In Seine Menu

Champaign Area Fish Exchange, Inc.

Members Educational News Update

May 2008

Champaign Area Fish Exchange

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Auction	Art Pesch	217-356-7090	capesch@soltec.net
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MONTHLY MEETING: Saterday, May 3, 2008. Meet at the home of Gary Stebbins, 1712 South Anderson Street, Urbana, IL. 7:00 p.m. See the map at the end of this newsletter.

PROGRAM: We will tour fish rooms of two of our members, Gary Stebbins and Jim Sternburg, both of Urbana. Meet at the the home of Gary Stebbins at 7:00 p.m.. After we view his set-up and fish, we will drive to Jim Sternburgs home to view his tanks and his outdoor fish-breeding ponds.

COVER PHOTO: Banded Sunfish in a tank in Jim Sternburg's fish room. Photo by Phil Nixon

CAFE Website: www.champaignfish.com

To submit articles and classified ads to the newsletter, email Carie Nixon at dragonfly@illicom.net
or mail to Carie Nixon, 381 County Rd 1300 E, Tolono, IL 61880
You may also bring material for the newsletter to the monthly meeting.

Calendar of Events

May 3 CAFE meeting, 7:00 pm, Urabana, Illinois.

Aug 19 Missouri Aquarium Society, Summer Auction at the Stratford Inn, 800 S. Highway Dr., Fenton, MO Viewing at11:00 AM, Auction at NOON For more info contact John 618-604-7228 or Johnsfishy@att.net or visit the Website at www.missouriaquarium-society.org

July 12 **CAFE Summer Auction**, Urbana Civic Center, Urbana, IL

Aug 6-9 **The International Symposium On Freshwater Stingray Biology**
Holiday Inn Express, Palatine, Illinois. stingraysymposium.com

Aug 19 **Missouri Aquarium Society, Summer Auction** at the Stratford Inn, 800 S. Highway Dr., Fenton, MO. Viewing at 11:00 AM, Auction at NOON. For more info contact John 618-604-7228 or Johnsfishy@att.net or visit the Website at:
www.missouriaquariumsociety.org

Sep 2 **Circle City Aquarium Club Fall Auction** at Holiday Inn, Beech Grove, IN for more info contact Bill Flowers at ccacauction@gmail.com

Nov 18 **Missouri Aquarium Society Fall Auction** at the Stratford Inn, 800 S. Highway Dr., Fenton, MO. Viewing at11:00 AM, Auction at NOON. For more info contact John 618-604-7228 or Johnsfishy@att.net or visit the Website at:
www.missouriaquariumsociety.org

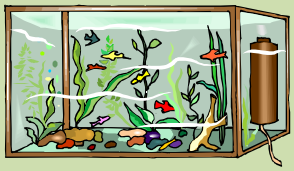
Classified Ads

(free to CAFE members)

Fish For Sale:

Excellent tank cleaners: young bristlenose catfish (*Ancistrus* sp.) for sale. F1 generation from wild caught parents. $4 each or 3 for $10. Call Carol at 217-356-7331 or email: mr.fang@insightbb.com

The entire cover photo of Banded Sunfish.



DOING IT RIGHT
BUILDING A FISH ROOM

by Richard Rice
London Aquaria Society, Ontario, Canada. October 1991
Aquarticles

We all, at one time or another, have said "If I'm going to get into fish, I'm going to do it right." Doing it right, when it comes to fish, means making our hobby as easy to keep as possible with the smallest impact on our living space. We all start out with a community tank or two. Soon, we decide that to do it "right", we should separate our fish according to species and provide the best living conditions possible for each species of fish. We then discover that to do this requires much space and the living room soon disappears. Our loved ones start to complain and we resist as long as possible before finally, out of desperation, promise to build a room specifically for our fish. This article deals with my personal trials and tribulations while building a fish room in my parents' house.

It's hard to decide where to start. Should we put up walls and then pack everything in? I thought of the types of fish that I wanted to raise and then calculated the gallonage required to keep these fish. The result was then broken down into filtration requirements, heating, air supply and shelf space. What I concluded was that my parents' basement wasn't big enough, but neither was Buckingham Palace. I had to start with smaller aspirations. We finally decided that the most appropriate way to go about it was to determine how much basement we were willing to surrender. The dimensions of the room had to be based on the size of the tanks we wished to use. Since we wanted to raise many different fish, we should use smaller tanks so that more could be fit in.

Most tanks in the 2 ½ to 30 gallon range can be put on a shelf that is 16 inches deep. This value is convenient because plywood or pressed wood sheets come in standard dimensions of 4 feet by 8 feet. A quick calculation tells us that from one sheet of plywood, we can get three shelves that are 8' in length with a depth of 16" less a sixteenth of an inch (or so) for saw blade cut off.

The next consideration was to determine the load carrying abilities of our shelves. We decided to use 2" x 4" pine for the structures, because

it was more likely to be straight than the less expensive spruce, and not too heavy too lift once the shelves were assembled. Water weighs about 10 pounds per gallon. Therefore, a 10 gallon aquarium weighs about 100 pounds, plus the weight of the glass itself. The greater the length of the shelf, the more gravity has an effect on its span. The ideal situation would be to have a span only as big as the object it is holding. This, however, is not practical. A good general rule is to support a shelf every four feet along its span. Also keep in mind that a 4 foot shelf is easier to move around than an 8 foot shelf.

Knowing our approximate floor space, we made a sketch of the room boundaries and placed cutouts of 4 foot and 8 foot shelves to optimize the space (actually I drew the room and shelves using a computer, but that is not necessary.) Our room was to include a laundry sized sink and appropriate counter space to facilitate cleaning out a 30 gallon aquarium. From experience in the engineering field, I have found that it is much easier to move something around on paper (not to mention less expensive).

Next, from our design, we marked the room dimensions on the floor. Using standard building practices we built the appropriate walls to enclose our room. Some important items to keep in mind when building a fish room include:

1. Insulate walls (and ceiling if possible) to reduce the cost of heating the room. The room should be as airtight as possible to avoid having tank heaters heat the room.
2. Staple vapour barrier to the framing before securing the sheeting (gyprock). Fish rooms are generally wet, so use greenboard instead of standard wall board if possible.
3. Use water resistant paints to prevent damage to the underlying materials.
4. If feasible, install a ventilation fan to remove some of the humid air from the room.
5. Place the shelving units far enough apart to allow for free passage between the shelves and for bending room.

Anyone who has kept a larger number of fish knows that, in time, multiple air pumps, heaters, lights, etc., tend to clutter up the room and can create a real rat's nest. This usually happens when you're in a hurry to do something and you end up with 40 feet of airline wrapped around your feet when you really need to use the bathroom after having your hands in a tank of water. The design of our fish room incorporated as many built-in features as possible. We went with one main air pump with all the distribution hose hidden in the walls and ceiling to enhance appearances. The pump is capable of driving 70 airstones and should be more than sufficient. The room has four separate electrical circuits coming in to prevent overloading any one system. The shelves have built in lights and power bars all originating from one initial junction box. We used BX sheathed cable (flex) to penetrate the ceiling and drop the junction box on the top of the shelf unit. Each shelf unit can be disconnected from the circuit by separating only one pair of conductors (the BX cable) and the shelf unit can then be removed from the room intact. Each light

can be controlled separately by using a switch mounted on the front of the shelf.

The general philosophy behind the air system is to complete an air path of equal pressure throughout the system. The easiest way to do this is to design the system on one main loop. The pump forces air into the loop where it travels around the loop to each of the drops to individual tanks. Any air that isn't expelled into a drop remains in the system. This creates a closed loop. All exits from the loop will have the same air pressure. In addition, the pump will have to work less because there is a constant pressure in the system. Pumps, like people, will last longer when they don't have to work hard.

The main loop was constructed using 1 inch diameter (inside measurement) reinforced vinyl tubing. The tubing is buried entirely in the ceiling between shelves and penetrates the ceiling to drop down at the leading edge of the top of each shelf unit. The drop runs the length of the top shelf at the front and then penetrates the ceiling agin. The drops to each aquarium were created by drilling holes in the main loop at the appropriate places along the shelves. A brass valve is screwed into the drill hole and acts as the control for the airline which is pressed onto the valve. The drops may be split as necessary to supply the various tanks below. It is best to drop a separate line to each tank from the main loop, because adjusting one line will not change the pressure in another.

Plan before you build your fish room.

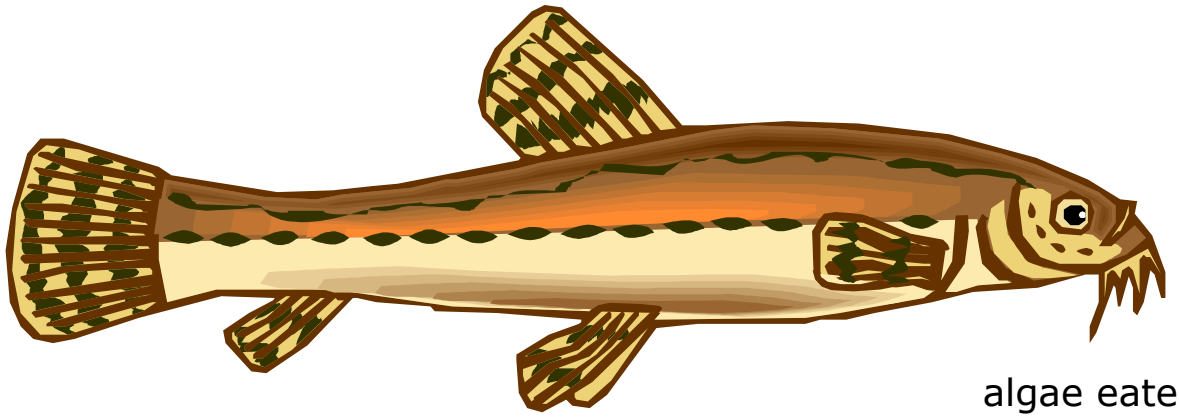
Photo by Carie Nixon

The lights and power bars were wired with standard 2 conductor 14 grounded copper wire with nylon R90 insulation. One important thing to keep in mind is always mount the power bar above the device to be plugged in. This creates a downward loop with the cord. Should water run down the electrical cord, it will drip off the bottom of the loop rather than into the receptacle or power bar. This is, of course, an emergency measure just in case one gets water in the fish room.

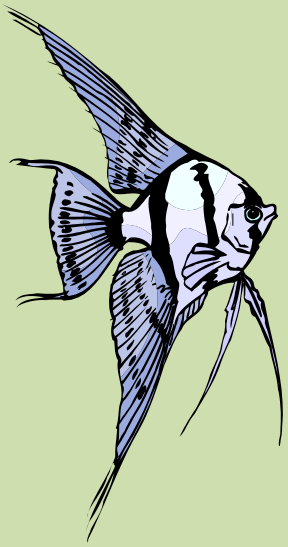
Accessories were added to the room for convenience. These include a portable pump used to drain and fill tanks. The pump unit is basically a PONY pump mounted on a ¾" plywood. The pump comes with a handle already attached which makes this unit completely portable. A normal two-way household electrical switch was connected to the pump and a long cord joined to the switch to facilitate moving around without having to find a source of hydro. The inlet and outlet of the pump were mated with quick-connect joints used for garden hose. To drain a tank, one needs only to join a short piece of hose connected to a gravel washer (the end of a Python) to the inlet end and a longer hose directed to a drain to the outlet side. To fill a tank only requires reversing the inlet and outlet hoses and putting the long end into the water storage tank. A restrictor valve was added to the shorter hose because the little pump threatened to remove all the inhabitants from the tank along with the water. (It's always the little guy that tries to be the boss!)

A large 50 gallon barrel was situated in the room to condition the water prior to adding it to an aquarium. This is very important because most urban water supplies contain chemicals that can be detrimental to the health of the fish. In fact, it can change them into frogs (they croak!). Letting water stand for about twelve hours allows certain chemicals like chlorine to dissipate into the air, and also allows the water to adjust to room temperature so that when it enters the aquarium, it doesn't shock the fish.

Many lessons can be learned from building a fish room. Most important is to plan well in advance. Much money can be involved in equipment so it pays (no pun intended) to think before you spend. Don't be afraid to take your time. The end result should be something to be proud of. If you learn a new technique, pass it on to others. We all have an interest in making our hobby more enjoyable, and would appreciate hearing from you.



algae eater



Ilyodon furcidens

by Steve Smith
First published in Fincinnatti, the official newsletter of the Greater Cincinnati Aquarium Society
Aquarticles

Ilyodon furcidens is a member of the Goodeid family of livebearers. They resemble a shiner in appearance and they are sizeable, reaching three inches as adults. While most wild type livebearers are a nondescript dull gray color, the Ilyodon furcidens are very attractive with subtle yellows and black coloration running along their body and intense yellow coloration on their finnage, with the male displaying more coloration than the female as can be seen in the attached pictures.

Ilyodon furcidens, male

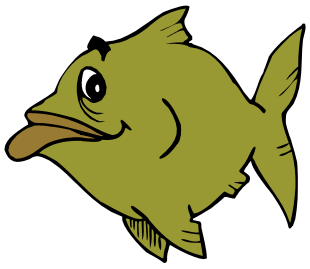
Unlike the more common Poeciliid livebearers where the male impregnates the females with a gonopodium the goodeids have a more primitive development. The anal fin of the male poeciliids is fully developed into the gonopodium, which delivers the sperm to the females. In the goodeids the first two rays of the anal fin appear to be notched out of the fin and function as a primitive means to deliver the sperm to the females. Another difference between poeciliids and the goodeids is that in most of the goodeids there is a connection between mother and fry somewhat like a placenta that delivers nutrients to the fry, making them more comparable to mammals. A female poeciliid's care for her fry on the other hand is almost comparable to a female mouthbrooding cichlid in that she provides protection to the developing embryos but all of the nutrients required for life come from the contents of the egg

with no outside supplement. Poeciliids practice an internal fertilization and internal egg development. Another difference is that female poeciliids can store sperm for several months' worth of fry while goodeids cannot. Thus a female goodeid needs to be re-impregnated after every batch of fry is delivered while a female poeciliid may have 5-6 batches of fry resulting from one male's fertilization.

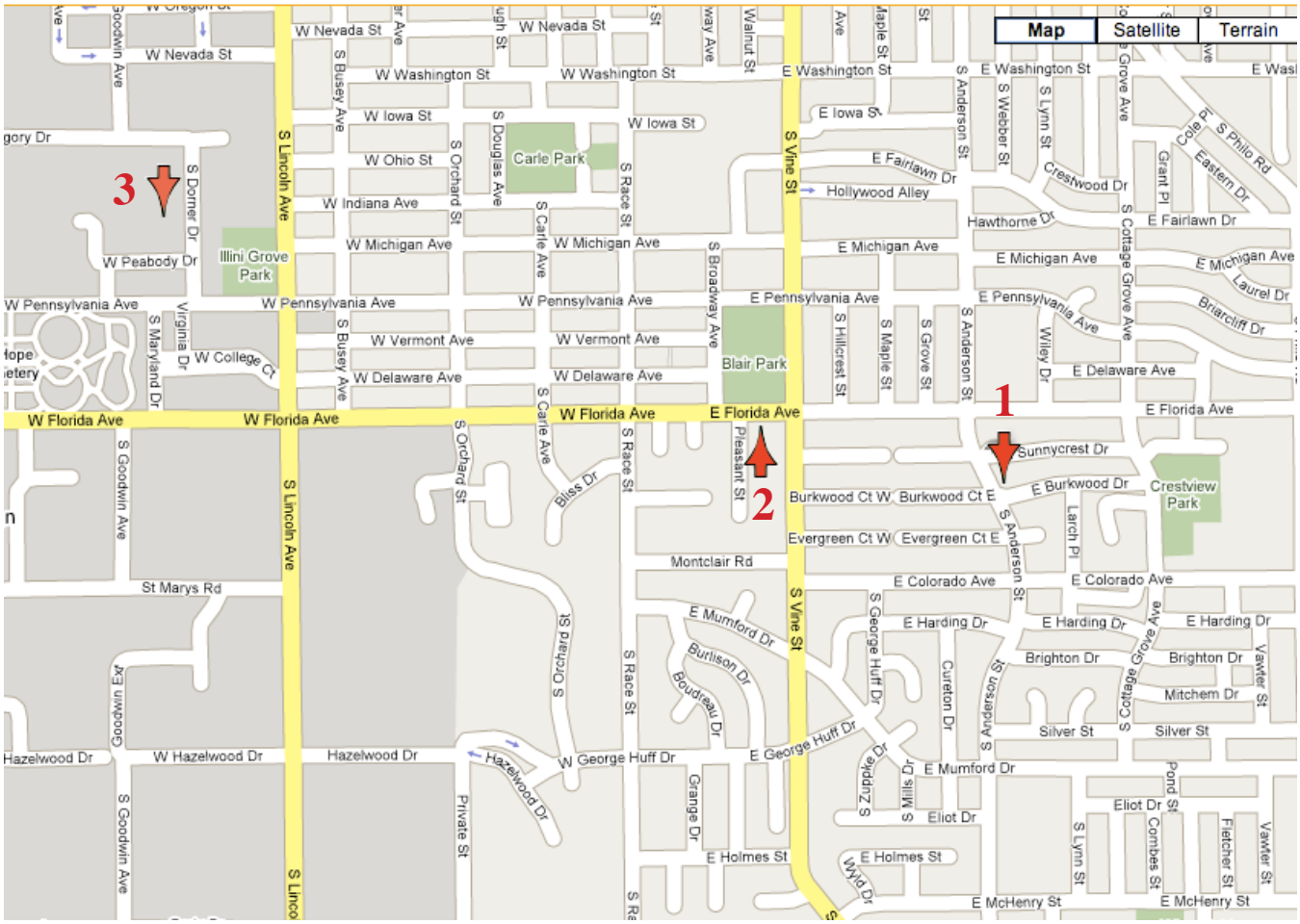
Ilyodon furcidens, female

A pair of *Ilyodon furcidens* and three fry were obtained from Mark Murtaugh and the pair was placed in a separate tank from the three fry. As with most livebearers a tank with clean moderately hard water in the mid to upper 70's usually satisfies their needs. Floating plants gives them someplace to hide and seems to make them calmer when they are swimming around the tank.

As the young matured they turned out to be a male and two females. The female of the pair was thin and looked as if she had just had a batch of fry when I received her. She had their first batch of fry about seven weeks after receiving them, and a second batch six weeks later. The fry are large as are most goodeids although the Ilyodon had more fry than most other goodeids that I have kept so far. There were over 30 fry in the first batch. The fry are not very mobile for the first couple of days but do take freshly hatched baby brine shrimp and small pieces of flake food. After a few days they become much more active and grow rapidly. The parents ignore the fry and thus a community tank of them is quite easily achieved.



Map for this month's program.
Urbana, Illinois



1—1712 South Anderson Street, Urbana. Meet here at 7:00 p.m.

2—107 East Florida Avenue, Urbana. Proceed here after visit to #1.
(park on Pleasant Street just west of the house).

3—Normal CAFE meeting place (Plant Sciences Lab).