My Native Fish Winter Cooling Device

Thomas Glassburner

6450 State Route 86, Windsor, OH 44099, tglassburner@gmail.com

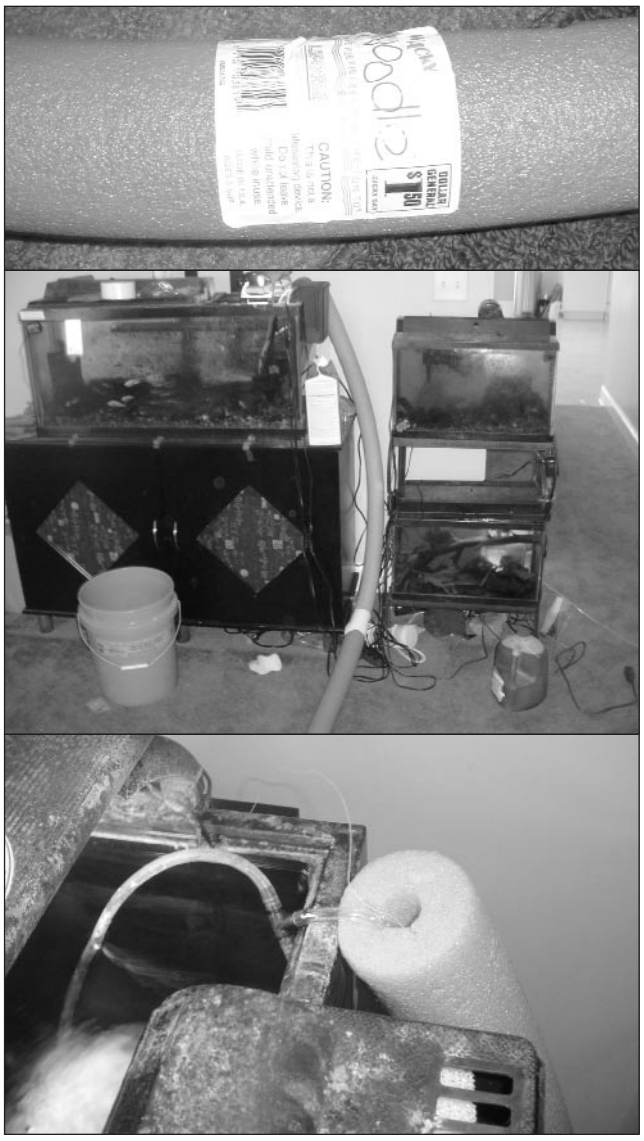
My tanks are normally 65-72°F all year, but in Fall 2007 I decided to try and give my darters a "winter" period to see if it would possibly lead to spawning activities when I warmed them back up. I needed a cheap, easy way of creating cooler water, so I came up with the following.

Equipment list:

- air pump
- 25' of airline
- 20' of "pool noodles"
- duct tape

I placed the air pump on my porch, plugged it in, and ran the airline through a window that I opened just enough to let the airline through. Then I used duct tape to seal the rest of the opening.

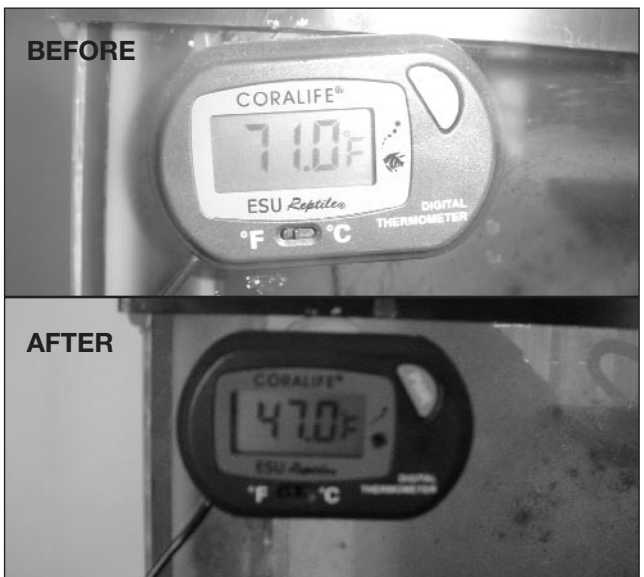
Once the airline was in the house, I ran it through "pool noodles" across the room to my darter tank. Pool noodles can be found at most stores in the summer for only a buck or two. (The ones I used were in my garage, left over from the previous summer.) I duct taped them together at the joints.



I used the noodles to keep the frigid outside air as cold as possible while it travels through the warm house until it is pumped straight into the venturi hole on each of the dual powerheads in my darter tank. When the very cold bubbles disperse into the water, the water in the tank is thus cooled off.

(Note: The air pump is connected to the powerheads anyway since the powerheads are too low for the venturi effect to actually work the way for which it was designed, so I am not adding any equipment that that wasn't already in use.)

My goal was to lower the temperature by at least 20°F to around 45-52°F.



As you can see from the photos, the technique worked well. All the male darters in the tank begin to color up and claim small territories. To induce spawning, I slowly allowed the temperature to rise and increased the photoperiod.

If you live in an area with very cold winter temperatures, this idea may work in trying to replicate a winter period for your native fishes.

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