

BOTTOMtime

The bi-monthly newsletter of the Nova Scotia Underwater Council • July, 1992



Underwater archeology courses

The courses should not be confused with the artifact-hunting or wreck diving classes that are sometimes marketed as “underwater archaeology”.

In 1989, I organized a short course in archeological techniques for sport divers for the Underwater Archeology Society of Nova Scotia (UASNS).

Successful participants received both a NAUI Advanced Specialty certificate in underwater archeology and the Part I certificate of the Nautical Archeology Society's (NAS) training program. The UASNS seems to have disappeared from the local scene since 1990, but there are still many opportunities for interested sport divers to get involved in shipwreck research. In fact, Nova Scotia needs skilled volunteers who can take a first look at many sites, so that the professionals and the heritage managers can judge which wrecks need to be

protected and which ones would be worth excavating. To help local divers take up these challenges, I aim to repeat the NAUI/NAS Part I course in 1992, and to proceed to an NAS Part II course, if there is sufficient interest.

The courses should not be confused with the artifact-hunting or wreck diving classes that are sometimes marketed as “underwater archaeology”. Instead, they are introductions to the world of the professional archaeologist, designed for amateur divers. The NAUI/NAS Part I program gives an overview of the basic principles and objectives of archaeological research, an introduction to some

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The NSUC president strikes the balance for the '91-92 year

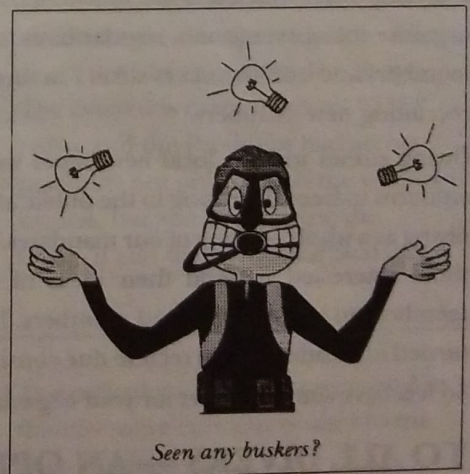
Fellow divers: it was on June 8, 1991 that I assumed with great expectations the post as President of the Nova Scotia Underwater Council. In the July, 1991 issue of the *Bottomtime*, I expressed the hope that the new Board would put past differences behind it and work toward our common goal of promoting good and safe diving in Nova Scotia. I also expected all the membership to support our activities. At that time I pointed out that if you want the Council to work — then you must work on it.

Now, some twelve months later, I

have the task of reporting on the 91-92 year.

I am happy to tell you there have been some successes, once again due to the efforts of a few, and I remain optimistic about the Council. At the same time, I am more than a little disappointed in how little seems to have been accomplished, and at the lack of overall support.

On the plus side, it is no small accomplishment that the year ends up with a full complement of Board members. This time last year it was a different story. With the recent addi-



tions of Dale Smith and Ed Larwence, all areas of the Province are now represented. The one position that was not officially filled was that of the Commercial Director.

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Editorial

POSITIVE THINKING

We members of the NSUC pride ourselves in the fact we are the only surviving council in the Maritimes. The Newfoundland and PEI councils no longer exist and New Brunswick has never had the luxury. The fact we are spread all over the Maritimes, all be it thinly, should make it easy for members to make the public aware we exist and to promote good relations with that public. "Why?", you may ask. If we are to grow as a healthy organisation should, new members will come from such contact. New members bring new skills, personalities and extra shoulders to spread the work load and the organization that goes on behind the scenes. All our volunteers need encouragement and praise. So next time you are at event that you think is well organised, then write to me and I will only be to glad to publish it for all to read. While I'm on the subject, a big hand should go to Ted Ianuzzu for the excellent Scuba Fest '92, to his wife for the well-presented fashion show as well as all those who pitched in to help.

New members mean increased revenue, increased revenue means we can do more for you, the member. Increased membership means an increased voice to the various halls of government that the NSUC may need to deal with.

There are areas where we are weak, the main one being self-promotion by the members and self-promotion as a whole. We have tried promoting ourselves with leaflets and met with very little response. Your ideas are welcome! Area directors should organise social events on a regular basis to get divers together members and non-members alike: I'm sure this would result in recruiting new members.

Diving stories to your local newspaper would also help. This amounts to free advertising to the public at large and promotes diving as a whole — "one of our mandates." To this end, I invite those interested to send their ideas of how to attract new members to any of the board members. I know they won't be turned idly aside and will receive due consideration and a reply. So let's have some support for your organization.

TO ALL DIVERS — AN OPEN LETTER

I am an advanced diver who lives in Portuguese Cove. Some of you may remember the bitter times divers experienced here, which led to the closing of this area to divers. Divers parked their cars on private docks and blocked the local fishermen who owned them. Several of these fishermen — my neighbours — were treated very poorly by divers and now it is illegal to dive from

the shore in this Cove. I cannot dive a few feet from my own house. I tried to talk to these local people, some of whom I am related to, but they were so bitter it was no use.

Now it may happen again at Bear Cove. Bear Cove, a few miles closer to Halifax, is a prime dive site. On the last weekend of June, 1992 several carloads of divers met at Bear Cove. They suited up on the roadside and had a nice dive. When they left, I went there and filled a full-size garbage bag with pop cans, chip bags, coffee cups, etc. This was in front of a private dwelling.

I do not want to live by the ocean and be forced to drive elsewhere to dive. To become certified to dive one must show some intelligence. Let's all use it to ensure we can enjoy these dive sites forever.

Phil Jennex, Portuguese Cove, N.S.

BOTTOMTIME

Bottomtime is published six times annually by the Nova Scotia Underwater Council. It is distributed free of charge to members. Non-members may purchase an annual subscription for \$17.50. Whenever possible, subscriptions will commence with the current issue.

Bottomtime is published as a forum with the aim to generate opinions, communication with and feedback from our members. Submissions to *Bottomtime* are published at the discretion of the editor. Articles are the opinion of the contributory authors and do not necessarily represent the views of the NSUC. Articles may be reproduced with the written permission of the NSUC. We encourage response to any of the articles.

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Send all submissions to:

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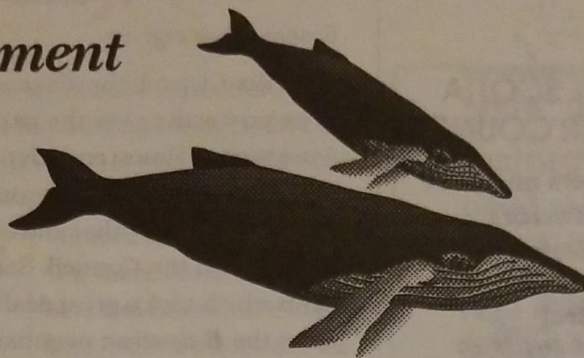
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The Nova Scotia Underwater Council

President Roland G. Lewis

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News in brief and comment



So you call yourself a diver?

TWO SCIENTISTS, A.R. Martin of the British Antarctic Survey and T.G. Smith of Canada's Dept. of Fisheries and Oceans, have been studying beluga whales in Barrow Strait in the high Arctic. They attached pressure sensor and radio transmitter packages to the whales and recorded their diving profiles for up to 11 days, using polar-orbiting satellites to pick up the data. The results of this high-tech work, recently published in the *Canadian Journal of Fisheries and Aquatic Sciences*, shows three kinds of diving: shallow dives for less than a minute; bounce dives to anything from 20 to 150 metres depth for up to four minutes; and square-profile dives to any depth down to 350 metres, with maximum times on the bottom exceeding seven minutes! Not bad for breath-hold diving. Average descent and ascent rates on the deep dives were around 2 metres per second (roughly 400 feet per minute), though the belugas had evidently read their manuals on safe diving since they slowed their ascents as they approached the surface.

And what makes a beluga dive so far, so fast and for so long? The scientists cannot be sure but it looks like they were feeding on Greenland halibut.

Compressor Explodes

A CAPE BRETON diver had a near death experience early in June. He was using his personal com-

pressor to fill his tanks in preparation for the upcoming season when, without apparent warning, part of the compressor suddenly exploded: this turned out to be a faulty water trap. Fortunately, only a few small pieces of shrapnel struck the man, who was standing next to the compressor. The major pieces went straight through the garage roof.

From the Cape Breton Area

DUE TO pressing family commitments, the Cape Breton Area Director, Ted Tracz, has had to decline his nomination for a second term in office. This position is now vacant. Anyone wishing information on the post is asked to call Roland Lewis at 562-2457 (h) or 539-6400 Ext. 144 (w)

Dive club: the nervous wrecks

On May 11, a group of twelve divers met to form what is loosely called 'a dive club'. Those present ranged in experience from less than one year to over ten years, and in certification from newly certified to instructor. Spokesperson Ken Jardine stated there would be only one rule for 'the club', and that was to go diving and do it safely. There are to be no officers, no constitution, and no dues. 'Members' are, however, encouraged to join the Nova Scotia Underwater Council. Council President, Roland

Lewis handed out application for membership forms and gave a brief account of activities. A list of contact phone numbers was exchanged to arrange dive buddies and then four of those present went on a night dive at Catelone Gut along with a dive marshal. Plans were made for a group dive the following Sunday. The group gets together on Monday evening at 7:30 at the YMCA, Charlotte St. to plan the next dive. Everyone welcome. (Isn't this what it is all supposed to be about?)

Official opening

On May 16, NSUC President Roland Lewis officiated at the ribbon cutting ceremony for the opening of Scuba Tech, the islands newest dive shop. The event was carried live on CHER radio, and the President had an opportunity not only to wish the owners success, but also to advertise the Council and the upcoming SeaHunt.

The only physical injuries sustained in this case were cuts and bruises to the arms and legs.

There is a lesson for us here: compressed air is as dangerous as a bomb, and a healthy respect should be kept for it whether in compressor or tank. No matter how careful you are, incidents may occur.

THE NOVA SCOTIA UNDERWATER COUNCIL

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NSUC Member Clubs

Aqualantic Scuba Club

PO Box 2944, Dartmouth E.

Dartmouth, NS B2W 4Y2

Tel.: 434.2768

Cornwallis Scuba Club

PO Box 295, CFB Cornwallis

NS B0S 1H0

Membership is open to individuals, families, clubs or commercial enterprises. Dues are set annually — usually at the AGM. Members' fees for 1992-93 are \$20 for individuals, \$30 for families, \$10.00 for students and \$50.00 for commercial enterprises. Membership is also open to clubs at \$25. Individuals may join by sending an application or letter with the fee to the Membership Secretary.

NOVA SCOTIA
UNDERWATER COUNCIL

P.O. Box 3010 South, Halifax

Nova Scotia B3J 3G6

"I have seen dedication above ...

Continues from page one

Your Board, and the Executive, have been very active over the past months. As we were an almost entirely new Board, considerable time was consumed getting to know each other and our respective roles on the Council. Some **major items** which took a great deal of energy were: the *Bottomtime*, negotiations with Roland Morrison and his committees; membership fees; the two AGM meetings of last year; ScubaFest; the budget; insurance; the CORS contract; and the Constitution.

Throughout the year we have continued to enjoy the administrative support offered by the **Centre for Outdoor Recreational Services (CORS)**. Our Administrator, Marcel Maessen, has done everything asked of him, always in a cheerful manner. He has been forthcoming with helpful suggestions and advice, and has attended meetings and functions on his own time for our benefit. I believe we are fortunate to have him in our camp.

Another success story was the September 8th **Sherwood SeaHunt**. Anyone who attended just had to have a good time — I know I enjoyed helping hand out the 86 prizes. Thanks are due to a great many people — too many to mention here. However, I would be remiss in not thanking Ken Jardine and Connors Diving Services for the dive mastering and safety crews. Of course, thanks are also due to Roland Morrison and his hard working committee who organized the event. Last of all, I must extend thanks to the 247 divers who participated in the event.

As a prelude to the ScubaFest event, **Diver's Socials** were begun during March. These were partly an effort to raise money, but also provided a venue for divers to get together in a friendly atmosphere in order to exchange information, fish stories, and maybe even plan a dive. I, for one, hope these continue.

I would like to make a few comments on **ScubaFest**. The first is to offer my congratulations to Ted Ianuzzi for a job well done under very trying circumstances. I believe he can be proud of his accomplishment — and rightly so since he did it virtually by himself. It was a very well-organized show with few hitches or omissions. Those that did occur were due to lack of support by the diving members of the NSUC. However, I do not wish to dwell on the negative side of a very successful event — there have been enough sour grapes already — but rather simply say: if you were not involved — well why not? You missed a good show and the NSUC missed you.

Still on the positive side of things, I would like to go on record as saying I was quite pleased to see reported in the March *Bottomtime* that **membership numbers** had almost reached the 300 mark. I hope this is a sign we are doing something right and that the membership will continue to increase so the Council can be even more representative of the divers in the Province. There has been cooperation from some dive stores and instructors to ensure their students become NSUC members. I thank them most sincerely for this effort — and ask the others to join this process as well. United we stand ...

As reported in the March and May issues of the *Bottomtime*, **two new retail outlets** have opened in Nova Scotia: **Scuba Tech** in Sydney — at which I had the honor of cutting the ribbon for the official opening; and **Jo's Dive Shop** in Lunenburg. These events can only reflect an expanding market for the scuba diving industry. Without prejudice to the other dive stores, I personally wish the newcomers every success in serving the divers of their areas.

There are some other people that deserve to be thanked publicly. **Wayne Bell**, my, and your Vice-President has

... and beyond the call of duty."

been a loud voice beside me. He has attended to all our contractual agreements and has been a very positive influence. **Colin Frazee-Whitelock** stepped down from the Board last year — but not away from the Council. The *Bottomtime* is very much the result of his hard work — for which he mostly receives abuse rather than the appreciation he deserves. He also acts as the Membership Secretary — a time consuming job.

I will conclude this review of the past year by saying — it has been a most interesting one. I have seen dedication above and beyond the call of duty, and I have also experienced some very negative attitudes by a number of people

who deserve not-to-be-mentioned. Although it is quite easy to say 'That's the way it is in volunteer organizations,' it

does not make it — right. We must all pull our weight. Yes, there are Board Members and Committee Members, but this does not excuse the general membership from doing their part as well. Paying \$20.00 a year is not enough, and most certainly does not give anyone the right to criticize the efforts of others.

I would like you to remember one more thing: the diving you hope to do tomorrow, may depend on the success of the NSUC today — and that success depends on you — now.

Roland G. Lewis, PhD

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Aqualantic Update — June, 1992

THE AQUALANTIC Dive Club has been extremely active since our last report in *Bottomtime*, with weekly charters. We have been diving extensively out of Ketch Harbour with Captain Tony Gillis on the shipwrecks of Sambro Island and the Sisters shoals. We have been pleased to welcome some members of the Dartmouth Dolphins and Underwater Adventurers on some of our dives.

The *Daniel Steinman*, the *Bohemian* and the *City of Vienna* have become familiar dive sites for the Aqualantics this year. The *Steinman* is known for the large coils of fused cable, plate glass and wine bottles. The *Bohemian* is a very scenic dive site with four boilers, a largely intact but flattened stern section and an abundance of port-holes. The *City of Vienna* is most well known for its piles of large artillery

shells. We dove on the *City of Sydney* and, most recently, the *Zoe*.

The water is still cold but the fish are back. Recently, large schools of pollock, several wolf eels and cod and the usual assortment of sculpins and sea ravens have been spotted. I recently saw two bright yellow sea ravens and an unusual looking shrimp hiding in the kelp near the wreck of the *Bohemian*.

Congratulations to Therese and Stephen, recently married. The Aqualantic Florida Keys dive trip is booked for September. Ten club members are heading to Florida for a week of diving. Openings are still available.

Are you interested in joining the most active dive club in the province? Call Grant at 860-3369 for more information!

Grant MacLeod

NSUC Member Instructors

David Allen

Home 434.4091

Austin Baird

Home 492.2653

Michael Bayer

Home 464.1139

Wayne Bell

Home 465.3880

Ches Chaulk

Home 765.8527

(Greenwood)

Darin Connors

Home 443.1150

Mike Covert

422.4499

L. (Charley) Doyle

Home 864.3136

Gary Edwards

Home 883.9392

Tim Gay

Home 443.3132

David Gough

Home 864.3046

Randy Inkpen

Home 434.9435

T. J. Kenchington

Home 889.3555

Dr. Roland Lewis

Home 562.2457

Rob Mack

453.0762

Dwayne T. McLaughlin

(Windsor)

Lorne Piercey

429.8265

Don Rodgeron

Home 835.8833

James Semple

Home 443.1150

Joanne Shadbolt

Home 636.9190 (Lunenburg)

Bob Smith

Home 462.0738

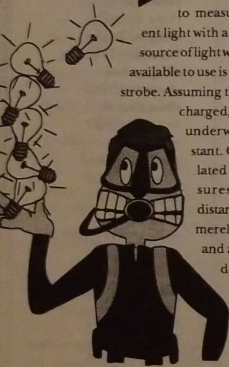
Dale K. Smith

Home 275.4471 (Chester)

John Taylor

Home 429.6752

balancing light



IN THE LAST

issue, we discussed how to measure natural or ambient light with a light meter. Another source of light which you should have available to use is an electronic flash or strobe. Assuming that the strobe is fully charged, the output from an underwater strobe is constant. Once you have calculated some proper exposures over a known distance it then becomes merely a matter of practice and a good memory. The decrease in light over distance results in an increase of approximately one f-stopper foot underwater. The decrease

fall off of light intensity is not quite geometric as it is in land — for our purposes — over short distances underwater we can assume it is! For a large strobe of 150 watt/sec and Kodachrome 64 film, the exposures are as follows: f16 for one foot, f11 for two feet, f8 for three feet and f5.6 for four feet, f4 for five feet. This is only a rough guide but it will work most of the time.

The majority of wide angle photos are taken in the 3-4 foot range, so one usually sets the camera lens opening at f5.6 and the focus at 3 feet at the beginning of a dive. This will enable you to be prepared for the majority of photo opportunities. But be aware of bright sunny days and shallow water, where the

amount of ambient light might be higher than the strobe output.

Exposure will vary on the reflecting/absorbing quality of the subject being filmed. A shiny fish might require a higher f-stop or a diver with an ugly black wet suit — never dive with these types! — might require a lower f-stop (a larger aperture or lens opening). Your exposure guide will also change with different film sensitivity (ISO) and if the strobe has variable power settings (i.e., 150, 100 and 75 watt/sec). If you do not have a great memory then it is best to stick with one type of film and strobe, setting until you become thoroughly familiar with it. But also remember that there are now automatic strobes on the market which can do that for you!

Guide Numbers

A useful way of remembering which f-stop to use is a guide number. These are numbers which help to calculate the proper exposures for subjects at varying distances from the camera. They are usually supplied by the manufacturer, but are not always accurate. Your notes will confirm the accuracy of the guide number. For example, if you got a perfect exposure by using f8 at three feet, the guide number for your strobe is 24. Write that value on the side of your strobe with the film value (ISO). To calculate other exposures at various distances, divide the guide number by the distance, giving you the f-stop value (i.e. 24 divided by 2 feet = f12 or f11 is the closest real value; 24 divided by 7 feet = 3.4 or f4).

Balancing Act

When taken while night diving, deep water, inside a wreck/cave, or taken against the wall of a reef, will be exposed by only the electronic flash. These exposures will be determined by the output of the strobe.

It is when both sources of light are present (natural and artificial light) that the photographer must be aware that a balancing act must take place.

An underwater photographer must learn to control both these

sources in order to take great

photographs. It takes great skill to perform the delicate balance required to take a photo which looks natural — without the light from the electronic flash overpowering the photograph and distracting the viewer. The photographer must use the natural sunlight to create the mood and depth for the photo while the strobe light is used to fill in the subject areas with subtle light. In most cases, the viewer should not be aware that a strobe was used. The strobe is used to restore the lost colours or to reveal details such as the eyes of the diver behind the mask. The first thing to remember is to use the highest f-stop value of the two light sources. For example: if the reading from a light meter (for ambient light) is f4 and the strobe (artificial light) calculation for the subject at three feet is f8, then you must use the higher f-value of f8, or the strobe will overexpose the photo. In this example, the background will be dark because the ambient light is not strong enough to have a great effect on the exposure. If you wanted to have more natural light affect in the photo you could do three things:

- 1) move the strobe further back from the subject, in this case about 100 feet.
- 2) reduce the power setting on the strobe, if possible by two settings.
- 3) use a more sensitive film for the conditions, for example a 400 instead of a 100 ISO film would increase your lens opening by 2 f-stops. This last suggestion must be decided upon before the dive, unless you have two cameras!

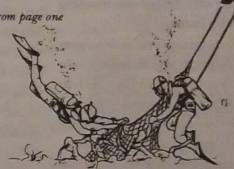
If you have the conditions where both the ambient and artificial readings are the same, then it is best to reduce the artificial light by about one f-stop. This will allow the natural or ambient light to set the mood for the photograph and the artificial to add the subtle colour to the photograph. Ambient light will give depth to the photo and make it "look" underwater. The artificial light will restore the light lost by absorption and take away the blueness to give the necessary "punch" to the photo.

Let ambient light play a major role in your exposures. Don't become a slave to the power of the strobe! Remember that the mastering of this technique is a major step in taking great photographs!

This article is the twelfth in a series on underwater photography by Bob Semple

Underwater archeology

Continues from page one



underwater techniques — which should allow divers to assist with surveys of shipwrecks and other sites — and some introduction to artifact identification, heritage law and the like. As taught in Nova Scotia, it includes 12 hours in class and two days of diving with various types of survey gear. The final dive is a detailed survey of part of a shipwreck. There is no pre-requisite for this program except dive certification: even non-divers are welcome to attend the class session (but, of course, not to dive).

NAS Part II — for which Part I is a required pre-requisite — is taught as a series of modules by professional archaeologists, artifact conservators and other specialists. It takes all of the Part I topics to a much higher level, while adding an introduction to excavation techniques and a course of specialized topics.

Part II students must undertake their own underwater project — a pre-dive survey of a site which would be ideal — and produce a report on it. They are also required to attend a professional conference on underwater archaeology to gain more experience of the academic aspects of the field. Graduates of Part II are competent underwater archaeologists fully able to work as assistants on any site or to run their own non-disturbance projects.

For further information, contact Trevor Kenchington, 889-3355

**1992
SIEVA
HUNT**

**Sunday, September 13
Crystal Crescent Beach, Sambro, N.S.**

Time Registration, 9:30 - 11 am. Divers enter the water at 11:30 am.

Fees \$12 for NSUC members; \$15.00 for non-members

Rules All divers must present a C-Card. No substitutes allowed. A diver must wear a BC if a wetsuit is worn. All equipment in good working order.

Cressi-sub

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BRIAN DUMONT

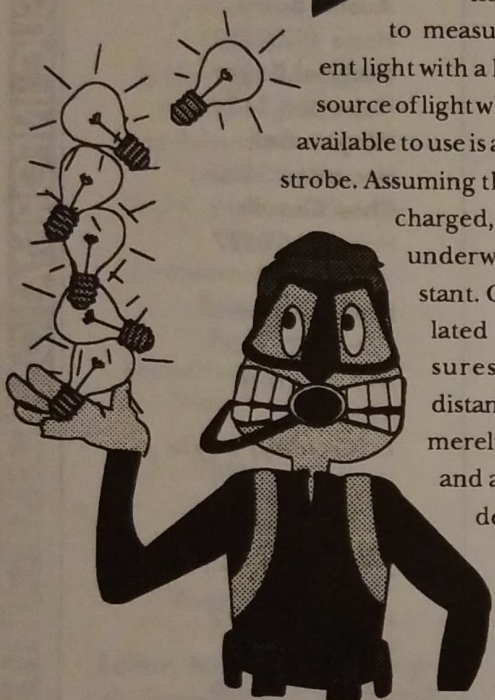
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If you have the conditions where both the ambient and artificial readings are the same, then it is best to reduce the artificial light by about one f-stop. This will allow the natural or ambient light to set the mood for the photograph and the artificial to add the subtle colour to the photograph. Ambient light will give depth to the photo and make it "look" underwater. The artificial light will restore the light lost by absorption and take away the blueness to give the necessary "punch" to the photo.

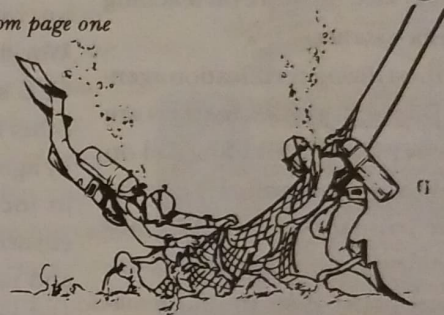
light

Let ambient light play a major role in your exposures. Don't become a slave to the power of the strobe! Remember that the mastering of this technique is a major step in taking great photographs!

This article is the twelfth in a series on underwater photography by Bob Semple

Underwater archeology

Continues from page one



underwater techniques — which should allow divers to assist with surveys of shipwrecks and other sites — and some introduction to artifact identification, heritage law and the like. As taught in Nova Scotia, it includes 12 hours in class and two days of diving with various types of survey gear. The final dive is a detailed survey of part of a shipwreck. There is no pre-requisite for this program except dive certification: even non-divers are welcome to attend the class session (but, of course, not to dive).

NAS Part II — for which Part I is a required pre-requisite — is taught as a series of modules by professional archaeologists, artifact conservators and other specialists. It takes all of the Part I topics to a much higher level, while adding an introduction to excavation techniques and coverage of specialized topics.

Part II students must undertake their own underwater project — a pre-disturbance survey of a wreck site would be ideal — and produce a report on it. They are also required to attend a professional conference on underwater archaeology to gain more experience of the academic aspects of the field. Graduates of Part II are competent underwater archaeologists fully able to work as assistants on any site or to run their own non-disturbance projects.

For further information, contact Trevor Kenchington, 889.3555

Cressi-sub



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ing light

sources in order to take great photographs. It takes great skill to perform the delicate balance required to take a photo which looks natural — without the light from the electronic flash overpowering the photograph and distracting the viewer. The photographer must use the natural sunlight to create the mood and depth for the photo while the strobe light is used to fill in the subject areas with subtle light. In most cases, the viewer should not be aware that a strobe was used. The strobe is used to restore the lost colours or to reveal details such as the eyes of the diver behind the mask.

The first thing to remember is to use the highest f-stop value of the two light sources. For example: if the reading from the light meter (for ambient light) is f4 and the strobe (artificial light) calculation for the subject at three feet is f8, then you must use the higher f-value of f8, or the strobe will overexpose the photo. In this example, the background will be dark because the ambient light is not strong enough to have a great effect on the exposure. If you wanted to have more natural light affect in the photo you could do three things:

- 1) move the strobe further back from the subject, in this case about two feet.
- 2) reduce the power setting on the strobe, if possible by two settings.
- 3) use a more sensitive film for the conditions, for example a 400 instead of a 100 ISO film would increase your lens opening by 2 f-stops. This last suggestion must be decided upon before the dive, unless you have two cameras!

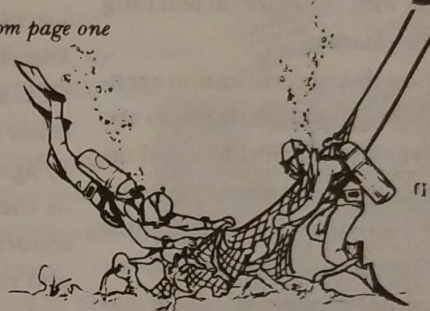
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Oxygen training mandatory, CEU program adopted by instructors

DURING THEIR most recent meeting, Divers World instructors unanimously agreed that there is a requirement for a continuing education program for diving leadership personnel. As a result, Divers World has adopted a policy requiring all of its instructors and assistant instructors to maintain certain continuing education standards in order to remain with the store on teaching or supervisory status.

As with most diving certification agencies, all of Divers World's instructors are required to renew CPR and first Aid on a bi-annual basis. They will also now be required to maintain Oxygen Administration certification on the same bi-annual interval basis. With the information and knowledge available today, instructors can no longer overlook the importance of normobaric oxygen administration. Studies have found that victims of dive-related accidents who have been treated with oxygen from the time of the accident to their arrival at a recompression chamber, have recovered with the least complications and residual problems. As with most reputable facilities, Divers World instructors carry oxygen with them to all dive sites: in order for this practice to be effective, it is important that the instructors and assistant instructors be absolutely current

in the latest administration techniques and be thoroughly familiar with the operation of the unit. With the adoption of this new standard it is hoped that, at Divers World, this will always be the case.

The concept of Continuing Education Units (CEU) is not new to recreational diving. Unfortunately, it is not yet mandatory in Canada — possibly an innovation long overdue. Divers World instructors, having accepted that CEU's are in keeping with the many other advancements in diving standards by agencies of the past 30+ years, voted to incorporate CEU's as a method of ensuring a high standard of instruction and safety. All Divers World instructors and assistants will be required to accumulate one CEU per year in order to maintain teaching status with the shop. CEU's are awarded at a rate of 0.1 CEU per hour for completing recognized leadership development seminars, workshop, course or conference. CEU's may also be obtained by registering in any of the several CEU accredited correspondence programs available. The purpose of this CEU program is to encourage instructors to stay abreast of changes and new techniques in emergency procedures, instructional techniques and latest developments in diving.

The calibre of diving instruction available in Atlantic Canada from basic entry to advanced and specialty training is extremely high, as is evident by the extremely low number of accidents in the Atlantic Canada region. This is a reflection on the instructors themselves because, as most experienced divers know, the quality of instruction the student receives is dependent on the ability and experience of the instructor — rather than the certifying agency or any other single factor. The instructors at Divers World welcomed the introduction of a policy for continuing education and encourage other instructors, clubs and stores to consider implementation of a similar system so that divers will continue to receive the most updated and safest diving instruction available.

DAN — Oxygen first aid course



Divers World now offers the DAN — Oxygen First Aid in Diving Accidents Course. For a decade or more, 100% oxygen administration has been recommended by leading diving physicians, training has been advocated by instructional agencies in their texts and a few serious instructors have purchased their own oxygen kit. For the most part, access to instruction has been difficult. Call Divers World at 876-0555.

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Diving in the Niagara area

RECENTLY I HAD the pleasure of diving Shirkston Quarry in the Niagara area with an exiled Brit, whom I originally met in Saudi Arabia some 10 years ago. He also chose to marry a Canadian nurse like myself — "What good taste us Brits have."

What a difference than diving in the Maritimes. I chose to dive wet for a change mainly due to room in the car with four people travelling to Niagara and the States. The dive started with a small drop-off to a ledge and then a succession of drop offs until we reached some 15 ft and there, through the gloom the frame work, a pump house appeared. On exploring this, we found the pump still intact and other pieces of equipment lying around. In such a ghostly environment, it was hard to imagine this place manned and working. My buddy, Pete Lnysky, then guided me down a pipe line to the bottom of the quarry depth, about 37 ft. Here, small gauge railway lines spun

off into the distance. Following the rails along, we saw a cart on its side that had been used for carrying rocks. Soon after, we came to a juncture in the rails, and followed one until — much to my surprise — I was faced with two locomotives about 8 ft. long still sitting on the rails intact, as if waiting for the drivers to get up a head of steam and haul the next load out of the quarry!

All too soon the dive came to an end. A thank you here to the diver who lent a spare backpack, as I would not have dived this intriguing spot without. If you are in this area, there is an entrance fee, as Shirkston is private. It has facilities for beach activities, picnicing and camping. You also pay extra for diving. After paying your entrance fee at the gate you call in the office to fill out the necessary forms and to produce your C card to obtain your diving permit. It is an excellent place to take the family for the day whilst you fit in a dive.

Colin Frazee-Whitelock

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Learn to scuba dive

Upcoming Courses in Nova Scotia

Date	Agency	Course	Dive Shop
August			
2	NAUI	Wreck Diver	Divers World
6	NAUI	Basic Open Water	Divers World
11-16	NAUI	Rescue Course	Divers World
13	PADI	Basic Open Water	Northern Shore
14	PADI	Basic Open Water	Northern Shore
18	NAUI	B. O. W. (to Sept. 10)	Divers World
19	NAUI	B. O. W. (from July 27)	Divers World
25	SSI	Basic Open Water	Nautilus
	PADI	Specialty Course (call)	Dive Masters
	PADI	Basic Open Water	Jo's Dive Shop
September			
1	PADI	Basic Open Water	Scuba Tech
9-13	NAUI	Open Water II	Divers World
10	NAUI	B.O.W. (from Aug. 18)	Divers World
14	NAUI	Basic Open Water (to Oct. 7)	Divers World
15	PADI	Basic Open Water	Northern Shore
22-27	NAUI	Advanced Diver	Divers World
October			
5	PADI	Advanced	Northern Shore
6	PADI	Basic Open Water	Scuba Tech
	PADI	Rescue Course (call)	Northern Shore
7	NAUI	B.O.W. (from Aug. 14)	Divers World
	Aqua Dive (Dartmouth)		469.6948
	Dive Masters (Dartmouth)		465.2526
	Divers World (Lakeside)		876.0555
	Greenwood (Ches Caulk)		765.8527
	Jo's Dive Shop (Lunenburg)		634.3443
	Nautilus School Of Diving (Halifax)		454.4296
	Northern Shore Diving Centre (Halifax)		429.8265
	Scuba Tech (Sydney)		562.6061

Dive Courses and Events is a regular listing organized and provided by the staff of *Bottomtime*. Please contact the Editor.

Notices

Jo's Dive Shop will be presenting an intro to scuba, with normal dives, barbecues and other events from July 31 to Aug. 3. For more information, please call Jo's Dive Shop, 634.3443.

"Get Wet" 92, International Scuba & Snorkel Festival, July 31-Aug. 3, The Ovens Natural Park near Lunenburg. Co-sponsored by the Park and the Scuba-Doo Dive Club. Call 766.4621 for details and registration.

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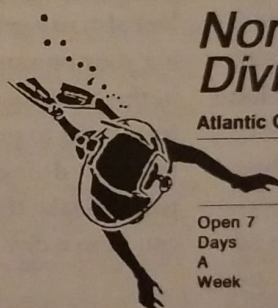
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Navy blue large V-Neck sweater	Gold lettering	\$15.00
NSUC tacky t-shirts	(Various colours)	\$5.00
NSUC decals .75	NSUC Hyperbaric	.50

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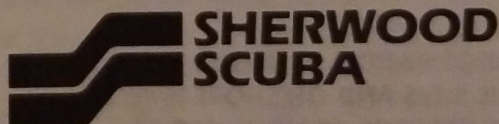
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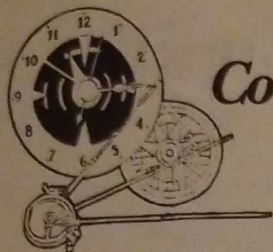
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Coming Events

*Coming events is a calendar of events of interest to divers in Nova Scotia and the region. To have your event included, please write to **Bottomtime**.*

§ AQUALANTIC DIVE CLUB

The club sponsors a full program, including regular meetings on the second and fourth Wednesday of every month. *For information, call 434-2768.*

§ THEY CAME BY SEA

Explorers, adventurers, early settlers, and thousands of immigrants came to Canada by sea. Many touched the shores of Nova Scotia or passed through Halifax. A series of events will be held centred around this theme, to mark the 500th year since the voyage of Columbus, Maritime Museum of the Atlantic. *For information, call 424-7490, 1675 Lower Water.*

§ DIVE THURSDAYS

Divers World offers supervised dives every Thursday. This is a good opportunity for any level diver to brush up on new or reaffirm old skills and to meet new people who are interested and active in our sport. The evening includes a planned dive with an Instructor in attendance ready to assist and guide groups of divers at local sites each and every Thursday. All dives conducted in daylight hours, fee \$7.00, space limited: *call 876-0555*

§ WEDNESDAYS — NIGHT DIVES

Divers World is continuing its organized night dives on Wednesdays. They developed last summer into a popular event. Divemasters will always be in attendance with emergency equipment in hand, fee \$5.00, space limited: *call 876-0555 ahead as dive times vary with daylight hours.*

§ DUNE RESTORATION PROJECT

Cole Harbour-Lawrencetown Coastal Heritage Park System, Conrads Beach, Halifax Co. Canadian Parks and Wilderness Society, NS Chapter. Saturday, August 8, 9 am. Rain date, Aug. 9

§ CLAM HARBOUR SANDCASTLE & SCULPTURE CONTEST

Clam Harbour Beach Provincial Park, Halifax County, Sunday, August 9, 8 am - 6 pm

§ WALKING TOUR OF THE ROCKS, MINERALS AND LANDFORMS OF PEGGY'S COVE

With Howard Donohoe, Dept. of Natural Resources and the NS Museum, William E. deGarthe Memorial Provincial Park, Tuesday, August 11, 7 pm.

§ NSUC SEAHUNT

The NSUC presents the 12th annual SeaHunt. A fun-filled event for certified scuba divers. Divers retrieve tokens within a designated area. They are exchanged for tickets which are used to draw for prizes. Crystal Crescent Beach Provincial Park, Sambro, N.S. Sunday, Sept. 13. Registration 9:30 am - 11 am; starts at 11:30 am

§ 10TH ANNUAL SASKATCHEWAN SUPER DIVER COMPETITION

Sept. 5, White Swan Lake, one hour north of Prince Albert, contact the Saskatchewan Underwater Council.

THE NSUC LENDING LIBRARY

1991 Sport Diver Open Water Vol. 1, Pts. 1 & 2	(video)
Contains Using Skin Diving Equipment	(video)
Using Scuba Diving Equipment	(video)
Sports Diver Open Water Vol. 2, Pts. 1 & 2	(video)
Bouyancy/Out Of Air Pt. 1	(slides)
Rescue/Accident Management Pt. 1	(slides)
Rescue/Accident Management Pt. 2	(slides)
Dive Promotional Programme	(slides)
<i>Tapes for the above,</i>	
Underwater Louisburg	(video)
Underwater Hockey	(video)
Hyperbaric Video	(video)
Hyperbaric Video (beta)	(video)

Drysuit Instruction	(video)
Drysuit Instruction	(slides)
Sport Diver Advanced Vol. 1, Pts. 1-3.	(video)
<i>Contains: Diving Equipment • Boat Diving</i>	
Underwater Navigation	
Sport Diving Advanced Vol. 2, Pts. 1-3	(video)
<i>Contains:</i>	
Limited Visibility Diving • Diver Stress & Rescue	
Deep Diving	
Neal Watson's Undersea Adventures	(video)
Louisburg Marine Heritage Pts. 1 & 2	(video)
<i>Contains: Part 1 in English • Part 2 in French</i>	
Australia Discover It	(video)
Dive Nova Scotia Pts. 1-3	(video)
<i>Contains:</i>	
Part 1 Dive Nova Scotia • Part 2 Dive Nova Scotia	
Part 3 Wreck Diving	

All videos are VHS unless otherwise stated

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Contact Rob Snelling, Secretary, at 429-8067

Join the Nova Scotia Underwater Council!

Do you need the NSUC?

Does a fish need water? Of course ... and you do too. The NSUC is the general, democratic association of all divers for our province. We exist to unite divers, promote diver safety, clean waters, service and the growth of our sport itself.

Yes, you need a provincial underwater council – the NSUC.

Do we need you?

More than ever. All athletes, all sports have their associations. Scuba divers are also a special interest group. Like other groups, our strength is in numbers and organization. As we grow, so grows our programmes and our voice on the issues of general concern and interest to all sport, recreational and commercial divers, including state regulations.

What we do ...

Involvement and Representation to the various levels of government on:

- Scallop licenses; costs and quotas
- Dive site access, National Harbours permit
- To update dive sites and dive site access
- Special Places Protection Act

Promotion of Safety and Advancement of Diving

- Investigate complaints about scuba instruction
- Hold seminars and workshops concerning diver safety
- Disseminate information about the Hyperbaric Chamber

Representation to the Sport Governing Bodies

- Founder, Canadian Federation for Underwater Activities
- Interaction with other Provincial Councils
- Voting member of Sport Nova Scotia – access to equipment, secretarial and regional support services, other sport bodies
- Member, Centre for Outdoor Recreational Sports

What we offer ...

Representation for the following sport diving interest groups – serving as a focus and contact amongst

- Clubs; individual divers; commercial members; u/w archaeology groups and other marine interest groups

Events

- The NSUC stages a variety of popular events such as the annual SeaHunt and the ScubaFest – you receive a discount on admission – and social functions. There's an AGM too.

Our own newsletter, Bottomtime

- Six issues per year which you receive by mail
- Articles concerning local diving interests, sites and topical news in brief and comment; dive club news
- Informative articles on diver safety and advancement
- Listings of current diving events, courses and programmes
- Divers Boutique – free divers' buy & sell for mbrs.; product news and reviews; how to series on U/W photography

Annual subscription to Divers Free Press

- This excellent publication is your guide to the world of scuba diving and is available free with your membership.

NSUC Video Library

- An extensive, informative and educational free video library (postage costs only) in VHS and BHS format

Is it worth \$20.00?

Can a fish swim? You bet!

To receive all of the above plus much more, complete the form below and return it with your membership fee to the NSUC, or drop by our booth at ScubaFest '92.

NOVA SCOTIA UNDERWATER COUNCIL

P.O. Box 3010 South, Halifax, Nova Scotia, Canada B3J 3G6

Name _____ Address _____

City _____ County _____ Postal Code _____

Phone (h) _____ (w) _____ Occupation _____ Date _____

Student Member _____ Renewal _____ Number years diving _____

Certification (Agency(s) & Certification No.) _____

Membership Class: ☐ Individual ☐ Family ☐ Commercial

Club Affiliation _____ If non-club member, do you wish to join a club? _____

Are you interested in serving on a Council position or committee? _____

If yes, please specify _____

Fees enclosed: ☐ Individual (\$20) ☐ Family (\$30) ☐ Commercial (\$50) ☐ Newly certified diver (\$10)

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