

Text by Richard Taylor Photos by Andrey Bizyukin

As divers, we all learn very quickly that staying too long underwater can often bring about an urgent call of nature. A rush back to shore or back on to the boat is one of the first experiences for many new Open Water Divers, if not that ignominious feeling of having no choice but to make our wet suit slightly warmer for a short time.

It is a simple truth that scuba diving seems to make many of us want to relieve ourselves sooner than we would expect. The number of divemasters who have had to wash "pongy" wetsuits after dive sessions is probably all of them, whilst the sight of fellow divers trying desperately to save some dignity while finding a "private moment" during a surface interval is something that probably no diver has missed, and most have experienced firsthand.

Laugh as we may (or smile sheepishly), the act of urination is as much a part of safe diving as staying hydrated, ascending slowly and breathing continuously. Alternatively, "holding on", just like diving dehydrated, fast ascents and holding one's breath, will pretty much lead to pain, injury and, often, some complicated and unpleasant treatment.

However, for most divers, the 30- to 40-minute foray underwater on a single tank isn't unpleasant and some simple predive preparation ensures that they remain comfortable when exiting. For those who want to explore the depths further and longer as a technical diver, then this issue of bodily function does require some

consideration. This is even more so when you hop into a drysuit.

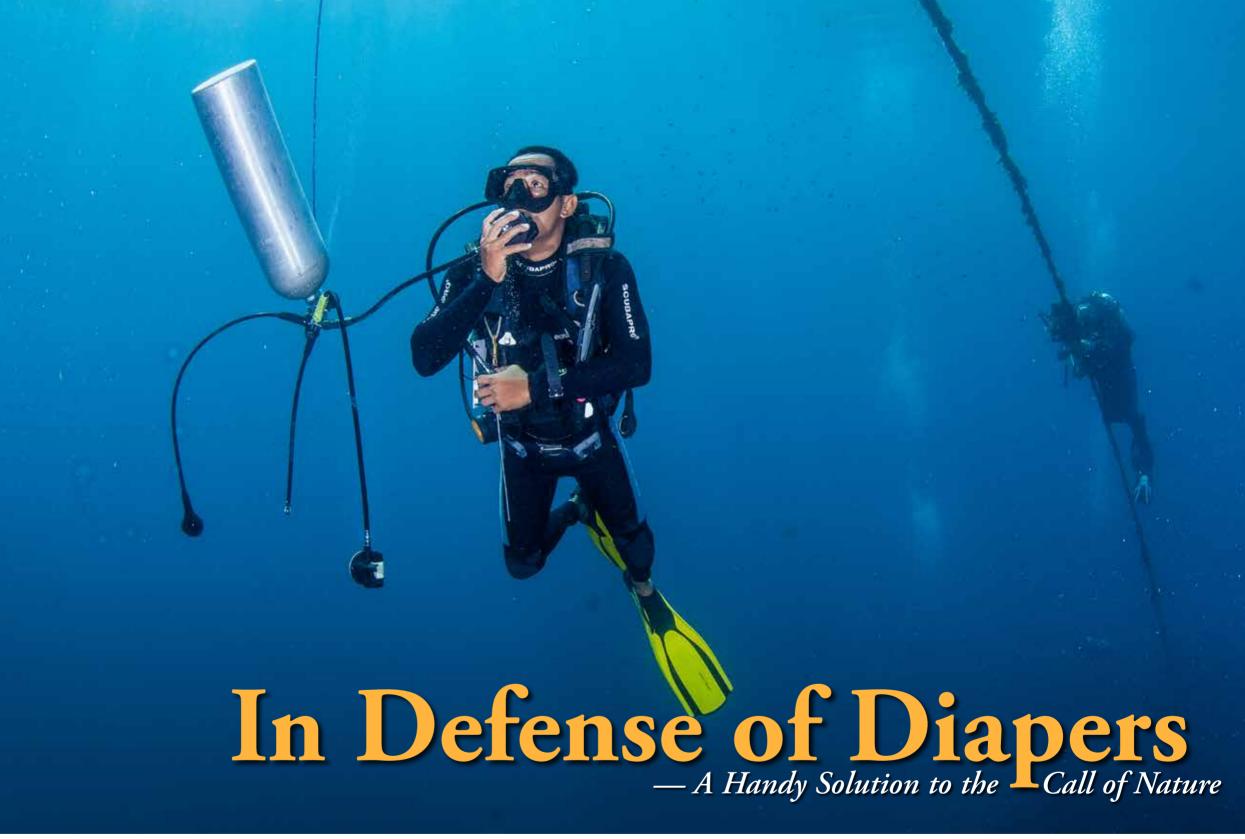
Drysuit options

Most technical diving texts nowadays discuss using drysuits due to the longer and deeper (and often colder) dives. With this often comes the need to consider

so-called "accessories", one of which has gained quite popular attention is the P-Valve. There are many makes available, but all rely on the basic principle of a catheter and tube leading to an external valve fitted into the drysuit. Initially the domain of the male diver, recently there has been a trend for the female diver to

include the use of the "She Wee" or other similar devices.

Whilst these points of view are both humorous and educational, they often take the position that there is really no acceptable alternative. However, and this may come as a surprise to many, there was an alternative long before P-Valves,



66 X-RAY MAG: 69: 2015

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DUCATION

PROFI

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and there will be one long after you have hung up your last drysuit. It's one of those "D" words divers don't really like to talk about: Decompression, Dehydration and Diapers!

"Diaperology"

When we talk about diapers, let's make sure we understand a few things. Firstly, we are not talking about swimming around wearing elasticized plastic pants sloshing around in a bath of our own wee. Secondly, we are not talking about wraparound nappies, with huge plastic safety pins and regulators. Here, we are talking about wearing adult diapers for comfort.

Okay, I appreciate that many people go "Yuck!" and "Eeww!" and such like when they think about using diapers (or adult nappies, if you wish). So, let's have an honest look at the alternative and some of the pros and cons.

First: "No one wears those!"
I am sure most of you have come

across the adult diaper section of the supermarket or pharmacy. Have you ever wondered why they are on the shelves and not hidden away in some private unmarked cupboard? Simply put, many people use them. The global market is worth over US\$8 billion, and it is growing at eight percent -- higher than any other toiletry market (including toilet paper). Over 25 million Americans buy them every year.

Second: "I'm not going to wear them!" HA! Boy, do I have news for you: One in three women over the age of 18 suffer from some sort of sensitive bladder or incontinence. Fifty percent of seniors have some form of "urinary weakness", whilst 80 percent of people who wear adult diapers are female, due to conditions mostly caused by child-birth. Hence, odds are that you are going to visiting the adult diaper section of the supermarket one fine day. So get over it!

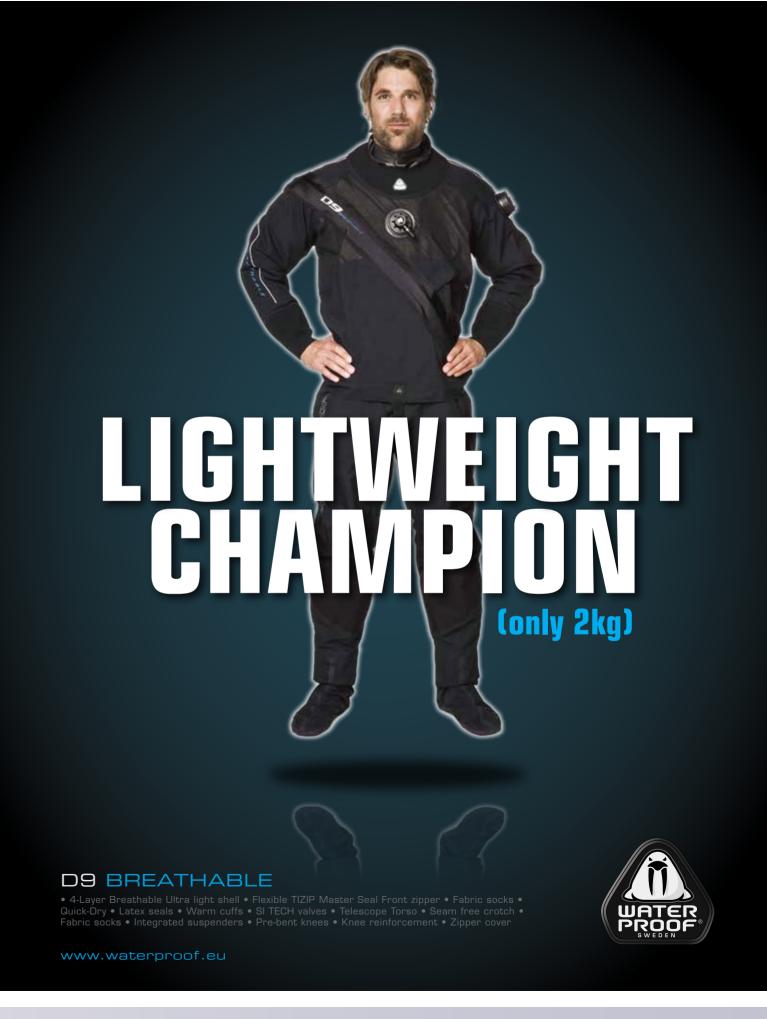
Third: "I don't want to sit in my own waste for hours." Let's break this one down, shall we?

"For hours"

Not all of you are going to be Explorer Club divers spending three-plus hours decompressing from a 250-foot cave exploration dive in the middle of Guatemala. Most of us do this for fun. Most of your students do this for fun. Yes, we may want to channel our own inner Sheck Exley or Lloyd Bridges, but the reality is that most boat trips, cave dives and shore dives last a couple of hours, max.

"My own waste"

Okay, nappies/diapers are there to absorb and contain our waste—specifically, our wee/ urine. Diapers are designed to take the liquid away from the body and have it absorbed in gel type pads, so the body is left relatively dry.



57 X-RAY MAG: 69: 2015

EDITORIAL

FEATURES

TRAVEL

NEWS

JKS EQUI

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ECH

DUCATION

PROFILE

PHOTO & VII



Diapers

hydrated before we dive, not auzzlina a gallon of caffeine before we hop in our drysuits and wear that nice tight weight belt or harness strap over our bladders. And if you are diving with a rebreather (CCR), what on earth did your instructor teach you about one of the benefits of "the warm moist air" anvwav?

The net result is that if we are well balanced and hydrated before the dive, have gone to the toilet regularly, and have not drunk copious diuretics, our wee requirements will be smaller.

Diaper tips

Now, there is no problem with doing a wee in a diaper. Most babies don't "control the flow", they just let it go when they need to go.

Well, when using an adult diaper, we need to learn the same. Don't hold it in, just relax. The first time you feel like

Fourth: "But I pee SO much after just 30 minutes!" Just how much are you drinking before you go diving? It amazes me the number of people I see who literally guzzle down drinks before a dive. What's worse is, half of it is either grande (or venti) coffees or super-sized Cokes! Have you people never heard of diuretics? These things make you go to the toilet!

Hydration

So we need to talk about hydration. You pee because your body has produced excess fluid waste; the darker it is, the more dehydrated you are becoming. We used to say 64 US fluid ounces per day, or just under two liters, equated to about the recommended six to eight tall glasses of water a day.

Nowadays, it is considered more appropriate to consider six to eight cups per day (or just under 1.5 liters), in addition to a balanced diet. Your kidneys process about four cups an hour, so when you drink more, what do you

think happens to it? Right. Hello, bladder!

The best way to hydrate your body is to consume a constant intake of small quantities of water. Yes.. WATER! Slowly. Sip it. Don't guzzle. This keeps your body hydrated and avoids excess fluid being directed immediately to your bladder. You will still wee, but they will be regular and smaller.

Yes, we dehydrate more when we dive. It is said that we dehydrate just over one liter of the body's water (33 US fl. oz) for every 88 cu ft of dry compressed air we breathe in (that's about a 12L ali). How precise that is who knows, but the principle is pretty right. Our rate of dehydration increases when we dive for many reasons, the dry air definitely being one.

So we need to compensate for this. The best way to do is by consuming fluids while we dive (water-filled camel packs, anyone?) A more practical alternative is having a well-hydrated body before we dive. This means being







X-RAY MAG: 69: 2015

EDITORIAL

FEATURES

TRAVEL

NEWS

SCIENCE & ECOLOGY

TECH



you need to go, go!

Now, I know many of you are sitting there thinking: "No way, not me!" and "It'll spill into my drysuit!" So, don't take my word for it—test it out for yourself! Get hydrated, limit the coffee and sodas, and try it out in the shower. That's how I was taught to get used to them, and that's how I tell my students to try it out. If at first you don't succeed, then just relax, and tackle it slowly.

Let's be honest, adult diapers are not for everyone! It is a discussion many divers need to have—technical divers and instructors in particular. Regardless of which side of the fence you sit on, it is one that every instructor needs to have a balanced look at. Of the many technical divers I have taught over the years, most of the women have tried diapers, and many instructors now discuss this

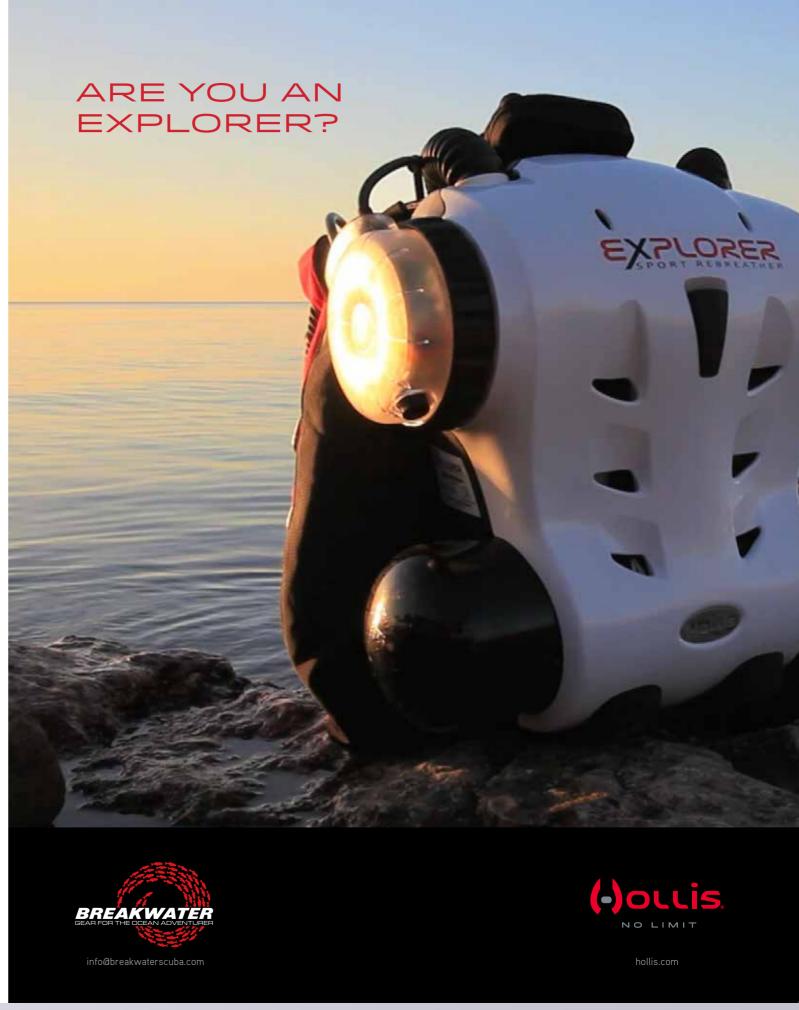
subject equally alongside P-Valves. As professionals, we have an obligation to be able to discuss both sides fairly. It is, after all, the diver's choice.

Lastly, don't forget these benefits:

- 1. They are simple to use and require little "personal preparation" (and just because you wear them doesn't mean you've used them).
- 2. They are available in most supermarkets or pharmacies around the globe.
- 3. Based on the stats, chances are high that you may have to use them one day, so you may as well get used to them now.

Safe diving—and a dry and comfortable one too! ■

As one of Australia and New Zealand's first Technical Diving Instructors and Instructor Trainers, Richard Taylor is an avid cave and wreck diver and frequently published technical dive and risk management writer and lecturer based in Wellington, New Zealand. He has served as the Australian regional director and sales representative for TDI/SDI and is a founding member of 'The Sydney Project' mixed gas diving team. He was the safety and diving officer for the joint Australian-Turkish team finding the Australian WWI submarine—the AE2—off Gallipoli. He also founded and directed the OZTeK Australasian Diving Technologies Exhibition and Conference and was honored with the OZTeK2013 Industry Recognition Award for "Exceptional Contributions to the Growth of Technical Diving."





69 X-RAY MAG: 69: 2015

EDITORIAL

FEATURES

TRAVEL

NEWS WRECKS

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SCIENCE & ECOLOGY

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