# WHY DIVE DRY?

Tyler P - From the WHITES website: <u>www.whitesdiving.com</u>

Divers have questioned whether or not to dive in a drysuit in certain environments for years. We are a little biased here at Whites, but we will do our best to educate you on why you should or shouldn't dive dry.

In cooler climates most houses have insulation – the insulation combined with air pockets provides an excellent layer to keep the house toasty warm. This same principal applies in diving; a layer of thermal protection with air pockets protects the diver from cooling body temperatures.

There are a few things to consider before buying a wetsuit, a drysuit or agreeing to being trained in one or the other:

- 1. Water temperature
- 2. Your personal tolerance to the cold
- 3. How long will you be in the water or diving for
- 4. Depth (wetsuits compress at depth, therefore losing thermal insulation value)
- 5. Your activity level
- 6. Surface weather conditions
- 7. Cost

Notice that Experience Level or number of dives is not on that list; many people claim should be.

Let's look at each one individually:

## **Water Temperature**

Clearly the temperature of the water is different in separate parts of the world. You'll need to consider the temperature of the water you will dive in most often, or where you may travel to go diving. Consider the quality of diving and types of marine life as well. The critters and marine life will differ depending on water temperature.

Here in British Columbia, Canada, (where WHITES are based) the water temperature below 6m is fairly consistent at about 10-11°C (give or take). In the summer a surface thermocline, makes the water temperature much more bearable for swimming, but helps very little for divers below 6m. These cold waters allow for an incredible diversity of life which has ranked BC with some of the best dive sites in the world. For this reason most avid Pacific Northwest divers use drysuits.

#### Your personal tolerance to the cold

You probably know someone that is always cold – the heat is cranked and they always need lots of blankets. Different body types and statures can increase or decrease the susceptibility to cold. You probably know your personal tolerance level, so take this into consideration before selecting your exposure protection.

# How long will you be in the water or diving for?

Do you have long surface swims to your dive sites? Do log dives that are really long (a dive lasting 50-60 mins would be considered a lengthy dive). What if you travel somewhere with great diving – is there a chance your dive could be cut short due to long, cool exposure times? Why spend all that money on travel just to lose precious minutes underwater.

We all want the best bang for our buck – we spend countless hours and money getting gear together, gearing up and preparing for dives – nobody wants to end a dive early because they are cold. If you find yourself in a situation where you end dives early because you are cold, it is likely time to consider a drysuit.

## Depth (wetsuits compress at depth, therefore losing thermal insulation value)

The deeper the water, the more a wetsuit compresses and therefore loses thermal effectiveness. If you regularly dive to deeper depths to find wrecks, explore new walls or critters only found at depth and you get chilled at those depths, a drysuit may be an excellent option.

#### Your activity level

When you dive do you go with the current, move slow and steady in an effort to conserve air and energy efficiency? Divers have individual styles of diving, if you are the diver that moves very little and does not work very hard underwater, a drysuit may improve your thermal comfort. Note: We have found that this factor affects your choice of exposure protection the least of all the ones we have listed.

## Surface weather conditions

You are probably familiar with how it feels to be out in the rain, or just jump out of the water when there is some wind, or the temperature is a little cool. The combination of being wet with cool temperatures or windy conditions can be very chilling. Often diving in cold water with a wetsuit in the summer can be somewhat tolerable – you surface after a dive and the sun can warm you up in preparation for a possible second dive. However, if there is wind or the temperature is cooler, your first dive may be ok, but your surface interval can cool you off making your second dive very uncomfortable.

This is a bit of a catch 22 in some cases – it's warmer in the summer, but depending on where you dive, the diving is often better in the winter when it is cooler. Here in the pacific northwest, diving in the winter is generally better due to visibility. Sunny summer conditions bring in plankton blooms that can turn generally clear waters into a murky mess.

If your local diving does not boast warm tropical days year round, it is a safe bet that a drysuit will keep you warm no matter of the surface conditions, allowing you to take advantage of diving year round so you can see and experience the best dives with the best visibility.

#### Cost

This is always an interesting topic of discussion – what is the true cost of diving dry vs. diving wet? Cost can be viewed from 2 points – financial and experience – the true monetary expense vs. the cost of missing a life experience that is invaluable.

Drysuit - \$1100-2000 Thermal protection - \$500 Drysuit hood - \$80-100

Watching a 15 foot giant pacific octopus check you out and show you the whole range of its almost 2000 suckers – priceless.

Many divers start diving by renting and purchasing a wetsuit because it is cheaper, we don't deny that - but we can tell you that when you buy your wetsuit and then decide you should really have a drysuit, and buy one of those too – it's cheaper to just buy a drysuit in the first place.

So rent and choose carefully - consider all the costs, there is a good reason that once divers go dry they never go back.

Lastly we address the notion of experience. There is a common misconception that diving dry is hard, that you should have lots of dives and experience first because buoyancy is more difficult. Many will even say that brand new divers should not learn how to dive in the beginning with a drysuit.

As an instructor trainer, I have trained countless divers in drysuits, new and experienced. I will admit it may be more complicated to dive a drysuit, but that does not make it harder. Just as one diver can argue that diving a drysuit is more difficult and therefore risky, I can argue that diving without one in cold waters is even more of a risk. If your instructor is an avid drysuit user, there is no reason a drysuit would be more risky or challenging. In scuba courses they often teach you to do a hover upright, they can just as easily teach you how to hover horizontally in a drysuit. If you are trained properly diving a drysuit is no risky than using a wetsuit.

The statistics show that there is no more of a chance of being injured because of drysuit use than there is of wetsuit use.

So if you are a new diver and think you should learn in a drysuit ask your local dive store to teach you in a drysuit. If you are an experienced diver and are debating about wetsuit over drysuit, consider all of the above carefully and think about the true "cost" of owning a drysuit.