

In Depth

Tropical Fish Club of Burlington

May—June 2018



Bowl Show at the June 14th meeting!

Breeding White Cloud Mountain Minnows

Visiting Segrest Farms, part 2

Breeding Panda Corydoras

NEC 2018 Awards and Recap

Calendar of Coming Events

and so much more!



Barbs and rainbows in a large display tank at Aquarius aquarium store in Montreal.
photo by Ann Whitman

In Depth

published by The Tropical Fish Club of Burlington

Established February 1989



We meet on the second Thursday of each month, September through June, at 6:30 PM at the VFW Hall, 73 Pearl St, Essex Junction, VT.

Our membership consists of adults, children and teens. Many members are very experienced and have been keeping fish for years, and others are just getting started. People of all ages and experience levels are always welcome. Meet and learn from those who share your interests!

Officers

President: David Banks dbanks@together.net
Vice president: Brian Candib Bcandib@comcast.net
Treasurer: Janine Banks dbanks@together.net
Secretary: Ann Whitman awhitman@madriver.com

Board of Directors

Ira Gardner-Morse (2018) thepotoo@gmail.com
Rob Hintze (2019) rob.vermont@gmail.com
Pam Crossett (2019) pamc.vt@gmail.com
Dwight Moody (2018) DwightDMoody@yahoo.com

Committees

In Depth Editor: Ann Whitman
Membership: Janine Banks
Breeder Awards Program: open
Bowl Show: Brian Candib
Newsletter Exchanges: Andrew Bessy
brewingman@comcast.net
Publicity: open
Librarian: David Banks
Web page: Dan Gwozdz
NEC Delegate: David Banks

Tropical Fish Club of Burlington

315 US Route 2
Grand Isle, VT 05458
802-372-8716
www.tfcb.org

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Ann's pair of *Pelvicachromis taeniatus* 'Wouri', which won NECA show awards at the 2018 NEC. photo by Mark Denaro

From the President

by David L Banks, Jr



Thanks to all who came out for the swap on Saturday, April 14. We had a great turnout, great vendor setups and it was overall a great success. And the weather held out until the event was over, hope everyone had a safe trip back home! Again, many thanks to club members who helped out with the club table, since many of the usual club helpers had vendor tables.

Mark Denaro was our April speaker and shared his extensive knowledge of Labyrinth fish. Mark, Ann Whitman and I had a busy week as we also attended the Montreal and Otter Valley meetings where he gave two additional programs on wild bettas and his trip to Peru. Thanks to Ann for hosting our speaker this month! Hosting is a great opportunity to get to know a speaker, show off your fish and help out the club. All you need is a spare bedroom and a little bit of time. Janine & I really appreciated Ann volunteering to host Mark!

Our May speaker will be Jen Williams and she will speak on planted aquariums, her title is "Aquascaping for Non-Aquascapers". It will be a great chance for everyone to hear her ideas on the use of plants and other hardscape to make a very nice slice of natural beauty, and I expect it will be a down to earth presentation that we all can easily learn from.

I have been trying to get a program on fish photography for some time, and was able to schedule Rich Pierce and Tony Terceira to give us their tag team approach to taking photos of fish-related topics for our June meeting. Rich has chaired the NEC photo competition for many years, and Tony has been one of his judges. One of the most popular NEC events is their live critique of the photos entered in contest. What a great way to learn to take better pictures and edit them!

TFCB first started back in 1989, and 4 years ago we held a huge 25th anniversary celebration. Next year is our 30th and we are in the early stages of planning a similar event, probably in June 2019. Watch for more details as we get more into the planning.

The TFCB picnic will be planned for some time this summer. Do Saturdays work for everyone? Looking at Saturday in mid to late July, I think. We will host the picnic at our house in Grand Isle this year.

This fall promises to be a busy with a full schedule of great fish events! Aquatic Experience and Catfish Convention are in October. Our club's fall schedule is also looking good, see the calendar, web site and Facebook page for details.

David



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Editorial

Responsible Fish Breeding

By Ann Whitman



A few recent events got me thinking about the propagation of aquatic animals and our responsibility to their species and to the other aquarists who may buy them at an auction, swap or local fish store. As hobbyists, many of us consider breeding fish as our highest achievement. Indeed, clubs celebrate our breeding efforts with prizes and certificates and titles.

Those who participate in C.A.R.E.S. keep the goal of maintaining threatened and endangered species for future generations. If it wasn't for our success at breeding fish, we wouldn't have our beloved auctions!

Which brings me to the recent events that gave me pause. At two different clubs, from two different sellers, I saw bags labeled "Painted Fire Red Cherry Shrimp" up for auction. Neither of these bags contained "Painted Fire Red" shrimp. Yes, they were cherry shrimp and their ancestors were Painted Fire Red, but the desirable coloration of the strain had been lost. Without selective breeding and culling, these shrimp had reverted to pale, washed out pink. Pretty, but not Painted Fire Reds. It takes work, through selective breeding and culling, to maintain a pure strain, whether it's fancy shrimp, guppies or other artificially created varieties. It's the responsibility of the breeder to either keep the pure strain or advertise the "unselected" progeny for what they are—culls, not the more expensive and valuable strain. Falsely disseminating animals that do not conform to the standard does a disservice to the strain and to those who buy them and work hard to keep, breed and sell them.

Selective breeding is especially important to preserve as many wild, existing species and their regional variants as possible, as habitat destruction and other environmental pressures send more and more species to the brink of extinction. One of the goals of C.A.R.E.S. is to maintain species so that they may one day be reintroduced to their native habitat. Many species, such as killifish and rainbowfish, for example, exhibit significant color and pattern differences within their species, depending on where they originate. Each variant may occur in only a very small area where a new parking lot, chemical spill or severe storm may wipe it out. Maintaining careful records and avoiding the interbreeding of different species and variants is the only way to protect these species' unique wildness and connection to a particular tributary, lake or drainage. Those of us who breed these fish may be responsible for keeping these species in existence!

When we become breeders of our aquatic pets, we assume a great deal of responsibility to the species we keep, and to other hobbyists. It's important to understand the species or variant you are breeding and share knowledge with other breeders. Keep records and do your part to preserve future generations of wild aquatic animals.

Ann



Speaker of the Month: May

Aquascaping for non-Aquascapers

with Jen Williams



The talk is called “Aquascaping for non-Aquascapers”—because anyone can do it! We’ll touch on all the basics and foundations to create this underwater art form, from layout principles and how to be successful at planted tanks to pro tips and (hopefully) inspiration to go forth and create your own slice of nature.

About Jen: I got my first tank when I was seven and went through the appropriate array of guppies, barbs and tetras, through to my first encounter with keeping Cichlids when I was in high school. Years later, via a Craigslist ad I posted, stating “Firemouth Cichlids, bring a net and a bucket”, I was introduced to something I wasn’t expecting...a formidable former Army Lieutenant in my living room filling his bucket with fish, and telling me all about local fish clubs and planted tanks.

Armed with a healthy dose of curiosity at what kind of characters would be at a fish club meeting, I attended my first [GWAPA](#) (Greater Washington Aquatic Plant Association) gathering and was completely hooked. Serving on the Board in several positions (including two terms as President) I have also enjoyed participating in events with the other local clubs and the true friendships I have made in this hobby. I currently also sit on the board for the [Aquatic Gardener’s Association](#) (AGA).

To date, I have a stack of ribbons from aquascaping contests, and have truly enjoyed the competitive side of this hobby. I am also an avid fan of Blue-eyed Rainbowfish (specifically *Pseudomugil*) and enjoy keeping and breeding them with the rest of my eclectic assortment of fish. To pay the electric and water bills that accompany all of the assorted gallons of aquatic madness, I work as a Graphic Designer...and also enjoy fast cars as a former professional drag racer, and purring cats as a long-time volunteer/rescuer with the 4Paws Rescue Team.



The first-prize, award-winning aquascape at Aquatic Experience 2015, designed by Jen Williams and Rachel O’Leary. *photo by Ann Whitman*

Speakers of the Month: June

Photographing Fish

with Richard Pierce and Tony Terceira

If you have ever tried to take photos through the reflective glass wall of an aquarium of a fish that won't stop moving, you know it's tricky and frustrating to get a decent shot. Rich and Tony are here to help! Bring your camera and learn from the pros. The tips and tricks you learn will improve your fish photography and more. Hint: they also know A LOT about fish and love to talk about that, too.

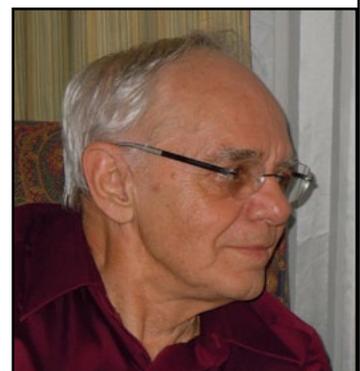
Richard Pierce has been keeping fish for as long as he can remember. His interest in all things aquatic led to degrees in Marine Biology and Biological Oceanography. He has worked in a retail aquarium store and in two public aquaria. He currently maintains approximately 1200 gallons in 120 aquaria in his fish room. Since his largest aquarium is 65 gallons, most of his fish are small. Although he keeps and enjoys all kinds of fish, killifish, wild-type livebearers and characins are of particular interest right now.

In addition to fish keeping, Richard enjoys photography, especially photographing fish and macro photography. He has won awards in both the [American Killifish Association](#) and NEC photo contests, and now chairs the annual NEC photo contest. He has spoken at many aquarium societies in the Northeast and Midwest and enjoys meeting other aquarists and visiting their fish rooms.

Richard has been an active member of the [Tropical Fish Society of Rhode Island](#) since 2003 and is currently Breeder's Award Program Chair. He is an active member of the American Killifish Association, and served as its Chairman from 2013 to 2015. He is President of the [Northeast Council of Aquarium Societies](#) and chairs their Breeders Participation Program. Finally, he is the President of the [Southern New England Killifish Association](#) (SNEKA).



Tony Terceira has been involved in the tropical fish hobby for over 35 years. He is a fellow of the American Killifish Association, former member of the board of trustees and former editor of the Journal of the American Killifish Association. Tony is an award-winning, internationally renowned photographer. His work and articles have appeared in most major hobbyist and scientific publications worldwide. Tony is also the author of [Killifish, Their Care and Breeding](#) published in 1974. It is still a definitive work in the hobby. Tony has moved into the digital era and is currently working on a variety of compilations of photos and articles for the web and CD. A sought-after speaker, his presentations are seen in aquarium clubs and conferences nationally. Tony is a noted breeder of killies, bettas, angels and most tropical fishes.



Club Meetings and Events

by Ann Whitman

*photos by David Banks, Janine Banks, Mark Denaro
and Ann Whitman*

We enjoyed hosting Mark Denaro at our April meeting where he talked about labyrinth fish, especially *Betta* and gourami species. While he was in the area, David and I took him to the OVAS meeting in Pittsford and up to the Montreal club where we also had a chance to visit a couple of excellent shops and enjoy some Montreal smoked meat and poutine at the Green Spot, a classic diner.

On April 14th, our club put on our 3rd annual Fish, Frog and & Reptile swap meet at the Holiday Inn. Despite threatening weather (yes, another wintry event—in April!), we had a good turnout. Several local stores and breeders were able to attend, in addition to vendors from neighboring states and half a dozen club members who set up tables.



Mark and David at the Montreal meeting.



Mark and our friend Genevieve at Aquarius in Montreal where she works.



Ann checking out the shrimp and snails at Aquasense.



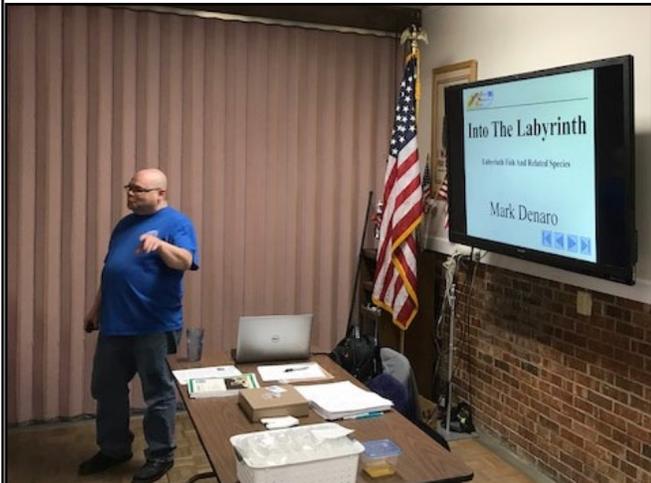
Steve, Ann, Luke (owner), and Mark at Aquasense, an aquascape specialty store in Montreal.



Rob and Roy preparing their entries for the club auction.



Mark, Jeff, David and Rob chatting before the presentation.



Mark speaking at the TFCB meeting about labyrinth fish.



David, Ann and Genevieve at Aquarius, Montreal.



The swap meet was well attended by families, and the welcome table staffed by TFCB volunteers.



Rob had a big display of fish, plants and equipment for sale.



Kyle from Backwoods Reefs drew plenty of attention with his selection of coral frags.



Reptile enthusiasts were not disappointed with the selection of snakes and other animals at the swap.



Brian brought lots of fish and secondhand tanks for sale.



David also brought a good selection of fish and equipment



Janine represented Reef2Rainforest and sold houseplants.



Roy and Ira offered a large selection of unusual aquatic plants from their own tanks.



Keith from K.J.E. Aquatics in Albany, NY, sold plants and supplies.

FISH BAG REMINDER

We will have fish bags available for sale at our meeting. Stock up before the OVAS auction! These are high quality 3 mil bags.

Member prices for packs of 25 bags are only:

4" x 15" \$1.50

6" x 20" \$2.00

8" x 20" \$2.50

Northeast Council of Aquarium Societies Convention 2018

As usual, TFCB was well represented at the NEC convention in Connecticut this year. The event was held over the St. Patrick's Day weekend, which added an extra touch of festivity. Those attending the banquet dinner on Saturday night were treated to a group of young Irish dancers, and a number of attendees dressed for the occasion.

Our club made a good showing in the annual awards presentation. Here's the list of awards our TFCB members achieved this year.

NEC Cichlid Show

Ann Whitman – 1st place—African non-rift lake

Ann Whitman – 3rd place—African non-rift lake

NEC Guppy Show

David & Janine Banks – 2nd place—novice, open female

David & Janine Banks – 3rd place—novice any other shape, male

NEC Nano Aquascaping contest

Ann Whitman – 1st place

Ann Whitman – People's choice

NEC Breeder Participation Program

Roy Karros – 3rd place—individual achievement award

TFCB – most club points

TFCB – most club member participation

NEC Photo Contest

Ann Whitman – 2nd place—class 6, Ponds and Water Gardens

NEC Article Competition

Ann Whitman – 1st place—Continuing Column category

Oliver MacKinnon – 1st place—Junior category

David Banks – 3rd place—Breeding Article category



Rob showing his Irish spirit!



Ann won 1st place in the Nano Tank Aquascaping competition in the judged and People's Choice awards.



Roy with his 3rd place NEC award for most breeder points in 2017. And it was all plants!

CALENDAR OF COMING EVENTS

- May 10 **[TFCB meeting](#), Jen Williams speaker, *Aquascaping*, VFW Essex Jct, VT**
- May 11 [BASNY auction](#), Brooklyn, NY
- May 20 [OVAS annual auction](#), Rutland, VT
- May 25–27 [American Killifish Association](#) convention, Romulus, MI
- June 7–10 [NANFA Conference](#), Young Harris, GA
- June 9–10 [NEFGA IGFA Guppy Show & Auction](#), Lancaster, MA
- July 4–8 [American Cichlid Association](#) convention, Houston, TX
- June 14 **[TFCB meeting](#), Rich Pierce, Tony Terceira speakers, *Aquarium Photography***
- July 4–8 [American Cichlid Assoc. Convention](#), Houston, TX
- July 7–8 [Pioneer Valley Water Garden & Koi Club](#), 25th Annual Pond Tour, Western MA & CT
- July 12–15 [North American Discus Association](#) Show, South Iselin, NJ
- July 14–15 [SJGG IFGA Guppy Show & Auction](#), Griggstown, NJ
- Sept 7–9 [Marine Aquarium Conference](#) (MACNA), Las Vegas, NV
- Sept 13 **[TFCB meeting](#), Klaus Steinhaus, *CARES Fish Conservation*, VFW Essex Jct, VT**
- Sept 14–16 [Keystone Clash](#) convention, Harrisburg, PA
- Oct 4–7 [All-Aquarium Catfish Convention](#), Herndon, VA
- Oct 11 **[TFCB meeting](#), Ian Fuller speaker, *Corydoras Catfish*, VFW Essex Jct, VT**
- Oct 14 [NJAS Fall auction](#), East Brunswick, NJ
- Oct 19–21 [Aquatic Experience](#), Meadowlands, Secaucus, NJ
- Oct 21 [NJAS auction](#), East Brunswick, NJ
- Nov 8 **[TFCB meeting](#), VFW Essex Jct, VT**
- Nov 11 **[TFCB annual auction](#), Holiday Inn, So. Burlington, VT**
- April 12–14, 2019 [NEC 44th Annual Convention](#), Cromwell, CT

TFCB Turns 30!

February 2019 marks the 30th Anniversary of the founding of the Tropical Fish Club of Burlington! Thirty years ago the first 50 people gathered at the South Burlington High School library to talk about fishkeeping. It was a great turnout and several of the people there went on to become the founding officers and board members of the club. Many still keep in touch with David and me and our club. To celebrate the successful past 30 years and the future of our club, TFCB will be hosting a convention, with several speakers (we're hoping to bring one in from Europe, too), a dinner cruise on Lake Champlain, a Vendor Room and swap meet, giant auction, and even a microbrewery tour! June 2019 is the targeted month; stay tuned for further details!! —Janine Banks

12 th Annual

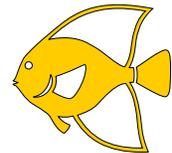
Otter Valley Aquarium Society

Tropical Fish Auction & Bowl Show

Sunday May 20, 2018
Noon - 5:00 PM



The Godnick Center
1 Deer Street
Rutland, VT 05701



Free Admission Door Prizes
Viewing Lots 9:30am - 11:30am

Raffle at Auction

50/50

Silent Auction Plant Tables

Peoples Choice Bowl Show

1st Prize \$100 - 2nd \$75 - 3rd \$50

Please see bowl show rules on our website

PLEASE VISIT OUR WEBSITE FOR AUCTION RULES

Pre-register before May 18th and get a 60/40 split
www.ovasociety.com

Breeding the White Cloud Mountain Minnow (*Tanichthys albonubes*)

By Dwight D. Moody

Many aquarists get their start breeding fish by having livebearers, such as guppies, platies, swordtails and mollies. Whether you intend to have babies or not, the mother fish has a brood every month or so and the babies can be found swimming in the parent's tank and either relocated into a breeder net or another tank to raise. Sometimes only a small percentage of the brood can be salvaged because some fish view their babies as a tasty snack and if there is not enough plants and other cover for the babies to hide in, they may be eaten. This can be minimized by making sure the mother and other tank mates have good, high quality foods. Breeder traps can also be used but they have a tendency to stress out the female and have been known as "death traps" for a reason. The best one I have ever used gives the mother the length of the tank to swim, has good water flow and has slots in the bottom that allow the babies to drop into the main tank and get away from the mother.



Male White Cloud Mountain Minnow (in front,) displaying for the female (in back).

Let's say you want to take the next step and try an egg laying fish. White Cloud Mountain Minnows are a great choice because they are OK in an unheated tank (they come from mountain streams in China) and generally do not bother the babies. I have mine in a 6 gallon long tank with a bunch of Java Moss on one side. Java moss is a great tank plant because it provides great cover for fry as well as hosting tons of small live foods that fry can feed on, like rotifers, protozoans, etc. It does very well in low to medium light and is pretty much a plant that anyone can grow.

Most importantly, the tank has a box filter for aeration and filtering the tank water. Box filters are a fish breeder's best friend, in my opinion. They generate gentle water flows and often have a lot more activated carbon than power filter cartridges. Unless it is equipped with a sponge pre-filter, a power filter will suck up tiny egg layer fry and puree them with the impeller, plus delicate fry will be battered by the water flows. Lastly, power filters tend to really polish the water of any and all swimming microfauna which leaves any surviving fry nothing to eat. Box filters tend to trap particulates, but the filter floss can also serve as a refugium where microfoods can breed with the offspring, leaving to go into the tank water.

I check my tank regularly with a flashlight and if I see fry, I use an empty TetraMin container to dip them out and transfer them to a grow-out tank. The adults generally do not bother the fry but bigger and older fry may consume their younger siblings, especially if there is a great size difference. Newborn fry are very small and can be killed by a net, but I find that dipping them out does not harm them. Once they are in the container, I use a turkey baster to transfer them to the grow-out tank or I just place the

container into the grow out tank and gently transfer the contents. Once in the tank and feeding, they will grow rapidly on powdered flake food, microworms and newly hatched brine shrimp.

Alternatively, you can condition your fish in separate tanks (males are slimmer, females tend to be fatter) and put them together into a established breeder tank with a good bunch of Java Moss, and a good box filter, then take them out when the females look thinner (after laying their eggs). Most fish, if put together the night before, will spawn the next morning. Then you just take the adults out and the breeder tank becomes the grow-out tank for the babies. If you take the Java Moss and the box filter out of an established tank they will already have the bacteria needed to prevent ammonia build up in the breeder tank.

If you are looking to increase your fish breeding experience, give the White Cloud Mountain Minnow a try and don't forget to bring the fish you raise to the next Tropical Fish Club of Burlington meeting to share with others.

Editor's note: White Clouds are an excellent fish for putting outside in a patio tub for the summer. With plenty of plants for cover, you will likely find baby fish throughout the summer.

BOWL SHOW REMINDER !!!

The June meeting will feature an Open Class bowl show! Bring your best fish for the contest and learn how to photograph them with our featured speakers!

First prize is \$20, 2nd and 3rd prizes receive a ribbon.

1. Fish must be displayed in a bare tank or bowl, i.e. no decorations, no gravel etc. The tank or bowl must have one flat side & hold less than 20 gallons of water. No lights.
2. If you need a bowl, contact David prior to the meeting.
3. Life support systems are not encouraged, but will be accepted if necessary to sustain a particular fish.
4. Water is available, but entrants must supply their own water conditioner, nets, etc.
5. There is a limit of 3 entries per person.
6. Judging will be by popular vote.
7. The Tropical Fish Club of Burlington is not responsible for any loss or damage.

In My Travels, Florida 2016

Segrest Farms, Part II

by David L Banks Jr, TFCB

In the Jan/Feb 2018 issue, we started off by looking at the overall operation and a nice selection of fish we saw at Segrest Farms, Florida, in the main building. This issue we will take a closer look at the operation within the main building, the infrastructure behind it and then move onto some of the other buildings and properties we saw.

I should mention, as a general rule, Segrest is not open to the public. If you will be in the area, please call and see if they can accommodate you. I also am not sure of their exact policy, but don't expect to buy fish while you are there unless that is something you have confirmed with them ahead of time.

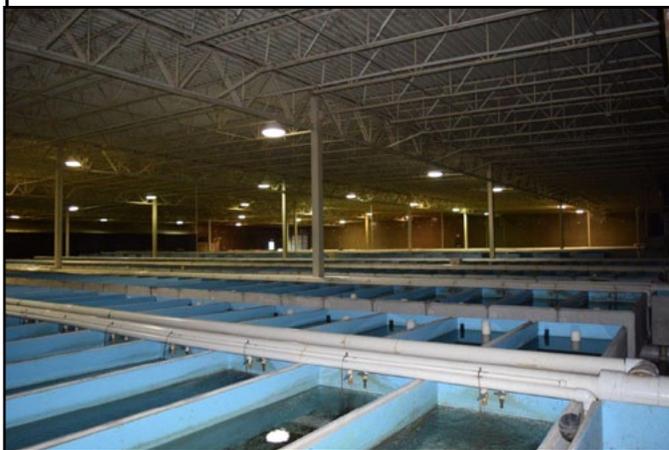
Each row of tanks within the main building had their own filtration system setup, outside the building. This kept easy access and the focus inside could remain on the fish.

The combination of the different colored buckets and their tracking system along with the conveyor belt throughout the building made for an efficient process. Fish were picked from their tanks, and sent along to be bagged and packed for delivery.

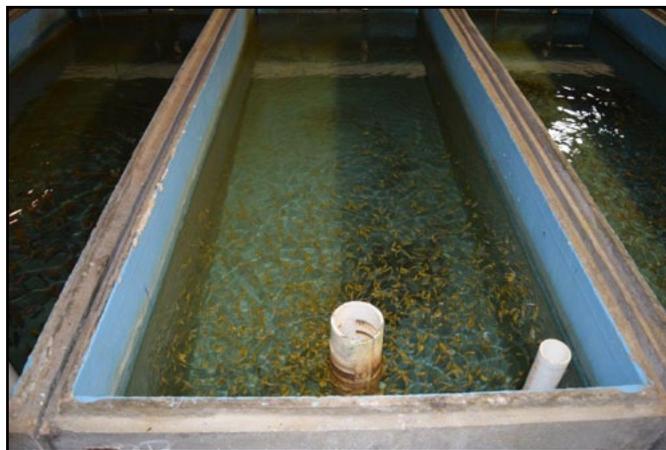
Along with the main building, we saw the marine building and a goldfish section. They also had a plant and even reptile and small animal sections. They were in the process of building a new, very large goldfish building while we were there, the structure was complete and the floor ready, but no tanks or other infrastructure in place yet.

We also toured other nearby properties of Segrest where they do breeding and grow out. Growout was a combination of large cement vats and outside ponds. We visited in "winter" so the ponds were covered to protect against the harsh Florida winters! Kidding aside, tropical fish don't like even 50 degrees, so the plastic covers do a great job protecting the fish.

The entire facility seemed very well thought out, and had everything they needed, including the on-site laboratory to do the extensive testing they do. While this would seem to fill most people's need for fish for a single day, this was only the first stop of the day. The next issue will continue with the trip ...



Extensive concrete tanks, full of grow out fry.



Closeup of one of the grow out tanks.



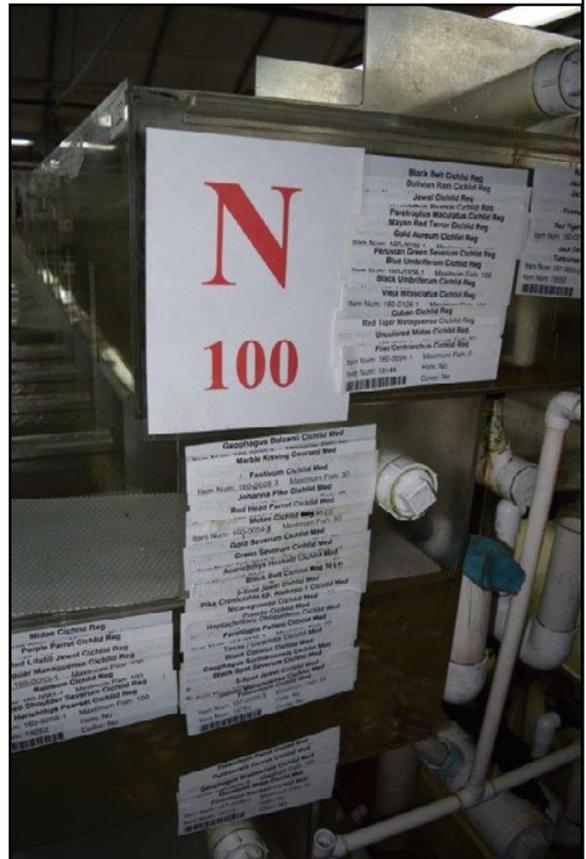
Sandy Moore showing us a sizing device, smaller fish slide right through.



Outside ponds for rearing fish are covered because of the "cold". Tropical fish don't like chilly temperatures!



The water treatment system is very extensive. They have separate filtration systems for each row inside (top left). To monitor water quality, Segrest uses this sampling device for testing (lower left).



Keeping track of all the fish and their location is serious business! Here's the labeling system at the end of one row.



Color-coded buckets with treated shipping water are stacked and ready to fill (left). Filled buckets ready for bagging are loaded onto a conveyor and sent to the shipping area for bagging (above).



Buckets of fish end up here, ready to be bagged and shipped.



Workers bag the fish, fill with oxygen, and seal the bags.

To be continued in the next issue of In Depth!



These fish are all boxed and ready to go. Last stop before the airport.

Breeding *Corydoras panda*

By Ann Whitman

Corydoras catfish are one of the fish most hobbyists buy when they set up their first tank. Usually sold as “the clean-up crew”, these active and personable schooling fish quickly become favorites. Nearly everyone loves them, and the panda cory, with its black mask and endearing name, is especially popular. I keep many species of *Corydoras* in my community tanks and they have spawned, but it’s nearly impossible to collect their eggs or raise fry in such situations. I finally decided to give a group of pandas their own space to see if they would breed.

I bought a group of 8 *Corydoras panda* directly from their breeder at the Big Fish Deal in Maryland on March 4th this year. I set them up in their own 5-1/2 gallon tank with about 1/4" of fine sand and a sponge filter, but no heater. The temperature in the tanks on that shelf ranges from 72° to 74° F. I was a little worried about my water parameters because it’s hard, full of minerals and runs about pH 7.8, which is considerably different than this fish’s native habitat. Fortunately, they settled right in and showed no sign of distress.

March and April were stormy months, with snow and rain and low pressure events occurring weekly. This is the sort of weather that often prompts *Corydoras* to spawn. In the wild, storms bring flooding and a sudden influx of food. To help simulate that natural event, I stepped up my water changes to twice a week and fed frozen brine shrimp and blood worms several times a week, in addition to the regular diet of scavenger pellets and flake foods.

I wasn’t long before I saw the pandas running up and down the sides of the aquarium, usually the precursor to spawning. I had added a large handful of java moss to their tank, but decided to throw in a yarn mop that I had made for killifish breeding. I took off the cork so it would sink to the sandy bottom. On April 5th, just a month after I brought the pandas home, I found 35 eggs in the yarn mop! They were well covered in sand, but stuck to the yarn fibers. Like most fish, corys consider newly laid eggs as food, but I think the sandy eggs may have been less palatable and somewhat more protected.

I carefully removed the eggs from the yarn with my fingers and placed them in a net breeder suspended in their parents’ tank. The eggs are quite firm and easily handled. I set up a sponge filter with a tall outlet that bubbled water into the net to keep the eggs



My breeding group of *Corydoras panda*, one of the most popular catfish species.



Eggs about two days after they were laid. They are covered in grains of sand.



These fry have just hatched and still have full yolk sacs. See the Java moss for scale.



At 1 week old, the fry are just over 1/2 cm in length and beginning to eat newly hatched brine shrimp.

lightly aerated. Over the next few days, most of the eggs got a fuzzy coating on them, but they turned dark as if embryos were maturing inside. After 5 days, 28 of the eggs hatched! I moved the newly hatched fry to a small Marina breeder box that hangs on the outside of the parents' tank. I repositioned the sponge filter to create aeration and water exchange. To prevent fry from escaping into the tank, I fitted a small piece of sponge filter into the overflow.

It takes a couple of days for newly hatched fry to absorb their yolk sac, so they don't need additional food until the third day after hatching. For their first food, they received microworms twice a day for the first week, and I introduced newly hatched brine shrimp on about the 5th day. I continued to give small daily feedings of microworms in addition to the brine shrimp for a couple of weeks, in case any fry were developing more slowly and needed the smaller food to catch up. After a couple of weeks, I added finely crushed flake food that I soaked in a bit of water until it sank. The fry got fed twice a day with brine shrimp and soaked flake food. I used a pipette to add small amounts of that to their tank, and then removed the uneaten food after an hour or so with a turkey baster.

I was very careful to suck up waste and uneaten food at least once or twice a day to keep the fry as clean as possible. When the fry were about two weeks old, I moved them to a larger Marina breeder box to make way for a new batch of panda eggs that had just hatched. When the fry were a month old and about one centimeter long, I moved them to their own 5-1/2 gallon tank with a sponge filter and 1/4" of fine sand. At this age, they finally began to look like tiny versions of the adults and enjoyed scooting about in the sand, looking for brine shrimp and morsels of food.

It's been a rewarding experience and I'm excited to have successfully bred and raised this adorable and popular *Corydoras* species. I have since set up half a dozen other *Corydoras* species and have my fingers crossed that they will follow the panda's lead.



At two weeks old, the fry are still about 3/4 cm long. Note the microworms in the background and the belly full of pink brine shrimp.



At one month old, the little pandas have finally started to resemble the adults. These fry are only about 1 cm long!



Four-week old panda fry in their new tank with sand and a sponge filter.



WARNING WARNING WARNING

Tropical Fish Club of Burlington members are hereby warned of elections to be held at the meeting on June 14th, 2018 at the VFW Hall in Essex Junction, 6:30 to 9:00 PM.

Elections will be held for the following positions:

President (currently David Banks)

Vice-president (currently Brian Candib)

Treasurer (currently Janine Banks)

Secretary (currently Ann Whitman)

Board of Directors seat (currently Ira Gardner-Morse)

Board of Directors seat (currently Dwight Moody)

Per the [Constitution](#), we will elect a nominating committee at the May meeting. Members who wish to run for office shall place their name with the committee before the June meeting. Nominations may also be placed from the floor at the June meeting prior to the election.

