

Meditation and Diving

How meditation can help prevent serious diving accidents

by Gustaf Lundskog



Most divers have at some point been nervous before or during a dive. That is completely natural. We plunge into a world that we were not created for, a world where a lot can go wrong. Novice divers often feel inadequate or insecure amongst more experienced divers, and at the same time they are afraid of admitting it.

But it is not only beginners who get nervous, experienced divers can also feel anxious. Sometimes it is enough that you got seasick on the way out to the dive sight, or that it has been a long time since your last dive. Moreover, the minutes before a dive can be very hectic, especially if you are with a larger group. Everybody has to quickly put their gear on, check their partner's equipment and make sure that the air supply is working properly. After that it is time to get into the water. If you are diving from a rocking boat, that is easier said than done. When the whole group is finally gathered you must get down below the surface. After all, you do not want to be that lone diver bobbing like a cork, while the others are waiting impatiently a few meters down.

Each of these steps can be stressful for inexperienced divers, and that is even before the dive itself has begun. But some nerves will not harm you. It is a part of the excitement of diving and it can even be good for you. Nervousness makes us alert and feeling more present in the moment. But if that nervousness becomes fear twenty meters below the surface you may easily panic, and panic kills divers.

This does not mean that a good diver is someone fearless who pushes the limits. A good diver is the one who saves the fearless diver when he has pushed the limits too far. A good diver always reacts in a calm and methodical manner. A good diver recognizes signs of panic, not only in himself, but also in others. A good diver is always aware of what the rest of the group is doing, and ready to act if help is needed. The best divers radiate a calm that is infectious and makes all others feel confident and relaxed.

That is why you do not need four hundred logged dives in order to be a good diver. It may very well be

the "newbie" who keeps his calm in an emergency and saves a friend's life.

But it is not easy to stay calm when chaos is all around you. Panic is a primitive reaction that triggers a physical response in our bodies. Your heart beats faster, your breathing quickens and several different hormones are secreted, including adrenaline and cortisol (known as "the stress hormone"). Your body makes itself ready to flee and our instincts tell us to get to safety as quickly as possible. Unfortunately that often means that the diver makes an uncontrolled emergency ascent, and unfortunately that often leads to serious injuries such as decompression sickness or pneumothorax.

That is why we should practice ways of battling panic when it grabs hold of us, and meditation is a powerful tool on the journey towards a peaceful mind. Freedivers realized that a long time ago, and amongst them it is the norm rather than the exception to incorporate meditation in their training routines. Amongst scuba divers it is not yet that common. Many people still consider meditation to be "strange" or "mysterious", but that is not an opinion shared by the research community:

"So far we have mostly seen psychological effects of meditation. Researchers have also begun to look at physical effects, but that is something relatively new", says Dr. Camilla Sköld.

Dr. Sköld, RPT, Ph.D., is one of Scandinavia's foremost experts on mindfulness and meditation. She is the founder of the Center for Mindfulness Sweden (CfMS), and she also teaches future doctors and psychologists at the Karolinska Institute, one of Europe's largest medical universities and research facilities.

"There are a lot of exciting things happening around meditation. Researchers are trying to find out what happens in our brain, in our nervous system and to ageing processes in our blood when we meditate. The latest research is conducted with the help of MRI machines, which means that you use magnetic cameras to study how the brain reacts when someone is meditating. Quite a few very established and renowned scientists are beginning to look into these questions", Dr. Sköld continues.

One of the scientists that have taken an interest in meditation and mindfulness is Elizabeth Blackburn, who

was awarded the Nobel Prize in Physiology or Medicine, 2009. She is studying so called telomeres. Telomeres are the protective caps at the ends of chromosomes in our cells (Dr. Blackburn has compared them to the tips of shoelaces). The telomeres slowly wear down as we get older and finally they get so worn that our cells can no longer divide. It is a natural process, but at the same time test results show that stress hastens the erosion. Based on empirical data, Elizabeth Blackburn has put forth the theory that meditation prevents many of the injurious effects of stress. This in its turn would mean that meditation slows down the ageing process in our cells, prevents disease and prolongs our lives.

Dr. Camilla Sköld works on a daily basis with people who suffer from stress, illness and anxiety disorders. With the help of a meditation program, developed within the health care system in the United States by professor Jon Kabat-Zinn, she teaches them to handle their anxiety.

"A lot happens in our bodies when stress overwhelms us. Our entire automatic stress-response system is set off. That is a system which we cannot control. Originally the system was supposed to protect us from real threats, but nowadays the threats often come from within. We get



anxious because we imagine something to be wrong or dangerous, and that is when the system responds. The threat comes from within, but it is confirmed by how we feel our heart beat harder, our pulse quicken and our hands get sweaty. The whole system is set off, and often that makes us even more afraid."

With the help of meditation we can learn to just observe what happens in our body, instead of letting panic take control of us. For a diver that can mean the difference between life and death, both for oneself and for others. Being able to resist the instinct to quickly reach the surface in an emergency is a skill that all divers should be taught when they begin their dive training.

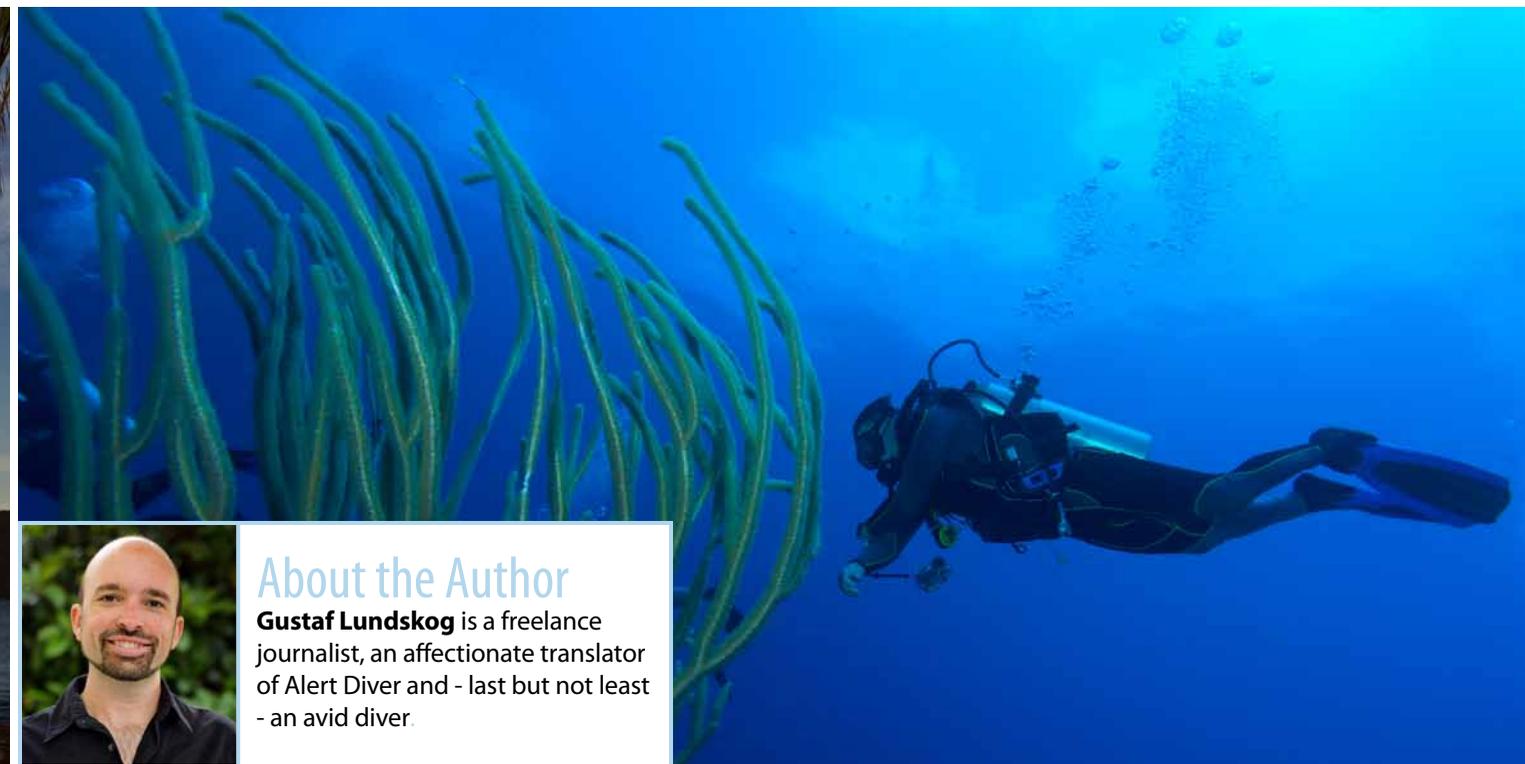
"It is important for us to understand that stress-response cycles come and go in waves. A cycle peaks and diminishes in 90 seconds. If you are able to endure for 90 seconds the cycle has then reached its top and disappeared. But if you start thinking or get scared a new cycle be-

gins and then the peaks follow upon each other, which makes you feel like they never end. It becomes a vicious circle", Dr. Sköld explains.

Camilla Sköld is certain that meditation can help nervous, anxious or stressed divers. You can very well sit down in a quiet spot before a dive to meditate, but Dr. Sköld points out that meditation is a skill that you must learn and practice.

"You should practice in peace and quiet so that you can use it when you find yourself in more stressful situations. Divers are already very acquainted with their breathing. Therefore it will not feel so strange to them when they start doing breathing exercises. I am convinced that divers would benefit greatly from meditation."

Scuba diving is a fantastic sport. "The big blue" welcomes us with promises of never ending adventures, but at the same time we are often reminded that we are just occasional visitors in the deep. As divers it is our responsibility to respect our limitations and to always dive safely. With the help of meditation we can train ourselves to react calmly in stressful situations and prevent accidents that otherwise would have led to serious injuries or even death. ■



About the Author

Gustaf Lundskog is a freelance journalist, an affectionate translator of Alert Diver and - last but not least - an avid diver.