

Wet Pet Gazette

The Journal of the Norwalk Aquarium Society
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The View From Up-front

by Kenneth Balog
President, Norwalk Aquarium Society

As we approach the end of summer, it's a good time to remind everyone of the upcoming fall show and auction season. Every year, aquarium societies around the region hold fish shows and auctions to promote the hobby and raise money. Over the past few years, participation in these shows has been slipping badly. This is unfortunate since showing fish can be a lot of fun. You can meet new people, see rare and unusual fishes that you may never see anywhere else, and you may even win a trophy or two. The program at our August 17 meeting will teach you everything you need to know to show fish successfully. I know that many of you are thinking that your fish don't have a chance and that it's a total waste of time, but nothing could be farther from the truth. Anyone with experience showing fish will tell you that if you have a fish you are proud of, chances are that it can win. You just have to try.

Finally, on August 20th, Jack Adinolfi's Black River Aquarium Society will be holding its annual auction. Jack is a great friend of our club and we want to support him as much as possible. Thus, we will be organizing a car

pool to go to the event. Be sure to come to our August meeting for details.

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Editor's Notebook

by Douglas De Ment
Norwalk Aquarium Society

I'll happy to report that a couple of people heard me begging that

WE NEED YOUR ARTICLES!

So this month, we have a new contributor to the Wet Pet Gazette – Ms. Stephanie De Ment (age 12) writes her first fishy article in a “Diary of a New Young Breeder” Chapter One. It’s an interesting story ... now, anybody think that she will get those Mickey Mouse platies that she wants? I guess we’ll have to stay tuned for a future installment.

Also this month Don Maloney visits us with a great article on *Dicrossus filamentosa*. Thanks Don!

And of course this month Ed Katuska is back with his regular column *Did You Know?* He also has another great article on the beautiful *Apistogramma nijsseni*. Thanks Ed!

We have two reprints this issue. Our first reprint is from Norman D. Edelen, Jr. of the Greater Portland Aquarium who writes a review of “Rasboras: Keeping & Breeding Them In Captivity” by Dr. Martin R. Brittan. Our second reprint is *Poeciliopsis gracilis* by Dave Sanford of the Greater Seattle Aquarium Society

However the Wet Pet Gazette is ravenous when it comes to articles there is always a next issue! So remember:

WE NEED YOUR ARTICLES!

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WE NEED YOUR ARTICLES!

Write up a few! I’ll take them in any format, by e-mail, on disk, typed ... even “old fashioned” handwritten on paper, sent by “snail mail.”

Junior Member Article

Diary of a New Young Breeder Chapter One

*by Stephanie De Ment
Norwalk Aquarium Society*

So you guys need articles? Well what about an article with pep and personality? Written by yours truly.

Among all the tanks in the De Ment family fish room, is one 15 gallon tank decorated with plants, marbles, and bridges. For about six years, on and off, it has held my absolute favorite little fish, the platy (mainly rubys). A couple of months ago, my recent batch of six various platys died of some sorta parasite, plague or something. They have now gone to the great toilet bowl in the sky.

Ever since Ruby, Comet, Mickey, Donald, Bubbles and Splish left, my interest in going downstairs and feeding all the fish and observing my platies, has faded.

Then my Dad obtained some mated “daffodils” from Uncle Don (Barbour) because, well, he had a 100 gallon tank full of their fry so he decided to rid himself of the source. He gave them to my Dad, and passed on the problem to us – me. After about three months with no action (that story another time), Sapphire and Granite hit it off with their first batch. That captured my interest. Then they had another and another, and sooooo on! Right now my interest in them has started to fade, and my want for Mickey Mouse platies has escalated.

To get my wish, I'll spend a day cleaning out tanks with my Dad, then I'll put a strand of hair in my face, get my eyes real big, and say "PLEASE" to my Daddy. My Daddy will want to make his little girl happy, and then I'll probably get my fishes!

REPRINT:

***A Review of
Rasboras:
Keeping & Breeding
Them
In Captivity
by Dr. Martin R. Brittan***

***by Norman D. Edelen, Jr.
Greater Portland Aquarium Society***

Attending a convention in Sacramento, I once had the opportunity to witness a presentation by Dr. Martin R. Brittan concerning the fishes of the American Southwest. During his talk, Dr. Brittan suddenly came upon a slide of a dam. He ceased talking for a moment, and squinted up at the image. "No, this isn't an old car rally. This is just an old slide," he announced with no trace of humor. The cars present in the parking lot of the dam all dated from the 1950's! Of course everyone laughed riotously.

That was my first example of Dr. Brittan's penchant for recycling old material. Bearing that in mind, it is not too great a surprise to find that his new book "Rasboras: Keeping & Breeding Them In Captivity" is basically a

new printing of his book Rasboras, published in 1954. Both works are products of T.F.H., a company also known for reusing material until familiarity sets in.

It is true that some of the text has been altered. One word was altered in the first paragraph for instance: "which" was substituted for "that." In addition, some of Dr. Brittan's personal philosophy has been deleted; in the earlier work there is a wonderful sentence concerning learning and sloth that is replaced with a note pointing the reader to the Zoological Record. The omitted sentence is reproduced here: "Experts" become so by using common aids to knowledge, "duffers" don't bother and so they always remain duffers. Sound advice for anyone. I would hope to be on the path leading to expert status. I don't know about the rest of you duffers though.

Other changes seen between the two works are simply the results of changes in scientific understanding. The earlier work indicates that about 45 species of Rasbora are known to exist, while the latter work states that about 60 are currently recognized. Some newly described species are included in the new work, which is current enough to include 9 species that have been described in the 1990's. Some species names have been altered by age, and such changes have found their way into the new work.

There is no other work concerning rasboras as contemporary. The new work has 64 pages, and has numerous color photographs of many species. The artist John Quinn represents some species not photographed with color illustrations. These are undoubtedly the artist's best work. There is a brief

introduction on the genus, discussion of its geographic range and habitat preferences, and then the body of the work is made up of extremely brief accounts of a selection of species. The species accounts are spare and technical, being a description of the coloration of the animal, some fin ray and scale count data, and an indication of the native range. Codes are used for the measuristic data and the native range, which constantly forces the reader to refer to the key in the introduction. This proves annoying, but does save space. Two short chapters detail the aquarium care needed to keep rasboras properly, and the breeding of the animals. The chapter on breeding discusses the genus as a whole, and then proceeds to cover three species in detail. The three species afforded individual attention in the chapter are intended to represent examples of the spawning of small, medium, and large rasboras.

Interestingly, Dr. Brittan includes a bibliography at the end of his work. Often this is a feature lacking in books written with the aquarium trade as an audience. Duffers will undoubtedly overlook what a great source of inspiration for further reading this section is.

Definitely this book is needed in the library of any aquarist interested in this diverse genus. It is contemporary, concise, and very well written and illustrated. It would be handy for those attempting an Asian geographically oriented tank, or who just enjoy keeping active peaceful fishes.

Apistogramma nijsseni

by Ed Katuska
Norwalk Aquarium Society

Being a long time cichlid fanatic I was thrilled to return home one evening from an aquarium society meeting with a bag of *Apistogramma nijsseni*. There were five fry in the bag which were bred by a fellow hobbyist. I have successfully bred and maintained several other species of the genus but this was my first attempt at the beautiful *nijsseni*.

The new arrivals were soon placed in a forty gallon breeder tank I was currently using to grow plants. I placed various types of cave-like dwellings in different areas around the tank. The caves along with the dense vegetation growth provided the new inhabitants plenty of security while settling in. To my delight the next morning they were swimming around happily in their new home. The tank was also home to a school of juvenile *Corydoras elegans* and a family of rummy-nosed tetras, *Hemigrammus bleheri*. This combination of tankmates along with the flourishing plants and darkish fine gravel that covered the bottom made this tank a sight to behold.

An Aquaclear power filter maintained the water quality with a prefilter helping on the intake tube. I also had a large sponge filter lending a hand. I'd rather have a sponge filter at the end of the airline than an airstone, it just makes more sense to me. A Hagen plant bulb supplied the lighting and the tank was placed in a very well lit room. A thirty-percent water change was done once a week. The water flows out of my tap at a fairly soft rate so it is

easy for me to maintain conditions that are suitable for South American Cichlids. Adding a small amount of filtered rainwater into the tank mixed with my tap water aided in keeping the tank at a soft enough level to keep the inhabitants happy. The pH was kept around 5.8 to 6.0, the temperature was held at 79 to 80 degrees Fahrenheit.

The dwarf cichlids were fed a variety of foods such as frozen mosquito larvae, brine shrimp, bloodworms and a mixture of dry flake foods. All the inhabitants were tank raised and did not mind the flake food being served from time to time. Feeding the apistos was not a problem at all. They relished anything edible that was in front of them. In my opinion a good varied diet and proper water quality is the key to successfully raising aquarium fish. A varied diet aids in growth, color, breeding conditioning, and longevity.

As the *nijsseni* started to mature their adult colors started to become vibrant. The males sport a light blue body with a yellow coloration in the lower belly region. Jet black pectorals highlighted with bright yellow tips. This species has a nice round caudal fin with a bright red ring bordering the outside. The females hold a beautiful bright yellowish coloration with a dark black blotch on the operculum and on the mid body. The pectorals being a deep black like the males with an orange coloration at the tips. The female also possesses the red ring in the caudal fin but was only noticeable when she was guarding fry.

I approximated the dwarfs being about nine months old when I first noticed fry in the tank. As I went to do a water change one day I noticed the proud mom swimming with her

small brood. The enclosure she was in was a small ceramic cave in the rear of the tank. Due to the surrounding heavy vegetation I did not realize a spawn had taken place. I'm glad there was enough room in the tank for the others to give her space. As with most apisto females they could get nasty guarding their young. I removed eight small free swimming fry from the large tank and put them in a ten gallon tank of their own. Unfortunately only three survived. I thinned out a lot of the plant life around her dwelling to give me a birds eye view of the next spawning event. Also most of the other tenants were removed as well. I took about another month but the second spawn (at least that I know of) was in the works. The opening was too small for me to take a count of the eggs but at least I knew there was more than eight. When the fry became free swimming I had thirty-six new additions to the family. This time around I let the parents raise the young for a while before they were removed. It's a wonderful sight to watch cichlids parent their young. All in all I ended up with twenty-four viable fry. The youngsters were fed newly hatched brine shrimp along with prepared fine powdered foods. As they started to grow mosquito larvae was also added to their diet.

In conclusion I would say the *A. nijsseni* is one of the most enjoyable fishes I have ever raised. Whether you're a fan of dwarf cichlids or not I would recommend giving this little beauty a try.

July/Aug., 2000

Did you know?

by **Ed Katuska**
Norwalk Aquarium Society

Hello all. The year is half over already, where does the time go? I found some interesting facts this month pertaining to the oceans of the world. The ocean is truly one of Mother Nature's gifts to the world. Although I have never been a strong marine hobbyist I find it fascinating that the oceans are home to so many amazing creatures, medical cures, and natural wonders. As usual we also have some fishy news for your enjoyment. As of late I have been finding more news stories featuring fish related topics than ever before so I have enough news clips to keep this column going for quite sometime. Don't forget about the trivia question. Now that this publication will be on the World Wide Web for everyone to read, the trivia question is there for all to answer. If anyone is a trivia buff and would like to take a crack at it, send your answer by email to: edkat3@aol.com. Good luck.

Did you know...

Where it all started

Life began in the seas 3.1 billion to 3.4 billion years ago. Land dwellers appeared only 400 million years ago. A relatively recent time line in the whole scheme of things.

Old and crabby

The horseshoe crabs have existed in essentially the same form for the past 135 million years. Their blood provides a valuable

test for toxins that cause septic shock, which previously led to half of all hospital acquired infections and one-fifth of all deaths.

Wow

The world's oceans contain 99 percent of all the living space on the planet.

These facts came from the Smithsonian Institution's Ocean Planet exhibition and from the book "Ocean Planet: Writings and Images of the Sea," by Peter Benchley and Judith Gradwohl.

The Wacky Fish World

Thinning the herd

11/29/95- Melbourne, Australia (AP)-- The badly decomposed remains of Neil Wilson of Melbourne were discovered in a paddock near the Toolondo Reservoir. Neil's death was shrouded in mystery, tragedy, and a fish suit. Law enforcement officials said the 49-year-old man was wearing a heavy green plastic bodysuit, which he apparently constructed from old waterbed material. The suit was designed with an external full-length zipper in the back along the spine, constricting his legs into a mermaid like tail. The only openings in the suit besides the zipper were two holes for the eyes. The suit enclosed his entire body like a maritime mummy costume, thus restricting movement and breathing. A second, yellow colored suit was found in his garage.

Officials have learned the victim was taking medication at the time for epilepsy and diabetes and speculate that his behavior may

have had a chemical basis but locals have their own theories about the aquatic adventure. “He wanted to be a fish,” exclaimed one unnamed resident, recalling incidents in which Wilson would swing from a rope while wearing the suit at the lake.

Kidnapped

6/13/00- New Orleans, Louisiana (ABPnews.com)—Outfitted in a floppy hat and plaid pants with a fake Nikon camera slung around it’s neck, the 5 foot fish was one of 100 displayed by various artists and placed around the city as part of the Convention and Visitors Bureau’s Festival of Fins, said Claire Murphy, an artist. It vanished last week from its perch outside the Louisiana Superdome. Police said the fish snatchers were so anxious to net the massive fish they shattered its rear fins in a bid to pry him loose from his concrete mooring. For days Murphy pined for the one that got away and wondered whether this was the beginning of a fish snatching crime spree or just a fluke.

On Monday workers at the Superdome got an anonymous call, apparently from the fish thieves and were told where the fish could be found. The fish was a little green around the gills after its abduction, said Michael Murphy, the artist husband. In fact it was practically filleted. “He was almost split in half”, he said. But Claire Murphy was relieved to have him back and will do whatever it takes to restore Tour de Grouper to his former kitschy glory. “A local studio will help repair the fins, and I will repaint the damaged areas, replace the camera...and he will be returned to his perch in front of the Superdome. My 74-year old mother says if they catch the guys, she’s

going down there with her BB gun,” Murphy said.

Just when you thought it was safe to take a bath

6/13/00- Portugal (AP)-- A British holidaymaker in Portugal got a huge surprise when the five-foot shark he brought back to his hotel room began to splash about in his bath. The man thought the shark was dead after he caught it while on a fishing trip, but it took to life once he put it in the water filled tub. He rang the hotel reception to report his lively roommate and when employees arrived on the scene, they found the bathroom flooded. When the tourist finally checked out he left a thank-you note saying he hoped management enjoyed the present.

There was no word on the fate of the fish.

Last Months Trivia Question

A group of dogs are called a pack and a group of fish is called a school. What is the correct term for a group of jellyfish?

Answer

A group of jellyfish is called a smack.

This Months Trivia Question

Walt Disney was quoted as saying, “There is a natural hootchy-koothchy motion to goldfish” referring to the fish ballet in this classic Disney animated movie. Can you name that movie?

*Later that night, I went down into the fish room.
A flashlight in one hand and a turkey baster in the
other... ready to do the dirty deed!*

Dicrossus filamentosa

My trauma in their
care and breeding

by *Don Maloney*
Norwalk Aquarium Society

Dicrossus filamentosa is a dwarf Cichlid found only in northern south America. It inhabits small, shallow water courses. There are two known populations of *D. filamentosa*. One is found in the Orinoco head waters and the other in the Rio Negro. The only method of distinction that I'm aware of is two fold, one the male of the Rio Negro morph has a narrow wedge of speckles in the deep fork of the lyre-tailed caudal fin, and two the female develops bright red ventral fins after the first spawn. The other population's male has a wide speckled area and their female's ventral fins remains clear after the first spawn. Regardless of the population this is a beautiful fish with a striking checker board pattern along its flanks. Hence their common name Checker Board Cichlid. Please see the cited reference for accurate physical description of this fish. Every major magazine and reference book has at least one decent picture. In older literature this fish is known as *Crenicara filamentosa*. Because of the wide availability of photos I will opt to save valuable paper on describing this stunning fish's appearance. Please forgive me.

I was able to purchase from a breeder/importer out of Massachusetts on 3/20/97. Having researched this fish months before it's arrival allowed me to choose

carefully the habitat I would use for it's home. I recently purchased a 35 gallon breeder and decided to use it. It's large bottom area makes it ideal for small territorial Cichlids and its shallow water depth offers excellent light penetration for healthy plant growth and ease of maintenance. It came without a lid. I easily fashioned one out of 1/8th inch plexi-glass. For planting this tank I chose Java fern and Java moss and some of the salvinia sp. floating plants, which were good for a while but began growing out of control. I can't tell you how many pounds were pulled out at every water change. Open spaces between the bunches of Java fern patches allowed the fish free swimming room. The broad leaves of the Java fern are absolutely necessary because this fish deposits the eggs on plant leaves. Coconut shell halves and a small piece of bog wood were in the tank along with a shale cave for the *Apistogramma nijsseni* pair which ultimately spawned in this tank too, at the same time! For substrate I chose fine gravel 1-2" deep for plant roots but later began to remove some of it because fine gravel holds too much dirt.

Water that has a low pH value and extremely soft is mandatory in the breeding these Cichlids. The eggs of this species will easily dissolve in even moderately hard water. I obtained water for these fish two different ways. First, I used rain water collected in a plastic 55 gallon drum. Second, I use tap water. Both rain and tap water are filtered through a A.P. tap water purifier. Then it is trickled through peat to produce a water with a pH to around 5.5-6.0. The water temperature of the new water is slightly cooler (70F to 72F) than that of the aquarium which is kept at 80F-82F. The addition of slightly cooler water definitely aids in

triggering the spawning ritual. Water is changed about 10-15% every 2 weeks.

The fish are fed a variety of foods. This is important as proper conditioning of the fish insures beautiful, healthy fish and frequent spawns. Frozen foods like Blood worm and Brine shrimp are fed most often because of their relatively high nutritional value and, most importantly ease of use. I'll treat them occasionally with live brine shrimp, and mosquito larvae when they are "in season". When I'm pressed for time they'll get Tetra Cichlid flakes. Yes, they'll take dry flakes! I've heard stories of fish keepers going to extreme lengths to procure all sorts of live and home made prepared foods for these fish. That was not the case for me.

The filtration is handled by 3 box filters with ceramic noodle, peat, and floss. Filters are changed when they appear very dirty. The filters are changed on a rotation basis at water change time.

Lighting is a single 36" plant bulb. The tube is about 12" above water level. The light is on a timer set for 15 hours. Healthy plants, if you're going to keep them, are important because dead and dying plants don't help keep the water clean. Change the bulb at least once a year.

The tank mates are 4 Cardinal tetras, 1 pair *A. nissjenni*, 1 *Plecostomus* sp. and 2 *Ottocentrus* cats. Note: I eventually removed the tetras after young filamentosa fry vanished spawn after spawn. Note on a note: young fry continued to vanish even after the Tetras had been removed! But that's for later on in the story!

The SPAWNING. The female chooses a leaf on which to spawn. It is usually a perfectly shaped, clean broad leaf not far from the bottom about 2-5 inches. She meticulously cleans the leaf. At this time the female has been doing a lot of head standing when the male comes by. I guest that is her signal to the male that she is ready to spawn. I never witnessed the blessed event. But in the morning she is hovering directly over the chosen leaf. The egg mass appears to be about 30 to 50 eggs. I however have never been lucky enough to yield that many fry. She has now drastically changed her color pattern and attitude. Her normal checker board pattern is now replaced with a solid black lateral stripe and her ventral and anal fins have turned bright red. The male has also lost his checker board pattern for the solid black stripe. She is extremely defensive now, and will move into a headstand position if any body even looks at her and she'll flare her fins and arch her body. If an intruder gets too close she will dart out at them. After spawning the male receives no better treatment. He's chased away and the female cares for the young until they're old enough to fend for themselves. I've heard stories of severe brutality resulting in a dead male, but it never came to that with this pair, in my tank. A quick theory as to why. All the breeding articles that I've read that reported male beatings resulting in death (apistos, too.) had a common denominator, small tanks averaging 15 gallons or less.

Several times I had patiently allowed the female to rear the young on her own until they reached a size when I could take them out. I figured around 1 cm or more. But that never happened. These fish had spawned numerous times and numerous times the eggs would either disappear or the fry would disappear.

Only rarely did the fry hatch and hang on the underside of the leaf for several days only then to disappear like all the other times. I didn't know what was going on, I thought about predation by the neons so out they came. Sometimes I was fortunate enough to witness the newly hatched fry clinging to the underside of the leaf by the tiny suction cup on the top of their heads be gently nibbled off by the female and placed in a small depression in the gravel.

Only to be moved every day to a new spot several more times and then, vanish. I had enough! I had to steal the fry, it was the only way!

Now for the fun part. These fish spawned regularly, they got regular water changes, had a nice place to live, and got well fed. But, the deal was they lived in luxury and I got fry. They were not living up to their part of the agreement. So I had to take action, drastic action! Time to remove the fry. This was not going to be easy because the fry were not regular free swimming fry. I think the correct word is zygote. You know what a zygote is. It's a microscopic fish that is one quarter tail, one quarter eye and half yolk sack! They were not going to swim into any net! After having watched clutch after clutch disappear, I knew just when the "rescue" had to be executed. I waited until the mother took the fry down from the leaf into the first depression in the gravel. Later that night, I went down into the fish room. Flashlight in one hand and turkey baster in the other, ready to do the dirty deed! Now, I was told that keeping an aquarium was supposed to relieve stress. Nothing but a lie! This was serious business. I was very nervous about what I had to do next in order to get *Dicrossus filamentosa* fry. The automatic

timer had shut off the lights just minutes before. But having thoroughly planned and rehearsed what was to happen next, I knew just what to do and where the fry would be. They were back on the leaf, yes every night the mother would put them back up there. As I began to suck them out with the baster some began to fall off the leaf into the darkness! This was turning into a debacle! My heart was bounding like an air chisel! After what seemed like hours (10 minutes) I was able to get about half the fry. I decided right then to leave some in hopes that the female would not totally freak out.

The fry were nothing more than specks! A mere 2-3mm long. The following morning they were still alive. The worst is over, or is it? As long as the fry were still with yolk sack they were not going to feed. Several days later they were just barely free swimming and began to feed on Liqui-fry and once totally free swimming they took newly hatched Artemia larvae. The tank chosen to house the fry is a 2 ½ gallon tank had been set two weeks prior to moving the fry. This tank had been filled with water from the parent tank. It has a mature sponge filter and Java fern and moss. Once the fry begin feeding on the brine shrimp larvae the worst is over. The only worries now are the proper amount of food and water changes.

As far as the adults are concerned, they didn't really seem too upset over the loss of their young. Within a month they would begin to spawn again. It is certainly possible to breed these fish on a regular basis if you are good with a baster!

In conclusion *Dicrossus filamentosa* proved to be a very challenging fish to breed. To date, it's the most challenging for me. I can

say that it was certainly a humbling experience. But I was determined to breed this fish.

References

Horst Linke Dr. Wolfgang Staeck
American Cichlids I 1994 Tetra-Press

Salvatore Silvestri – pers. com. 1998

A reprint :

Yet Another Livebearer

Poeciliopsis gracilis

by Dave Sanford

Greater Seattle Aquarium Society

When I noticed them in the dealers tank they were labeled as minnows. Considering the fact that the males had a rather large gonopodium they couldn't be any species that I recognized as a minnow. As usual, I was intrigued by the identity of a fish I had never seen before. What species could they be? I narrowed it down to either genus *Poecilia* or *Poeciliopsis* on the basis of general body shape. The species determination would have to wait until I could look it up in Lothar Wisneth's *Atlas of Livebearers of the World*. Four were purchased for id purposes as well as for the BAP points to be earned. Thumbing through the atlas, they were easily identified as *Poeciliopsis gracilis*, one of the many livebearers found in the streams flowing into both the Atlantic and Pacific in southern Mexico, Guatemala, and Honduras. The males get to 1 3/4 inches in length while the

females can grow to 2-2 1/4 inches. The body coloration is greenish with a slight blue iridescence. Their flanks have 4 to 6 black irregular spots thus the common name "porthole livebearer." Even the babies have the spots at about two weeks of age which makes it easy to distinguish them from other fry. All fins are clear or have just the slightest hint of color. The species name *gracilis* refers to the slender body shape, except for gravid females of course! I keep all of my livebearers at temperatures in the mid to high 70's. Feedings consist of live baby and adult brine shrimp, earthworm and spirulina flakes. I usually mix two or more kinds of flakes together to insure variety. If kept well fed the adults don't seem to take any interest in eating the fry, which are about 1/4 inch long at birth and have a preference for the surface. The females produce a brood at about 28 days after fertilization by the males. So far the maximum number of fry found has been eight. I suspect that more are born but get picked off by the other fish in the tank. When observed, the fry are caught and transferred to a five gallon rearing tank choked with Java moss. I haven't determined if the females can store sperm for several broods like guppies do. Males constantly pursue females and each other. This hyperactivity probably limits their use as a dither fish for dwarf cichlids by they would be good for larger ones that can't eat them. If you want a lot of action in a tank these hyperkinetic little fish will add some zip to your tank.

REGULAR MEETINGS AND PROGRAMS

Meetings are on the third Thursday of each month except July and December, starting 8:00 PM at the **Nature Center for Environmental Activities, 10**