1911~ 2011
Celebrating 100 years of Educating Aquarists

AQUATICA

THE JOURNAL OF THE BROOKLYN AQUARIUM SOCIETY
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Male *Cyprichromis leptosoma*

Photo Credit: Kenji Takasi

Female holding eggs

Photo Credit: Rusty Wessel

1911~2011 100 Years of Educating Aquarists

AQUATICA

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The **Brooklyn Aquarium Society Inc.** is a non-profit organization 501(c) (3) for people interested in the aquarium hobby and the study of aquatic life. The Society meets the 2nd Friday of each month except July and August at the Education Hall of the New York Aquarium at Coney Island, Surf Avenue at West 8th St., at 7:30 PM. Meetings are open to visitors. Refreshments are served. Membership is $25 per year family/$20 individual/$15 for students under 14. Send inquiries or membership checks payable to: **Brooklyn Aquarium Society,** c/o Membership Chairperson, P.O. Box 290610, Brooklyn, NY 11229-0011.

BROOKLYN AQUARIUM SOCIETY
CALENDAR OF EVENTS 2010 ~2011

100 Years of Educating Aquarists ~ 1911 - 2011

MAY 13 **Spring Auction** ~ Freshwater fish, plants, marine fish, aqua-cultured corals & dry goods auction including a new 55 gallon tank & stand • Discount books & sales • Raffles • Door prize and much more.

JUN 10 **Carol Ross ~ Collecting Fish in Peru** ~ Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods auction • Discount books & sales.

JULY 8 **100th Anniversary Party to be held at the New York Aquarium. More information to follow.**

SEPT 9 **Joe Caparetter ~ Unique Corals You Can Keep** ~ Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods auction • Discount books & sales.

OCT 14 **Fall Giant Auction** ~ Freshwater fish, plants, marine fish, aqua-cultured corals & dry goods auction including a new 55 gal. tank & stand • Discount books & sales.

NOV 11 **Anthony Stissi ~ Lake Tanganyikan Tropheus Species** ~ Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods auction • Discount books & sales.

DEC 9 **BAS Holiday Party** ~ Members, their families and friends, all you can eat sit-down dinner • Fish Bingo & Prizes • BAS Awards presentations.

2012

JAN 13 TBA (marine)

FEB 10 **Peter Warny ~ Visits to Various City & State Aquaria** ~ Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods auction

MAR 9 **Tony Vargas ~ Successful Reef Aquariums from Around the World and How They Got There** ~ Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods auction

APR 13 TBA (freshwater)

MAY 11 **Giant Spring Auction** ~ Freshwater fish, plants, marine fish, aqua-cultured corals & dry goods, including a 55 gal. tank & stand

JUN 8 TBA (marine)

SEPT 14 **Mike Hellwig ~ Fish Breeding Contest with Ted Judy** ~ Marine fish, aqua-cultured corals, freshwater fish, plants & dry goods auction

OCT 12 **Giant Fall Auction** ~ Freshwater fish, plants, marine fish, aqua-cultured corals & dry goods, including a 55 gal. tank & stand

NOV 9 TBA (marine)

DEC 14 **Holiday Party** ~ Members, their families and friends, all you can eat sit-down dinner • Fish Bingo & Prizes • BAS Awards presentations.

With permission

Jeremy Gay, Thursday 24 February 2011, 11:00 am

Filed under: lifespan longevity oldest live Koi Discus catfish cichlid loach guppy marine

This is a question often asked in the postbag of *Practical Fishkeeping* magazine. Having seen lots of aged fish on my travels, I wanted to find out the length of time some our aquarium veterans are surviving, and my findings are amazing!

Unfortunately, although some fish die every year through disease or mistakes, the ones that are being cared for properly are going on to reach a truly ripe old age, and that doesn't always seem to be related to species size.

Species selection

I think that as well as researching fish size and water requirements, we should also consider the length of time which they will live. Life is short when you are an avid fishkeeper, as there are so many species to keep and so little time to keep them.

To find out how long a broad selection of aquarium species are living, I posted a blog asking readers to share their experiences.

What I found

My investigations led me to discover that many community species of fish are capable of outliving a cat or a dog, so making themselves a long-term commitment for the fishkeeper.

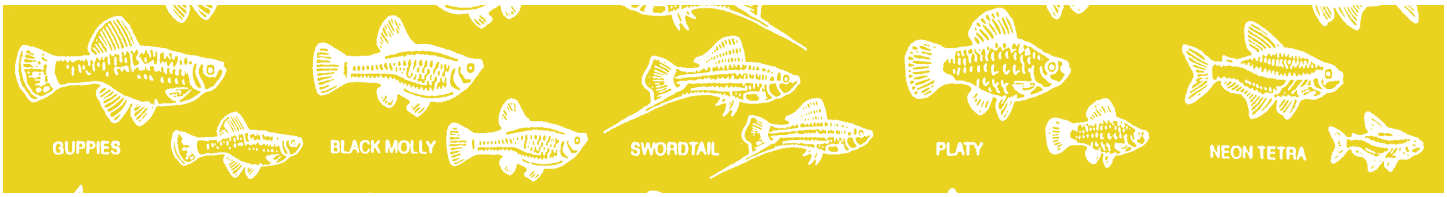
Take the Clown loach, for example. I found ages up to 24 years reported, and, considering that in that time they can and will reach 30cm/12" in length and are a social species requiring the company of their own kind, the number of enthusiasts who can truly offer them what they need, compared with the number of people who purchase them, is very low indeed.

Twenty five years is a large chunk of anyone's life and who can predict what they will be doing and where they will be living for the next quarter of a century?

It seems it's not always the small species that have the shortest life spans.

Most tetras, rasboras and small barbs can hit five years old, as you might expect, but my investigations showed that some were swimming through to seven, eight and even ten years of age. An Emperor tetra was listed at nine years old and a Neon tetra at ten!

I've listed two fish in the table at the end of this feature with big questions marks around them — a nine-year-old guppy and a 12-year-old White Cloud Mountain minnow. If those two cases are true, then these small "short lived" fish species are outliving species like rainbowfish and some cichlids, both of which are normally noted for their longevity. The average life span for a guppy, apart from that one, was a much more average 18 months.



Whether this is good or bad I have yet to decide, but some families, genus and species stood out as being long lived. I've already mentioned the 24-year-old Clown loach, but even smaller loach species seem particularly aged. A 15-year- old Dwarf chain loach has been recorded along with a 17-year-old Kuhli loach.

Then there are the catfish. I would go so far as to say that some catfish are known for being long lived, *Synodontis* in particular, and a *Synodontis schall,* a large syno, is listed at 38 years old. But even smaller synos are hitting the 20 years of age mark and beyond. I found a *S.nigrita* at 19, a *S. flavitaeniatus* at 20 and the small, true upside down catfish, *S. nigriventris*, at 21 years of age

Other small catfish species continued to surprise me, with *Corydoras* really opening my eyes. The list includes a Bronze corydoras at 11 years old, no surprise there perhaps, but what about a *Corydoras zygatus* at 21?

Lots of 'common plecs' and 'gibbiceps' plecs were registering at the 27, 28 year mark, so that is another good reason why you should think long and hard about introducing one as a solution to controlling a short-term algae problem.

Marines were featured too, even common community species. Mr. **A. B. Hussey** said: "I have been a fishkeeper for 35 years. Started keeping marines in 1992 and have a Regal tang, pair of Clowns and a Humbug, which were my among my first fish purchased." Well done, Mr Hussey, I say.

Extra care

The fact that some specimens are living so long must be a combination of genetics and extra care taken by the fishkeeper. No fish will last very long in poor water conditions, if fed a diet that is poor in nutrients or if kept in a stressful situation. You, the fishkeeper, are responsible for all three of the above and should always put the welfare of the fish first.

I dropped fish health expert, **Dr Peter Burgess,** a line to ask if he knew of any age-related illnesses in fish and anything to look out for.

It seems that old fish are at greater risk of certain diseases and are also less able to withstand unsuitable water conditions or bullying. Spinal deformities can occur in old fish just as they do in humans. And fungus and eye infections increase in older specimens due to less efficient immune systems. Cell mutation is more likely in old fish, resulting in melanomas, as will organ failure, particularly kidney failure.

A tall story?

Koi are well known for being long-lived. However, there is one age reference about which I am more than a little skeptical. If it is true and can be scientifically proven then great, but even if it cannot be validated it still makes a great story.

It involves a Japanese Koi carp called Hanako that reportedly lived 226 years. Hanako was owned by **Dr. Komei Koshihara** and lived in a pond in Gifu, Japan, with five other geriatric Koi. In 1966, Dr. Koshihara made a radio broadcast about his favourite fish and the following is taken from the English transcript, which I found on www.vcnet.com:

"This Hanako is still in perfect condition and swimming about majestically in a quiet ravine descending Mount Ontake in a short distance. She weighs 7.5 kilograms and is 70 centimetres in length. She and I are dearest friends. When I call her saying 'Hanako! Hanako!' from the brink of the pond, she unhesitatingly comes swimming to my feet. If I lightly pat her on the head, she looks quite delighted.

"Sometimes I go so far as to take her out of the water and embrace her. At one time a person watching asked me whether I was performing a trick with the carp. Although a fish, she seems to feel that she is dearly loved and it appears that there is some communication of feeling between us. At present, my greatest pleasure is to go to my native place two or three times a month and keep company with Hanako.

"I am often asked how it is that I can tell the age of a fish. As a tree trunk has its annual rings, so a fish has its annual rings on its scales, and we only have to count them to know the age

of a fish. As a matter of course, we ourselves cannot do it. It requires the aid of a specialist and the use of a light microscope.

"Now, what was it that made me think of ascertaining the carp's age? My grandmother on maternal side, who left this world at the advanced age of 93 some eight years ago, is said to have been told by her mother-in-law: 'When I was married into this family, my mother in-law said to me, that carp has been handed down to us from olden times; you must take good care of it.'

"When I was told this story, I became very curious to know how long the carp had lived. I found out Hanako's age by the before mentioned method, but you may easily imagine how greatly I was grieved when I was forced to take a scale off her beautiful body. I caught her in a net very cautiously and repeatedly said: 'Excuse me!'

"I took off two scales from different parts of her body by using a strong tweezers. The scales were examined by Professor **Masayoshi Hiro**, D.Sc., Laboratory of Domestic Science, Nagoya Women's College.

"It took two months for him to acquire a satisfactory result. Using the light microscope, he photographed every part of the scales. It seems he took a great deal of trouble. When it was certain beyond doubt that the carp was 215 years old, the two of us exchanged a look of delightful surprise.

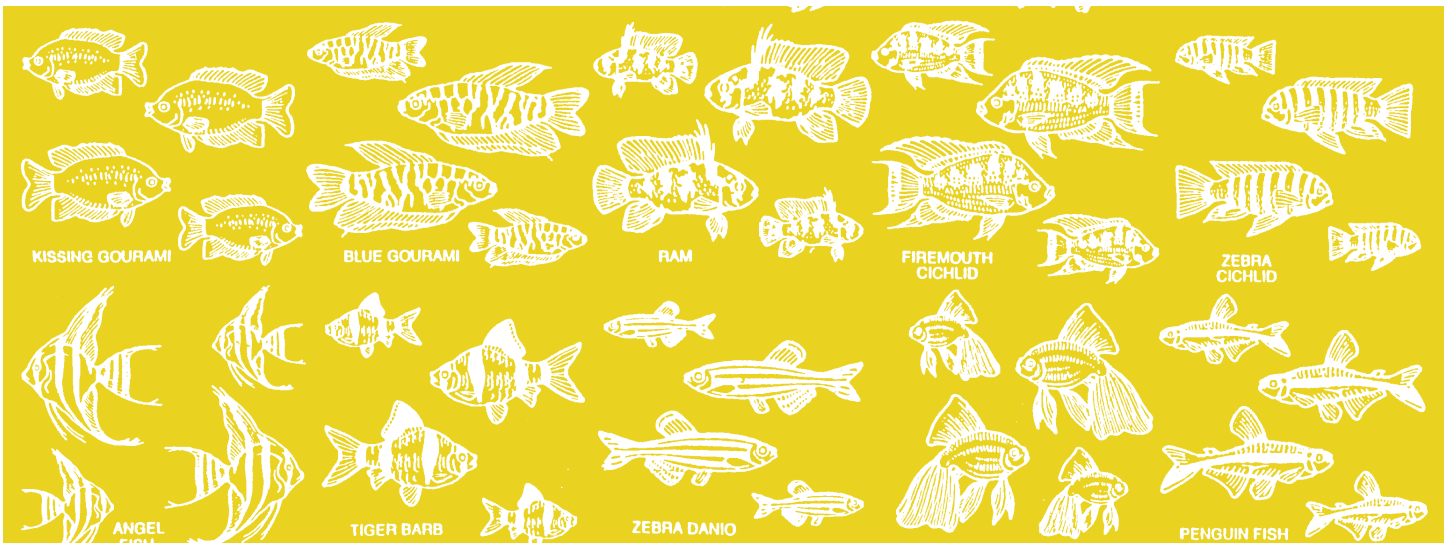
"Then I had the professor examine the remaining five carp in the same pond, three white and two black ones. The examination took one year, and it was found out that three were respectively 168, 153 and 149 years old, and the remaining two were both 139 years old.

"Those results led us to be convinced that not only are the carp rare ones, but they are a very precious existence from the scientific point of view as well. We must consider, then, in what surroundings and under what conditions these long-lived carp are placed. The pond is located far deep among the mountains of Mino Province. The locality is called Oppara, Higashi-Shirakawa Village, Kamo County, and is about the same distance from Gero Hot Springs on the Takayama Line as from Nakatsugawa City on the Central Line, both lines belonging to the National Railways.

"Nearby there are rustic hot springs called Oppara-onsen. Facing south toward the Pacific on the top of Mount Ontake, you will look down upon the locality at the foot of the mountain. Through the locality runs the Shirakawa, a tributary of the River Hida, which again is the upper reaches of the River Kiso.

"A stream of limpid water never ceases to flow all the year round. It is this water that flows into the pond where Hanako lives and which was carefully constructed with stones in former days. Besides that, pure water trickled from the foot of the mountain streams close by into the pond, making the favourable conditions still more favourable. The pond cannot be called large, only being about five metres square."

Hanako died in 1977 at the age of 226 as the world's oldest animal. The current record holder for longevity is a 400-year-old clam found in waters off Iceland's north coast. The species, *Arctica islandica*, can be aged by measuring the growth rings around its shell.



Longevity rules OK!

Below is a list of fish and their age as claimed by their owners.

• **3 years**
Three lined pencilfish, *Nannostomus trifasciatus*
• **5 years**
Red eye tetra, *Moenkhausia sanctaefilomenae*,
Buenos Aires tetra, *Hyphessobrycon anisitsi*,
Black phantom tetra, *Hyphessobrycon megalopterus*,
Cherry barb, *Puntius titteya*,
Swordtail, *Xiphophorus hellerii*,
Sailfin molly, *Poecilia velifera/latipinna*,
African red eye tetra, *Arnoldichthys spilopterus*
• **6 years**
X ray tetra, *Pristella maxillaris*,
Festive cichlid, *Mesonauta festivus*,
Uaru, *Uaru amphiacanthoides*,
Gold sucking loach, *Gyrinocheilus aymonieri*,
Tiger barb, *Puntius tetrazona*,
Cardinal tetra, *Paracheirodon axelrodi*,
Harlequin, *Trigonostigma heteromorpha*,
Angelfish, *Pterophyllum scalare*
• **7 years**
Golden barb, *Puntius sachsi*
• **8 years**
Silver shark, *Balantiocheilus melanopterus*,
Pearl gourami, *Trichopterus leeri*,
Scissortail, *Rasbora trilineana*,
Snakeskin gourami, *Trichogaster pectoralis*
• **9 years**
Angelicus catfish, *Synodontis angelicus*, Guppy, *Poecilia reticulata*,
Giant danio, *Devario aequipinnatus*,
Emperor tetra, *Nematobrycon palmeri*
• **10 years**
Neon tetra, *Paracheirodon innesi*
Wild discus, *Symphysodon spp.*
Black widow, *Gymnocorymbus ternetzi*,
Silver dollar, *Metynnis argenteus*,
Armatus eel, *Mystus armatus*,
Hoplo cat, *Megalechis thoracata*
Congo tetra, *Micralestes interruptus*
Brochis, *Brochis splendens*
Rosy barb, *Puntius conchonius*
• **21 years**
Upside down catfish, *Synodontis nigriventris*
• **24 years**
Clown loach, *Chromobotia macracanthus*
• **25 years**
Bristlenose catfish, *Ancistrus* spp.
• **27 years**
Red tailed catfish, *Phractocephalus hemioliopterus*
• **28 years**
Common plec, *Liposarcus pardalis*
• **30 years**
Ornatipinnis, *Polypterus ornatipinnis*
• **31 years**
Pacu, *Colossoma macropomum*
• **37 years**
African lungfish, *Protopterus annectens*
• **43 years**
Goldfish, *Carassius auratus*
• **73 years**
Australian lungfish, *Neoceratodus forsteri*
• **80 years (226 years)**
Koi, *Cyprinus carpio*

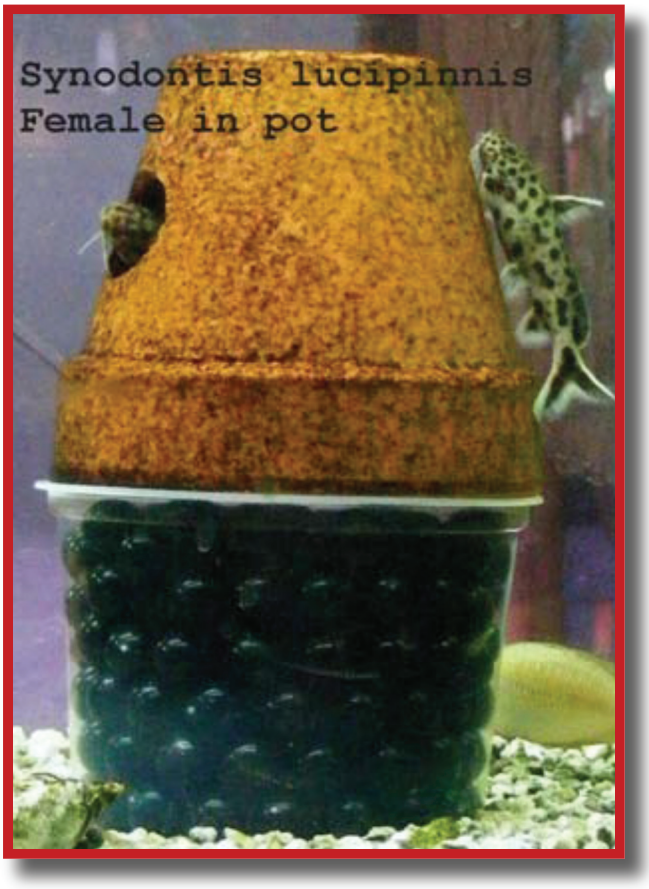
Note that some of the fish listed are still alive and well, and many would have been over a year old when purchased.

Reprinted from *The Youngstown Aquarist* Vol. XXXVII Issue. 3
BAP Article by **Regina Spotti**

Breeding *Synodontis lucipinnis*

Last year while on one of his many journeys, Eric returned home with a pair of this fish for me to "play with." The juvenile male and female made themselves at home in a 20 gallon tank equipped with a floating killie mop, a sponge filter and a stray potted plant. The bottom of the tank is covered in approximately one inch of an African Cichlid gravel mix. The Synos shared their quarters with a group of Melanotaenia angfa, a mid size rainbow fish.

Prior to attending the fourth All-American Catfish Convention in October 2010, we thought this was just another pair of *Synodontis petricola.* I was excited when someone at the convention looked at my fish, which were for sale, and stated he thought they were *S. lucipinnis,* not *petricola*. As luck would have it, one of the speakers at the event was **Jeremy Wright**. Jeremy has studied and will soon publish his work on the revision of *Synodontis* species. During his presentation regarding his research, he explained the differences between these two species of fish. The *petricola* have small spots on their heads and an even pattern to their spots. The *lucipinnis*, on the other fin, have larger spots scattered eandomly over their entire body. S. petricola are also a larger fish, with lucipnnis usually maxing out at around four inches. Apparently there are quite a few *lucipinnis* that have been parading around as *petricola*. And now, my original pair is making themselves at home in a friend's tank.



Back to caring for and spawning the fish: Regular partial water changes were carried out on the tank weekly to maintain water quality and the pH at 8.1. The fish were provided with live blackworms, various crushed flake, frozen plankton, live glass-worms, and freeze dried tubifex worms as part of their varied diet. Baby brine shrimp was fed to the bows on a daily basis, but I did not see the Synos partake of them. They did frenzy on the live and thawed frozen foods when they hit the water. Basically, they ate anything. Of course, on such a varied diet, they grew quickly and began to spawn regularly.

To ensure my success in spawning them, Eric suggested using a plastic deli-style cup filled with black marbles to catch the eggs. The cup was covered by an overturned terra cotta flower pot with a hole in the center to allow access for the fish. The parents frequently met inside of the pot and appeared to wrestle or chase each other around the dark space inside. Once the spawning was complete, tiny 1 millimeter pale milky colored eggs could be seen between the marbles. I would dump the cup filled with tank water and marbles into a plastic tray, scoop out the marbles and look for eggs or fry. There were just a few eggs in the first spawn only 10. Since they had to compete with the angar for food, the pair did not produce a high amount of eggs. To keep the eggs clean, I siphoned off any debris in the container using a turkey baster. Water from the parents'tank was added to the container to maintain water quality. An air stone was used to slightly stir the water. A word of caution about the air stone-if the flow from the air stone is up too high, the fry will hatch and quickly die because they are using all of their energy fighting the current. After only 24 hours, white 2.5 mm fry with large egg sacs will appear (although they are somewhat difficult to see in a clear container!).

These fry are quite active, wriggling and scurrying around looking for somewhere to hide. Provided they have Java moss or some sort of cover, they will settle down, but are quite active. Being so small, they are tricky to feed. I used sponge squeezings and APR powder for almost two weeks prior to introducing fresh baby brine shrimp and microworms. Even with daily water changes, these fry grow incredibly slowly! After about one week, their color is white with blurry splotches of brown.

At eight weeks, there are differences in measurements of the fry. As you may have guessed, the fry are cannibalistic. Siblings often become a handy snack and should be separated by size. Some fry are just over a centimeter while others are smaller. From here on out, the fry will eat anything that is available to them. And yes, it does take a long, long time to grow to adulthood from fry! Patience is required! This is a pretty species of *Synodontis*. They are also very peaceful and will make enjoyable pets. If anyone is interested, there are numerous articles available online regarding the revision of Synos. These articles are very informative and will clarify anyone's questions, if you keep any Syno species, you really should peruse these articles.

RLS 10/25/2010
Breeding *Synodontis lucipinnis*
BAP Article by Regina Spotti

Mike Garibaldi

Reprinted from *Cichlid Chatter*, Greater Chicage Cichlid Association
January/March 2010

Everything You Read About Fish Keeping Is BS - Including This Article

While sitting up late one evening reading various forums, I reflected on what we know versus what we don't; on sound practice versus nonsense; on that which is effective and what is just plain old BS. Please remember this is from the perspective of a fish room with breeding/aquaculture tanks, not from the perspective of a show tank in a living room. If you wish to apply these thoughts to a show tank – get longer boots - the BS really starts to get deep when the tank is in a public area.

Filtration

You can filter a tank for anywhere from $1 up to thousands of $. I have seen tanks filtered by sponge filters, HOB filters, canisters and wet/dry filters – all at the same time! Assuming you do a minimum 20% water change every week, anything more than 1 type of filter is overkill. If you are removing the waste, why bother filtering it? Many of us do 50% water changes weekly – or more. What's left in the water after a 50% water change? A little wee-wee, but not in a concentration high enough to hurt your fish. All of this extra filtration is an extravagance designed to make the fish healthy, but all it really does is make us feel better. Test your water! If your nitrates are managed and you maintain your water changes, kill the extra filters. I use sponge filters in all of my tanks. Some tanks are filtered by 1 sponge; some by 7 – it all depends upon the number of fish in and size of the tank. Why do I say get rid of the redundant filters? I think it gives you a false sense of security in that you think the extra filters are keeping the water clean. If you rely solely on your filters, you will succumb to Manana Syndrome. When this disease hits, you start saying "I'll do the water changes manana." As the syndrome develops you will stretch and stretch the interval between water changes and eventually your much vaunted filters will crash. Set a ritual – weekly, bi-weekly – whatever – for your water changes and stick with it. Your fish will thank you and those little gadget filters can be sold and the $ can be used for more fish, or beer.

Stocking Levels

I massively overstock all of my tanks with the exception of fry tanks.

In a standard 125, for example, I have 9 *champsochromis*, 9 *rhamphochromis*, 6 *buccochromis* and 5 *oreochromis tanganyikae*. All about 175 inches. Oh no – I am over the

1" per gallon rule! Call the Fish Police! As long as you maintain good water change frequency and quantity, stocking levels aren't that meaningful. Keep the water clean and the rest works itself out. Of course, as those fish mature, I will move them to other tanks so that I can observe their natural behaviors… WAIT – more BS is on the way. UPDATE – the *rhamps* kept getting some type of scourge. I would treat, it would heal and then it would return. I was unable (lazy) to go down to the fish room for a few days and, as bad luck would have it, a *rhamp* or two succumbed to the bug. That started a crash dive to fish hell and I lost all of the rhamps and 7 of the champs – MANANA SYNDROME strikes again.

Stock Lists

Keeping fish in glass boxes isn't natural. Fish won't show their "natural" behaviors in a tank, so get over it. Every time I hear – you can't mix this with that because it isn't "natural," I cringe and reach for a drink. I have a tank right now where I have 11 wild caught *Petrochromis*, 3 wild caught male frontosa, 6 rare as an honest politician *paretroplus nourisatti* and 6 *mbuna*. Hmm, I forgot the new world fish. I can remedy that this evening. How did this tank develop? The petros and mbuna were hanging out and then I needed a home for the *frontosa* – in they went. The *nourisatti* have a reputation as a bad attitude fish that will kill each other for fun, so they went in this tank so that the petros could keep them in line. Guess what – it works. It might not be aesthetically pleasing to everyone, but these are hobby tank, not a public aquarium.

In a standard 125, for example, I have 9 *champsochromis*, 9 *rhamphochromis*, 6 *buccochromis* and 5 *Oreochromis tanganyikae*. All about 175 inches. Oh no – I am over the 1" per gallon rule! Call the Fish Police! As long as you maintain good water change frequency and quantity, stocking levels aren't that meaningful.

Foods

How many times have you heard the hobbyist talk about the insane number of foods he feeds his fish? Live worms from California flown in via FedEx; freeze dried, hypoallergenic salt free krill; floating pellets, sinking pellets, moist pellets, home-made foods – oh my! Want to hear a secret? Fish, given enough time and proper inclination, will eat anything. I have found great foods for $2-$3 per pound. I was in Michigan a few weeks ago and bought 5 pounds of pellet food for $16 from Wet Thumb Aquatics. Guess what? The fish eat it; no, they LOVE it. Funny thing about fish food – we wait til steak goes on sale to buy it, because we hate paying $10/pound for it, yet we will gladly pay twice that rate for FISH FOOD! Fish keepers will spend $20+ on a 1.1 pound bag of "special" color enhancing food – really - that is insane. Yikes! My suggestion, buy a cheap pellet in a quantity that you will use in 6 months, throw it into a container (or a bag) that you can reseal and store in a corner of your fish room. Ban flake foods. They suck. They are messy, and an inefficient way to get mass into a fish. Here is some blasphemy – tropheus will eat pellets. No kidding. And piscivores will eat veggie pellets. This is serious blasphemy, but it is true. Lots of folks will say I am full of BS because they have seen the frozen foods and half a dozen different pellets in my fish room. Why am I saying only use one type when I have so many?

Several reasons –
1) I am still looking for the holy grail of fish food; I have not found it.
2) If you ask manufacturers, they will send you a several 5 pound bags of food for free so that you will give them feedback. I go through about 10 pounds of food per month and I only pay for half of it. When I think about foods, I think we are all truly nuts.

Equipment

When I think of other equipment that is full of BS – heaters come to mind. We expect a device to cost $15 - $20, be absolutely accurate in the most, relatively speaking, hostile environment on earth and to last forever. They are all crap. Want to know the greatest thing I did when I rebuilt my fish room and installed drywall? I installed a ton of fiberglass insulation. Right now I have 6-20 gallon tanks, 6-75 and 5-125. The 75 gallon tanks and 4 of the 125 have heaters in them and the rest do not. The tanks without heaters sit at about 74 – 75 degrees. I do not vent the furnace into this room and, as several GCCA members will tell you it stays warm year round.

Frontosa keepers

by and large are full of BS. I am astounded how much they (we) will spend for a fish that, while pretty, is quite frankly identical with its brethren found in other regions of the lake. Of course, I am speaking about the *Zaire Frontosa*. Say it to yourself in hushed tones – *Zaire Frontosa*. I will reek of sophistication if I have a *Tembwe*, or *Kitumba* or *Moba*, or *M'toto*, or *Moliro*, or a *Kapampa*. Holy crap! Why should anyone care if the fish is found at Kitumba or Kapampa? By virtue of it being found by one set of grass huts versus another, the price can be 2 or three times as expensive. I understand that the fish come from Congo, and there is a war going on, but these aren't diamonds. They are fish that are very similar to the same genus/species found in less exotic (less warfare) countries like Zambia or Tanzania. Basically, it seems folks are hot for something because it is rare. These are not Picassos, just fish. I am always amazed at a Convention when I see a guy talking about his $2000 in *Frontosa* yet he hasn't seen a dentist since the dawn of time. Get your priorities together people!

Fish food is a prime example. In the old days you would run out of food and go hit the store. While there, you would have an opportunity to see some nice fish and odds are you would walk out with something new. Now you buy the food at swap meets, or online from some guy out of his basement. It's unconscionable how these vendors deal with ANYONE.

Manufacturers will not escape my wrath, either

I would like to think that there are things I would buy from a fish store, if there were any left. Look at all of these manufacturers who will sell directly to any BS artist with a business license (less than $50 from most states) or even without one. Fish food is a prime example. In the old days you would run out of food and go hit the store. While there, you would have an opportunity to see some nice fish and odds are you would walk out with something new. Now you buy the food at swap meets, or online from some guy out of his basement. It's unconscionable how these vendors deal with ANYONE. As a matter of fact, please don't forget, I am ordering bulk food at the

Another ad that makes the BS meter start to wiggle is when you see a guy selling a whole setup that has a few years on it, and he wants 95% of the purchase price. What makes a guy think that after several years, the value of the equipment even remotely approaches the original cost?

end of the month, so PM me right away. Fish clubs and conventions – anytime you go deep, deep into a hobby, you will find eccentrics and BS. I always tell my wife, in the geekdom chart, fish shows are above the comic book nuts, but below (way below) the Trekkies. Don't get me wrong – conventions are fun and I attend them frequently. Still, at these conventions, you'll see the guys selling the f1 OB Peacock or some other drivel that is BS and it bugs me when the rubes get taken. What is worse is when a guy buys a ton of fish right before the convention and then they become, through some mystic ritual, wild. Yesterday they were pond raised and today **poof** they are wild. How do I know this has happened? The guy bought the fish from me. Did I call him on it? No, because I too am full of BS.

F1, f1, f3, oh my - Somewhere along the way, we all became geneticists.

A wild fish is often designated f0; its progeny are f1, f2, f3, etc.However, if you are in Canada, a wild fish is designated wc and its progeny are designated g1, g2, g3, etc. If an f1 US fish is bred to a g1 Canadian fish what do you get? Probably ankle deep BS. While we are on the topic of f1 vs. wild, where did all of this craziness start? You can get great representations of almost any fish out of the farms in Florida. Some of the real obscure things – okay, you'll need to get wild fish to see those, but the rest are available. Everybody wants instant gratification today. Buy a wild caught group, let them breed, and poof you have a ton of f1 fish to sell to all the newbs who don't know better. Those same fry are often (always?) available from Florida farms for a fraction of the cost. Somewhere along the way, many of us have been brainwashed into believing that unless the fish is wild or one generation removed, it is garbage. What BS. Breeding fish – a speaker just said in one of our meetings – I didn't breed the fish, they did it themselves. I paraphrase, but you get the gist. Fish breeders are also purveyors of cow pies. 95% of the fish that have been BAPed in the GCCA would have bred in a bucket in the corner. You didn't breed them; you were patient. Want to really impress people? Keep a strain of fish for several generations.

Fish ads

I love the adjective "rare." Fish keepers often fail to distinguish the difference between "rare" and "ugly." Rare is the "true" rare fish. Most ugly fish are rare; not all rare fish are ugly. But most are. Just because you were a damn fool to buy the icantbelieveiboughtitus expensiveandgrayus doesn't mean the rest of us will. Another ad that makes the BS meter start to wiggle is when you see a guy selling a whole setup that has a few years on it, and he wants 95% of the purchase price. What makes a guy think that after several years, the value of the equipment even remotely approaches the original cost? That's about it. Enjoy your fish. Pay it forward.

Izzy Zwerin - BAS

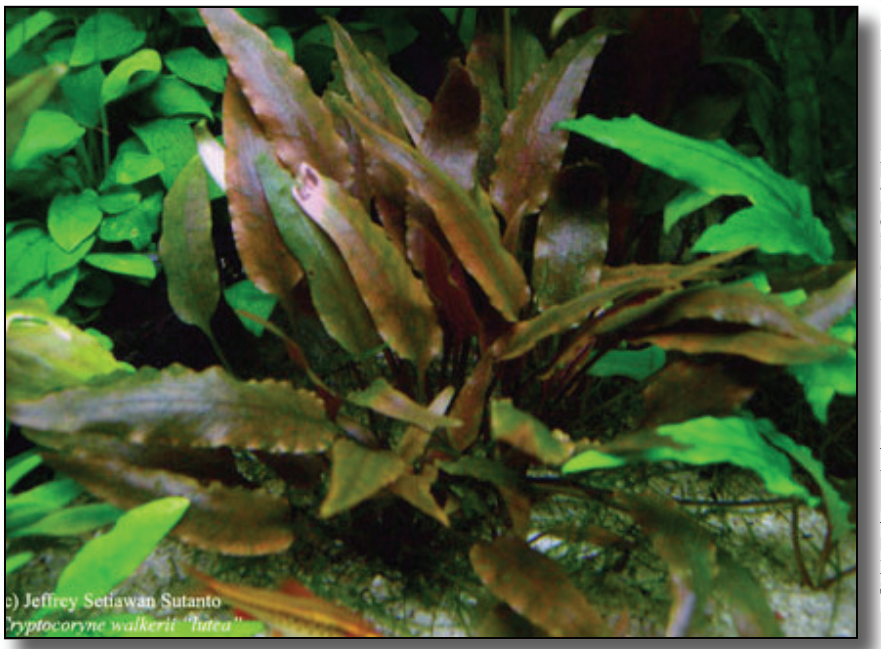
EDITORS NOTE: Members with questions about aquatic plants or setting up a planted tank can contact **Isidore (Izzy) Zwerin,** our plant editor. You can call him at **(718) 449-0031** between 7pm to 10pm, Monday to Friday.

The Practical Plant

Propagating: *Cryptocoryne walkeri*

***Cryptocoryne walkeri* is a great plant that would be a great addition for any aquarium. The plant is suitable for placement in the midground. This plant is extremely hardy and tolerant of a wide range of water and lighting parameters, as are most Crypts.**

It is, in typical Crypt fashion, slow to get established. Mine took about two months to start growing. Once it gets established it grows well. It will spread via runners and given a little time become quite prolific. The leaves are Lanceolate in shape. Under proper lighting the leaves are reddish brown in color. In less intense lighting the plant will be more brown than red.



Mine is currently being housed in a 10 gallon aquarium with good light but no CO_2 enrichment. The water is fairly soft, slightly acidic and temperature of 78˚ The plant will not do well without adequate water movement. It does not require much in the way of liquid fertilizers, I just add some trace elements a couple of times a week.

Like most Crypts, this plant is a heavy root feeder and will benefit greatly from the use of substrate fertilizers.

The native range of *Cryptocoryne walkeri* is in central Sri Lanka. This is one of those Crypts that is prone to "Crypt Rot." This is disturbing. but there is no cause for panic. Crypt rot is a condition where all the leaves rapidly disintegrate. There is considerable debate in plant circles as to the cause of this. I personally believe that this is just how the plant adapts to a new environment. I keep a variety of Crypts and given time, the plant will regenerate.

Be patient as the regeneration process may take quite some time. Because of this habit, the plant should not be transplanted often.

Dan Hagan runs TheShrimp Farm.com.
The place to go for dwarf freshwater shrimp.
Shrimp are the perfect aquatic inhabitants for your under water planted garden.
If you're interested in keeping dwarf freshwater shrimp or have a question about them, go to Dan's blog site and ask your question.
It's a great site with reliable and accurate information on dwarf shrimp.

Crystal Red Shrimp

Crystal Red Shrimp History

The Crystal Red Shrimp is the selectively bred red color variant of the Bee Shrimp. Originally selectively bred in Japan for its red coloration, the Crystal Red Shrimp is becoming one of the most popular Dwarf Shrimp across the globe.

Crystal Red Shrimp Care

Crystal Red Shrimp are a little more demanding than many other Dwarf Shrimp, and have the same care requirements as the wild type of this species, the Bee Shrimp. The water is required to be soft and slightly acidic for the Crystal Red Shrimp to be happy. They also prefer a little less than tropical temperatures. As with all Dwarf Shrimp, the aquarium should be well established and parameters should be kept stable. The higher grade Crystal Red Shrimp are more sensitive to nitrates than many other Dwarf Shrimp so care must be taken to ensure high quality water.

Crystal Red Shrimp Diet

Crystal Red Shrimp are omnivores and share the same diet that most Dwarf Shrimp enjoy. Crystal Red Shrimp are algae eaters, but will often times need supplemental feedings. Aquarium foods intended for bottom feeders and aquatic invertebrates are readily accepted, as are blanched vegetables (boiled until soft). There are foods made in Japan specifically for Crystal Red Shrimp that are high quality foods, but are not necessary.

Crystal Red Shrimp Breeding

If optimal care requirements are met, the Crystal is fairly easy to breed. Crystal Red Shrimp carry their eggs a little longer than many other Dwarf Shrimp, and after hatching develop a little more slowly. It can be difficult to determine the sex of a Crystal Red Shrimp', the males are slightly smaller and have shorter, thinner tail sections. The females are larger with a longer and wider tail section.

Crystal Red Shrimp Behavior

Crystal Red Shrimp are non-aggressive, and are quite active. In an aquarium that has no predators, Crystal Red Shrimp will often be observed grazing on algae, on aquarium plants, decorations and on the substrate. When fed, the shrimp will often form large groups that are quite striking in appearance.

Crystal Red Shrimp

Scientific Name:
Caridina cf. cantonensis
Other Scientific Names: N/A
Common Name:
Crystal Red Shrimp
Other Common Names:
Red Bee Shrimp
Origin: South East Asia
Found in the wild: No
pH Range: 5.8 - 6.8 Ideal pH 6.2
Temperature Range: 62° - 72°
Ideal Temperature: 68°F
Hardness Range: -1-5 dkh
Ideal Hardness: 3 dkh
Life Span: 1 - 2 years
Size: 1 - 2 inches
Gestation Period: 30 days
Diet: Omnivore

Special Notes

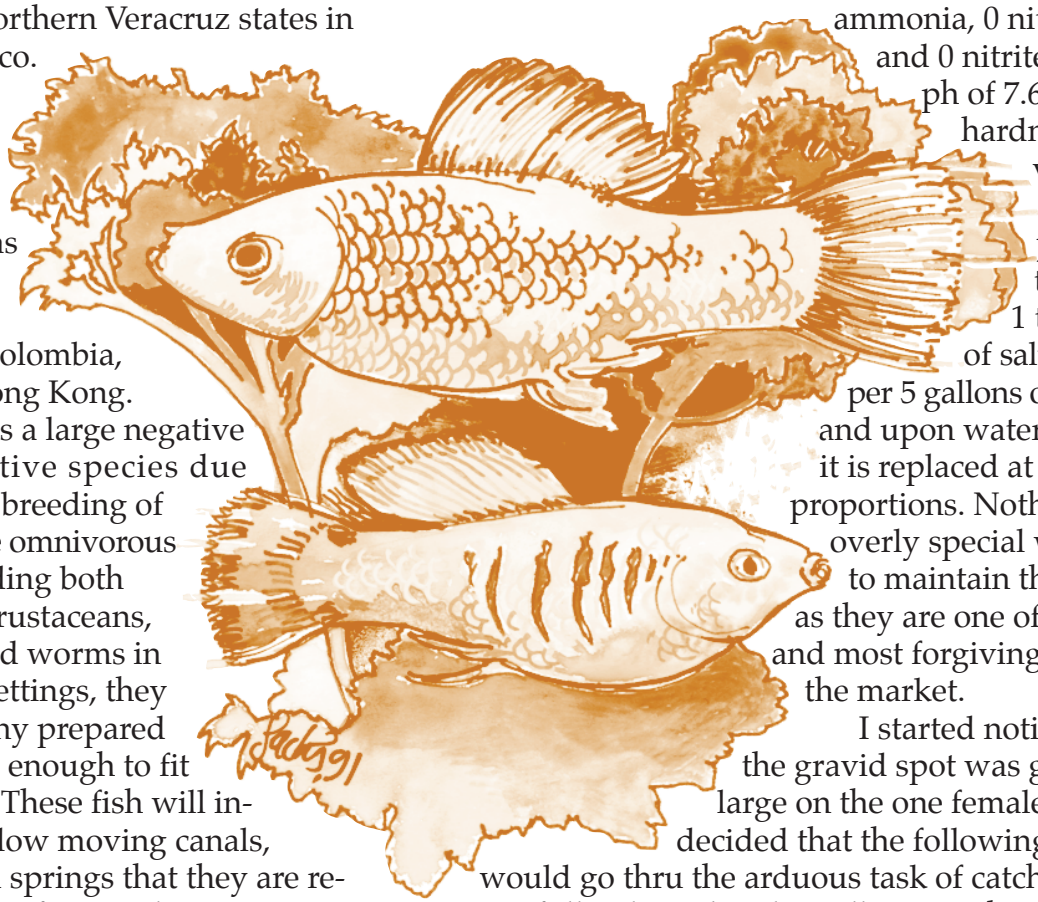
As with all aquatic invertebrates, it is important to make sure copper does not get into the aquarium. Copper is toxic to all Dwarf Shrimp. Many medications contain elevated levels of copper, so it is recommended not to medicate an aquarium with Dwarf Shrimp in it.

BAP Report by **Michael Steffen**
TANK TALES November 2010 Volume 39, No. 10
The Official Publication of the Aquarium Club of Lancaster County

Platy Variatus

I acquired a few of the "Sunset" variety of this species in early May while fish shop hopping with my father. The time spent with him would have sufficed, but to find a few gems to bring home that day put it over the top for me. I purchased 1 male and 2 females with the females being prehit; and before long I knew I would have fry.

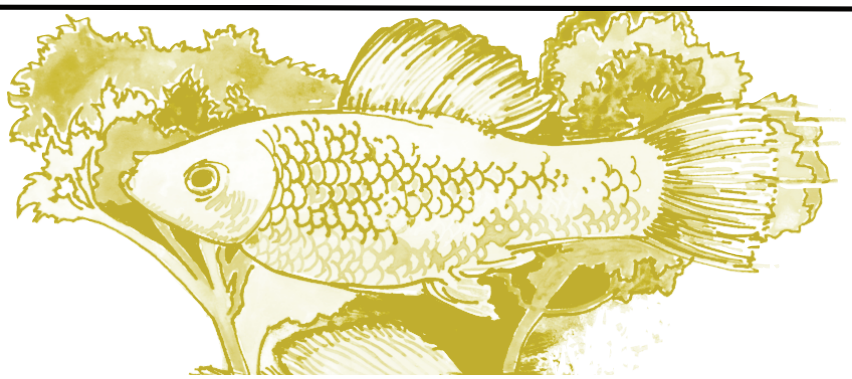
The *Platy variatus* hails from the southern Tamaulipas and northern Veracruz states in northeastern Mexico. This species presents an invasive problem in Florida and Montana. as well as a few other countries of the world including Colombia, Singapore, and Hong Kong. Hong Kong reports a large negative impact on their native species due to the prodigious breeding of these fish. They are omnivorous with its diet including both plants and small crustaceans, insects, and annelid worms in the wild. In tank settings, they will accept most any prepared or live foods small enough to fit into their mouths. These fish will inhabit almost any slow moving canals, ditches, and warm springs that they are released into and therefore can become invasive very quickly.



The fish were maintained in a 10 gallon tank with a few assorted other livebearers and my ghost shrimp. The tank is fully planted with a dual sponge filter and a composite substrate consisting of a peat moss layer covered by a sand layer topped with a small gravel layer. This tank also boasts a 3 dimensional back ground that I crafted a while back from styrofoam and dry lock paint, but more on that in other article in the future.

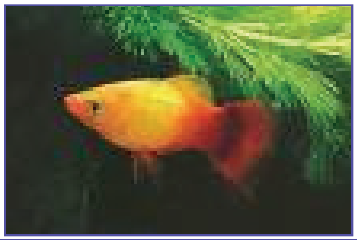
The chemical levels of this tank are 0 ammonia, 0 nitrates, and 0 nitrites with a ph of 7.6 and a hardness of very hard by the jungle test strip. 1 teaspoon of salt is added per 5 gallons of water and upon water changes it is replaced at the same proportions. Nothing overly special was done to maintain these fish as they are one of the best and most forgiving fish on the market.

I started noticing that the gravid spot was getting large on the one female and decided that the following day I would go thru the arduous task of catching a fish in a fully planted tank. Well, to my shock the next morning I didn't have to catch anything since she had given birth that morning before I got to the



tank and there were little platys all over the tank. I am not one to leave livebearer fry in the tank with their parents due to the high protein snack factor that the fry often become. But trying to chase these tiny fish in a tightly planted tank was turning into a nightmare and after 30 minutes of chasing them and tearing almost every plant loose, I decided to let the chips fall where they lay and I'll get the next batch. At this point I had given up on having any fry from the first birthing but with the platy's ability to store sperm I knew that even if the male didn't get his job done, I would have more fry in 4-5 weeks. Plus I also had the backup plan of the second female who was not quite ready to pop.

In the next few days, I spent some time in front of the tank and noticed some fry hiding in the plants and sneaking out to grab a flake every now and then. This thrilled me with delight and I also noticed that the adults I had were hanging at the top of the tank more and more. Over the next few days I lost the 3 that I purchased from the big box pet store but still had the fry. Slowly but surely, they started venturing out and I could count them and saw that I had 8 little perfectly clear fry. Over the next month or 6 weeks, they started developing their colors and man-o-man the color from the fry eating high quality food vs. their parents was astonishing. The fry had bright clear colors ranging from yellow on the dorsal thru orange to red to green on their stomach. They were really becoming a sight to see and a true gem in my fish room. For some unknown reason, I lost 1 during week 8 and another during week 10. I now believe the ones I lost to be males since the ones I have left are now pushing the 5 month age and seem to be 5 females and 1 male. I think that the strongest male nipped the fins of the other 2 males to take dominance and they didn't fare too well in the fighting.



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In conclusion, these fish are great fish to keep and have a dog like personality. They are always happy to see you come to the tank and even happier after you toss in some food. "Highly colored" and "energetic" are some more descriptive words for these little jewels. Personally, I usually have a nicely planted livebearer tank and often spend many restful hours in front of it.

So till you peek behind my shell to see me again I bid you happy fish keeping.

Joe Graffagnino, BAS, President

Black Eggs

I have bred many species of fish, but I have never seen black eggs. I was amazed when I saw them and from a West African cichlid no less. I obtained a breeding pair of *Tilipia snyderea* from fellow fish breeder **Vinny Babino**. Vinny informed me that these are very beautiful fish, with striking color markings. They are aggressive fish when spawning and protecting their young, and they are the gift that continues to give – once they start spawning, you can't get them to stop.

Tilipia snyderea are the smallest of all Tilipia and they hail from Lake Bermin in Cameroon, West Africa. This species' common name is "Snyder's dwarf tilapia." There are three colors that these species can display, based on their mood and especially during breeding. They can go from a pale bland color to a green, to a red. In breeding dress, both the male and female are absolutely stunning with a green top that goes to the middle of their body (lateral line) which extends from the head through the anal fin. The lower portion of the body is an orange red. But that's not all -- the face changes color as the mouth becomes a dark black, while the lips become pure white -- truly amazing coloration on a fish that gets no larger than 4 - 5 inches.

When I received this beautiful pair of fish, I realized they were too large for a 20 gallon aquarium, so I quickly did some rearranging and Since I believe in species tanks I kept them by themselves. After less than one month in their new home, they started moving large amounts of gravel in the tank. They really like to landscape. Four days after the landscaping began, the female took up residence in a small clay breeding cave that had an opening the size of a thumb. It was obvious that the male could not enter. I assumed that they would lay their eggs on the glass bottom since they made it bare by moving all the gravel away. A day or two later I used a flashlight to see into the cave and lo and behold! I saw around 20 or so black eggs.

A few days later, they must have hatched because the parents moved the fry one foot away from the cave and under a piece of coral. I was worried for the fry because this tank was overrun with Malaysian burrowing snails, who I thought may go for the babies. However, within a few days my snail problem was a problem no more. After their yolk sacs disappeared and the fry started free swimming, I fed them microworms, vinegar eels and frozen baby brine shrimp. The fry grew quickly and they tended to clone each other, for although I initially counted around 20 eggs, I now counted about 80 swimming fry.

I would highly recommend this beautiful, but aggressive West African cichlid as a welcome addition to a species only tank. Also, this fish is on the endangered list of fish species, so maintaining this fish will help it from becoming extinct in the wild. Please share this wonderful fish with other members of local fish clubs and let everyone enjoy them.

H. Blair Howell
www.hillcountrycichlidclub.com/articles

Species Profile:
Cyprichromis Leptosoma

Cyprichromis leptosoma or the sardine cichlids, as they are called in the hobby, come from Lake Tanganyika where they live in schools numbering in the 1000s or more. They are one of the only true schooling cichlids known. They occur in a number of different geographical variants, each displaying a different coloration and each variant occurring in both a blue and a yellow tailed morph. While the females remain a dull dusky color, the male's colors can be quite stunning.

Cyprichromis are found around rocky shorelines and in open water all over the lake. They prefer a temperature of 74 - 78 degrees and, as with all rift lake cichlids, like hard alkaline water.

Male Photo: Blair Howell

In the aquarium, *Cyprichromis* should be kept in groups of at least 6 individuals or more. They are sensitive to water quality and good filtration is a must. They are great for a Tanganyikan community tank because they occupy the upper layers of the tank.

Some care should be taken in choosing tank mates for *Cyprichromis*. They should never be housed with frontosa, as they are a primary food source in the wild.

Cyprichromis can be very entertaining to watch as the males are constantly displaying either to females or to display dominance.

When spawning, the males will stake out a three dimensional area in the open water at the top of the tank. They defend this area vigorously against intrusion by other males while trying to entice the female to enter. As a rule, they are quite nonaggressive, but I have seen them chase away fish much larger than themselves while defending their territory.

I have one male that is particularly aggressive in defense of his territory which he always stakes out right near my highly aggressive male Hap. sp. 44's territory in my 125. On more than one occasion, I have seen the male 44 and the Cyp. get into a face off. Ultimately the sp. 44 always backs down. While they look quite fragile it has been my experience that these guys can be quite tough. By no means are *Cyprichromis* aggressive towards other fish though; they in fact seem to have a calming effect on the tank. This is especially true with my

Displaying Male Photo: Blair Howell

Julidochromis marlieri gombe.

I was never able to get a photograph of him because he was always hiding in the rocks before I added the *Cyprichromis*. He now will come out and patrol an area around his rocky home and I have gotten several good shots of him.

Breeding *Cyprichromis* is not difficult provided they feel secure in their environment. Once a male has successfully lured a female into his territory, he will display for her with his dorsal and anal fin clamped tight against his body and his mouth protruding. In this way he induces her to lay an egg. She then turns around and catches the egg in mid fall. Once the egg is in her mouth, she nuzzles the male's ventral fins, fertilizing the egg and the dance is repeated.

Female Photo: Blair Howell

Depending on the size and condition of the female, she may lay up to 20 or 25 eggs.

Cyprichromis are a very active and fun to watch addition to any large Tanganyikan community tank. This fish is always in demand and is a great fish to breed. All in all, I would recommend them to any Tanganyikan enthusiast.

Species Profile:
Cyprichromis Leptosoma

- **Scientific Name:** *Cyprichromis leptosoma* (Mpulungu)
- **Pronunciation:** sp-r-kr-ms lp-t-s-m
- **Common Name(s):** Blue Flash, Blue Neon, Neon Head
- **Geo. Origin:** From Kasanga to Mpulungu
- **Habitat:** Open Water
- **Diet:** Carnivore
- **Gender Differences:** Dimorphic
- **Breeding:** Maternal Mouthbrooder
- **Temperament:** Mildly Aggressive
- **Conspecific Temperament:** Mildly Aggressive
- **Maximum Size:** 4.5"
- **Temperature:** 77 - 79°F
- **pH:** 8.6
- **Water Hardness:** Very Hard
- **Difficulty:** 2

COMMENTS:

Certainly one of the more popular Cyps in the hobby, this geographical variant is known by several nicknames: Blue Flash, Blue Neon, and Neon Head. The Blue Flash is the holotype for the species *Cyprichromis leptosoma*. It is found at the southern most end of the lake, from Kasanga, Tanzania to Mpulungu, Zambia. Specimens are collected at several locations, including Kasanga, Kambwimba, Isanga, Chituta Bay, and Mpulungu. Like all *Cyprichromis leptosoma*, it is found in 2 distinct color morphs: blue-tailed males and yellow-tailed males. It differs from the other 4 leptosoma in the following manner: Males are not as blue-bodied, but are primarily grayish-brown with a strong blue highlight on the head (hence the name Neonhead). Blue-tailed males have a light-blue anal and dorsal fins. The dorsal fin is speckled throughout with small, dark spots. Yellow-tailed males have a blue dorsal fin with a black band running along its base. The anal fin is also blue and may or may not be streaked with black markings.

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P.O. BOX 290610, BROOKLYN, NEW YORK 11229-0011

Please check your address label to see when your membership expires

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*If family membership, please list all family members. **Only first two listed will have voting rights.**

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Number of tanks [ ] marine [ ] freshwater [ ] Do you breed fish? [yes] [no]

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_____

Special interest (if any)_____

_____

How did you hear about BAS [friend] [dealer] [flyer] [*Aquatica*] [mag ad] [online] **other**_____

To volunteer check [yes] [no] A board member will contact you if you check yes.

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