



# The Raleigh Aquarium Society

P.O. Box 31564, Raleigh, North Carolina 27612-1564  
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## August 2nd, 2007

Next Meeting: Thursday @7:30pm **September 6th, 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 follows 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.

## Meeting Agenda

### *Breeding Fish for the Really BIG Farms*

NC State Aquaculture technician Robin Sanderson will bring us this month's program. Robin was the head fish-breeder at Florida's 5D fish farm. He was charged with supplying over half the country's Wal-Mart's with all their fish. That's a lot of FISH! Robin will show us how he produced millions of bread & butter fish; saleable quantities of less common varieties; and even spawned the occasional "impossible to breed" fish. Here is true treasure chest of knowledge, come pick his brain on that tough fish you've been trying to spawn.

# Monthly Feature



## **The Cape Fear Shiner -- One of NC's Rarest Native Fish** -- Gerald Pottern

The Cape Fear shiner *Notropis mekistocholas* is a 3 inch long, tan to yellowish minnow with a black lateral stripe and distinctive black-edged scales on the upper half of the body (see photo). Its entire known range is limited to the Cape Fear River basin in Chatham, Lee, Harnett, Moore, and Randolph Counties in central NC. Superficially it is very similar to four other shiner species with similar coloration that share its habitat: the swallowtail, spottail, whitemouth, and coastal shiners, but can be distinguished from those species by the size and angle of its mouth, head shape, eight anal fin rays, and black edge on its lower lip. Internally, it has a much longer intestine than all other shiners, which allows it to get by on a diet of algae when the usual shiner foods - insects and worms - are scarce.

During 1984 to 1986 while in graduate school at NC State University, I did a status survey of the Cape Fear shiner which US Fish & Wildlife Service then used to support its listing as a federal endangered species in 1987. This summer I'm doing surveys to update those done in the 80's, in cooperation with NC Wildlife Resources Commission and US Fish & Wildlife Service.

Since its initial discovery in 1962, Cape Fear shiners have been collected from the Haw River above Pittsboro in northeastern Chatham County, Rocky River from Siler City downstream to Deep River in central Chatham County, Deep River from southeastern Randolph County through northern Moore County to the US-1 bridge in southeastern Chatham County, and the Cape Fear River between Buckhorn Dam in southeastern Chatham County and Lillington in northern Harnett County. It also occurs in the lower reaches of large tributaries including Fork Creek (Randolph Co), Buffalo Creek (Moore Co), Robeson Creek and Bear Creek (Chatham Co), and Avents, Parkers, and Neals Creeks (Harnett County), usually within 0.5 mile from the larger river.

The Cape Fear shiner requires shallow, rocky riffle/pool habitats with aquatic plants such as riverweed (*Podostemum ceratophyllum*) and water willow (*Justicia americana*). It does not typically live in deep, unvegetated river segments, or in pooled waters above dams. Consequently, much of its habitat in the Haw River, New Hope River and Robeson Creek was destroyed by construction of Jordan Lake around 1980. Based on my surveys and those by

other NC biologists between 1984 and last week (July 2007), the Cape Fear shiner is still fairly common in Deep River from NC-22 at Highfalls in Moore County downstream to US-1 in Chatham County, and in the lower few miles of Rocky River below Woodys Hydro Dam. Populations in Rocky River upstream of the Hydro Dam and in Haw River above Jordan Lake appear to be gone or nearly so; we haven't found any in these river segments since the 1980's (but we're still looking). The most exciting find this year was catching ONE Cape Fear shiner in the Cape Fear River at NC-217 near Erwin in southeastern Harnett County. This was the first one caught in Harnett County since 1986, and this site is 11 miles downstream of Lillington, previously thought to be the southernmost range limit of this fish. This Harnett County population seems to be hanging on tenuously, and is isolated from the upstream Deep River population by Buckhorn Dam.

The future of the Cape Fear shiner is uncertain as central NC's human population continues to grow. The recently built Randleman Dam, a new water supply reservoir on the Deep River upstream of the shiner's habitat, will cause changes in river flows, temperature, nutrients, sediment transport, and other factors that could affect the shiner's long-term survival and reproductive success. We don't know whether the Cape Fear shiner's demise in the Cape Fear River in Harnett County is due to water quality and nutrient changes caused by Jordan Lake's outflow, but this is a real possibility. Randleman Lake will also support extensive new urban development that will affect fish habitat in the Deep River and its tributaries. The efforts of local City and County governments to promote "low-impact development" strategies and well-planned on-site storm water management will be especially crucial if the Cape Fear shiner and many other species in this river basin are to survive long-term. Introduced species such as the flathead catfish - now common in the Cape Fear River - may also have an impact.

The NC Wildlife Resources Commission and US Fish & Wildlife Service will use our findings from surveys this summer to develop strategies for protecting river segments that still have good populations of Cape Fear shiners and for recovering populations where they appear to have died out, if habitat improvement is possible. Meanwhile, if you're free on a weekday and would like to help seine for shiners in slippery rocky rivers, please contact me. Gerald Pottern  
gbpottern@yahoo.com 919-556-8845.

# Trading Post

*From Genn*

10 - Male Halfblack Redtail'd guppies @ \$1.00 each (sorry no females available), 3 palm sized baby java ferns \$1.25. Wanted Pelvicachromis, Apistos and Rainbows. email at [Leviathan\\_Bettas@yahoo.com](mailto:Leviathan_Bettas@yahoo.com), Genn will ship and as she is only in Fayetteville postage will be cheap and next day to just about anywhere in NC.

*Christine Duncan* 919 662 8537 Garner NC e mail [swampwaterwitch@yahoo.com](mailto: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)  
Kribensis unsexed juveniles.

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. Infracasciatus infrasciatus, 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 Fomusus (You can read a cool article about these in the AKA's March/April Journal) 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.

*From Gerald:* Gerald, [gbpottern@yahoo.com](mailto:gbpottern@yahoo.com) 919-556-8845

I have some extra gravel for Free: 1) white sand, 1-2 mm size; 2) mix of brown gravel and dolomite, 3-5 mm size; 3) coarse natural river gravel 10-20 mm; 4) gray-black crumbly gravel/sand (Triassic Basin mudstone). If no takers, then would somebody take these from me at the Vet School and bring to Swap Meet as a club donation?(I'll be out of town Aug 18 weekend)

Also Free (or for swap meet):

1) large air pump, Jun Model DT-13 from Aquatic Ecosystems,( 60 watts) runs good but pressure aint what it used to be. Ok As Is for 10 - 15 sponge filters. If you can fix it it'll run 50+ filters. probably needs new diaphragm/valves but i havent found parts.

2) Little Giant water pump, may not be safe for submersed use (seal around power cord looks iffy), but OK for in-line (not submersed) use. Has threaded inlet & outlet.

Sale: Kribensis (lotta spots, great color) \$12/pair, \$3 extra males.

# Other Interesting Things

From Norman H. Waaks in Greensboro.

I think the Charlotte Area Aquarium Society is having a workshop and/or auction on the weekend of September 22<sup>nd</sup>. I saw reference to it recently . . . somewhere.

## 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, 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](mailto: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:

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