

September 11, 2007



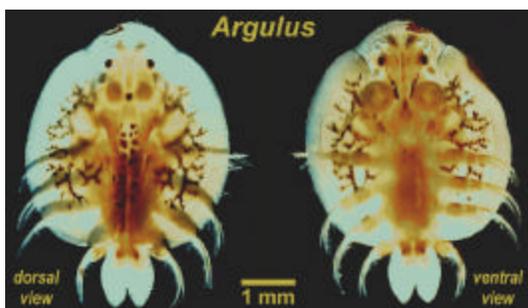
tideline aquatics Newsletter

Tideline Aquatics Store Hours

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

UNINVITED GUESTS – TRULY EVIL FISH PARASITES!

We have covered fish parasites in past newsletters but today we want to cover some of the more visible creatures that can infest our freshwater aquariums, saltwater aquariums and garden ponds. Most of these parasites arrive on wild-collected fish or mud pond grown fish. In these environments, often these parasites go unnoticed but in the confines of the aquarium or garden pond, these parasites can wreak havoc! Not only do the parasites cause the fish harm, the wounds they inflict often lead to secondary bacterial skin infections. Once you become familiar with this group of nasty parasites, perhaps you will be able to recognize if/when they find their way into your aquarium or pond.



ARGULUS – COMMONLY KNOWN AS FISH LICE

The argulus parasite is most commonly seen on goldfish and koi but can also infect tropical species. There are nearly 150 species of argulus! The most common means of introduction into the aquarium are from infected fish being added to the tank. In the garden pond, argulus can arrive on newly introduced infected fish, from the legs

and feathers of birds and even from frogs and toads. The argulus parasite can reach .4 inches in adults making them easy to spot if you know what to look for.

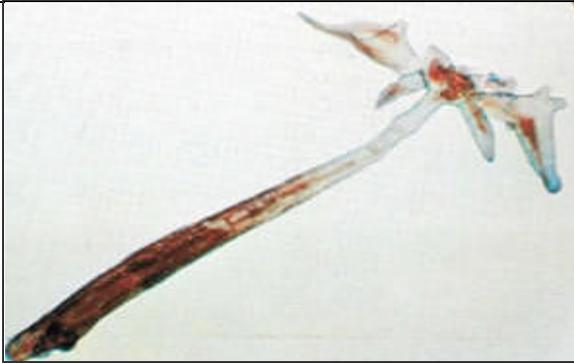


ARGULUS FEEDING ON A HOST FISH'S BLOOD!

Symptoms include twitching of the infected fish's fins, erratic swimming and severe scratching. This is because the argulus parasite has the ability to swim freely in the aquarium or pond. As it swims about, it will jump on to a fish. At this time, the argulus parasite uses its 'suction feet' to adhere to the host fish. Once attached, the argulus parasite stabs the host fish with its sharp stylus (feeding apparatus) and releases chemicals that prevent the fish's blood from clotting as it sucks fluid and nutrition from the host fish. Adult female argulus will release from their host and swim about laying eggs on plants, glass surfaces and even the gravel. The eggs are protected by a gelatinous capsule that cannot be penetrated even by most medications. After the eggs hatch, the juvenile argulus are most vulnerable to medications. There are two good treatments for killing argulus parasites. Dimilin works by preventing the newly hatched argulus parasites from maturing into feeding adults. Treatment with Dimilin should last for 4-8 weeks. Another means of killing argulus is with the use of Organophosphate medications like Fluke Tabs or Trichlorfon. Though these treatments are effective, it may take 3 treatments in 1 week

intervals for 3-4 weeks to eradicate these evil blood suckers. Silver scaled fish (Arowanas, Silver Dollars, Pacu, etc), Discus and Marine Lionfish are sensitive to Organophosphate medications and care should be taken if any of these species are present in the treatment tank. Removal of the adult argulus using tweezers is helpful also. Without treatment, the host fish become weak. The wounds inflicted by the argulus parasite become invitation spots for secondary bacterial infections and eventually, death of the host. Early diagnosis is important in preventing an extreme outbreak.

LERNEA – ANCHOR WORMS



From this photo of an adult Lernea, you can see why they are commonly called anchor worms. Juvenile lernea swarm the fish and creep under a scale where they imbed themselves in the tissue. As they mature, the anchor-like head allows them to remain firmly attached. First, the infected fish may show a small red bump on the skin. After a short time, the lernea parasite grows to about 1/2" long with only the sweeping forked tail trailing out from the former bump on the skin of the fish. Anchor worms lays hundreds of eggs and can overcome an aquarium or ponds fish inhabitants. In severe cases, every fish may have dozens of these anchor worms hanging out from the skin of your fish!



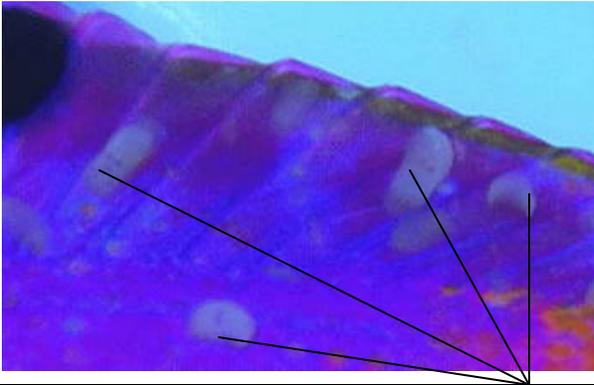
AN ADULT ANCHOR WORM (LERNEA)

Last week at the store, we received a shipment of pond-grown Bosemani Rainbowfish. After releasing them from the bag, we quickly spotted dozens of anchor worms hanging from these poor fish! Of course, they immediately went on Quarantine Status. All freshwater tropical fish and goldfish are susceptible to anchor worms. Treatment of anchor worms is quite simple. By using Dimilin in the pond or aquarium, the eggs of the anchor worms are quickly killed as it prevents them from maturing. Adult anchor worms can be removed with tweezers if done carefully as the entire worm must be pulled from the fish's skin.



FANTAIL GOLDFISH COVERED WITH LERNEA

Outbreaks of anchor worms can also lead to serious secondary bacterial infections like Aeromonas (skin ulcers) and Dropsy (pinecone disease). If a severe outbreak is found, you may need to use an antibiotic treatment in conjunction with the Dimilin treatment. You should treat the aquarium or pond for 14 days with Dimilin, then retreat for an additional 14 days (1 dose each 14 days).



MONOGENEAN FLUKES (FLATWORMS)

In recent years we have seen a huge increase in the number of **marine fish** arriving with these white ‘flatworms’ from the wild. We now implement regular treatments into our marine systems when new fish arrive just in the event that any of these creatures hitched a ride to Tideline Aquatics. These ‘flatworms’ feed on skin mucus and likely cause no harm to the fish in the wild but in the enclosed aquarium, they can multiply in large numbers causing the fish to scratch and rub in an effort to rid themselves of these creatures. With close examination, they are easily seen as small, almost clear raised bumps on the fish’s skin and often, the eyes. If you suspect them on one of your fish, just give the fish a freshwater bath (treated freshwater that is the same temperature and pH of your aquarium) for about 3 minutes. In freshwater, these ‘flatworms’ become cloudy white in color and begin to fall off the fish. If one fish has this parasite, likely all of the fish in the aquarium need to be treated. Luckily, these creatures are easily killed using Praziquantel. This medication is harmless to the biological filter and usually eradicates these parasites after one 24 hour treatment though we suggest a follow-up treatment after 3 days. Though these parasites do not seem to cause any direct problem for the fish, the stress they cause as they fish rub and scratch can lead to secondary bacterial infections of the skin and eyes. At Tideline Aquatics, all of our marine fish are treated upon arrival to our systems with Cupramine (a copper product) for marine ich and with Praziquantel (sold under the trade name Prazipro) for these skin flukes to ensure you purchase only the healthiest marine fish. If you shop around, as most hobbyists do,

look closely at your fish is you notice them scratching and/or rubbing regularly yet show no signs of marine ich (white spot disease). A simple treatment as described here will make your fish feel relief from this irritating hitchhiker from the wild.

HELP WANTED: AQUATIC PROS **AQUARIUM MAINTENANCE CO.**

Aquatic Pros is looking for HONEST, DEDICATED, HARD WORKING persons for possible employment with their company. You do not necessarily need to know all the odds and ins of the marine aquarium but experience with marine systems is a BIG PLUS. Their business entails the regular maintenance of both freshwater aquariums, marine aquariums, reef aquariums and even garden ponds in homes and businesses throughout the Lowcountry. You must have a vehicle (small truck, minivan, etc) capable of transporting water and other maintenance supplies to each job site you would be assigned to after an extensive training period. You must also have EXCELLENT people skills (you are not a jerk to your fellow American). Aquatic Pros offers good pay if you are chosen to work for this company. This job is not a “cake walk”, you must be hard working, able to lift heavy materials and flexible in your hours. If this sounds like you or someone you know, please call Jason Sack at (843) 813-5006 for a possible interview. We recommend them to anyone that desires to have their aquariums and ponds serviced – because they are an honest business operation with strong work ethics and excellent people skills.

NEW AQUARIUM DRIFTWOOD!!

Our driftwood guy just delivered one of the nicest shipments of aquarium driftwood we have had in some time. Though the small pieces are limited, we have numerous medium, large, extra large and jumbo select pieces of driftwood now in the store. Many have hollows, branches and arches for added beauty!

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



THE BEAUTIFUL ANGELFISH (PTEROPHYLLUM SP.)

We usually choose a marine fish or invertebrate for the fish of the week but this week we had such an incredible shipment of large angelfish arrive, we chose them. If you have purchased angelfish from one of the so-called superstores and lost them, you are not alone! We purchase angelfish from only one or two suppliers because we know they have healthy, virus free angelfish. These tank-bred fish are hardy if given soft water and relatively peaceful tankmates. Good matches for the angelfish aquarium are larger tetras (bleeding hearts, phantoms, XL neons, etc), rasboras, peaceful gouramis (dwarf, pearl leeri), clown loaches and the like. Though angelfish will survive on flake foods, they appreciate a treat of frozen or freeze-dried foods like bloodworms and/or brine shrimp as a supplement. Though angelfish can be bossy, they seldom cause too much trouble as long as you do not add very small fish (small neons, small cardinals, etc) to the aquarium (the angels will eat them). Also avoid fin-nipping fish like tiger barbs or more aggressive species like Oscars or Jack Dempseys. 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 (NOW IN STOCK UNLESS NOTED OTHERWISE!)

Feeder Guppies, Feeder Goldfish, Feeder Rosy Reds, Feeder Crayfish, Feeder Fiddler Crabs, Feeder Live Black Worms. Ghost shrimp are running low!! Come in early or wait until next weeks shipment.

FRESHWATER FISH (NOW IN STOCK):

Golden 'Orange Spot' Severums, Large and Small Angelfish (assorted varieties), Mixed locally bred Fancy Guppy Pairs, African Butterflyfish, South American Dragonfish Gobies, Bumble Bee Gobies, Knight Gobies, Australian Gold Desert Gobies, Dwarf Freshwater Pufferfish (actually brackish), Large Figure Eight Pufferfish, Large Green Spotted Pufferfish, Green Scatophagus, Small Tank Bred Archerfish, African Ropefish, Mixed Fancy Chinese Goldfish, Florida Bred Cardinal Tetras, Glo-lite Tetras, Lemon Tetras, Large Florida Bred Neon Tetras, Rummynose Tetras (finally), Red Serpae Tetras, Dwarf African Frogs, Red Wag Platies, Sunburst Platies, Assorted Pairs of Sailfin Mollies (very nice!), Blue Gouramis, Gold Gouramis, Millennium Rainbowfish, Boesmani Rainbowfish (quarantined), New Hybrid! Orange Boesmani Rainbowfish, Marci Rainbowfish, Turquoise Rainbowfish, Red Pearl Hybrid Rainbowfish, Red Cherry Barbs, Golden Barbs, Roseline Denisonii Sharks (awesome!), Trimaculatus Cichlids, Altispinosa Bolivian Rams (Extremely Nice Shipment), Mixed Florida Bred Oscars, Assorted Mbuna African Cichlids (true breeds, not mutts), Siamensis Flying Fox Algae Eaters, Super Nice Otocinclus Algae Eaters, Gold Spot Lyretail Plecostomus, Duckbill Catfish (cool), S/M Clown Loaches (Super Size and on our coupons this week), Golden Dojo Weather Loaches, Common Dojo Weather Loaches, Botia Striata Loaches, M/L Tiretrack Eels, Gold Spotted Lungfish and more!!.

LIVE AQUARIUM PLANTS (ARRIVING ON FRIDAY):

Many types of brand new live plants are expected on this shipment as well as beautiful anubius plants growing on driftwood.

GOLDFISH, KOI AND POND PLANTS (NOW IN STOCK):

Small Blue Shusui Butterfly Koi (super nice!), Small Domestic Koi Assortment, Medium Assorted Domestic Pond Koi, Jumbo Japanese Koi, Awesome Sarasa Veiltail Pond Comets, Assorted Small Chinese Goldfish, M/L Red & White Ryukin Chinese Goldfish, Medium Red Ryukin Chinese Goldfish, Floating Island Plants, Hornwort, Tons of Bog Plants, Blooming Lotus Plants, Water Poppies, Nymphoides geminata and more!

SALTWATER FISH (NOW IN STOCK):

Right now we have some of the nicest marine fish in the store. The aquariums are packed with quality marine fish from nearly every spot in the tropical world. Pink Tail Triggerfish, Hawaiian Barlett's Anthias, Indian Ocean Neon Velvet Damsel fish, Bali Purple Basslets, Bali Dogface Pufferfish, Indian Ocean Sailfin Tangs, Bali Mimic Eiblii Tangs, Fiji Coral Beauty Angelfish, Bali Halfblack Angelfish, Bali Eiblii Angelfish, Sri Lanka Yellowfin Angelfish, Hawaiian Flame Angelfish, Caribbean Argi Pygmy Angelfish, Indian Ocean Koran Angelfish, Red Sea Asfur Angelfish, Bali Male Squareback Anthias, Bali Tomato Clownfish, Bali Pink Skunk Clownfish, Indian Ocean Sebae Clownfish, Bali XL Maroon Clownfish, Sumatra Large Goldbar Maroon Clownfish, Indian Ocean Black & White Heniochus Butterflyfish, Indian Ocean Kleini Butterflyfish, Sri Lanka Bicolor Blennies, Fiji Canary Blennies, Indian Ocean Grammistes Blennies, Indian Ocean Scooter Blennies, Fiji Citron Gobies, Indian Ocean Rainfordi Gobies, Bali Green Mandarin Dragonettes, Bali Spotted Mandarin Dragonettes, Sri Lanka Diamond Sifter Gobies, Indian Ocean White Sifter Gobies, Indian Ocean Pink Spot Watchman Gobies, Mexico Longnose Hawkfish, Indian Ocean Fuzzy Dwarf Lionfish, Indian Ocean Black Volitan Lionfish, Fiji Bluespot Pufferfish, Indian Ocean Valentini Pufferfish, Hawaiian Red Stripe Squirrelfish, Indian Ocean Niger Triggerfish, Bali Clown Triggerfish, Hawaiian Yellow Tangs, Indian Ocean Blue Regal Tangs, Bali Tominiensis Tangs, Sri Lanka Clown Tangs, Indian Ocean Powder Brown Tangs, African Powder Blue Tangs, Bali Mimic Yellow Tangs, Bali Adult Chocolate Tang, Bali Sixline

Wrasses, Indian Ocean Solorensis (Tricolor) Fairy Wrasses, African Formosa Wrasses, New Species of Fairy Wrasse from Tonga, African Formosa Wrasses, Indian Ocean Multicolor Pencil Wrasse, Bali Harlequin Tuskfish, Fiji Orange Shoulder Tangs, Fiji Blue Green Torpedo Gobies, Jumbo Black & White Cardinalfish, Cortez Passer Angelfish, Jumbo Snowflake Moray Eels and much more folks.

SALTWATER INVERTEBRATES (NOW IN STOCK):

Fiji Premium Live Rock (200lbs), **Tonga Premium Niu Live Rock (LIMITED QUANTITIES LEFT)**, 4-Layer Feather Dusters, Cluster Hardtube Red Dusters, Purple Reef Lobsters, Large Saron Monkey Shrimp, Sri Lanka Cleaner Shrimp, Sri Lanka Fire Shrimp, Pom Pom Boxer Crabs, Electric Blue Reef Hermits, Pink Margarita Reef Snails, Black Margarita Reef Snails, Zebra Long Tentacle Anemones, Super Color Large Bubble Anemones, Assorted Color Mushroom Rocks (lots!), Assorted Nano Corals (always a nice mix on these), Green Polyp Pipe Organ Corals, Yellow Polyp Rocks, Green Button Polyp Rocks, Super Mix Fancy Leather Corals, Branching Frogspawn Corals, Fiji Candy Corals, Super Green Blasstomussa Wellsii Corals, Super Red Micromussa Amakusensis Corals, Emerald Crabs, Anemone Crabs, Atlantic and Hawaiian Feather Dusters, TONS of incredible live hard and soft corals, Horseshoe Crabs, Serpent Starfish, Macro-algae for your refugium and more.