

# UnderWater



The Official Newsletter of the Iowa Aquaria Association

July 2005 | V2:N7



COVER: *Protomelas taeniolatus* (Super Red Empress) | by Bill Brown (manus)

INSIDE: The Freshwater Angelfish | Lake Victoria: Troubled Waters | Species Profile



# UnderWater

Volume 2, Number 7  
July 2005

Published monthly by the Iowa Aquaria Association for members.

UnderWater is owned and maintained by the Iowa Aquaria Association and Joe Lover, the editor. If you wish to reproduce any material (articles, photos, etc.) found within UnderWater, please contact the Editor below.

To submit an article for UnderWater, please email Joe Lover, Editor, at [underwater@iowaaquaria.com](mailto:underwater@iowaaquaria.com).

**| IAA President |**  
Scott Carlson  
(fishwhisperer)

**| Editor, Designer |**  
Joe Lover  
(loverland)

**| IAA Contributors |**

Sandra Cowles  
(s&m angels)

Brett Dailey  
(physicsboy)

Jason Jenkins  
(malawi wowwie)

Camille Nichols  
(aquagirl)

# UnderWater Welcome

## 2005 BAP STANDINGS

Name	'05 BAP Points
1. Jo Meade	70
2. Bob Randall	60
3. Bill Brown	50
4. Matt Anderson	30
5. Scott Carlson	20
6. James Kutscher	10

Putter | Magnet | Organic Cotton Tee | Value T-Shirt | Jr. Ringer T-shirt |  
 Women's T-shirt | Dog T-Shirt | Jr. Raglan | Jr. Hoodie |  
 Classic T-Shirt | Men's T-shirt | Dog T-Shirt | Jr. Raglan | Jr. Hoodie |  
 o G | D | Jersey | White T-Shirt | Ash Grey T-Shirt |  
 Sh | T-Shirt | Women's T-Shirt |  
 pe | T-shirt | Sweatshirt | Boxer Shorts |  
 Classic T-shirt | Camisole | Infant, Toddler T-Shirt | Infant Creeper | Bib

**IAA** [www.cafepress.com/iowaaquaria](http://www.cafepress.com/iowaaquaria)  
**SHOW YOUR SUPPORT**

## IN THIS ISSUE

2 – BAP Standings

3 – UnderWater Photography Contest

4 – The Freshwater Angelfish, by Sandra Cowles (s&m angels)

6 – Lake Victoria: Troubled Waters, by Jason Jenkins (malawi wowwie)

8 – The Dailey Adventure: GCCA Cichlid Classic, by Brett Dailey

10 – Species Profile: Archocentrus Centrarchus, by Camille Nichols (ag)

11 – Fishroom Tour '05, by Brett Dailey (physicsboy)

14 – Calendar of Events



# UnderWater Photography Contest



Joe Lover (loverland)  
*Cyrtocara moorii*

**1st**  
PLACE



Joe Lover (loverland)  
*Ps. zebra* Long Pelvic Ngara  
Honorable Mention



Bill Brown (manus)  
*Protomelas taeniolatus*  
Honorable Mention



Joe Lover (loverland)  
*Metriaclima estherae*  
Honorable Mention

**This month's contest was guest judged by Ad Konings, who generously donated an autographed book to the winner. A special thanks goes out to Mr. Konings. July 20th is next month's photo submission deadline.**

# The Freshwater Angelfish

Hobbyists have known the famous freshwater angelfish for quite some time. The hobbyists first considered angelfish to be a “problem fish,” because getting a pair to mate up and spawn was very difficult. Once “tank-raised” stock became available, this all changed.

Among the multitudinous array of fish of every size, shape, habit, form, and color imaginable which can be kept by the aquarist of today, only a handful are so widely recognized and so completely satisfying in themselves as to be kept by many aquarists exclusive of other fishes. The angelfish, king of the aquarium, is unique for its qualities, which make it deserving of this title. It is large, beautiful, graceful and spectacular, and yet for its size, it is gentle.

In 1831 the first freshwater angelfish became known to science as described by Cuvier & Valenciennes. It was thought to be related to the batfish of the marine genus *Platax*, because of its very tall and deep dorsal and anal fins, thus named *Platax Scalaris*. In 1839 Heckel realized it belonged to the cichlid family, and the new name became *Pterophyllum Scalare* (Ter O Fill UM Ska Lare). *Pterophyllum* de-

rived from Greek meaning “winged leaf” and *Scalare* from Latin meaning “like a flight of stairs” referring to the dorsal fin.

The *Pterophyllum Leopoldi* was recorded in 1855 by Castelnau and was first described as *Plataxoides dumerilii*. This fish like the *P. Scalare* had the shallower body, which distinguishes it from the *P. Altum* that was first discovered in 1903 in Venezuela. The *P. Altum*, which has the largest and deepest body of the freshwater angelfish still today, makes quite an impressive show fish. The angelfish of the aquarium hobby today are for the most part pure *P. Scalare*.

For the hobbyist consid-

ering keeping freshwater angelfish, whether by themselves or in a “community” tank, should first

remember, the angelfish is of the cichlid family and can be capable of growing to a large size and should be given plenty of room. The larger the aquarium, the better, and avoid over crowding them.

Next we come to water quality suitable for freshwater angelfish. Remem-



Dark Marble Veil

ber they do come from rivers in the wild. Some will tell you that the water HAS to be “perfect” to successfully breed them. Personally I feel as long as your tap water is not extremely hard or high in PH, don’t mess with it. Neutral in PH and not more than slightly hard is best in most cases. If changes are needed do it slowly over several partial water changes.

Now comes the fun part. Freshwater angelfish come in many different varieties. There are many different colors and fin types, and combinations there of. There are a number of very nice and desirable strains of angelfish that have become established over the years in the aquaria, and several of them have had a substantial impact on the hobby of fish keeping. One of the most majestic in my option is the Black Lace Angelfish. The primary difference in Black Lace



German Blue Blusher Veil

# The Freshwater Angelfish



Black Lace Superveil

and other angelfish is the concentration of the pattern especially on the fins, which takes on a lace-like effect. Black Lace is the steppingstones to the solid black angelfish. Sadly the Black angelfish are much more fragile and therefore harder to raise.

The Marble Angelfish like its name the pattern on its sides will be unpredictably different from one fish to the next. The dorsal, anal and tail fins are streaked with black. Seldom are any two alike in markings even within the same spawn.

Another of the most common freshwater angelfish is the Gold or Golden which was developed from a single little runty fish which was found around 1963 among the thousands of angelfish that Carl Naja of Milwaukee was raising commercially. This little fry was almost discarded, but was placed in a tank alone

and almost forgotten. As it grew the blotchy appearance turned completely yellow or golden. After many years of trial and error Naja was able to market the first gold angelfish in 1969. A few years later in the

early 1970's Peter Wong of Hong Kong produced another gold strain.

Now that we are past the basics of Angelfish history, we could go on and on with all the different crosses and genetics of freshwater angelfish. Without going on to describe all the different types of marbles and the less seen albino, zebra, scribbled or clown, Smokey, chocolate, half-black, Latino and on and on. Along with all the different genetics, colors and markings of the angelfish go the fin types. The common (standard), veil and the super veil tail. The type of fins does not change the colors or markings of an angelfish, just the look. As the name implies, the veil tails have long veil-like tails. In addition the other fins are also longer and larger. The veil tail characteristic is dominant. If a veiled angelfish is crossed

with a standard finned the results will be 50% veil and 50% standard. A pairing of two veils will produce 25% standard, 50% veil and 25% super veils. Where as two super veils will breed 100% super veils. Although the super veils are the less hardy of the fin types, the veil and super veil seem to be a lot more peaceful and undemanding than their standard siblings.

The Pearl or Diamond scale as it was first called is completely covered with metallic or diamond-like scales. This is sometimes confused with the iridescent partial



German Blue Blusher SuperVeil

coverage, which a lot of angelfish have depending on the lighting.

We cannot leave out the beloved Blushing Angelfish, which have a red cheek area, thus blushing. The red is a result of a transparent gill plate cover. A true Blushing Angelfish has no pattern of stripes on the body. While the dorsal and anal fins are outlined with black, some describe them as plain. Various crossings have re-

sulted as Marble blushing, black lace blushing, Koi, and German blue blushing.

I have been asked thousands of times (as have most others who have breed angelfish) "How do you sex them?" Well, the BEST way I have found is to let the angelfish do that part themselves. Their batting average is much better than even the most experienced angelfish breeder. The fact is, that certain breeders can sex angelfish with a degree of accuracy. With experience and years of dealing with angelfish, partially by

"feel", there are few physical differences. There in lies the problem, relating this to others proves to be somewhat difficult. Personally I only get it right about 70% of

the time.

The above only touches the surface of the history, varieties and care of freshwater angelfish and most of all it is only one point of view to the insight of angelfish. There are as many different thoughts and opinions on angelfish as there are types of angelfish.

by Sandra Cowles  
"S & M Angels"

## THE AFRICAN RIFT LAKES, PART 1

# LAKE VICTORIA: Troubled Waters

Lake Victoria is located in Eastern Africa, resting between the countries of Uganda, Kenya, and Tanzania. Covering approximately 68,800 km squared (about the size of Ireland)(3.), Lake Victoria is among the largest of freshwater bodies in the world, second only to Lake Superior. Although the lake has a massive surface area, the depth of the lake is relatively shallow. With

away from the basin. Scientists are saying that the lake could have been formed as early as 25,000 to 35,000 years ago. Within that time, it is believed that the lake may have dried up entirely between 10,000 to 14,000 years ago. This means that the 300+ know Haplochromines that evolved in Lake Victoria did so in an astoundingly short period of time. Even more amazing, they have



an average depth of 40 meters, and a maximum depth nearing 80 meters Lake Victoria contains only about 15% of the total volume of water that is found in its neighboring lake, Lake Tanganyika.

Speaking in geographical terms, Lake Victoria is extremely young. The lake was formed when a recent up-thrust of the Western side of the Victorian Basin reversed the flow of the rivers that once flowed

all evolved from a single species, and have "less genetic variation than the human species." (Coleman)

Discovered by John Speke in 1858, Lake Victoria was believed to be the source of the Nile River. Lake Victoria started to experience drastic changes once "Henry Stanley circumnavigated the lake to confirm Speke's claim" (TED Case Studies) in 1875. Within a few decades the English had built a railroad through the

area, and started to clear large areas of the lake's forest for farming teas, sugar, tobacco, and cotton. As local populations grew, the people turned to the lake as means to satisfy a growing demand for a tilapia known as Ngege. With the new English gill nets being used, the population of Ngege was quickly decimated to a commercially unsustainable level.

At that point, in the early 1950s, it was decided that the lake would have to be stocked with nonnative

fish to sustain the growing fisheries. The first stocked species to thrive was the Nile Tilapia, *Oreochromis Niloticus*, a plankton feeder. A few years later the idea of establishing a population of the Nile Perch, *Lates Niloticus*, came about. Ecologists, knowing the dangers of introducing such an invasive species, strongly opposed the idea. Regardless, in 1954 the Nile Perch started to show up in commercial catches. It is suspected that homesick, English anglers released them into the



## THE AFRICAN RIFT LAKES, PART 1

# LAKE VICTORIA: Troubled Waters

lake for sport fishing.

With the Nile perch already introduced, the governments decided to actively stock Lake Victoria with them in the early '60s. For the next twenty years the population of the enormous predatory Perch, reaching lengths over six feet, and weighing over 390 pounds, remained in check. It wasn't until the early 1980s that a troubling change appeared. The perch population exploded from comprising of less than 2% of the lake's biomass to an astounding 80%. In the meantime, the native Haplochromine populations dropped from

the fisheries, and supports around 25 million people (a third of the combined populations of the involved countries). No part of the Perch goes unused. The fillets are sold for food. The skins are tanned and used to make belts, purses, and boots. The swim bladders go to breweries to use as filters, and to Asia for use in soups. A large swim bladder alone can fetch as much as \$6 a pound.

Still, the local fishermen are harmed by the industry. With Haplochromine populations decimated, the fishermen are forced to purchase the Perch



perch makes processing for sale much more difficult. Instead of letting the Haplochromines dry in the sun, the fishermen must go through the process of smoking and cooking the filleted carcasses of the perch. While local populations suffer from protein deficiencies, the large Nile Perch exporters sell approximately 200,000 tons annually to local hotels, as well as European countries. The price fetched for these filets is well beyond the average local's budget. Unemployed, and too poor to afford the prices demanded of Perch meat, the Victoria Basin has experienced the loss of livelihood and food of approximately 30 million people.

Nile Perch are not the lake's only problem. Pollution has become rampant as booming populations have settled in the basin. Approximately 2 million liters of untreated raw sewage get dumped into

the lake on a daily basis. On top of that, industrial wastes from companies like breweries, fish processors, and agricultural processors are discharged into the lake as well. Gold mining is also on an upswing causing the levels of mercury, used in the mining process, to rise. Although the local waterways are becoming contaminated with heavy metals, the problem has not become out of control.

Nutrient levels have tripled since 1950, as a result of the industrializing of the area. The concentration of phosphorous has increased five times the level they were since 1960. This has caused a massive bloom of blue-green algae. When algae decays, it takes a great deal of oxygen to complete the process. This depletion of oxygen is causing huge parts of the lake to be devoid of life.

The nutrient rich waters have also given rise to a



80% of the lake's biomass to just 1%. It is estimated that 150-200 of the 300 indigenous Haplochromines are believed to be extinct.

The Nile Perch industry brings about three to four billion U.S. dollars a year to

scraps from the large fisheries that have the technology and boats to fish from the open waters of the lake. Not only are the heads and tails of the perch less tasty than the native Haplochromines, the high oil content of the

# THE ADVENTURE

## The GCCA Cichlid Classic

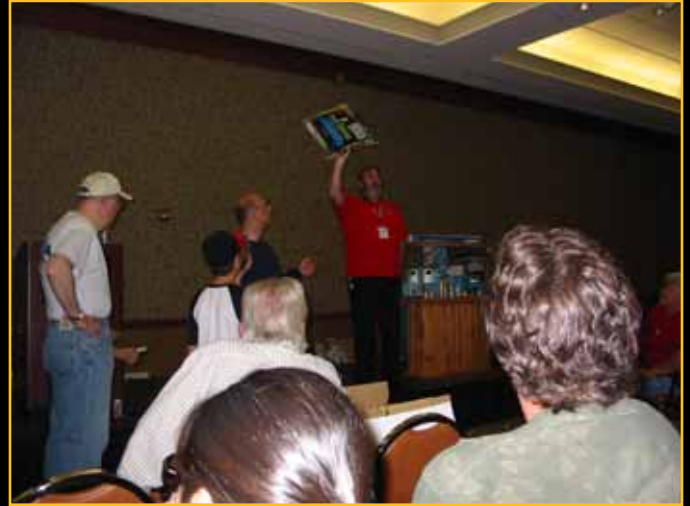
My next adventure was the Greater Chicago Cichlid Association's Auction held May 29th in Arlington Heights, Illinois. This was the first fish related auction I had ever been to. It was a great experience, and one that I hope to have again. This auction was only a part of the week-end of events starting on May 27th of the GCCA Cichlid Classic.

The auction kicked off at 11:00 a.m. I arrived about an hour early to get good seating, and to soak up the atmosphere.

Before going into the auction area, I swapped my driver's license for an auction number. This was done at a table located at the entryway to the room. An auction number was not needed to enter the room, but was needed to bid upon items. There was no buyer's entrance fee required for this auction. Also note, around this "check-in" area, were a few vendors selling fish tanks and related merchandise. After receiving my auction number, I proceeded inside into a large open room of the Sheraton hotel. Inside this room were a number of tables in the back. Most of the floor was covered with chairs. At the front was the auctioneer area along with some tables and fish supplies.

I'll start off by saying as it got closer to 11:00, more and more bags of fish were accumulating in the back of the room. These bags were brought in on carts, etc. and were set onto tables allowing people to view the fishes. Along with the trend of an increasing number of bags of fish was an increase in the number of people. Before I knew it, it was nicely packed. It wasn't too crowded, yet there was a respectable turnout. If I had to guess, I would estimate there were about 250 potential buyers. I did not perform a head count, so don't hold me to it.

The auction kicked off with the sales of fish related merchandise that was donated to the club. There wasn't a lot of merchandise to auction, so before I knew it, bags of fish were up for bid. As items were sold, a "runner" would bring the winner their item they had bid



# THE ADVENTURE

## The GCCA Cichlid Classic

upon. Coupled in the exchange was a piece of paper which served as an efficient and effective way to check-out when one wanted to leave the auction. A copy was given to the buyer, and the runner retained a copy to facilitate this process.

It was interesting to note, that if somebody found a bag of fish they liked, they could pay a small fee and have that bag of fish brought up to the auctioneer area so that bag would be auctioned sooner. So, as one can imagine, the earlier bags sold for more money, and were more competitively bid upon. I was amazed at how much some of the bags of fish were selling for. Some, arguably, sold for more than they would have sold in a pet store; others sold for slightly less money than you would find them selling at a pet store. As time went on, things started to settle down a lot. It did take awhile, and I was informed from more experienced auction enthusiasts that this was a GREAT seller's auction. From my perspective, things settled down to be nicely priced, comparable to most swap meets.

So, late into the evening the auction came to a close. People were directed accordingly, how to check-out. After paying for my winning bids, I was given my drivers license, and I was on my way home.

It was truly a great experience, but it wouldn't have been nearly as fun without my fish friends. It was nice discussing fish with fellow members of the IAA, as well as other fish enthusiasts outside of our club. I ended the night having an early morning dinner with fellow IAA members. I believe I got home sometime around 3:00 AM. So, fish people beware; auctions are an all-day event!

For more information about future GCCA events, one can visit their website at [www.gcca.net](http://www.gcca.net).



# Archocentrus

## The Flyer Cichlid

# Centrarchus

Archocentrus Centrarchus are omnivores originating from the eastern side of Nicaragua and Costa Rica, mostly in shallow water environments such as ditches and shallow ponds.

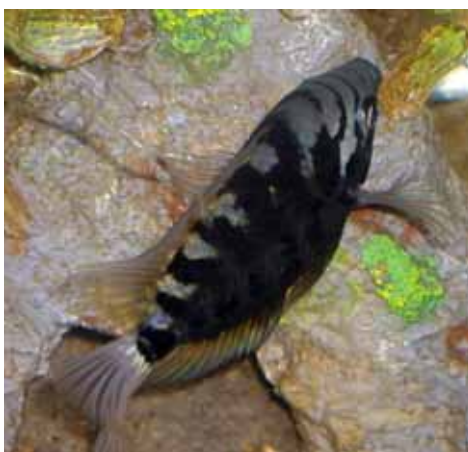
They were first typed by Gill and Bransford in 1877. They are often called the Green Fin or Flyer Cichlid, and one of the easy to keep and very attractive species of smaller New World cichlids. Male Archocentrus Centrarchus grow to 5 or 6 inches (and grow longer dorsal extensions), and females grow to about 4 inches.

Their coloration varies from their normal coloration of a greenish-brown base color with some striping and/or spotting to a black and white color, as I will describe later. They prefer a temperature of 75 - 78°F, but can probably tolerate 70-85°F in otherwise ideal conditions. They prefer a higher pH than one might expect, preferring the pH at 7.2 - 8.0 and enjoy hard water. For these reasons, keeping Archocentrus Centrarchus has been easy for me, as my tap water is about 7.3 and the water is always



relatively hard.

A. Centrarchus can do surprisingly well as an individual in community tanks providing that tank



mates are hardy fish, but not so big they can eat them! They are only mildly aggressive towards other fish, but can be highly aggressive with their own species. For this reason, it is best to keep a mated pair together if keeping more than one, preferably in a species only tank. A six foot long tank is recommended as the minimum size for keeping this cichlid as a spawning pair within a community tank.

I spawned my pair successfully in a 20-gal-

lon tall tank, and though I understood them to be a substrate spawner, they laid their eggs up high on an artificial cave structure in their tank. While spawning, the male and female become almost all black with a bit of white with the midsection down to the belly turning completely to an almost jet black. Three to four days after they had spawned, I would notice a tiny wriggling mass on the sand in a pit on the bottom of the tank. Within about a week, fry were free swimming and able to eat finely crushed flake and powdered krill.

# FISHROOM '05 TOUR

# physicsboy

π η ψ σ ι χ σ β ο ψ

Welcome to my fish room. Interestingly enough, it will not be like this for much longer as I'm in the process of a move. For now though, here it is. I currently have seventeen aquariums housing 550 gallons of water total. As a breakdown, I have a 125, 75, 55, 38, 2-29's, 3-20L's, 20H, 15, 3-10's, and 3 totes that are 25g each. All of these are housed in a bedroom downstairs measuring 14.5' X 11.5' except the 75g which is kept upstairs in my son's bedroom.

Almost all of my tanks house Lake Malawi cichlids. I'll try and break all of them down separately including set-up, etc. Note that I generally provide lighting to my aquariums through sunlight. However, I also use a 60w incandescent bulb for my downstairs fish room that runs in sync with the sunlight. As the sun goes down, I turn on some of my fish lights.

I tend to feed my fish frozen brine shrimp as a treat, and the staple being NLS foods. I also supplement with OSI flake, as well as other foods.

I'll start with my largest tank, and work my way around my fish room. My 125 gallon houses many Malawian cichlids, and



one Arius seemani catfish. I have about 20 Placidochromis sp. phenochilus "Tanzania", 11 Pseudotropheus acei "Black Acei", 2 Nimbochromis polystigma, and 3 Copadichromis azureus. The Phenochilus have started spawning as well as Black Acei and Polystigma's. I believe the Azureus is just a matter of time. They are of size, but have

yet to do the deed. For filtration I'm using 2-Aquaclear 500 power filters, and 2 Hydrosponge 5's one being run by air, and the other by a Hagen 802 powerhead. For lighting, I'm using 2-40W fluorescent bulbs along with 2 30W fluorescent bulbs. Things were fine in this tank until recently when two fish came up dead (my domi-



Copadichromis borleyi and Pseudotropheus acei

nant Polystigma male, and his holding female). So, things have been moving around a little bit, but this is where it is at right now.

Below the 125 gallon aquarium I have a 29 and a 20L. I built the stand to house 29's on both sides, but I put the 20L there as the other tanks were set up already. In the 29, I have some Red Top Ndumbi, and Pseudotropheus elongatus "Chailosi". The Red Top Ndumbi's have just started to spawn. I believe the Chailosi's will soon enough. The aquarium is filtered by a sponge filter and a power filter. The 20L next to the 29 has Marleri Peacocks, and Pseudotropheus elongatus "Chewere". I noticed today that I had a holding female Marleri which is good news. The aquarium is filtered by 3 sponge filters (2 by air, and one by a powerhead). Both tanks are lit by fluorescent bulbs.

Across the room are a series of tanks. To the far left at the top, I have a 38 gallon. I have Fryeri, Saulosi, Zebra Manda's, and a Gibbiceps Plecostomus. Everything has spawned except the pleco, and juvenile Zebra Manda's I'm raising. The tank is filtered by 3 sponge filters. The tank is lighted by 2-30W



fluorescent bulbs.

Below the 38 gallon is a 20L aquarium. It has no lid, and currently house 2 breeding nets for raising smaller fry. I currently have OB Peacocks in it. In the breeding nets I have Saulosi fry and Black Acei fry.

To the right of the 38g is a 29g that houses Red Fin Borleyi, and German Red Peacocks. In addition it has 3 breeding nets that have an assortment of fishes such as (Zebra Manda's, German Red Peacocks, and Taiwan Reefs). The aquarium is filtered by a Fluval 403 coupled with 2 bio-wheel filters. In addition, I have an under-gravel filter plate being run by a Hagen 802 power-head. I have a fluorescent bulb that illuminates this aquarium.

Below the 29 gallon is a 20L aquarium that houses

Oscars. I have 6 Red, and 1 Tiger. They are still pretty small, about 3" each. The aquarium is filtered by a power filter, and

one sponge filter. The aquarium is lit with a fluorescent bulb.

On the floor in front of this 20L is a 10 gallon aquarium. It is filtered by a sponge filter, and houses Ngara Peacocks. They are still pretty small as I just acquired them. I have no lighting on this tank.

To the right of the 29 gallon is a 20H. I also have



**Protomelas steveni "Taiwan Reef"**

3 breeding nets in it. The adult fish are Makonde's. They have just started to spawn. I noticed a female holding today. In addition I



**Pseudotropheus Saulosi**

also have some bristle-nose plecos. In the nets, I have some Red Top Kimpuma's, and Eureka Red Peacocks. Filtration is provided by a power filter and two sponge filters. I light this tank w/ a compact fluorescent screw in bulb that is inside a clip on light fixture. I use this to light both this 20H and the 15g below it.

Below the 20H is a 15 gallon that houses Zebra Manda's. I have mostly OB ones in there, but also have 2-3 regular males. The filtration is provided by a power filter, and a sponge filter powered by air. I also have a power-head that helps circulate water and introduce oxy-

gen into the tank. .

To the right of the 20H on the opposing wall is my 55g. I have about 20 Zebra Chilumba's, 12 Yellow Labs, 18 Synodontis multipunctatus catfish, and 3 Turquoise Peacocks. I have the tank filtered by 2 sponge filters, and one power filter. The tank is lighted by a shop-light that houses 2-40W bulbs.

Below the 55g are 2-10g's. The left 10 gallon has Albino Eureka Red Peacocks, and Black Acei. In the breeding net, I have Fryeri fry. The right tank has Kinszei about 2" in size. Neither tank is illuminated with light except room light, and sunlight.

To the right of the 55 is the wall housing the 125. From the picture you may

From page 12

have noticed my totes on the floor. Currently these contain Zebra Manda's and Turquoise Peacocks. Each tote is filtered by sponge filters ran by air.

Upstairs is my 75g aquarium. It is filtered by two Emperor 400's. It is lit by a shop-light that houses 2-40W bulbs. The species I have are Jalo Reef Afra's, Taiwan Reef's, Red

Top Trewavasae's, Zebra Manda's (Breeders), and a Gibbiceps Plecostomus.

All of my tanks air is run off of air pumps. I recently acquired Dolphin air pumps and would recommend them. They seem to do a good job for their low cost. I try and do routine maintenance with water changes every 2 weeks. I generally do a 50% water

change at a time. Smaller tanks or tanks with smaller fishes, I do water changes more often. Most aquariums have heaters, though I know heat the room with a Quartz 1000W/1500W heater. I have the thermostat set on 80 degrees Fahrenheit.

As some of you know, I'm in the long-process of finishing some tanks I'm

building. These will be done soon, and I hope to complete some more this summer. It all depends on space and money at hand. I also want to add some grow-out space whether it is rubber troughs, or what have you.

Anyway, thanks for visiting my fish room...you are all welcome to come see it anytime.

## THE AFRICAN RIFT LAKES, PART 1

# LAKE VICTORIA: Troubled Waters

From page 7

water hyacinth infestation. Water Hyacinth is a rapidly growing, floating weed that clumps together in large bunches. Absent from the lake as late as 1989, the Water Hyacinth has begun to choke off important waterways and landings as the growths are too thick for most boats to traverse. Uganda has been hit the hardest so far. While the Hyacinth blankets the surface, it robs the waters below of light. This in turn prevents the development of plankton, robbing the already stressed populations of cichlids, of food. Water Hyacinth also serves as the perfect breeding ground

for disease-carrying snails. As the growth of Hyacinths continues to rise, so does the frequency of diseases reported in the area of infestation.

As grim as all the problems Lake Victoria is currently facing seem, measures are being taken to ensure that the lake doesn't become the largest body of dead water on the planet. Groups like the Lake Victoria Environmental Management Program are planning ways to manage and restore the land surrounding the Basin. They are also working on controlling the Nile Perch and Water Hyacinth. Test zones have shown successful, and

the tactics discovered there will be implemented on increasingly larger scales.

Perhaps all is not lost for Lake Victoria. On the bright side, stocks of more than 40 different Haplochromines are being maintained in genetic isolation from other species at more than 30 different aquariums in the U.S. and Europe under the watch of the World Conservation Program. There has recently been a return of several species in the wild that were believed to be extinct, and many more species' status is being re-evaluated. To lose such an amazing example of species radiation (remem-

ber 300+ species evolved in 10-14,000 years) would not only be a great loss to Africa, or even aquarists, but the whole planet.

By Jason Jenkins

### Sources:

1. Rabi, Marcela. TED Case Studies: Lake Victoria. Fall 1996.
2. Coleman, Ron. Cichlid News. Vol. 6 No. 1, pp. 14-15. How Old is Lake Victoria. January 1997
3. Chege, Nancy. Lake Victoria: a sick giant. people&theplanet.net. 1/6/04

August 13, 2005  
Swap Meet from 10am-12pm  
Meeting at 2pm  
www.iowaaquaria.com

Best Western Des Moines North  
5055 Merle Hay Road  
Johnston, IA 50131  
For info: (563)-386-7913



Looks like it's IAA SwapMeet time again.

# IOWA AQUARIA ASSOCIATION

## / CALENDAR OF EVENTS /

DATE	TIME	EVENT	LOCATION
July 9	4:00 pm	EIAA members only picnic	Swisher, IA
July 10	7:00 PM	GCCA Meeting	Holiday Inn, Rolling Meadows, IL
July 21-24	Varies	ACA 2005 Convention	Radisson Plaza Hotel, Fort Worth, TX
Aug. 4	7:30 PM	MAS Meeting	St. Christopher's Episcopal Church, Roseville, MN
Aug. 9	7:00 PM	EIAA Meeting	Kenwood Park Presbyterian Church, NE Cedar Rapids, IA
Aug. 13	10:00 AM	IAA Swap/Meeting	Best Western Des Moines North (see above)