

Diving with Dentists

Some dentists do it in noisy restaurants, and some do it in airport hotels. Some seek the nearest dental college and some travel to meetings at large convention centers.

Dentists who belong to the United States Dental Divers Association (www.usdda.com) amass a good portion of their annual continuing education hours by joining the group on week-long trips that combine a scuba diving vacation with high quality dental seminars.

Dr. Richard Reiter, USDDA president, explains that it is only natural for dentists to be enamored with scuba diving. “After all,” he reasons, “we spend our entire professional lives ‘diving’ into an aqueous medium looking for something interesting to explore.”

He was joined by about two dozen participants on the group’s most recent excursion, their 21st annual Thanksgiving week trip, to Cozumel, Mexico.

The association, which sponsors three trips annually, often returns to this same destination, because the island's crystal-clear, turquoise waters, white sand beaches, and second largest coral reef in the world are an irresistible attraction to avid scuba divers.

Alan, a dentist from Rochester, New York, remarked, "I always knew that I would love scuba diving. In dental school, my grades were always below "C" level."

A Typical Day in Paradise

We gathered early every morning on our own reserved boat, and motored 45 minutes to the reef, while chatting and changing into wetsuits. Although the waters were fairly warm at 78 C, swimming for hours in a strong underwater current at a depth of 60 to 80 feet, can result in a serious case of hypothermia.

These three millimeter thick, neoprene wetsuits keep divers warm by allowing a thin layer of water between the diver's skin and suit. This trapped water is soon heated by the body and insulates the diver against massive heat loss.

After up to one hour, the first dive ends, and everyone returns to the boat for a one hour surface interval. These mandatory rest intervals are a very important safety feature, because during time spent underwater, nitrogen gas bubbles accumulate in a diver's tissues. The deeper the dive, the faster the nitrogen bubbles enter the tissues, and the longer one stays underwater, the greater the quantity of accumulated gas bubbles.

These accumulated bubbles are dangerous because they can cause a serious, crippling case of decompression sickness, otherwise known as "the bends."

A well-trained, safety conscious diver carefully monitors how much time he spends at varying depths. The appropriate surface interval allows the body to "out-gas" nitrogen bubbles.

During this forced rest period, we'd eat fresh fruit and drink plenty of fluids to prevent dehydration, while the boat traveled to our second dive site. Later, after returning to the hotel dock, we'd consume a quick lunch and meet in the seminar room for the afternoon's lecture.

In this way, over the course of the week, we were able to explore ten different and unique locations along the reef, and log 20 hours of continuing education hours.

Surface Intervals

It was during the long surface intervals that we had a chance to interact with each other, and get to know our colleagues.

Some of our chatter involved what we had experienced diving. Mel, from the Bronx, had spotted an impressive-looking, 2-foot long, barracuda, with sharp, prognathic teeth, swimming alongside us during our very first dive, but the fish had “grown,” in our imaginations and conversations into a 6-foot monster by the end of the week.

During one interlude, Don, from Montana, pointed to my T-shirt, wrinkled his nose, and said, “Boy, you must really love that shirt!”

I realized that he was making fun of my much-beloved, slightly worn, “Key Largo” shirt. Okay, it was actually very worn, threadbare and frayed, with noticeable tears in the fabric.

Back in the hotel room, I complained to my wife that my friend was making fun of the dive shirt with which I had shared many an adventure. “You mean you actually wore that in public?!” she exclaimed, and promptly deposited the shirt in the wastebasket.

Underwater, because all of us were wearing masks, full wetsuits, buoyancy compensator vests, air tanks, boots, and fins, it was often difficult to tell who’s who. After one dive, Jon, from Minnesota, remarked to me that my blue “Mares” flippers looked exactly like Ann’s, his fiancée.

“During the dive, I almost snuck up behind you to give you a hug,” he admitted sheepishly.

“You would have been very disappointed,” I countered.

Consulting with the Dive Master

Oswaldo and Manuel, local divemasters and our underwater tour guides, spent the entire week with our group. On one occasion, Mike, from Connecticut, was calculating exactly how many pounds of lead weights he should wear on his belt. A properly weighted belt allows a diver to become neutrally buoyant in the water. With too much lead, a diver sinks to the bottom like a rock; too little, and a diver is too buoyant and remains stuck on the surface, unable to descend.

Generally, a heavier diver requires more pounds of lead. Muscle mass is, of course, more dense and less buoyant than body fat. “I am 150 pounds of lean muscle,” Mike explained to Oswaldo, “but weigh 220 pounds all together.”

Featured Creatures

The highlight of any dive trip, of course, is exploring an area’s unique flora and fauna. On this trip we encountered the usual beautiful coral formations, underwater plants and sponges. We admired the usual assortment of Caribbean groupers, angelfish, snappers, and parrot fish.

Although we didn't encounter any sharks, our group did include Larry, an attorney from California.

My personal favorite denizens of the deep are turtles, and I was delighted to spot and observe many on this trip. My wife decided to analyze my fascination with turtles. "You identify with them," she pronounced sagely, "because on land they are slow, awkward, and wrinkled-looking. But, in the water, no matter how old the turtle, it seems graceful and majestic."

On one memorable dive, Arnold and I noticed a very mysterious-looking, blinking eye sticking out of the sand. After gently fanning away some of the surrounding sand, we discovered a very pretty, very shy, stingray hiding under a protective layer of sand.

On another dive, Arnold brought along scraps of breakfast rolls and fruit slices to feed to the fish. Usually, a diver offering food is quickly engulfed in swarms of colorful fish, eager for a free hand out.

Poor Arnold couldn't attract any takers. Stand-offish schools of finicky, finny friends avoided him like the plague. After, Divemaster Oswaldo claimed that because these were Mexican fish, they would only eat tacos and fajitas.

On another dive, Oswaldo pointed to a beautiful, bright red sea horse, clinging by his tail to the thick stem of an underwater plant. The poor, mystified, 2-inch tall creature was soon surrounded by a dozen picture-snapping, delighted dentists.

Later, Terry, from New Jersey, asked Doris, from Montana, "Why were you so enthralled with that sea horse? You live on the western plains. Don't you see horses all the time?"

Continuing Education

The afternoon courses were excellent. Dr. Jon Tesser used a Power-point presentation to review the history of CAD-CAM restorations, the evolution of the latest CERAC technology, and showed detailed slides of the efficient, high quality porcelain

crowns, inlays, onlays, and laminates that he routinely produces in his office.

Dr. Donald Nordstrom presented a seminar on the uses and effectiveness of fluoride varnishes, and latest research papers on different approaches to primary tooth pulpotomies and pulp therapy.

I was also a presenter. I discussed treating pediatric patients in a general dental practice, and conducted a hands-on participation exercise on fabricating chairside space maintainers.

Dr. Michael Drysgula lectured on the importance of attaining a dry, isolated, easily visible and accessible operating field, and focused on the advantages and disadvantages of the Isolite System.

Finally, Dr. Teresa Segat discussed various all-ceramic restorations, the indications and contra-indications of the different types of porcelain available, and avoiding common preparation and cementation errors.

Future Trips

One dentist suggested that in the future, if we could only figure out a way of conducting CE courses underwater, we'd be able to dive not only mornings but also afternoons as well. Dr. Reiter considered his proposal.

“Too impractical,” he decided, “we'd have to somehow get water-proof laptop computers, and an 80 foot long extension cord for the Power Point projector.”