

AVSC new board members

We are proud to introduce some of our members of the new board and tell you a little about them.

IVAN B. DONOVAN

Certification Level: I have an Advanced Open Water Certification and other training in Nitrox and Wreck.

My other interests are photography, travel, music, mastering the computer, and chess.

My favorite dive is the wreck of the Thistlegorm in the Red Sea. I also love drift diving off of Cancun, in Hawaii and Curacao.



Ivan Donovan—AVSC President 2011-2013—has been a member since 2002, serving as Board Member at Large 2002-2005, and Vice-President from 2005-2010.

WILLIAM P. LANDERS

I have been an AVSC member since June 2005 and served as Club Treasurer 2007-2013. I have a Rescue Diver Certification and a Nitrox Certification.

I love most sports, but especially basketball.

My favorite dive spots are: Cave dive in Dominican Republic, Wall dive in Cayman Islands, Bonaire and Belize



CLAUDIA CAYNE

I got started in diving because I love the water and it was something I had always wanted to do. I have only made a handful of dives since I received my Open Water Certificate last year but I am looking forward to the future.

I think Dutch Springs was an interesting place to start after certification. Lots to see and a great place to test out my new equipment. But Hawaii and the Fiji Islands are definitely on my destination list.

As a new board member I hope to bring some new ideas that encourage more group participation for our members and make others want to be part of our club.



GERRY CHUMISO BROWN

My interest in diving began with my friendship with Jo Ann Wade, a diver for 15+ years. She invited me to travel with her dive club NCASE (North Coast Aquatic Scuba Explorers) to Fiji as a nondiver. After each dive the excitement and exchange of adventures underwater was contagious. It took me a year, but I was certified to scuba dive.

I was certified for Open Water in Sept. 2007. I hope to become AOW (advanced open water) this summer. I have about 95 dives.

Several memorable moments:

Looking up and seeing my fellow NABS' divers ascending—an amazing sight.

At Montauk, Long Island my instructor Mia coaxing some tiny squid and they came to us.

Swimming with sharks in the wild in Bahamas—wow!

Surrounded by a school of yellow striped fish with the sunlight showering the scene as I was slowly ascending and seeing a beautiful black and white spotted ray passing through.

I would love to visit Fiji as a diver or dive in Australia's Great Barrier Reef.



Every Breath You Take, Every Move You Make

—by Kramer Wimberly

Nobody wants to cut their dive short by consuming air too quickly. With a little practice, however, you can learn to extend your bottom time to 50 minutes or more.

Two factors control the amount of time a diver can spend in the water: the amount of nitrogen the diver is absorbing at a given depth and the amount of air he is consuming. There is little that a diver can do about the consumption of nitrogen other than adjusting depths in relationship to the dive profile or by replacing it with additional oxygen (nitrox diving). We can, however, control the amount of gas being consumed by controlling our breathing. Why is it that a group of divers can enter the water and dive the exact same dive profile yet one dive buddy ends the dive with 1800 psi of air in his tank while the other returns with 1500 psi? Why do some divers return with even less? The answer is *poor air consumption skills*. But with a little practice, the controlling factor on most dives will be the amount of *nitrogen* the body has consumed and not the amount of *air* remaining in your tank.

I always log the volume of air in my tank at the beginning and end of a dive and measure it against the time we spend at a given depth.

Overall fitness can save a diver better than 5% of their air volume. Then I'll check the volume of air

consumed by the rest of the divers in the group. On a recent club trip, I noticed that the group was spending approximately 43 minutes on each dive. Yet there is no reason we can't get an average of 50 or even 60 minutes out of our dives.

Breathing is a function of physiology. The rule of thumb is that the larger the person, the larger their lungs and the greater the volume of air that person tends to consume upon inhalation. The smaller a person is, the smaller their lungs are and the consumption rate tends to be less. Additionally, people who exercise and are in good physical condition practice breathing control during times of physical stress and therefore tend to consume less air during a dive. The opposite applies to people who do not exercise and are out of shape: they tend to consume more air and must end their dives earlier.

General fitness can save a diver better than 5% of their air volume because the diver labors less under task-loaded activities and returns more quickly to a normal breathing rhythm afterward.

Anxiety or excitement can also drastically affect the consumption of air on a dive. A physiological response in the body, producing endorphins, results in faster breathing. New divers and divers that have been inactive will invariably pause at the beginning of a dive, looking out over the water thinking to themselves, am I ready for what is about to happen? Should I have re-read my manual? Maybe I should have taken that refresher course. I'm going to stay close to the divemaster. These thoughts can put them close to hyperventilation before the dive begins. So, upon first descent, breathing is already labored and it takes a few minutes to bring their breathing back under control. A diver that pauses a minute or two to slow down their breathing rate *before* the descent will conservatively save 5% of their air volume.

During the course of your dive your breathing pattern should not fluctuate erratically. Taking long, slow, deep breaths is the most efficient use of air in your tank. Once you develop this pattern of breathing try hard not to alter it during the dive. When exerting energy on a dive is unavoidable it should be slow and deliberate with an eye on maintaining your breathing rhythm. Try to work at shallower depths where air consumption is less.

As a dive buddy, you can monitor the breathing rate of your partner by watching the length and speed of the bubbles coming from his regulator. If you see long steady streams of bubbles coming from his regulator, you know they're alright. However, short choppy breaths mean you need to slow them down to help get control of their breathing. Otherwise, it's going to be a short dive. Monitoring and modifying breathing rates can also save upwards of 5% of your air volume.

A typical misstep of most divers is being over weighted on a dive. Not knowing how to



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properly weight yourself causes divers to carry around more weight than necessary, work harder, and ultimately use more air. Carrying around extra weight can account for an additional 5% of your air volume.

Divers can also manage their air supply by monitoring and adjusting their profile. The deeper you dive the more air you consume and the shallower you dive the less air you consume. If a diver is diving on a wall, a reef or wreck with varying levels, they can plan their dive according to their consumption rate. If you are diving with a group and they have identified a dive profile of 70 feet, by adjusting your profile to 60 feet and gradually diving even shallower, you will have substantially changed not only your air consumption but your nitrogen intake as well.

If you consider making some of these minor adjustments to your dive, in a short time you will find yourself extending your bottom time to 50 or 60 minutes and ending your dives with 1000 psi remaining in your tank. Oh my, look at you! 🌟