat Dive reservationist effective immediately. Many thanks to Michael Borden for his efforts in that position.

- 2) We are going to fully enforce our Dive Boat Policy no more free rides if you are not paid or do not have a dive deposit on file, you are not on the charter. Also, there will be no unpaid non-members on any boat dive roster whether vouched for by a member or not. Those of you that have been supporting us in good faith and spirit will have no problems; the few of you that have been jerking us around will!
- 3) Elsewhere in the newsletter is a belated (to us) announcement about Chamber Day, 3 May 1990. The cost on any of the boats listed is \$57 and it is tax deductible please try to support this event.
- 4) Also elsewhere is an announcement for SCUBA '90. The Sea Divers may have a shared booth at the event. Please mark your calendars for 22, 23 and 24 June 1990 and try to support this event also.
- 5) We are going to plan something a little different for this year's Halloween bash we need a volunteer, draftee or someone to head the whole thing up and generally guide the committees.

... OVER AND OUT. PLAN YOUR DIVE, DIVE YOUR PLAN!

AP

Managing Risk Factors of Diving

by Joel Dovenbarger R.N., Medical Coordinator DAN

Sport scuba diving is a relatively safe sport. However, there is a low risk of injury. In 1985 DAN estimated the incidence of dive accidents as less than 0.01 percent. These injuries are decompression sickness (DCS) or the "bends" as it is sometimes called.

Another less common diving related injury is arterial gas embolism (AGE). Some divers can be identified as having an increased risk of DCS by their medical history or physical condition. However, it is nearly impossible to determine who will get DCS as no single factor is usually responsible for its development. There are still many unknown variables in gas exchange and bubble formation, which works in combination with other minor factors to cause DCS.

Blood Flow

The main function of the circulatory system is supplying oxygen and other metabolic fuels to living cells within the body.

Blood flow to individual tissue groups is unique and determined by their particular needs, Some "high priority" organs such as the brain, lungs, heart, and abdominal organs receive a relatively high rate of blood flow, because of their constant use, and are considered "fast tissue." In contrast, muscles have a variable blood flow, which depends upon their activity level and oxygen demand.

The circulatory system also removes metabolic waste products from the tissues. However, effective elimination is depend-

ent upon adequate circulation. Any condition which inhibits blood flow to and from tissues is considered an increased risk for DCS.

Two major factors affecting circulation are dehydration and vasoconstriction (narrowing of the blood vessels).

Dehydration is mainly affected by inadequate fluid intake, alcohol consumption, vomiting, diarrhea, and some diuretic medications. Breathing dry compressed air also contributes to dehydration. Diving further increases dehydration by causing the kidneys to produce increased amounts of urine.

Vasoconstriction interferes with the offgassing of nitrogen from tissues. It is
most commonly seen as a response to cold
water. However, this response is also triggered by a nerve center in the brain, and various other mechanisms, including hormones and
some cardiac and hypertension medications. Both de-

hydration and vasoconstriction may lead to bubble formation in the post-dive period by reducing the body's ability to eliminate excess nitrogen.

Environmental Risk Factors

· Cold Water Physiology

Divers who are cold (hypothermic) have an increased susceptibility to DCS. Nitrogen is more soluble in cold tissue than warm. Cold tissue decreases the body's ability to eliminate accumulated nitrogen, increasing the likelihood of DCS when combined with other risk factors.

If a diver is profoundly chilled or tired after a cold dive, he should discontinue diving. Divers continue losing body heat unless rewarming is started immediately.

See Risks page 4

Risks

Muscle Physiology

Heavy work increases the body's demand for oxygen. To meet the increased oxygen requirement, blood flow is increased, which increases nitrogen uptake as well. The development of the no-decompression dive tables was not conducted under conditions of strenuous exercise. A diver using No-D tables for strenuous diving has significant possibility of error.

Many divers be a myth. However this belief. Some of increased rate of physical activity.

Exercise and Decompression

The following is excerpted from "Exercise and Decompression," by Richard Vann Ph.D., of Duke University.

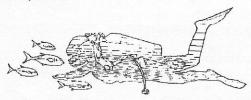
The effect of exercise on decompression safety is determined by the phase of the dive in which it occurs. Four phases can be identified: on the surface before diving, during the bottom time, during the decompression of ascent, and on the surface after diving.

Pre-dive exercise, particularly weight lifting to the point of muscle soreness, appears to be associated with large volumes of bubbles returning to the heart and DCS II. Pre-dive exercise may create new gas nuclei from which additional bubbles can form.

Exercise during bottom time accelerates inert gas uptake and causes an elevated risk of DCS unless the decompression time is extended.

Exercise during decompression accelerates inert gas elimination and appears to reduce the risk of DCS. This may be, in part, because a diver stays warmer while he exercises. The possible beneficial effect of exercise should be studied further before it is acceptable for general use.

Exercise on the surface after diving is associated with an increased risk of DCS.



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Individual Risk Factors

•Age

Many divers believe the relationship between age and DCS is a myth. However, there may be a theoretical basis to disprove this belief. Some considerations for older divers are a possibility of increased rate of other illness along with a decreased level of physical activity.

Some authorities suggest that divers take 10 percent off table or computer No-D limits for every decade after age 20. They reason that reducing the amount of inert gas uptake by limiting exposure for older divers may minimize DCS.

Many dive physicians also feel that individuals over 40 should have an annual medical examination which includes an electrocardiogram. Early detection of physical problems may prevent a dive accident later.

• Fatigue

The exact pathophysiology of fatigue is unknown. It is a complex process involving body metabolism and mechanics.

Fatigued divers are often unable to perform physical work and may be unable to make crucial decisions. Fatigue may also predispose divers to nitrogen narcosis. Complaints of fatigue and lack of sleep prior to diving, show up on DAN accident forms with regularity.

· Alcohol

Dehydration is a proven risk factor in DCS. Alcohol directly causes dehydration by withdrawing body fluids when it is excreted in urine. The best method to avoid dehydration is to completely abstain from alcohol the night before a dive, during the dive day, and to drink plenty of non-alcoholic or caffeine-free fluids post-dive.

Overt Risk Taking

There are divers who insist on taking extreme risks that may endanger themselves and their dive buddies.

The most common abuse is exceeding No-D limits. Ideally, divers will schedule their dive plan for the next greatest depth and time limit than the actual dive. No dive plan is entirely safe. However, diving within NO-D limits reduces that risk.

See Risks page 5



Risks

Other abuses which increase the risk for DCS include: Pushing table or computer limits; rounding dive profiles downward; using short surface intervals; and diving shallow to deep depths.

•Repetitive and Multiday Diving

were performing either repetitive or multiday dives. Out of 214 accident cases, 55 percent were doing multiday diving and 64 percent were doing repetitive diving.

· Altitude

If the partial pressure of nitrogen in tissue rises above ambient pressure, bubbles may be encouraged to form. This may happen during flying or driving (to altitude) too soon following a dive.

Women in Diving

There is little information to support the old myth that men and women are vastly different in relation to scuba diving. Recent studies indicate that well-conditioned males and females are not appreciably different and run about the same risk of DCS.

Pregnancy

No safe depth or time limit for pregnant women divers has been established. There is and undetermined, but real risk to the unborn child (fetus) during pregnancy if the mother chooses to dive. Silent bubbles forming within the fetus could create air embolism due to the unique anatomy of the developing child. These bubbles are normally filtered out of the lungs of adults. In contrast, any bubbles trapped in the blood supply of the fetus could have catastrophic consequences.

Predisposing Medical Problems

Any illness which alters the diver's ability to interact in the underwater environment should be considered disqualifying.

Absolute Contraindications

Some medical conditions greatly increase the risk of DCS and are extremely hazardous to divers. These are considered as absolutely disqualifying for sport scuba diving.

These include seizure disorders (epilepsy), asthma, joint disease, nervous system damage and numbness (including prior DCS), insulin-dependent diabetes, chronic phlebitis, multiple sclerosis, degenerative bone disease, and labile hypertension. Other considerations are alcoholism and drug dependence.

Some medications are also contraindicated for diving.

•Temporary Contraindications

Other medical conditions are considered as temporarily disqualifying for diving. The most ignored problem is the common cold. Other short-term conditions include; active infections, sinusitis, hay fever, ear infections, and recent surgery or trauma.

Many divers tend to seek self-treatment for temporary conditions with over-the-counter medications. These drugs often treat only the symptoms of an illness, and not the cause. Unfortunately, the underlying medical problem still exists and may continue to pose problems for the diver.

Post — Dive Risk Factors

Some risk factors occur following the dive. When combined with other pre-dive factors, these often control the outcome of DCS.

· Alcohol

The most common post-dive element is alcohol consumption. The beer or two to celebrate a great day of diving may be the one factor which tips the balance in favor of bubble formation and DCS.

• Restricted Movement

Many divers must travel several hours to a favorite dive site. The long drive home may leave the diver cramped. This lack of activity restricts the blood flow and decreases the body's ability

to remove nitrogen. Symptoms of DCS may also be seen in divers who awake after the inactivity of a nap of a full night's sleep post-dive.

Altitude

DAN physicians advise divers to wait at least 24 hours after The majority of all divers reporting accidents to DAN in 1987 diving before flying, because DCS symptoms can take up to 24 hours to develop.

Summary

The differences between any two individuals are great. What is safe for one diver may not be safe for another. It is up to each diver to be aware of these differences and to keep them to a minimum to reduce the inherent risk of dive injury.

Each diver must be their own risk manager and control the risk in diving. The alternative is to be controlled by them.

DIVE COMMITMENTS

	18/19 MAY (Fri/Sal) PEACE			2 JUNE (Saturday) ENCORE
1.	SANDRA ANDERSON		1.	CALVIN ARNOULD
2.	KATHLEEN BENNETT		2.	KATHLEEN BENNETT
3.	DANIEL BITTON		3.	MICHAEL BORDEN
4.	MICHAEL BORDEN		4.	JACK BRYANT
5.	KATHY DACEY		5.	MIKE BUTLER
6.	JOHN DELANEY		6.	KATHY DACEY
7.	CATHY GALE		7.	JOHN DELANEY
8.	BILL GARRETT		8.	RICHARD EVANS
9.	BRUCE GILES		9.	CATHY GALE
10.	JONATHAN GORDON		10.	STEVE GALE
11.	ROBIN GRANT		11.	BRUCE GILES
12.	FAISAL HAROON		12.	ART HILL
	ART HILL		13.	STEVE KAVANAUGH
14.	PETE KENEFICK		14.	PETE KENEFICK
	PETER LANDECKER		15.	KATHI MCNALLY
16.			16.	LINDA MONOSMITH
17.	DIANE MCLAUGHLIN		17.	ALLEN PARKER
18.	DON MCLAUGHLIN		18.	DAN PORTWAY
19.	MIKE MCLAUGHLIN		19.	DICIE SIZEMORE
20.	KATHI MCNALLY		20.	KEN SIZEMORE
21.	PAT MINOR		21.	WES STEPP
22.	LINDA MONOSMITH		22.	BOB STIVERS
23.	JOHN MOWREY		23.	SCOTT WILLIAMS
24.	ALLEN PARKER		24.	
	VANN PARKER		25.	
26.	DAN PORTWAY		26.	
27.	LYNNE ROBINSON	g	27.	
28.	DAVID SERENA	0	28.	
29.	DICIE SIZEMORE	n,	29.	
30.	LIN SITTIMOUF	0 :	30.	
31.	WES STEPP		31.	
32.	CHANDRA TENLEY	*c	32.	
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	\$ \$ \$			

TRAVEL CORNER

Sea divers, it is time to plan on going to Cabo San Lucas Oct. 19. For our first out-of-country dive experience. The price of \$450 pp. (double occupancy) includes air fare, three nights at the Solmar Hotel and two days of two tank diving. One day we will dive Cabo which is one of the best dives I've ever been on — the water warm enough to dive in T—Shirts at the time of year we are going (though Lycra suits are recommended), There are over 800 species of fish and the visibility is great. When I dove there we were checking out the sand falls then we turned around to see a school of twenty mobela rays swim by. The second day we will travel to Cabo Pulmo in the Sea of Cortez to dive Pulmo Reef, the only coral reef in the Sea of Cortez and the site of a Scripps research program. Bubble watchers are welcome at a cost of \$325 pp. and this includes a snorkeling trip. I encourage you to consider staying an extra night because three nights in Mexico is never enough once you get there and start to unwind. A \$100 pp deposit will hold your space and this can be paid by credit card. Those interested please give me a call soon so I'll know how many spaces to reserve.

I would like to use this space every month as a travel corner. If you need a vacation dive buddy or have dive vacation plans to share, please contact me. Dave and Barb Serena and Linda Murray and John Dines are booked on the Ocean Spirit, the diving cruise ship, for the July 1 sailing. There is still space available and in spite of any problems you may have heard about, everyone who cruises on her does seem to have a great time. It is an opportunity to dive Belize, the Bay Islands, and Cozumel all in one trip and to experience cruising at the same time. Come help Linda and John celebrate their honeymoon.

Beach Travel

I hope to hear from you about any diving vacations you have planned and of course, as a full service travel agency, we at Beach Travel are willing to provide any assistance you may need in planning the perfect dive vacation.

309 Pier Avenue, Hermosa Beach, California 90254

213/376-8956

213/772-7337

BENDS? NO, NOT FROM NITROGEN BUBBLES

ANOTHER TYPE OF BENDS TO AVOID: Would you believe divers have more knowledge and take better care of their equipment than their bodies? Statistically, the highest occurrence of low back disc surgery involves 30 to 40 - year old baby

boomer males. Over 85% of divers are college educated with above-average paying positions. Doesn't it seem ridiculous that most don't know how to lift a 40-pound scuba tank? Improper bend and lift activities are the leading cause of acute low back disc herniation and lumbosacral sprains, resulting in intense pain and often significant disability. An injury of this kind almost always needs professional help.

PROPER BC-TANK LIFT: Whether a beach or boat dive, the weaker or less experienced of two divers should assist the stronger with his/her BC-tank placement first. This is accomplished by squatting with the back straight and grasping the tank with hands simultaneously placed on the tank bottom and below the valve. Take a deep breath while compressing the stomach muscles and exhale as you lift. Repeat breath-holding and compression of the abdominal muscles intermittently until your buddy has secured his/her chest-waist straps. Then reverse roles, finish checking each other out, and go have fun diving.

FIRST AID: Should acute low back pain strike, always use ice locally applied to the area of pain first. Ice applications are most effective (reducing inflammation and pain) for 15-20 minutes on and about 20 minutes off. This should be continued during the following 24-72 hours, or as long as the pain is sharp and acute. "Over-the-counter" pain killers such as

aspirin or ibuprofen can reduce inflammation associated with the pain. Make sure that you can safely take these medicines without having adverse effects on your stomach. Also, remember never to take these anti-inflammatory medications with an acid-base beverage such as orange juice, tomato juice, tea or coffee. A helpful item (believe it or not) is a weight belt. Take the

See Backache Page 7

BENDS?

(No - Not From Nitrogen Bubbles)

Chiropractic - Medical
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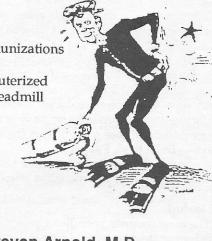
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> > You Can't Replace Your Health!!!

Stephen Gray, D.C. - Steven Arnold, M.D.

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SCIBA 90

The Dire Show

JUNE 22, 23, 24, 1990 Queen Mary Hotel Long Beach, California

SCUBA 90, the largest dive show in the western United States will again take place on the magnificent Queen Mary in Long Beach, California. June 22,23 & 24 are the dates set for this event that is expected to draw over 10,000 enthusiastic divers and non-divers alike.

The 40,000 square foot Exhibit Hall (actually on board the ship) will be filled with scuba-related exhibits comprised of equipment manufacturers and representatives from the hottest dive-travel destinations. Of particular interest will be the exhibits of shipwreck artifacts and the underwater photo gallery displaying the works of some of the west coast's best underwater photographers. An additional outside display will show off the newest and latest in dive boats.

SCUBA '90, will feature a continuous underwater film festival showing exciting multi-projector slide shows and spectacular underwater films by Howard Hall, the late Jack McKinney and many more including several sensational premier films by exciting newcomers. The film festival will run continuously during show hours Saturday and Sunday. Admission to the film festival is included with the general admission to the show.

Running concurrently with the show is an extensive schedule of seminars and presentations, which will cover a wide range of topics including: exotic diving destinations, California diving, both beginning and advanced underwater photo techniques, dive medicine, underwater hunting, California wreck diving, advanced diving techniques, marine life, underwater video equipment and techniques, dive computers, and more. Many of the seminars will take place in some of the Queen Mary's most ornate salons. Advanced registration is recommended. Please write the address below for schedule and specifics on registration.

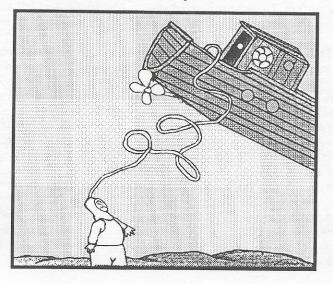
A major door prize will he given away on each day of the show. Door prizes include a Kuttenhofen custom wetsuit, U.P.L. video housing and B.C., and a trip for two to the Belize Bay Islands provided by Tan/Sahsa Airlines.

One of the many highlights of SCUBA'90 is the special Fiji Nights to take place under the wings of the spectacular Spruce Goose. This magical night will take place Saturday 7:30 p.m. 'till 11:00 p.m. Sea Safaris Travel, Inc. and Fiji Visitor's Bureau are sponsoring the event which will feature live entertainment native Fijian snacks and drinks, and a Fiji dive trip door prize. Also during the evening, SCUBA'90, will present the dive equipment and fashion exhibition and the awarding of the California Scuba Service Award. This award was commissioned by SCUBA'90, to recognize those individuals who have made long term positive contributions to sport diving in California. The award itself is an original bronze sculpture handcrafted by Treasure Beach Nautical Jewelry. Admission to Fiji Night is included with general admission to SCUBA'90.

For complete information including seminar schedules and registration information, write SCUBA '90, P.O. Box 11231,

JUST SEVEN YEARS AGO.....

Bonnie Chettle was President; Andy Paroczai Vice President; John Mowrey Treasurer and Julee Legar Secretary. To date the club had lost \$700 on dive boats — woops, and the May boat dive was on the Peace to Santa Rosa at \$38 (single day non-inclusive). The Peace had just moved from Port Hueneme to Ventura Marina. The May beach dive and campout was at Malarrimo about half way down Baja at "around \$150" per person. Recipe of the month was Abalone Pot Roast in Wine and we were announcing the club's new meeting place for June - Beach Bum Burt's as Lococo's was being sold. The Newsletter was a really ugly light brown — sort of like baby-do-do!!



Backache

weights off the belt and fit it snugly around the waist below the naval. This compresses and stabilizes the pressure in the lower trunk, allowing you to move some what more comfortably and easily. You may even insert the ice pack (insulated between the belt and your lower back. Don't try to "work out" low back pain! You will further damage the area by trying to stretch, twist and bend to get rid of the pain. Attempts at exercise will only make your condition worse. If your lower back pain persists longer than two days with this well established and recommended self-treatment program and bed rest, see a physician.

FACTORS TO CONSIDER: There are many causative factors involved in lower back pain; the primary contributing elements include: (1) A family history of lower back problems. Your spine may resemble your parents as much as you do. (2) Your general physical condition. If you are out of shape, the forces acting on your spine may cause it to get out of shape. (3) A history of low back pain with radiating pain in to either buttock or legs (often refereed to as "sciatica"). (4) Your occupation. Sedentary workers are at higher risks for developing low back problems. (5) Your: hobbies. Divers are at a higher risk of developing back problems. (6) Women who have had full-term pregnancies secret the hormone "relaxin" which softens ligaments in the body. (7) A history of moderate-heavy work activity which involves repeated lifting. (8) A history of poor spinal hygiene (improper body mechanics), including sleeping on the stomach, wearing high heels, sitting or standing with poor posture and improper bending (retrieval) techniques. This list is actually far from complete. Yet, it points to the complexities of trying to evaluate back pain according to some of the elements which contribute to

See Backache Page 8 Vol.90 Issue 4 Page 7

LESSONS LEARNED

The 7 April 1990 dive had been advertised as a trip for experienced or advanced divers to give them a chance to explore the wonders of Farnsworth Banks. a couple miles off of the backside of Catalina Island. The trip was arranged by one of the local dive instructors. On board the charter boat were two instructors from two different dive shops, card carrying advanced divers, an advanced diver class and several others who, although not certified advanced divers, had more than enough dive experience to qualify, them for the trip.

The boat arrived at Farnsworth Banks beneath overcast skies. The water was relatively calm and anxious divers were already suited up waiting for the gate to open. A short announcement was made prior to the dive by the trip organizer. He read aloud the no decompression limits from the latest NAUI dive tables for depths from 100 to 130 feet, and reminded divers to watch their time, depth, air and computers if they had one.

The divers buddied up, entered the water and proceeded down the anchor line. Approximately half of the divers had completed their dive and had returned to the boat when a distress call was heard off the starboard bow. A diver had surfaced unconscious with bloody foam coming from his mouth, his buddy was with him and he inflated the diver's BC and called other divers over. Within minutes, if not seconds, the victim was receiving CPR and mouth-to-mouth from four divers who spelled each other during the swim, against the current, back to the boat.

Divers on board were ordered to the bow to clear the back deck. The Coast Guard and Hyperbaric Chamber were called and oxygen was brought out, all before the victim was even on the swim step. The resuscitation efforts continued on board. The Coast Guard and harbor Patrol came out from Catalina harbor with a paramedic and more oxygen. The dive boat was escorted into the harbor where a Coast Guard helicopter received the diver and flew him to the Chamber. Once the chaos of attending the injured diver had settled down, the following scenario emerged.

"L." was a certified advanced diver about 42—44 years old, and although he dove fairly frequently, he was not in as good of physical condition as his buddy "A.," who was younger. Approximately 12 minutes into the dive, "L." had only 500 psi of air in his tank with 120 feet of water between him and the surface. The buddy team began the ascent, with "L." ahead of "A." who was scanning the area in search of the anchor line. When he was at 70 feet, "A." looked up to see "L." about 20 feet above him giving the out-of-air (hand across the throat) signal. "A." swam to "L." (at 50 feet) and began buddy breathing. "L." was panic stricken, "L." and was of no help to him self and both divers began to lose buoyancy and sink. "A." could see that "L." was becoming unconscious as his eyes rolled back in his head. At 70 feet "L." became limp and "A." dropped "L's." weight belt, then his own, resulting in a buoyant ascent.

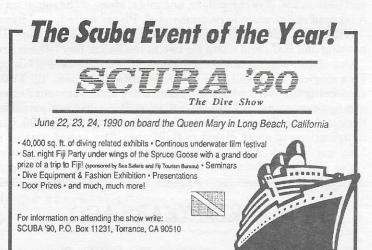
After evacuating "L." the dive boat went around the Island to pickup "A." who had ridden with his buddy to the chamber. At the Isthmus, we saw activity around the Sheriff's helicopter. "L." had died.

A report will not be made by the Sheriffs office for several months, and unless there was some unlikely equipment mal-

Backache

It is much easier to prevent the occurrence of acute low back pain than having to go through the ordeal of professional evaluation and treatment. This is to say nothing of the pain. Follow the guidelines illustrated here and apply them not only in the lifting of a heavy tank or dive bag, but to the proper retrieval of small articles (such as swim fins, dive knives, etc.) and you will be able to enjoy your activities without the constant reminder of an aching back. An ounce of prevention by using your back as it is designed to be used is the intelligent way to go. The pound of cure you may otherwise encounter will be a very heavy burden.

Stephen W. Gray, D.C.



function, all indications point to the conclusion that "L." was a victim of his own making. He made several mistakes, the biggest was not watching his air consumption closely on a deep dive and waiting until he had only 500 psi left to make the long ascent to the surface. He had all the advantages once he got to the surface. There were many divers nearby who knew CPR, the chamber was close by and the Coast Guard was in Catalina Harbor.

This lessons learned is not intended to discourage anyone from diving Farnsworth Banks or making any other deep dives. Farnsworth Banks is a beautiful dive, I dove it before and I will dive it again. This is being written as a reminder to divers to think out their dive; dive within the tables; watch your air consumption, time and depth; save plenty of air to ascend and provide for a safety stop at 10–15 feet. Divers should know their own and buddies limitations. Finally, if there is any anxiety on the part of the diver or his buddy before or during a dive, abort the dive. There will always be another day and other dives.

K. D.

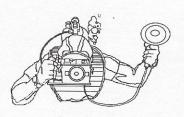
Another sad note from the same dive. My buddy and I saw a large gill net caught on a rock pinnacle at about 100 feet. Trapped inside the net was a dead seal. Petitions to abolish these nets may be found at your local dive shop.

JULY TWO-DAY BOAT DIVE AND CRUISE

27/28 JULY 1990 MEMBERS \$165

BEGG ROCK/SAN NICOLAS/SANTA BARBARA CHARISMA NON-MEMBERS \$185

(INCLUDES FOOD AND AIR



Our second two-day dive of 1990 is an outer island cruise and dive to the very best spots in the Southern California area. This is a Friday/Saturday affair, and has all the makings of a really great trip! The ENCORE is berthed at 22nd Street in San Pedro, and is 78 feet long, 25 feet wide, has 7 staterooms, a 36-seat galley, freezer, large sun deck and color TV/VCR — BIG!

We will have at least two chances at BEGG ROCK which is a group of pinnacles that rise about 15' above water and plunge in the most spectacular fashion to over 100' with rolling ledges from 30' to 60'. It's located about 7 miles north of SAN NICOLAS island, and is noted for its huge plate-sized SCALLOPS easy to limit out at the 2 day limit of 20. PHOTOphiles and VIDEO buffs will

be in seventh heaven, as visibility is usually excellent. Relative beginners should note that BEGG ROCK is fully exposed to the mood of the ocean, but on good days may be dived by all skill levels after appropriate pre-dive consultation with the dive masters and a properly planned dive.

SAN NICOLAS, the outer most of the southern islands, is noted for its remoteness and large size game. The ocean temperature will be coming up in the yearly cycle making diving very pleasant. We should also have no problem reaching limits on ABALONE picks, greens and reds. Large FISH, such as Calico Bass, Sheephead, etc., etc., can be found in the kelp beds and reefs. Even if you don't limit out, you won't come home empty handed! We will overnight at SAN NICOLAS, probably at Dutch Harbor, with dinner, several varieties of wine for, those interested, and good friends — making for a typically great evening. The following day we will either head for BEGG ROCK for a second attempt, or cruise to SANTA BARBARA Island, which is the smallest, prettiest island, and has a little of everything. The spectacular underwater arches, walls, reefs, sea lions, and other sea life are great for PHOTOGRAPHY and VIDEO and visibility is usually exceptional. If you didn't limit out on ABALONE at SAN NICOLAS, then you should complete your catch at SANTA BARBARA — mostly pinks, greens and a smattering of whites and reds. Again large FISH surround the area including black sea bass (these are for viewing only)!

In our now established two-day tradition, several prizes will be awarded during this trip. These will include a prize for a drawing of your sign-in number; a booby prize; and for those who sign up and pay in full by 20 June 1990, a special drawing for a single-day boat dive in 1990. Our two day trips are really fun ask anyone who has been on one recently — and they are a great way to get to know other divers in the club. Sign up early to make sure you have a spot remember our dives are filling early. Call Scott (Williams) at (213)371-9985 or Allen Parker at(213) 813-2955 for information or inputs to the dive. Boarding begins at 9:00 PM on Thursday, 26 July for an early AM departure. Be there!!!.

1990 BEACH DIVES

DAY	DATE	WHERE	FEATURE	KEY CONTACT**
SUN	6 MAY	VETERANS PARK	REFRESHER, BOUILLABAISSE	BILL GARRETT
SAT-WEDS	30 JŲN-4 JUL	JADE COVE	JADE, CAMPOUT, ETC.	PATRICK MINOR
FRI-SUN	24–26 AUG	LA BUFADORA, MEXICO	POTLUCK, CAMPOUT	MICHAEL BORDEN
SAT	13 OCT	WHITE POINT	PUMPKIN CARVING CONTEST	KATHLEEN BENNET /KATHY BACKUS
FRI-MON	19-22 OCT	CABO SAN LUCAS	BOAT, BEACH, PARTY, ETC.	LINDA MONOSMITH
FRI/SAT	2–3 NOV	CATALINA	BOAT, CAMPOUT	BILL GARRETT/ ALLEN PARKER

On the first Sunday of each month Ken Sizemore will be diving White point in support of the Paul Meister OOPS (Ocean Observations Project Survey) program. The Sea Divers are encouraged to be an integral part of this program.

^{**} Cathy Gale is the Beach Dive Chairman and will be the overall coordinator for our program; key contacts are for specific dives only.

CATALINA PINNACLE AND REEF DIVE

2 JUNE 1990 MEMBERS \$59

FARNSWORTH BANKS/CATALINA

ENCORE NON-MEMBERS \$66

(INCLUDES FOOD AND AIR)

We are taking the ENCORE from 22nd Street to FARNSWORTH BANKS and other reefs around CATALINA. This will be THE SEA Divers first dive on the ENCORE — the largest boat in the Southern California fleet. The ENCORE is 80 feet long, 25 feet wide, has 12 staterooms, ladies dressing room, 45 seat galley, a walk-in freezer, large sun deck and color TV/VCR. We are limiting the trip to 36 divers which is extremely comfortable on a boat of this size. A BIG boat!

FARNSWORTH BANKS is on the back side of CATALINA about 1.3 miles off Ben Western Point. The banks are about 1100 yards by 600 yards, with the shallowest pinnacles at 55 to 70 feet. The spectacular walls descend to over 100 feet. FARNSWORTH is famous for its now protected unique coral which is the deep purple color contrasting with other colonies of coral, such as at Santa Barbara, which tend to be pink, red or orange. Some of the colonies of coral are over 15 inches in diameter, and the whole visual effect adds immeasurably to the beauty of FARNSWORTH both to the eye and the lens of your camera, still PHOTO and/or VIDEO. Large FISH, which are not protected inhabit the area so you spear folks should collect a nice bounty.

Following the FARNSWORTH BANKS dive (or dives) and depending on ocean and weather conditions, we will dive at least three other shallow reefs or pinnacles on both the back and front side of CATALINA.

This is a spectacular dive and is suitable for all skill levels assuming ocean conditions are acceptable. Should the ocean not cooperate, relative beginners should double check their viability with the divemasters. Always be aware of your own capabilities.

This is an all inclusive dive and our run back to 22nd Street will feature the ENCORE full food fare for late lunch/early dinner. Call Scott [Williams] at (213) 371-9985 or sign-up Allen [Parker] at (213) 813-2955 for information or suggested inputs for this dive. Boarding will begin at 9:00 PM Friday 1 June for an early AM departure to FARNSWORTH. HOPE YOU CAN MAKE THIS ONE our last dive at FARNSWORTH was in November 1986, and it was just spectacular.

BEACH DIVE

6 MAY — VETERAN'S PARK, REDONDO BEACH

DIVING — BOUILLABAISSE COOKOUT/POTLUCK

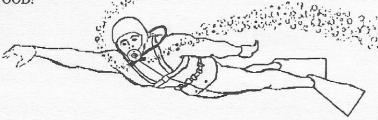
We will dive just south of the pier at Redondo adjacent to Veteran's Park. We will dive the old pier pilings, the canyon, and provide anyone in need of a short refresher with an appropriate buddy or buddies. Diving over, we plan to have a bouillabaisse cookout and potluck. Bring along any type of seafood (caught or bought!) and chef Garrett will add it to the bouillabaisse. If you're not into bouillabaisse, bring along a potluck to share with others. The approximate schedule is:

09:00 AM – 11:00 AM Dive as desired/at will! 11:00 AM – 01:00 PM Prepare bouillabaisse

01:00 PM - 05:00 PM Eat and socialize

Veteran's Park is shown at the lower right center of the map on the front page of the newsletter. Bill "Chef" Garrett is the key contact at(213) 813-0189 (work) or (213) 324-8424 (home).

THIS PARTICULAR EVENT HAS BEEN A GREAT SUCCESS IN THE PAST HOPE TO SEE YOU THERE — DON'T FORGET THE SEAFOOD!





90-5	FRI/SAT	18/19 May	San Miguel/ Santa Rosa	PEACE	VENTURA
90-6	SAT	02 Jun	FARNSWORTH BANKS/CATALINA	ENCORE	22nd Street
90-7	Fri/Sat	27/28 Jul	Begg Rock/San Nicolas Santa Barbara	Charisma	22nd Street
90-8	SAT	04 Aug	WILSON ROCK/TALCOTT SHOALS	WILD WAVE	VENTURA
90-S	Sun	09 Sept	Palos Verdes	(SMALLBOATS)	King Harbor
90-9	Fri/Sat	14/15 Sep	SAN MIGUEL PASSAGE	PEACE	VENTURA
90-10	FRI	05 Oct	SAN NICOLAS	WILD WAVE	22nd Street
90-C*	Fri/Sat	02/03 Nov	CATALINA	WILD WAVE	22nd Street
90-11	SAT	01 Dec	SANTA BARBARA	WILD WAVE	22nd Street
90-12	Sun	16 Dec	SANTA CRUZ CHANNEL/ANACAPA	PEACE	VENTURA

^{*}COMBINED BOAT/CATALINA CAMPOUT AT EMERALD COVE

Wild Wave/Charisma/Encore - 22ND Street Landing:

South on Harbor freeway, left on Gaffey, left on 22nd street, down the hill and park in designated areas.

Peace - Ventura Marina:

North on Ventura freeway to Victoria Ave. in Ventura. Turn left onto Victoria and continue to Olivas Park Drive. Turn right and continue all the way down toward the beach and across Harbor Drive, go to the left on to Spinnaker Drive. Look for Milano's Italian Restaurant or if you get to the end of Spinnaker turn around and take the second left. Park adjacent to the berth which is by HornBlowers Restaurant at Slip #20

DIVE BOAT POLICY

- A club member may, but is not required to, have a boat deposit on file with the club. 2)
 - A club member will have a confirmed reservation on an upcoming dive only if:

*Please include date of last dive for each diver.

- The club member has a deposit on file with the club and makes a telephone request for a reservation with the dive boat reservationist.

 For TWO DAY DIVES, a minimum of one half of the price of the dive must be recieved by the dive boat reservationist. Dive Boat deposits may be used as a part of the one half requirement.
- Any reservation may be cancelled two weeks prior to a dive with a full refund. Cancellations will not be accepted within two weeks prior to the dive unless a diver 3) holding a reservation can sell or transfer their reservation to another qualified diver. The dive reservationist will assist in this process, but is not responsible to provide paying alternates. When confirmation is received by the dive boat reservationist that a cancelling diver is being replaced by another qualified diver, the replacement diver is then fully responsible for the cost of the dive. 4)
- If a diver has a deposit on file with the club and uses that deposit to secure a reservation on a boat dive, he may not use that deposit to secure any additional dives until he has paid the club for the first dive. Two years after a diver has ceased to be a member of the club, his unclaimed dive boat deposit will be forfeited to the club. Only Sea Diver club members and members of other selected clubs may make boat dive reservations prior to one month before a scheduled boat dive. Partial refunds from boats which do not make the advertised dive location will be passed on to members who request them within two weeks of the dive.

BOAT DIVE RESERVATION FORM

DIVE DATE:	DESTINATION	f:	LOS VICENZO SERVEDOS
NAME OF DIVER(S):			
PHONE (DAY):	(EVE):	COST OF DIVE:	\$
MEMBER: YES NO	*DATE OF LAST DIVE		
Please make checks payable to THE S	SEA DIVERS and mail to:	THE SEA DIVERS P. O. Box 2415 Redondo Beach, CA	. 90278

Checks must be recieved at least two weeks prior to the dive date in order to guarantee your spot.

(213) 372-7764

FIRST CLASS MAIL

ADDRESS CORRECTION REQUESTED



KATHI McNALLY 20405 ANZA AVE., #50 TORRANCE, CA 90503

			4,346731746.4	2015/02/17	_ ZIP CODE
HOME PHO			_ WORK PH		()
EMERGENC	Y CONTACT	SENSON DESCRIPTION	PH	IONE	
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Type of divin	g preferred: beach/boat/	skin			ated quarterly for <u>new</u> members
Jo You want Type of divin	g preferred: beach/boat/	/skin	0	Prora	

P.O. BOX 2415

Redondo Beach, CA. 90278

Please fill in completely: incomplete forms may not be accepted.