



April 10, 2007

# tideline aquatics Newsletter

## Tideline Aquatics Store Hours

Monday – Friday 11am-7pm  
Saturday 10am-6pm  
Sundays 1pm-5pm

## GOOD CHOICES FOR SMALL 'NANO' REEFS

With small reef aquariums, referred to as Nano Reefs, becoming more and more popular, this week we will discuss some of our suggestions for fish and coral additions to these aquariums.

Live corals are often mistaken for plants when actually they are animals. With competition for space on the reef in the wild, many coral species have developed means to discourage the growth of other corals species. With limited area in a nano reef available, these more aggressive corals may not be the best choice unless you are dedicating the aquarium to house only that particular species. Coral choices can depend on your aquariums lighting, water flow, water temperature and YOUR dedication to the needs of more delicate coral species. The corals we will cover in this newsletter are the more hardy varieties. Demanding coral species like Acropora, Montipora and other SPS species should be maintained by the more experienced reef aquarist. Most nano reef aquariums that are available will require modifications in the lighting, water flow

and filtration in order to support these more delicate corals.

Zoanthids:



Often sold as polyp rocks or zoo rocks, these encrusting creatures are extremely hardy. These animals tolerate higher organic levels in the aquarium and are hardy even under some of the poorest of lighting systems though their color and growth rate will be reduced under these less desirable conditions. These animals come in a variety of colors and sizes many of which can be housed together. By collecting small colonies of different colors and placing them in different areas of the live rock, zoanthids will quickly multiply and cover entire rocks. Direct feeding of the colonies will produce even faster growth. If you control how much space the zoanthids can take, you can combine other hardy choices like mushroom rocks, leather corals, and even some of the hardier stony corals like trachyphyllia and lobophyllia species.

### Mushroom Rocks:



Also hardy and quite prolific, mushroom rocks can be found in many color variations. The more common blue mushrooms multiply quickly while others like the Yumu mushrooms are the complete opposite. Mushrooms are an ideal choice for the nano reef aquarium. They prefer lower water flow, accept temperature variations quite well and survive even under lower light conditions. If their numbers grow too large, they can easily be cut from the group and given to friends where they will quickly attach to rocks and begin a new colony. We suggest keeping mushroom rocks low in the aquarium. This can control how much space these animals can utilize allowing room for other organisms in the upper reef.

### Hardy Leather Corals:



Soft coral choices like leather corals make excellent additions. Though these corals grow large with time, they are easily pruned by simply cutting back the coral

tissue using a sharp blade. Cuttings can be given to friends or attached to rock and traded with other reef keepers. Purchase small sized leather corals and place them in the tank between colonies of mushrooms and/or zoanthids. In most cases, these corals tend to live peacefully together. In the event that a group is being stung, trim away the aggressor to make more space between the two competitors.



Hardy leathers include the Toadstool Leather (*Sarcophyton*), available in brown and green color, the Tree Leather (*Sinularia*), available in green, brown and gold color, the Devils Hand Leather (*Lobophytum*), available in brown, green and yellow color, and the Finger Leather (*Cladiella*). The *Cladiella* species can be more aggressive. It will require an area that it can dominate to prevent stinging of surrounding corals.

### Trachyphyllia and Lobophyllia Corals:



When purchased at a small size, either of these corals will perform well in the nano reef aquarium providing that it contains power compact lighting or better. There are a variety of color variations available with these corals and they tend to not be too territorial. The only negative for the nano reef is that these corals do grow quite quickly. With time, the coral will need to be moved into a larger aquarium as they are not easily fragmented as with leather corals, zoanthid polyp colonies and mushroom colonies. These corals can be easily damaged by more aggressive species meaning you will need to keep spreading varieties from encroaching near them.

#### Blastomussa Corals:



Though expensive, Blastomussa corals are well worth the money. In a properly maintained reef, these corals form large colonies that are available in many color variations. Blastomussa enjoy regular direct feeding. This will speed up their growth and multiplication rate.

Combining these corals with leather coral varieties is usually safe providing that the different species are not touching each other. The branching variety, Blastomussa merletti, is easily divided. Each coral head grows on an individual tube-shaped skeleton that grow in close colonies. By separating the skeleton groups, dividing the colony is simple.

#### Caulastrea Corals:



Sold under the common name, Candy Coral, this hardy stony species is a good candidate for the nano reef. There are many variations of this coral available, all of which are hardy. This stony coral multiplies by either the heads dividing or branching buds from the sides of existing heads. If the colony becomes too large, simply break the branching coral skeleton and separate the group.

#### Sexy Shrimp (*Thor amboinensis*) and Bumble Bee Shrimp (*Gnathophyllum americanum*):



Reaching barely ½” in length, both of these shrimp stay small enough to live out their lives in a nano reef. Accepting all types of prepared foods, these shrimp make good scavengers for uneaten food used for feeding the fish and corals. These shrimp are easily seen during the daylight hours though they will move throughout the reef rock.

#### Small Gobies:

The following gobies make excellent fish for nano reefs. They remain small in size and tend to live happily with one another.

Like all reef aquariums, the number of fish should remain low. Remember that the more you are required to feed the tank, the more organics will accumulate in the water. These organics can lead to problem algae that can destroy the beauty of your reef aquarium.



Blue Neon Goby (*Gobiosoma oceanops*)



Trimma Goby (*Trimma* sp.)



Firefish Goby (*Nemateleotris magnifica*)



Citron Goby (*Gobiodon citrinum*)

Nano reefs contain only a small amount of sea water. Due to the small volume of water, changes in conditions can occur

quickly. A simple overfeeding or the death of even a small organism can cause major problems with water quality that may not even be noticed in larger reef aquariums. Live corals and marine fish require a stable environment as they are not able to adapt well to adverse conditions. Regular weekly partial water changes, daily top off from evaporation and strict feeding habits will ensure that your nano reef is successful.

### HIGHLIGHTS THIS WEEK:

Japanese Koi from Sakai of Hiroshima

Hardy and Tropical Water Lilies

Pond Bog Plants and Oxygenators

Huge Selection of Local Bred Angelfish

Live Corals – Some of our best ever!

### **LOCAL CLUBS / ORGANIZATIONS**

Have a reef aquarium? Check out our local reef club at: [www.charlestonreefers.org](http://www.charlestonreefers.org)

Love water gardens and koi? Visit the Charleston Showa Koi Club website at:

[www.charlestonshowakoiclub.org](http://www.charlestonshowakoiclub.org)

Aquarium Forums – [www.wetwebmedia.com](http://www.wetwebmedia.com)

Saltwater Fish Aquarium Club – Visit CMAC's website at: [www.columbiamac.org](http://www.columbiamac.org)

Steven Pro will be in Columbia visiting CMAC on Saturday April 14. He will be visiting the LFS here [Columbia] before heading off to Riverbanks Zoo to do a presentation on "Moving Beyond Anecdote: Simple Experiments for the Hobbyist". We will meet outside gate 8 at 6:30 and enter as one large group at 6:45. Steven's presentation will begin at 7:15. For those who do not know Steven. He has written numerous articles in both print Aquarium magazines and in online forums such as Wet Web Media. He is a regular speaker to clubs throughout the US and speaks annually at MACNA and IMAC. He serves on the Board of Directors for the Pittsburg Marine Club which is hosting MACNA this year. He owns an Aquarium maintenance company. He is currently building a greenhouse to grow corals. We will have a

raffle after Steven's presentation with the grand prize being a Snapper External Pump donated by ReefFlo.

## Fish of the Week



VALENTINI PUFFER (CANTHIGASTER VALENTINI)

While most pufferfish are hardy, many grow too large for smaller aquariums. The sharpnose puffers, however, only reach about 4"-5" in length. These puffers tend to be quite peaceful but can hold their own with smaller triggerfish and wrasses as well. These puffers prefer a mixed diet of chopped frozen foods, pelletized marine foods, dried marine algae and spirulina flakes. Like other pufferfish, the Valentini puffer is not reef safe. This is just one of the coupon specials this week at: [www.tidelineaquatics.net](http://www.tidelineaquatics.net)

## What's New This Week

### **FEEDERS: (NOW IN STOCK)**

Live Black Worms, Rosy Reds, Guppies, Feeder Comets, Feeder Crayfish and Feeder Fiddler Crabs are all in stock!

### **FRESHWATER FISH (ARRIVED ON TUESDAY AFTERNOON):**

Sunburst Mickey Mouse Platies, Red Tuxedo Platies, Assorted Color Male Bettas, Dwarf Rainbow Gourami Pairs, Pearl Leeri Gouramis, Zebra Danios, Red Millennium Rainbowfish, Blue & Gold Bosemani Rainbowfish, Super Nice

Neon Praecox Rainbowfish, Large Threadfin Rainbowfish, Beautiful Marci Rainbowfish, Blue Turquoise Rainbowfish, Longfin Rosy Barbs, Large Tiger Barbs, Albino Tiger Barbs, Medium Red Firemouth Cichlids, Jurupari Eartheater Cichlids, Green Terror Cichlids (awesome color), Texas Cichlids, Mixed Mystery Snails, False Tigrinis (Juruense) Shovelnose Cats, True Upside Down Catfish, Albino Cory Catfish, Clown Loaches, Dojo Weather Loaches, Gold Dojo Weather Loaches, Botia Batik Loaches (NEW!), M/L Fire Eels, Striped Peacock Eels, Medium Peacock Eels, Clown Knifefish, Elephant Nose (Africa), Large Florida Garfish, Bumble Bee Gobies, Green Spotted Pufferfish (Large), M/L Green Scatophagus, South American Stingrays, XL Tank Bred Cardinal Tetras, Black Skirt Tetras, Glolite Tetras, XL Neon Tetras, Red Serpae Tetras, White Cloud Mountain Minnows, Dwarf African Frogs, African Mudskippers (nice!), Algae Eating Japonica Shrimp, Freshwater Flounders.

### **LIVE AQUATIC AQUARIUM PLANTS (NOW IN STOCK):**

Potted Indian Red Sword Plants, Glossostigma Ground Cover Bunches, Bacopa Carolina Bunches, Red Foxtail Bunches, Giant Hygrophylia Bunches, Nice Corkscrew Vallesneria Plants, Red Narrow Leaf Ludwigia Bunches, Potamogeton Gayi Bunches, Water Wisteria Bunches, Medium Amazon Sword Plants, Oriental Sword Plants, Anubias Barteri Plants, Moss Balls, Water Sprite, Dwarf Sagittaria, Crinum Onion Plants, Aponogeton Ulvaceous Plants, Lucky Bamboo (for Beta Bowl use only), Mayaca Bunches, Red Tiger Lotus Plants, Rare Horemannii Sword Plants, Crypt. Spiralis Clumps, Aponogeton Boivinianus Plants.

### **SALTWATER FISH (ARRIVED ON TUESDAY):**

Fiji Red Lyretail Anthias (Males), Fiji Twinspot Coris Wrasses, Central Pacific Lemon Peel Angelfish, Eastern Asia Squareback Anthias, West Americas Barnacle Blennies, South Asia Ocellaris Clownfish, South Asia True Percula Clownfish, Eastern Asia Green Chromis, Eastern Asia Blue Damsel fish, Eastern Asia Yellowtail Blue Damsel fish, Eastern Asia Domino

Damselfish, Eastern Asia Fourstripe Damselfish, Eastern Asia Dragon Sifter Gobies (A cool new variety), South Asia Yellow Watchman Gobies, West Americas Flamehead Gobies, Central Pacific Flame Hawkfish, South Asia Diamond Sifter Gobies, Tank Bred Fridmani Pseudochromis, Eastern Asia Starry Dogface Pufferfish, Central Pacific Yellow Eye Tangs, Eastern Asia Blue Regal Tangs, Central Pacific Yellow Tangs, Central Pacific Humu Triggerfish, Eastern Asia Harlequin Tuskfish, Central Pacific Red Christmas Wrasses.

### **SALTWATER FISH (EXPECTED ON WEDNESDAY):**

True Solomon Island Dalmation Pufferfish, Australian Pumpkin Hogfish, Mexican Male Paddletfish Wrasses, Tonga Bundoon Blennies, Indian Ocean Yashia Gobies, Solomon Island Majestic (Navarchus) Angelfish, Cebu Starry Algae Blennies, Fiji Half Black Foxface Rabbitfish, Bali Eiblii Angelfish, Bali Coral Beauty Angelfish, Bali Half Black Angelfish, Indian Ocean Snowflake Moray Eels, Indian Ocean Rainfordi Gobies, Indian Ocean Valentini Pufferfish, Indian Ocean Niger Triggerfish, Kauderni Cardinalfish (these will be quarantined for 7 days before we release them to ensure they are healthy), Sumatra Ocellaris Clownfish, Sumatra True Percula Clownfish, Large Indian Ocean Tomato Clownfish, Indian Ocean Fuman chu Lionfish, Indian Ocean Dogface Pufferfish.

### **SALTWATER INVERTEBRATES (ARRIVED ON TUESDAY AFTERNOON):**

Sebae Malu Anemones, Long Tentacle Anemones, Fluorescent Horn Hynophora Corals, Green Cactus Pavona Corals, Yellow Porites Corals, Anemone Crabs, Assorted Seahares, Central Pacific Fluorescent Green Mushroom Rocks, Waving Thick Stem Xenia Corals, Eastern Asia Flower Ricordea Mushroom Rocks, XL Nassarius Snails, Zebra Turbo Snails, Bumble Bee Shrimp, Sexy Dancer Shrimp (minus one – the blue spotted jawfish swallowed it!), Red Skunk Cleaner Shrimp, Premium Fiji Live Rock.

### **SALTWATER INVERTEBRATES (EXPECTED ON WEDNESDAY):**

Purple Linkia Reef Starfish, Pink Seriatopora Birdnest Corals, Neon Fox Corals, Pink Stylophora Corals, Fire Red Lobophyllia Corals, Red Cynarina Meat Corals, Fancy Color Bubble Anemones, Aqua Cultured Fiji Ultra Acropora Corals, Neon Red Superman Montipora Corals, Bright Blue Millipora Corals, 3" Super Crocea Clams, Orange Linkia Reef Starfish, Tonga Branch Live Rock.

### **From Our Customer Photo Gallery:**



Colin King Lewis' tiny pistol shrimp

Please email your favorite aquarium photo to:  
[chris@tidelineaquatics.net](mailto:chris@tidelineaquatics.net)

We want to share your photos by placing them on our website for others to enjoy.