



A Diver's Guide to North Carolina Weather

During the summer months, our typical weather pattern is very similar to the tropics- hot and sunny in the morning with scattered showers or thunderstorms in the afternoon. Sometimes, we'll enjoy a ridge of high pressure that drops the humidity and eliminates the rain chances but, though rare, we might get a few days in a row of overcast skies and rain. When we get hurricanes, they typically occur in late September, with the threat diminishing towards the middle of October. These are few and far between, however (barring 2005 and there's no need to revisit that year), and should have little impact on your travel plans. What affects our diving conditions most is wind.

North Carolina, similar to the entire east coast...or any coast for that matter...has its issues with wind. The magic of an island, of course, is that, at any given point, there is a windward side and a leeward side. That means that depending on which way the wind is blowing, it's bound to be calm enough to dive somewhere. Not the case with a coastline. In the summer, the prevailing winds in North Carolina come out of the southwest, offshore, so there is no protection offered by land. So, when the wind blows hard, the seas get rough.

There is, however, a distinction between "wind chop" and "swell". Wind chop is a sea condition categorized by lots of waves, very close together that have, as the boat captains say, "no back on them" - meaning they're like miniature ski-jumps where the boat goes up one side then comes crashing down on the other side, as opposed to gently riding over them as it would a "swell". Wind chop can start or stop rather suddenly and is, as its name implies, completely dependent on how hard the wind is blowing. "Swell", on the other hand, refers to big, wide rollers that have a lot of space in between them. Swell is generally caused by offshore storms and doesn't fluctuate as quickly as chop. While swell can have an impact on visibility and current, it's typically not a problem for topside conditions unless compounded by wind chop. In other words, a 4-foot swell is not an issue, but a 4 foot chop can be downright uncomfortable, and, the two together? Forget about it.

So how rough IS "rough"? Your perception will vary according to what you're used to, but here are some guidelines. 1-2 foot seas produce calm, lake-like conditions. 2-3 foot seas make for a pretty good day on the water, though it is a tad bumpy. A solid 3 foot is doable not miserable, where 4 foot is doable but

probably miserable. 5 foot is no fun at all and if you are in 5-foot seas, you're probably on your way back to the dock. Anything 6 feet or over, if you left the dock at all (which is unlikely), there is little chance you're getting in the water. On average, during the summer, 10% of all days are "blown out", not diveable. The most common condition is a 2-3 foot sea, which comprises about 50% of all dive days in NC. The remaining 40% is evenly split between the marginally miserable, miserable, and positively perfect. A good rule of thumb- the actual size of a wave is two-thirds the size you think it is. What you think are 3s are really 2s, 6s are 4s, 8s are 5s, etc. (This caveat is included to save you the embarrassment of claiming you went diving in 8 foot seas to those who know better. Right now, there are absolutely folks saying out loud to themselves or to those around them, "Pfffft. I was too out in 8 foot seas!!")

But, what winds produce what seas, you ask? Out of the southwest, winds exceeding 15 knots will create sea conditions that over a few hours, build to the point of being un-diveable, If you're reading NOAA's Marine Forecast, and you see words like "light and variable" or "winds 5 to 10 knots", you're in for a fabulous, "dead slick calm" day on the water. Another common forecast is "SW winds 10-15 knots", which is a lot like a "50% chance of rain" in that it sounds like you're being provided with information, but actually, you know nothing. When you start to see "SW winds 15-20 knots", your chances of an Aquarium or museum visit are rising, though if the boat departs early enough, you might be OK. Anything over 20 knots, go have a nice breakfast, then buy a kite. Although, you're sure to be disappointed, we promise you that you'll be infinitely happier on land than you would be on a boat.

