

Breathing Heavy: How to reduce your gas consumption

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For some divers, being the first to hit turn pressure means nothing more than a good-natured jibe from dive buddies once back on the boat. For others, a high rate of gas consumption stands as an obstacle to their full enjoyment of diving.

There are more ways to solve this problem than just throwing a bigger tank on your back. That only treats the symptom and complicates proper gas planning. Treating the cause requires a little more effort, and while the results will not only reduce your breathing rate, they will also make you a better diver altogether.

Dive lots.

Of course, the more you dive, the better a diver you will become. You will have better buoyancy control and better trim, you will maintain your depth while swimming and stopping, you will read the currents and surge better, and you will simply be more “at one” with the underwater world.

Naturally, your gas consumption will decrease. However, you can concurrently take several steps to accelerate this natural process of learning.

Exercise lots.

Fitness makes you more efficient at physical activity. The fitter you are, the less you will have to work to manage your gear on the surface, swim at depth, and get back into the boat. Though there are plenty of fit divers who are inexperienced and still Hoover, you will only reduce your breathing rate by maintaining a consistent exercise program. Run, swim, bike, play hockey- it doesn't matter what you do as long as you're getting at least 3-5 hours of exercise each week.

Swim laps.

Along with promoting general cardiovascular fitness, swimming forces us to adapt to the water in several ways beneficial to divers. We get comfortable breathing with our faces in the water, and this may reduce the immersion effect we experience when diving. Instead of sending a signal of alarm, your body remembers at a subconscious level that it's OK for your face to be submerged.

Freestyle swimming (a.k.a., “the crawl”) is especially useful to divers, as it teaches us to breathe with a fast, deep inhalation and a long, slow exhalation. If you can work as hard as a distance swimmer while breathing as slowly and calmly as they do, just think about how slowly and calmly you are really capable of breathing while diving.

Of course, some divers certainly overdo it and breathe too slowly. You don't need to hold your breath to load up on carbon dioxide, and this can cause a few serious problems-

increased narcosis, decreased oxygen toxicity threshold, loss of consciousness. Don't push your luck.

Maintain proper buoyancy and trim.

Buoyancy and trim are inextricably linked- when you're not in balance, one will compensate for the other. If you have poor buoyancy, then you will subconsciously change your trim to maintain your depth. If you have poor trim, then you will subconsciously change your buoyancy to maintain your depth.

What happens when you stop kicking? No cheating with your hands- keep your thumbs tucked in your weight belt. Do you sink, rise, or stay at the same depth? If it's either of the first two choices, then your buoyancy and trim are both wrong, forcing you to fin more frequently than you need to. Try staying still for a change and see what happens.

First of all, you should be able to stop finning and maintain your depth *indefinitely*, and if you can't do this, then you need to work on it until you can. Hover or Hoover- your choice.

Next, you must learn to direct your fin thrust directly behind you instead of slightly above or below, and this goes for whatever fin kick you're doing. This takes practice, especially since we naturally drop our feet as we lift our eyes to see what's ahead of us. This causes most of us to end up a little negative, and we waste kicking effort to keep from sinking.

Use frog kick.

If you change only *one* thing in your diving to make yourself a better breather, this is it. Frog kick is usually taught as a way to decrease silting near sensitive areas, but it has the added benefit of being a constant check of buoyancy and trim. Kick and glide. Kick and glide. Kick and glide. Every kick cycle is a chance to see if you are rising, sinking, or neutral, and you will instinctually add to or dump from your BC to maintain an efficient trim.

"But isn't frog kick less effective than flutter kick?" you might ask. If cave divers wearing doubles and stages can frog kick into the flow of a spring, then it will provide plenty of thrust for the majority of your diving. In fact, once perfecting the frog kick, many divers don't go back to flutter kick at all.

Slowwwww downwwwwwn.

Instead of being a human eggbeater, make an effort to disturb the water as little as possible. Move like you're in Jell-O. Wrecks are already sunk and reefs don't have legs, so there's no need to dive like a bumblebee zipping all over the place trying to see everything before it goes away. Make an effort to spend more time hovering to look around instead of constantly swimming.

Stay shallow.

You don't need to be constantly two feet from the coral or wreck to see it, and a birds-eye view can help you take in more at a time. That way, you can see what's really worth getting close to.

By staying as shallow as possible, you breathe from your tanks at a lower pressure. This conserves your gas supply even if you have made no other changes to reduce your breathing rate.

For the next few dives, try to stay just *five feet* shallower than you would otherwise dive and see if you can tell a difference. Then try ten feet. You might be surprised at how much more you get out of each dive.

Reduce changes in depth.

Every time you change depth, you must either add gas to or dump gas from your BC. Plan your path through the water a few moves ahead to maintain as constant a depth as possible.

Lose weight...

...from your weight belt. Extra weight (or extra gear, for that matter) forces you to work harder against your inertia when making changes in direction or speed. You must also inflate your BC more to become neutral, and this increases drag while swimming.

Once you learn to hover without finning, be sure to reevaluate your weighting. You might find that you don't need as much weight as you once thought (though the reverse is certainly possible).

Drill your skills.

Practice what you already know until it's second nature. This goes along with diving lots. Get your gear and meet your buddy for a pool dive. Practice mask clearing, hovering, helicopter turns, and out-of-air drills.

You don't even need a tank and BC to improve your dive skills. Read "Pool Exercises for Developing Water Comfort" at DIVEFITNESS.COM to get some ideas for stuff you can do in a pool with a buddy and mask, fins, and snorkel.