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The SCAT

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scaas.info

Club Notes

Our Mission Statement: Meetings of the St. Catharines & Area Aquarium Society are held on the first Monday of each month, 7.30p.m., at the Seafarers & Teamsters Union Hall, 70 St. Davids Rd. E. Thorold, Ont. No meetings are held on Mondays that are holidays. Those meetings are held on the second Monday. There are no meetings during the months of July and August. ***The Society, established in 1958, is a non-profit, educational organization dedicated to the task of promoting interest in the breeding, raising, maintenance and study of tropical fish, both at the beginner and advanced levels***. The St. Catharines & Area Aquarium Society is a charter member of the Canadian Association of Aquarium Clubs Inc. (CAOAC) www.caoac.ca. SCAAS is also a member of the Federation of American Aquarium Societies (FAAS). More news and information about the St. Catharines & Area Aquarium Society can be found at **http://www.scaas.info**

Our next meeting will be held on April 02.12 Start time is 7.30 pm ALL ARE WELCOME
This month's program will be a video by Roman Haljkevic of some of our members' aquariums

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Membership Dues:

Family: $ 25.00
Single - $ 20.00
Junior - $ 10.00 (under 16)
Seniors - $ 10.00 (over 65)

Inside This Issue

Cover photo of an electric blue ram (Charlie Drew Stock)
Photo © by DAve Unruh

Jar Show

The fish of the month will be Angels Discus
For May it will be Dwarf Cichlids

Presidents Message

Our March meeting was a big success with our speakers from the Durham Club, Barry McGee and Jim Taylor on their trip to Uruguay. We are working towards a Show and Auction in October, we have been very successful over the past three years and we are hoping to be successful again this year especially with some of the feedback we have received from other clubs. Saturday was Hamilton's auction and they had a great turnout. Roman will be putting together a video of some member's tanks so it should be very interesting. We did another trip to Toronto and set up some more stores for the members to go too. Again, if anyone is interested in going on a day trip to Toronto to some of these stores let me know and we can set something up. You can e-mail me at tom.hillier@hotmail.com. Lastly don't forget the food for the food banks as they are short on non-perishable foods with the Easter season on its way.

Tom Hillier

Membership Meeting Minutes

March 5, 2012 **Meeting Commenced** at 7:42 pm.

Opening and Welcome: Tom Hillier welcomes everyone present. He also welcomed our new member Rob.

Upcoming Events and Announcements: Read by Tom Hillier : Hamilton Auction March 17, Brant Show and Auction March 25, Durham Convention Easter weekend.

Our members are in favour of continuing with the current board of CAOAC.

Treasure's Report: Presented by Bob Hayslip : Float 182.56, Bank 2117.30, Total Funds 2299.86

Breeding Award Program: Tom Bridges presents certificate to: Tom Hillier

Any Other Aquatic Animal Breeding Award Program: Pam Danyluck presents certificates to: Tom Hillier x 3

Horticultural Award Program: Erica & Dudley

March's Program was presented by Barry Mckee and Jim Taylor. This program was on a group members, fish collecting trip to Uruguay. They saw many fish over the course of the trip. Some of the fish were catfish such as plecos, whiptails and corys. Gymnogenys and gymnogeophagus were two kinds of cichlids they came across as well as some livebearers. This was a very interesting program with lots of pictures of fish, and some pictures of housing, a few birds and barbeques. BBQ are a major part of any household, and were built before a new house was constructed. One of the members of the group needed to visit a hospital and received treatment for $25. The group came home with quite a few specimens that they caught. They also would like to return for another collecting trip.

Refreshment Break supplied by Shawn and Shirley. **Jar Show Awards**: Pat Shriner presented jar show awards to: Joe Krawchuk

Door Prize , Nightly Raffle,Evening Auction

Meeting Adjourned at 9:57 pm.

PFK investigates: Shrimps killed by mail order plants!

Published in the April issue of Practical Fish Keeping. reprinted with permission

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Two PFK staff members recently had quick and severe shrimp wipeouts after the addition of mail order plants to their tanks. Nathan Hill finds out more.

Alongside a couple of other equally confused aquarists, I quite recently experienced a wipeout of my shrimps in a planted tank.

The wipeout occurred after the addition of some mail order aquarium plants, from one UK mail order supplier, PlantedTanks.co.uk, whose plants originated from one specific supplier in Singapore, called Oriental Aquarium PTE Ltd. The mortalities were both rapier quick, and staunchly irreversible. It seems that anything without a spine that was living in that tank was doomed, despite my best efforts at moving them as I noticed the problem.

Symptoms were easy enough to spot. Shrimps turned bright pink, lost all sense of direction and composure, and tried to leap from the tank. Within a couple of minutes they lay on their sides, their pleopods the only source of activity. Within two minutes more they were dead.

Conversations with a minority of other aquarists have revealed similar problems, similar symptoms, but varying timescales, and the problem looks as though it may be a new phenomenon that the hobby will need to be acutely aware of if invertebrate poisonings are to be avoided.

It seemed that plants, or something on the plants, were poisoning freshwater shrimps in aquaria, and our own wipeouts varied from a tiny 30 l. nano tank to a 6 x 2 x 2' mature aquarium.

We made Tony Newsom-Virr of PlantedTanks.co.uk aware of the issues and he did some investigating, contacting three suppliers of aquarium plants for export from Singapore.

Simply put, plants from far away destinations are required to adhere to sanitary rules before they may be exported. This means that they require certification, and in order to qualify for that, they are required to show that they have made adequate efforts to remove potentially damaging insects. After all, if we're purchasing greenery from all over the globe, the last thing we want is for a hitchhiking Colorado beetle or three to come along for the ride, and blight indigenous crops once it gets here.

In treating for these insects, plant exporters will typically resort to one (or more) of three potential insecticides – none of them particularly pleasant.

"Further to my phone call today," said Newsom-Virr, "I can confirm the following information has been provided by the farms in Singapore who supply plants to the UK market."

"Phytosanitary certification requires the plants to be free of pests and disease prior to export to the receiving country. The methods applied are as follows – information supplied per farm:

Oriental Aquarium PTE Ltd use BUPROFEZIN (0.01%) & TRICHLORFON (0.08%) for the duration 120 minutes

South Island Aquarium PTE Ltd use IMIDACLOPRID 18.3% V/V (0.005%) for 45 minutes

Aquarium Liberty PTE Ltd use IMIDACLOPRID 18.3% V/V (0.005%) for 60 minutes

"All farms advise that following exposure to the above chemicals, all plants are rinsed in freshwater – although they do not advise for how long. The advice from the farms for end customers is that they quarantine the plants in a plant only system before introducing to a tank populated with inverts and crustaceans etc.

"At PlantedTanks our process goes one step further. Upon receipt of the plants they are all dipped in a solution of Potassium Permanganate which then highlights any crustacean in purple for us to easily identify them for manual removal.

"They use of this product also provides a mild sterilisation effect against disease etc. We then wash all plants in tapwater – which removes any residue. Finally plants are placed in the holding tanks with Potassium Nitrate, Mono Potassium Phosphate, Magnesium Sulphate and trace elements as a fertilisation boost prior to shipping. Total exposure is from two hours to four hours depending on weekly volume.

"Plants that are classed as overstock remain in our tanks until sold – this can be up to six days.

"Reference has been made against all three chemicals detailed above, and as such we will now produce a recommendation sheet for our customers to use about plant quarantine. Our recommendation will be that all plants from ANY supplier should be quarantined in alkaline water for a minimum of two hours to 48 hours, then finally rinsed in tapwater prior to addition to any tank with livestock present.

"Reference has been made from:

- http://pmep.cce.cornell.edu/profiles/extoxnet/pyrethrins-ziram/trichlorfon-ext.html
- http://sitem.herts.ac.uk/aeru/iupac/100.htm
- http://www.imidaclopridandtrees.com/mammalbirdfish.html

"What has been specifically noticed is that:

- Trichlorofon is a particularly aggressive organophosphate pesticide. It however can be detected in acidic water up to 526 days at 20°C at pH5.0. That said – if alkaline water is used – pH 8.5 then this product is 99% degraded within 2 hours.

- Buprofezin is an insecticide – specifically an acaricide. It is not approved for use in the UK. The degradation half life is 50 days within soil and 16 days in water at pH 7.0, 20C. This product specifically requires extended quarantine of at least 48 hours.

- Imidacloprid is a systemic insecticide. It has a three-hour half life in water pH neutral. It is known to be non-toxic to fish, moderately toxic to crustaceans and highly toxic to invertebrates. The addition of this chemical to water reputedly degrades to CO2 as a side effect of the degradation in the presence of light."

Plant sprays made easy

So let's first look at imidacloprid, a nasty nicotine based neurotoxin. Commercially, it's

more commonly used to keep bugs and beetles from Californian crops. It can also be used to kill cockroaches, fleas on pets, and a whole host of insects.

Imidacloprid is dangerous to aquatic invertebrates, and annoyingly has a long lifespan in the conditions which we typically keep them in. Although it degrades quickly when exposed to sunlight, and when kept in alkaline conditions, when in acid water it can linger and linger. In fact, given its half-life of 70-100 days in low pH values, it could be in the system for a while. When used, it is dosed at a rate of 0.005% for 45 – 60 minutes before plants are shipped out. It's rather potent stuff.

Secondly, Buprofezin is used by some exporters. It's another protector of Californian crops, mainly grapes, and it functions by inhibiting the synthesis of chitin, much in the same way as one of the methods used to control parasites like Argulus.

Of course, it's not just Argulus and insects that use chitin – our beloved shrimps are made of the stuff as well.

In a polar opposite to Imidacloprid, Buprofezen is quite stable in alkaline water, and less in acidic with a half-life of around 50 days at a pH of 5.0.

However, the doses used by plant exporters are quite low. Although a longer bath time and concentration is used, 120 minutes in 0.1% solution, this is the chemical I'd least implicate in shrimp deaths.

Which brings me to Trichlorphon. Trichlorphon used to be marketed in in many products, including something called Dipterex, which was basically glorified sheep dip. Trichlorphon is an organophosphate, now banned in the EU because of all of the horrendous damage it was doing to farmers that used it.

Trichlorphon baths before export are at a level of about 0.8% solution, for around 120 minutes. Given that this stuff will kill Daphnia at a level of 0.00096mg/l, I suspect it to be the major player in shrimpy disasters.

It's a fan of acidic water over alkaline, at a pH of 8.5 it degrades rapidly, literally within hours. Kept in acidic and cooler waters, it may still be traced over 500 days after addition to water. On the downside of breaking down, much of what it breaks down into is the chemical dichlorvos, which is another horrendously potent insecticide.

So what can be done?
Well, to deactivate these chemicals, very little. Placing them into water conditions where they are unstable will help, as will exposure to light.

But the biggest thing that can be done is a soak and rinse – quite literally a plant quarantine. Obviously this happens when plants have been sat in a store, just by virtue of their having been in tanks that are water changed frequently, but I'd consider maybe taking the view that a brand new plant, straight out of the box upon delivery to your home, when it's usually considered at its most fresh, may not be the sensible purchasing option that it was several years ago.

I hasten to add that these are chemicals that we only know of from a small selection of exporters, and than none of these exporters are of European or Scandinavian origin, where laws regarding sanitation of plants are rather different. Such European suppliers usually supply the bulk of their plants in potted form, like Aquadistri's Aquafleur, Aqua Dip, Tropica, Dennerle and others.

Vitally, PlantedTanks report to us that from the February 29, all of their trading with South Island and Liberty will cease.

Instead, the company has opted to use European plants, as well as to commence the production of their own IV plant range. The company is working hard to resolve the potential issues of pesticides on plants, but strongly advocates the idea of quarantining and new plants – just as a hobbyist may do with other livestock.

The problem is that there may be other chemicals being used, and much like Trichlorphon it may be that much of what's being bandied about is stuff that we're unaware of. After all, just because a chemical is illegal here, it doesn't mean that it's illegal all over the world. And if it's legal there, it may be used in abundance. Oriental Aquarium for instance also has farms in China and Malaysia.Practical Fishkeeping advised PlantedTanks to halt Potassium Permanganate dipping too, to rule that out of the equation, and subsequently they have stopped any use of this chemical in the dipping of their plants.

We thank Tony-Newsom-Virr of PlantedTanks.co.uk for his crystal clear transparency, honesty and his research.

Published: Nathan Hill,PFK Friday 24 February 2012.

Editors Note *– Thanks to Jeremy Gay of Practical Fish Keeping for allowing us to reprint this article. Practical Fish Keeping has lots of great articles & information. Why not check it out?*

http://www.practicalfishkeeping.co.uk/index.php

SCANNING THE EXCHANGES & etc.

with Pat and Tom

GOOD READING. . .

➤ **. . . in the Potomac Valley Aquarium Society's newsletter 'The Delta Tale' - Winter 2012 issue**

- The Lazy Fishkeeper -- A New Way to Keep Live Blackworms by Sherry Mitchell
- Tips for Your Fishroom – Microworm Culture is as easy as Pie and good for your Fry by Frank Cowherd

➤ **. . . in the Hamilton & District Aquarium Society's monthly bulletin – March, 2012**

- Spring Around the Corner by Charles Drew
- Driftwood in the Aquarium by Alfred Betts

➤ **. . . in the Circle City Aquarium Club's Newsletter 'Fancy Fins' – December, 2010**

- Archocentrus Nigrofasciatus by Mike Dunagan
- Aphyosemion Occelatum Sika Sika by Jim Sizelove
- Stowaways by Adam Anderson
- Breeding Apistogarrama Agassizi, a black water dwarf by Bradley E. Moore
- Spawning Rosey Red Minnows by Mike Matthews

February, 2011

- Rainbow Gudgeon (Tateurndina ocellicauda) by Charlie Grimes
- Swordtails, the Rusty Wessel way
- Raising Rainbow fry by Mike Matthews
- Brachyraphis sp. "Costa Rica" by Mike Matthews
- Steatocranus Casuarius - blockhead or buffalohead cichlid by Michael Dunagan
- Steatocranus Spawning Betta Albimarginata by Mike Matthews

BAP ACHIEVEMENT AWARDS
presented at the March meeting

Tom Hillier
Rosy Danios (Danio roseus).....5 pts.

Congratulations! *Tom Bridges, BAP chair*

****

Other Aquatic Animals
Tom Hillier Clea helena
(Assassin Snails) .....5 pts.
Neocaridina cf. Zhangjiajiensis
var. blue 5
Procambarus sp. (Marmakrebs) 5

UPCOMING EVENTS
To June 24, 2012

March 31 – Calgary Aquarium Society speaker weekend.
April 6 – 8 – Aquaria Expo and CAOAC CONVENTION, hosted by the Aquarium Society of Winnipeg.
April 15 – Durham Regional Aquarium Society Aquariama -- auction, Vendor Expo and a Nano Tank Show/Display.
April 21 – Sarnia Aquarium Society
Spring auction.
April 22 – CAOAC meetings, Waterdown
See <**www.caoac.ca**> click on Calendar
May 6 – London Aquaria Society.
Spring auction.
May 27 – 2012 Toronto Reptile & Tropical Fish Expo.
June 24, 2012 CAOAC meetings & President's Barbeque, Waterdown
See <**www.caoac.ca**> click on Calendar

ALWAYS CHECK EVENTS IN CASE OF CHANGES!
go to <www.caoac.ca>
go to Calendar and the list of respective clubs.

Most clubs' newsletters are on their web sites. If they are not available to you, let me know and I'll provide you with the article you'd like to read. Pat

Lamprologus ornatipinnis

text & photos by Dave Furness

This interesting little cichlid inhabits the coastal, sandy shores of Lake Tanganyika, where they live and breed in Neothauma Tanganicensis snail shells. The male and females have their own shells.

There are no external differences between the male and females. They can grow between 2.5 to 3 inches in total length. The male of this species is usually larger than the female. In nature they feed on insects, but will accept flake and frozen foods. Make sure that they get some meat in their diet.

A few months ago I was able to get between six to eight of these Ornatipinnis and placed them into a twenty gallon aquarium. The tank contained some gravel (they prefer sand) with about ten large shells and a box filter. The water parameters of their tank should have their water temperature between 75 and 81 degrees Fahrenheit, with a PH between 7.8 and 9, and the GH hardness between 12 and 20.

Unfortunately, I have been having a great deal of water problems in my home and have lost half of my fish stock of all the species that I own. I was fortunate though, to have four of the Ornatipinnis survive, and have a pair spawn for me. The Ornatipinnis are harem spawners, so you should have at least one male and three or four females. The female lays her eggs in the shell and the male fertilizes them. At this time the female spends a great deal of time in the shell fanning the eggs. When the eggs hatch, the fry stay in their shell for protection. When they are more mature, they will wander out, but not far from their shell. You will have to look closely around the shell to see them resting on the gravel. They do not swim very much.

Their first food should be liquid fry for a couple of weeks, followed by some newly hatched brine shrimp after that.

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Spawning & Keeping Tropheus sp."Ikola"

by DAve Unruh

I have wanted to keep Tropheus for quite awhile, but never got around to it until about a year ago. I remember reading an article by Klaus Steinhaus on keeping Tropheus and they did not sound as hard to keep as their reputation seems to be. Klaus gave some good advice on keeping these African cichlids. I took that to heart and for the most part I followed his advice.

Shortly after reading his article I came across an unsexed wild caught group of Tropheus sp."Ikola" (Ikola is the location from which these fish were caught). As I observed them I thought I could see some differences in the fish which made me think there were at least 3 females in the group of 12 fish. It took a few dollars to purchase the fish but I thought the price was reasonable.
As it turned out I got more females than I bargained for, which in my mind was a bonus.

I brought the fish home and put them in the 110 gallon 5 foot long tank that I had ready for them. The tank was only 18" deep but was 24" wide. I prefer my tanks to be as wide as possible rather than tall as it makes more bottom space for the fish. There were no other fish in the tank at this point. The tank was lighted by two old 48" fluorescent tubes so the light was not very bright. I had filled the back part of the tank with large lava rocks at the bottom and smaller lava rock nearer to the top. The rocks broke the surface of the water in some areas. I made two large piles of rock with a small open area between the piles and about 10" of open space in front of the piles. The gravel was fairly fine light brown to brighten up the tank a bit. I used reject reverse osmosis water and tap water with calcium hydroxide to achieve a pH of 8.0 and 715ppm tds (1430μs). The temperature was 25° (78F).

The Tropheus seemed quite happy in their new home and some fights for dominance broke out but no serious damage was done. The fish were already about 5 to 7 cm long (SL) and so were large enough to start breeding, which may have added to the aggression level. There was always some chasing going on which made for quite a bit of activity in the tank.

Tropheus should have a strictly vegetarian diet as they are herbivores so I fed them only spirulina flake food and sometimes vegetarian pellets.

They had the tank to themselves for the first 7 or 8 weeks untill I added a group of 12 wild-caught Eretmodus cyanostictus to the tank. The goby cichlids were a good match for the tropheus as they too are primarily herbivores. There ensued a bit of chasing between the species but there was hardly a torn fin to be seen.

It only took a few months for the Eretmodus to have their first spawn and I was able to witness the event. Shortly after this I decided to catch and remove the female Eretmodus that was carrying a mouthful of eggs. To accomplish this I had to remove all the rocks & it was then that I discovered that there were two young 1.5cm tropheus fry in the tank. I caught these two as well and then took a careful look at the tropheus. I was fairly sure that one was holding eggs so I caught her as well.

She went into a 3 gallon tank set up with water from her tank and a sponge filter. I added a small clay cave to give her some shelter. Ten days later she released eight well developed fry that were quite large,

about 1.2cm long. I was amazed that she could carry those babies in her mouth.


Troheus sp."Ikola" female carrying eggs
photo © by DAve Unruh

A few days later I returned the female to the large tank were she was welcomed back into the group. I was tempted to feed the babies newly hatched brine shrimp as I do with many baby fish, but I resisted the urge. Tropheus are susceptible to bloat when they are fed meat products. I fed them the same food that I gave their parents – spirulina flake food. I was amazed at their rapid growth.

Another month went by and I saw that a tropheus was carrying eggs. A week later another female was carrying eggs as well. I left these fish in the tank to release their fry in the lava rocks which they did after another two weeks or so. Once again I removed all the rocks to catch the fry. There turned out to be 14 more baby tropheus to care for. The previous spawn had been moved to a 25 gallon tank to grow so the 3 gallon tank was available for the latest spawns.

My experience with tropheus was problem free, and I credit that to following Klaus' advise – have at least 8 fish and more if you can. Make sure there is enough rockwork so the fish can easily hide from the dominate fish, and feed only spirulina to these fish.

I ended up moving these fish to a smaller 50 gallon tank & took half the rock out to put in the smaller tank. Despite the smaller space the fish are getting along quite well, with regular spawns there is an abundance of fry. When I see more than 15 fry I remove all the rocks and catch the fry. I always seem to miss catching one or two fry but I get those the next time I catch fry. I could leave those in the tank to increase the colony but I want to keep the colony as a wild-caught group.


Troheus sp."Ikola" fry about 2months old
photo © by DAve Unruh

To leave some of the fry in would start to dilute the colony with F1 fish and then I would not be able to state that all the fry I produce are first generation fish. The only loss I have experienced was one fish that jumped out of the tank. After seeing the number of females carrying eggs I now know there 5 females in the group.

The Eretmodus were moved to a fifty gallon tank along with the rest of the lava rock and they are also doing well in their smaller quarters, although spawns are less frequent.


Tropheus sp."Ikola" male(right) & Female
photo © by DAve Unruh

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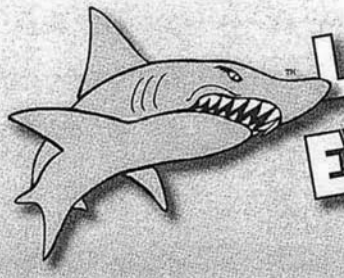

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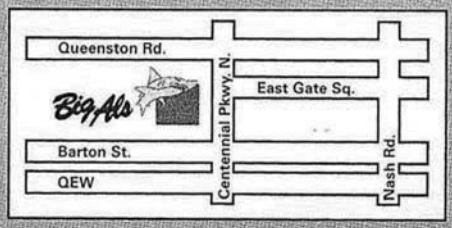

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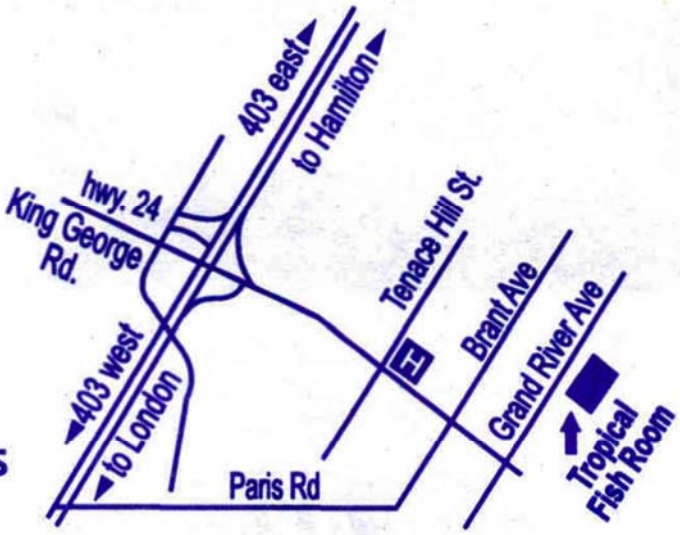

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