

Continuous Collection

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I had been spawning *Synodontis petricola* for several years now, but only raising a couple of dozen total. I had setup an upside down flowerpot on top of a saucer full of marbles. While I did get eggs with this setup, I never had more than 8 or 10 at any one time and more typically had 6 or less. These are very tiny eggs and the fry grow very slow, typically taking 6 or 7 months to reach almost 1" in total length. Feeding only a few very small fry was also difficult. It was somewhat of a chore to collect the eggs, and it needed to be checked daily since the eggs hatch in about 24 hours and the fry start to swim away.

At a recent auction I had brought in two 1"+ *petricola* and had several people ask if I had any more. At the time I had not even tried to collect any eggs in many months. I knew there had been others in the northeast breeding them, so it was not high on my priority list. Come to find out that nobody had any *petricola* at that time. So I decided I would try again, at least in 4 or 5 months I would have a few.

My engineering side started to kick in, how could I make this whole process easier! I knew that one hobbyist had rigged up some sort of way to collect the eggs from the marbles using a filter to suck the eggs out some how. Of course I had never seen his setup, he did describe it to me once, but I really didn't remember the details. After sketching out an idea, I made a trip to Home Depot. I needed some 1" PVC elbows and a length of 1" PVC pipe and a tube of aquarium grade silicone rubber.

I started by drilling 5 small holes in the middle of the bottom of the saucer, close enough so that when I glued the 90 degrees PVC elbow to the bottom, all holes fit inside the opening. Since the *petricola* eggs are so small, I was able to use a small drill bit. I wanted many holes so that a marble would not block it. I used many small holes instead of a large one so the marble wouldn't fall through.

Next I created a tube to carry the eggs up to a collection point. A short piece of PVC was added to the elbow glued to the saucer, then another elbow pointing up to the surface. A piece of pipe was inserted then to bring it up to the surface with another elbow and short piece of pipe to bring it over to the collection point. One last elbow was added so the eggs would come out of the pipe and head down.

The collection point was a small mesh breeder trap which allowed water to pass through. On top of this was a fine mesh fish net. The eggs would collect in the net with fresh water coming up the pipe circulating around the eggs.

To get the eggs and water to circulate through this unit, a small whole was drilled in the side on the vertical piece of pipe. A piece of rigid airline tubing was inserted. This created lift like in an air driven undergravel filter lift tube. One other alteration needed to be made. The air would come up the pipe and collect in the top piece and come gulping out in large spurts. A very small hole was drilled in the top of the last piece of pipe which allowed the air to escape, but the water would continue on into the net smoothly.

With this setup in place I was sure to get a few more eggs, and all I had to do was check the net each day. Even if the eggs hatched, the fry would stay in the net. But to my surprise, I got more than I had expected! After being setup for a few days there were the expected few eggs. Then on about the 6th day, I checked the net and could not believe what I found. There were over 100 eggs in the net, all in the past 24 hours! I left them in the net until that evening. When I returned home after work, many of the eggs had hatched and they were swimming around the net.

It seems that every 7-10 days there are at least 100 eggs overnight. In between there are still the few eggs here and there. There are 9 adult petricola in this tank, but I typically only see the largest pair going into the flowerpot and they are in and out of the pot all the time.

Having had such good luck with the petricola, I thought I would try a similar setup for another species. *Synodontis victoriae* is much larger and much more aggressive than its cousin petricola. I used a 10" flower pot and all the marbles I could find with the same type of setup. Unfortunately, I have never seen the victoriae go into the flowerpot. Oh well, that would have been too easy. I have a few other species I would like to try this setup with, but haven't gotten to them yet as I will probably need a pot somewhere in between the 10" and the 4" I use for the petricola. I am also thinking of modifying the setup for egg scatters instead of cave spawners, but those designs are still in my head.

One of the major aspects of breeding fish is protecting the eggs and/or fry from the adults and other tank inhabitants. This method of continuous collection offers that protection and gives us the chance to succeed at the next hurdle, trying to raise the fry!

