



# tideline newsletter tideline aquatics

## Tideline Aquatics New Store Hours

<b>Monday</b>	<b>Closed</b>
Tuesday-Friday	11am-7pm
Saturday	10am-6pm
Sunday	12pm-5pm

## WHY DOES THE pH OF MY WATER DROP?

The most common water quality issue we deal with daily from customers is not ammonia, nitrite or nitrate, it is actually low pH issues. This common problem is so simple to correct it is just that many customers focus on fixing pH instead of fixing actual problem causing the low pH – low carbonate hardness (KH or alkalinity). We mainly use the measurement of carbonate hardness (KH) at Tideline Aquatics so that is what we will use in discussion in this article.

In simple terms, the KH is the waters ability to stabilize and hold pH. There are so many pH correcting products on the market but unfortunately most do not do anything more than raise the pH while leaving the KH of the water low. This results in the pH falling back down within days since the low KH issue was not addressed with the product used. This is why anytime you have a low pH in your aquarium or pond water you should also test the carbonate hardness (KH). In nearly every case you will find that the KH of the water is low. If you use a product that raises the KH to the proper level, the pH will rise to a normal level within a 24 hour period and remain stable. Organics in the water

(these are acidic in nature) will slowly begin to lower the KH over time. This is why you must add a carbonate hardness (KH) buffer on a regular basis to keep the pH of the water stable.



Charleston tap water has a KH of only 1!! This low KH is quickly degraded and this is why so often customers find that the pH of the water has dropped so rapidly. We suggest adding not only your regular water conditioner (like Aqualife Complete) but also add a buffer that raises the KH of the water also. By increasing the KH of the tap water to 3 or 4 degrees, your freshwater aquarium or pond will maintain a stable pH of 7.2-7.5 which most aquarium species will thrive in. In addition, we also suggest using a small amount of “coral rubble” in a nylon bag added to a high flow area of your filtration system. As our soft aquarium water flows through the bag of coral rubble, it will erode this material that has a natural pH and KH increasing ability thus stabilizing the aquarium water. Regular testing will let you know when this coral rubble needs to be rinsed out thoroughly or replaced.

In aquariums that use reverse osmosis water or distilled water KH is also of big concern. Either of these waters has a KH of zero! If you are topping off your reef or planted aquarium with this type of water, it is extremely important that you add a KH buffer to this water prior to adding it to your aquarium. In reef aquariums, we suggest maintaining the KH of the water at 10-12 degrees. Regular additions of a KH buffer based on your water test analysis will stabilize the pH of the water and maintain the proper KH level.



There are certain circumstances where the water has the proper KH level yet the pH of the water still remains low. The most common cause of this is poor oxygen levels in the water or high organic levels in the water. If you find your aquarium to have this problem, add a small airstone driven by a simple air pump to the aquarium water for 24 hours. Then test the pH of the water. If it has risen to a normal level you will know it is from low oxygen levels. Increase the water's surface agitation to permanently fix this low oxygen level. If this did not correct the low pH, then you likely have high levels of organics in the water. Perform several 25% partial water changes over a week long period (with water that has been buffered to the correct KH level) and change out the activated carbon. In nearly every instance, this will stabilize the pH of your water.

So in short, never base buffer additions on just the pH level of the water. You should be testing both pH and KH instead. Also remember that the buffer you add to increase the pH must also adjust the KH. Also avoid buffers that contain

phosphates. This is especially true in reef aquariums and planted aquariums. Phosphate based buffers will cause massive algae blooms and are toxic to most reef organisms. If ever in doubt, visit the store for the correct products to keep your aquarium water stable and safe for your fish and invertebrates.

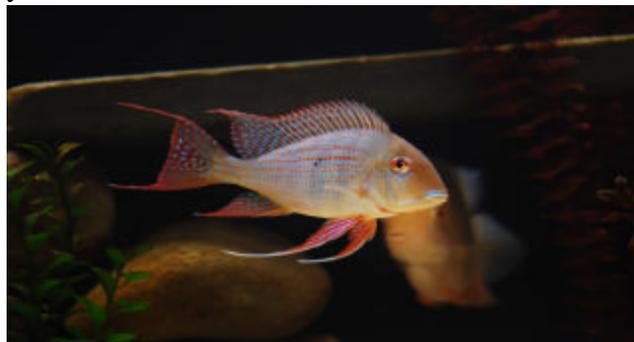


PHOTO BY ALLAN TEMPLETON

## **NEW WILD TOE CORAL FOOD!! AN ODD NAME FOR A COOL NEW PRODUCT!**



This cool new refrigerated coral food contains phytoplankton, artemia, prawn eggs, fish eggs, clam and oyster larvae and zooplankton. Just remove the cap, turn off your pumps, insert the bottle (spout down) over the coral and gently squeeze the food over the coral tissue. This direct feeding ensures that each coral gets its fill. Then put the bottle back into the refrigerator until the next feeding!!

**NOW IS AN EXCELLENT TIME TO VISIT TIDELINE AQUATICS. WE ARE LOADED WITH AMAZING LIVE CORALS, FABULOUS AQUA-CULTURED LIVE ROCK, MASSIVE NUMBERS OF REEF SCAVENGERS AND ALGAE EATERS, WONDERFUL FRESHWATER FISH, POND FISH AND WATER LILIES!**

**WE WILL BE CLOSED SUN, JULY 4TH**