



# CAPITAL UNDERWATER DIVERS ASSOCIATION NEWSLETTER

NOVEMBER 8, 2017

VOLUME 8, ISSUE 63

## ELECTED OFFICERS:

**President:**  
Pat Cox

**Vice President:**  
John Hayes

**Sec/Treasurer:**  
Denise Haas

[cudadivers@yahoo.com](mailto:cudadivers@yahoo.com)

[www.cudadivers.org](http://www.cudadivers.org)

## NEXT MEETING!

November 15<sup>th</sup> 2017  
@ 6:30pm  
C2Sea Scuba

**Topic: Elect Officers**

## UPCOMING DIVE TRIPS!

- Aqua Cat Cruises  
Mar 30 – Apr 5<sup>th</sup>

## UPCOMING EVENTS!

- Hummer Pool – DEC  
10<sup>th</sup> & JAN 14<sup>th</sup>



## Club News!

We would like to discuss the CLUB Christmas Party and Charitable Donations at the Next meeting.

We also have 2 Pool Events Scheduled for Hummer Sports Park! December 10<sup>th</sup> & January 14<sup>th</sup> at 12-3pm

In addition, the Club is in the process of planning 2018 dive trips. If you have not responded to the e-mail; please make sure to let us know where you would like to go diving next year.

It is also that time of year again to vote for the 2018 officers. If you or anyone you know is interested in the following positions, please email Instructor Mike at [Info@c2seascuba.com](mailto:Info@c2seascuba.com):

- President
- Vice President
- Secretary/Treasurer

If you know anyone that is interested in joining CUDA Divers, now would be the time to join as we are currently accepting applications for new members and renewals from current members. New members receive a CUDA Divers T-shirt (white) for joining the club as well as other great benefits our members currently receive.

## C2Sea Training Specials!

### Rescue Class and EFR: @ C2 Sea Scuba

- \$300 (Student material sold separately)

Class Fees and Books must be paid for and purchased no later than December 31, 2017

### Qualified Not Just Certified: @ Hummer Pool Clinic

- Basic Emergency Procedures
- Mask Flood / Lost, Loss of weights / Buoyancy, Rapid Ascent, BCD Failure,
- Free Flowing Regulator, Out of Air!
- Cost - \$75.00

**Call for more information!!**

**C LUB SPONSOR:**

Mike Ward

**C2SEA SCUBA**  
3124 SW 29<sup>th</sup> St., Unit #5  
Topeka, KS 66614  
785.228.3535

[Info@C2SeaScuba.com](mailto:Info@C2SeaScuba.com)

[www.c2seascuba.com](http://www.c2seascuba.com)



**MEMBERS BIRTHDAYS!**  
**November / December**

- Laura Bohnenkemper
- Abby Haas
- John Hayes
- Carson Butler
- Marc Linton
- Matthew Brubaker
- Leroy Hicks
- Debra Hicks
- Paula Butler
- Shaun Hoover
- Gary Pope



## Equipment News!

### DEMA NEWS!

Lot of NEW products from the DEMA Show this last week in Orlando FL, DEMA is the Divers Equipment Manufacturers Association an annual event for Professionals. This is also where the Dive RESORTS come to introduce Travel Specials for the following Calendar year!

OMS Systems has introduced several new products, a new travel, SIDE MOUNT System the SideStream27. This new System has 27lb Lift bladder, integrated spine weight system ( 15Lbs ) and standard butt plate.

A New Light weight IQ Lite BCD Harness. This ultra light 2.4 system is great for travel, but can be adapted easily to cold water environments. A new comfort cumber bund is also available.

A long with several new Dry Suit models and features. The new Yukon II will come standard with silicone zip seals for rest and neck. The new tri-laminate includes "Freedom Form" for more comfort and range of motion.

### Travel Specials!

**CAYMAN BRAC – Brac Reef Resort** has put together an amazing package!  
7 nights / 6 days of diving, all meals inclusive for \$1595.00. Airport transfers included.

- BONUS #1     5 – days of sgl tank afternoon diving!  
BONUS #2     Nitrox Included!  
BONUS #3     Shore Diving on the House Reef!

TRAVEL - October 20<sup>th</sup> – 27<sup>th</sup> 2018

### Anthony's Key Resort – 50<sup>th</sup> anniversary special

When you book one 7-day all-inclusive package at Anthony's Key Resort, your second guest stays FREE

Package includes:

Accommodations, Buoyancy control workshop, Air tanks, weight belts and weights

3 single tank boat dives per day

2 single tank boat night dives per week

...and more!

# DIVE FITNESS!

## Preventing Foot and Calf Cramps

by Cameron L. Martz

Foot and calf cramps happen in even the fittest of divers after finning around for a dive. Most commonly a painful nuisance, these cramps can become a serious problem if currents change and you are working to get back to a mooring line or surface swimming to the boat.

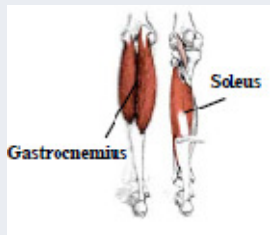
### Foot Anatomy

You can think of the foot as a “bag of bones.” It is designed to flex throughout and must be allowed to do so for optimal strength and blood flow. The three-dimensional model to the right (courtesy William Ledoux, Ph.D., Dept. of Veterans Affairs) shows how the 28 bones of the foot form an arch supported by muscle and connective tissue underneath. Between every bone are flexible joints, giving the foot its many ranges of motion.



### Calf Anatomy

The lower leg is devoted to flexing and extending the ankle via the most efficient skeletal muscles in your body. Typically, the muscles doing the most work while finning are the gastrocnemius (upper calf) and the soleus (lower calf), which runs behind and below it. They are responsible for pointing your toes or the power stroke in most finning techniques, and are thus most likely to experience cramping during a dive.



### Equipment

Before you blame your body for causing you pain, you need to eliminate your equipment as a trigger of cramps.

1. The foot pockets of your fins must be wide enough for the bones of your feet to be able to “splay,” or spread apart, as you fin. Squish them together and the muscles in your feet can neither work nor circulate blood efficiently.
2. Your booties must be snug without restricting the bones of the foot for the same reason as above.
3. Your fin straps must not pull too deeply into your Achilles tendons, or this will cause extra tension on the muscles of the calves.
4. The legs of your wetsuit or drysuit should not be restrictive. As with your feet, if you can't move your legs through their natural ranges of motion, then they can't produce the power you need or get the blood supply they need.

### Stretches

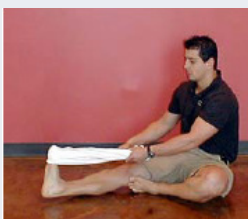
Muscle tightness is a well-known trigger of cramps. These stretches are easy to do and will make a real difference in calf flexibility.

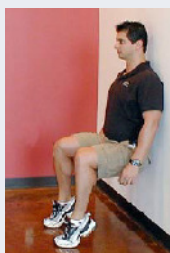
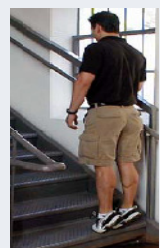
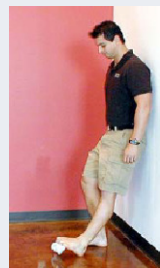
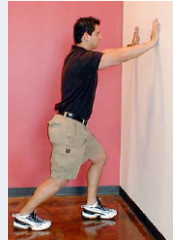
Stretching should not hurt. Do not do any stretch to the point of pain. Move slowly through all movements described below, and hold each stretch for 20-30 seconds. Perform these stretches 4-5 times per

### Toe Pull (Muscles of Feet)

1. Sit on the floor barefoot with one leg straight.
2. Loop a towel under your toes.
3. Pull until stretch is achieved.

*Tip: As taught in most OW courses, this stretch can be done to relieve an active foot or calf cramp while diving. Just grab the blade of your fin, straighten your leg, and pull the blade back towards your knee.*





### **Straight Leg Calf Stretch (Gastrocnemius)**

1. Stand in a lunge position with hands on wall, keeping rear knee straight and both feet flat on the ground.
2. Lean your hips towards the wall until stretch is achieved. You should feel this in the upper calf area.

### **Bent Leg Calf Stretch (Soleus)**

1. Stand in a lunge position with hands on wall, keeping rear knee slightly bent and both feet flat on the ground.
2. Lean your hips towards the wall until stretch is achieved. You should feel this in the lower calf area.

### **Exercises**

Though this unit focuses on stretching, it is only natural to include the following exercises when you discuss cramping. The stronger your calves are, the easier finning will be and the less likely you will experience cramping. Also, fitter muscles have better circulation, further reducing their tendencies to cramp.

These exercises can be done immediately after performing the stretches above and should only take you a few minutes. Perform these exercises 2-3 times per week.

### **Sock Pickup (Muscles of Feet)**

1. Remove your shoes and socks.
2. Grab a sock with the toes of one foot and lift it off the floor, holding for one second.
3. Release and repeat until fatigue achieved

### **Standing Calf Raise (Gastrocnemius)**

1. Stand with the balls of your feet firmly on the edge of a step and your heels suspended.
2. Stand as tall as you can, emphasizing a squeeze in your calves.
3. Slowly lower yourself until your heels are just below the edge of the step.
4. Repeat until fatigue achieved.

*Tip: To increase difficulty, do one leg at a time*

### **Seated Calf Raise (Soleus)**

1. Lean against the wall as if sitting in an invisible chair.
2. Rise slowly onto the balls of your feet.
3. Slowly lower yourself until your heels are just touching the floor, but not resting. Keep a contraction on the calf muscles from the first through the last repetition.
4. Repeat until fatigue is achieved.

*Tip: To increase difficulty, do one leg at a time.*

### **Author's Note**

This article on preventing foot and calf cramps is an excerpt from Fitness for Divers, a book written by diver and fitness professional Cameron L. Martz.

<http://www.divefitness.com>