

# Breeding & Raising *Synodontis petricola*

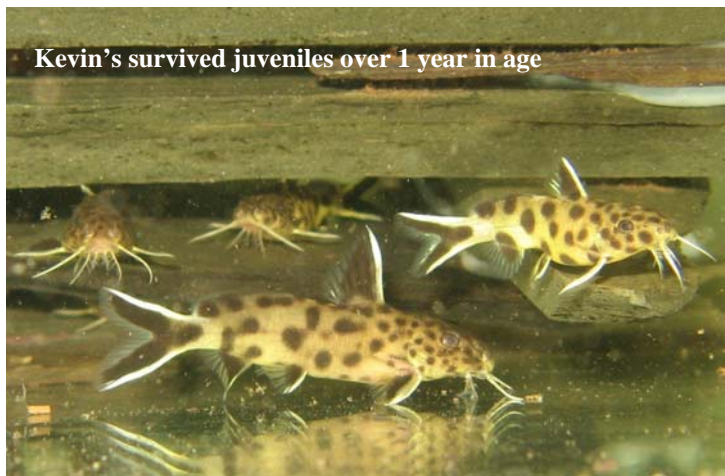
By Kevin Reimer (KWAS) – January 2008 [Kevin.Reimer@sympatico.ca](mailto:Kevin.Reimer@sympatico.ca)

I can finally say that I've successfully spawned and raised *Synodontis Petricola*. I'm very proud of this accomplishment as the journey was not an easy one nor was it a quick path for me. The most important ingredients were to not get discouraged at short comings and to keep at it. I am by no means a biologist, expert hobbyist, or expert breeder. I've written my experiences here as a hobbyist new at spawning catfish, as I remembered learning them. I hope I can help someone else spawn these 'cool cats'.

*Synodontis petricolas* come from Lake Tanganyika and prefer a pH range of 8.0 – 9.0 at 22-24°C with hard water. I've found that *s. petricola* and *s. multipunctatus* seem to be the most common African catfish in the hobby. The *s. petricola* will grow to about five inches and the *s. multipunctatus* will grow quite a bit larger. However, as juveniles they're difficult to tell apart. Both species look similar with spots on whitish background and have those white barbells. You can identify the *s. petricola* by the solid white leading dorsal and pectoral fins which the *s. multipunctatus* don't have. Coming from Lake Tanganyika with these preferred water parameters make these beautiful little catfish the perfect complement to any rift valley cichlid show tank. They love to be in groups, swim all over the tank and their antics are a joy to watch.



Mature female *Synodontis petricola*



Kevin's survived juveniles over 1 year in age

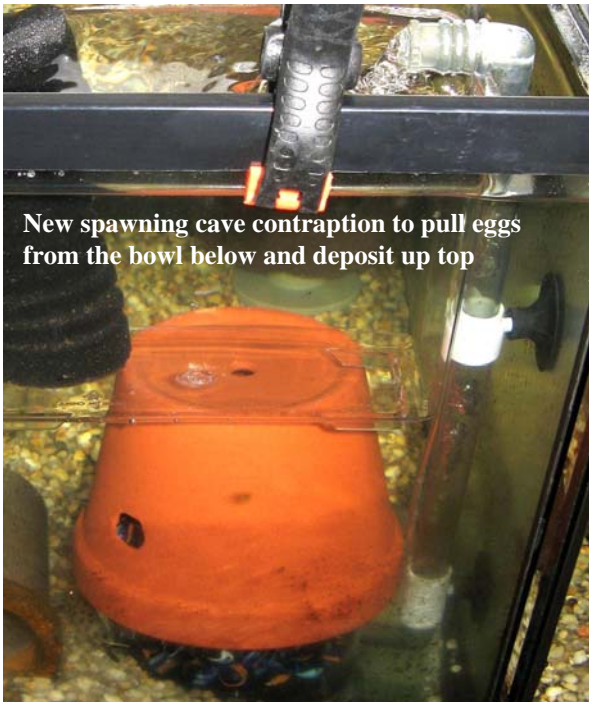
My journey began when I purchased a linear air pump, for my fish room, from a fellow hobbyist I met on our club's forum. Rick or aka Rickzfish on [www.kwas.ca/forum/](http://www.kwas.ca/forum/) had tanks filled with young *s. petricola* growing out. I had seen *s. petricola* in the local fish stores; however, the price at over \$25 each deterred me from getting any. Rick's cats were reasonably priced and much larger than the store's which fueled my 'fish geek' compulsive urge. I spent what remaining money I had on 10 of his African catfish; I couldn't leave Rick's and not bring any of these cats home.

I immediately set out to spawn these gorgeous catfish. Awaiting their maturity, I continued aggressive feeding and frequent water changes as I searched and read everything I could find on the

internet regarding care and breeding. Rick shared his spawning techniques with me at his place including how he used a marble bowl set up and acrylic egg tumblers. He did advise that it would take over two years for the fish to reach breeding maturity. Mine were currently about a year and half old. I placed all 10 fish in a 10 gallon tank furnished with an over sized #4 sponge filter and no more than a half inch of pea sized gravel. These *s. petricolas* are a very easy fish to feed as they eagerly ate anything and everything I offered to them; hence the frequent water changes.

Several months later, finding a clay pot that fit well on a bowl was challenging in of it's self. Frequenting the dollar stores, I found a glass bowl that worked, filled it with dark marbles and fitted a clay pot with a small entry hole on top. Many months went by of cleaning the bowl, polishing marbles and looking for any sign of eggs or fry; not really knowing what I should to look for. I eventually neglected to clean the bowl at every water change. I lost interest due to the lack of evidence and other fish spawning activity in my fish room.

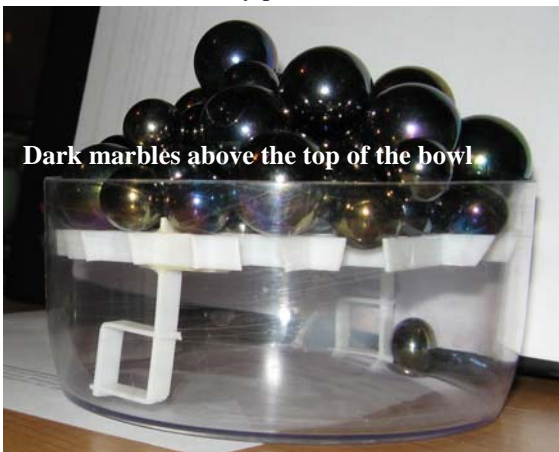
Early 2006, amongst the filth in the bowl I saw a tiny fry dart between marbles when I looked at the bowl from underneath. After removing the marbles I counted 5 fry. Needless to say these didn't survive but it was enough to awaken my drive and start focusing on these fish again. After re-reading spawning reports on the internet I made a new spawning cave contraption. This device would pull the eggs from the bottom of the bowl and drop them in the breeder net above. I used a clear plastic storage container, cut to fit the clay pot, and cut a hole in the bottom of it to fit a 'Hagen Elite' filter tube which would draw the eggs out and up once air was supplied. I had this going for about four to five months with no evidence of spawning; however, the bottom of the bowl stayed much cleaner as the 'contraption' successfully pulled the dirt out of the bowl into the breeder net.



In August 2006, I noticed that a couple of the *s. petricolas* were getting quite fat. More than fat in fact, so fat and swollen I was concerned that they were sick and I could potentially lose them. I called Rick to talk about my no spawning situation and the bloated sick fish. Rick was very helpful in discussing and sharing everything he knew with me. We discussed petricolas for an hour and we concluded I wasn't really doing anything wrong and just needed to try a few different things. I did two things as soon as I got off the phone. First, I turned the air off of my contraption as perhaps the water flow was too much and it was discouraging them. Secondly, I removed two younger males from the group. The thinking was that perhaps they were disrupting and / or eating the eggs during a spawn. Well, I couldn't believe it... the next day I had eggs. (In hind sight I now know that the two swollen cats were full of eggs.)

I ceased using this 'contraption' in an attempt to pull the eggs automatically, by leaving the air off, and had a few spawnings within two months. However, the survival rate of young was terrible. Total eggs from a collected spawn never exceeded 50. I was battling egg fungus and figured the dirt in the bowl along with my slow response in getting the eggs out was my challenge.

A new bowl / pot cave was needed so I could see the contents within the bottom of the bowl. My goal was to capture eggs more quickly and to limit the useless checking of the bowl. With this version, I used the same type of plastic container but cut it taller so the pot would sit higher exposing more bowl at the bottom. Using 'egg crate', fluorescent light diffuser, I created a shelf / table for the bowl in which to place the marbles on. This allows the eggs to drop through to the bottom of the bowl, free of marbles and in plain sight when searching for eggs. In addition, you could now see when the dirt collected enough to warrant a bowl cleaning. I cut a small opening in the clay pot for the fish to enter right where the bowl meets the clay pot and ensured the marbles were above the bowl line.

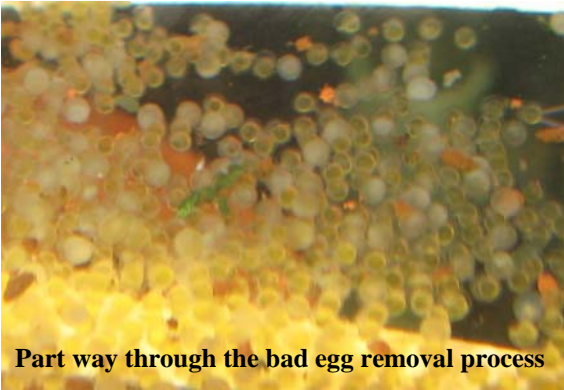


October 2006, I had my first quick capture of eggs with the newest cave creation. I started with maybe 60 good eggs. After battling the 'wild fire' white fungus over the first couple days, I was left with 12 wigglers which eventually perished. Another spawn this same month, I ended up with six wigglers with egg sacks of which two survived.

Over the next nine months, with relative consistent spawns, I tried many different ways to house the eggs and wigglers: egg tumbling, different fry boxes, different tank same water, methyl blue, and peroxide to name a few. The number of eggs continued to increase gradually with each spawn. I did have some survivors, however, nothing good enough to consider a success or valid for a KWAS BAP submission.

I resorted back to keeping the eggs and wigglers in the same tank as the adults as this was the one technique I used previously that had the best survival rate. The first time I attempted this again, I had a decent amount of wigglers which mysteriously disappeared, what the heck! On the next round, I caught the adult *s. petricolas* eating the last of the wigglers by sucking them through the nylon. What a snack that is! What else is going to challenge me? I was almost ready to give up. Then, for no apparent reason the spawning stopped. Once again, my interest wandered away towards other fishy activities.

Then one water changing evening, from the corner of my eye ...and from across the room ...I thought I saw something move in the bowl. After closer inspection I found a juvenile swimming inside the bowl, not from the other side but actually inside of the bowl under the marbles. I 'passionately' pulled everything from the tank to get that little bugger out of there! ...He must be eating my eggs! I ended up relocating a total of three young ones from the tank, each were just over three quarters of an inch. I figure the spawning must have continued and they've been feasting on caviar! My interest was back on again in October 2007.



Part way through the bad egg removal process

November 2007, I had my largest spawning to date, probably over 300 eggs. Eggs are a millimetre in diameter, or just over. The good ones are the colour of honey (golden honey that is ;- ) and the bad or unfertilized eggs are cloudy white. After collecting the eggs, you need to remove all of the bad eggs to prevent fungus that will spread like ‘wild fire’ across all of the good eggs.

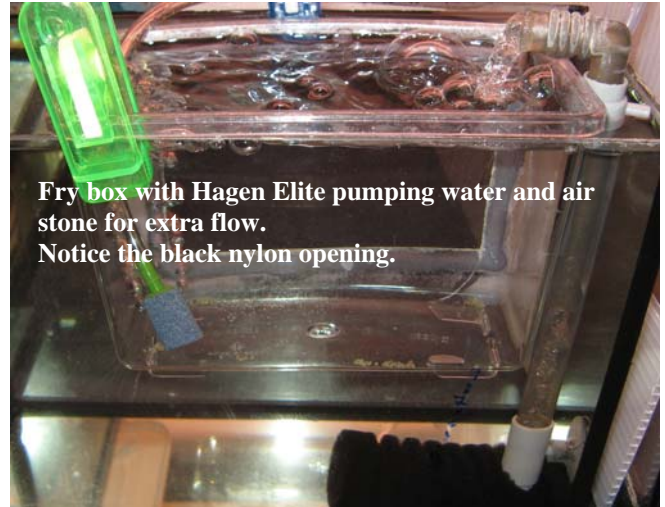
I spent five hours picking out white unfertilized eggs, one egg at a time, using a small plastic pipette from a water test kit. Three hours or more the first evening and then another two or more the next morning, all time spent on separating bad eggs. I ended up with about 150+ good eggs. Talk about a sore back and dry eyes. This pipette turned out to be my best friend for the next while, as I had to continually pull out bad eggs, dead wigglers, and then on to dead fry.

I placed the good eggs in a fry box within the same tank as the parents. I added half a cap of peroxide to the 10 gallon tank to assist with any fungus after the egg juggling. Now I had attached a plastic guard on this fry box so that the adults couldn’t get their darn lips close enough to the meshing. Water was pumped into the fry box with a Hagen Elite filter and an air stone was added for maximum water flow.

Eggs hatched in two days and I started with about 100+ wigglers, wow what a sight! I was not about to celebrate quite yet and was content to wait it out.



Just out of the egg, 100+ wigglers



Fry box with Hagen Elite pumping water and air stone for extra flow. Notice the black nylon opening.

Remembering conversations with Rick, I would be lucky to have a 40% survival rate. I fed these guys at least three times a day including vinegar eels and mini micro worm sparingly. You could tell they were eating because you could see their bellies swell at feeding time. After the two week mark I had 50+ fry and only rarely had to remove a fatality.

I started feeding micro worm and decapsulated shrimp and then eventually moved on to crushed flake. Once I passed the one month mark, having about 50 fry pushing a cm in length, I knew I was over the hill.

Learning the hard way is the only way at times. I came to the realization that celebrating too soon lead to deeper discouragement; perseverance and acknowledging that the work was just beginning with a spawn was the correct path. I’m hoping I have assisted you with either a hint, a tip, or encouraged you to take up this challenge to spawn some *s. petricola* yourself. If you have a strong will and patience I’m confident you too will be victorious!

This adventure was extremely rewarding as it was no easy street and the knowledge and lessons learned along the way were many.



Over 4 weeks in age and looking like their parents

If you have any questions, want more details, or if you have any suggestions or tips for me please don’t hesitate to send me an email.

All photos by **Kevin Reimer**