

# 2009 FAAS Publication Awards Reprint Policies

The Federation of American Aquarium Societies encourages you to reprint the best articles from our 2009 Publication Awards. Please follow the Reprint Policies dictated by each society.

<b>Society</b>	<b>Reprint Policy</b>	<b>Where to Send Reprints</b>
<b>Aquarium Club of Lancaster County</b>	Anyone using original material from any "Tank Tales" must return two (2) copies of the original article to our exchange editor.	Joel Antkowiak 36 Dawkins Drive East Earl, PA 17519
<b>Atlanta Aquarium Association</b>	Allowed and Appreciated, provided notice given to AAAA.	Atlanta Aquarium Association 3405 Avocet Court Norcross, GA 30092
<b>Greater City Aquarium Society</b>	Not-for-profit aquarium societies are hereby granted permission to reproduce articles and illustrations from this publication, unless the article indicates that the copyrights have been retained by the author, and provided reprints indicate source, and two copies of the publication are sent to the Exchange Editor of this magazine. Any other reproduction or commercial use of the material in this publication is prohibited without express written prior permission.	Stephen Sica Exchange Editor Modern Aquarium 80-40 223 Street Hollis Hills, NY 11427-1223
<b>Hill Country Cichlid Club</b>	Reprints are permitted providing proper citation is included as well as a copy of the publication sent to HCCC librarian.	Hill Country Cichlid Club 1302 Greenhill Dr. Canyon Lake, TX 78133
<b>Kitchener-Waterloo Aquarium Society</b>	Articles from this publication may be printed in a not for profit publication provided credit is given to both the author and KWAS. Copies of the reprint must be sent to both the author and KWAS. Any other use is prohibited without the written consent of KWAS.	Kitchener-Waterloo Aquarium Society Box 38037 256 King Street North, Waterloo, Ontario, Canada N2J 4T9
<b>Long Island Society</b>	Permission to reprint original articles is hereby granted to other non-profit organizations, provided proper credit is given to both the author and the Long Island Aquarium Society and two (2) copies of the reprint are sent to the editor.	Long Island Aquarium Society P.O. Box 873 Nesconset, NY 11767
<b>Milwaukee Aquarium Society</b>	Reprints of original articles published in the Splash are permitted. When reprinting an article from the Splash, please: credit the author, the Splash and the Milwaukee Aquarium Society. Send two copies of the issue containing the reprint to the address below, one for the club and the other for the author.	Milwaukee Aquarium Society PO Box 250824 Milwaukee, WI 53225
<b>Nassau County Aquarium Society</b>	Permission to reprint original articles is hereby granted to other non-profit organizations, provided proper credit is given to both the author and NCAS and two (2) copies of the reprint are sent to the editor. Any original artwork remains the property of the artist and may not be reproduced. NCAS prohibits distribution of any articles contained in the Pisces Press on any online electronic service, unless written permission is granted from both the editor and the author.	Nassau County Aquarium Society P.O. Box 358 Glenwood Landing, NY 11547
<b>Pacific Coast Cichlid Association</b>	Material in Cichlidae Communiqué may be reprinted by non-profit organizations, provided that proper credit is given to the Cichlidae Communiqué and the author, and that two copies of the publication containing the reprinted material (one for the author, the other for the PCCA library) be sent to the PCCA. Reprints must also be accompanied by the following: "Reprinted from Cichlidae Communiqué, publication of the Pacific Coast Cichlid Association"	PCCA P.O. Box 28145 San Jose, CA 95159-814

## Classroom Aquariums Breed Excitement

Jim was as excited as I had ever seen him.

“Mr. Maxwell, I got an aquarium this weekend. I’ve been researching about cichlids and I’m ready to start up my tank. I was reading about those yellow fish the *Labidochromis*.” Jim slowly sounded out the genus name.

“My tank should be big enough and there are plenty of rocks in there for them to hide around. The articles I read said they need plenty of places to hide”

From this point on I realized the power of keeping aquariums in the classroom. Jim was a student who had received failing grades throughout the whole year up to that point. He was your classic student with potential, but felt no need to give the effort. Nothing had excited him up to that point in the year, and now he was voluntarily reading extra research and was discussing habitat, feeding methods, and even learning scientific names. I knew from that point on there was more to be done, and aquariums would become a useful tool in my classroom.



### HOW DID WE GET THERE?

I stumbled upon the use of aquariums quite frankly by accident. I began teaching in 2004 as an 8<sup>th</sup> grade science teacher. I had been a cichlid enthusiast for only three years when I started teaching. I had kept a couple tanks of African cichlids at my home, but had nothing at school during the beginning of my first school year. Midway through the school year in my first year of teaching, my wife and I moved and our new place did not have room for the tanks. In an act of desperation I brought the tanks into the classroom. I placed a 30-gallon tank with *Labidochromis caeruleus* and *Melanochromis cyaneorhabdos* at the front of the classroom. What I realized changed my classroom set up forever.

It was amazing how excited the students were that first day they came into the classroom to see a tank of brightly colored fish sitting at the front of the

room. My first thought was I had created a distraction, and I had made a big mistake. While I did have some daydreamers get lost in the constant movement of the mbuna, I realized much more benefits from the tank, than distractions. In that half of the year, several of my classes were able to witness spawns from the *Labidochromis caeruleus*. None of the students believed that these fish would actually raise babies in their mouth until they witnessed the throat of the Yellow Lab bulging with babies. We were able to test water quality, observe minerals evaporate out of the water and cling to the glass, visually examine the nitrogen cycle, have plenty of examples of animal behavior, and have several teachable moments that could occur at any time. I knew I had stumbled on something quite useful.



### **WHERE HAVE WE BEEN?**

I had a year under my belt and felt more comfortable as a teacher, but I had switched grades and added some responsibilities outside of the classroom. This made it difficult to envision a larger plan for the cichlids in the classroom. I still kept the fish in the classroom, but was still working on a larger plan in my head. Being a competitive person by nature, I started to plan how classes

could compete against one another, but I needed more tanks. My second year in the classroom came and went without much of an increase in the use of the cichlid tanks.

In 2006 I purchased an 8-outlet air pump and 6 ten-gallon tanks. My goal was to set up all six tanks in the classroom and for each class to take care of their own tank and maintain it throughout the year. I made it into a class competition. Students received points for feeding the fish, changing the water, taking the temperature of the water, testing water quality, and I had a point system devised for the number of fry their fish had. Our art teacher allowed the students to use her left over clay to make caves and cones for the fish, which was really a great opportunity for the students. The response from the kids was overwhelming. Students donated food, filters, heaters, and decorations. Fellow teachers were stopping by the room to see what was going on because the students were talking about all the fish in our science room, and which class was “winning” the competition. We kept a variety of species that could fit in a 10-gallon tank. That first year we kept a variety of dwarf cichlids, and some juveniles. In 2006 we kept *Neolamprologus brichardi* (very established pair awesome to watch them raise their tiny babies), *Pelvicachromis pulcher*, *Pseudocrenilabrus multicolor*, *Lamprologus brevis*, juvenile *Astatotilapia burtoni*, *Steatocranus casuarius*, and *Nanochromis parilius* were all kept at some point. Of those fish, we managed to breed the *multicolor*, *burtoni*, *brichardi*, and the *brevis*. The first year was a hit with the kids. There are still multiple students from that class I talk with that keep and

maintain fish, some of which were from our original program.

We continued on in a similar manner in 2007. We set up six tanks again with various dwarf cichlids. In 2007 we kept *Julidochromis ornatus*, *Lamprologus similis*, *Lamprologus stappersii*, *Neolamprologus brichardi*, *Pelvicachromis pulcher*, and *Pseudocrenilabrus multicolor*. I also kept two separate tanks of *Stomatepia pindu* and *Paralabidochromis chromogynos* in the classroom. What I found was that the kids were more drawn to the *pindu* and *chromogynos*, because they were out about in the tank more, their color was fantastic, and we could observe their behavior more easily. They didn't cower in the tank when kids walked up to it or by it. Our dwarf cichlids would hide a lot (it didn't help I chose to keep shell dwellers), and that led to a lot of kids losing interest in our tanks. I was trying to determine what to do about our tanks and our projects and felt like our project was coming to a crossroads. I wanted to revamp it, I wanted it to mean something more, and give the kids something to work for and towards. Frankly, I wanted our project to have a purpose higher than learning how to keep fish. The idea hit me as I was determining how to teach a lesson about invasive species. I decided to base the whole lesson around Lake Victoria and what happened when the Nile Perch were introduced. I integrated that problem with the current invasive species problems in Lake Michigan with the Zebra Mussels, Round Gobies, and Sea Lampreys etc. to add a local meaning to the problem of invasive species. The kids took off with it. They were intrigued by the problem as a whole. The students did days of

research on all the problems that had snowballed since the introduction of the Nile Perch, and all the problems that were beginning to happen in Lake Michigan since the introduction of the non-native species. A group of students also created a large mural entitled "Don't Lake Michigan Turn Into Lake Victoria." The end result was a group of students wanting to do more, and I was right there with them.



I contacted Greg Steeves and asked if he could provide my class with any information or resources on the situation in Lake Victoria, and he was more than willing to help. I started trying to find Lake Victorian cichlids wherever I could, and gathered all the information I could get my hands on. I learned about the Lake Victoria Species Survival Program, and contacted Jay Hemdal out of the Toledo Zoo and asked if there was still a program going on in which schools could get involved keeping and breeding Lake Victorian cichlids. Sadly, I found out that this was no longer functioning. I then came upon the Aqua Havens program, and the CARES program, and realized there had to be something out there our class could get involved in.

I have been a consistent viewer of the HCCC website forum over the past

couple years and post every now and then, but most of all I learn from the knowledge this club has. Several months ago I learned about the possibility of connecting American classrooms with classrooms in Kenya that were also keeping and learning about their native fishes. I immediately contacted Greg Steeves again about this opportunity. Greg informed me further about the CARES program and Aqua Havens program and asked more about my own program. After several correspondences Greg offered to assist in a more substantial way in our classroom and provide support for a Lake Victoria/Endangered Species project.



This year our six classes of 8<sup>th</sup> grade science keep 3 tanks of Lake Victorian cichlids. The cichlids are housed in two 30-gallon tanks and a 40-gallon tank. I keep about 10 different species of Victorians at home and let the students chose any that they wanted. I included *Astatotilapia burtoni* since I always read it is in the satellite lakes and tributaries,

and it is an easy fish to breed. The students picked *Paralabidochromis chromogynos*, *Pundamilia nyererei* Python Island, and *Astatotilapia callipterus*. We still have the competition idea with the Lake Victorian species, and have bred all three in class. We plan to switch out and try new species within the next couple weeks. Four students have taken home Victorian cichlids for tanks they have started at home during the current school year.

### **WHERE ARE WE GOING?**

Our classroom is looking to improve on this project and increase its magnitude and fine-tune its objective. We are looking to get involved a project that will involve us with other schools, and network us if possible with the Kenya schools. Another goal we would be looking to achieve is to breed these cichlids and distribute their fry to other schools, hobbyist, or other interested students. In my mind long terms goals for this project would include creating a network of schools throughout the United States that would participate in a similar program. I would like our students to start up a website where we can upload photos, video, monthly updates and articles, a species log and breeding log, and post experiments and results, this would serve as a way for schools to network and share fish, and share data and ideas. It would also serve as a way for hobbyist interested in our project to stay in touch and informed. We are blessed with a large science room and lab area. There would be room for 4-6 55-gallon tanks double racked, and 6-9 20-gallon tanks triple racked for grow out space in an little used science office we could convert into a grow out area.

## WHY WE DO IT?

Over the years I have realized the tremendous value of having aquarium fish in the classroom. I have had multiple parents contact me about the difference our fish keeping made in their son/daughter's life. Stories about how they had never seen their child so excited, or they had never seen their child motivated about anything in school up to that point. One letter I remember stated she told her son he had to stop using the "f word" (fish) so much because that is all he would talk about when he got home from school. During my time working on my undergraduate degree and during my time in graduate school one theme reoccurred over and over. You must reach the students in a personal way and connect the learning to the students' interests and life outside of school; when you see well over 100 kids a day that can be a difficult task to accomplish. With the help of aquariums in the classroom, I have found something that interests a wide array of students. It is difficult to find a student that does not enjoy watching colorful fish swim through the water gracefully, or watch little fry scurry around the tank. I believe aquarium keeping in the classroom truly hooks (sorry for the pun) students into a meaningful experience, which they can build on outside of school and in their future.

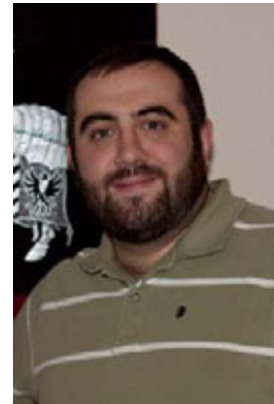
If you would like to contact me about our classrooms progress or project feel free to contact me at [tmaxwell@peotoneschools.org](mailto:tmaxwell@peotoneschools.org).

-Terry Maxwell

## Our Own Evan Bower speaking at the ACA 2009!!!

The ACA this year will have some HCCC representation. Evan has been invited to speak on *Apistogramma*, a genus that we all know he is well versed in. Let's make sure there are plenty of HCCCer's there to share this historic event. Knock 'em dead Evan. We're all very proud!

**Presentation topic: A Practical Introduction to the Genus *Apistogramma***



Evan Bowers is an avid hobbyist who keeps a variety of cichlids from both the old and new worlds. Over the last several years he has become fascinated by the behaviors and activities of dwarf cichlids from South America and West Africa. Evan is an active member of the Hill Country Cichlid Club and a founding member of the Austin Aquarium Society. When not watching his fish Evan also enjoys spending time with his family and has a growing interest in photography. Evan's presentation will provide an introduction to the genus *Apistogramma*, concentrating on the requirements for keeping and breeding them successfully in captivity.