

August 14, 2007



tideline aquatics Newsletter

Tideline Aquatics Store Hours

Monday – Friday 11am-7pm

Saturday 10am-6pm

Sundays 1pm-5pm

PREPARING WATER FOR PARTIAL WATER CHANGES

Every aquarium should receive at least a 25% partial water change each and every month. Partial water changes remove accumulated organics and replenish electrolytes and elements utilized by the organisms. Water that evaporates from the aquarium DOES NOT account for a partial water change. Only water evaporates, all else remains in your aquarium water! When performing a partial water change, one should also use an aquarium substrate vacuum while removing the water. The vacuum turns the substrate while sucking out fish waste and other pollutants trapped within the gravel or sand.



HAGEN AQUARIUM GRAVEL VACCUM

That said, proper water preparation is a must. Often we hear customers say that every time they do a partial water change, they lose some of their fish or other organisms. This WILL NOT happen if you do things correctly. If you do not purchase

your water, then you should start by filling an aquarium safe container (not the car washing bucket) with tap water or reverse osmosis water that you will use for the aquarium water change. If you are using tap water, you will want to treat it with a water conditioner that removes ammonia, chlorine and chloramines. We suggest always double dosing the water conditioner, as the recommended dose is often not enough to remove the amount of ammonia we have in our tap water (it varies weekly).



QUALITY WATER CONDITIONERS

If using reverse osmosis water for a freshwater aquarium, you will also need to add an electrolyte replacement product and a pH/KH buffer to the water (reverse osmosis water is too stripped to use directly in the freshwater aquarium). For a saltwater aquarium, once the tap water is treated properly, you should then mix in the salt until the salinity matches that of the aquarium. Never mix salt directly in the tank!! If using reverse osmosis water for your saltwater aquarium, you can immediately mix in the correct amount of salt to match the salinity in your aquarium. Check the salinity two or three times to ensure your hydrometer is reading correctly (free of bubbles that may give you an incorrect reading). Any mixed saltwater should be aerated with an airstone at least 1 hour after getting the salinity correct. Treated freshwater that has to sit more than an hour should also be aerated. At the point, whether for a freshwater or a saltwater aquarium, the new water should be

tested for pH, ammonia, nitrite and carbonate hardness (KH). The reason you test the water is to ensure that the parameters are close to the water parameters in the aquarium. If needed, adjust the water parameters to closely match that of the existing aquarium water (unless your aquarium has poor water quality, then ensure the new water has acceptable testing levels). Lastly, check the temperature of the new water. It should be within two degrees of the aquarium water temperature. If the water is too warm, simply float some ice sealed in a bag (never add ice directly to the water) into the new water stirring until the temperature is correct. If the water is too cool, you can place your containers in some hot water in the bath tub or simply warm a portion of it in the microwave and add it back to warm up the water in the container. It is important for the water temperature to be within two degrees of the aquarium water!

Now that you have your new water ready, wipe down the inside of the aquarium glass. Now unplug your aquarium heater and filtration system and begin vacuuming your gravel or sand. Move decorations to the side and vacuum under them. If you have a reef aquarium, vacuum the areas of the sand bed that are accessible. In a live plant aquarium, vacuum the substrate in areas where the plants will not have to be moved. Remove all of the water you intend to remove before you add the new water back to the aquarium. Once you have refilled the tank, remember to plug back in the heater and filtration components. Ensure that your filters are running properly. To prevent a possible disruption in your biological filter, filter cartridges, canister filters, sponges, phosphate removers activated carbon and/or filter pads should be serviced the week AFTER the partial water change. Too much cleaning at one time could lead to a rise in ammonia and/or nitrite levels so waiting one week will prevent this from occurring.

We mentioned that the minimum water change is 25% per month. Heavily stocked aquariums, aquariums with limited filtration or aquariums that are fed heavily will require more frequent partial water changes. Monthly testing of NITRATE (not nitrite) levels will let you know if you are performing your water changes

frequently enough. Reef aquarium nitrate levels should be less than 10ppm. Live plant aquarium nitrate levels should be less than 10ppm. Fish only freshwater and saltwater aquarium nitrate levels should be less than 50ppm. Garden pond nitrate levels are best if kept below 50ppm also.



TEST NITRATES (NOT NITRITES) TO SEE IF YOU ARE DOING PARTIAL WATER CHANGES FREQUENTLY ENOUGH

THE MUDSKIPPER TANK!

Is it a frog? A worm? An eel? Does it live on land or in water? Well, it is just a combo fish, actually a goby, the Mudskipper (*Periophthalmus* species). Mudskippers are found in nearly every tropical climate from Africa to Australia. The size of these fish varies from species to species though the care is quite similar.



MUDSKIPPER JUST HANGING OUT CHILLIN'

Mudskippers tend to live at or just above the water line. They cannot be kept in an aquarium filled with water. Mudskippers are territorial so if your aquarium is less than 48" long, it is best to keep only one in the tank. The water levels should be about 4"-6" deep with multiple "islands" where the mudskipper can climb out and bask. This can be driftwood, lace rock, shale or slate but we suggest not piling up gravel or sand this deep as it can be foul from lack of circulation within. Mudskippers like warm water, about 78-82 degrees with a pH of 7.0-8.0.

Though they can tolerate elevated levels of ammonia and nitrite, by adding a biological submersible filter the water quality will remain acceptable. Mudskippers come from tidal swamps where salt levels vary day to day. The addition of marine salt is a must. Salt levels should vary from 1.005-1.010 though changes in salinity should always be gradual. These cool fish like it humid in the aquarium. This can be achieved by using a loosely fitting glass top. By keeping the backstrip off the glass tops, the air within the enclosure will remain of good quality. If you use gravel or sand on the bottom, we suggest keeping it no more than ½” deep. When performing partial water changes, the aquarium can be temporarily filled about ¾ of the way full and then vacuumed back down to the normal depth.

one if we are out of stock. Once the mudskippers arrive to our store, we suggest you let us hold it for about 7 days to ensure they are eating well and have healed up from the damage they often sustain during shipping.



A FACE YOU JUST CANNOT FORGET!



A HAND-TAMED MUDSKIPPER

Feeding mudskippers is the fun part! Mudskippers love fiddler crabs, crayfish and even earthworms. Being a wild-collected fish, they will require live foods at first but as time goes on, they quickly become tame enough to even take thawed frozen foods like shrimp, krill, clam, etc directly from your fingers! So get out and find that aquarium you have stashed in the garage or attic and consider setting up a Mudskipper tank. This is one of those creatures you grow to love even though it looks like some mixed up genetic mistake! Most mudskipper species available to our hobby reach a maximum size of about 6” and are imported from Africa. If you are interested in one of these cool guys, just let us know and we will gladly special order you

NOW IN STOCK – ON OUR COUPONS THIS WEEK!!



PURA NitrateLock Filter Media

Finally, a NITRATE removing resin that works in both saltwater and freshwater aquariums. Using selective ion exchange resins that target nitrate, NitrateLock rapidly removes nitrates from aquarium water. This product can be recharged and reused multiple times by simply soaking it in a brine solution. Available in two sizes: 500ml for treating 50 gallons, 1L for treating 100 gallons.

REEF CLUB MEETING AT TIDELINE THIS SATURDAY!

The Charleston Reefer’s Club monthly meeting is being held at Tideline Aquatics this Saturday night at 7:00pm. You do not have to be a member to attend! Mrs. Cam from **The Spa of**

Charleston on Wappoo Road is supplying the food. The talk will be on Advanced Reef Keeping. As always during their meetings, there is plenty of open discussion about reef husbandry and reef organisms after the main talk. Tideline Aquatics is proud to have them use our facility for their meetings when asked to do so! **There are also a couple of surprises for this meeting!** Please try and attend. We ask that you just bring a folding chair or stool for sitting. Since the store is closed, we ask that you park behind the store and enter through the back door. The meeting starts at 7:00pm and please attend!



LOCAL CLUBS / ORGANIZATIONS/FORUMS

Have a reef aquarium? Check out our local reef club at: www.charlestonreefers.org

Love water gardens and koi? Visit the Charleston Showa Koi Club website at: www.charlestonshowakoiclub.org

Saltwater fish aquarium club – CMAC www.columbiamac.org

Question and Answer Forum – www.wetwebmedia.com

Fish of the Week



CARIBBEAN NEON GOBY(*Gobiosoma oceanops*)

Unlike the commonly sold cleaner wrasse (*Labroides* species) that ALWAYS dies, the

Caribbean Neon Cleaner Goby is one of the hardest of marine fish even being regularly bred in captivity.



CLEANER WRASSES DO NOT LIVE IN CAPTIVITY!!

Tideline Aquatics does not sell and will never sell cleaner wrasses or other species that have no chance for survival in captivity. The Caribbean Neon Goby darts about the tank landing here and there all day long. Fish even approach this fish to be cleaned. The goby will crawl on the skin of the fish and appear to be picking off dead skin and other irritants (hopefully not parasites in your aquarium). Neon gobies will accept all fish foods from flakes to frozen. Be sure that you have nothing in your aquarium that will eat these small 2” long gobies like lionfish, triggerfish or eels. Marine Angelfish, Tangs (Surgeonfish), small Wrasses, other Gobies, Blennies and the like all make excellent tank mates with the Neon Cleaner Goby. This is just one of the specials this week at Tideline Aquatics. Print off the coupon at: www.tidelineaquatics.net

What’s New At Tideline

FEEDERS (SEE BELOW!)

Feeder Crayfish, Feeder Fiddler Crabs, Feeder Guppies, Feeder Rosy Redds, Feeder Goldfish are all in stock. Feeder Ghost Shrimp are running low so if you need them, come in right away! – Live Black Worms are plentiful.

FRESHWATER FISH (NOW IN STOCK)

Beautiful Lyretail Marigold Swordtails, Standard Marigold Wag Swordtails, Super Colorful Fancy

Dwarf Gouramis, Tiger Oscars, New Lemon Yellow Oscars (**not dyed**), Medium Common Plecostomus, M/L Common Plecostomus, New Brightly Colored Golden Rainbow Sharks (**not dyed!**), Large Figure Eight Pufferfish, Large Green Spotted Pufferfish (limited quantity), Tank Bred Cardinal Tetras (SUPER NICE THIS TIME AROUND), Electric Blue Crayfish (many of you have been waiting), Dwarf African Frogs, plus all the goodies you expect from Tideline Aquatics.

ARRIVED RECENTLY:

Large Angelfish, German Blue Rams, Rosy Tetras, Medium and Large Green Terror Cichlids, Pike Cichlid, Firemouth Cichlids, Jaguar Cichlids, Colorful Mixed Platies, Super Nice Dalmation Mollies, Assorted Mbuna African Cichlids, NEW! Synodontis valentiana Catfish, 2.5" Clown Loaches, Nice Sized Bala Sharks, Tank Bred Dolphin Whale Morymirids, Florida Bred Large Neon Tetras, Bright Orange Bumble Bee Japonica Shrimp, Pseudotropheus demasoni Cichlids (intense color and mean), Synodontis angelicus Catfish, Synodontis brichardi Catfish, Synodontis flavitaeniatus Catfish, Synodontis schoutedeni Catfish, Eretmodus cyanostictus 'Makombe' Goby Cichlids, Lamprologus tetrocephalus Cichlids, Phyllonemus typus Mustache Catfish, Apistogramma cacatuoides 'Double Red' Dwarf Cichlids, Apistogramma agassizi 'Double Red' Dwarf Cichlids & False Zebra Plecostomus, Monster Silver Arowana, XL Leporinus, XL Angelfish and more!

LIVE AQUARIUM PLANTS (NOW IN STOCK):

Red Tiger Lotus, New Bacopa Australis, XL Amazon Swords, Dwarf Sagittaria, Ozelot Sword Plants, Java Lace Fern, Java Moss on Driftwood, Riccia on Driftwood, Watersprite, Aponogeton ulvaceous, Red Nesea, Anubias Gigantea, Indian Red Sword Plant, Rotala Indica Bunches, Small Amazon Sword Plants, New Monosolenium Bunches, Rotala Magenta Bunches, Dwarf Hairgrass, New Ludwigia Cuba (very nice), Hygrophylia difformis (Wisteria) Bunches, Italian Vallesneria Plants, Potamogeton Gayi Bunches, Ludwigia Peruensis Bunches, Lobelia Cardinalis Plants (potted), Nesea Bunches, Clumps of Red Wendtii Cryptocorynes.

GOLDFISH, KOI AND POND PLANTS (NOW FULLY STOCKED):

Small Blue Shusui Butterfly Koi (super nice!), Small Domestic Koi Assortment, Medium Assorted Domestic Pond Koi, Jumbo Japanese Koi, XXL Domestic Koi, Awesome Sarasa Veiltail Pond Comets (ready Friday), Medium Standard Butterfly Koi (limited), Assorted Small Chinese Goldfish, M/L Red & White Ryukin Chinese Goldfish, Medium Red Ryukin Chinese Goldfish, Large Assorted Chinese Oranda Goldfish, Floating Island Plants, Hornwort, Super Quality Hardy and Tropical Water Lilies (running low), Tons of Bog Plants, Blooming Lotus Plants, Water Poppies, Nymphoides geminata and more!

SALTWATER FISH (NOW IN STOCK):

Fiji Coral Beauty Angelfish, Indian Ocean Koran Angelfish, Indian Ocean Annularis Angelfish, Bali Flagfin Angelfish, Hawaiian Flame Angelfish, Hawaiian Yellow Tangs, Bali Mimic Tangs, Indian Ocean Clown Tangs, Fiji Orange Shoulder Tangs, African Powder Blue Tangs, Hawaiian Yellow Eye Kole Tangs, Indian Ocean Kleini Butterflyfish, Indian Ocean Black and White Heniochus Butterflyfish, Cortez Passer Angelfish, Indian Ocean Humu Triggerfish, Niger Triggerfish, Indian Ocean Bursa Triggerfish, Hawaiian Blue Jaw Triggerfish, Indian Ocean Dogface Pufferfish, Bali Valentini Pufferfish, XL Caribbean Porcupine Pufferfish, Indian Ocean Clown Gobies, Caribbean Neon Gobies, Bali Yashia Gobies, Cebu Starry Aglae Blennies, Coral Sea Maroon Clownfish, Indian Ocean Red Tomato Clownfish, Indian Ocean Snowflake Moray Eels, Indian Ocean Panther Groupers, Fiji Orangetail Blue Spotted Sharpnose Pufferfish, Fiji Glass Cardinalfish, Indian Ocean Tiger Jawfish, Indian Ocean Peacock Flounders and much more!

SALTWATER INVERTEBRATES (NOW IN STOCK!):

Brightly Colored Bubble Anemones, Sri Lanka Cleaner Shrimp, Super Color Cultured Acroporas from Fiji, Sri Lanka Tiger Pistol Shrimp, Fiji Premium Live Rock (200lbs), Blueleg Reef Hermits, Scarlet Reef Hermits, Florida Condylactus Anemones, Flowering Rock Anemones, Sally Lite Foot Crabs, Sponge Crabs,

Atlantic Turbin Snails, Cortez Redtip Reef Hermits, Red Fire Shrimp, Margarita Snails, Large Tonga Nassarius Snails, Mexican Turbo Grazers, Nice Selection of Indonesian Mushroom Rocks, A Super Selection of Nano Corals (only \$19.99 EACH – includes Frogspawns, Torches, Hammers and more), Red Chili Soft Corals, Pumping Pom Pom Xenia, Bisma Worm Rocks, Green Zoanthid Rocks, Ball Porites Corals, Green Bubble Coral, Favia Brain Corals, Metallic Trachyphyllia Corals, Candy Caulestrea Corals, Super Color Cultured Acropora Corals, Common Sebae Anemones, Frogspawn Corals, Gold Torch Corals, Green Torch Corals, Green Hammer Corals, Indo Finger Leather Corals, Bright Green Wellsophyllia Coral.