

Finformation

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Next Meeting – October 31

Bill Shenefelt

On Killifish

CONTACT THE
NEWSLETTER

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available in full color online at**
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NEWSLETTER ART

Kribs cover art by Kathy Bintrim. The
original drawing will be auctioned at
the next meeting.

Banana plant art by Tom Connors.

MEMBERSHIP

DUES are \$20 a year per family
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see Steve Gibbs at the next meeting.
Visit WWW.GPASI.ORG

General Meetings are held at the
Phipps Garden Center in Mellon
Park at the Corner of
5th and Shady Avenues.
DOORS OPEN AT 7 PM

2003 General Meeting Dates
Oct 31 • Nov 21

The Board of Directors meets at 7pm
at Elmer's Aquarium in Monroeville
on the following dates:

Nov 3

All members and suggestions for
discussion are welcome. Contact a
board member for meeting
confirmation.

Upcoming GPASI Events

Next General Meeting

October 31: Bill Shenefelt will discuss killies. Shene will provide an introduction to killifish keeping for the general aquarist. He'll talk about getting started with killies, keeping them, and breeding them, with an emphasis on non-annual species. He'll teach us about water, foods, tanks, and other needs for killies and will show fishroom photos, tank photos, and fish photos. Shene started keeping killies when he was in grade school in the early 1950's, and re-entered the killie hobby twice, once in the late 60's lasting through early 70's and then again in 1999. He re-filled his 30 tanks from the 70's, and his operation grew to about 230 tanks and 65 to 70 species at present. He ships fish all over the US and eggs all over the world. Shene gave a similar talk at GPASI before but has expanded and enhanced it. Visit Shene's website, Shene's Killies, at shene.killi.net.



male and female *Diapteron cyanostyctum* Makokou (about 3/4" long)
Photo by Bill Shenefelt

Upcoming Events

November Meeting

Steven Pro, GPASI member and president of the Pittsburgh Marine Aquarist Society (PMASI), will speak on keeping saltwater fish. He will tell us about selecting healthy and appropriate marine fish and will introduce major families from sharks to puffers. Steven has been keeping freshwater aquariums for most of his life, and started keeping saltwater fish in college. He owns Pro Aquatic Services Company, an aquarium sales and maintenance business in Pennsylvania. He has long been active in the retail and hobby sides of the ornamental aquatics industry. He has been a member of the Pittsburgh Marine Aquarium Society, Inc. for the past seven years, having also been elected to the Board of Directors for the last five years. He has served on the Board of Directors of the American Marinelife Dealers Association. You can visit his personal webpage for more information and to see his publications: <http://users.stargate.net/~dspro/>.

BAP Report

Bedotia ankavia

Text and Photo by Eric Bodrock

Bedotia ankavia are another of the more recently imported species of Madagascar rainbowfish into the US. These resemble the *B. geayi* that has been in the hobby for years. Their body shape is the same but



the *B. ankavia* body color is faint green and orange and blend together. Older females have a bit more of a dark band running thru their body, which the males are void of. Their fins lack the intense red/orange/yellow color and black trim of the *B. geayi*, but do show an orange band in most of the tail with faint white edging. At first glance you would think that you were looking at a washed-out *B. geayi*.

I acquired a group of five of these about six months ago when they were at the size of one and a half inches. It appeared that I had two males and three females. Within a couple of weeks I ended up losing a male from the group. The remaining male has grown now to three and a half inches, the females only to two and a half inches. I set them up in the same manner as I did with another species of *Bedotia* (species "White-Fin") that I received at the same time: alone in a bare twenty-gallon aquarium. A sponge filter with a good airflow provided filtration. Water changes of fifty percent done every ten days keeping the pH between 7.2 – 7.4, temperatures in the upper seventy degrees Fahrenheit range. My TDS meter read 242 at time of set up (and spawning). A floating yarn mop and a sunken mop were added for them to deposit eggs into. Diet consisted of live black worms, live baby brine shrimp, frozen bloodworms and assorted flake foods offered usually one to three times a day. (continued next page)

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~ There can be no club without its members. If there is anything that you would like to do for GPASI, just let one of us know. We'd be happy to have you as part of the team. ~

As with the other Madagascar rainbows, spawnings occur without much trouble. Eggs are deposited in the mops and can be easily seen scattered through the yarn strands. Mops are then removed once a week and placed into a smaller tank for hatching. Free-swimming fry will appear several days after mops are pulled. The fry are tiny and resemble flicks of pepper dashing about in mid water. Euglena is added for first food, Microworms added after about a week to replace the Euglena. Live baby brine shrimp is added shortly after the microworms. Fry grow slow for the first month or so and then growth rate picks up. The fry show a dark body color until they reach about an inch and a quarter, then they start to lighten up a bit.

I have also been able to catch fry right from the tank where they can be seen swimming in the open water with the breeders. As long as they are well fed, the parents don't seem to bother with them. But, as with breeding any fish, if you want the babies, get them separated from other fish as soon as possible to eliminate any chance of them being eaten. Another thing I always do is separate fry (or eggs) into two different containers, just in case there are problems with a tank. As the saying goes...never put all your eggs in one basket! ■

Getting Started with Planted Aquariums

9 Things to Remember About Planted Aquariums Cavan Allen

Planted tanks are very worthwhile. I doubt I would have tried killies if I had never joined GPASI, but I'm glad that I have. One of the advantages of being in a general club is that everyone is exposed to so many different things. The purpose of me writing these articles, then, (and even the whole AHAP program) is to get people interested in the plant side of the hobby. If you breed rainbowfish, set up a lushly aquascaped aquarium to show them off! Everyone should have at least one show tank. Planted aquariums can be very beautiful, and many fish look their best when living in them.

Planted tanks need not be expensive. How much money goes into a planted tank is dependant on things like the size of the tank, what kinds of plants you'll be keeping, and how easy it is to maintain it. For example, pressurized CO₂ systems cost more than yeast bottle ones but make your life a lot easier. Simple tanks can be some of the nicest though, so don't think you have to go all out. Even if you do opt for a more advanced setup, you can save a lot on equipment costs if you look in the right places.

Planted tanks are not inherently difficult. Aside from being cheaper, lower light tanks with easier plants are simpler to maintain. And as I mentioned in a previous article, even tanks with lots of light are easy to maintain once you get into a routine.

Never give up. A problem that seems impossible to solve probably has an easy solution. There are several types of algae that gave me a lot of grief in the past. Now I know how to prevent them and they're no big deal. The rewards for not giving up and keeping at it far outweigh any difficulties you may have early on. Trust me on that.

Learn as much as you can. There are several good books available and a wealth of information on the internet. As soon as you finish reading this article, get online and go to www.thekrib.com and after looking around there for a while, go to <http://fins.actwin.com/aquatic-plants/>. Both sites are top-notch and are great places to learn the practical information that you just can't get in most books. You'll meet some really nice people too! As far as books go, *Aquarium Plants* by Christel Kassermann is a superb book, especially for identification of plants. *Aquarium Plants Manual* by Ines Scheurmann is a very good book covering the basics of planted aquariums. Other good books are the *Baensch Atlas* series, the *Optimum Aquarium*, and last but not least, Takashi Amano's *Nature Aquarium World* books for inspiration.

...There are some things you need to learn for yourself. Every tank is different and even the best advice can only take you so far. Trial and error definitely has its place. So...

...Don't expect overwhelming success overnight. Be patient!

When you set up a new planted aquarium, you *will* go through a period where you will encounter algae and other problems. When the tank is well established and you get over the hump, things are much easier. There is much more room for error in a tank that has been running well for some time.

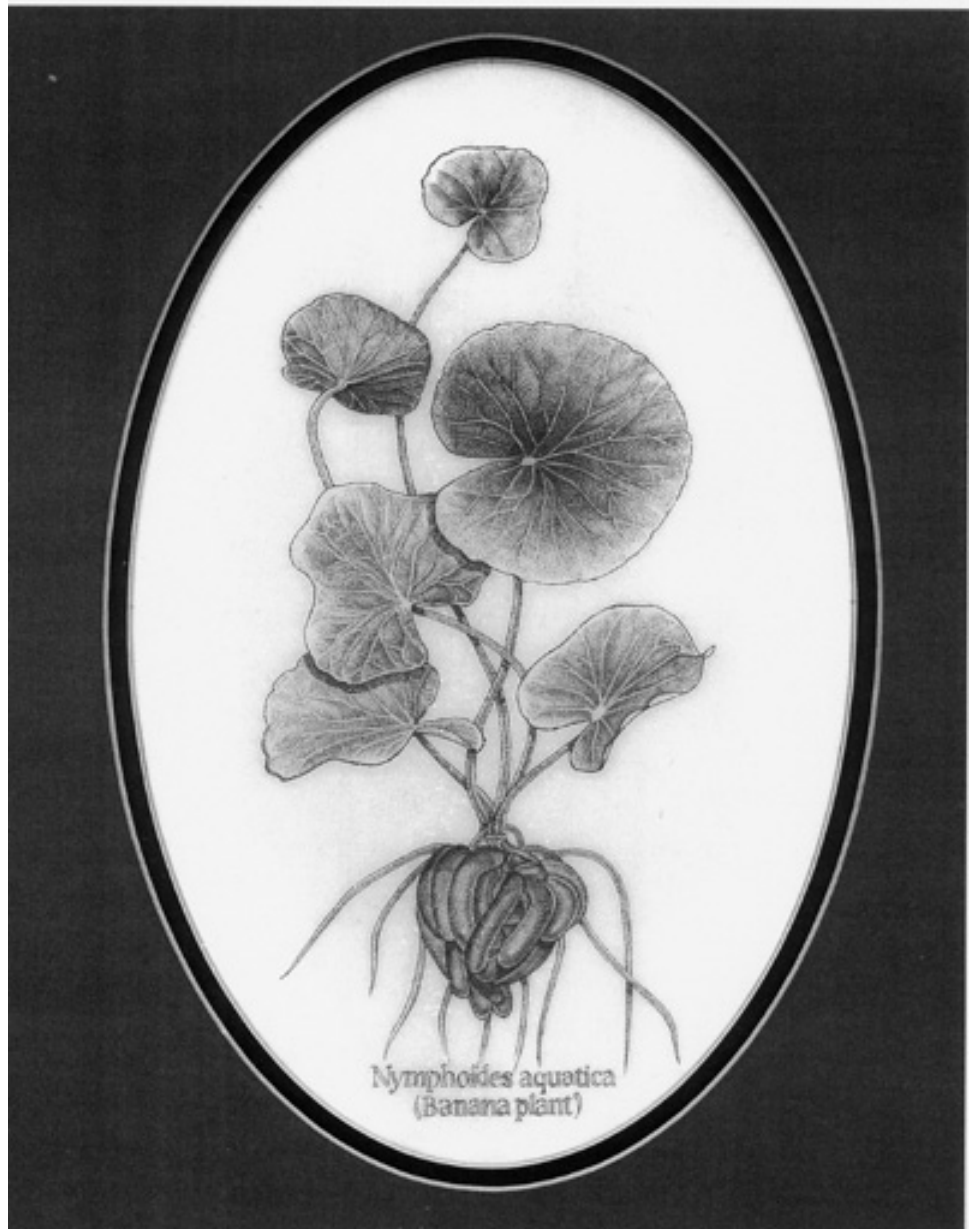
The plants themselves often require the same patience. Many of them take a while to get going, especially those that are purchased as emersed specimens, which will need time to begin growing submerged leaves. Others simply need to reach a "critical mass" before growth really takes off. I had a small *Bolbitis* fern that stayed four inches tall for months before suddenly turning into a huge "shrubbery" that took up a third of my 30-gallon tank.

Don't be intimidated. The learning curve isn't that steep at all, and there's no need to jump right into the deep end of the pool. My advice is to start with easier plants and put off the metal halides and expensive equipment until later. There are Latin names and plant-specific terminology to learn, but it's really not all that difficult.

Keep a journal. If there's one thing

I regret not doing over the years, not keeping a journal of my tanks is it. Having a record of your tank will help you overcome any problems a lot faster and will be of interest later on.

I hope I've inspired at least some of you to start a beautiful planted aquarium. As always, if you have any questions, I and the other "plant geeks" in the club will be glad to give you a hand. ■



Ick!!!!

Text by Sallie S. Boggs

Photo courtesy Stephen Cuthbertson

There are some “words” that impart a lot of emotion. *Eeek!* is one we might use when we see a big ugly bug in the kitchen. *Yuck!!* is one we might say when some squashes that bug. *Ick!!* is what an aquarist says when he or she sees tiny white raised spots on the fins and body of one or more of our fish. The truth is that Ick (or Ich) is an abbreviation for the name of the parasite that has burrowed into the flesh and is safely encrusted in the white spot. That parasite is *Ichthyophthirius multifiliis* (Ichthy means “fishy” and I don’t know what *ophthirius* means, but let us think of it as “with white spots”). The individual parasites grow and mature under the skin and then break out and fall into the muck on the bottom of the tank where they are enclosed in a jelly-like covering. There they divide and become numerous hungry swimming, swarming icklets looking for a host (a susceptible fish). Only in this last stage are they vulnerable to attack by us (the concerned fish keepers).



Ick may not be the most common parasite in fish, but it is easy to recognize once you have seen it and it is easy to treat successfully and even easier to prevent. Even so, it kills a lot of aquarium fish.

Recognition of Ick

Ick causes white spots, slightly raised, discrete

and the size of fine sand. In early stages, the fish seem to itch and often scrape their bodies on objects, seeming to scratch. There may be only one or two spots or many (heavy infestation). If there are many spots and the fish looks sick it may be too late to cure it. For this reason, you should examine your fish frequently and be observant of their behavior. This is especially true for fish you plan to buy and fish in the quarantine tank, or for all your fish if you have added new fish without quarantine. The only other infestation that might be confused with Ick is Velvet. However, Velvet is finer, more like flour grains and may appear yellow. Velvet kills a lot of anabantoid fry.

Prevention

All aquariums probably contain some dormant or even active Ick organisms, but they don’t multiply and spread because the fish are resistant. Stressed fish, like the ones you buy and bring home from an auction or a fish store, or fish that are being chased, or fish in dirty tanks are more susceptible and when they get Ick, it multiplies to quantities that can even infect and kill previously healthy fish. Just bagging and moving fish can stress them. Over crowding or over feeding or too few water changes can also stress fish. Sudden temperature changes or pH changes can stress fish.

We all know that we should put new fish in a quarantine tank until they become less stressed or have shown no evidence of infestations for a couple of weeks. If they do show Ick, they can more easily and safely be treated in the quarantine tank than in your community tank.

If you are like me, and have filled the quarantine tank with the last batch of fry you got from your BAP fish, then you will probably take your chances and acclimate the new fish briefly before adding them directly to your community tank. If you must do this bad thing, at least be careful enough to add the fish only. Do not add the water as it may contain a high concentration of hungry Ick swimmers just waiting to attach themselves to your unsuspecting fish.

Let us say you goofed, and now your whole community tank is full of fish with white spots the size of fine sand and the fish are scratching on the gravel. Now what? If you caught the infestation in time, there are several potential "cures" for Ick. However, some of these cures themselves can be lethal to certain fish like loaches, catfish and tetras. For this reason, my favorite "cure" is based on the, "dilution theory of pathogen containment." This was best expressed by my Grandmother who often said, "Too much of anything is a sin!" and "A little bit of dirt is good for you!" These concepts were reinforced during my research on the effects of bacterial endotoxin (part of a bacteria's cell wall). Too much endotoxin killed mice, but mice given a little endotoxin lived longer than identical mice given no endotoxin.

The best way to remove the swimming forms and the mulm that contains the jelly-coated forms of Ick is with a diatom filter. The life cycle of the Ick is about three days (shorter for higher temperatures), so raise the temperature to the upper end of your fishes' range (about 80 degrees F for many fish). Check the fishes' temperature range in a book, because too high a temperature will further stress the fish. The higher temperatures will hasten the Ick drop-off time. Since the Ick is unreachable while it is on the fish and most diatom filters are not designed to run continuously, you want the Ick to go through the cycle as fast as possible. I have found that a HOT Magnum filter with the paper filter installed can be used as a diatom filter if diatomaceous earth is allowed to be sucked into the HOT Magnum unit until it coats the paper filter. These filters are able to run continuously and, to be effective, you have to run them 3 days longer than the time when no more white spots are seen. When you remove the filter, be careful that water does not run back into the tank. Decontaminate the water in the filter and the filter itself by running it in a bucket with some Clorox before you wash the diatoms down the drain.

Besides the fact that you don't have to put drugs in your tank, the advantage of the diatom filter cure is that it helps reduce the stress on your fish by cleaning the tank. To further reduce stress you can remove 1/2 of the water and replace it with chlorine/chloramine free, like temperature water. If you are treating fish that like hard and/or slightly salty water, adding buffer and a little salt may also reduce stress. By reducing stress you reduce the fish's susceptibility to reinfestation.

If you don't have a diatom filter, the next choice is one of the chemical cures sold in the pet stores. There are several of these. One I have used is "Quick Cure" from Aquarium Products. Like most of the Ick cures, it contains one or more dyes, probably some salt and formaldehyde. Some contain copper compounds as well. Use as directed by the manufacturer (this includes the recommendation to use 1/2 the dose if you are treating tetras) and remember to remove carbon from your filter until you are done treating the tank. At 1/2 the dose I cured some Icky Kuhli loaches that fall in the category of scaleless, and therefore sensitive, fish. Because some of my favorite fish are sensitive to the dyes in these chemical cures and can die from them, I like to make sure the "cure" I buy is advertised as "safe" for sensitive fish. If you have these types of fish, or plan to get them, I recommend that you not only use a brand that is said to be safe for them, but also remove the chemicals AFTER the fish are cured. You can do this by running a carbon filter on the tank for a day or two and throwing away the carbon.

There are lots of books on fish diseases, but most are too academic (did I, an academician, just say that?). Here are two I think are pretty good:

A Commonsense Guide to Fish Health by Terry Fairfield

Diseases of Aquarium Fishes by Robert Goldstein Ph.D.

Many websites are inaccurate in their description of the life cycle of Ick. The following website has a good picture of Ick on a fish and a good description of the life cycle: <http://www.bellaonline.com/articles/art3529.asp>. ■

Call for Articles, Photographs, and Questions

Do you have a good idea for a newsletter article about a particular kind of fish, a specific problem, or general aquarium-keeping practices? You can submit articles by e-mail, fax, or US mail. Photographs can be submitted via e-mail or on a disk or CD. The editor's contact information is always listed on the top left corner of page 2 of the newsletter.

Both Sallie Boggs and Cavan Allen are willing to answer questions related to their expertise. Send questions about genetics, biology, and breeding to the editor for Sallie to answer. Send questions about growing and propagating aquatic plants to the editor for Cavan to answer.

Sailfins on Sale

Text by Susan Everett

Photo courtesy David M. Schleser

At a sale price of \$2.00 each, a tank full of "fancy mollies" was too tempting to pass up. Mind you, I worked at the store, receiving fish like a kid at Christmas. Being fish over-extended, I had to learn to leave them at work. But while I had kept a dozen or more kinds of livebearers, I had never had the big majestic mollies. Rumored needs of big, warm brackish tanks and delicate fry put me off. Yet by the end of the day, I chose a calico male with black fins and three different colored females, since they can be aggressive. A warm 10-gallon tank of Java ferns with a shot of sea salt was their new home, and good spirulina flake was the menu.



Fry were darting in about a month, so I screened the square-bellied females to one end of a similarly set-up 10-gallon tank. They say mollies don't eat fry—much. The yield was about 80 combined fry. During cleaning, these kids didn't just scatter like most fry; they formed a tight school, like ocean fish, moving as a smooth, graceful unit. They ate at every chance, swarming the glass when I went by. The microworms, fine spirulina and growth flake, baby brine shrimp, and green pond objects I supplied never seemed like enough, and they grew like cichlids. Partial water changes every other day and 84 degree water helped, I'm sure. For those who know birdseed, they went from safflower to sunflower seed size in a month.

To identify these for the Breeder Award Program, I went to my *Atlas of Livebearers* by Lothar Wischnath. Molly species are many and often interbreed. *Poecilia velifera*, "sail-bearing" variety are largest; males can be 15 cm or 6" long and females up to 20 cm/8". The males' dorsal fins are also twice as tall as most "sailfins" in stores. I'd seen these giants at SeaCave in their own tank a decade ago. Amazing beasts. No, mine were *P. latipinna*, "wide fin" mollies. Males are 8 cm/3" and females 10 cm/4 "; the fish are found from the Carolinas to Mexico. They are still considered "sailfins," beyond common *P. sphenops* mollies, with males' fins and bodies being wide and rectangular.

These fish can acclimate to salt or fresh water, and if afflicted with the "shimmies" or fungus, it's generally recommended to add salt and raise the temperature. My theory for my success is water quality; I do frequent partial changes, and of course a diet including spirulina can't be ignored. Don't be afraid to try these splendid livebearers, whether on sale or not! ■

The Newsletter/Web Team

Thank you to Nancy Frieze for mailing *Finformation* and Connie Yarris for preparing articles for Newsletter Exchange Editor Armand Sichi (these articles appear in our on-line exchange column).

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Upcoming Events of Interest

11/02 Akron Auction, Tallmadge, Ohio 330-848-3856 – Bud White
11/22-23 OCA Show, Strongsville, Ohio 440-236-6301 – Marc

Ongoing Reptile Swaps at Palace Inn in Monroeville, PA Herb Ellerbach (412) 361-0835

GPASI Marketplace

BUY

Mike Parahus wants to buy up to 6 long-finned white cloud mountain minnows. He'd like a mix of males and females and is not interested in the "golden" variety. He would also like to buy up to 6 *Rasbora brigittae*. (724) 843-0584.

SELL

Steven Pro would like to sell a used SpectraPure 35 gpd RO unit. It is in excellent condition. The membrane is about a year and a half old, the prefilters only four months. Asking \$100. Contact at 412-327-3805, 412-886-0873, or by email at dspro@stargate.net.

38 gallon tank + pine stand, Marineland Penguin dual-biowheel filter, glass top. Tank measures 36"x12"x21" high. Best Offer. Email leslie.wheeler@verizon.net or (412) 362-1537

Mark Short is selling a new G.P.D. RO membrane for \$35. Call (412) 856-0797.

Walter Roth has plastic bags to sell in 100 count packages. Sizes are 6 x 12", 8 x 15", 10 x 20". Call (724) 449-9651.

Sharon Serbin designs and creates fish-related art: stained glass mosaic tables and wall hangings; tile mosaic floors; and hand-painted T-shirts and other clothes items. E-mail sjsrbin@pgh.net or page her at (412) 949-3106.

Ross and Laura Cronkhite still have tanks for sale at 65 cents on the gallon:

99 (one hundred if you count the one that needs repair) 15 gallon tanks
7 (seven) 20 gallon tanks
6 (six) 20 gallon Long tanks
3 (three) 45 gallon tanks
4 (four) 55 gallon tanks
1 (one) 75 gallon tank
plus airline and fittings, a few nets, and a supply of 5 gallon buckets and 4 and 5 quart ice cream buckets, and the assorted stands

Also available:

one dozen 20L, new (still in cardboard) \$16/each
Air blower at \$200 (capable of running everything in a looped system)
5, 500 gram cans of Microfine Spirulina powder. Paid \$30. Willing to let go at \$20 each.

Contact (412) 233-0996 or lauross@libcom.com

To let other members know about aquarium-related items you'd like to buy, sell, or trade, contact Jean Grace at (412) 441-1106 or jgrace@pitt.edu

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Elmer's Aquarium & Pet Center	4005 William Penn Highway, Monroeville	(412) 372-6535
In Leafy Shadows	ilshadows@excite.com	(412) 369-0499
Krispy Kreme Doughnuts	Rt. 19 in Cranberry Twp; Century III; Eastgate Mall in Greensburg	
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Shene's Killies	http://shene.killi.net	(724) 449-9651
Three Guys Aquatics	www.threeguysaquatics.com	
Walt's Water World	4151 Grandview Dr., Gibsonia	(724) 449-9651
West Hills Pet Center	West Hills Shopping Center, 925 Broadhead Road, Moon Township	(412) 262-2220
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