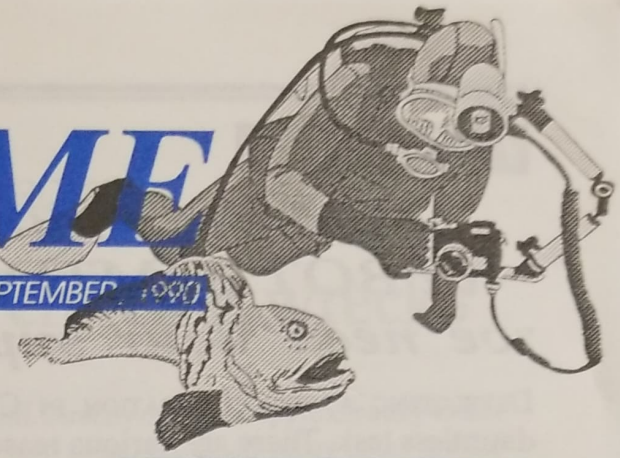
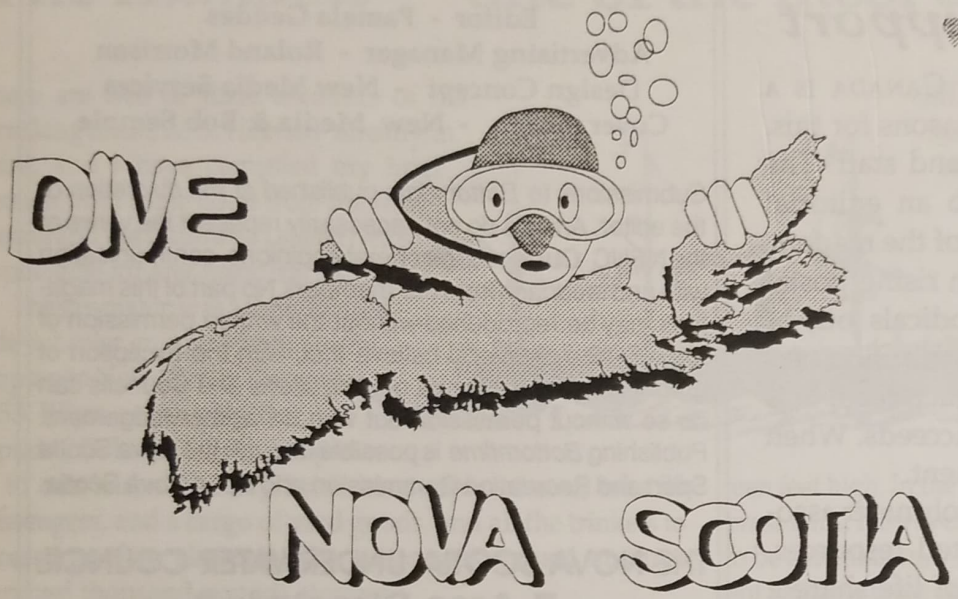
BOTTOMTIME

NEWSLETTER OF THE NOVA SCOTIA UNDERWATER COUNCIL SEPTEMBER 1990





The 10th annual SeaHunt - an "underwater treasure hunt for certified scuba divers" - gets underway this year on Sunday, September 9 at Crystal Crescent Beach in Sambro, with organizers promising a fun-filled day for divers and even freedom from the hurricane that ravaged last year's SeaHunt.

The SeaHunt involves a collective mass of several hundred divers lining up at a start line, then entering the water at 11 a.m. to search for pop tops which have been stashed along the ocean bottom in a roped-off area. Each diver turns in his top, receiving a ticket which is entered into a draw for valuable prizes. Saftey is also a prime concern. Divers are matched with a buddy if they don't come with one. Some divers and their families stay throughout the afternoon, holding informal barbecues along the beach.

This year, there are some 200 prizes which have been solicited by SeaHunt organizers from dive shops, suppliers and Metro-area businesses. The main corporate sponsor is Mares Canada which is contributing some 200 T-Shirts: some local dive shops are contributing as much as $3,000 worth of diving gear in support of the hunt. There is a surprise grand prize worth several thousand dollars donated by the Northern Shore Diving Centre. Another sponsor is the Daily News.

All divers, whether members or non-members of the Underwater Council, are being encouraged to participate. In mid-August, a professional poster of the SeaHunt was released and newspaper publicity has already started. This year, two dollars of every registration fee will be donated to the Abilities Foundation.

Directions *Take Route 349 from the Armdale Rotary to Crystal Crescent Beach Park, Sambro.*

Details *Registration starts at 9 am and SeaHunt at 11 am.* *See page 19.*

New features premiering in this issue

- New Product Info
  U.S. Diver's Select B.C. 15
- Nova Scotia's dive shops - in profile
  Aqua Dive 9

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EDITORIAL

The bottom line at BOTTOMTIME: we need your support

DEVELOPING A NEW PUBLICATION IN CANADA IS A dauntless task. There are various reasons for this. One is the task of finding writers and staff. The second is defining and keeping to an editorial policy consistent with the concerns of the readers. Another is financial, especially with rising postal rates squeezing hundreds of periodicals out of existence. Another is access to a distribution network so that your publication is, in fact, read. It is rare, indeed, that something new succeeds. When it does, it is an impressive achievement.

This is especially the case for a volunteer association in amateur sport with limited resources, but where people from all walks of life share a common aim and activity.

We are proud to have brought our readers a new *Bottomtime*. The task we began four months ago of transforming it into a low-cost but attractive and topical 16-24 page newsletter has been a challenging task! But we believe the results are positive. The staff have been gratified at the response - overwhelmingly favourable comments from the readers, with hardly any negative reaction.

What first strikes the reader's eye is the professional re-design. We are aiming to aesthetically reflect the content of a Nova Scotia diving newsletter and our natural environment - the fascinating world of the ocean and its shores and the activity of man in the ocean - not just some glitzy format, but a publication that breathes.

Behind that professional format and production must come a professional approach to all questions: writing, editing, graphics and photos, business and especially to editorial policy. To set a standard. And then to advance that standard.

The editorial policy and aims are the key link. The main problem facing volunteer organizations is not technical, but content - the main problem for *Bottomtime* is to define and popularize this policy. The general aims are set out in our "Objectives" - now highlighted on the back cover of each edition of the new *Bottomtime*.

continued on page 4

BOTTOMTIME

SEPTEMBER, 1990

Newsletter of the Nova Scotia Underwater Council

Editor - Pamela Geddes
Advertising Manager - Roland Morrison
Design Concept - New Media Services
Cover design - New Media & Bob Semple

Submissions to *Bottomtime* published at the discretion of the editor. Articles do not necessarily repesent the views of the NSUC. Our aim is to generate opinions, communication with and feedback from our members. No part of this magazine may be reproduced without the written permission of the NSUC, however, I believe that, with the exception of graphics, other non-profit organizations and Councils can do so without permission but with an acknowledgement. Publishing *Bottomtime* is possible through the Nova Scotia Sport and Recreation Commission and Sport Nova Scotia.

THE NOVA SCOTIA UNDERWATER COUNCIL

■ Area Directors ■

Vacant		Cape Breton
Danielle Gough	864-3046	Central
Gary Mattinson	895-3909	Fundy-Highlands
John Pothier	762-2241	South Shore
Sylvain Roy	765-3786	Valley
Joe Christie	875-3732	Commercial

■ Executive ■

Lynn Gallant	434-3675	President
vacant		Vice-President
Dave Rodwell	765-6771	Treasurer
Colin Frazee-Whitelock	864-1157	Secretary
John Webber	477-2662	Past President

■ Committees ■

Pam Geddes	477-2909	Bottomtime
Bob Trider	469-6440	U/W Hockey
Roland Morrison	463-3796	Constitution/Ethics
		Sub Sea Horizons
Barbara Turney	464-9276	Membership Registrar
Darlene MacDonald	827-2944	Sea Hunt
Mike Turney	464-9276	Sea Hunt
Danielle Gough	864-3046	Marketing
John Webber	477-2662	Public Relations
Lynn Gallant	434-3675	Awards
Vacant		AGM

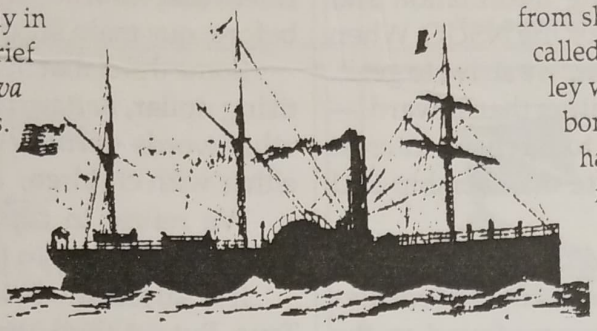
Membership is open to individuals, clubs, or commercial diving enterprises. Dues are set annually - usually at the Annual General Meeting. Individuals may join by sending an application or letter with the $14 fee to the Treasurer.

NOVA SCOTIA UNDERWATER COUNCIL
P.O. Box 34, Armdale, Halifax, N.S. B3L 4J7

Nova Scotia's Shipwrecks

The *Humbolt* - "one of the most enticing wrecks"

There are two or three accounts of the wrecking of *U.S.M.S. Humbolt* already in print, and I have compiled my brief version from some notes from the *Nova Scotian* and the *Illustrated London News*. I apologize for any inaccuracies.



The steamship was a three masted side-wheeler en route from Southampton to New York in December 1853. When nearing Halifax, her captain J.D. Lines decided to put in to our harbour to replenish his supply of coal, take 90 passengers, and a cargo of yard goods, and all the trinkets to accessorize fine clothing. The cargo was valued at three hundred thousand pounds sterling.

On December 6, in a thick fog, and under the incompetent direction of a local fisherman, the *Humbolt* ran aground on the Sisters Shoals at 6 o'clock in the morning. Captain Lines thought the damage seemed light. He got the ship off the ledge and sailed towards Halifax. However, he soon realized the damage was worse than he had thought as his ship was rapidly filling with water. Thinking of saving lives, he headed straight for the cliffs and ran the *Humbolt* onto the rocks a little north of Portuguese Cove. News of the wrecking soon reached Halifax and the steamer *Osprey* made two trips out to take off passengers, belongings, and mail. The weight of the heavy engines and wave action caused the ship to settle low, but she was not abandoned by the Captain and crew for another two days. The weather moderated for several days and several attempts were made by the Royal Engineers from Halifax to salvage the cargo. Eventually, after blowing up the upperworks, they managed to get some ruined cargo out. Towards the end of the month, the *Humbolt* finally broke and disappeared beneath the waves.

The ship was rediscovered sometime during the 1960's by sport divers. She is now scattered north along the coast to beyond Bear Cove. At the Portuguese Cove site there is little to be seen at first glance but in the 1970's, diving the *Humbolt* was a very popular activity for local divers - a short easy climb down over the rocks and a bit of a swim out and you were there. Oh, what treasure there was to be found - you got hooked on the *Humbolt*. Of course this was before we were aware of how important the heritage of the sea is. This was long before underwater archaeology came to Nova Scotia.

The marker was on an outhouse high on the edge of the cliff. Directly opposite, approximately 45 feet from shore, is a small valley in the granite called the Buttonhole. The floor of the valley was loose gravel in which there were bone or glass buttons. Hundreds must have been found over the years. I once found what I thought was a diamond there miraculously unscoured. It turned out to be quartz that had once been in a setting. The sides of the Buttonhole are ten to fifteen feet high. In the crevices along the sides, a diver can find brass nails. However, a slight glint of something can turn out to be a medallion, a watch fob, or a silver coin. The coins are not valuable these days and many of the medallions are badly worn, but some are as good as the day they went down. Here and there on the rock and concreted to it you can see watch chains worn down to dust and impossible to move. Nearby in a gully that goes down to eighty feet, a few gold watches have been found. My buddy once found two watches lying together with the glass and hands gone, but the dials and inner works still in place.

A few yards north of the Buttonhole, a diver will find a few timbers buried beneath granite boulders and the copper and brass pins that once held them together rammed into crevices. One huge copper pin seems to have been pounded straight into the rock and in the 1970's was shiny and clean from the many vain attempts to pry it loose. Further north of Portuguese Cove there are at least three pieces of the ship's hull. Perhaps they are thirty or forty square feet in size. They lay in 60 feet and deeper. The wood has been sufficiently preserved by the copper pins and even a bit of copper sheathing remains intact.

What little is left of the *Humbolt* is one of the most enticing wrecks I know of. Portuguese Cove has become a high class neighbourhood in the 1980s. Expensive houses were built across our access to the water and modern plumbing did away with the outhouse. Then the sea urchins died and the kelp grew thick and fast and a diver can no longer discern the tiny shiny glint of treasure.

Directions *The* Humbolt *is found north of Portuguese Cove. Ask your local dive shop for charters. This information has been taken from "Passport to Diving".*

Colin Frazee-Whitelock

The bottom line at Bottomtime

continued from page two

In other words, the re-design is part of a more comprehensive enhancement of *Bottomtime's* editorial content and structure.

The central idea is to put the publication at the service of all divers, reflect their concerns and needs, while at the same time recording information and serving as the journal of record for the NSUC. When we do not receive that information, we strive to get it.

This orientation is outward, rather than inward — topical and timely and appealing to a general interest readership beyond the immediate membership and even the diving community.

We doubled our printing and distribution, from 200 to 400 in July and August (the estimated readership is three times that). News is now found on the front page of the *news* letter. New features to help divers with information that might enhance their participation in the sport have been introduced. *Bottomtime* has developed an internal organization and consistency.

Now we have our own editorial organization - our ability to co-operate and work together. The editorial, business and technical staff have become one. (We are looking for more!) Our perspective is that ***not all problems could be solved at once.*** We would proceed one issue at a time, but with a long-term attitude and plan. So, we have solved various problems and the editorial and design features of *Bottomtime* will further develop and be enriched over a period of time with work, consultation and constructive criticism.

One problem we have not yet solved is economic and, on this point, controversy has broken out. Our budget, beyond covering the postage for the remaining five issues, is virtually exhausted. We have sent out over 100 letters soliciting advertising to all dive shops in our province, inviting businesses across Canada and abroad to promote their goods and services. There has been some response and some resistance. Some commercial members have been very pleased and enthusiastic that we have a Nova Scotian publication that is reaching out to all divers and even to potential divers. Some advertisers are sceptical that the publication can be maintained, or think that the terms of reference will be changed in mid-stream, and have taken a wait-and-see attitude.

Our attitude is that our readers do need information to assist them with their purchases, but we should not, nor have not, tailored the newsletter to the advertising dollar. For example, we did not nor will not change our publishing schedule because this or that shop is gearing up a promotion, and the remark that this or that shop "dominates *Bottomtime*" is, in our opinion, beneath comment. Thirdly, we are confident that we will win support. As we have repeated before, our main support is from the readers.

Some think that because we haven't got the advertising dollar, *Bottomtime* should cease advancing; in other words - *swim or drown.* But this does not work, either with children, or with diving, or with life.

We refuse to capitulate to such problems. We should co-operate to find concrete solutions.

It is said that - *but money won't just fall from trees.* True. But we think that we should either plant some trees or find some trees with money and shake them.

We who have worked so hard on the publication are not without ideas and solutions.

One solution given to us was to have a professional cover and amateur innards. This is not a solution. It would give you, the reader, a false impression. Therefore, in this issue we have lowered the quality of production, by using a photocopier at Sport Nova Scotia, while striving to keep the editorial and design quality at the level we have set.

We will be presenting our detailed proposals to the Board Meeting of the NSUC on September 8, 1990. You are welcome to sit and participate with us.

We need the support, most of all, from the readers. It is for this reason we are making you conscious of the issues, and the perspective to solve them. The main support you can give us is not material, but moral.

The editorial, business and technical staff

EDITOR'S NOTES

I receive regularly *Museum News and Views* from the Nova Scotia Museum Complex. There are 23 branches in Nova Scotia.

I also have Summer '90's issue of *Spray Magazine,* Atlantic Canada's Sail and Power Magazine. They have features, articles, regional reports, and Olympic information among other things. They include new products, a business directory, and classifieds.

I have also received Volume 7, Number 2, May 1990 *NAUI News* with an article on their Annual General Meeting on April 1, 1990.

Continued on page 20

News in brief & comment

Dartmouth Dive Team Reinstated?

On Wednesday, July 18, Andy Desrochers got a call requesting tanks and regulators. He next got a call asking for divers to attend the scene of a drowning in Lake Banook. Lynn Hebb and Carol Draper were at Aqua Dive at the time, so the three of them headed out to dive for the victim's body. By the time they had arrived, the body had been found.

The drowning death of Roger Nanton of Ontario sparked renewed interest in the disbanded Dartmouth Dive Team.

Formed in 1978, the team consisted of eight scuba qualified fire fighters, any two of whom were on call at any one time.

Equipped with dry suits for all weather diving, the team served chiefly for body retrieval, although there was one occasion when they were called upon to search for an artificial limb that was lost at the Ferry Terminal by a visiting yachtsman.

During its eleven year history, the team was called into action only a half dozen times.

This, plus the difficulty in getting the team to the scene of an accident, plus the costs of equipment, training and upgrading, led Dartmouth City Council to disband the team in the spring of 1989. Although there have been calls to reinstate the team, City Administrator John Burke has reported that the Public Safety Committee has recommended that it would be better to contract with private diving firms as needed, rather than to maintain a standing dive team.

This decision will have been made at the City Council meeting on August 28. Incidentally, there is a strong indication that the RCMP dive team will also be disbanded.

It was reported in the news media that the Lake Banook Safety Patrol dive team found Mr. Nanton's body. This was erroneous. Mr. Joe Vidito, former head of the Dartmouth Dive Team, and Training Officer with the Dartmouth Fire Department, was the diver who found the body. There is no Lake Banook Dive Team.

Deep Diving Record

On February 14, 1990, Bret Gilliam attempted to break Neal Watson's deep diving record of 437 feet on air.

Theoretically, despite the records, text books proclaim that lung squeeze can happen below 130 feet.

Bret Gilliam has done over 12,000 dives with over 200 below 300 feet. Although he is associated with Ocean Quest International, his deep diving is done independently. He has professionally generated dive tables from Randy Bohrer.

He carries among his equipment a 92 cubic foot tank and one regulator and is distracted by more equipment. He claims to have worked out his own safety margin for his air consumption. He can keep the partial pressure of carbon dioxide down to block effects that include narcosis and oxygen toxicity.

He prepares for a dive by snorkel breathing at the surface for 10 minutes. Eventually his heart rate can slow down to 12 beats per minute and his respirations can reduce to two breaths per minute, two conditions that theoretically do not support homan life. He relies on his own experience for feeling comfortable doing this.

During the record breaking dive, he appeared at 452 feet. After 58 minutes from the beginning of the dive, he had 750 psi remaining in his tank and was back on the surface.

Taken from an article from Lynn Hendrickson from the section Advanced Diving in "Scuba Times".

Subsea Horizons Update

A contract is being signed with Dartmouth Sportsplex for an exhibitor's reception on Friday, May 3, and for the show on May 4. Holiday Inn in Dartmouth will offer a special rate of $72.00 per night for the week end.

Offers for the grand prize were received from Air Canada (destination Tobermory, Ontario via Toronto) and from Air Nova (destination St. John's, Newfoundland).

After much deliberation, the committee accepted the Air Nova bid for several reasons.

First, this would support Atlantic Canada's diving.

Second, it was felt that there is better wreck diving in Newfoundland than in Tobermory. The dive package is being negotiated with two dive shops in St. John's.

Red Cross

The Canadian Red Cross Society has sent *Bottomtime* "Friends" Volume 10, No. 1, Spring 1990 in addition to a resource library bibliography for articles, books, periodicals, and videos.

We will be publishing information from it subsequently.

Photo Contests

Provincial Parks

CATEGORIES

Recreational Use: Recreational activities in a provincial park.

Scenic: A provincial park landscape.

Flora or Fauna: The park's natural environment

FORMAT

Entrants must submit one original colour slide and or a 5 times 7 black and white print mounted on a suitable backing, with negative. Entrants must provide their name, address, phone number and name of the provincial park where the photograph was taken with each entry.

Forward to;

Provincial Parks Photo Contest, c/o Nova Scotia Department of Lands and Forests, Parks and Recreation Division, RR#1 Belmont, Colchester Co., N.S. B0M 1C0

RULES: For a complete listing of rules, please write the above address. Entries must be postmarked no later than November 1, 1990. If sufficient number of entries are not received for any one category, the Department of Lands and Forests reserves the right not to award a prize in that category. For a complete listing of Nova Scotia's provincial parks, please contact the above noted address. Employees of the Department of Lands and Forests and their immediate families are not eligible to enter this contest.

PRIZES IN EACH CATEGORY:

1st colour slide $100
1st black and white print $100
2nd colour slide $50
2nd black and white print $50
3rd colour slide $25
3rd black and white print $25

Divers World Photo Contest

July 14, 1990 to Jan 14, 1991 Prizes from U.S. Divers, Wenoka, Mares, and Pelican. Photos can be above or below water of Nova Scotia only. Colour black and white. Photo must contain divers.

REPORTS FROM THE NSUC EXECUTIVE

President's Report

My apologies for not having a report in the last *Bottomtime*. My report was submitted but inadvertently left out.

Bottomtime

We have been receiving very good comments on the new format of *Bottomtime*. Due to a lack of funding we will be unable to keep up this professional format but will strive to keep things as professional as possible. Should income increase then perhaps we can go back to the new format.

"Rumblings"

I have heard some third and fourth hand "rumblings" about certain aspects of the Council. My only comment to those complaining is please call or write to me. An anonymous complaint is worse that no complaint at all. How can I react to a complaint for which I have nobody to answer to? I am fully aware that the Council is not perfect but it is hard to change without direct feedback.

Clubs

I would like to welcome our new member clubs. The purpose of having member clubs is to give some recognition to those who consistently support the Council. We will be considering new incentives for member clubs - if you have any suggestions please let us know.

On another note, I received a phone call from the Atlantic Bloodhound Track and Trail Unit. They are doing research in using dogs to find drowning/drowned people. They need some divers to simulate a drowning person to aid in this research. If you would like to assist this interesting cause, please call Leo Caldi at 477-5154 before the summer is over anytime before 8AM or after 10 PM. The research will be conducted in a shallow lake.

Cape Breton

A note to Cape Breton divers. You are now without representation on the Board of Directors. Anyone interested in standing for Cape Breton Area Director please let me know.

I hope to see you all at the Board Meeting September 8 and at the Sea Hunt on September 9, 1990.

Regional Reports.

Fundy Highlands

It has been a good summer in this area for diving with many people getting out due to the very warm water conditions we have had so far. Some divers are diving 30-40 feet with no wetsuits, honest!

Pugwash area

In the Pugwash area, over near Parrsboro, divers report some very good scallop beds near Spencer's Island. Don't try diving without a local diver. The water is cold at all times and the currents must be watched very closely.

Truro area

I have spoke to some divers in the Truro area, and all agree that a local air station would be good for all divers in this area, but who wants to look after the maintenance on one? I will write the Onslow Belmont Fire Department in the near future and find out if they would consider maintaining their unit for the use of divers in the area. I hope to have a reply in the next newsletter.

Gary Mattinson

NSUC MEMBER CLUBS

Aqualantic Scuba Club
P.O. Box 2944
Dartmouth East
Dartmouth, N.S.
B2W 4Y2
Tel: 434-2768

CFB Cornwallis Scuba Club
P.O. Box 295,
CFB Cornwallis, N.S.
B0S 1H0
Tel: 638-3574

West Pubnico
Dive Shop West Pubnico
Yarmouth County,
N.S. B0W 3S0
Tel: 762-2241

Club membership costs $20 and is available from the NSUC treasurer

Maritime Marlin Travel

Services are available to the members of Sport Nova Scotia through Maritime Marlin. I received information from the sales managers of Maritime Marlin (Denise Brouwer), Canadian Airlines (Steve Dodge) and Air Atlantic (Len Thompson) and Dave MacLean of S NS.

Maritime Marlin is the largest travel agency in Atlantic Canada with 26 locations. Its volume makes it an important trading partner to all airlines, hotels, car rental companies and other travel services. Because of its volume, Maritime Marlin can negotiate special airfares, upgrades and seat selections on advance purchase tickets. The company guarantees the lowest fare applicable to its clients, or else will refund the difference and give a $25.00 gift certificate for use at a later date. The agency will also confirm car rental rates, and will refund any difference in price. Preferred Car Rental rates are available to its clients. As well, ticket delivery is guaranteed within 3 hours.

One of the major benefits to sports is the 2% "administrative service fee" on all net airfares purchased through Maritime Marlin using a credit card for payment. I confirmed with Denise that this applies to all travel booked with the agency, and not just sports-related travel. Accordingly, if a diver is taking a personal trip and books through the agency, if the ticket is paid for by credit card and Maritime Marlin is asked to code it to the NSUC, a member of Sport N.S., then the Council will get a cheque for 2% of the cost of the ticket. These "fees" are paid directly to the sport on a quarterly basis. So far this year, the NSUC has received $53.00 under this arrangement.

A further benefit is that Maritime Marlin will provide $100,000 of air flight accident insurance for Sport Nova Scotia travellers (including NSUC members) at no charge. This insurance is provided in addition to any other coverage that may be extended by a credit card company.

For vacation travel, Maritime Marlin offers members of Sport Nova Scotia with a 5% "employee" discount. I verified with Denise that this would also apply to NSUC members and their immediate families. Finally, the agency offers Club Maritime Marlin. This program provides trip planners with information to assist with travel planning. Additionally, trip planners may be invited to attend FAM (familiarization) trips to experience travel from the business traveller's perspective, as well as being eligible to win prizes. For each reservation made, the trip planner gets an entry form. Draws are made monthly (prize is dinner for two at a local restaurant or travel vouchers), quarterly (weekend get-aways for two to Montreal or Quebec City) and annually (trip for two to Florida).

Steve Dodge provided the information on Canadian's Sportsair program. Based on the number of trips booked per year with Canadian or Air Atlantic, a sports group will receive either free tickets or a rebate. Len Thompson has information on Air Atlantic's new jet service.

As outlined above, the Council may receive valuable benefits when its members book travel either with Maritime Marlin and / or Canadian / Air Atlantic, even for personal trips. It costs nothing extra for the member, and can result in either cash to the Council or travel credits. I would therefore urge members to consider using Maritime Marllin for their travel arrangements - be sure to mention at the time of booking that you are with the NSUC. As well, it would be appreciated if you could forward copies of ticket stubs or boarding passes to the Secretary each time you fly Canadian or Air Atlantic.

Roland Morrison

155 York St.
London, Ontario, Canada
N6A 1A8
(519) 661-1095

Squba INC HOLIDAYS

sQuba-TIPS

SCUBA CELEBRATION - November 9, 10, 11 in Hull, Quebec. Please drop by our booth and pick up your **SQUBA-CAP COUPONS.**

CHARTER PACKAGE TO BONAIRE - CONQUEST TOURS will begin 1 & 2 week packages this winter with direct flights from Toronto and hotel accommodations at **DIVI FLAMINGO.** We will arrange your optional **PETER HUGHES** dive packages and low priced meal plan.

CANADIANS LOVE CURACAO. ADVENTURE TOURS begin weekly departures October 7 with direct flights from Toronto and hotel accommodations at **CURACAO CARIBBEAN.** We will prebook your diving with **CURACAO SEASCAPE.**

ANSE CHASTANET, ST. LUCIA. This is a great resort, especially for couples. **FIESTA HOLIDAYS** fall package including roundtrip airfare from Toronto, hotel accommodations, breakfast and dinner daily is a real bargain. We will confirm your diving with **DIVE ST. LUCIA,** right at the resort.

DOMINICA - This is truly an adventure (see National Geographic, June Issue). We have a super package at **CASTLE COMFORT GUEST HOUSE** and **DIVE DOMINICA.** Beat the crowd and travel now before the low introductory rate ends. Call us for free colour brochures.

CAROUSEL HOLIDAYS begin 1 & 2 week departures to **CURACAO** in November. Also available in November with **CAROUSEL is GRAND CAYMAN.** Call us first for great rates on hotel and air only packages to these exciting dive destinations.

PHONE (519) 661-1095
CANADA TOLL FREE 1-800-265-3447
FAX (519) 673-1935

How to play the great membership drive lottery

1. How to Play Simply register with the N.S.U.C. as an Individual, Family, or Associate member and automatically receive one entry in the contest. One entry is awarded for each person named in a Family Membership application. Receive an additional entry for renewing membership in 1991 prior to April 30, 1991. Also receive one entry for every 5 members recruited in the above categories. Recruited members must be new members or those who haven't been members since prior to the 1989-90 membership year. Mark the recruited member's application form conspicuously with "Referred by_____ (your name goes in the blank).

2. Contest Deadline All membership forms must be received with applicable membership fees by April 30, 1991. The Draw will take place at Subsea Horizons, May 4, 1991. The address for submission of forms and fees is: Membership Contest, N.S. Underwater Council, P. O. Box 34, Armdale P.O., Halifax, N.S., B3L 4J7.

3. Eligible Contestants The contest is open to all members and non-members except NSUC Board of Directors, club membership registrars/secretaries and employees of donors. Dive shop employees and instructors are eligible, but may not win prizes donated by suppliers with whom their shop has an e xclusive contract. Substitute prizes will be awarded instead.

4. Prizes They must be accepted as awarded - no exchanges and no cash equivalent. The prizes include Cressi-Sub regulator, Fitzwright/SeaQuest B.C. and air source, Suunto triple console, Sherwood Blizzard regulator & Spirit B.C., and a Brooks custom wet suit with all options, and an Oceaner Sub-Arctic wet suit.

PADI

Training Counts

New and Varied Schedule of Instructor Development Courses.
Promoting Environmental Protection Awareness.

For further details please contact

PADI Canada
#3 -10114 McDonald Park Road,
RR #3 Sidney. B.C. V8L 3X9
Telephone (604) 656-7234

Public Notice

The Occupational Health and Safety Division of the Nova Scotia Department of Labour has prepared draft regulations which would pertain to commercial diving operations and anyone who receives remuneration for diving services.

Before these Regulations are finalized, the Occupational Health and Safety Division is inviting submissions from anyone involved in the commercial diving industry.

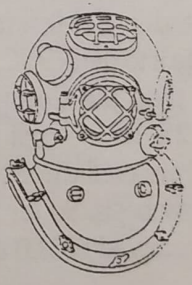
Interested parties are asked to contact the Occupational Health and Safety Division to receive a copy of the draft regulations.

Final submissions must be received by the Occupational Health and Safety Division by September 21.

Please contact: Occupational Health and Safety Division
Department of Labour
P.O. Box 697
Halifax, N.S.
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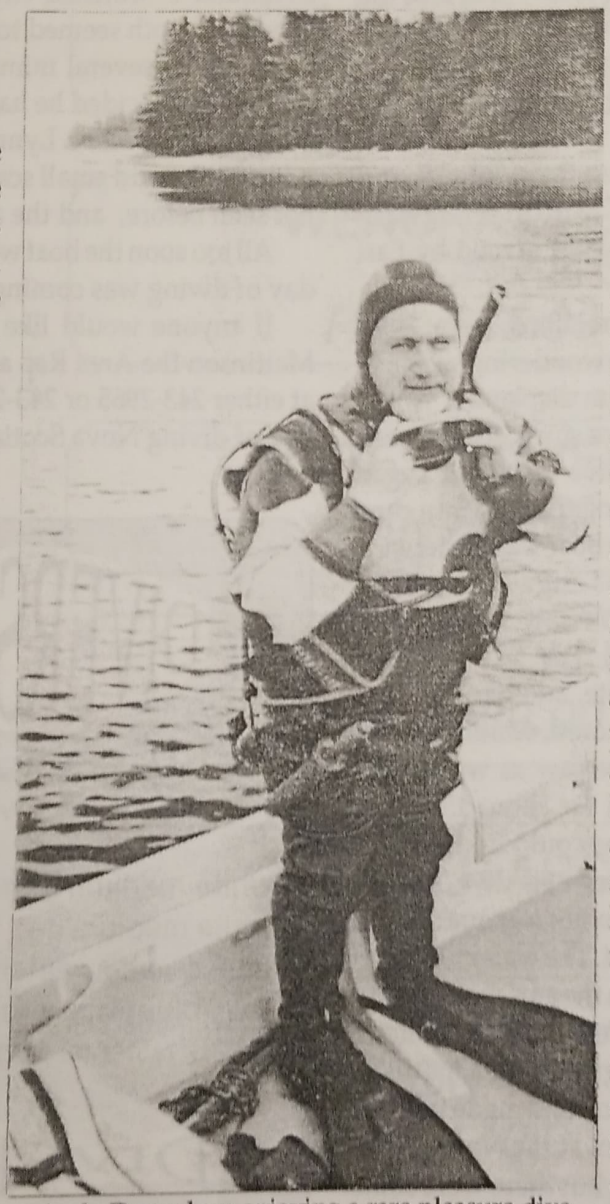
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EXPERIENCE THE DIVERS WORLD

Andy Desrochers and Aqua Dive in Profile

Profiles of commercial members - first of a series



Andy Desrochers enjoying a rare pleasure dive

Andy was born and raised in "La Belle Province". In the summer of 1956, he experienced his first scuba dive. "I was hooked" said Andy. With diving in mind, the following year he joined the Navy and took his first scuba course. Over the years he served on many ships as a ship's doctor and ship's diver. He later combined his medical and diving knowledge and specialized in hyperbaric medicine. In 1968 he was posted to the East Coast Diving Unit as a hyperbaric medical technician, one of only two in Canada at the time. He retired from the fleet diving unit in 1978. During his Navy days, Andy dove and worked throughout the world. He also spent some time in experimental diving with the U.S. Navy S.E.A.L.S. and U.D.T. Dive Teams and with the D.C.I.E.M. Unit in Toronto.

His first sport diving involvement was in the late sixties or early seventies when he joined the Dartmouth Dolphins Scuba Club and the N.S.U.C. Upon meeting Peter Giffin, he became an Association of Canadian Underwater Councils and P.A.D.I. (Professional Association of Diving Instructors) instructor.

In 1972, they formed Canadian Scuba Diving Schools Ltd. and in 1974 opened Aqua Dive Scuba Shop to serve their growing number of students and the general diving population. Andy and Peter were later joined by Art Zahn. Peter and Art have since both retired, and in 1986, Andy was joined by his wife Marie. That same year the shop was moved from Woodside to their property at 77 Prince Albert Road in Dartmouth.

Over the years, Canadian Scuba Diving Schools and Aqua Dive have grown into one of Canada's most respected scuba centers. They are the second oldest existing P.A.D.I. training facility in Canada, and have trained over 4000 sports divers as well as being responsible for the career starts of many instructors, dive shop owners and managers. They have been associated with the Dartmouth Dolphins since the beginning and have been a major factor in the club's growth, now at 150 members. Aqua Dive has supported such Nova Scotia diving events as the Sea Hunt, Easter Egg Hunt, Diving For Dollars, and most clubs' annual dives. They were also the co-sponsors for the first annual Ecology-Muscular Dystrophy Dive, which raised $2300.

Aqua Dive Scuba Shop are dealers for most major manufacturers of scuba equipment, and specialize in Dacor, Scubapro, U.S. Divers, Tabata, Atlan, and Viking equipment. This year they were the proud recipients of Dacor's Silver Award for excellence in sales and marketing.

Andy and Marie have been married for 29 years and have three sons and two grand sons all of them divers and future divers. They attribute their success to their basic philosophy "Don't try to be the biggest, just the best".

Danielle Gough

Support, Develop and Contribute to the new *BOTTOMTIME*
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Sorry, Jane!
The article on *The Humbolt* on page 3 is by Jane Biggs, and not Colin Frazee-Whitelock, who is to publish his own study later this fall.

Diving Nova Scotia's Red Sea

The Northumberland Strait was shown on early charts as the Red Sea. Nova Scotia's Red Sea may have been named after the sand colour which is caused by iron oxides. Although not known by that name today, it is the warmest salt water found in Atlantic Canada.

Lynn Gallant and I travelled to Pugwash on July 29, and dove the Red Sea with divers from the Truro and Pugwash areas aboard a large Strait-style lobster boat owned by Earl Pauley.

Armed with an invitation and directions from Gary Mattinson, we arrived at the site at 11:30 wondering which of the seven or so white boats with blue trim displaying "C.V." numbers on the top was the one we were supposed to meet. Suddenly, vehicles began to unload dive gear and began loading one of the boats. After exchanging friendly introductions, the equipment was loaded and the boat was underway. We sailed out the serpentine channel of Pugwash Harbour admiring the picturesque shoreline. We saw a ship from Turkey loading salt.

When we arrived at our first dive site, another ship was steaming toward Pugwash. It later anchored, waiting for the tide and the departure of the vessel we saw as we left the harbour. This anchorage has been used for about 150 years and therefore one never knows what one could find there.

Unfortunately, no one found anything this dive, but the potential is there. The dive site was approximately one mile off shore, and had a depth of thirty seven feet. The water temperature was a balmy seventy one degrees on the surface and sixty two if you stayed off the bottom. Five feet from the bottom, there was a colder layer of fifty seven degree water. One of the local divers dove with no wet or dry suit on and made two dry suit divers look as out of place as a bikini at the North Pole.

The bottom was fairly flat at this site, but there were some anenome varieties not seen regularly on the Atlantic coast near Halifax that made the dive quite interesting and enjoyable.

Once the divers had returned to the boat, Earle started the engine, pulled the anchor, and we steamed for about half an hour to the next dive site. The warm temperature, and the fact that there was no breeze, made me wish I had worn a bathing suit or at least brought a wet suit. On this dive, some people opted for wearing their Farmer John (and Jane) only, while Sheldon wore only his trunks and B.C. again.

Our second dive was again just over thirty feet, but this time the bottom was quite uneven with some fairly large rocks providing a home for a variety of crabs and of course lobster. Lynn and I watched two good-sized lobsters duelling for what they both seemed to think was a perfect rock for a new home. After several minutes of a see-saw battle, one of the contestants decided he had had enough and crawled quickly away from the scene. Lynn and I swam slowly back to the boat noticing the odd small scallop, some starfish of a colour I had not seen before, and the anemones again.

All too soon the boat was headed back to shore, and a good day of diving was coming to an end.

If anyone would like to dive this area, call either Gary Mattinson the Area Rep at 895-3909, or Captain Earle Pauley at either 243-2965 or 243-2410. I thank these people for a fine day of diving Nova Scotia's Red Sea.

John Webber

DIVERS' BOUTIQUE

NSUC Clothing For Sale

embossed with "Nova Scotia Underwater Council"

1 white medium golf shirt (gold lettering) $22
1 white medium golf shirt (navy blue lettering) $22
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1 navy blue large v neck sweater(gold lettering) $30

Contact Danielle Gough 864-3046

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1 Black sharkskin wet suit
Best Offer
Call Bob Doiron 864-0238

Underwater Photographic Techniques

No. 2

That fish must have been 6 feet long !! - Bob Semple

Why do objects viewed underwater seem to be much larger than they really are? This minor problem in underwater photography and a major problem in fish-telling stories is known as **refraction**. It is caused by the bending of light rays as it travels through substances of different densities. Light travels 186,300 mi. (299,800 km) per sec. in air and in water its speed is reduced to 140,000 mi. (225,000 km) per sec. The ratio is approximately 4:3 and is called the **refractive index**. This effect can be noticed when a spoon is placed into a glass of water. The spoon seems to be split where the air meets the water and the portion underwater appears larger. As kids, we used to throw rocks at fish we would see resting beside logs in a lake or stream. Fortunately we would miss, partly because of bad aim and mostly because the fish was not actually where we were observing it to be! The light rays were bent as it entered the water and the fish was really below the image we were looking at.

The diver wearing a mask, receives the light rays after they pass from the water to the air medium. The diver's eye "sees" the subject as 25% larger and closer than it actually is because of the bending of the light rays (See diagram)! The distance of the subject is perceived from you is called the **apparent distance**. If you were to measure the actual distance, it would be 25% further away.

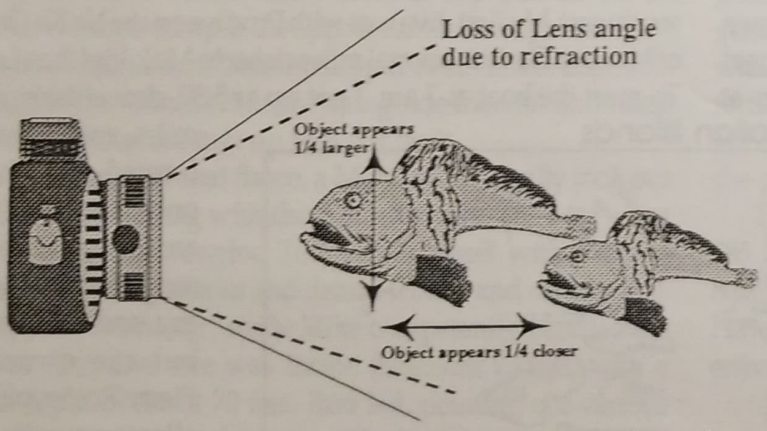


Diagram: Showing effects of the refraction of light through a flat lens port.

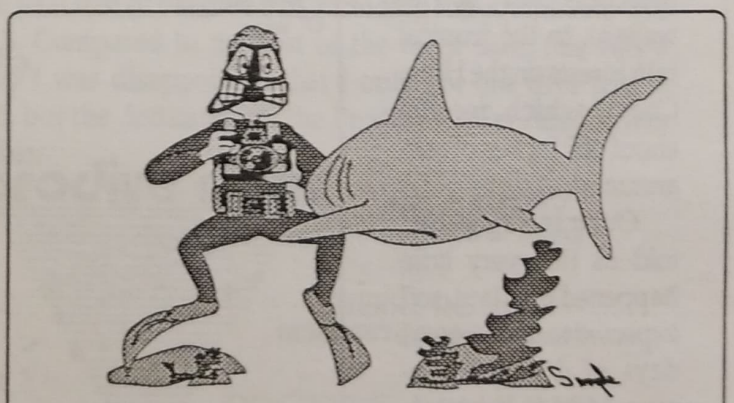
What does a camera see? The camera lens also has an air/water interface so it should "see" the subject same way you do. When you focus on the subject you must **focus on the apparent distance and <u>not</u> the actual distance**. If you were to measure the distance from the camera to the subject, you would use 3/4 of that value to set the focus on the camera.

Another effect that refraction has on underwater cameras is that it **reduces the viewing angle** of the lens. An underwater 28 mm lens will have about the same angle of view as a surface 35 mm lens. A 35 mm lens will be like a "normal" 50 mm lens on the surface. The bending of the light rays increases the size of the object being viewed. This can actually be an advantage in close-up work! Shy critters don't have to be approached as closely to get pictures.

Refraction can also cause a problem with **distortion of faces** behind dive masks. The more the subject's face is turned from the photographer, the greater the distortion. It is better to try to film the diver's face with it turned towards the camera.

Refraction through flat lens plates (ports) tend to distort the edges of photographs from wide angle lens. **If the port is curved or dome shaped, refraction can be eliminated**. The greater the curve, the smaller the amount of refraction! The dome port acts as another lens an creates a virtual image a few inches outside the dome. The camera lens must be able to focus on this image. A close-up adapter lens may be necessary. By correcting for refraction, dome ports allow the wide angle lens to maintain its viewing angle and not have edge distortion.

We now can see that when light enters water, that not only is it reduced in quantity (absorption) but it is also affected in quality (refraction). These are not the only factors, so we will discuss some more the next time.

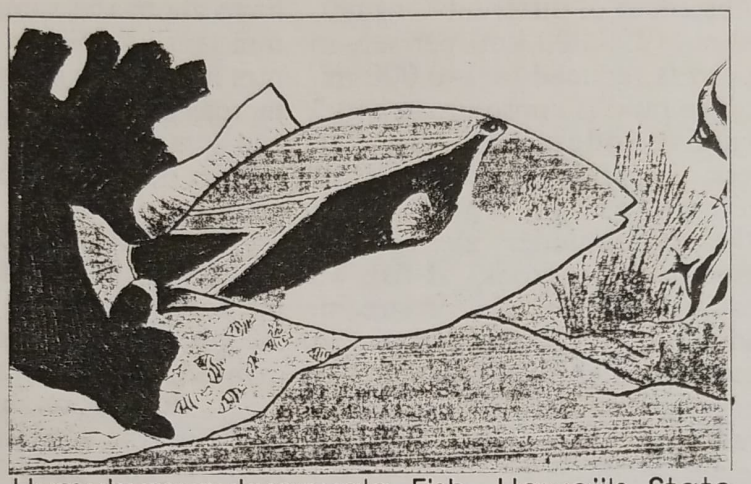


Don't worry, Neil !! Because of refraction, it's actually not as large and close as it looks !!

Hawaii - a plethora of sealife

By Roland Morrison

After having frolicked on the Great Barrier Reef in Australia, our next stop was Hawaii. We scheduled three days on Oahu, the island on which Honolulu is located. With an obligatory tour of Pearl Harbour, Charlotte and I managed to squeeze in an escorted tour of the Eastern half of Oahu, the highlight of which was 3 hours of snorkelling in Hanauma Bay, just beyond Diamond Head.



Humuhumunukuapua'a Fish, Hawaii's State Fish

The Bay is a horseshoe-shaped Marine Life Conservation District, crawling with what must be the tamest fish in the world. No spearfishing is allowed, so the local fish must have not developed a wariness towards humans. Indeed, just the opposite happened, because the fish are now used to receiving handouts (mostly bread) from the snorkellers. About 100 different species of fish greet swimmers. Opening a food bag is an invitation to be "swarmed" by hungry fish.

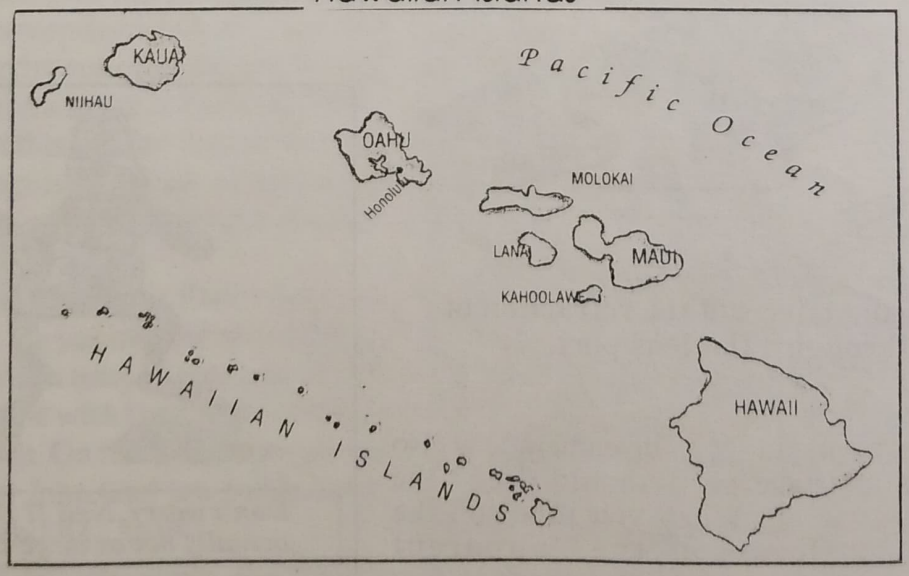
The next week of our visit was spent on Maui, in a small town named Lahaina. With two volcanic peaks, the island has a great deal of climatic variation, ranging from the constant sun at Lahaina (the name means "Land of the Merciless Sun" in Hawaiian), to the tropical rain forests on the Hona Coast, which receive about 400 inches of rain annually.

Our travel agent had told us that very little happened on Maui, so I expected to have several days of diving. However, Maui is booming, and the population has nearly doubled in the past year. With the recent introduction of direct jet service from Japan and California, the press of tourists can only increase.

Hawaii's coral formations are not as colourful nor as magnificent as those of the Great Barrier Reef, but Hawaiian waters boast about 680 species of fish, some 30% of which are endemic (found exclusively) in Hawaii. Parrotfish, snappers, wrasse, butterfly fish, triggerfish, surgeonfish, and even the occasional ray, shark, moray, and sea turtle can be seen. The ubiquitous triggerfish (humuhumunukunukuapua'a" in Hawaiian) is the state fish of Hawaii.

Due to the agricultural runoff from the sugarcane fields, visibility at the nearshore reefs of Maui is not great. Hence, the dive destinations are the small privately owned island of Lanai, just a few miles northwest of Maui, and Molokini Crater, to the southwest. My first dive was with Prodive on the Na Ka Oi IV, out of Maalaea Harbor, several miles closer to Molokini than Lahaina. To meet the boat at 7 am, I got up at 5:30, drove thirty or forty miles, and then was informed that the boat only goes out if there are three or more passengers. Yes, I was angry and disappointed, but the owner, Mr. Pierre Rosier, offered to allow my wife to go along on the next trip free of charge. Charlotte agreed, so we re-booked the dive with Prodive. This postponement did allow Charlotte and I to have a lovely snorkel-

Hawaiian Islands



Hawaii's coral formations are not as colourful nor as magnificent as those of the Great Barrier Reef, but Hawaiian waters boast about 680 species of fish, some 30% of which are endemic to Hawaii.



The No Ka Oi IV at Maui, Hawaii

ling experience at Olowalu Bay, and to explore more of the island.

My next dive trip was a night dive booked with Lahaina Divers. I thought the price was rather outrageous, at $65 U.S. for a one-tank shore dive, but I really wanted to do a night dive in Hawaii. Having had one bad experience, I called before the 6 pm rendezvous time to confirm the dive. What dive? The night dive guide was teaching a course that evening and no one else was available to go with me. Thank you Lahaina Divers! The next morning, Charlotte and I had a snorkel trip booked on an inflatable. We showed up at the appointed time and guess what? They had booked us for a later trip in spite of our reservation slip! We demanded a refund while the tour guide tried his damndest to convince us that the mix up was our fault.

The morning after that fiasco, a Monday, we finally took our trip with Prodive, along with three other divers. The boat was a comfortable 37' twin-engine Tolleycraft vessel with all dive amenities, including snacks and drinks (coffee and soft drinks). Rod acted as divemaster, while Mike competently handled the boat. Our first dive site was inside Molokini Crater, with a planned depth of about 70 feet. Rod led, pointing out various items of interest. He found a moray which everyone petted, and then pointed out a whole nest of white tipped sharks in a small cave. A school of squirrel fish blocked the entrance to the cave, so I cautiously shooed them away with my left hand so I could take a picture. I was concerned about placing my hand too deeply into the cave, but finally the squirrel fish cleared enough and I got a great shot of the sharks.

After a surface interval of a half hour, we dove the backside of Molokini. The "back side" drops to about 300 feet, but we stayed at forty feet or less. The highlight of this second dive was a small octopus that Rod found. Everyone played with it, "mushrooming" it by having it swim backwards into your hand, and letting it grab on with its tentacles. When it was my turn to handle it, I took pity on the frightened creature and let it go.

While we were diving, Charlotte was snorkelling around the boat, taking pictures with a $10 submersible camera she had bought. The pictures she got actually were quite nice, so it just goes to prove that you don't need expensive equipment to get good underwater photos. From February to April, humpback whales visit Maui to give birth to their young, and we were fortunate to see a few of them on our return to Maalaea. We even got a shot of a whale tail (that small black speck in the center of the photograph!).

The total cost of the dive trip, including full equipment, was $85 U.S. Compared to the cost of the night dive, this was a bargain! I was disappointed that I only got one dive trip in Hawaii, but the dedication of the Prodive staff ensured it was enjoyable.

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Snorkelling - some common sense precautions



For many scuba divers, snorkelling is what the wimps do, those people who do not have the courage to become real divers. However, although snorkellers may never face decompression sickness nor embolisms, they do face hazards.

Conventional wisdom states that swimmers must not enter the water within one hour of eating. A better rule is to stay out of the water if you feel "heavy" or tired after a meal. As with diving, the consumption of alcohol also rules out going into the water.

Many snorkellers wear only a bathing suit, and erroneously believe that the water will protect them from the sun's rays. Severe burns can be experienced with only thirty minutes' exposure, so sunblock should be applied, especially to the back and the backs of the legs. A block with an SPF factor of 15 should be used. Check the label to ensure that the block will remain effective in water for at least an hour.

Although a mask is worn, the eyes can sometimes be irritated by salt water, sweat, antifogging solution, or even by runoff from the sunblock. Rinse eyes with room temperature fresh water, or with eye drops. If the irritation persists for more than an hour, see a doctor. To prevent leaks, ensure a good fit with the mask by holding it to your face and breathing in through your nose. You should be able to keep the mask in place solely by the vacuum created by breathing in. When in the water, make sure that the straps are not twisted, and that no hair is caught under the skirt of the mask. This breaks the seal and can lead to leaks. NEVER wear goggles while snorkelling! Goggles are for swimming. Although most snorkellers use saliva to prevent their masks from fogging, some use antifogging solutions. If such a solution is used, rinse the mask before putting it on. For those who require corrective lenses, these can be put into a mask, but soft contact lenses can also be worn (these can be washed out of the eye in a mask-flooding situation).

Swimmer's ear is an itchy and painful infection that occurs when swimming in polluted water. Bacteria enter the ear and flourish in its moist, dark and warm environment. When swimming in a suspected polluted area, ensure that no water is trapped in the ear. If you develop swimmer's ear anyway, doctors recommend squeezing a dropperful of rubbing accohol (or a 50-50 mixture of alcohol and white vinegar) into the ear, working it around by wiggling the ear lobe. Next, turn the ear down so that the solution drains out. If this doesn't work, see a doctor.

For jellyfish stings, apply a paste of powdered meat tenderizer and water. This **deactivates** the poison. An antihistamine cream might also be used. Wash the area first with rubbing alcohol, vinegar or diluted household ammonia. Do not use fresh water alone - this will **fire off** stingers that are on the skin. A mixture of baking soda and salt water also works.

Swimmer's itch is caused by microscopic parasitic worms found in contaminated fresh water. Symptoms at first are a skin rash with itching, and later include headaches, muscle aches, abdominal pain and diarrhea. Many of the worms can be killed before they penetrate the skin by vigorous towelling, repeated several times at ten minute intervals. If symptoms do appear, again, see a doctor.

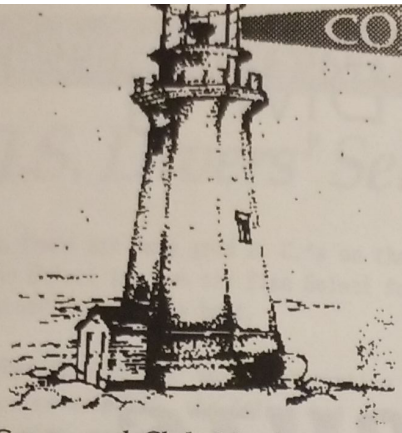
Fresh water may also harbour an organism which if ingested can cause unpleasant gastrointestinal symptoms such as diarrhea. Unlike most diarrhea, these symptoms can persist for weeks or even months unless medically treated. Check with local authorities to make sure that swimming areas are not contaminated. As well, if one portion of a beach is ruled as unhealthy, do not swim in an adjacent area. Foam, debris, oily slicks, discoloration and thick, greenish seaweed are all indications of unsafe water.

First time snorkellers should have lessons before going out on their own. Equipment should include a well-fitting mask, a snorkel (not the s-shape with the ball on the top) and comfortable fins. Look for self draining features when selecting a snorkel. If the lighter shoe fins are used, ensure that they are not too tight nor too loose. If they are too tight, this can stop blood circulation in the foot. Too loose, and abrasions of the top of the foot and toes can happen. If a heel strap fin is worn, a sock or neoprene booty should be worn on the foot, again to prevent abrasions and blisters. A t-shirt can provide some protection from the sun, and a snorkeller's buoyancy compensator can allow a snorkeller to float and rest if tired or injured.

Snorkellers and divers should have a buddy always. When in unfamiliar waters, check with locals concerning tides, depths, currents, and other marine hazards. Never dive or jump into water unless you are sure that the depth is safe and free of obstacles. Ease into such water. If caught in a strong current, try swimming diagonally to shore instead of directly against the current. If boats are zooming around your head, get out of the water. You should also leave the water before dark or if a storm is developing.

Most safety rules for snorkellers are based on common sense. Follow them, and enjoy the marvellous world that is just beneath the surface of the sea!

By Roland Morrison



COMING EVENTS

Coming events is a calendar of events of interest to divers in Nova Scotia and the region. To have an event included, please write to *BOTTOMTIME*. The deadline for listings is detailed on page two.

CFB Greenwood Club Meeting at the Base Recreational Center at 7:00 PM usually the first Sunday of each month.

C.P.R. Course at the Nautilus School of Diving, Quinpool Road in Halifax. Check with Mike for times.

Aqualantic Dive Club Meeting at the Mic Mac Boat Club in Dartmouth, NS at 7:30 PM usually the second and fourth Wednesday of each month.

Dartmouth Dolphins meet the first Sunday of every month, Aqua Dive Scuba Shop, 77 Prince Albert Road, Dartmouth at 7:30 PM.

Underwater Archaeology Meetings are the first Monday of every month at 7:30 PM at the Maritime Museum of the Atlantic on Lower Water Street in Halifax.

Underwater Hockey at the Dartmouth Sportsplex will start up in September. Contact Bob Trider at 469-6440.

The Canadian Federation of Underwater Activities (CFUA) has proclaimed September 3, a national environmental diving awareness day. Details from CFUA, #208-5334 Yonge Street, Toronto, Ontario M2N 6M2.

Board Meeting, Nova Scotia Underwater Council, Sport Nova Scotia, 5516 Spring Garden Rd., Halifax, September 8, 10 AM. All members are welcome to attend as observers.

Environmental Interpretation and Education for Outdoor Leaders. Big Cove YMCA Camp, Pictou County. Application deadline is September 14. Call: 582-7408, Alan Warner.

Wilderness First Aid and Continuous Care for Outdoor Leaders. Big Cove YMCA Camp, Pictou County. Application deadline is October 12. Call John Skaling at 422-6437 (o) or 765-8044 (h).

The Nautilus School of Diving is to travel to Key West, Florida, with Nova Scotia divers. October 21-28.

"Jack Tar in History: seamen, pirates and workers of the North Atlantic World", Saint Mary's University, Halifax, October 25-28. Contact Dr. Colin Howell, History Dept. at 420-5756.

The joy of snorkelling

An adventure for the family, young and old alike

Lynn Gallant

How long has it been since you have been snorkelling just for the fun of it? Oh, I know, you snorkel out to the wreck site and on those days when you are not careful enough, you have to snorkel back to shore. But, have you been in the water just for the joy of snorkelling? "Is she daft?" you are saying. "Who snorkels if they don't have to?"

Well up to a week ago, I would have said the same thing myself. I took my scuba course nine years ago and have never really enjoyed the fun of snorkelling. It was just a means to an end.

One fine Saturday, I was planning a dive in Cranberry Cove with my buddy Roland to take a fifteen-year-old Texan girl on her first ocean dive. The girl had only been on two open water dives and they were in a warm lake in Texas. I know I am off the subject, but I have to say that I was impressed with the performance of this young lass. She had buoyancy control that most seasoned divers only dream of and air consumption which would make many people look like air hogs. My hat goes off to her instructor - he/she must know how to teach.

Roland insisted that I take my ten-year-old son Andrew with me as "the wife" was coming to take care of him. Off we went, Andrew with his mask, snorkel and fins in hopes of a side trip to the beach.

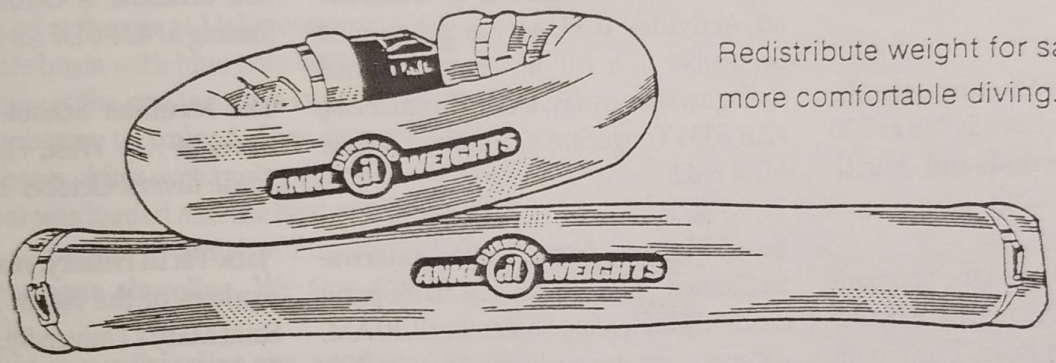
Cranberry Cove that day was busy with check out dives, but we found a space on the rocks and settled in for the day. After we finished the dive, Roland's wife Charlotte, decided to do some snorkelling. With the water a balmy 58 degrees F, Andrew suited up, too. He put on Roland's sissy vest which was several sizes too big, and his hood and gloves, and jumped into the water. By this time I had my tank and weights off and was floating like a cork and was very hot in my dry suit. Away we went - off to explore the "unknown" in Cranberry Cove. It was as if we were seeing with new eyes! Every crab, lobster and school of fish was a new discovery. Did you know that there are two beautiful red anemones near the end of Cranberry Cove? Personally, I have never been to that end of the cove before. It was amazing what can be found in only a few feet of water.

Now my son has an old wet suit and we will spend the rest of the summer exploring the little coves of Nova Scotia. Instead of hearing "Awwwww, mommy's going diving again", we can make it an adventure for the family, young and old alike.

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Although there are many good B. C.'s on the market, the Select (Cousteau Select for men and Elan Select for ladies), has got to be ranked amongst the best.

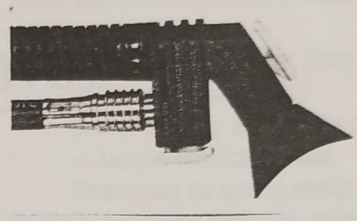
Constructed of a tough but conservative military-black 420 dernier nylon material, the Select has one large pocket panel on either side, and a smaller panel on the right shoulder. Interchangeable plastic accent cards can be inserted into these panels to match dive gear. Colours available are blue, yellow and pink, with an extra red card for men, and violet for ladies. Although the right pocket of the Cousteau has a flap and velcro closure, the left pocket has a slash opening with a velcro strip. Both large pockets have accordion-style expandable mesh which is fast-draining. The rubber panels over the pockets stiffen them for ease of use, as well as protecting the B. C. from scrapes and other wear. An octopus or gauge console might be tucked into the space between the pocket and the B. C. to prevent it from dangling when not in use.



The Elan Select BC has shoulder straps that cross over the chest area and attach to the cummerbund.

The Select uses U. S. Divers' patented Sea Spider harness which is made of soft, stretchy neoprene. The beauty of this harness, and of the wide velcro-fastening cummerbund, is that they are depth-compensating, and will remain snug even when a wetsuit is compressed at depth. The Alpine backpack is made of hard plastic in an upside-down contoured T-shape. This protects the diver's kidney area as well as distributing the weight of the tank to the hips from the shoulders when wearing the tank on land. Two touch-fastener adjusting bands hold the tank to the backpack. The largest has a rubber sleeve to prevent slippage, and a cam action buckle to cinch the tank tightly. The band straps are secured by velcro strips. As well, the backpack has a carrying strap.

The Select uses a single bladder design with no inner bladder that could become damaged due to salt crystals, chlorine or other corrosives. The main air chambers (at the waist) are attached by a sliding strap system so that when the bag is inflated it blows away from the body and does not constrict movement. The men's model has vertical, adjusting shoulder straps, with a quick-release on the left shoulder. The ladies' version has cross-over shoulder straps attached to the cummerbund, and does not have the large left pocket. Both models have overpressure valves at the lower back and on the power inflator (pull down on the hose).



Micro Power Inflator. 1/3 smaller than conventional inflators.

The most innovative feature of this B. C. is the Micro Power Inflation system (MPI). It is about one-third smaller than conventional power inflators, and uses neon-coloured rectangular tabs for inflate/deflate buttons. The mouthpiece does not use teeth tabs but easily fits into the mouth for manual inflation. The corrugated hose is also smaller than with similiar B. C.'s. Instead of spring action, the MPI uses differential air pressure to regulate airflow, so with fewer moving parts, there should be less maintenance. Two hose guides on the corrugated hose are used to attach the low-pressure hose to the inflator. This removes any loop in the LP hose that might snag on underwater obstacles, as well as allowing the MPI to hang within easy reach. The lower of these guides can be attached to the B. C. to secure the MPI in place.

What's it like to dive in a Select B. C.? Well, it's very nice. The B. C. has all the modern conveniences, large, easy to use pockets that STAY CLOSED and that are easy to get into, and an easy-to-use power inflator that's not floating behind your head when you need it. The harness system distributes the weight of the tank comfortably, and the buoyancy support is symetrical, whether in a vertical position at the surface, or in a horizontal attitude while swimming underwater. Drag was hardly noticed. For cold-water divers, the B. C. provides a certain amount of warmth to the back and underarm areas of the body.

The Select B. C. is the top of the line product offered by U. S. Divers. It is available from all U. S. Divers dealers. Until September 30, Divers World of Lakeside, N. S., is offering the Select for a price of $369.00 (regularly $429.00). See their address elsewhere in this issue.

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More about the SeaHunt

Rules of the 1990 Mares Seahunt ...

All divers must produce on the day a valid C card or equivalent diver qualification.

All divers must be over 18 years old or be accompanied by a consulting parent or guardian.

All divers must have a mask, fins, snorkel, wet or dry suit, regulator, pressure gauge, and depth gauge all in a good state of repair. If a wet suit is worn, a buoyancy compensator in good working order must be worn.

All divers must enter and leave the water with their designated buddy.

On leaving the water, all divers must proceed directly to the marshalling area and check in whether in possession of a token or not.

Each diver may remove only one token from the water.

The consenting parent or guardian must be present while a diver under 18 years of age is in the water.

No member of the NSUC Board of Directors or Seahunt staff will compete in the Seahunt.

The decision of the Chief Marshall will be final. Non compliance with these rules will lead either to immediate disqualification or refusal of entry to the Seahunt.

All divers will sign the informed Consent form acknowledging that they have read and understood the rules of the Seahunt. The consenting parent or guardian must sign the Informed Consent form for a diver under 18 years of age acknowledging that they understand the rules of the Seahunt.

By Grant MacLeod and Darlene MacDonald

... From the Abilities Foundation

Darlene MacDonald
Coordinator of the 1990 Sea Hunt

Dear Ms. MacDonald:
Re: 1990 Mares Sea Hunt on September 9, 1990

On behalf of the Board of Directors of the Abilities Foundation, I would like to thank you and the Underwater Council members for all the work being done to raise funds for Nova Scotia's physically disabled children.

As you are aware, these funds will allow the foundation to provide much needed services to disabled children in the province. These services make a difference in their daily lives and improve their quality of life:

1. An equipment loan program.
2. Financial assistance.
3. A physically accessible camp.
4. Mobile medical clinics.

Thank you for caring about Nova Scotia's physically disabled children. May your 1990 Sea Hunt be a very positive and successful event.

Sincerely yours
Faye M. Joudrey, Community Liaison Officer

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EXPERIENCE THE DIVERS WORLD

Editor's Notes

Continued from page 4

Enclosed was a revision of tables, the President's Message, Editor's Notes, Coast to Coast information, 1989 awards with some familiar names, an article by D.P. Miles on the octopus regulator, and information on Zebra Mussels, regular items like the market place, who's who, new leaders, and the NAUI Canada Board of Directors.

I also received some information on the National Coaching Certification Program. Levels 1 to 3 certify coaches as competant coaching leaders of school, community, and club sports programs. Levels 4 and 5 prepare candidates for leadership roles in national and international sports. You can contact your national, provincial, or territorial sports organizations for more information.

I recently received Manitoba Underwater Council's Man Underwater Magazine. Their President is Holly Mackling at 837-5151 in Winnipeg. They always have events lined up, and recently had a spearfishing contest.

Canada's Search and Rescue program has recently changed its logo and decals can be obtained from The National Search and Rescue Secretariat, 17th Floor, 365 Laurier Avenue West, Ottawa, Ontario, K1A 0K2. 1-613-992-0063.

The Public Archives of Nova Scotia at the corner of University and Robie in Halifax has bound issues of *Bottomtime* from 1978-1979, 1980-1981, and 1988 and unbound copies of November 1987 and some of 1990's issues. I have 1982's issues 2 and 3 and 1983's December issue which may be sent to the Archives as they are since I cannot seem to locate any other issues from those years to have bound. Campbell's Bookbinding Service is now binding 1984, 1985, and 1989's issues of Bottomtime with 1988's bound copy as a guide. I am trying to tabulate 1986 and 1987, but am trying to find pages 7 and 8 from August 1987's issue and pages after 34 of September 1986's issue.

This last year I have had 4 articles on trips. In November 1989 an article was published on the Aqualantic Dive Club's Newfoundland trip by Jane Biggs. Mid April saw an article on Diving in Grand Bahama Island by Grant MacLeod. Two articles were published by Roland Morrison; they include one on Paihia, Bay of Islands from May's end and Diving the Great Barrier Reef from mid July. Thank you all for your submissions.

My apologies go to the N.S. Underwater Archaeology Society for not acknowledging them as a source for some material in July's *Bottomtime*. However, they were acknowledged at the end of the N.S. Shipwreck Inventory article in the same feature. In their own right, they have a very informative newsletter.

Also please excuse a mistake last issue where it was stated that FQAS is making a French version of our Hyperbaric Video. This is not in the process as of present.

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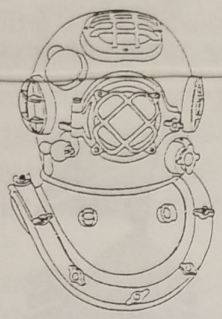
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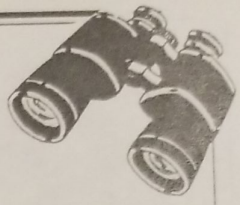
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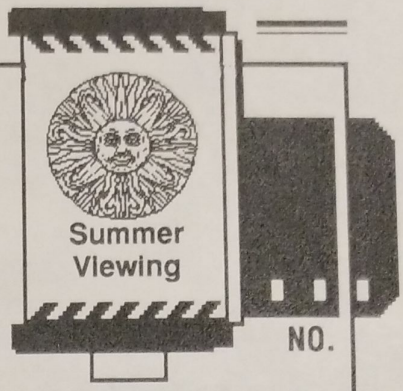
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The Nova Scotia Underwater Council Association of Divers - our objectives

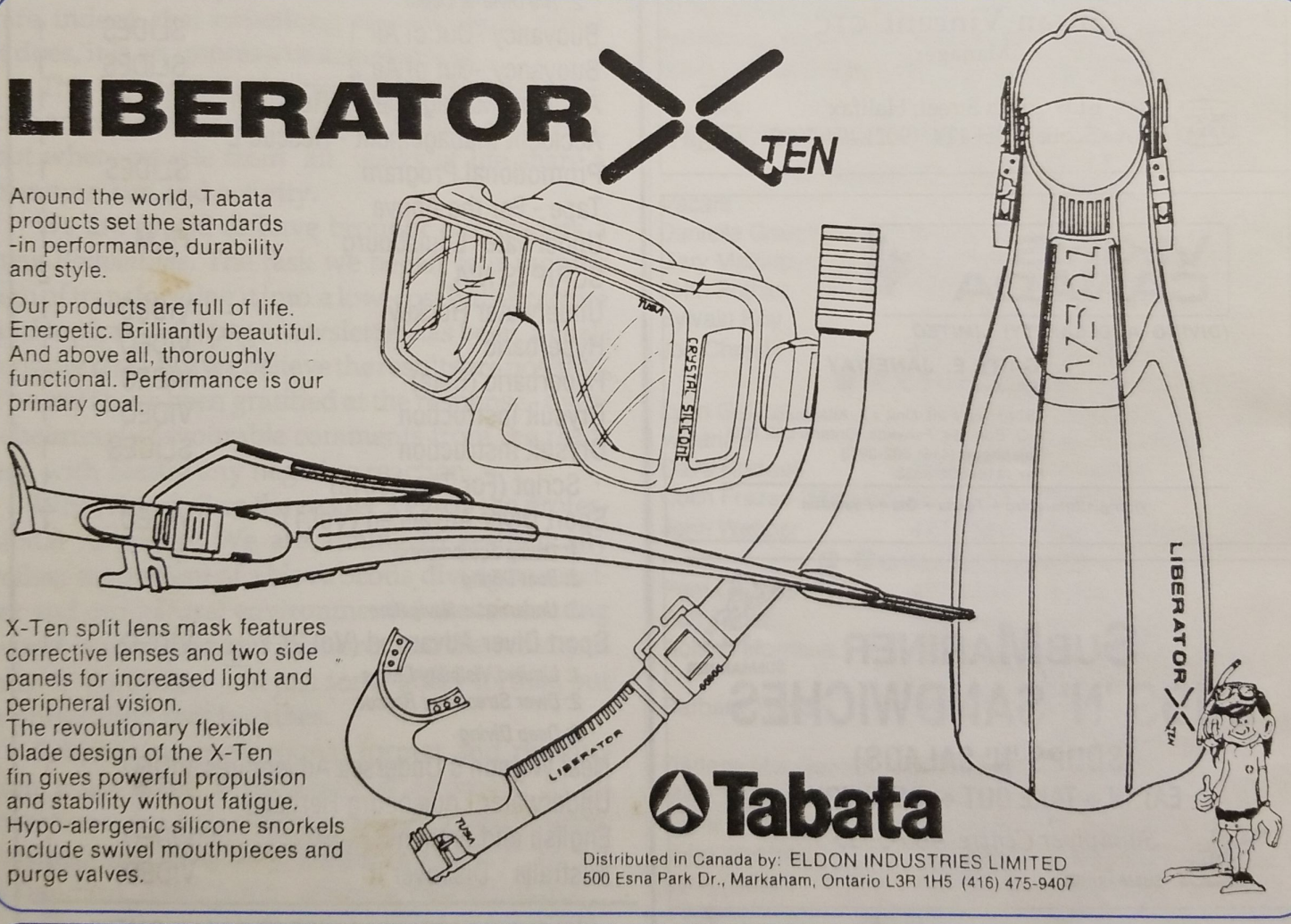
1) To be a representative body for the scuba diving community so as to preserve, support, and promote diving and diver safety in the provinces;
2) To ensure that training programs are given to a recognized level of quality, to foster and encourage the safe handling and usage of all approved types of equipment used in the sport of scuba diving;
3) To make available to all members information concerning safety, medical, technical, and research data concerning the sport of scuba diving; and
4) To cooperate and participate with the provincial government on projects and policies that lead to the recognition of sport diving as a significant recreational activity.

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VOLUME 1, NUMBER 1

SATURDAY, SEPTEMBER 1, 1990

New "seminar" series being launched by Divers World

Start to mark your calendar and make your reservations. Diving authorities and leading-edge experts will be coming to Halifax this fall.

All those interested in advancing their knowledge of the most update trends in diving technology, products and styles are invited to participate in the up-and-coming series of seminars with special guests visiting Dives World during September and October.

This dynamic series, which is free and open to the public, will be run by industry experts and representatives of companies representing the cutting edge in diving technology.

Acquaint yourself with new hardware and official tests and evaluations of equipment. New services. New techniques. New styles. New ideas. Sharpen your diving skills on the spot. And more.

Confirmed speakers include:

- John Gardner
  President
  US. Divers/Aqualung Canada
- Gary Mallender,
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Call us for more information.

DIVERS WORLD UPDATES

Divers World is now organizing dive charters and excursions to St. Paul's Island, northern Cape Breton - *"the graveyard of the Gulf"* - and locale of some 250 shipwrecks.

- ◆ 1 trip in October
- ◆ 3-day weekend

Call for information and details.

Divers World is now Nova Scotia's only N.A.U.I. Pro Facility

- ❒ six instructors on staff in Metro;
- ❒ four affiliate instructors based in Sydney, Cape Breton.

R.E.C. Divers Formed!

Nova Scotia's newest dive club has just been formed as an affiliate of Divers World. The club, with 26 founding members, is open to all divers. An enthusiastic atmosphere marks the Club, with its emphasis on dives and events, including subsidized boat dives.

Update on Diving Courses

October 8	Open Water Diver Course Starts
October 15	Advanced Diver Course Starts
October 22	ScubaBronze/ Diver Rescue Course Starts
October 29	Wreck Diver/ Research Diver Certification Course Starts

The philosophy of our courses and our qualified instructors is summed up in belief that "anybody can teach you what they know. We teach you what you need to know."

Experience the divers' world. Call for more information ...

... space is limited.

The Atlantic Canada Road Tour - Update

Since opening in mid-June, Divers World has completed its first class in Clark's Harbour, near Yarmouth. This course (Open Water 1), held over two weekends, was successfully completed by 10 people. We will be back in mid-to- late-September for our second class.

We are currently working on other projects in Sydney and various parts of Newfoundland.

For more information on how easy-to-learn scuba courses can be taught in your very own home town, call (902) 876-0555.

We will travel anywhere in Atlantic Canada to teach scuba, advanced and rescue courses.

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