

The

# DARTER

MAY/JUN 2014



*Chilatherina axelrodi*

## EDITOR

Mark England

314-315-0331

editor@missouriaquariumsociety.com

www.missouriaquariumsociety.com

## PRESIDENT

Pat Tosie  
1813 Locks Mill Dr.  
Fenton, MO 63026  
314-616-4316  
pattosie@yahoo.com

## VICE PRESIDENT

Gary Lange  
2590 Cheshire  
Florissant, MO 63033  
314-412-7636  
gwlange@sbcglobal.net

## TREASURER

Marlon Felman  
1570 Candish Ln.  
Chesterfield, MO 63017  
636-536-4809  
marlon.f@charter.net

## SECRETARY

Cory Koch  
22 Briarcastle Ct.  
O'Fallon, MO 63366  
636-278-0736  
sithlid@gmail.com

## EXECUTIVE COUNCIL

Larry Albright	allbrightdiana@yahoo.com	314-452-5120
Ed Millinger	amazoneddy1@yahoo.com	573-883-9943
Kevin Wise	hcaaquatics@yahoo.com	618-494-8552
Debbie Sultan	debsultan@gmail.com	618-410-7150
John Van Asch	johnsfishy0731@att.net	618-604-7228
Derek Walker	jamdwalk@msn.com	636-461-2312

Advertising & Promotions	Mark Theby	314-428-3536
Auction Chairman	Mike Hellweg	636-240-2443
Breeders' Award Program	Steve Edie	636-922-4232
Corresponding Secretary	Pat Tosie	314-616-4316
Editor	Mark England	314-315-0331
Exchange Editor	Steve Deutsch	314-741-0474
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Membership	Ron Huck	314-481-2915
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Points Tabulator	Ed Millinger	573-883-9943
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Social Events Coordinator	Debbie Sultan	618-410-7150
Swap Meet	Holly Paoni-Wise	hcaaquatics@yahoo.com
Webmaster	Charles Harrison	314-894-9761 charles@inkmkr.com
Welcoming	Ron Huck	314-481-2915

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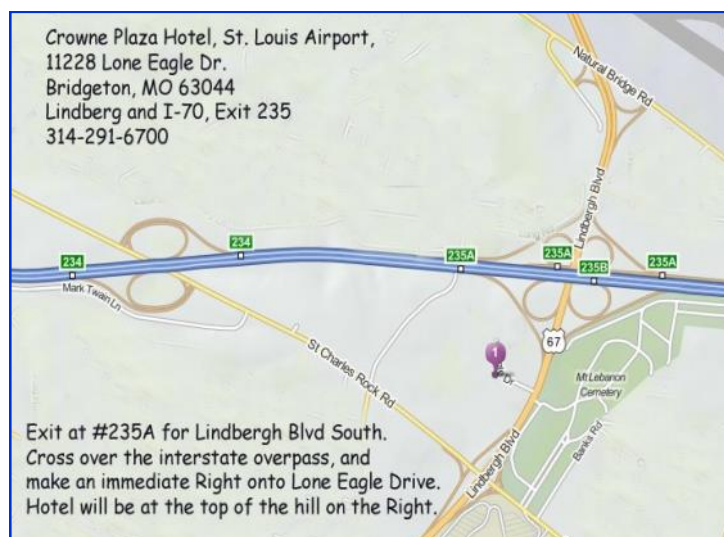
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## MAY 15—JUAN MIGUEL ARTIGAS AZAS INTO THE HEART OF THE RIO NEGRO AND THE AMAZON JUNGLE



### This meeting will be at the Crown Plaza Hotel!



A lifetime dream for many of us aquarists is to visit the Amazon basin and the Rio Negro, a river without comparison, home of one of the most diverse and beautiful fish fauna in the world; like the Angelfish, the cardinal tetra, the discus fish, the South American Arowana, the Oscars, the pink freshwater dolphins and a huge number of other fish species. Nowadays, the dream is attainable and the beauty of the Rio Negro is yet mostly unaf-

ected by human activities. Its sheer beauty and power are there to be enjoyed and never forgotten. Certainly, living this dream is not a disappointing experience. In this talk I present my experiences in the Rio Negro, showing the landscape, the fauna, the flora, both above and underwater. I can bet the attendee will consider visiting this wonderful corner of earth and make it her dream.

#### About the Speaker

Juan Miguel is the creator and editor of the Cichlid Room Companion. His love for computers and nature, together with the revolutionary development of Internet was too much for him to let the opportunity to create this page pass along. He has found that the maintenance of a real good home page is a life time enterprise, and he is ready to cope to that. Juan Miguel enjoys travelling to the natural habitats of the fish he loves, where he obtains underwater pictures of them. He likes to observe them, trying to understand their natural history and relationships. He has managed to obtain a great knowledge on the biology and geographical distribution of the fishes in Mexico. This gives to his conferences an originality and spe-

cial interest. Juan Miguel has been awarded the Guy Jordan Retrospective Award 2008 by the American Cichlid Association. The maximum honor this association gives to people who has done extensive contributions to the International Cichlid Hobby is an aquarist in San Luis Potosí, Mexico (the very center of it). He has loved fish since he can remember and has kept them steadily in home aquariums for over 30 years now. His main interest are Central American Cichlids and Mexican fishes, but he is also very interested in any other type of fish.



## JUNE 19TH MEETING—GOING GABON!

Ted Judy is an addicted aquarist with over 25 years of fish keeping and breeding experience. He is a generalist who enjoys all types of fish from anabantids to tetras, but always finds plenty of room in his fish room for fish from West Africa (especially the dwarf cichlids).

Ted's club affiliations are the American Cichlid Association, the Madison Area Aquatic Hobbyists and the Milwaukee Aquarium Society.

Ted is a former high school science teacher who now dabbles as a fish importer and local wholesale distributor. He is a prolific speaker, proficient writer and wants to be a better photographer. See more of Ted's hobby by visiting his video blog at [www.tedsfishroom.com](http://www.tedsfishroom.com). Repashy Superfoods and OddBallFish.com are proud sponsors of Ted's activities in support of the aquarium hobby.

### Going Gabon!

This talk documents Ted's 2011 fish collecting trip to Gabon, West Africa. The presentation includes photography and video from many collecting locations. Gabon is a place that is infrequently visited by traveling aquarists, and a country from which there is no commercial exportation of tropical fish. You will see many interesting species that are virtually unheard of in the hobby. This talk is about 1-hour long.

### Collecting With Ted Judy!

We are also planning to go collect native Missouri fishes on Friday morning after the June 19th meeting. We'll probably be within a two hour drive of St. Louis, leaving ~ 8 am. If you are interested let Gary Lange know right away. Space is limited as some of the places we are thinking about going don't have a lot of parking.



## CLUB HOPPING By Steve Edie

More events will be added as clubs firm up their schedules. Check with the individual clubs for more details.

May 15-18	St Louis	American Livebearer Association	Annual Show	<a href="http://livebearers.org">http://livebearers.org</a>
May 23-25	Chicago	Greater Chicago Cichlid Association	Cichlid Classic	<a href="http://www.gcca.net">www.gcca.net</a>
May 23-25	Syracuse, NY	American Killifish Association	Annual Convention	<a href="http://aka.org">http://aka.org</a>
Jun 5-8	Crossnore, NC	North American Native Fishes Assn	Annual Convention	<a href="http://www.nanfa.org">www.nanfa.org</a>
Jun 28	St. Louis	Missouri Aquarium Society	Annual picnic	<a href="http://www.missouriaquariumsociety.com">www.missouriaquariumsociety.com</a>
Jul 10-13	Louisville	American Cichlid Association	Annual Convention	<a href="http://www.cichlid.org">www.cichlid.org</a>
Jul 19	Urbana, IL	Champaign Area Fish Exchange	Auction	<a href="http://www.champaignfish.com">www.champaignfish.com</a>
Aug 10	St Louis	Missouri Aquarium Society	Summer Auction	<a href="http://www.missouriaquariumsociety.com">www.missouriaquariumsociety.com</a>
Oct 4	St Louis	Missouri Aquarium Society	Swap Meet	<a href="http://www.missouriaquariumsociety.com">www.missouriaquariumsociety.com</a>
Oct 16-19	Herndon, VA	All Aquarium Catfish Convention	Annual Convention	<a href="http://catfishcon.com/">http://catfishcon.com/</a>
Oct 24-26	San Antonio	Federation of Texas Aquarium Societies	Annual Convention	<a href="http://www.texascichlid.org">www.texascichlid.org</a>
Nov 7-9	Chicago	Aquatic Experience	Industry Show	<a href="http://aquaticexperience.org">http://aquaticexperience.org</a>
Nov 9	St Louis	Missouri Aquarium Society	Fall Auction	<a href="http://www.missouriaquariumsociety.com">www.missouriaquariumsociety.com</a>
Nov 21-23	Cleveland	Ohio Cichlid Association	Extravaganza	<a href="http://www.ohiocichlid.com">www.ohiocichlid.com</a>

## FROM THE PRESIDENT

### Pat Tosie



The 2014 Spring Fling Fishy Thing is now in the past, Scott and all the workers did a wonderful job of putting the show weekend together and making it a successful event. Special thanks go out to our speakers: Liz Marchio, Dr. Paul Loiselle, Gary Lange, and Rachel O'Leary. If you missed the weekend and/or the speakers, you missed a good and informative time.

Next coming up is the American Livebearer Convention May 15 – 18 and our speaker lineup will be as follows: Dr. John Lyons: speaking on GWG "The North American Goodeid Working Group (NAGWG): purpose, origins, organization, and future plans". Dr. Godfrey Bourne will talk about "What *Poecilia parae* and *P. picta* are teaching us about color, sex and personality." Rick

Borstein talks on Livebearer Reproduction Strategies (Beginners Talk) and Automating Water Changes in your Fish Room. Charles Clapsaddle's talk is titled Hatchery Operations/Breeding Techniques and he will also be giving the banquet talk. Mike Hellweg will present "Livebearing in Miniature". Gary Langes' talk "Digital Fish Photography – How to Photograph Your Fish for Fun and Profit" will help you take better photos. Jennifer Reynolds will teach us "Freshwater Stingrays in the Wild and in the Aquarium". And as an added bonus, Juan Miguel Artigas Azas: will be at the MASI Monthly meeting giving a talk on Thursday night (Our monthly meeting in May will be at the hotel) and he will also be giving a talk for the convention about

Characodons.

Gary Langes' search for worthy candidates to run for President, Vice-President, Secretary, Treasurer, and Council members is in full swing, so please let him know if you have interest in running for an official or council member.

Scott Bush has decided to step down and let someone else take over as Show Chairman next year. I wish to thank Scott for all his hard work for bringing back MASI's Annual show and putting them on with much excitement and success. That does mean, however, that I am looking for someone to step up and take his position as Show Chairman. As Show Chairman you get a position on council, you get the final say as to what show classes,

speakers, and activities happen at the Show. I repeat, you get to decide the direction the show goes with picking the speakers! Scott had a fantastic lineup and it will be hard to match, much less beat, but I am sure our next Show Chairman will do their best. If you are interested, please give me a call, text, or e-mail.

MASI's Annual Picnic should be Saturday, June 28, more details as to location and time will follow.

On a sad note, longtime member Marc Daly passed away, so please keep him and Kathy in your prayers.

Keep looking below water....

## FROM THE EDITOR

### Mark England



At nearly every MASI event I attend, I am humbled by the depth and breadth of expertise among our members. Many of our members are truly experts in the niches in which they are interested.

We also have less learned members who are able to enlarge their knowledge from those who have been there before.

It seems to me that aquarium keepers pass through several distinct phases as they mature in

the hobby. Beginners are trying to learn the basics. And sadly, most never progress beyond this stage. It is truly the shame of our hobby that so many try and fail when a little bit of help would let beginners flourish.

The intermediate aquarist has learned to keep fish and plants alive and flourishing. There is understanding of the ecological processes and time is taken to understand species specific needs. This is the dangerous stage when addiction may set in.

Our club is blessed to have so many people at the most advanced stage when the hobbyist begins to specialize and understand aquariums in depth. It's a time when one can give back to the hobby by helping others along the path to successful aquarium keeping.

Next time you have the opportunity, share with your fellow club members.

## From The Fish Room by Ed Millinger

I feel we are fortunate to have such a nice meeting location. Years ago we were bounced around from room to room at a local hotel. Each different room also carried a different price. It was impossible to budget for.

The council has given its blessing to a second food drive for the church's food pantry. We traditionally have donated food to the church only at Christmas time, but since the need is so great, we will also be collecting at our June meeting. Please donate what you can. You are certainly under no obligation, I just thought it would be a nice way to show our appreciation.

In this issue's way back machine we travel to the July-August-September 2003 issue. Our president was Jack Berhorst, vice Gary Lange, treasurer Klaus Bertich, and secretary Angela Hellweg. The executive council was comprised of Roy Bradhorst, Bob Buckles, Steve Edie, Charles Harrison, Mike Hellweg, Joe Moreno, Pat Tosie and John Van Asch.

Mike Hellweg led the HAP ranking with 1635 points, followed by Ray Schlund 1395, Maureen Green 1135, Derek Walker 960 and Gary Lange had 935 points. Derek Walker wrote

three articles about plants and Mike Hellweg two. Klaus Bertich reported on trips to two auctions and the ACA.

Has this ever happened to you? Out of the corner of your eye you see some movement in your aquarium and your first thought is, "Was that some fry moving around?" More than likely it is a piece of debris, quite a let-down. Then there are times when you spot a small baby (a lone survivor) and since you have different fish in the tank you have to wait for it to grow up to see what it is.

Fishy news headlines:

- Chlidid Power, Dentists Warn Of Its Destructive Effect On Dental Health.

- Angelfish: Survey Of Engineers Declare It Their Favorite.
- Recent Study Shows Wild Bettas Have More Fun.
- Blind Cave Tetras Do It In The Dark.
- Swordtail Makes A Point.
- Green Terror, It's A Fish Not Algae. O.K. Maybe It Is Algae also.
- Bleeding Heart Tetras To Hold Blood Drive.

A tip of the MASI hat to Scott Bush and everyone who helped with the Spring Fling Fishy Thing. We had more entries this year, great speakers, a delicious banquet and an auction that didn't



run forever.

Thanks to a donation from Rachel O'Leary many of us were able to obtain Repashy food to try. There is quite a buzz about it and I just started with it myself.

Don't forget to bring a food donation to the June meeting.

Have a fishtastic day.



Pat Tosie

## Electronic Distribution Now Available In Full Color

For those who prefer, the Darter is now available electronically, instead of the paper distribution. To change from paper to electronic distribution, email me at [editor@missouriaquariumsociety.com](mailto:editor@missouriaquariumsociety.com). You will get your Darter sooner and the club will save printing and postage. And, as in 2013, you will save \$5 on your membership.



# The American Livebearer Association Celebrates its legendary yearly gathering with The Missouri Aquarium Society in St.Louis,Mo!

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## May 15-18

St. Louis— the home of the 2014 American Livebearers Association Convention!

This year's convention came by surprise and the members of MASI are very excited to host such a great event. We have so much in store for you this coming weekend.

We have kept some new ideas that was used last year and since it went over well, we planned to do it again this year. We also kept some old traditions.

This year we have planned a great weekend of all-around Speakers. We have topics for beginners and experts! I believe this will be the ALA's first sting-ray talk.

The North American GWG meeting will be here again to go over some basics and watch for the mini auction! The room sales is on this year again and I hope everyone will be apart of it. There will be a great rare fish silent auction that you don't want to miss.

Please take part in the Hospitality room. This is a chance to meet new and old friends.

I also would like to thank the members of the Grand Valley Aquarium Club (GVAC). They had most of the hard work done on file.

Also, thanks to all the MASI members that have put in many hours of hard work!

### FEATURED SPEAKERS

- Dr. John Lyons: "The North American Goodeid Working Group (NAGWG): Purpose, Origins, Organization, and Future Plans".
- Mike Hellweg: "Livebearing in Miniature"
- Gary Lange: "How to Photograph Your Fish For Fun and Profit"
- Rick Borstein: "Automating Water Changes in your Fish Room/Livebearer Reproduction Strategies" (Beginners)
- Jennifer Reynolds: "Freshwater Stingrays in the Wild and In The Aquarium"
- Charles Clapsaddle: "Hatchery Operations and Breeding Techniques"
- Juan Miguel Artigas Azas: "The Rio Negro"
- Juan Miguel Artigas Azas: "Characodons"
- Dr. Godfrey Bourne: "What Poecilia parae and P. picta Are Teaching Us About Color, Sex and Personality."

## GOODEIDS, ENDEMIC FISHES FROM CENTRAL MEXICO

By Carmen del Rocío Pedraza Marrón and Omar Domínguez Domínguez



*Ameca splendens*, male

“Programs of maintenance in captivity have demonstrated their effectiveness in order to avoid Goodeids extinction.”

Almost completely surrounded by mountain chains, Central Mexico is one of the most extensive tropical high plateaus of the planet; it is considered by the World Conservation Monitoring Center as one of the most important regions of the world regarding freshwater fish conservation. It harbors the principal zone of the country concerning freshwater wetlands with a unique fishes diversity, containing species representative of the Nearctic (Ictaluridae and Cyprinidae) and Neotropical fauna (Poeciliidae and Cichlidae) and also endemic species (Atherinopsidae and Goodeinae), where out of 100 native species, 70% are endemics.

The unusual diversity of the fishes that inhabit Central Mexico is linked to a series of drastic geologic and climatic chang-

es that generated a complex hydrogeologic system. In addition, another important factor in the conformation and diversification of the ichthyofauna is the historical exploitation of the natural resources of the region. Inside the limits of Central Mexico, lives approximately 70% of the population of the country, 67% of the industries and only 20% of the superficial water. All of this suggests that besides understanding the biological complexity of freshwater ecosystems, we have the obligation to preserve them for future generations.

### A natural treasure

One of the most representative groups of fishes of the region is the family Goodeidae, conformed by 21 genera and 45 species. Goodeids are evolutionarily related to the genus *Profundulus*, a group of fish

that inhabit high zones of the south of Mexico and Central America. The Goodeidae are divided in two subfamilies: *Empetrichthynae* and *Goodeinae*. The first one is composed by two genera, *Empetrichthys* and *Crenichthys* and four species distributed in Valle de la Muerte and Nevada region, east of The United States of America. The other one is represented by approximately 41 species contained in 19 genera restricted to Central Mexico and some adjoining regions. In the Pacific slope, the subfamily *Goodeinae* is distributed in Aguanaval and San Pedro-Mezquital river basins at the North, limited to the south by Balsas river basin, whereas in the Atlantic slope they exist solely in the high lands of Salado and Pánuco river basins. They are considered as a natural treasure because they have

# GOODEIDS, ENDEMIC FISHES FROM CENTRAL MEXICO (CONTINUED)

“...most distinctive characteristic is their embryonic nutrition called matotrophy”

unique adaptations associated to their peculiar reproductive and embryonic development strategies.

The first one is an internal fertilization. Males present a modification in the anal flip shaped as a copulatory lobe named spermatopodium, which plays a crucial role in the transference of the spermatic package to the interior of the female. The spermatic package is a small bag that, when they squeeze the spermatopodium against the genital aperture of the female, it is expelled by an internal muscular organ that has a ring shape. The tight contact that implies making Goodeid's fertilization successful promoted the appearance of sexual selection strategies that have been largely discussed as one of the possible causes that allowed diversification in this group. Among them, the marked difference between males and females shapes in

some species, as for an elaborated courtship that involves very complex moves and dancing by the males.

Nevertheless their most distinctive characteristic is their embryonic nutrition called matotrophy. The embryos have a specialized structure that allows them to exchange gaseous and to get nutrients and macromolecules (lipids and proteins) from the female. This structure is known as trophotenia, it is form in the ventral part where the anus begins once that the embryo is expelled to the lumen of the ovary, where it completes its development. Their shapes and sizes depend of the species, even some of them can lack of it, at least apparently like *Ataenobius toweri*. The offspring of the Goodeids born completely developed, which gives them a higher probability of survival, but represents a disadvantage because the number of de-

scendants is smaller than the one of oviparous fishes.

## The magnitude of the threat

As for most of the aquatic fauna that inhabits Central Mexico, this subfamily is in great peril of disappearing, in fact it is considered as one of the groups of fishes with the highest risk of extinction in the world. Although they are present in the majority of Central Mexico, the distribution patterns by specie are very restricted, there has been found microendemic species that inhabit small ponds or in stretches in tiny mountain streams (for example *Chapalichthys pardalis*, *Zoogoneticus tequila* and *Allotoca zacapuensis*). On the other hand, some studies revealed the strong genetic structure and differentiation that exist among the populations of certain widely distributed species, such as *Zoogoneticus quitzeoensis*, *Xenotoca variata* and *Allophorus robustus*.

These characteristics made them seriously threaten by a huge environmental problem. The Lerma-Chapala-Santiago hydrologic system, nestled in the Trans-Mexican Volcanic Belt, presents one of the biggest water extraction volumes of country, as for the subterranean as for the superficial ones; at the same time the Lerma river basin provides sustenance to one of the most significant economies of the country, maintaining a big quantity of industries and agricultural

*Girardinichthys viviparus*, male



# GOODEIDS, ENDEMIC FISHES FROM CENTRAL MEXICO (CONTINUED)

zones in their limits. Because of that, it represents one of the most polluted and impacted basins of the world. Ironically, this hydrologic system is very important on regarding ichthyological diversity, it harbors the biggest number of Goodeid's species (16) and has one of the highest endemic rates in fishes reaching globally 66%. In addition to the overexploitation and pollution, there are other factors that contribute to the damage of the aquatic ecosystems and impact negatively on the flora and fauna of the region. Some of these major factors include introduction of exotic species (and their parasites) and the modification of the habitats.

Unfortunately, in some cases there is such an environmental impact that some Goodeid species have been reported as extinct, such as *Characodon garmani* and *Skiffia francesae*, although there still exist some organisms in captivity of last one, another specie is considered as probably extinct or about to become extinct (*Zoogoneticus tequila*), several species are in high risk (as *Ameca splendens*, *Allotoca goslinae*, *Allotoca maculata* and *Allodontichthys polylepis*). The last five species mentioned



inhabit Ameca river basin in Jalisco state, where the pollution of water by agricultural fertilizers, desiccation, introduction of exotic species and fragmentation of the habitats as a consequence of the construction of dams, are the principal causes of environmental impairment. In other basins of Central Mexico, it has been documented the impact of human activities and their effects in reduction and disappearance of populations of native fishes that inhabit those waters, as for example Cuitzeo, Pátzcuaro, Zirahuén and Chapala Lakes, where inhabit several species of Goodeids. Officially, 24 species of goodeids are endangered,

among them one is considered extinct in the wild, 19 endangered and four as threatened. Nevertheless, data obtained by diverse research institutes have shown that the Norma Oficial Mexicana-059 is far away of showing the magnitude of the environmental problem. A recent publication that contemplates historic and actual data of the presence of fishes of the subfamily Goodeinae concluded that two species are already extinct in the wild (one with populations in captivity), 17 are critically endangered (one possibly extinct), five in danger, two threatened, 11 vulnerable and only three at low risk. In another paper, where it is employed ecological-niche modeling in order to predict the potential distribution of species, published in Conservation Biology magazine, the data revealed a pessimistic view for Goodeids long term conservation in their natural environment. It was also observed that more than 60% of the species have suffered extinctions in

more than 50% of the localities where their presence have been historically registered. A study published on February 2007 in the same magazine, exposed the serious impact of the brutal desiccation of an important number of water bodies of the country during the 19th and 20th centuries with the purpose of agricultural development, on the genetic diversity of the specie *Zoogoneticus quitzeoensis*, as for the negative effects that pollution and the fragmentation of habitats have on the genetic erosion of the populations. In addition, by using genetic, environmental, ecological and social data, there were identified operational conservation units for this specie. In both studies it is shown the inability of the actual national commission of natural protected areas to shield zones with a high richness of Goodeid species and, even more, the genetic richness of many of their populations. The huge difference between the official results and



# GOODEIDS, ENDEMIC FISHES FROM CENTRAL MEXICO (CONTINUED)

the scientific ones in only 42 of the 520 freshwater fishes of Mexico, and in the commission of natural protected areas, shows the discrepancy between the academic and the governmental sector. The lack of integration among both sectors results in a decreasing of the possibilities of conservation the high biological richness of Mexico, and in particular, of this natural treasure: the mexican Goodeids.

## Conservation strategies

The conservation of Goodeids seems very complex. The generated knowledge is not enough, because if the irrational use of natural resources continues favouring the development of human activities, without looking for the environmental cost, the possibility of finding this and other organisms in our water bodies is every time more scarce.

It is not a trivial matter, especially in a country like Mexico with a serious politic, social and economic problematic. But even though conservation strategies are complex, realistic and immediate conservation actions must immediately take place, such as identification of key areas for conservation of the biological biodiversity. Nevertheless, in order to make these programs effective, these areas should achieve certain biologic requirements and a series of demands in the political, social, cultural and environmental scope. Because of this,

*Zoogoneticus tequila*, male



it is a very difficult issue that needs to be addressed in a multidisciplinary way, while the need to implement conservation and restoration of habitats and species actions is urgent and cannot be put off.

Programs of maintenance in captivity (conservation ex situ) have demonstrated their effectiveness in order to avoid Goodeids extinction. However, they represent a short term and partial solution. Long term conservation is very complex and requires much more information and resources in all aspects, the first aim should be achieving their medium term conservation through habitat restoration programs and the identification of key areas that have at least the following requirements: to be extended and stable enough in order to maintain big populations of Goodeids and to avoid genetic depression, but at the same time, they must occupy the minimum extension possible in order to facilitate management and an accurate protection; to contain in a natural way the highest number of native spe-

cies and the lower number of exotic species; also native populations should be genetically distinct and healthy; to have political and social support; and last but not least, the direct influence of the alterations to the capture basin should produce the least possible impact to the water body. There are some areas that cover at least partially these requirements, they are the big springs distributed across all Central Mexico that serve as a refuge to an important number of native species when the surrounding water bodies have been polluted. Among them, some have

been declared urban, regional or municipal parks, as Laguna de Zacapu in Michoacan State; others are protected because of their use as a recreation area or because they are surrounded by private lands, such as the springs of Los Berros in Durango State, Los Venados in Jalisco State or Xochimilco at the Distrito Federal, for

which a plan of restoration is already in progress. At the same time, other ecosystems continue suffering the irrational uses of the biological resources, the customary introduction of exotic species as carps, bass and tilapias, the unmeasured subterranean water extraction and the impossibility of the authorities to implement the law. Some examples are the springs of La Media Luna in San Luis Potosí State, Los de la Luz, Orandino, La Mintzita and Camécuaro in Michoacan State or San Francisco del Rincón in Guanajuato State.

*Zoogoneticus tequila*, female



## FISH CAN'T READ, OR SPAWNING MELON BARBS WITHOUT REALLY TRYING

By Dave Williamson



This story starts way before the actual spawning took place, in fact we're talking a number of years and three groups of fish in between the first time I had this fish and when I was finally successful. Way back when, when Wet Pets was still in Mogadore, a new fish came in under the name of "Melon Barb". They were really nice, males were pinkish with black markings and the females had the same markings on a peach colored back-ground. After I got the pair I bought home things began to change. The male's color intensified to a deep red and then he promptly bumped off the female. I kept him in a community tank of barbs, danios and loaches. He lived and

thrived and I showed him numerous times until he lived out his time, and so ends round one. A couple of other club members picked them up from the batch I did and had similar results, no spawns.

A few years down the road, I find them again labeled "Red Clown Barbs", but the markings were the same and the color similar, just a little "muddier." Remembering the mess from the last time with attitude of the male, I didn't just get a pair this time, I got four of them. Well after some time passed, I realized that I had four males, and on top of that they never really colored up that well like the first one, so off to an auction they went. Here again I knew someone

who had gotten some of them at the same time and they weren't able to spawn them either. OK, so now we're done with round two.

Enter round three. In one of my trips to Cleveland for the reptile show when I still worked at the pet store, I had a couple of shops I would stop by while I was up there. That's when I saw them in their "clearance" tank of leftovers. They were a little larger than the last time and it appeared that there were three males and two females so I went ahead and got all five of them since they were a good price and I'm a sucker for trying fish again that I didn't have luck with previously. After a few weeks of them being settled

Reprinted with permission from the Jan Feb 2014 Tank Topics of the Greater Akron Aquarium Society

# FISH CAN'T READ, OR SPAWNING MELON BARBS WITHOUT REALLY TRYING

into a twenty gallon long tank with some Danio choprae, "Pork Chop" Rasboras and Dwarf Botias, I found one of the males floating and chewed to shreds. I didn't know if he was bumped off then chewed on or what since no other mystery deaths occurred. I actually kind of forgot about them since they were kind of high-strung and darted off into the Java ferns any time I came close. Like the second group, the males never got the brilliant red that the first male got. I really began to wonder if they were really the same species or possibly a population variety collected from some other location that has a slightly different coloration. You never know when it something imported through the wholesale pet trade, since things never come with collecting site information like we get with hobbyist collected stock. One thing they did have in common with the first batch was that the males were still quite aggressive to each other. All four fish constantly had tattered fins. I can't prove it since I never actually saw them doing anything to the other fish in the tank, but at least on a couple of occasions a Danio or Rasbora would turn up dead with its tail chewed off. I'm willing to bet they had something to do with it!

So now that I'd had them for more than a year and was sure of the sexes, I thought about trying to set them up to spawn in typical egg-scatterer fashion. I put a false bottom in the tank of plastic canvas with a big ball

of Java moss and put a pair in. Took them out a couple of days later and left the tank alone for two weeks. Nothing. Tried that on two separate occasions with the same results. By this point I was pretty much over them since I could-

as I could and searched around the tank for more with no luck. Then every couple of weeks I'd find one or two more. They were obviously growing up right there in the community tank with the adults just like every fish book I've ever read

At this point I decided that since I had finally succeeded with them it was time to move them out so I could have their tank for something else, you know the BAP slut that I am!



n't get them to spawn and I couldn't show them (damaged fins), they were just kind of hanging around. That's when things changed. I had noticed a lot of activity in their tank with fish darting in and out of the Java ferns and all the mulm in the tank being stirred up. I figured that they were spawning at this point but there was no way I could separate eggs from all the stuff in the tank, and figured the loaches were eating them as fast as the barbs could lay them anyway. This kept up for quite a while (more than a month) and then one day I was shocked to see three tiny little vertically striped fish darting around amongst the mulm. Of course I grabbed a net and got them out as quickly

said wouldn't happen!

After a few weeks I had amassed a group large enough I could turn them in for BAP and they grew well in their own 2-1/2 gallon on microworms and crushed flake food. Once they got about 3/8" long they would even at-tack frozen adult brine shrimp and tear it up. Since I was going to turn them in, I needed to find out their scientific name so I did some searching on the internet and came up with a reference that referred to them as *Puntius fasciatus* and a synonym of *Puntius melanopyx*. On Wikipedia they had pictures of both the brilliant and muddy versions, but no description as to why they looked different.



## SOMETHING DIFFERENT

By Bob Major



I recently ordered 10 Stiphodon atropurpureus. I have never kept any species of the genus Stiphodon. I knew this fish was a type of goby but not much else. But before ordering I wanted to see if these fish were fresh water dwellers and did not need brackish water. Many gobies do require brackish water. After a short search I found they were in fact fresh water fish.

After the fish arrived I offered them various foods over the better part of a week. Most fish I have kept anxiously devour white worms so I started with them but there was no interest. Then frozen blood worms and brine shrimp -- no interest. Then flake and algae wafers -- still no interest. The fish

Reprinted from the March 2014 Fish Talk of the Atlanta Area Aquarium Association

were active and healthy but I knew they would not stay that way if I did not get them eating.

As I mentioned, before I bought them, I checked for information what type of water they required. But since I had kept other fresh water gobies before without difficulty, I did not investigate further about these fish. However since they were not eating I got online to read more about these fish.

Stiphodon are native to Southeast Asia. They live in fresh water rivers and streams that flow into salt water. They mostly live around waterfalls and in moderately fast moving water. They feed mostly by grazing on algae found on rocks and pieces of wood.

With this information in hand I placed some algae covered plants and driftwood from some of my other tanks into

their tank. Voile! They started grazing almost at once. By grazing I mean that they picked at the algae like cow would graze on grass rather than rasping the algae like a pleco does. I have found they will eat most types of algae but not black beard algae. They will even eat blue-green algae which most algae eating fish will not eat. Stiphodon atropurpureus however are not a good alternative to keeping plecos and other algae eating catfish in a community tank. They do not seem to be big eaters and it takes them a while to clean up the algae that they are presented with.

Stiphodon atropurpureus adults get to around 2 inches with males getting larger than females. Males have a bright neon blue stripe that runs the length of the body. Females are grayish in color with black markings. From what I have been

able to find there is no record of this fish being bred in the aquarium

It is thought that in the wild the fish breed in fresh water but after hatching the fry migrate to salt water. Then they return as they mature to live the rest of their life in fresh water. It is possible that the fry are just not strong enough to live in the fast moving water that the adults live in and are washed down river into the salt water. I am hoping that the second scenario is true and that these fish can be bred and the fry raised wholly in fresh water.

Stiphodon atropurpureus is truly "something different" from other fish I have kept and I hope it becomes more wide spread in the aquarium hobby.



# Spring Fling Fishy Thing!

## BEST IN SHOW

Spiny Zebra Eel – Jim Miller

## PEOPLE'S CHOICE

Betta patoti – Kurt Zahringer

The annual MASI spring show has come and gone and what a fun weekend it was. Thanks to our fantastic speakers who were very informative and entertaining. Our show and vendor room was quite busy all weekend and the Saturday night banquet was pretty popular with those who attended.

Numbers were up this year across the board...there were 108 show entrants compared to 33 last year. Some of that was due to group participation of

the Gateway Guppy Associates with 33 entries and the StL Beta Society with 9. We had a total of 14 different members with entries. The banquet was attended by 10 more people this year than in 2013.

Thanks to all those members who helped plan, set-up and participated in the event, a fun weekend was had by all! Plans have already begun to make 2015 bigger and better!

Scott Bush



Kevin & Holly Wise Photo

## CLASS WINNERS

### Class 1 – Aquascaping

1. Holly Peoni-Wise
2. Chris Mohrle

### Class 2 – Livebearers

1. I. Furcidents – Pat Tosie
2. Redwag Lyretail Sword – Larry Allbright
3. X. maculatus – Jim Miller

### Class 3 – Characins

1. Flameback Bleeding Heart – Larry Allbright
2. Leporinus desmotes – Jim Miller
3. Flameback Bleeding Heart – Larry Allbright

### Class 4 – Cyprinids

1. Puntius padamya – Ed Millinger
2. Puntius padamya – Ed Millinger
3. Roseline barb – Chris Mohrle

### Class 5 – Anabantoids

1. Belontia signata – Jim Miller
2. Betta patoti – Kurt Zahringer
3. M. congicum – Kurt Zahringer

### Class 6 – New World Cichlids

1. Australoheros sp. Oblongum – Ed Millinger
2. Neetroplus nematopus – Jim Miller
3. G. brachybranchus – Ed Millinger

### Class 7 – Old World Cichlids

1. Pundamilia nyererei – Pat Tosie
2. Hap. Sp. Fire Red Uganda – Pat Tosie
3. Pelvicachromis pulcher – Jack Heller

### Class 8 – Catfish

1. L200 pleco – Derek Walker
2. L60 pleco – Jim Miller
3. Blue-eyed bristlenose pleco – Derek Walker

### Class 9 – All others

1. Spiny Zebra eel – Jim Miller
2. Empire Gudgeon – Jack Heller
3. Pupfish – Derek Walker

### Class 10 – Original Artwork

1. Yawning Rainbow 8 x 10 photo – Gary Lange
2. Turning Rainbow 8 x 10 photo – Gary Lange
3. Blue Ram 8 x 10 photo – Gary Lange

# Spring Fling Fishy Thing!

## Kids' Contest by Holly Paoni-Wise

When The Spring Fling Fishy Thing was fast approaching the idea of getting kids more involved in the hobby came up a few times. How can we get kids more involved in our hobby? A few ideas were thrown around and a kids coloring contest was a fun way for them to have fun and be part of the event.

We had a great artist Sam Scalz, Nature Artist, donate his own time to make a original line drawing just for MASI and this coloring contest.

With the coloring page made up, and a donated grand prize of a Aqueon 5 Gal mini Bow, the stage was set. Over a few meetings pages were handed out to kids who were interested and a few days at the show. A total of 6 entries were entered into the show which was judged on Saturday and the Winner

was chosen by two judges. Kayla age 6, was crowned the first place winner. We heard back from her the next day after she received her prize and we were told she is a very happy little girl who now has Male Endlers, a Mystery Snail and Java Ferns in her new tank.

With this contest we hoped to get more kids interested in aquariums and the fish hobby we all love so much, Maybe its just one small step to get them involved, but everyone had to start somewhere, this was our way to help one, two or more kids see what it was all about, It was a lot of fun to do, the smiles were worth all the effort. These kids are the next generation of our hobby, with out them there is no future, so a small step now may lead to bigger foot steps in the future.



## FISHES AS DISHES

PATRICK A. TOSIE, SR.

# Tilapia With Chile Lime Butter

### Ingredients:

#### Fish

6 (5 ounce) skinless tilapia fillets  
1/2 teaspoon salt, to taste (I prefer kosher)  
2 tablespoons vegetable oil

#### For the Butter

1/4 cup unsalted butter, softened  
1 tablespoon finely chopped shallot  
1 teaspoon finely grated fresh lime zest  
2 teaspoons fresh lime juice  
1/2 teaspoon salt  
1 teaspoon minced fresh serrano chili, including seeds



### Directions:

Make chile lime butter: Stir together butter, shallot, zest, lime juice, chile and salt in a bowl.

Prepare fish: Pat fish dry and sprinkle with salt. Heat 1 tablespoon oil in a 12-inch nonstick skillet over moderately high heat until just smoking. Saute 3 pieces of fish, using a spatula to turn once, until golden and just cooked through, 4 to 5 minutes. Transfer to a plate and saute remaining fish in same manner. Serve each piece of fish with a dollop of chile lime butter.

Serving Size: 6,

Time: 15 minutes to prepare, 10 minutes cooking

## AUCTION UPDATE

By Mike Hellweg

As I complete my third year as Auction Chairman, I would like to thank everyone for their support, participation, and assistance making each auction just a bit better than the one before. I'm glad to say that the 2014 Spring Fling Fishy Thing Annual Spring Weekend and Auction continued that trend.

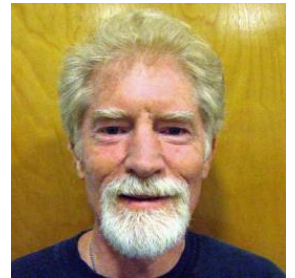
We moved into three rooms and fit comfortably, without the noise problem and lack of seating we've experienced as we've grown in size. I think we now have a balance between attendees and space – for a while – with room to grow. A few folks commented that it looked like a light turnout, but we actually had a larger than normal crowd, more items than a normal auction, and more bidders who bought than usual, too. In other words, it was a very good auction! We were a bit more spread out since we had a 50% larger room. Turnout was not as huge as our February auction, but that was a one of a kind monster in the middle of a near record cold spell with nothing else for folks to do. For our spring auction we competed with the weather, the first good weekend in months, and I think we held our own. Bidders, sellers and the club all did very well.

Thanks again to all of our volunteers, all of our sellers, buyers, and all who came by just to socialize! Without all of you, we would not be able to do the many things that our club does. I hope we see all of you at the Annual Summer auction on August 10, 2014.

And for now, 'nuff said Mike [auction@missouriaquariumsociety.com](mailto:auction@missouriaquariumsociety.com)

## Points Update by Ed Millinger

I have compiled the points earned so far this year. First the service points are listed and then the show points. You must have earned at least three points so far this year to be included on this list. Please be sure to print clearly when signing in at the monthly meeting. To view what it takes to earn points you can view the membership handbook by clicking on the blue Membership banner on the [missouriaquariumsociety.com](http://missouriaquariumsociety.com) website. Just above the map of our meeting place you click on the word (here) (in blue) to download the membership handbook. Thanks, Ed Millinger



Member	Service	Show	Member	Service	Show	Member	Service	Show
Larry Allbright	50	32	Ron Huck	35		Randy Shell	16	
Dave Bell	18		Jerry Jost	4		Randy Simmons	27	
Klaus Bertich	13		Carl Kling	3		Larry Siegel	14	
Connie Bremer	15		Amber Koch	22		Susan Siegel	4	
Scott Bush	37		Cory Koch	41		Mike Slater	27	10
Bob Buckles	3		Gary Lange	38	30	Rose Sonderman	12	
Tom Corradini	32		Dan Ludden	4		Tim Sontag	3	
Kathy Deutsch	40		Bruce Mayhew	4	2	Mike Steffans	4	
Steve Deutsch	34		Leroy McCreary	18	10	Randy Steele	15	
Steve Edie	57		Tony McMillian	18		Debbie Sultan	56	
Mark England	29		Wayne Miller	3		Mark Theby	29	
Marlon Felman	61		Jim Miller	9	124	Pat Tosie	75	74
Charles Harrison	36		Ed Millinger	63	47	Jim Ulett	4	
Sue Harrison	18		Chris Mohrle	3	15	John Van Asch	34	
Jack Heller	18		Jim Mueller	10		Derek Walker	20	25
Mike Hellweg	83		Kitty Mueller	4		Holly Wise	49	
Angela Hellweg	5	21	Dwayne Peters	18		Kevin Wise		30
Mike Henthorn	4		Todd Powers	4		Norb Wright	4	
John Higgins	3		Dave Rush	13		Kurt Zahringer	8	40
John Hittler	10		Nick Scarlatis	24				

## Mar/Apr HAP Report by Mike Hellweg

<b>Holly Paoni Wise</b>	345 points			
<b>Kevin Wise</b>	Ceratopteris thalicroides		Water Sprite	V 5
	Echinodoras bleheri		Bleher's Amazon Sword	V 15
	Marsilea crenata		Water Clover	V 15
	Microsorium pteropus	windelov	Lace Java Fern	V 10
	Microsorium sp.	narrow leaf	Narrow Leaf Java fern	V 10
	Alternanthera reineckii		Red Hedge	V 15
	Anubias barteri	nana "micro"	Microleaf Dwarf Anubias	V 15
	Anubias lanceolata			V 15
	Hemianthus callitrichoides		Dwarf Baby's Tears	V 15
	Myriophyllum mattogrossense		Southern Milfoil	V 10
	Taxiphyllum sp.	Flame	Flame Moss	V 5
	Vallisneria biwaensis		Contortionist Val	V 5
<b>Pat Tosie</b>	345 points			
	Echinodoras bleheri		Bleher's Amazon Sword	V 15
<b>Andy Walker</b>	690 points			
	Pogostemon erectus			V 15

Reproduction Key: V = Vegetative, OB = Outdoor Bloom, IB = Indoor Bloom, S = Seedling



Spring Fling Raffle Winner—Mark Shocker

## March Breeders Award Program by Steve Edie

Member	Species	Common	Pts	Total
Jerry Jost	<i>Barbus hulstaerti</i>	African Butterfly Barb	20	2042
Cory Koch	<i>Cryptoheros myrnae</i> *@	Blue Eyed Cichlid	25	3217
	<i>Pundamilia nyererei</i> "Makobe Island" #@		10	3227
	<i>Sarotherodon caroli</i> "Barombi Mbo" #@		10	3237
	<i>Skiffia lernae</i> "La Mintzita" *@	Olive Skiffia	45	3282
Holly Paoni & Kevin Wise	<i>Pethia padamya</i> *	Odessa Barb	15	158
	<i>Xiphophorus</i> sp. "Domestic Swordtail" ^ Albino Pineapple Sword		1	159
Todd Powers	<i>Aulonocara maylandi</i> @	Sulfur Head Peacock	20	20
	<i>Pundamilia nyererei</i> "Python Island" *@		25	45
Nick Scarlatis	<i>Julidochromis regain</i> "Zambia Gold" *		15	610
	<i>Neolamprologus wauthioni</i>		10	620
Debbie Sultan & Tom Corradini	<i>Lamprologus ornatipinnis</i>		10	200
	<i>Mesonauta festivus</i>		15	215
Pat Tosie	<i>Ameba Splendens</i> #@	Butterfly Goodeid	15	4365
	<i>Ptychochromis oligacanthus</i> "Mananjeba River" *@		35	4400
	<i>Pundamilia nyererei</i> "Makobe Island" #@		10	4410
Derek Walker	<i>Ancistrus</i> sp. "L144"	Blue Eye Ancistrus	10	3070
	<i>Ancistrus</i> sp. "Green Dragon"*		20	3090
	<i>Girardinus falcatus</i>	Goldbelly Topminnow	5	3095
	<i>Haplochromis</i> sp. "Ruby" *@		25	3120
	<i>Rineloricaria</i> sp. "L10A"	Red Lizard Catfish	20	3140
	<i>Sewellia lineolata</i>	Reticulated Hillstream Loach	20	3160

\* = First MASI species spawn (5 point bonus)

\*\* = First MASI species and genus spawn (10 point bonus)

\*\*\* = First MASI species, genus and family spawn (15 point bonus)

@ = C.A.R.E.S Species at Risk (Double base points)

# = Species previously submitted = 0 points, except for C.A.R.E.S. = base point bonus

^ = Species previously submitted, limited points for additional color varieties

Sources: Cal Academy - <http://research.calacademy.org>

CARES - <http://www.carespreservation.com>



## April Breeders Award Program by Steve Edie

Member	Species	Common	Pts	Total
Mike Hellweg	<i>Apistogramma luelingi</i> "Con Zia" *		20	5854
	<i>Crenichthys baileyi moapae</i> **@	Moapa White River Springfish	50	5904
	<i>Mogurnda cingulate</i> "Dekai" *	Banded Gudgeon	20	5924
Mike Huber	<i>Labidochromis caeruleus</i>	Electric Yellow Lab	10	158
	<i>Otopharynx lithobates</i>	Yellow Blaze	10	168
Cory Koch	<i>Xystichromis</i> sp. "Dayglow" #@		10	3292
	<i>Neochromis omnicaeruleus</i> "Makobe Island" #@		10	3302
	<i>Poecilia reticulata</i> ^	Japanese Blue Double Tail Guppy	1	3303
	<i>Skiffia multipunctata</i> "La Luz" #@		20	3323
Justin Lehman	<i>Ameca splendens</i> @		30	85
	<i>Ancistrus</i> sp. "Bristlenose"		10	95
	<i>Neolamprologus multifasciatus</i>		10	105
	<i>Puntius titteya</i>	Cherry Barb	10	115
Holly Paoni & Kevin Wise	<i>Xiphophorus</i> sp. "Domestic Platy" ^	Blue Ghost Platy	1	160
Todd Powers	<i>Sciaenochromis fryeri</i> "Mara Rocks" *	Electric Blue	15	60
Nick Scarlatis	<i>Pseudotropheus</i> sp. "Acei"		10	630
Pat Tosie	<i>Chapalichthys encaustus</i> "La Presa Orandino" @		30	4440
	<i>Hemichromis</i> sp. "Moanda"		10	4450
Kurt Zahringer	<i>Aphanius sirhani</i> "Azraq Oasis" *	Azraq Killifish	20	550
	<i>Fundulus zebrinus</i> "Boonslick" *	Plains Killifish	15	565
	<i>Melanotaenia sexlineata</i> "Tabubil"	Fly River Rainbowfish	10	575



\* = First MASI species spawn (5 point bonus)

\*\* = First MASI species and genus spawn (10 point bonus)

\*\*\* = First MASI species, genus and family spawn (15 point bonus)

@ = C.A.R.E.S Species at Risk (Double base points)

# = Species previously submitted = 0 points, except for C.A.R.E.S.  
= base point bonus

^ = Species previously submitted, limited points for additional color varieties

Sources:

Cal Academy - <http://research.calacademy.org>

CARES - <http://www.carespreservation.com>

## Classifieds

Buy/Sell	Member	Item	Bid/Asked	Contact
Sell	Jim Miller	Bloodworms and brine shrimp. Brine Shrimp eggs 16 oz. can.		314-638-1134
Sell	Charles Harrison	Thiosulfate crystals (Chlorine Remover) - half pound	\$3.00	
		OTO double strength Chlorine/Chloroamine test kits - 4 ounce	\$12.50	(314) 894-9761
		Flubendazole, 10% powder 25 grams	\$20.00	charles@inkmkr.com
		Lavamisole HCl Powder - 5 grams treats 100 gallons	\$10.00	
		Methylene Blue 5% solution (4 ounces)	\$12.75	
		Acriflavine Concentrate (4%) solution, 2 ounces	\$12.70	
		Bromthymol Blue pH test solution, 4 ounces	\$7.00	
Buy	Mike	Small Styro shipping boxes - 12 x 12 x 12 or a little bit smaller. If your company uses them and throws them away, save them! Bring to the meeting or I'll come pick them up	Free	636-240-2443

MASI Members can place a classified ad in the Darter for free. Ads may be up to 30 words in length. Send your ads to the editor. The ad will run for one issue unless you specify how long to run it, in which case it will run as requested.

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\*Please call or email with zip code for prices and shipping quotes.



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PatTosie@yahoo.com



**Pat Tosie**  
Real Estate Consultant  
Direct: 314.616.4316  
www.PatTosie.com  
PatTosie@PSPHomes.com

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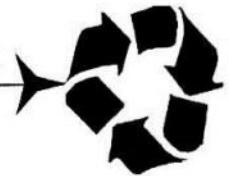


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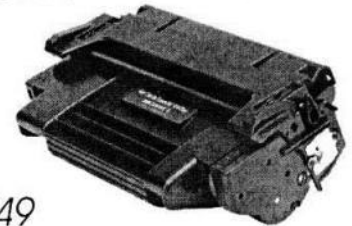


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