



The Raleigh Aquarium Society

P.O. Box 31564, Raleigh, North Carolina 27612-1564
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July 7th, 2007

*Next Month's Meeting will be on Thursday @ 7:30pm **August 2nd 2007***

Meetings are held on the first Thursday of each month at the [North Carolina State University College of Veterinary Medicine](#) located at [4700 Hillsborough Street in Raleigh](#). Visitors are welcome! Snacks and light refreshments are provided. A raffle of fish and fish related items follow the meeting. Due to Security Issues, NCSU has required that the doors going into the downstairs lobby remain locked. Please be on time, as we will have a designated person standing by the door to let you in. If you are late, you may try knocking or call Brandon Berry's cell phone at 252-266-3559, Jeff Jenkins at 919-612-0229, or John Patterson at 919-264-4011.

July 7th Meeting Agenda

The July monthly meeting that's going to be at Todd's house will be on Saturday, July 7th. From about 3pm till whenever Todd gets tired of us and kicks us out – LOL! We're planning on eating between 4:00pm and 4:30ish with the "meeting" immediately following. Todd has some surprises for us to keep us entertained too! We will have a regular meeting and go through the agenda as well as the monthly raffle. However, there will be no speaking program (but I believe our August speaker is planning on attending, but he won't be doing an "official presentation" till the August meeting - but you can get a chance to meet him early and chat).

You should bring with you chairs for your group and a side dish or dessert (or both) to share with the group.

Here are the directions on how to get to Todd's house:

Directions to Todd & Dee Wenzel's house:

402 Adrian Dr., Garner, NC 27529
919-329-9326. wenzelt@netzero.net

From the southern Raleigh Beltline (I-40 & 440), exit on So. Saunders St (US-70 & 401 South). Stay in left lane which keeps you on Hwy 70 at the 70/401 split. Pass Kroger Plaza on right, go another 2 miles, Exit right on Vandora Springs Rd. (just after Outback & Domino's on right). Turn right at top of exit ramp onto Vandora Springs Rd. Take first right onto Beichler St, and then next right onto Adrian Drive. Wenzel's house is #402 on left. We'll post some signs to help you find your way!

Raising a Fruit Fly Culture

By Christine Duncan

Probably because I can't keep a daphnia culture alive if my life depended on it I continue to look for alternative live cultures to feed my beloved Killies and other fish. Today I'm going to share what I've learned about fruit flies. This is a food you can get free of charge if you have any over ripe bananas. To start a culture from wild fruit flies merely mash 2 blackened bananas into 2 cups oatmeal a little yeast and enough apple cider vinegar to make a thick paste. Put about a 1 inch layer into a wide mouth quart mason jar and leave outside open to the air so the wild fruit flies can find it. After you see several collecting in the jar to lay their eggs, close up the jar with a piece of paper towel folded over 4 times and secured with a rubber band. You don't have to worry about actually catching any of the adult wild flies as it is actually their young that will be your culture.

This method while cheap has several draw backs. First other fly types may find your jar before the fruit flies do and you begin with a contaminated culture. Second what flew into your jar will make babies that will fly out (using a funnel to transfer them into another smaller container works pretty well but you still need good hand eye co-ordination). And any fruit fly that makes its way into your house will be your fault. This is a sure way to test your marriage if it can survive a mass escape it will survive anything.

I've opted for flightless, commercially available strains. There are 2 types readily available; *Drosophila hydei* which grows to about 1/8 inch, and it's smaller cousin *Drosophila melanogaster* which grows to about 1/10 inch. At 75-77* F D. *hydei* will mature in about 28 days while *D. Melanogaster* will mature out in about 10-12 days. It is wise to start a new culture each week for either type. It is very important that you not let any wild fruit flies into you cultures because the flightless gene in both is recessive and soon your fish's dinner will be flying away.

There are some supplies you will need to get your cultures going. To hold the culture you can use water bottles and cotton balls or sponges to plug the entrance. These are used as a one time culture and are thrown out after the culture in them has peaked. Packing the media into the bottom can be a bit tricky and as your flies will need something to crawl up out of the media a paper towel or un-dyed excelsior stuffed in after the media and before introducing your flies works well enough. Or you can use the wide mouth mason jars with either paper towel or cloth secured over the top with a rubber band. Again, give your flies something to crawl up out of the media; with these you can also use those plastic canvas needle point sheets. It becomes more cost effective because now you can get them back out of the jar and reuse everything after you clean them. I've found the mason jars to be a bit awkward when I'm trying to feed because the flies have this suicidal drive to climb out and I can never get the cover on with out some actually escaping. I am currently using the quart soup containers I get from the local Chinese Take Out. I use a sewing needle to punch very small holes in the lid or past cloth over the larger holes my husband put in the lids. I'm currently using hay because I ran out of excelsior one night but I have always got hay for the rabbits so it's all good. And may actually be cheaper I think.

Then you will need your media for your flies to grow and multiply in. There are several people on the internet that will happily sell you some or you can make your own. I've included some recipes I've found on the internet that you may like to try. Most of the ingredients you may already have on hand which can save you some money too.

RECIPE #1

Anthony Hundt (an old recipe of mine)

8 bananas
1/4 cup sugar
rolled oats (oatmeal)
1 packet bakers yeast

Put banana and sugar in blender and mix until the banana is liquefied. Mix in oatmeal until it becomes firm, but still moist. Put mixture in wide mouth quart canning jars. Add a few granules of bakers yeast to the surface and add about 30 fruit flies. Cap the jars with a paper towel folded in fourths held on with a rubber band. Substitution with other types of fruit also works.

Variation, use the following ingredients:

1 cup banana (about 2 bananas)
1 cup apple sauce
1 Tablespoon vinegar
2 cups oat meal

Home Made Culture Recipe:

- ½ Cup Instant Mashed Potato flakes.
- 4 tsp. Cornflower.
- 2 tsp. Active yeast.
- ½ tsp. Sugar.
- Apple Cider Vinegar.

I mix all the dry in a larger portion and when needed add in the Apple Cider Vinegar before I use this. The Apple Cider Vinegar has 2 uses, first it is a good mold inhibitor, and second it helps bind the items together. When ready to mix the dry with the Vinegar you will want to mix it in a 1:1 ratio, it will be the consistency of a dry paste. You don't want it to be too wet, or it will foul your culture.

1 cup of water
1 tablespoon cornmeal
1 teaspoon agar (available at health food stores)
1 tablespoon molasses
1/8 teaspoon calcium propionate (available at chemical suppliers)
1 package baking yeast

Except for the yeast mix all ingredients above and boil. Pour the mixture into culture vessels. Cover the vessels and place in the refrigerator until you are ready for them.

When you are ready to use the cultures sprinkle six to ten grains of yeast into the culture. Your home prepared medium is now ready for the fruit flies.

After preparing the medium add a dozen or more fruit flies to the vessel. This should remain undisturbed for about ten days. After ten days you may start another culture with the flies from this vessel or feed them off.

Now that you have your medium made and your container ready it's time to add your fruit flies. I acquired my cultures over the internet and they arrived as a culture with a container, media, etc. If you go this route then you actually start by starting your second culture. After you get your culture started you will continue to make a new culture once a week. The warm weather of summer makes them mature very quickly. And in this 90 plus degree weather we have been having the

media will go bad too quickly if you keep your cultures out side. To start a *D. hydei* culture you will need about 25-35 flies. To start a *D. melanogaster* culture you only need about 15-25. Just dump them into you container and depending on which culture you have you can begin harvesting them in about 1-2 weeks.

Harvesting your fruit flies does require a little practice. They have an inbred compulsion to climb out of their container and they will be going nowhere very fast. So you should have another container and possibly a funnel already on hand. Begin by thumping them down. Just thump your container on the work area surface until all the little flies are knocked down and you can quickly open the container. Then using the funnel or by just holding the container over the other container gently thump it again knocking the amount of flies into the other container. Recover both containers quickly. You can then take this second container and put it in the freezer until the flies stop moving around, usually just a few minutes. This makes them easier to feed until they begin to warm up and revive at which time either finish feeding quickly or refreeze them for another couple of minutes. You must harvest them at least once or twice a week or the culture will crash due to too many flies

You can also harvest the larva. If you intend to do this you need not put anything into the culture container for the flies to crawl up on. As the larva mature they will begin leaving the medium and crawling up the sides of the container. You can just scrape them out and feed them to your fish.

When you first begin to feed your fish these guys begin with just a few until they figure out what is going on. Once they get a taste for them they will snap them up in a feeding frenzy. Also if you have a lot of floating plants the flies will try to get out of the water and onto the plants. Right now everything from my betas and killie fish to my angel fish are gobbling these guys down. My Native American fishes that turn their noses up to flake food thrive on these guys.

Trading Post

Wanted: a few cherry shrimp from someone who's coming to the picnic. No wonder mine quit producing, I'm down to one!

For Sale or trade: one "kissi" *Juli. transcriptus* & two *Praecox* rainbows & one 4" *Syno. multipunctatus*. I also have numerous juv. *Syno. petricola*.

Todd Wenzel / 919-329-9326 / wenzelt@netzero.net

Todd & Dee Wenzel
402 Adrian Dr.
Garner, NC 27529
919-329-9326

Christine Duncan 919-662-8537 Garner NC email swampwaterwitch@yahoo.com

Has the following fish available:

Laetacara dorsigera a small S. American cichlid species peaceful in the community aquarium (unsexed fry 0.5-1 inch)

Angel fish fry unsexed from a silver and pearl scale koi cross about 1 inch.

Kribia unsexed juveniles 1-1.5 inches.

And the following Killifish species:

Epiplatys duboisi, *Ep. dageti* (very pretty and delicate looking), *Ep. annulatus* small with bold black/chocolate vertical stripes and a red "flame" in the tail, *Ep. infrafaciatus*, *Fund. gardneri makurdi* (a fish with a blue body with red spotted lines and yellow borders on his fins and lyre shaped tail), *Fund. gardneri gold AS* (a bright golden fish with red spotted stripes and a lyre type tail). And a sweet little blue dwarf killie known as *Adoma fimosus* that would look

good in a planted tank with other very small fish or shrimp. Please call or email me if you are interested. Thank you for looking.

Other Interesting Things

From Gerald Pottern something that sounds fun and interesting:

This summer I will be surveying for endangered Cape Fear shiners in the Haw, Deep, Rocky, and Cape Fear Rivers and their tributaries in Chatham, Lee, Harnett, Moore, and Randolph counties. This study is in cooperation with the NC Wildlife Resources Commission, Non-game Wildlife Section. If anybody would like to assist me and WRC staff (on weekdays) beginning this Friday July 6, let me know. Experience seining is preferred and good balance is a necessity, as we'll be wading on large slippery rocks, sometimes in fast water. Gerald Pottern, gbpottern@yahoo.com, 919-556-8845

Hello,

In case you haven't heard or read in the July issue of TFH, we are launching a Tropical Fish Photo Contest with the winner receiving not only their photo in Tropical Fish Hobbyist magazine, but also a \$250 gift certificate to the Pet Shop of their choice.

<http://www.milliondollartropicalfishpage.com/Contest>

I am writing you today to spread the word to your club members and to associate clubs. Please have any members with fish and a camera to start clicking away and enter our contest. Maybe you could even submit a photo on behalf of your organization and then use the Gift Certificate for one of your events and to promote your club in TFH if you are voted by the world as "winner". If you wouldn't mind, please post our invitation to participate in your club's newsletter and perhaps your website.

As always, Million Dollar Tropical Fish page is a graphic internet forum for the entire Tropical Fish Community. It is free to any club, society or organization promoting the hobby. Please **post your events** on our calendar <http://www.milliondollartropicalfishpage.com/Calendar> Also, send me any topics of interest for discussion on our blog and participate often.

Best regards,
Joe Di Bartolomeo
Million Dollar Tropical Fish
Office 1.800.504.1650
Cell 1.201.218.6177

Monthly Web Links

Raleigh Aquarium Society Forum on Yahoo Groups
<http://groups.yahoo.com/group/raleighaquariumsociety/>

Potomac Valley Aquarium Society in the Washington D.C. area <http://www.pvas.com/>

Atlanta Area Aquarium Association in Atlanta, Georgia <http://www.atlantaaquarium.com/>

Carolina Fish Talk <http://www.carolinafishtalk.com/>

Charlotte Area Aquarists Society <http://pvelasco.net/CAASBBS/index.php>

Marine Aquarium Society of the Carolinas <http://masotc.net/>

North Carolina Koi & Watergarden Society <http://www.nckws.com/>

Carolina Aquatic Plant Enthusiasts <http://www.ncaquaticplants.org/>

Aquatic Gardeners Association <http://www.aquatic-gardeners.org/>

KingFish Services <http://www.kingfishservices.net/>

Club Sponsors

*(The following businesses give RAS members a discount on purchases)
You may be asked to show your RAS membership card*

[Aquatica](#) 5533 NC Hwy 42-West, A-16, Garner (10%) **919.661.7790**

[Aquatic Concepts](#) 4221 Garrett Road Durham, NC **919.489.901**

[Carolina Pet Supply](#) 322 McCormick Street, Garner (10%) **919.773.0014**

[Critter Country Inc](#) 14 Technology Drive, Garner (10%) **919.772.3761**

[Down Under, Salt Water Fish & Corals](#) Highway 70 (in between Agri Supply and White Oak Shopping Center) in Garner. 20% on livestock, 15% on dry goods) **919.662.8820**

[Fins, Furs & Feathers Pet Center](#) 303 S. Horner Boulevard, Sanford, NC 27330 (10% on everything except tanks) **919.718.0850**

[Fish Pros](#) 5655 Western Boulevard, Suite A, Raleigh 27606 (10%) **919.233.1122**

[Fish World](#) 2205 Westinghouse Blvd., Suite 109, Suite 109, Raleigh (10%) **919.872.1228**

[Infinity Pets](#) 100 W Main St Suite C, Youngsville NC 27596 (10%) **919.570.3039**

[Pet Mania](#) 7901 Falls of Neuse Rd #125, Raleigh (10%) **919.676.3225**

[Pet Paradise](#) 9101-141 Leesville Road, Raleigh (10%) **919.848.8881**

[The Pet Pad](#) 1347 Kildaire Farm Road, Cary, (10%) **919.481.6614**

[Triangle Tropical Fish](#) 3600 N. Duke St. Suite #36 Durham (10% excluding aquariums and stands) **919.479.0088**

Please contact Christine Duncan at raleighaquariumsociety@yahoo.com if you are an active member of the Raleigh Aquarium Society and do not have an up to date membership card. Membership cards can be picked up at any meeting.

Raleigh Aquarium Society

Application for Membership

Membership privileges include:

- Ability to post items in trading post section of monthly newsletter
- A discount card good at participating local pet stores
- All club discounts on club functions
- Education from the most knowledgeable aquarium experts in NC
- Yearly Membership - \$15.00 (includes spouse and children)

(Membership dues run from March 1st each year. New members joining any other time will be pro-rated at \$3 + \$1 for each month remaining in the year.)

Name(s): _____

Date to begin membership: ____/____/____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (____) _____ (2) (____) _____

Email Address: _____

New Membership

Renewal Membership

Mail to:

Raleigh Aquarium Society
PO Box 31564
Raleigh, NC 27612-1564