

On Location from: COJO World Headquarters, Lincoln, New Brunswick

ISSUE 71

What's New

Merry Christmas, Happy New Year and Welcome to the Dec 2016 edition of the COJO Diving Safety Stop newsletter.

November was an awesome month to just do some diving!! COJO did teach a few courses, First Aid, Oxygen Provider, as well as SDI Instructor courses but gears are shifting for the winter to get some non-diving courses taken care of!! COJO still has the COJO-North Dive Master course ongoing as well some upcoming Discover SCUBA Diving and Open Water Diver courses.



The weather is closing in and getting quite cold outside but, the **diving is still** awesome!! There are tons of dives coming up as well as tons of events such as the Underwater Christmas Tree Decorating and the COJO Christmas Party!! Don't miss out on all the gifts!!

During November, Joe delivered a presentation at Autism Connections on the AWESOME Marine Life off Deer Island and in the Bay of Fundy!! Connie provided all the pictures!! It was a totally awesome time for the children, adults and Joe!!

Doc Octo is back with a rerun of an awesome article, "**Stop In The Name Of Love**, **Before You Break My Heart (Or Fill It With Nitrogen Bubbles)**" You might remember this one from a while back. What an awesome article!! Thanks Doc!!

COJO's Winter Store Hours:

Monday Tuesday Wednesday Thursday Friday 5pm to 9pm 5pm to 9pm 5pm to 9pm 5pm to 9pm 5pm to 9pm

Thanks and Safe Diving!! Connie and Joe COJO Diving





Courses During November

During November, COJO ran all of these courses.

- > **PADI Discover SCUBA Diving**
- **DAN Oxygen Provider Course**
- PADI Divemaster Course (Ongoing)
- **SDI** Instructor Evaluation
- **St John Ambulance First Aid Instructor Trainer Course**





Great job to all and Awesome Job to Adam Brown on completing his SDI Open Water Instructor Course!! Woo hoo!!



COJO's MONTHLY NEWSLETTER

Courses To Come

Looking ahead and moving into December and 2017, We will be shifting gears for the winter, concentrating on pool training, and courses like Visual Inspector for Cylinders and First Aid as well as many, many more courses!!

Have a look at the calendar and Get enrolled or sign up now!!!!!



- **3 Dec PADI Open Water (Pool Training)(Fredericton)**
- **3 Dec PADI Discover SCUBA Diving (Fredericton)** \triangleright
- \triangleright **3 Dec – PADI – Discover SCUBA Diving (Bathurst)**
- \triangleright **3 Dec – PADI – Dive Master (Pool) (Bathurst)**
- \triangleright 7 Dec – COJO – Drysuit Familiarization course
- \triangleright 8 Dec – PADI – Enriched Air Nitrox Course
- \triangleright 13 – 14 Dec – EFR – First Aid and CPR
- 15 Dec – DAN – Oxygen Provider
- 17 Dec PADI Discover SCUBA Diving
- \triangleright 17 Dec – PADI – Open Water (Pool Training)
- \triangleright 6 Jan (Through Winter) – PADI SEAL Team
- 14 15 Jan TDI Visual Inspection Procedures Course

If you would like information on courses for 2017 or on our Training Calendar, contact us at cojodiving@gmail.com for more details!!





Events During November

Bay of Fundy Presentation (Autism Connections!!



During November, Joe was asked (begged them to let him) to do a presentation at Autism Connections in Fredericton, NB!! Connie prepared an awesome presentation on the magnificent marine life here in the Bay of Fundy!! On the 19th of November, Joe went and presented to an awesome group of over 10 people!! He showed off gear, pictures and talked about the amazing underwater adventures that can be had in the Bay!! What an awesome time!! Thanks to Autism Connections for the invite, we would love to do it again!! Woo Hoo!!



Events To Come

COJO Christmas Party!!

Every year to get in the spirit of Christmas, COJO hosts a Christmas Party and Customer Appreciation Night!! This year is no different. On December 9th we will have an awesome party that is sure to attract Santa and all his elves!! Don't miss out on the gifts and FOOOOOOOD!!!!



COJO Underwater Christmas Tree Dive!!

Another favorite of the season is COJO's Christmas Tree Decorating Dive!! This year, on 10 December, we will be on Deer Island at Customs (CanCat) Beach!! This event always draws a crowd!! Go on our Facebook page or send us a note to info@cojodiving.com for more information on dive times and types of decorations!! DON'T MISS IT!!





COJO's MONTHLY NEWSLETTER



And Now, Doc Octo!!

Stop in the name of love, before you break my heart...

(or fill it with nitrogen bubbles)

This month's column focusses on two common practices in recreational diving; the safety stop and the deep stop. As we will discover, the safety stop is always a good idea while the deep stop, well not so much.

As recreational divers we plan most of our dives to stay within the nodecompression limits set by our computers. We either limit our bottom time or our depth so that we don't have to make formal decompression stops on ascent. This is a wise practice, as decompression diving requires special training, equipment and carries an increased risk of injury. What you do need to know however, is that your dive computer is a damn liar. That's right, a dirty stinking liar. "Stupid lying computer, and you compass right next to him, you should know better." Your computer is a liar because even dives done within the "nodecompression limits" still require decompression. The reason for this is simple; when we breathe gas at depth we accumulate potentially hazardous nitrogen in our tissues. For a diver at 100 feet to take a normal breath, he must inhale four times as much gas. The consequence of breathing air under higher pressures is the increased uptake and accumulation of nitrogen in our tissues. Normally, we give up that nitrogen during ascent when the higher concentration of nitrogen moves out of the tissues, into the blood and finally is exhaled through our lungs. That's decompression, even though you weren't all dressed-up in fancy black tech-gear with extra tanks and spiffy trim. Every dive is a decompression dive; remember a great many recreational divers get bent diving well within the nodecompression limits.

So except for that time you put on your scuba gear to clean the dead leaves out of the kid's pool, we should agree that all dives are really decompression dives. In the mid-70s, scientists found that you could get a lot of information studying decompression practices by looking for bubbles found in blood vessels when divers ascend. Work done by Donna Uguccioni specifically looked at gas bubble formation when divers incorporated a *safety stop*. For



COJO's MONTHLY NEWSLETTER

clarity, a *safety stop* is defined (depending upon the computer decompression model or specific dive agency) as a stop during ascent at anywhere from 10-30 feet for 3-5 minutes. Uguccioni found a very significant reduction in bubble formation when divers ascended from a 100 foot dive if they stopped at 20 feet for 3 minutes prior to surfacing. Now all recreational dive agencies endorse the safety stop, so it's a bit of a no-brainer.

However, a common flaw in human thinking is that if something is helpful, doing more of it must somehow be better. This is where the deep stop story starts. Back in the mid 90s a biologist Richard Pyle noticed if he stopped after a deep dive at an intermediate depth, he felt better at the surface. From this observation and Doppler studies, some divers have adopted the practice of adding a deep stop of several minutes during no-decompression limit dives. The problem is that while you are hanging out at 50 feet being all tech for doing a stop that your computer didn't ask for, you continue accumulating nitrogen into the slower tissues. Unlike the safety stop where everyone agrees on its usefulness, the deep stop story is less clear. In some cases deep stops seem to decrease the risk of getting bent, while in other cases they actually increase the risk. The current thinking is that deep stops are probably only of benefit on certain dive profiles. This means that deep stops are really only justified if your computer is using one of the bubble decompression algorithms (like VPM or RGBM) and you are doing an actual decompression dive. However, the experts at DAN are in agreement that there is insufficient evidence to recommend a deep stop if your computer didn't ask for it. The expert consensus is to keep the ascent rate below 30 feet/minute, use a safety stop and don't get all fancy on us. So do what your computer tells you; because even though it's a liar, it's still smarter than you are.

The good thing about science is that it's true whether or not you believe in it."

— Neil deGrasse Tyson

Thanks Doc!! Neil Tyson was one of my favorite boxers!!



COJO's MONTHLY NEWSLETTER

COJO "Rent To Own" Program

The **COJO** "**Rent to Own**" **Program** is born from the need for divers to get into their own gear sooner. You've already decided the diving sport is awesome and you want to go diving as much as you can! But spending money on rental gear doesn't allow you to save up to buy your own gear. This program supports your dive habit AND gets you into your own gear sooner!

How It Works

- You set up an appointment for a gear consultation, and we put together your perfect gear package.
- We provide you a quote.
- You pay at least 30% deposit towards your personal "**Rent To Own**" gear package.
- Every time you rent items from our awesome rental fleet that are in the same category as your "**Rent To Own**" package, 100% of those rental fees go towards your gear package!
- Once you have at least 60% down towards your personal "Rent to Own" package, we'll order in your shiny new gear for your personal rental use until your package is fully paid!

More detail is available on our website here.

Contact Us to setup your appointment!





Featured Course (November to March) 17 to 19 March (Back Up Dates 24 to 26 March) PADI/SDI Ice Diver Course Ice Diver Instructor Course



\$300.00 + HST

If extreme, unusual and challenging scuba diving appeals to you, try diving under the ice. Ice diving is one of the most adventurous scuba specialties because you learn how to plan and carry out dives under the ice, in a group, safely and in a very fun and exciting manner.

Pre Requisites for the course (Diver)

-18 Years Old -PADI Advanced Open Water Diver (Or Equivalent)

Pre Requisites for the course (Instructor) -SDI Open Water Instructor (Or Equivalent) -SDI Ice Diver Instructor (Or Equivalent) Note xx Call to Discuss xx -Current Medical (signed by physician) (Ask us for details) -Up to date Membership fees and insurance



COJO's MONTHLY NEWSLETTER

Featured Product "THERMALUTION"

It's time to redefine your diving!

Tired of being **cold** on your dives? We have the solution for you!

We are pleased to be new dealers for the **Thermalution** product line. Thermalution have a series of shirts and vests that brings powered heat into the water with you, whether you are diving wet or dry.



It's waterproof, washable, and available as a wireless solution.

Contact us for a quote! Or come in and try it, we have a demo model in store!

Read more about the styles & models here!



COJO "Throwback" Pic!



Photo Credit © Monica Hindley

Connie on Santa's knee – December 2008,

Deer Island, Customs (CanCat) Beach



Other Awesome News!!

The **PADI Seal Team** course is starting up again at our **Fredericton Store** this **January!!** This is an awesome course for all kids who love to learn how to carry out secret missions in the name of national security and fun!! **Register now** so you don't miss out!!





We would love for you to follow us on **Facebook**. Become a **friend** of **COJO Diving** at <u>http://www.facebook.com/COJODiving</u>

COJO has a YouTube Channel where you can view some of our dives as well as training videos. It is constantly being updated so don't miss out!! Check out the latest pumpkin carving videos on there!!

Click for COJO YouTube Channel

Thanks and we are looking forward to diving with you soon!!

Connie and Joe!!