

#### Introduction

Welcome! Thanks for joining me here on this diving journey. I truly appreciate you being here.

Together we will have you increasing that bottom time on your next dive – as well as enjoying that dive more.

Getting air to last longer is a big concern for many divers. Both new divers and not so new divers. It can be a hard skill to master.

As one would expect, newer divers often seek and need some guidance. On dive trips, more often than not, newer divers will have to ascend sooner than experienced divers since they go through their air more guickly. It is only natural.

The more experience you have, it usually follows (though not always) the less air you will use compared to more inexperienced divers.

Of course, there are exceptions to every rule. But if you have ever had to cut a dive short because you ran out of air, the following tips should help you reduce your air consumption.

And, remember, it is just not you that has to surface early. Maybe your buddy is frustrated because he always has more air than you, yet he has to cut his dive short too. So try and improve your air consumption for him/her too!

So let's get started with our 3 tips to make your air last longer.

## 1. Stop Moving

Our first tip is straightforward but I know it is not as easy to do as it sounds. You may not even be aware you are violating this rule.

But moving around uses energy. And you must breathe to feed that energy.

The more you are moving around underwater, the more air you will use. You should use a minimum of movement to get the maximum air consumption.

Concentrate and be aware of your movements. Keep your hands at your side or held in front of you (or whatever position you are comfortable with).

You don't need them to swim for the most part so don't use them.

This is where buoyancy control helps you conserve air. You will see many new divers use their hands to adjust their position in the water column or to stay horizontal. Once you have control of your buoyancy, you will no longer need to do this. **Less movement equals less air used**.

Rather than use your hands, you can just move forward with your fins. They should be propelling you, rather than your hands. And if you are on a drift dive you usually don't even need to use your fins. You can just move along with the current and not have any movement at all.

#### Technique Explained:

**Kicking:** There is a kicking technique that you can use that should help to improve your air consumption. It is the most efficient way to propel yourself forward underwater.

It is the **flutter kick** that is similar to the standard kick swimmers use when swimming freestyle on the surface. However there are two important distinctions:

- 1. The kick you should use while scuba diving is much slower than the kick you would use on the surface.
- 2. The kick while scuba diving is more powerful, or bigger, than the kick on the surface.

Since you have your fins on, you will have a bigger resistance to water. So while scuba diving you should use much more of your leg in the kick than on the surface. Your kick should originate at your hips - not your knees. It will thus be more powerful.

Swimmers on the surface do quick, small kicks with their legs. Yours should be much slower and controlled. Concentrate on it and you will see what I mean.

You should try and keep your legs fairly straight as you swim while

scuba diving. I see many divers use a kick that is similar to that old bicycle exercise you had to do in gym class (you know the one: lay on your back, raise your legs up and support your lower body with your hands, then move your legs as if you were riding a bicycle - bring back any memories?). If they are not doing the bicycle kick they are bending their legs too much at the knees.

Both of these methods of kicking use energy and thus increase your air consumption.

Remember, kick slowly, kick straight and kick big.

Look at the experienced divers and diversaters. They just float along and barely move. That is what you are aiming for.

I remember watching the divemasters when I first started diving. Their diving looked effortless and they appeared to be just floating along. I wanted to be able to dive like that.

Whenever I watched a divemaster or an experienced diver, it reminded me to **stop moving**. Make that your goal: when you see someone just floating along like that, try and imitate them. Stop your movements. It will soon become natural.

So concentrate on your movements while underwater - and then stop those movements. No fidgeting allowed. You air consumption will improve.

Unlike watching a divemaster, I have also witnessed the other extreme. When we were in Bonaire we did a couple of boat dives (Bonaire is primarily a shore diving destination). On the boat with us was a diver that was taking photographs and swimming all over the place like a crazy bee. She was so busy and all over that I couldn't stop watching her. Of course, she was hitting coral like crazy too since she had no buoyancy control.

She actually lasted longer than I thought she would

before she had to surface. I watched her go up and wasn't all that surprised when I saw her go straight to the boat without doing a safety stop. Hearing her later on the boat, turns out she surfaced without a safety stop because she had an empty tank. Now that is not someone you want to be. It is just downright dangerous.

### 2. Streamline Everything

Our second tip is quick and to the point.

While this may not seem like a big deal, it will help improve your efficiency underwater.

Make sure you have nothing dangling from your gear setup. This will create drag and increase air consumption. So get rid of those accessories you don't use and have everything clipped and close to your body.

- → Make sure your octopus is in a holder or in the BC pocket if a holder isn't available
- → Clip your SPG (submersible pressure gauge) to your BC so it doesn't dangle. This will also help protect it from getting damaged on the coral or other surfaces.
- → Put your dive light, slate, etc. in your pockets or have them clipped closely to your body.

Or better yet, if you are not using them or don't need them, don't bring them. It will only add to the weight and clutter of your gear set up.

**Be a minimalist** and just bring the bare necessities. Your bottom time will be better for it.

## 3. Improve Your Buoyancy Control

While this is a whole topic in and of itself, there are some steps you can take on your next dive to get closer to neutral buoyancy.

# And why are we talking about buoyancy control during tips about air consumption?

Because as you improve your buoyancy you will decrease your air consumption.

Talk about killing 2 birds with 1 stone!

I understand that this is one of the dive skills that the majority of divers find most challenging.

Many divers - and not just "new" divers - find obtaining neutral buoyancy to be the hardest dive skill to master.

Look around you during your next group dive and chances are there will be people that are bobbing up and down like crazy or never stop moving underwater.

Now this isn't to criticize them because we were all there at one point. Me included of course. It is a difficult skill to master, no question about it. But it can be done with a little practice and patience.

And once you master neutral buoyancy - you will have a whole new dive experience. And a whole lot more air in your tank.

It really is a different world down there when you can float along effortlessly and with seemingly no movement. So how do you get there?

The best tip I can give you is to:

### **Use the Proper Weight/Adjust Weight After Initial Dives**

This is probably the biggest contributing factor to problems with buoyancy control. **Most beginning scuba divers are overweighted.** 

As they begin their training or their initial dives after completing training, divers are understandably a bit nervous. After all, breathing underwater is not natural and who knows what you will see in the open ocean (is that a

shark?).

Since the new diver is nervous and anxious, most likely they will breathe more and breathe more heavily. This will cause a diver to rise (and fall) in the water column. As a result, new divers are sometimes given more weight in order to keep them on the bottom during their training dives.

Which is fine as far as it goes.

A problem may arise if the amount of weight isn't adjusted once the diver is more comfortable in the water. Once you are comfortable in the water you tend to need less weight. I have experienced this first hand several times.

Earlier in my dive career, I would go on a dive trip after not having dove for a few months. On that first initial dive of the trip, I would put on 1-2 pounds more than I would normally use. That first dive after not having dove for a while can be a little anxiety ridden and I wanted to make sure I had enough weight.

I was a bit nervous, so I knew I would want a little more weight. I would normally only need this extra weight for the first dive. After that, I would be right back in the groove and comfortable underwater once again. I would then take off that extra 1 or 2 pounds and use my "normal" weights once again.

So if you are anxious when you do your first dive, don't stress out about it. You can try what I did and see if it works for you.

Compensate a bit and add another pound or so. Once you are comfortable underwater again, take off that pound and see how you feel (put on and take off your weights in small increments - one or two pounds (at the most) at a time).

So if you are getting more comfortable in the water, you may find that you are overweighted. This is especially true if you are just starting out.

The key here is that you will probably have to make the adjustment yourself.

Once you are finished with your open water certification dives, you no longer have an instructor to watch over you so it is up to you to make any adjustments. If you are carrying 4 extra pounds (or whatever the case may be), it is that much harder to get neutrally buoyant.

And you be using that much more air to keep yourself neutrally buoyant with that extra weight.

You will have to compensate for that extra weight by adding air in your BC since the extra weight has to be offset by extra buoyancy.

Since your buoyancy changes with depth (both the air in your BC and the effect of your wetsuit), if you are carrying extra weight it is that much more you have to adjust for. This will keep you pretty much constantly fiddling with your inflator hose to maintain your desired depth. Which is obviously not what we want to do.

# You want to take off as much weight as you can since buoyancy control is generally easier with the less weight you have.

So it may be time to make some adjustments on your next dive if you have not yet obtained neutral buoyancy.

And as I said earlier, there is an excellent side benefit of neutral buoyancy:

You won't be using that precious air to keep refilling your BC so you can improve your air consumption at the same time.

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If that's not enough incentive for you, DAN (Divers Alert Network - a well respected non-profit organization focusing on dive safety) states that "Diving incident reports often cite overweighting and/or poor buoyancy control as a contributory factor to, or a factor associated with, accidents or near accidents." So work on that buoyancy.

#### **Conclusion:**

Well there you have it. Three tips to increase your bottom time.

- 1. Stop moving
- 2. Streamline
- 3. Improve your buoyancy control

So the next time you go on a dive, concentrate on these 3 tips. Review them before you go under. And put them into practice before you dive in and while you are under.

Your bottom time **WILL** increase.

Best of luck and happy, longer diving. I will be in touch soon with some more tips to help you with your diving.

Until then.

Here's to longer bottom time, Dianne