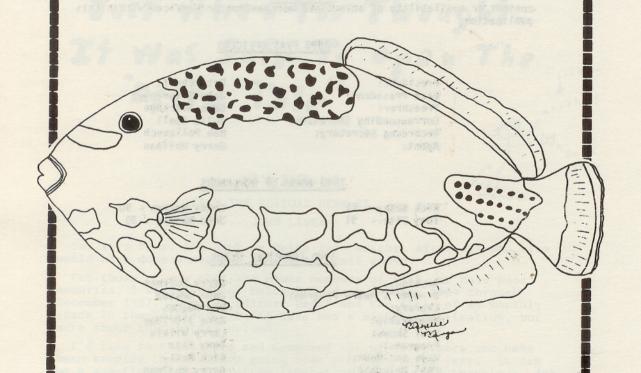
*DELTA TALE * Nov/Dec 1990 vol 26 #6

Nov/Dec 1990

polomac valley aquarium rociety



POTOMAC VALLEY AQUARIUM SOCIETY

P.O. Box 6219 Shirlington Station, Arlington, VA 22206

The Delta Tale is published for the benefit of the membership of the Potomac Valley Aquarium Scclety, Inc, a non-profit educational and social organization. The Society was founded in 1960 for the purposes of furthering the aquarium hobby by the dissemination of information and advice, and to the promotion of good fellowship among the membership by organized activities and competitions. All correspondence to the Society and to Delta Tale should be directed to the above address. Original articles and artwork appearing in Delta Tale may be reprinted by other non-profit organizations if credit is given to the author, Delta Tale, and PVAS. Two copies of the reprinting publication should be sent to Delta Tale; please include the author's name so that a copy of the publication can be forwarded to him or her. The Society and Delta Tale disclaim any responsibility for the content or availability of advertised merchandise or services within this publication.

1990 PVAS OFFICERS

President: Vice President: Treasurer:

Corresponding Secretary: Recording Secretary:

Agent:

Pete Thrift John Stieringer Gene Aldridge Julie Spall Bob Pallansch Gerry Hoffman

1990 BOARD OF GOVERNORS

Rick McKay - 91 Tony Fitz - 91 Kenny Warren - 90 John Mangan - 90

1990 COMMITTEE HEADS

Auctions: Breeder's Award Program: Library:

Membership: Bowl Shows: Programs: Ways and Means: FAAS Delegate:

Delta Tale Editor

Gerry Hoffman John Jessup Ray Hughes Gene Aldridge Larry Wilkie Tony Fitz Rick McKay Gerry Hoffman John Mangan

Printed by TOP CAT Printing, 164 Colburn Drive, Manassas Park, VA.

IT HAD BEEN THREE YEARS SINCE HE HAD GONE. THEY THOUGHT HE WAS GONE FOR GOOD. PVAS HAD ONCE AGAIN BECOME A QUITE, PEACEFUL PLACE. BUT...

Just When You Thought
It was Safe To Open The
"Delta Tale"

HE'S BACK ! !

PVAS

FRUM THE EDITORZ DESK II
JOHN LIVES

Yes it's true. I'm back as Delta Tale editor. After all who else would have done something like that stuff above.

For those of you that are newer members of PVAS, or have poor memories, I was editor of Delta Tale from January 1984 through December 1987."Frum the Editorz Desk was the title of my monthly (back in the "old days" Delta Tale was a monthly publication, but more about that later) column.

I'd like to thank Pete and Gene and all of the others who have been keeping the magazine going over the past three years. It can be a sometimes tedious, often frustating, and usually thankless, job.

For some time now Delta Tale has been published on a bimonthly, more or less, basis. I will be keeping this schedule, at least for the foreseeable future. There are two main reasons for this: I really have no desire to get burned out again by trying to put out a monthly publication; and the second, and even more important reason, YOU, yes you, aren't submitting enough material to fill a monthly publication. That is the main reason that it was decided

to switch to publishing every other month. Delta Tale needs your support. It can only be as good as you help make it. I really didn't want to start out my first editorial lecturing but old habits die hard. Send me lots of articles and I won't do it again next issue.

During one of the changes of editors my file of art work was lost. But luckily during my absence from Delta Tale I have been going to art school, as you could probably tell from the high quality of the artwork at the begining of this column. I should be graduating at the head of my class. My teacher told me that my drawing of Binky the Clown looked exactly like the one on the match book. Pretty impressive eh. So, starting with the next issue I will be doing all of the Delta Tale artwork. Unless, of course, some of you want to send me some. I'll try to fit it in.

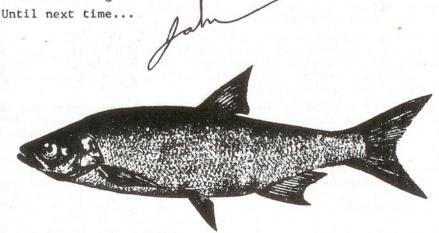
One of the purposes of Delta Tale is to educate the membership. To help with this I am starting a new feature called "Word of the Month". This months word is "facetious". Go to your dictionary, look up this word, read the definition, and then reread the previous paragraph. Except for the part about the lost file. It really is lost.

November is election month for PVAS. More information on this can be found elsewhere in this issue.

Volunteer typists are needed to type material for Delta Tale. I have a couple already, but the more the merrier. See me at the monthly meeting if you would like to help.

Articles etc. for Delta Tale can be sent to me c/o the clubs P.O. Box or sent directly to me at 9770 Oleander Ave, Vienna, VA 22181, or just hand it to me at the meeting.

That's enough for this time. After all it's been 3 years since I've done this. I don't want to pull a muscle in my brain by doing too much thinking at once.



El Presidente:

By the time this issue of the <u>Delta Tale</u> gets to you, our fall workshop weekend will be history. The <u>club owes</u> a great deal to Ray Hughes and Tony Fitz, who co-chaired most of the planning and arranging that made this weekend so memorable for club members and interested hobbyists. Thanks are also due to Gene Aldridge for doing the auction books, Gerry Hoffman and the other auctioneers, and the ever-dependable PVAS auction crew. Activities such as this promote the hobby and our club to the general public as nothing else can, and certainly the fishkeeping skills of all who attended have been improved and broadened.

The November meeting will have two important items of business to be conducted. First of all is the annual election of Board officers and members. If you would like to nominate someone (including yourself!), it is not too late. Either call me any evening, or just make your nominations from the floor at the meeting. I sermonized enough in the last Tale on this subject - JUST DO IT!

A second item of business is the club's holiday party. It has been a tradition that the December meeting is a pot-luck dinner, with the club furnished the ham or turkey, and the membership bring side dishes and desserts. The party will take just a bit more coordinating this year because our new quarters in classroom 7 do not have kitchen facilities. If you would like to help with this activity, please see any Board member. We can use your help!

In addition to the November elections, there will be several committee positions becoming vacant in the next few months. If you feel that a Board position is a bit more that you care to take on, how about a committee? Serving on a committee is an excellent introduction into the operations of our club. By the way, the term committee implies that there is more that one person involved - too many of the PVAS groups are single individuals.

Finally, the new Board will need YOUR views and wishes expressed on how and where the club should be going. Do we do a show or workshop next year? Have we gotten too far into marine aspects of the hobby, or not far enough? How can the monthly meetings be improved? Should we start the meetings at 7:30 rather than 8 PM, to have more 'social' time? If the Board doesn't know there is a problem, needed change, or improvement area, they won't be able to do anything about it. Speak up - it's your club.

WHAT'S HAPPENING

November:

Nov. 12- PVAS Monthly Meeting. Featuring-

Elections of 1991 PVAS Officers

Bowl Show- this months' categories Angelfish, all other Cichlids, & Open.

Mini-Auction- PVAS members may bring up to 3 bags of fish or telated items to be auctioned. Anyone may buy. Always some bargains available.

Raffle- lots of good stuff to be raffled.

Door Prize- everyone has a chance to win.

Program- Not known at press time but sure to be something interesting.

Everyone is welcome- doors open at 7:30, meeting starts at 8:00.

REMEMBER!!- we are now meeting in one of the rooms around back. Walking into the Karate class that's in our old room could be hazardous.

December:

Dec. 10- PVAS Christmas Party-

Details are still be worked out at press time. This is usually a pot luck type diner for PVAS members and their families. You should be hearing from the "lucky" person who was volunteered to coordinate the diner. Other usual features of the evening are-

PVAS annual awards presentation.

Gift exchange- anyone bringing a small fish related gift will receive one in return. Please wrap them and DO NOT bring anything live.

No mini-auction or Bowl Show this month.

More details on this evening should be available at the Nov. meeting. Plan on coming. There's always lots of good food and friends.

January:

Jan. 1- Make New Years Resolution "I will write lots of articles for Delta Tale this year, participate in the BAP, and bring lots of fish to the bowl shows and auctions."

WHAT'S NEW

This column for one thing, but lots of other stuff too. Our hobby is rapidly changing. There are new products being introduced and new ways of doing things every time you turn around. There's so much that it is very difficult for a single person to keep up with it. So this column, if it is to be a success, will have to be a group effort.

I am going to need all of you to be on the lookout for new stuff and to let me know about it. Just about anything new and fishy qualifies: new products, new fish, new ideas, etc. etc. Just make a few notes and send them, or hand them, to me. Please give me something in writing though, don't just tell me. By the time I get around to sitting down to type up this column I will forget, or even worse, print wrong information. Also, please include your name in case I need to double check any facts or get more information.

I'll start this month with a few fish notes— By now most of you have seen pictures of the "zebra pleco". If not see the March 1988 issue of TFH, or the Dec. 1989 issue of Aquarium Fish. These fish have been available in the area several times recently. I saw some in late Sept./early Oct. If you check around you may be lucky enough to find one. This fish is even more impressive in person than in the pictures. Be warned though, they ain't cheap. There's been a lot of Synodontis spp. coming into the area recently: angelicus, brichardi, eupterus, notatus, to name only a few. Prices are very reasonable, at least compared with what they were in the past. Take the time to look closely in your dealers tanks, you'll be surprised at what you may find.

There have been several new filters introduced two that I'd like to mention are the Canistar by Penn Plax and the Penguin Bio Wheel by Marineland. I've been burned several times by "new" filters so I'm very skeptical whenever I see one. I was given a Canistar as a sample and I've been playing around with it for several months. I think Penn Plax may have finally managed to make a good filter. The Canistar is a hybrid of a power filter (ie Whisper, Dynaflo, etc) and a canister filter. It is the size of a mid-size power filter but has an air and watertight seal and lid. It has several options as to the filter media you can use. You can use a filter floss sleeve and carbon/zeolite cartridges, or a pleated filter cartridge similar to those in a conventional canister filter- with or without diatom powder. The way the filter is designed all water passing through the filter must pass through the filter media. The Penguin Bio Wheel filter isn't really a totaly new filter, it is an improvment to an existing one. The Penguin filter looks like your typical overflow type power filter. The new part is the Bio Wheel. This looks like the wheel of an old paddlewheel steamboat, the kind you'd expect to see Mark Twain or riverboat ganblers on. This wheel hanges in the outflow of the filter and is kept turning by the

filters water outflow. This wheel can thus become an ideal place for biological filtration, just like in the "mini-reef" or trickle filters. I haven't tried one of these yet, but I think it's a neat idea and I am planing on getting one sometime soon. I'll update you later on what I find out about it. If you already have a Penguin filter you don't have to add it to that collection of old filters in the corner of your fishroom that we all end up with. You can get a "Retrofit kit" (sounds like it will send your filter into orbit) to convert you old Penguin filter. One final word about these filters—this isn't new, just new to me, and maybe to others who haven't used Penguin filters. The filter box has no hole in the bottom and "O-ring" to conect the moter. Everything is sealed inside the filter box. I've never had a filter with an O-ring leak but I've always worried about them. If you share this worry this may be the filter for you.

Next, some saltwater stuff. Instant Ocean is introducing a new formula marine salt made specifically for "Mini-reef" type tanks. It is supposed to help eliminate the need to use so many additives to keep your inverts healthy and happy. They told me it would be out soon so watch your dealers shelves if you are interested. The final item for this month is artificial corals. There are at least two brands of these due out very soon and both look amazingly realistic. With the great increase of interest in marine tanks a lot of pressure is being put on reefs around the world to supply coral (and other stuff) for them. It is already illegal to collect coral in many places and it is becoming harder to get and more expensive. These items will do a great deal to help the situation. Even without these problems with natural coral we all need to stop and realize the effect our hobby is having on the reefs. We cannot go on collecting unlimited amount forever. We need to find alternatives. The November 1990 issue of Aquarium Fish magazine has a picture of Aquarium Systems version of these corals. More on these next time.

I've gotten things started. Now it's up to you to help me fill up the next column. Send your submissions to me at the adress below, or see me at the meetings.

Happy Shopping.

John Mangan 9770 Oleander Ave Vienna, VA 22181

TRADING POST

Have anything to sell or trade? Looking for something? Send your ad to the Delta Tale Trading Post c/o John Mangan, 9770 Oleander Ave. Vienna, VA 22181.

Deadline for the next issue is December 1,1990.

For Sale: used TFH and FAMA binders. Good condition. \$5 each. John Mangan, 703-573-4400.

FREE- your ad in this space for free if you are a PVAS member. Contact trading post at the adress above.

WHO KILLED THE GOODIED?

by George White, PVAS

The goodied's body, floating among the duckweed belly up, bore marks of a violent death. His favorite gray rock where he liked to hang out looked the same as before. Alas, no clues indicated who among his tankmates could have been the culprit. All anyone knew was that each of the other four fish in the aquarium had been alone with Goody only once during the evening before he became a floater. Goody Goodied was the aquarium bore—his longwinded stories were as bland as his appearance. But, that could hardly have been a motive for murder.

Some in the aquarium looked at the whiptail catfish, a suspected closet sadist. She always carried a whip and her dark sleek armored scales looked awesome. But, Whipper denied killing Goody.

John, the Angelfish, looked so innocent, but he was always hungery. And, he was a member of the Cichlid family, known for its tendency to mete out nasty treatment to lesser fish. Goody was certainly a lesser fish.

Gary, the Cardinal Neon, always flashed about the aquarium, sometimes with no goal in mind. The other fish considered him to be overly vain. However, he had absolutely no reason to be jealous of Goody.

Lee, the Chinese Algae Eater, had a tendency to come and go in unpredictable fashion. She claimed, however, to be an almost religious vegetarian.

The fish worried that their aquarium keeper would interrogate them and eliminate one of them. All the fish considered their keeper to be a reasonably good servant, but he was huge and dangerous. Gary commented that it was a pity that Goody passed away, but his absence would not be noticed. Most importantly, it would be a shame if his demise led to the removal of one of the aquarium's star occupants.

Johnny Angel urged the other fish to stick together and protect each other from the aquarium keeper. He added that anyone who bought a goodied should not be hard to fool.

Lee glanced at the other fish and quietly suggested: "We must be inscrutable. We will all only tell him lies and only make two statements each."

filters water outflow. This wheel can thus become an ideal place for biological filtration, just like in the "mini-reef" or trickle filters. I haven't tried one of these yet, but I think it's a neat idea and I am planing on getting one sometime soon. I'll update you later on what I find out about it. If you already have a Penguin filter you don't have to add it to that collection of old filters in the corner of your fishroom that we all end up with. You can get a "Retrofit kit" (sounds like it will send your filter into orbit) to convert you old Penguin filter. One final word about these filters-this isn't new, just new to me, and maybe to others who haven't used Penguin filters. The filter box has no hole in the bottom and "O-ring" to conect the moter. Everything is sealed inside the filter box. I've never had a filter with an O-ring leak but I've always worried about them. If you share this worry this may be the filter for you.

Next, some saltwater stuff. Instant Ocean is introducing a new formula marine salt made specifically for "Mini-reef" type tanks. It is supposed to help eliminate the need to use so many additives to keep your inverts healthy and happy. They told me it would be out soon so watch your dealers shelves if you are interested. The final item for this month is artificial corals. There are at least two brands of these due out very soon and both look amazingly realistic. With the great increase of interest in marine tanks a lot of pressure is being put on reefs around the world to supply coral (and other stuff) for them. It is already illegal to collect coral in many places and it is becoming harder to get and more expensive. These items will do a great deal to help the situation. Even without these problems with natural coral we all need to stop and realize the effect our hobby is having on the reefs. We cannot go on collecting unlimited amount forever. We need to find alternatives. The November 1990 issue of Aquarium Fish magazine has a picture of Aquarium Systems version of these corals. More on these next time.

I've gotten things started. Now it's up to you to help me fill up the next column. Send your submissions to me at the adress below, or see me at the meetings.

Happy Shopping.

John Mangan 9770 Oleander Ave Vienna, VA 22181

TRADING POST

Have anything to sell or trade? Looking for something? Send your ad to the Delta Tale Trading Post c/o John Mangan, 9770 Oleander Ave. Vienna, VA 22181.

Deadline for the next issue is December 1,1990.

For Sale: used TFH and FAMA binders. Good condition. \$5 each. John Mangan, 703-573-4400.

FREE- your ad in this space for free if you are a PVAS member. Contact trading post at the adress above.

When the aquarium keeper showed up, the fish told the following lies:

Whipper: 1. "None of us killed the goodied."

2. "The goodied was alive when I left."

Johnny Angel: 3. "I was the second to arrive."

 "The goodied was dead when I came by."

Neon Gary: 5. "I was the third to visit Goody."

6. "Goody was alive when I left."

Lee: 7. "The killer did not arrive after I did."

8. "Goody was already dead when I swam over to his gray rock."

(HINT: Who done it can be deduced from the lies told to the aquarium keeper. The numbers were added to the statements to aid you in deducing the answer; they do not provide an additional clue.)

Disclaimer: This story is fishy. Any semblance to reality or actual piscine behavior is purely coincidental. By the way, the aquarium keeper never did figure out who done it.

ed. note: For those of you new to PVAS- George is a long time member of PVAS who was forced to flee the country when it was discovered that his fish room contained only cichlids. He is now living under an assumed identity provided to him by the ACA Cichlid Relocation Program. Those of us that knew him hope that one day he will receive a Presidential Pardon and be able to return to the U.S. where he can receive proper care, and perhaps even a cure, for his Cichlidophilia. Hopefully we will be hearing more from George in the future in spite of this note, or more likely, because of it.

J.M.

PVAS BOARD MEETING - SEPTEMBER 24, 1990

Rick McKay hosted the meeting, convened at 7:30 by President Pete Thrift. Also present were Gene Aldridge, Tony Fitz, Ray Hughes, Bob Pallansch, Juliet Spall, and Kenny Warren.

Pete announced that the '91 PVAS calendars are due in late October. He suggested moving the meeting time to 7:30 if needed to clear the building by 10:00. The slate of '91 officer nominees will be announced at the 10/15 meeting; with elections in November a short program was recommended for that meeting. The Christmas party needs a coordinator by 10/15--- there will be no on-site kitchen available this time.

90 Fall Workshop:

- Publicity: Two thousand flyers and three hundred brochures will be printed; deadline for store ad copy is Oct. 5.

 Tony announced that the Post, Times, and Journal papers have been notified; a weekend classified will be placed in the Post.
- Speakers: Tentative schedule--9:00- Padovani, 10:30 Thode, 1:00 - Davis, 2:30 - Moe; two backup speakers have been contacted. Lene offered to bring a screen and backup projector.
- Concessions: Plants by Mike T., subscriptions by "Aquerium Fish", Marine books by Martin Moe, sold at discount by PVAS (quantities to be determined at the 10/15 meeting.)
- Banquet: Menu and exact price to be announced 10/15. Pre-registration essential-- must be received by 10/18. Davis and Moe will be speakers.
- Auction: Kenny will buy 10 cases of pop.
 Stickers, bags, raffle prizes, etc. are on hand.

The meeting adjourned at 9:30.

and order

Robert J. Pallansch Recording Secretary

NOMINATING COMMITTEE REPORT

Below is the slate of candidates for 1991 as proposed by the Nominating Committee:

President: Rick McKay
Vice Pres: Ray Hughes
Treasurer: Kenny Warren
Corr. Sec: Julie Spall
Rec. Sec.: John Mangan

Board of Governors: Steve Buckel, Beverle Sweitzer (2 seats open)

This is a proposed slate only. Anyone wishing to run for any office can still do so. At the November meeting, nominations from the floor will be called for prior to the election. If you would like to run for an office but don't know anyone to nominate you, see any PVAS officer. We will be glad to help you.

ANEMONES -- SIMPLY CRAWLING WITH "AIPTASIA"

by James Christ, GPSAI

Anybody who has wandered through the marine fish section at a local aquarium store will have noticed an incredible variety of very strange looking animals. Unfortunately, most of these animals are very difficult to maintain in the home aquarium. One notable exception is the anemone.

The anemone is an extremely hardy animal, and comes in a variety of bright colors and interesting shapes. The anemone is one of the animals which is commonly used during the break-in period when a new tank is set up and the biological filtration has not yet been established, since it has a high tolerance for toxins such as ammonia. In fact, the only anemone I ever lost died when the heater in the tank stuck on, and even this anemone hung on for several weeks before it finally died.

Anemones are fascinating and strange creatures. They come in many shapes and sizes, with some anemones several feet across the column. Most cling tightly to some hard surface, so tightly that they can easily be injured if you try to remove them. Some are burrowing animals, however, with only their tentacles projecting above the sand they live in. Other anemones are adapted to a floating existence.

Most people have at least heard of the relationship between anemones and the clown fish. Less well known, however, is the relationship between the hermit crab <u>Pagurus bernhardus</u> and the <u>Calliactis</u> anemone. This anemone is commonly found attached the shell occupied by the hermit crab. The anemone gets some of the food scattered by the crab while eating, and the crab presumably gets some protection from predators.

Anemones are not very active animals, whether in the ocean or in an aquarium. Anemones are capable of slow movement, but they will normally remain in the same place for long periods of time. When they are startled, anemones will pull their tentacles in and contract to a small lump, but this is about as active as they get. Normally, they will simply move their tentacles about slowly, and perhaps lean to one side or the other.

If properly treated, an anemone will live for years in an aquarium. The normal lifespan of an anemone in the ocean is not known, although some have been reported to have occupied the same rock for up to thirty years. Anemones have survived for fifty years or more in aquariums.

Most anemones are quite easy to feed. If a small piece of food such as fish or shrimp is placed on the anemone's tentacles,

the anemone will retract the tentacles, pulling the food into the center tube where it will be digested. Several hours or as long as a day later, the anemone will contract and expel the remains of the food. The partially digested remains of the food will decompose rapidly, and it is advisable to remove it from the aquarium before it fouls the water.

There are some anemones which will not eat large pieces of food. In the wild, these anemones feed on small animals such as plankton, and food of similar size must be provided in the aquarium. The size of the food an anemone requires can be determined by the thickness of the anemone's tentacles. The types of anemones usually found in a store have thick tentacles, indicating that they eat large pieces of food.

The anemones I currently have in my tank originally came from the reef tank at the (Pittsburgh) Aquazoo, and belong to the genus Aiptasia. Dozens of them can be seen in the grassy tank next to the reef itself. When I first got the anemones, they were perhaps half an inch long when fully extended. Today, slightly over a year later, these two anemones can stretch to over two inches (not including tentacles). There are also ten or twenty more anemones ranging in size from half an inch to almost two inches in length. This does not include an uncountable number of smaller ones.

The aquarium in which my anemones are kept differs from a "normal" marine setup in several ways, some of which are intentional. The aquarium itself is a 14-gallon hexagonal tank. Such an aquarium is not suitable for the average marine aquarium because of its small surface area, and the small area available for the undergravel filter. When the tank was started, this was not an important problem, because there were only two small anemones, and anemones are particularly tolerant of poor water conditions.

The shape of the tank was convenient when it came to lighting the tank, however. The light is a 15-watt flourescent tube mounted on one of the sides of the tank. Because the tank is so narrow, this provides sufficient light for photosynthesis throughout the entire tank, and has encouraged a heavy algae growth.

Although marine tanks usually require both an undergravel and an external power filter in order to maintain the water quality, power filters are frequently omitted from marine invertebrate tanks to ease the task of feeding the animals. Creatures such as coral or "feather dusters" are not well equipped to chase their food in the tank, and a power filter would remove most of the food before it could be eaten.

Because the anemones were so small when I got them, I fed them frozen brine shrimp rather than pieces of fish or shrimp. Frozen brine shrimp can be conveniently fed using either a baster (make sure it is clean and has never been contaminated with soap) or a plastic syringe connected to a piece of airline tubing. A small amount of brine shrimp can then be squirted into the tentacles of each anemone.

If you miss one or even several days of feeding the anemones, there is no cause for concern. Anemones can go for long periods without food; they simply stop growing or, over a long period of famine, may actually shrink. At one point over the summer my anemones went without food for well over a month with no ill effects.

My two anemones grew rapidly, and were soon close to their current size. Two or three months after I got them, I noticed a third, much smaller, anemone in the tank next to one of the original pair. Careful inspection of the tank showed that there were at least half a dozen tiny anemones. The number of anemones I could find varied from day to day, but it gradually increased to almost twenty, at which point I gave up counting them.

How my anemones reproduced is an interesting question, and I am still not sure that I know the answer. For some reason I always thought that anemones reproduced by budding, and I have found that many other people also believe this. Where I got this idea, I do not know; perhaps from the fact that hydras reproduce by budding, and hydras are the closest freshwater relatives of anemones. Surprisingly, budding is almost unknown in anemones. There is only one genus in which budding is confirmed. In this genus, <u>Boloceroides</u>, budding occurs in a very unusual manner. These anemones can shed their tentacles by constricting a muscle at the base of the tentacle, and the anemone may then form a bud.

Most anemones are hermaphroditic, having both ovaries and testes. However, only one type of sex cell is mature at any time, in order to prevent self-fertilization. In some species, both the sperm and the eggs are released into the water, where fertilization occurs. The resulting larvae may settle on the column and pedal disk of the "mother" and develop there. Some larvae are parasitic on other organisms. Most types of anemones, however, remain free swimming for a period of time, but then attach to a substrate and develop tentacles. In other species the sperm alone is released into the water. The water circulating through a female anemone's body will carry some of this sperm, allowing internal fertilization and development of the embryo. The young anemones are expelled from the parent after they have developed tentacles.

There are two modes of asexual reproduction which occur in anemones. Some species may reproduce by fission, dividing either longitudinally or transversely. The other method is pedal laceration. As the anemone moves along a surface, portions of the pedal disk, or base, are left behind. These fragments then develop into complete anemones. One genus which is known to reproduce in this manner is Aiptasia, so it is likely that my anemones reproduced in this manner.

There are several observations which support the idea that my anemone reproduced by pedal laceration. After one of the large anemones moved, I have seen several small blobs left behind. In addition, there are always a lot of small anemones close to the larger anemones. Since anemones travel very slowly, this would not be expected if the baby anemones developed from free-swimming larvae.

On the other hand, the young anemones have always been widely spread throughout the aquarium. I found some of the babies on the opposite side of the aquarium from the adults, in places the adults had never been near. It is possible that, over a period of several days, the baby anemones traveled all the way across the aquarium. The parent anemones have sometimes moved from the top of the aquarium to the bottom in a single day, but this is a very rare event. In general, the baby anemones are usually quite stationary. If you find one on a wall and look for it a week later, it may have moved an inch.

The only other explanation for the spread of the anemones is sexual reproduction. If both the eggs and sperm are released into the water, the larvae are then free swimming, and they can be expected to settle throughout the tank. If you expect your anemones to reproduce in this manner, it is important not to have a power filter in the tank or you may filter out the anemone larvae.

If you are interested in more information about anemones, I recommend your visiting Langley Library of Pittsburgh. I found several very helpful books at this library.

References

- 1. R. McNeill Alexander, $\frac{\text{The}}{153}$ Invertebrates (Cambridge University Press), pp 120- $\frac{1}{153}$.
- 2. Robert D. Barnes, <u>Invertebrate</u> <u>Zoology</u> (W. B. Saunders Company), pp 101-113.

- 3. U. Erich Friese, <u>Marine Invertebrates in the Home Aquarium</u> (T. F. H. Publications).
- 4. Libbie Henrietta Hyman, The Invertebrates: Protozoa through Ctenophora (McGraw-Hill Book Company, Inc.), pp 365-399 and 566-599.

Reprinted from the GPASI JOURNAL - Spring 1987
The Journal of the Greater Pittsburgh Aquarium Society, Inc.



DOTOMAC VALLEY AQUARIUM SOCIETY



POST OFFICE BOX 6219 SHIRLINGTON STATION ARLINGTON, VIRGINIA 22206

APPLICATION FOR MEMBERSHIP

DATE:	19

NAME:		
STREET:		
CITY:	STATE:	ZIP:
TELEPHONE: (HOME)	(OFFICE)	
How long have you been in the hobby?		
What parts of the hobby interest you?	. 162 (16.0)	mag Andrews
What can PVAS do for you?		
Have you ever belonged to another aquariu	m society?	
If yes, which one(s)?		Separate and the

Individual annual dues for membership in the Potomac Valley Aquarium Society are \$12.00 per year, renewable each June.

Please hand this application to any PVAS member, or mail it to the address above. You will be contacted.

Virginia Shops

ANNANDALE PET SHOP 7406 Little River Turnpike Annandale, VA 22031 256-2400

DISCOUNT PET CENTER Manassas Shopping Center 9028 Mathis Avenue Manassas, VA 22110 361-7769

BAILEY'S PET CENTER Leesburg Pike Plaza 35217 South Jefferson Street Falls Church, VA 22041 931-1400

BEACON MALL PET CENTER Beacon Mall Center 6776 Richmond Highway Alexandria, VA 22306 660-6100

NATIONAL PET AND AQUARIUM Williston Shopping Center 6168 Arlington Blvd Falls Church, VA 22046 533-7828

OAKTON PET SHOP Oakton Center Rt 123 & Hunter Mill Road Oakton, VA 22124 281-9622

PET MART - TYSONS 8417 Old Courthouse Road Vienna, VA 22180 281-8181 PETS, ETC - ALEXANDRIA Mount Vernon Plaza 7638-B Richmond Highway Alexandria, VA 22306 768-2200

PETS, ETC - CHANTILLY Sully Plaza 13932 Lee-Jackson Highway Chantilly, VA 22021 378-2777

PETS, ETC - HERNDON Stuart Center 462 Eiden Street Herdon, VA 22171 437-0381

PETS, ETC - STERLING Hechinger Jamesway Plaza 243-C Harry Flood Byrd Hwy Sterling, VA 22170 430-9667

PETS-N-THINGS Pan American Center 3081 Nutley Street Fairfax, VA 22031 573-4400

SUNSHINE PETS 7395-H Lee Highway Falls Church, VA 22042 573-6946

WILSON'S PARROTS & MARINE LIFE Shirley-Edsall Industrial Park 5505-G General Washington Dr Alexandria, VA 22312 922-7358

These shops support our club -

Maryland Shops

ANIMAL EXCHANGE 765-A Rockville Pike Rockville, MD 20852 424-PETS

AQUARIUM CENTER Randlestown Plaza Center Liberty Road at Offutt Road Randlestown, MD 301-521-4529

BROTHERS PETS INC. 13810 Georgia Avenue Aspen Hill, MD 20906 460-4600

CONGRESSIONAL AQUARIUM Congressional Plaza 162 Congressional Lane Rockville, MD 20852 881-6182

FISH FACTORY AQUARIUM 582 North Frederick Avenue Gaithersburg, MD 20877 301-977-7500

GLENMONT TROPICALS Glenmont Shopping Center 12345 Georgia Avenue Wheaton, MD 20902 949-0344

MARINE CARE SPECIALISTS 15820 Redland Road Rockville, MD 20855 330-0720

MONTGOMERY TROPICALS 7845-G Airpark Road Gaithersburg, MD 20879 301-670-0886 PETLAND Briggs Chaney Plaza 13833 Outlet Drive Silver Spring, MD 20904 890-0044

PETLAND
White Flint Plaza
5268 Nicholson Lane
Kensington, MD 20895
231-5216

PET MART - ROCKVILLE 2230 Veirs Mill Road Rockville, MD 20851 762-3505

RICK'S FISH AND PET SUPPLY 36 South Market Street Frederick, MD 21701 301-694-9664 301-831-6866

SHOWCASE AQUARIUM 11248-11250 Triangle Lane Wheaton, MD 20902 942-6464

TROPICAL FISH WORLD, INC. Walnut Hill Shopping Center 16529 South Frederick Avenue Gaithersburg, MD 20877 301-921-0000

TROPICAL LAGOON 9439 Georgia Avenue Silver Spring, MD 20910 585-6562

they deserve our support in return!

BULK RATE U.S. POSTAGE PAID PERMIT NO. 418 ARLINGTON, VA

THE POTOMAC VALLEY AQUARIUM SOCIETY WILL MEET ON THESE MONDAYS IN 1990:

8	JAN	9	APR	9	JUL	15	OCT
12	FEB	14	MAY		AUG		NOV
12	MAR	11	JUN		SEP		DEC

Meetings are held at the John J. Wood Facility, 3730 Old Lee Highway (Rt 237), Fairfax City, Virginia. Doors open at 7:30, and the meeting starts at 8PM.

ALL ARE WELCOME:

