

# ATLANTA KOI CLUB



# KOI CHRONICLES



Dedicated to Sharing the Joy of Keeping Koi

November 2010  
Volume 22, Issue 11

## By the Pond



Mike Roach, President AKC

### Inside this issue:

Calendar of events	2
Meeting information	
Ikeage	
Meet the KHA's	
Sponsor's Page	3
Ammonia	4-6
Meeting Minutes	6
Winter Social Info	7
Meet the New Prez !	8
Membership Info	9
Directions to Meeting	10

### November 2010 By the Pond

I hope everyone is having a great Fall! The weather has been incredible. My koi are nice and fattened up for the winter. Now, just what to do with those darn leaves that keep messing up the bottom of my pond! Of course, I know what to do, my back just doesn't like it.

Anyway, huge thanks to the David's for hosting our November meeting. The weather was perfect, not to mention the food, friends, and libations! Also a special thanks to David Pugh and several others on the Nominating Committee for going through the process of finding us some great candidates for the election. And of course the elections are complete! Congratulations to our new President, Clay Melancon, our secretary for a second term JoANN Elmore, and our Equipment Manager Gary Elmore. I know the 3 of you, combined with our officers continuing on, will be great leaders!

And at the risk of sounding like Miss America, as she walks across the stage for a final wave....I can't believe I just typed that. LOL. Continuing on... the 2 years I've been President have flown by. It's crazy that I can think back to when I was elected and feel like it was only a short time ago! It's been a great experience and the role is a job I have come to appreciate, with great appreciation for those that have served in this role before me. I've always enjoyed being in a position to help and support others, and I was even happier to do this from a leadership position, in a hobby I really enjoy.

With that said, I wish to give special thanks to the many people and volunteers who supported me along the way. I couldn't have done it without you. And to the other officers, chairpersons and committees, thank you for some outstanding events over the last couple of years. There are a number of members who put their blood, sweat, and tears into this club (in some cases that is literal)...I promise, it hasn't gone unnoticed.

I also would like to give my appreciation to those sponsors and vendors that have supported our club in 2009-2010. It's been a tough economy and we appreciate your support at the club level and during events.

Thank you everyone!

Lastly, I really look forward to seeing as many of you at our upcoming Winter Social. It is being hosted by some of our newest members. I hope that you will come out and enjoy time with your fellow members as we close out 2010.

take care. mike



*Atlanta Koi Chronicles* is a monthly publication of the **Atlanta Koi Club**. Material is selected for its interest to Koi and Pond enthusiasts. **AKC Koi Chronicles** accepts no responsibility for the accuracy of the contents. Reproduction is permitted provided that this newsletter and/or the original source are credited. Articles may be submitted to the editor.

**Atlanta Koi Club  
Officers  
2009**

**President**

Mike Roach  
pres@atlantakoiclub.org

**Vice President**

Vicki Knill  
vp@atlantakoiclub.org

**Secretary**

JoANN Elmore  
scribe@atlantakoiclub.org

**Treasurer**

Gary Lee  
money@atlantakoiclub.org

**Property Manager**

Bill Fricke  
stuff@atlantakoiclub.org

**Appointed officers**

**Membership**

join@atlantakoiclub.org

**Koi Show**

Vicki Knill  
koishow@atlantakoiclub.org

**Koi Auction**

Steve Castel  
auction@atlantakoiclub.org

**P.R. Director**

Michael Roach  
pr@atlantakoiclub.org

**AKCA Director**

Michael Anderson  
rep@atlantakoiclub.org

**Newsletter Editor**

Toni Anderson  
report@atlantakoiclub.org

**Webmaster**

Michael Anderson &  
Adam Therrell  
wizard@atlantakoiclub.org



**Yikes!! My Pond (or fish) Need Help!  
Who do I call to help me?**

**AKC is extremely fortunate to have three (3) persons who have studied and taken courses in pond and koi care — and passed the extensive testing to become Koi Health Advisors.**

**These folks are NOT veterinarians...they are club members and hobbyists who love koi and koi ponds enough to help other members.**

**They offer many services to club members concerning the health of the fish and the pond. You will need to re-imburse them for their trip and any other supplies.**

**Fall Ikeage at Flat Rock Koi Farm!!**

Starts at 10:00- BRING YOUR WADERS if you want to help pull the nets.  
Lunch provided as well as plenty of refreshments.

Bring snacks and sweets if you like. Refrigerator is available if necessary.  
We have made lots of progress on the greenhouse (thanks to all our friends) and will have fish in the holding tanks for sale.

Fish from the mud ponds will be for sale as well-( after treatment).

Nov 13th with the 14th as a rain date.

Hope to see you there!

Vicki Vaughan

3831 Flat Rock Rd  
Watkinsville GA 30677  
Office 706-769-8951  
Cell 706-247-6274



**AKC CALENDAR 2010**

The currently planned meetings and events are:

**14 November** — Winter Social — Bob & Sue Chaffer



**DON'T FORGET TO WEAR YOUR NAME BADGE... THE  
RAFFLES HAVE BEEN REVIVED... AND YOU GET ONE  
FREE TICKET FOR WEARING YOUR BADGE... OTHER  
TICKETS MAY BE PURCHASED FOR \$1 EACH.**

# Support our Super Sponsors!



3831 Flat Rock Road  
Watkinsville GA 30677  
706-769-8951  
706-769-5305 (fax)

[www.flatrockkoi.com](http://www.flatrockkoi.com)  
carl@flatrockkoi.com or vicki@flatrockkoi.com

## Paradise Ponds & Waterfalls

Installation Maintenance Troubleshooting Pond Supplies

Jeff Krenner 404-519-8870  
[ParadisePondsAndWaterfalls.com](http://ParadisePondsAndWaterfalls.com)



## Atlanta Koi & Pond

Breeder & Dealer of Koi Pond Design & Construction Co.

Imported, healthy, quality Japanese Koi  
Clean, clear, healthy, easy maintain pond  
Pump, filter, U.V., bottom drain, skimmer  
Koi food, medication, water treatment

11:00AM -- 6:00PM  
THURSDAY THROUGH MONDAY **770-454-6799**

3291 Shallowford Rd., Chamblee, GA 30341



[www.splendorkoiandpond.com](http://www.splendorkoiandpond.com)

**770-321-FISH**  
1552 Rosewood Circle • Marietta, Georgia 30067

## THE POND PROFESSIONAL™



**Dave A. Jones**  
(770) 592-2273 office  
(770) 924-9589 fax  
(770) 924-1337 home

[www.ThePondProfessional.com](http://www.ThePondProfessional.com)

**Certified  
Master Pond  
Contractor**

Water Features	Landscaping	Tree Removal
Retaining Walls	General Contracting	Koi & Goldfish



## KOL KOI

Pond and Water Garden

**Blackwater Creek Koi Dealer**

Josette Costa  
Owner  
[www.kolkoi.com](http://www.kolkoi.com)  
info@kolkoi.com

2908 Moon Station Road  
Kennesaw, Georgia 30144  
Phone: 678.932.9277  
Fax: 678.659.9904

## Whitepath Water Gardens

14694 Highway 515 North  
Ellijay, Georgia 30540  
Telephone: 706-635-8700  
[www.water-gardens.com](http://www.water-gardens.com)



Of all the water quality issues that affect fish, ammonia is the most important to monitor after oxygen, especially in our closed systems. Ammonia causes stress and will damage gills and other tissues, even with only small amounts present in your system. Fish exposed to low levels of ammonia over time have proven to be more susceptible to bacterial infections and have poor growth. Ammonia is a killer when present in higher concentrations. Ammonia accumulates very easily in closed systems because it is a natural byproduct of fish metabolism. All fish excrete waste in the process of metabolizing food into the energy, nutrients, and proteins they use for survival and growth. Because it is continuously excreted and potentially lethal, successful koi ponds must incorporate methods to detect and eliminate ammonia before it can accumulate and harm fish. A byproduct of protein metabolism, ammonia's highest concentration is excreted across the gill membranes, with only a very small amount excreted in the urine. The decay of uneaten feed and organic matter create small amounts of ammonia, but in all closed pond systems, fish themselves are the primary source of ammonia production. The more feed a fish receives, the more ammonia it will produce. However, even a starved fish will produce some ammonia. Ammonia may also be present in city water. Even trace amounts can be toxic to fish, and ammonia is colorless, and, in small amounts, odorless. Therefore, the only way to know if ammonia is present is to test the water. In water, ammonia occurs in two forms, which together are called total ammonia nitrogen, or TAN. Chemically, these two forms are represented as  $\text{NH}_4^+$  and  $\text{NH}_3$ .  $\text{NH}_4^+$  is called ionized ammonia because it has a positive electrical charge, and  $\text{NH}_3$  is called un-ionized ammonia (UIA) because it has no charge. This difference is important to know because  $\text{NH}_3$ , un-ionized ammonia, is the form more toxic to fish. Both water temperature and pH affect which form of ammonia is predominant at any given time in a system.



### The Nitrogen Cycle

A biological process called the nitrogen cycle eliminates ammonia from the water by converting it to other, less toxic compounds. The ammonia fish excrete is converted to a compound called nitrite ( $\text{NO}_2^-$ ) by several other types of bacteria, including *Nitrosospira* and *Nitrosomonas*. Other groups of bacteria, including *Nitrosospira* and *Nitrobacter*, convert nitrite to nitrate ( $\text{NO}_3^-$ ). In mud ponds, this process takes place in the surface layers, and on plants or other structures. In closed koi ponds, a biological filter, or biofilter, must be provided as a place where the bacteria can live and flourish. A new biofilter requires up to six to eight weeks to build up sufficient bacteria to effectively reduce ammonia and nitrite levels. Other important points to mention about the nitrogen cycle are that both groups of nitrifying bacteria need oxygen and alkalinity to function. If oxygen levels are not sufficient, the process can break down, and ammonia and nitrite levels will increase. Alkalinity (bicarbonate and carbonate) is also used by the nitrifying bacteria. If alkalinity is less than 20 mg/L, the nitrifying bacteria will not be able to function. It's also important to note that nitrite is toxic to fish at levels as low as 0.10 mg/L. If the biofilter is immature or impaired, adding chloride in the form of salt (sodium chloride) or calcium chloride at the rate of 10 mg/L chloride for each 1 mg/L nitrite will reduce the toxic effects of nitrite on fish. Nitrate, the end product of the nitrogen cycle, is considered to be harmless to fish in natural systems and ponds as it is used as a fertilizer by plants, including phytoplankton. In closed systems with little or no water exchange, however, nitrate will accumulate and may be harmful if higher than 250 mg/L.



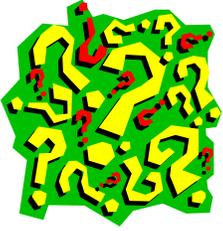
### Ammonia Testing

All hobbyists should invest in a good water quality test kit and use them often. A good water quality management program will reduce fish disease problems, promote growth, and lessen the need for chemical treatments. A water quality test kit will pay for itself many times over; both in numbers of fish saved and increased health. A log should be kept to monitor possible trends that may develop. Most commercial ammonia test kits measure the total ammonia nitrogen (TAN). Again, it is the un-ionized ammonia (or UIA) portion of the TAN that is more toxic. The UIA fraction of the total TAN can be determined from the TAN measurement if you know the temperature and pH of the water. At high temperatures and high pH, there is more UIA. Therefore, a good ammonia test kit will include a TAN test, a pH test, and a thermometer. There are two types of ammonia

(Continued on page 5)

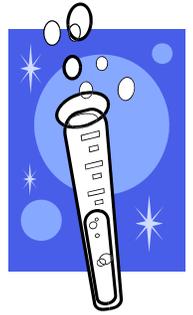
(Continued from page 4)

test kits, and each uses a different testing method to determine TAN. One is the Nessler's method and the other is the ammonia Salicylate method. If formalin or formalin-containing products have been used within 24-72 hours to treat fish for parasites, the Nessler's method will result in a falsely elevated ammonia reading. Use of ammonia binding products will also cause false high ammonia readings with the Nessler's method. The reagent used in the Nessler's method contains a small amount of mercury that in many states must be disposed of as hazardous waste. The other testing method is the ammonia Salicylate method. This method is not affected by ammonia binding products or formalin treatments. The ammonia salicylate method is also more accurate than the Nessler's method when testing ammonia in saltwater, and it does not require disposal of a hazardous waste. This is the preferred test kit.



### When Should Ammonia Be Tested?

If stocking densities are high, ammonia should be tested at least once a week. Keep records for all tests, and whenever ammonia is found, increase the frequency of testing until the problem is corrected. Whenever fish are sick, test the water quality often. Ammonia is responsible for more unexplained losses in koi keeping than any other water quality parameter. As previously mentioned, it is colorless and odorless, so the only way to know if it is present is to test for it. It is the responsibility of the hobbyist to test the water quality, which is very likely to be the underlying problem.



### Interpreting the Ammonia Test

In healthy ponds and Q-tanks, ammonia levels should always be zero. Presence of ammonia is an indication that the system is out of balance. Therefore, *any* ammonia in a pond or tank should alert to start corrective measures. Un-ionized ammonia (UIA) is about 100 times more toxic to fish than ionized ammonia. This UIA toxicity begins as low as 0.05 mg/L, so the result of the TAN test needs to be further calculated to find the actual concentration of UIA. To do this calculation, the temperature and pH need to be measured. Once the pH and temperature are known, the fraction of UIA can be calculated using a multiplication factor found in Table 1. Find the temperature on the top row of the table, and the pH in the left column. The number at which the appropriate column and row intersect in the table is multiplied by the TAN to give the UIA in mg/L (ppm). This calculation is summarized in Figure 2 and an example is given in Figure 3. Anytime the UIA is higher than 0.05 mg/L, the fish are being damaged. As the concentration rises above 0.05 mg/L, it causes more and more damage. At 2.0 mg/L, the fish will die. Again, *any* ammonia indicates a problem in your system. If you find it, take corrective measures immediately.



### Management of Ammonia Problems

The first thing to do when ammonia is present in a pond or tank is to reduce or eliminate feeding. Fish are not likely to eat during periods of ammonia stress and the uneaten feed will only make the situation worse. Overfeeding is a major cause of high ammonia concentrations, and stopping the feeding will allow the natural nitrogen cycle to "catch up" with the nutrient load. If at all possible, a 25% to 50% water change will help to remove some of the ammonia. Low levels of dissolved oxygen limit the ability of nitrifying bacteria to convert ammonia and nitrite, so it is important to monitor dissolved oxygen. It is best to establish and maintain a healthy biofilter. Some chemicals used to treat diseases in fish, especially antibiotics, can be detrimental to the nitrifying bacteria in the biofilter. Both ammonia and nitrite levels should be tested more frequently after applying a disease treatment, to ensure that the biofilter is still functioning properly.

### Summary

Ammonia is the major waste product of koi along with the breakdown of feed and other organics. It can accumulate in your pond, where it will, at the very least, decrease your fish health. It is frequently a stressor that leads to disease, and in other cases it kills fish directly. The only way to detect its presence is to test for it. A koi keeper should invest in a good water quality test kit, learn how it works, and use it regularly. Ammonia test kits only measure the total ammonia nitrogen (TAN). When this test indicates a reading above zero, koi hobby-

(Continued on page 6)



# Atlanta Koi Club

## Meeting Minutes – October 10, 2010

Officers Present: Mike Roach, Gary Lee, Bill Fricke, Vicki Knill ,JoANN Elmore

### OLD BUSINESS:

- Discussed and decided to delay the By-Laws revision until a future date.
- Reviewed show results.

### NEW BUSINESS:

- The future direction of the Club was discussed. The Statement of Purpose, ways to increase membership and involvement were areas of discussion.

### GENERAL MEMBERSHIP:

- The By-Laws will be revisited at a future meeting as the Elections for President, Secretary and Equipment Manager need to take place at this meeting.
- Nominations for Clay Melancon – President, Gary Elmore – Equipment Manager and JoANN Elmore Secretary were accepted as presented and majority vote for all.
- The ongoing vitality of the Club and ways to increase membership was presented as a point of discussion. Although many ideas surfaced and were bantered about, nothing was determined to be worth follow up.
- Thank you to Mike Roach for his service as President of the Atlanta Koi Club.

Respectfully submitted,  
JoANN Elmore - Scribe

*(Continued from page 5)*

ists can determine the fraction of toxic un-ionized ammonia (UIA) after measuring pH and temperature. When ammonia is present, the fish in the system should not be fed until the problem is corrected. Water change will help dilute the toxins. Test for ammonia regularly and take corrective measures as soon as you detect it. Severe problems may occur when tests are not performed frequently enough. Once fish have started to die, it is difficult to correct an ammonia problem without losing more fish.

If you have questions give me a call.

Joe



**Remember this activity?**

**Perhaps we should find another one  
like it to do...**

**Any ideas????**





The financial report which usually appears in this space will<sup>7</sup> be in the January Newsletter. The statement from the bank had not arrived at press time.

# It's time for the winter social !!!

Who: The whole club. Everybody. All of us. The bunch.

What: Our annual winter social — PARTY TIME!!!!

Where: At Bob & Sue Chaffer's home

When: Sunday, November 14, 2010 @ 1:30 p.m.

So, what do I bring: GOODIES! Bring casseroles, go-with dishes, salads and desserts. Please remember... we do need REAL food— lighten-up on the sweets!!

Our hosts will furnish the main course, all the utensils & plates/flatware etc., bread and drinks.





## Meet the New Prez *Clay Melancon* !

I would like to take a moment to introduce myself to all of our club members and tell you a little bit about myself.

First, there's this misconception about how to pronounce my last name. It's spelled **Melancon** — but it's pronounced **Mel aw saw** (French). Usually I just answer to **Clay**. My wife Julie and I have been active members of AKC since 2006. We have always kept aquarium fish, and started keeping koi and goldfish several years ago. We thoroughly enjoy the hobby.

Our pond is a formal design done in a Mediterianian style. It has raised stucco walls with brick and stone caps. There is actually two ponds, the smaller Goldfish pond flowing into the larger Koi pond through a two tiered waterfall system with decks on two sides, one deck is raised with a table and chairs for entertaining guests. Sounds big, but it was built with Goldfish in mind, so it's only 2500 gallons between the two ponds. We do have plans, (my wife does, anyway), to make The pond bigger and deeper, (never ending love affair with Koi I suppose). Maybe next year....

We are also members of ***Georgia Historical Artifacts and Research Group (GHARG)***. We research, locate and help preserve significantly historical sites in Georgia through archeological digs or private collecting. We document all finds and display them at living history events or reenactments. Our club was very instrumental in preserving the recently purchased six hundred acre Nash Farm Battlefield in Henry County.

Julie and I live in Hapeville Georgia, near the airport. I have been employed at Delta Air Lines for over thirty years. I grew up in Georgia. Julie was born in Miami, Florida and moved to Georgia when she was a teenager.

It is an honor be nominated and chosen as your President. Hopefully, I can fill the shoes of our former presidents and help our club flourish. With your input and help, I am sure that I can. I look forward serving as Atlanta Koi Club President.





The October meeting was at the David's and we had 35 members present along with two guests. We did have a quorum so elections were held for President, Secretary, and Equipment Manger. Congratulations to our new officers.

The November meeting is our "winter" social and will be held at the home of a new couple to our club, the Chaffer's. I hope you will be attending the November social — it is the last meeting for the club until the New Year.

Happy Holidays!

### MEMBERSHIP APPLICATION ATLANTA KOI CLUB

"Dedicated to Sharing the Joy of Keeping Koi"

www.AtlantaKoiClub.org



Date: \_\_\_\_\_ Check No.: \_\_\_\_\_ Check Amount: \_\_\_\_\_

Type of Membership: Household: \$50 for 1 Yr. \_\_\_\_\_; \$90 for 2 Yrs. \_\_\_\_\_  
(Check One) Individual: \$30 for 1 Yr. \_\_\_\_\_; \$54 for 2 Yrs. \_\_\_\_\_  
Sponsor: \$150 for 1 Yr. \_\_\_\_\_

Other: KOI USA Magazine Subscription: \$20 for 1 Yr. \_\_\_\_\_  
\*Name Badges: \$5 each. \_\_\_\_\_

Names: \_\_\_\_\_ & \_\_\_\_\_  
First Last First Last

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Best Phone: \_\_\_\_\_ Best Email: \_\_\_\_\_

AKC is a volunteer organization. We need as much help and support as you can provide, no matter how insignificant. In which of the following areas can you help?

Host Meeting \_\_\_\_, Pond Tour \_\_\_\_, Auction \_\_\_\_, Koi Show \_\_\_\_, Hold Office \_\_\_\_, Flower Show \_\_\_\_

To save money, we provide our newsletter in color via email several days earlier than mailed copies.

Would you like to receive your newsletter via email? Yes or No.

We try to publish a membership roster annually. It is given only to club members and AKCA, the Associated Koi Clubs of America. May we publish your address, phone number and email? Yes or No.

Make checks payable to **Atlanta Koi Club** and submit with application to:

\* Please consider buying **Name Badges**. For only \$5, you will get to know and be known by everyone and also receive a free raffle ticket every time you wear your badge to a Club Meeting.

**Bring Lawn  
Chairs**



**DEDICATED TO SHARING THE JOY OF KEEPING KOI.**