

Wet Pet Gazette

The Journal of the Norwalk Aquarium Society
Volume 50, Issue 6
November - December 2000

The View From Up-front

by Kenneth Balog
President, Norwalk Aquarium Society

November is finally here and everyone is talking about the national elections, but we should also spend a few moments to think about our club's elections. As always our elections are held at our November meeting and nearly all of the Board positions are up for election. Those of us who have served on the Board would be extremely happy to see some new people step forward to serve. New people usually bring new ideas and different viewpoints which are needed to keep things interesting and help the Board stay in touch with our members. I personally have a few people in mind when the time comes for nominations. Holding an office is not an enormous burden it usually amounts to just one extra meeting a month and most of us can easily fit it into our busy schedules. So, give it some thought and come to our November meeting.

There is another reason for attending the November meeting— our second annual Funny Money Auction. For those of you who missed it last year, a great time was had by all. Here's how it works. All year long, we earn funny money by attending meetings, writing articles,

breeding fish, etc., and in November, we use this money in an auction for a huge variety of goods and services. Last year, aquarium supplies, wine, gift certificates, fishing tackle, accounting services, and assorted things for the kids were auctioned. Additionally, funny money can be purchased at the auction if you are new to the club or need more for that expensive item. Last year it sold for a very reasonable 10 cents on the dollar. So, be sure to come to the meeting and join the fun.

Lastly, we should remember that our annual Holiday Party will be coming up soon. The exact date and location have not been set by press time, so watch your mail for further information.

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Editor's Notebook

*by Douglas De Ment
Norwalk Aquarium Society*

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 ... even handwritten on paper.

An article does not need to be long in order to make it good. This month I have included an article that I found on the web about writing a BAP article. Take the time to spread the information that you learned about the fish you bred.

If you haven't bred a fish, write about what you like about fish. Or how about something funny that happened to you? Tell us that story!

I wish everybody a happy, healthy, and prosperous new year.



Super - Simple Method For Writing BAP Reports

*Adapted from FISH FACTS
Central Kentucky Aquarium Society*

I'll bet one of the most often heard comments when people are asked to compose a Breeders Award Program (BAP) article is "How do I begin: what do I say?" Maybe this will help eliminate the stalls and false starts by providing an outline that could be used as a guide or even turned in with the items in each area for which you have information and this will be turned into an article for you. Give it a try and see if it works for you.

A. NAME OF FISH

1. Common Name (if it has one)
2. Scientific Name (if you know it)

B. DESCRIPTION OF PARENT FISH

1. Colour & General shape
2. Sex Differences
3. Size (approx.)
4. Temperament

C. SPAWNING TANK

1. Size (gallorage & dimensions)
2. Water Temp. & chemistry
3. If chemistry altered, How?
4. What substrate, plants, etc?
5. Type of filtration
6. Light sources

D. SET-UP & CONDITIONING

1. Sexes separated? How long?
2. Food, what, how much?
3. Raise temp.? How much?
4. Pairs or multiples?
5. How introduced to tank.
6. Feeding during set-up.
7. Describe spawning site.

E. DESCRIPTION OF SPAWNING

1. Describe spawning site.
2. Courtship/Spawning actions
3. Spawning colour & patterns.
4. Number/Description of eggs
5. Parental care?

F. RAISING THE FRY

1. How long till eggs hatch?
2. Special care of eggs?
3. When did fry begin to eat?
4. Feeding procedure: first and second food.
5. Special care of young?
6. Parental Brood care.
7. Filtration used with fry.
8. Growth rate.

G. COMMENTS

1. Any special observations
2. Interesting habits of adults
3. Interesting habits of the fry.

Basic Marine Guidelines

*By John D'Agostino
Brooklyn Aquarium Society*

[The following guidelines were written with the basic marine aquarium in mind. The techniques and systems described below may be applied to most aquatic environments. Please bear in mind that these are my opinions and not the final word. My goal was to present a brief overview of creating an optimal environment with minimal maintenance. "Happy fish keeping," - John D.]

My Sunday afternoons are usually dedicated to browsing local. While on these little excursions I will hear "Oh, look how pretty those saltwater fish are!" and then someone else will say "Yeah, but they're too difficult to take care of!" Well after hearing this for the umpteenth millionth time, I decided to put pen to paper and dispel the various rumors.

Marine aquariums are no more difficult to maintain than fresh water. If I had to put a shopping list for a marine aquarium, it would consist of: aquarium, lighting system, stand, filter system, heaters, protein skimmer, maybe some substrate, test kits, decorations, and salt. The only thing that may be unfamiliar to the novice would be the protein skimmer.

When purchasing each component, keep in mind the amount of maintenance required by that item. I try to choose items that require minimal amounts of maintenance. The more maintenance you must perform the more of a burden your hobby will become. This usually results in a relaxation of maintenance practices, culminating in dead fish and

another hobbyist who believes that marine aquariums are too difficult to maintain.

The first item that we must purchase is the aquarium. Purchase the largest you can afford. The minimum size should be 30 gallons. The shape is also important. Designer tanks may look great but are a maintenance nightmare. Aesthetics take precedence over maintainability and accessibility. When weight is not a factor (nor baseball bat-wielding children) glass is the preferred construction material. In spite of all the technological advances with plastics, plexiglass still scratches easily. On larger tanks height may be cause for concern. Personally my 150-gallon reef, which is 24 inches tall, stretches my contortionist abilities, not to mention my arms, to the limit.

The lighting system is quite simple. Strip lights are very manageable. Standard "cool white" bulbs will suffice. Actinic 03 blue bulbs are just for aesthetics. If the bulbs are not protected by a lens or shielded from the water, then waterproof end caps are a must. (Remember saltwater and electricity are a perfect recipe for disaster. Install GFI outlets or circuit breakers.) The photo period should be no longer than eight hours. Take into account direct sunlight from windows when calculating. Extended photo periods will cause algae to grow at an accelerated rate.

The stand should be of sturdy construction. Ordinary furniture, i.e. a TV stand, is not intended to support the weight of an aquarium (about 8 lbs. per gallon). Look for solid wood, not particle board, finished with polyurethane or formica, both inside and outside. Unsealed wood will stain and rot after a few years of exposure to salt water. Metal stands have no place around saltwater aquariums. Large

doors afford easy access to all filtration units. My personal preference is 36-inch high stands. The standard 24-inch high stand limits my choice of protein skimmers.

My recommendations on filtration systems are probably the most controversial point that I will make. There are only two approaches for filtering any aquarium, in my opinion. The first and foremost choice is the wet/dry filter; the second is dual canister filters. I have discounted the use of undergravel, reverse flow undergravel, hang-on filters and any combination of them because the high amount of maintenance versus the quality of the water is not worth the effort. This is not to say that an excellent environment could not be obtained from their use.

The wet/dry is my system of choice. When people first see a wet/dry filter it's like something out of "Aliens." The principles behind the wet/dry filter have been applied in sewage treatment plants for years. Water is dripped over a medium (blocks, balls, etc.) which causes it to become supersaturated with oxygen. High amounts of oxygen in the water help to break down organic waste by maintaining an environment conducive to the culturing a large population of aerobic bacteria.

When purchasing a wet/dry filter, large sump areas are preferred. Large sumps allow increased water volume, which compensates for evaporation. Drip plates are preferred over spray bars. Spray bars may bind or disperse

filter. Double layered spirals (DLS), bio-balls, bio-blocks, baskets are just a few. All the aforementioned products claim to have high flow rates and large surface areas. I have used DLS, balls and blocks. I prefer no one product over the others and have had great success with all of them. All of the above products, except for DLS, are made of ridged plastic and don't have to be changed or cleaned. DLS must be changed every six months or so (only change half of the roll every six months).

The second choice for a filtration system would be dual canister filters. One canister would be loaded with chemical and mechanical filter media. The second would be filled with biological media. I usually pack these filters with media sold by the manufacturer of the canister filter.

Heating is accomplished with fully submersible bayonet type heaters. Usually 2 watts per gallon will suffice when in heated surroundings. In unheated areas 3 to 5 watts may be in order. Always use two small heaters as opposed to one large unit. If a large heater malfunctions fish gumbo is sure to result. When two small heaters are in use and one malfunctions, the one is usually insufficient to raise the temperature above safe levels. Temperature should be maintained between 75 and 85 degrees. The key to temperature is not where you keep it but rather how stable it remains. The quickest way to "Ick Out" a tank is to have the temperature fluctuate more than 4 degrees. Place heaters in high flow areas for even heating throughout the aquarium.

Protein skimmers are one of the least used and most misunderstood auxiliary filters. Few dealers in the area recommend their use. The few who do, recommend units which are

undersized for the application. Protein skimmers are not new; many pond keepers have used them for years. There are many different types offered for sale. Counter current and venturi will probably be the most common. Counter current models employ a cylindrical tub where water is pumped into the top of the unit and is returned from the bottom. Air stones which produce fine air bubbles are placed at the bottom. Venturi skimmers employ a venturi valve to mix air and water, as opposed to air stones. The basic principle behind the protein skimmer is bubble cohesion. When a column of water is mixed with fine bubbles, organic molecules become bound. The surface will froth with these organics, which will eventually be elastic enough to travel up over the top, falling into the collection chamber. Protein skimmers are a must in order to maintain superior water quality.

When sizing a unit for your aquarium, remember a tank can't be overskimmed. My minimum recommendation, for a tank of 30 gallons, would be 24 inches tall by 4 inch diameter.

Skimmers are a high maintenance item. The collection cup must be emptied and cleaned twice weekly. Air stones on counter current models should be replaced monthly. If you're wondering if protein skimmers are worth the effort, just take a look at the contents of the collection cup.

I have no specific recommendations for a brand of salt. I have used the cheapest to the most expensive and find no difference. When selecting salts make sure that they are phosphate and nitrate free. Don't just believe the manufacturer's claims; test for it. The acceptable range for specific gravity, S.G., is

1.019 through 1.025. My tanks are maintained at 1.021. This number is not of my choosing but the result of the cup which I use to ladle my salt. I know that this cup filled to the top will produce four gallons of water with an S.G. of 1.021. I don't have to think, test or fuss around when mixing water. Again, the specific number is not important, consistency is the name of the game.

Decorations should provide numerous hiding places for your specimens. With the excellent quality of synthetic decorations available there is no need to purchase dead coral skeletons.

When I use substrate it is usually a thin layer of coral sand. A major contributor to poor water quality is poorly maintained substrate. I have been able to maintain a high water quality and great-looking aquariums by constantly changing my substrate. For my 135-gallon tank I purchase a 20-lb. bag of crushed coral sand. I spread a layer of sand about 1/2 inch thick across the bottom. About every six weeks I siphon all of the substrate out of the tank and replace it with new substrate. A 20-lb. bag will last about one year.

Now that the aquarium is filled with water it's time to cycle it. The word "cycle" means to start culturing aerobic bacteria. This is accomplished by adding a source of ammonia.

I prefer to cycle naturally by introducing hardy, nitrogen-resistant, fish (Damsels, Niger Trigger, Lion Fish). I have yet to use a product which has significantly shortened the amount of time required to cycle an aquarium. The entire process will take from three to six weeks. This can't be rushed. After a source of ammonia is added you should start testing for ammonia around day seven. Ammonia levels

should start to rise from day seven through day fourteen.

When ammonia peaks, nitrite testing should commence. Nitrite should peak around day twenty five. When ammonia and nitrite levels are undetectable, the biological filtration is established. During the cycling process the protein skimmer and chemical filtration should not be in use. (This will only lengthen the cycle process.) Upon completion of the cycle a 25% water change should be performed. This will ensure that nitrate, then end product of the nitrogen cycle, is within acceptable parameters.

Now it's time to create our little bit of the sea. If you plan to keep the fish(es) you purchase to cycle your tank, you're well on your way. If you don't, your dealer will usually accept them as trade towards the purchase of new specimens. Now add specimens slowly. Your biological filter is not very stable yet. Purchase one specimen every two weeks or so. When choosing a specimen, know the requirements and habits before you make your purchase. Read books, consult with sales people and other hobbyists. Initially, purchase specimens which are undemanding and are forgiving of those beginners' mistakes. Look for specimens which look healthy (no ragtag fins) and, are feeding well (don't take the dealer's word; ask to see the specimen feed). Not all specimens must be "Show Fish." The Strawberry Goby or Jawfish may not be the most beautiful fish, but it keeps the substrate clean and stirred.

The test kits which I prefer are LaMOTTE and HACH. Both are of professional laboratory quality. These kits may seem expensive, but the average kit contains 50 tests, which brings them in line with the price

of other brands. Most of the cost is for the glass hardware. Chemical refills are available at reasonable prices. The required tests are: pH, ammonia, nitrite, nitrate and specific gravity (S.G.). Phosphate is not essential unless algae is a problem. After the tank has aged, about six months, ammonia and nitrite testing is no longer needed. Parameters are: pH 8.0 to 8.5, ammonia 0.0 ppm, nitrite 0.0 ppm, nitrate below 20 ppm, phosphate below 1.0 ppm, and S.G. 1.019 to 1.025.

Poor water quality is probably the number one killer. Poor water quality is usually due to poor maintenance and/or overstocking. Maintenance should consist of monitoring, feeding, water changes and cleaning.

Daily observation of the tank inhabitants is a must. Early warning signs can be noted and corrective measures can be instituted.

The number one mistake most new hobbyists make is overfeeding. Fish do not have to be fed every day. In the wild, fish are more active and food is in short supply. Feed only what maybe consumed within five minutes. Remove any uneaten food as soon as possible. Vary their diet. Do not make feeder guppies, feeder goldfish or brine shrimp the staple.

Weekly water testing is the way to spot water quality trends. A rising nitrate level usually means overfeeding, overstocking, too few water changes or a combination of the above.

Water changes are another controversial issue. Recommendations vary from zero to 100% per week. Weekly 10% water changes haven't failed me yet. Whenever I spot trouble; whether it be illness, algae or what have you, my first line of defense is a 10% water change.

Prefilters should be changed or cleaned weekly. (Twice a week would be great; daily would be fantastic.) The prefilter is the first line of defense in the filtration system. The gross particles become lodged and should be removed, frequently, before they break down.

Weekly siphoning of the bottom would be optimal, with monthly satisfactory.

Chemical filter media become exhausted quite fast. Since there isn't a way to test for exhaustion, change them monthly.

Replace evaporated water daily in small systems, below 55 gallons, and twice weekly in larger systems.

Above all be consistent in your practices. A schedule that you can religiously adhere to is best.

I hope that the above points, although brief, have given you a flavor for marine aquariums. By no means rush out to your local dealer and purchase all the components necessary for a marine aquarium. You will be better off running out and purchasing a few books or magazines. Gather some practical knowledge. Above all, enjoy the hobby.

BOOKS

- The Marine Aquarium Reference Systems and Invertebrates. Martin A. Moe, Jr. Green Turtle Publications.
- The Marine Aquarium. Dick Mills. Tetra Press.

MAGAZINES

- Freshwater and Marine Aquarium Magazine.
- Marine Fish Monthly.

Breeding **Astatotilapia nubila**

By Kenneth Balog
Norwalk Aquarium Society

Astatotilapia nubila was first described by Boulenger in 1906. It is a small haplochromine cichlid from Lake Victoria in East Africa. It is one of very few cichlids that are also found outside of Lake Victoria, in Lakes Nabugabo and Kyoga and the rivers of the Victoria basin to be specific, and thus it is not facing extinction by the Nile Perch.

A. nubila is a generalized haplochromine species which shows little in the way of specializations that are often seen in other African cichlids. This species has no specialized teeth, jaws, finnage, or habits, just an incredible hardiness, resilience, and a thoroughly vile temperament. Its main claim to fame is the breeding colors of the male. His breeding dress is velvety jet black across his entire body with brilliant crimson red in his anal and caudal fins. He is a striking sight to see, and the only fish in Lake Victoria with this color pattern. The female is a drab greenish-gray and grows to about 3 ½ inches while the male grows to almost 5 inches.

A reverse trio of A. nubila was purchased at auction and placed in an established tank with a colony of Pseudotropheus. It was expected that the Pseudotropheus would be tough enough to handle the aggressive tendencies of the new fish while providing enough targets to diffuse the damage.

Filtration was handled by a combination of sponge, corner, and power filters. The tank held 55 gallons of hard water at 78 degrees Fahrenheit, a crushed coral substrate, and piled rocks and PVC pipes for hiding places.

This was not particularly successful. The next morning the subdominant male was dead and the female was beaten half to death. She was removed to a hospital tank and recovered at a remarkable rate.

Next, she was returned to the 55 gallon tank and placed behind a divider on one end of the tank. The two fish could see each other, but not reach each other, or so it was thought. Within minutes the male had jumped over the divider and started to harass the female. The water level in the tank was dropped 6 inches in an effort to discourage jumping and it worked for about a day. Eventually, the male managed to dig under the divider and push it aside enough to get through. As a result, the female was again removed to a hospital tank to recover. The resilience of this species was hard to believe.

Finally, the male was placed in a 10 gallon tank side by side with the hospital tank. Heavy cover glasses on both tanks discouraged jumping. This time the two fish could see each other in complete safety. A side benefit of this set up is that the male is usually in full breeding colors, and he continues with the usual breeding displays and behaviors. After several months, the female fully recovered from her injuries and her body filled with eggs. Now, she spent her time at the glass trying to get to the male. Both tanks were then given a fifty percent water change with slightly cooler water. The female was then moved to the male's tank and spawning occurred almost immediately. The

female was removed the next morning to brood the eggs in peace.

Four weeks later, nearly 50 fry were released. They were small by African mouthbrooder standards – only about 3/16" at release, but they grew rapidly on a diet of baby brine shrimp and crushed flakes. The fry required no special care and losses were virtually nil; it seems the species' hardiness is also present in the fry.

Thus, Astatotilapia nubila can be seen as a fish that would be of interest to more experienced fishkeepers. Its aggressive temperament and the required protection for the female make it too much trouble for the average aquarist.

GOLDEN OLDIE ARTICLE

**A Review of:
"Breeding Aquarium
Fishes,
A Complete Introduction"**

**by Walter D. Stevens Jr.
Norwalk Aquarium Society**

"A Complete Introduction To Breeding Aquarium Fishes" is a TFH Publication, written by Dr. Herbert R. Axelrod.

The book is a soft cover, inexpensive book, with many beautiful color photos for backup of discussions. A "Complete Introduction" is questionable.

I found the initial section "How to Breed Aquarium Fishes" to be difficult reading. The

interjection of personal thoughts caused discontinuities in the presentation of the information. Initially the author outlines eleven facts necessary "For those who want to report about fishes and how they spawn," and then he elaborates on each in the following twenty pages or so which have many beautiful colored photos of the subject being discussed. Information and photos are distributed roughly 50/50. Breeding seasons, diet, water, breeding site, sex characteristics, pre-spawning, spawning activity, and fry rearing requirements are discussed. The second section, which is the major portion of the book (roughly 100 pages), is an introduction to twenty-eight of the most common and popular aquarium fishes that the beginner would be able to breed. Specifics of each fishes breeding habits, requirements and environment are provided. A good introduction to each is provided. This portion of the book would be most beneficial to the beginner as an aid in determining which fish to try.

The book is limited in its scope, but is good as an introduction to breeding fresh water fishes. It would be a good addition to an aquarium society's library. It is a book which new members could review and that established breeders could fill in on.

Did you know?

by Ed Katuska
Norwalk Aquarium Society

Season's greetings fish folks. It's hard to believe another year flew by already. This month we are going to mix it up a bit. The last issue every year I try to do something with this column that is a little out of the ordinary. I figure with the holidays upon us many of you will be traveling about visiting friends and family and should be informed on fish and hobby related laws from various states. The "laws" printed below are actually true to life, real laws that still are on the books today. Although I'm sure most are not enforced in today's society. Some of these laws are so old when they were first written the Dead Sea was just sick. Also check out *The Wacky Fish World* area bringing you some funny fishy news clipped from the back of newspapers around the globe. I hope everyone has a happy and safe holiday season. See you in the New Year.

Did you know...

Animals are banned in **Arizona** from mating publicly within 1,500 feet of a tavern, school, or place of worship. (Better get those guppys home quick.)

In **California** it is a misdemeanor to shoot at any kind of game from a moving vehicle, unless your target is a whale.

Idaho residents cannot fish from a giraffe's or camel's back.

It is illegal in **Ohio** to get a fish drunk. Also in this state do not go fishing for whales on a Sunday, It's a no, no.

Don't get caught catching crabs in **Sarasota, Florida**.

In **Oklahoma** and **Seattle, Washington** it is illegal to carry a fishbowl or aquarium onto a public bus because the sound of the splashing water may disturb other passengers.

It is illegal to catch a fish in **Kansas** with your bare hands.

You may not catch a fish in **Pennsylvania** with any body part except your mouth. Also dynamite cannot be used to catch fish.

Tennessee law says it is illegal to catch fish by lasso. (To bad, it would make it so much easier to carry them back to the trailer park.)

It's illegal to fish from horseback in **Utah**.

In **Muncie, Indiana** it's a crime to carry fishing tackle into a cemetery.

It is illegal in **Vermont** to whistle underwater. (Not to mention pointless, stupid and down right impossible.)

Montana wins the prize in my opinion for stupid laws. It's illegal for married women to go fishing alone on Sundays, and illegal for unmarried women to fish alone at all. It is also against the law for a man to knit during fishing season. This one is not fish related but definitely worth a mention... It is illegal to have a sheep in the cab of your truck without a chaperone. (There go my Saturday night plans.)

Across the pond

Scotland- You cannot fish at all on Sundays.

Liverpool, England- It is illegal for a woman to be topless in public except as a clerk in a tropical fish store.

The Wacky Fish World

...and this little piggy was fish food

07/02/98- Dodgeville, Wisconsin (AP)- Dan Droessler, a policeman from Platteville, Wis., says he hauled in a 36 inch muskellunge that bit him on the foot. He was apparently dangling his foot over the side of his canoe while vacationing on Twin Valley Lake at Governor Dodge State Park. Floating along, he felt a bite on his foot, only to find a tiger muskie attached. He landed the 36-inch fish in his canoe. A local hospital used 60 stitches to close the wound.

Wait, the story gets better.

The Wisconsin Department of Natural Resources confiscated the fish, saying it's not of legal size and that **catching the fish with a foot is illegal**. The fish was taken to a freezer in Dodgeville while Droessler is negotiating with the DNR about the pending charges.

Oops, excuse us

09/20/00- Gothenborg, Sweden (Reuters)- A full-scale nuclear alert was launched by NATO after submarine sounds were heard under the sea off the Swedish coast could have been sparked by flatulent fish. A fleet of ships headed for the Baltic Sea on full alert to track down "enemy submarines", but found nothing. Instead, analysis of the propeller-like

noises detected underwater showed the sound could have come from a shoal of herring passing wind.

Incoming

09/22/00- Wimbourne, Australia (Reuters)- Brian Farley's wayward tee shot was heading for the middle of a lake until it bounced off the head of a dead fish and back onto the fairway. Mr. Farley found the 6 lb. 8 oz. fish floating in the lake with a golf ball-sized dent in its head. The 50-year-old completed the hole in a respectable three shots before fishing the pike out of the lake to back up his amazing good luck story.

Course director Stuart Hudson said other club members were only convinced of the fishy tale after closely inspecting the dent on the pike's head. The fish head, complete with golfball imprint, has been stuffed and is hanging on the club house wall. The rest of the pike was fed to Mr. Farley's cat.

Last Months Trivia Question

There is only one animal on earth that is known to see both infra-red and ultra-violet light. This animal happens to be a fish that all of you are familiar with. Name that fish.

Answer

The common goldfish, *Carassius auratus*.
The answer in Chinese is *Ji yu*.

This Months Trivia Question

The Golden trout, *Salmo aquabonita*, believed to occur only in Golden Trout Creek, high in the California Sierras, once bore a patronymic scientific name in honor of a former, now deceased, US president. Name this president.

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 Woodside Lane, Westport. Meetings are open to members and the public. Each meeting includes a Bowl Show (members enter their fish to be judged), a short business meeting, refreshments, a raffle of new goods, an auction of new/used goods, and a program/event.

BOARD OF DIRECTORS' MEETINGS

Board of Directors' (BOD) meetings are held in member's homes. They are generally but not always the first Thursday of the month. You do not need to be a board member to attend or to host a BOD meeting. Attending a BOD meeting is an excellent way to get better acquainted in the society, it also gives you a chance to see another aquarist's set-up. Just let the host/hostess know if you plan to attend. Hosting a BOD meeting is an excellent way to have some experienced hobbyists review your set-ups. Just let a BOD member know that you are interested in hosting a meeting and when. The BOD will gladly relocate a meeting to a member's home.

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N.A.S. EXCHANGE PROGRAM

N.A.S. will exchange its publication with other societies that send their publication to us.

Articles may be reprinted by not-for-profit aquarium societies by acknowledging the source and sending us two copies (one for our library, one for the author).

WET PET GAZETTE ADVERTISING RATES

The Wet Pet Gazette will print a business card size ad and will offer a page on our web site for any business that will display and offer our membership flyers. (We supply the flyers, the business simply provides the space.)

For larger ad spaces the cost per issue is

FULL PAGE \$ 25

HALF-PAGE \$ 15

These larger ads must be paid in advance of printing.

AFFILIATIONS

N.A.S. is a member of the Federation of American Aquarium Societies (FAAS), and the North East Council of Aquarium Societies (NEC).