



April 16, 2008

tideline aquatics Newsletter

Tideline Aquatics Store Hours

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

TAKE A GOOD LOOK INSIDE YOUR AQUARIUM CABINETRY!

Okay, you keep your aquarium nice and clean, you do your partial water changes AND you test your aquarium water regularly. What about the inside of your cabinet stand and/or canopy? The inside of your cabinet stand and canopy remains humid due to the evaporation of water from the aquarium. These humid conditions are ideal for mildew growth. If you have a saltwater aquarium, then salt spray will build up on the interior walls of the cabinetry as well.



To prevent damage or even worse failure (this is especially true for particleboard cabinetry) to your aquarium cabinetry, clean all insider and outer areas of the cabinetry every 2 to 3 months. Diluted bleach in water (about 1 part bleach to 5 parts water) is an excellent cleanser for killing mildew while distilled water or reverse osmosis freshwater are excellent for removing salt spray. When using bleach, you must be careful to NOT come in contact with your aquarium water in any

way or death will be imminent for your fish! Remove the canopy and scrub all areas completely. If the stain has become damaged on the inside of the canopy, consider re-staining it and allowing it to air out for a few days before replacing it back on your tank. Avoid staining the inside of your aquarium cabinet though as the fumes may harm your aquatic inhabitants. While cleaning, check the condition of your power strip. If salt spray or moisture has built up, this could lead to a fire! Always mount your power strip up on the cabinet and wipe it down regularly (and carefully) to prevent a fire from occurring! If any signs of damage are found or if saltwater is spilled into the power strip, just replace it. We have found two power strips that were at the point of catching on fire in recent home aquarium servicing.



SALT SPRAY + ELECTRICITY = FIRE HAZZARD!

Now go check the inside of your aquarium cabinetry and see if it could use some TLC. A quick clean-up will not take long!

CONSIDERATIONS FOR A SUCCESSFUL GARDEN POND

Before we begin, let's talk about the difference between a garden pond and a koi pond. A true koi pond tends to be just that – a pond designed for growing koi. For this discussion, we will focus on a garden pond. These are ponds that include fish and plants that are designed to blend with the surrounding landscape. Where a true koi pond utilizes hi-tech expensive filtration, a garden pond with fish (not overcrowded) can be filtered more economically yet remain easy to care for. We have found the filtration components discussed here to be more than adequate for an average stocked garden pond. If you plan on crowding the pond with fish, more expensive filtration will be required.



First, pick out a good spot for your pond. Though you may find it beautiful under the canopy of large trees, this will become a maintenance nightmare with tree debris always clogging the filtration components. Instead, find a sunny area of the yard away from large trees. Pond plants require at least 6 hours of full sun per day to flower. Second, decide on a shape for your pond. For the filtration to work at its best, good circulation is prudent. The shape of your pond should allow adequate circulation from one end to the other end as well as in between. Round, kidney-shaped, square and rectangular shapes allow for good circulation. Now that you've marked out the shape of the pond it is time to make several smart decisions. The depth of your pond needs to be at least 24" though we suggest 30" or deeper with shallow areas for placing plants. The size of your pond should be determined by your budget!! A large pond with inadequate filtration will be nothing but trouble

for you and its inhabitants. Though the filtration components we will cover here are necessary for most ponds, the larger the pond, the larger the filtration components thus larger will be the cost.

The Pond Liner: First consider the cost of the pond liner. For durability, we suggest always using a 45mil EPDM rubber liner material. Firestone makes the best liner material on the market. Here is the formula for determining your liner size (measured all in feet):

$$\text{MAX LENGTH OF POND} + (2 \times \text{DEPTH}) + 2 = \text{LENGTH OF LINER}$$
$$\text{MAX DEPTH OF POND} + (2 \times \text{DEPTH}) + 2 = \text{WIDTH OF LINER}$$

Pond liner material comes in widths of 10', 15', 20' and 25'. If your width figure is less, then you will need to round up the number to one of these widths. Liner is priced per square foot. Just multiply the length of the liner and the width of the liner to determine the square foot figure.

$$\text{LENGTH OF LINER} \times \text{WIDTH OF LINER} = \text{SQUARE FOOT REQUIRED}$$

The Pond Skimmer: No pond should be without a skimmer. Like a swimming pool, the skimmer captures debris that lands on the water and traps it in a basket before it can settle on the bottom of your pond. Pond skimmers also house the water pump which prevents it from becoming clogged and damaging the water pump.

Macro filtration
traps large debris for
easy removal and
pump protection

UV filtration
eliminates green water
and improves water
quality (optional)



Skimmer filtration
removes up to 85% of
debris before it sinks

Bio-filtration
supports biological health
provides mechanical
filtration and polishes water

The skimmer should be placed at one end of the pond. The liner will eventually be attached to the face of the skimmer once a water level is determined. There are pond skimmers for small and large ponds. The skimmer will be your main mechanical filter. That is, it will trap the larger debris from your pond.

The Water Pump: The pond pump should be large enough to circulate the entire volume of

water at least once per hour though more is better in this case. Here we will talk about submersible water pumps as most garden ponds utilize these. Spend the money on a quality pond pump with a strong warranty. This water pump will be your main life support for your fish. You get what you pay for with submersible water pumps folks! The pond pump will run 24 hours a day meaning durability is a must! When plumbing the pond, use larger tubing or PVC to get the most volume from the water pump.



Choose a water pump that will pass debris through it and avoid pumps that can easily become clogged.

The Biological Filter – Like an aquarium, a pond requires a biological filter to be successful. These filters use a media that allows the growth of beneficial bacteria while being easy to clean off accumulated debris.



The size of your pond and the number of fish you plan to house will determine the size of the biological filter required. Do not cut corners on the biological filter size as it will keep ammonia and nitrite levels at zero if it is adequate for your pond. It should also include a mechanical filter pad to capture pond debris that escapes the skimmer.



The better biological filters will also have a means of back-flushing the unit in between cleanings. Back-flushing removes muck that becomes trapped in the biological media. Remember that once your pond becomes established, the biological media should never be cleaned with tap water. Use only treated tap water, well water or pond water.

The UV Clarifier – In Charleston, we have long sunny, hot summers that can bring pond water temperatures into the upper 80's. Warm water and sunshine equals green water! Nothing destroys the beauty of your pond more than green water.



Though it is generally harmless to your fish, pea soup green water looks terrible. By using a UV clarifier, the pond water will remain crystal clear year round. The size of the UV should be determined by not only the pond size but the flow rate of your water pump.



The means of which a UV works in killing free-floating algae cells is simple. The water pump

pushes water into the UV where the ultra-violet light zaps the algae cells and kills them. Usually, the addition of a UV will clear up a green pond within 3 days. The lamps in the unit may burn for years though it is only efficient at killing free-floating algae for just over 1 year. Yearly replacement of the UV lamp will always keep your pond water crystal clear.

Now, before you dig the first shovelful of dirt, figure out the size of the pond you think you want. Get a rough guesstimate of how many gallons of water your pond will hold by using this formula (measurements in feet):

LENGTH X WIDTH X DEPTH X 7.5 = NUMBER OF GALS.

From that figure, you can determine what size skimmer, water pump, UV clarifier and biological filter you will need to maintain the pond successfully. If the cost exceeds your budget, consider sizing down your pond to fit your budget while still using adequate filtration components. The success of a garden pond is always determined by the filtration!

JAPANESE KOI ARE HERE!!



The Japanese Koi shipment arrived last week and they are extraordinary!! This shipment has the best mix of koi varieties that we have ever received. These fish will be quarantined until May 12th. Why, you ask? We want to ensure that the fish are free of all parasites which requires a 5-7 day treatment period. After that regiment, we expose the new fish to healthy domestic koi to watch for KHV. Though the chance of these fish having KHV is extremely small, we still quarantine them so you can be confident the fish you are buying are healthy and KHV free. That said, beginning THIS Friday, you can pick out the fish you want to purchase, pay for them in full, and pick them up after the quarantine period has expired. We will hold your fish for you until they are ready to go home. If you choose to take

the fish home before the quarantine period has expired, you will be required to sign a waiver. This waiver says that you have chosen to take fish from our store before the quarantine period has expired and that you are solely responsible for the fish. That means no warranty, no exchanges and no liability to Tideline if something were to happen. Once again, **you will be responsible for your decision to take fish home before the quarantine period has expired.** See all of you koi folks on Friday! Japanese koi prices: \$39.99 EACH or 4/\$140.00

What's New At Tideline

FEEDERS (SEE BELOW!):

Feeder Goldfish, Feeder Rosey Redds, Feeder Guppies, Feeder Crayfish, Feeder Fiddler Crabs, Live Black Worms. Feeder Ghost Shrimp are still not available!! The supplier received a shipment that was in poor condition causing them to have no ghost shrimp to sell.

FRESHWATER FISH:

Livebearers – Dalmation Mollies, Silver Lyretail Mollies, Fancy Guppies, Assorted Color Platies.

Catfish/Loaches/Plecostomus – Gold/Green Corydoras Catfish, Albino Corydoras Catfish, Hoplosternum Catfish, Shovelnose Catfish, Cute Stone Catfish, Colombian Blackfin Shark Catfish, Botia striata Loaches, Small Clown Loaches (few), Otocinclus Dwarf Algae Eaters, Small Common Plecostomus, Tons of Fancy Plecostomus.

Brackish – Silver Scatophagus, Green Spotted Pufferfish, Bumble Bee Gobies, Archerfish, Mudskippers.

Tetras / Rasboras / Barbs / Danios – Bright Red Cherry Barbs, Rainbow Dace Minnows, Harlequin Rasboras, XL Rummynose Tetras, Diamond Bleeding Heart Tetras, Ember Tetras, Hummingbird Characins, Red Serpae Tetras, White Cloud Mountain Minnows, Golden White Clouds, XL Neon Tetras.

Gouramis / Bettas – Male Bettas, Female Bettas, Red Flame Dwarf Gouramis, Blue Neon Dwarf Gouramis, Opaline Gouramis, Platinum

Gouramis, Moonlight Gouramis, Pearl Leeri Gouramis, NEW Red Flame Paradise Gouramis.

Cichlids (Dwarf, South American, African) – Green Severums, Gold Severums, Assorted Medium Peacock Cichlids, Jaguar Cichlids, German Blue Rams.

Other – Jumbo South American Lungfish, African Baby Whales, Baby Double Trunk Elephantnose (super cool and rare), Tank Bred Black Ghost Knives, Medium Silver Arowanas, Peacock Eels, Olive Nerite Snails, Mystery Snails, Roseline Denisonii Sharks, Turquoise Rainbowfish,

Goldfish – Medium Red Cap Orandas, Small Red Cap Orandas, Red Orandas, Calico Ryunkins, Red Ryunkins, Small Assorted Fantail Goldfish, Small Black Moors, Medium Assorted Fantail Goldfish, Medium Black Moors, Red Ranchu Lionhead.

Koi, Pond Fish and Pond Plants – Our pond area is now open and is filled to the brim with goldfish, Shubunkins, koi, water lilies, oxygenators, jumbo bullfrog tadpoles, bog plants and floating island plants. Japanese Koi are now in stock. Tropical Water Lilies and Lotus arrive Tuesday of next week.

Live Aquarium Plants – Micro Sword Clumps, Ludwigia ovalis, Baby Teardrop on Driftwood, Amazon Swords, Cabomba, Red Narrow Ludwigia, Rotala indica, Bacopa, Limnophila, Potamogeton gayi, Dwarf Lily Bulbs, Java Fern Mats, Hygrophila compacta (NEW), Anacharis naja (legal species), Watersprite, Rotala magenta, Hornwort, Dwarf Hairgrass, Dwarf Baby Teardrop.

German Hans Discus (Expected Friday): Red Turquoise Discus, Blue Pigeon Blood Discus, Blue Snakeskin Discus, Marlboro Red Discus, Blue Diamond Discus, Red Scribbled Discus.

The list above represents only the most recent livestock shipment. We have MANY other species available at the store!

SALTWATER FISH:

Angels / Butterflyfish – Juvenile Annularis Angelfish, Blue Koran Angelfish, Coral Beauty Angelfish, Lemon Peel Angelfish, Semilavartus Butterflyfish.

Clownfish – True Rose Nigripes Clownfish, Ocellaris Clownfish, True Percula Clownfish, Black Melanopus Clownfish, Gold Bar Maroon Clownfish, Baby Maroon Clownfish, Baby True Black & White Ocellaris Clownfish.

Gobies / Blennies – Rare Black & White Priolepsis Gobies, Orange Spotted Blennies, Engineer Gobies, Tiger Wardi Watchman Gobies, Yellow Watchman Gobies.

Wrasses / Hogfish – Indo Harlequin Tuskfish, Banded Wrasses, Fiji Sixline Wrasses.

Tangs / Rabbitfish – Orangefin Tominensis Tangs, Yellow Tangs, Powder Brown Tangs, Medium Blue Regal Tangs, Yellow Mimic Tangs, Orange Striped Bristletooth Tangs, Red Sea Purple Tang, Foxface Rabbitfish.

Triggerfish / Eels / Puffers – Small Humu Triggerfish, Clown Triggerfish, Niger Triggerfish, Bluespot Pufferfish, Valentini Pufferfish, Small Snowflake Moray Eels, Chainlink Moray Eels.

Lionfish – Fuzzy Dwarf Lionfish, Dwarf Lionfish, Antennata Lionfish, Volitan Lionfish.

Other – Jans's Pipefish, Royal Grammas, Assorted Warty Anglerfish (babies).

INVERTEBRATES:

Snails / Cucumbers / Starfish / Urchins – Basket Starfish, Sea Apple, Mexican Turbo Snails, Catseye Turbo Snails, Cerith Snails, XXL Nassarius Sand Sifter Snails, Nerite Snails, XXL Sand Sifter Cucumbers, Orange Linkia Reef Starfish, Tuxedo Urchins.

Crustaceans – Cleaner Shrimp, Tiger Pistol Shrimp, Caribbean Peppermint Shrimp, Coral Banded Shrimp, Evil Mantis Shrimp.

Corals / Polyps / Mushrooms – True Pink Zoanthid Polyp Rocks, Super Favia / Favites Brain Corals, Ultra Blasstomussa wellsi Corals, Cultured Toadstool Leather Corals, Blue Acropora Corals, Lime Green Acropora Corals, Australia Elegant Corals, Indo Elegant Corals,

Candy Caulestrea Corals, Torch Corals, Bright Orange Cactus Pavona Maldivensis Corals, Super Green Trachyphyllia Corals, Super Red Trachyphyllia Corals, Ruffled Ridge Turbinaria Corals.

Other – Red Foot Bubble Anemones, Derasa Clams, Maidens Hair Algae Rock, Assorted Feather Dusters, White Tip Anemone, Assorted Color Long Tentacle Anemones, Bright Pink True Rose Anemones, Blue Spotted Seahares.

This list is based on our most recent shipment of saltwater livestock. There are many other species available in the store not included in this list.