

SECOND QUARTER 2016

SOURCES

THE JOURNAL OF UNDERWATER EDUCATION

CONTENTS

Plan an Unforgettable
Summer in Brazil
PAGE 18

SCUBAnauts
International
PAGE 51

Buddy Up with Buddy Dive
Resort in Bonaire
PAGE 56

The Zen of
Manatee Swimming
PAGE 92

SEARCHING
FOR THE
LADY OF
THE SEA PAGE 68



SCUBANAUTS

Diving Into Life

By Angie Cowan, NAUI 53628

Communications Coordinator, NAUI Worldwide

Education, Leadership,
Confidence, Exploration,
Mentorship, Family,
Service, Commitment,
Accountability,
Teamwork, Friendship,
Citizenship, Safety,
Responsibility,
Personal Growth

T

hese are just some of the descriptors used when SCUBAnaut students, families and leaders are asked to describe this unique youth-development program focused on dive training and marine science. SCUBAnauts International (SNI) was founded by U.S. Navy Capt. Dave Olson in Palm Harbor, Florida, in May 2001, with a mission of introducing young people — ages 12 to 18 — to experiential science education through scientific diving and personal

development. SNI currently operates three chapters in the Tampa Bay area — St. Petersburg, Tarpon Springs and Tampa — with the goal of adding chapters regionally, nationally and internationally. To date, SNI has enriched the lives of nearly 150 SCUBAnaut student participants, of whom approximately 100 have graduated the program.

SNI is truly a family affair. Students interested in becoming SCUBAnauts, or “Nauts,” must have at least one

“ LEADERSHIP ISN'T ABOUT AN AGE. (NAUTS) WILL LEARN AND ACCOMPLISH MORE WHEN THEY CAN TEACH EACH OTHER AND SURROUND EACH OTHER WITH GOOD ROLE MODELS. THEY DEVELOP A CONNECTION AND SHARED EXPERIENCE THAT ALL COMES BACK TO THE FAMILY. WE ARE ALL INVESTED. ”

family member actively involved in the program, whether as a dive leader, educator, fundraiser, administrative assistant or some other support role. As a 501(c)(3) and volunteer-run organization, it's all hands on deck in keeping the SNI training program going and growing. Jim Cassick, SNI president and CEO, says it best: "Leadership isn't about an age. Nauts will learn and accomplish more when they can teach each other and surround each other with good role models. They develop a connection and shared experience that all comes back to the family. We are all invested."

SNI students and parents speak of the familial value of the program and how it brought them closer through shared experiences. In fact, many SNI parents participate in the scuba, safety and scientific diver training right along with their kids, some even reaching the dive-leadership level. Brothers and sisters join in the fun as well. Prior to the age of 12, students can participate as Snorkelnauts. Cole, now 18 years old, reminisced about his first experiences as a Naut more than six years ago: "My dad was the science lead with SCUBAnauts, so I'd go out on the boat with him as a young snorkeler. The first time doing scuba was a huge step for me because I had that bug for so long of wanting to get certified and wanting to be able to dive with SCUBAnauts. Taking my first breath underwater was a huge step and accomplishment for me because I was one step closer to accomplishing my goals."

Due to the high level of training that Nauts receive, another prerequisite for participation in SNI is a basic scuba diver certification. Once students become Nauts, SNI's dive leaders will take the students and their training to the next level by providing them with subsidized courses as much as possible. Dive safety and training are paramount, so it stands to reason that most of SNI's dive instructors — including Dive Safety Officers Mike Waugh (51613), Katie Shultz (56577) and Rod O'Connor (53779) — are NAUI leaders. Thus, all student certifications — which can include Advanced, Nitrox, Rescue and Master Diver — are issued by NAUI.

In addition to their NAUI training, all Nauts learn marine science through a curriculum designed specifically for them and conducted by expert scientists and educators. Hands-on experience is the key to solidifying the curriculum, so Nauts simultaneously work toward American Academy of Underwater Sciences scientific-diver qualification, which requires SCUBAnauts to meet a demanding set of standards that is followed by many universities, aquariums and government agencies. Mia, a 16-year-old Naut who is in her third year with SNI, enjoys conducting science while scuba diving, but she was quick to point out some of her challenges: "You're trying to hold a clipboard while you're trying to look at corals, measure things and identify fish; all while you're trying to maintain buoyancy in the water so you don't hit



anything on the bottom. I've come a long way from where I began."

In the Scuba Life-Saving and Accident Management program (SLAM), SNI requires annual requalification in rescue diving, first aid and CPR, oxygen administration, and swim tests. By incorporating the Divers Alert Network's first aid, CPR and emergency oxygen for scuba-diving-injuries courses in the training, SNI can provide the best training with the highest standards of safety. In describing his SLAM training, Zack, a 16-year-old Naut, stated: "All of the safety training has really helped. All of the adults say, 'You've got to get this training because it might be my life that you're saving next.' If anything goes wrong on a recreational dive, I



“All of the safety training has really helped. All of the adults say, ‘You’ve got to get this training because it might be my life that you’re saving next.’ If anything goes wrong on a recreational dive, I am prepared to take a leadership role if there’s a problem. I know to be careful and cautious. I know not to pass my limits of what I can and can’t do.”

am prepared to take a leadership role if there’s a problem. I know to be careful and cautious. I know not to pass my limits of what I can and can’t do.”

With all of this extensive training under their *weight* belts, the Nauts eagerly put it into practice and share what they’ve learned. The impact and reach of the SNI program goes well beyond the students and their families. From citizen-science research in the Florida Keys and mentoring and cross-training with combat-wounded veterans to outreach and education projects at local, regional and national levels, the Nauts do it all and really give back. This article can highlight just a few of SNI’s projects, but readers are invited to find out more by visiting the SNI website (scubanautsintl.org).

SNI’s team science projects include monitoring coral bleaching and disease, *Palythoa* substrate cover, and fish abundance and distribution throughout Florida’s Gulf Coast and the Keys. Nauts also assist Mote Marine Laboratory with its Coral Restoration Program by transplanting endangered coral species like *Acropora*

cervicornis (staghorn coral). Much of the students’ research occurs during SNI Summer Expeditions, which immerse them in environmental- and marine-science education and research. Reflecting on her Summer Expedition experience, Shaian, a third-year Naut stated: “I want to become a marine biologist, so I love learning the science and I love diving. My favorite thing about SNI is the summer trip; that’s a once-in-a-lifetime experience, and it’s cool interacting with the scientists at the Mote facility. We get to learn how to transplant coral from the nursery onto the selected artificial reefs. When we go the next year, we’ll get to see the improvement. It’s kind of cool to see what you’re doing to help the Florida Keys and reefs improve.”

SCUBAnaut students answer the question:

How has SCUBAnauts International helped you Dive into Life?

"I joined SCUBAnauts as the shy kid. Didn't like people. Kept to myself. But through SCUBAnauts, I really learned to branch out, and I've made some great friendships. It's taught me that you gotta throw yourself out there; you can't just sit behind everything your whole life — you gotta get out there and do stuff. That's directly transitioned into my schoolwork. There have been lots of times where I take a leadership role in a project."

Zack—16 years old, 3 years with SNI

"When you first join, it is pretty intimidating because you have so much training you have to go through. But it's worth it in the end. You learn great speaking skills through SNI, which helps with speaking to a large crowd. You definitely learn a lot of skills other than science through SCUBAnauts."

Shaian—17 years old, 3 years with SNI

"I've become more confident, and the program helped me to talk to various types of people because we get to meet the board of directors with our group; we get to meet the Mote marine scientists. And the leadership program helped me with how well-spoken I was and helped me improve my public speaking."

Mia—16 years old, 3 years with SNI

"The program has helped me become a better public speaker. I give a lot of presentations at school as well as the program, and I think the practice helps. It has helped me get a better background in marine biology. It has helped me get a better idea of different fields in marine and ocean biology. It's opened my mind to different ideas of what I can do after I graduate high school."

Chelsea—16 years old, 4 years with SNI

"I've taken leadership roles in school by encouraging students to research what they're interested in. SCUBAnauts is a great way to interact with both your peers and science — to see what's truly happening in the aquatic world. It's a great way for you to walk into college and know what you want to do, because you will be ahead. SNI helps you find exactly what you want to do. It's a great resource for teenagers."

Taylor—17 years old, 3 years with SNI

"SCUBAnauts is where it all started. It's an excellent program, and I wouldn't be the same person without it. I think that most kids who go through it get more than what they pay for in the program. You really become a highly qualified diver and you get awesome certifications. You become a great person as well. Anyone who goes through SCUBAnauts has a great chance of becoming a successful diver and a successful scientist."

Cole—18 years old, 6 years with SNI

Last year's expedition was located within the Looe Key Reef Sanctuary Preservation Area, 35 miles north of Key West. Team projects provide the perfect opportunity for more-senior Nauts to mentor and teach younger Nauts. SCUBAnaut Zack reflected: "During the projects, we have dive buddies for safety, typically with a more experienced Naut paired with a less experienced one. We're all working together collectively to accomplish a goal."

Nauts wanting an added challenge can work toward their MasterNaut status, which requires them to design an independent research project that they conduct under the guidance of mentor scientists. For MasterNaut candidate Taylor, these research experiences have been invaluable: "Many people are impressed that I'm 17 and a research diver. I have many certifications through SNI that many people in college might just now be getting. SCUBAnauts is a great way to get people interested in scuba diving — not only the scuba aspect, but also the science part that comes with it."

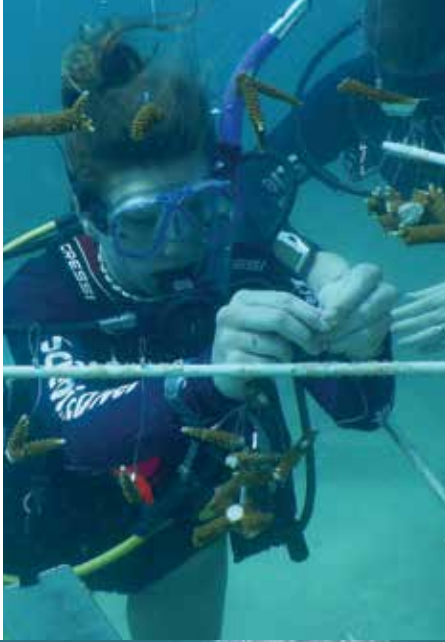
As part of their community outreach and education efforts, the Nauts discuss marine-science issues, and present their research projects to local, regional and even national stakeholders. Each year they attend the Capitol Hill Ocean Week (CHOW) in Washington, D.C., and participate in youth panels, presentations to nonprofits and meetings with members of Congress. In her fourth year with SNI, Chelsea shared what she likes most about doing scientific diving and sharing it with others: "Science in the water rather than outside the water is a lot more fun. We're not harming anything in the environment; we're going to them to collect our data rather than taking corals out of the ocean. We are not disrupting the ecosystem, and that's what I really like about it." Reflecting on his time spent at CHOW, Cole stated: "One of the SCUBAnauts' mottos is, 'Building character and leadership skills: education through exploration.' SCUBAnauts has mainly influenced my academic career, but it's also impacted my learning experience of the

government and policies that go into ocean conservation."

When talking with SNI students, one experience stood out above the rest: the Combat Wounded Veterans Navigation Challenge. The Combat Wounded Veteran Challenge is a group that was founded to improve the lives of wounded and injured veterans through extreme outdoor activities. CWVC and SNI share the same founder,



"Taking my first breath underwater was a huge step and accomplishment for me because I was one step closer to accomplishing my goals."



Capt. Dave Olson, and both are partners of Mote Marine Laboratory's ongoing coral-restoration project in the Florida Keys. So it was a natural fit for them to join in creating a co-mentoring and training program that pairs combat wounded veterans with young Nauts.

One of their tasks is to complete a long-distance underwater-navigation challenge. This includes classroom

training, pool training and then the event itself, which no matter how successful — or not — is a valuable experience. MasterNaut candidate Cole recalled: "Last summer was the second time I got to do [the Navigation Challenge]. They drop you off about 500 to 1,000 yards offshore, and then you get your [compass] on a big dive flag inshore. Then you just go for it. I wasn't really sure where we were going at the time. I got halfway through and had no idea where we were, but I just kept swimming with my buddy. He had no idea either. Then we got to where it was shallow toward the beach, and we had just nailed it. We were the first ones there!"

The students, families and volunteers who have participated in and contributed to SCUBA Nauts International over the past 15 years are to be commended for diving into life. Students have been empowered; families have grown closer; divers have become safer and better-skilled; leaders have been developed; lives have been transformed. Although the success of SNI is rooted in scuba training and marine-science education, the Nauts are about so much more. As Capt. Dave Olson said: "SCUBA Nauts International youth program is not about diving or about diving for science. It is about 'diving' into the process of character and moral development so that our youth are motivated to act from their higher self, inspired by the example of the mentors around them."



For more information about SCUBA Nauts International, a nonprofit 501(c)(3) organization, visit scubanautsintl.org or contact president and CEO Jim Cassick, jimcassick@scubanautsintl.org. Follow SCUBA Nauts International on Facebook and Instagram ([@scubanautsintl](https://www.instagram.com/scubanautsintl)).