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April, 2016

By the Pond

by Diane Giangrande

Hi All,

I heard I missed a good meeting last month. Thanks to Jerry for taking over while I was relaxing on the beach in Naples, FL. Thanks also to Michael Anderson for doing a presentation on PP and to Atlanta Water Gardens for allowing us to have our meeting at their facility.

The club had a great turn out at the Central Florida Koi Show in Orlando last month. There were 10 of us there – Melanie Onushko, Jerry Johnson, Gary and JoAnn Elmore, Marty Davison, Dave Gill, James Story, Tim and Cherisa Lawson and myself. Gary and JoAnn won Adult Champion, Most Unique and a bunch of smaller awards. Dave Gill won Baby Grand Champion Goldfish and 2nd in size 2 Oranda. Melanie won 2nd in size 1 doitsu and 1st in size 2 tancho and I won 1st and 3rd in size 3 Sanke. Everyone had a great time and as Gary pointed out – the AKC were the last ones standing at 3:00 AM on Saturday night after we ran out of adult beverages.

Jerry and I spoke to a lot of vendors about our show and had a good amount of interest. There was a new food we learned about in Orlando – Nijikawa. We spoke, at length, to a rep from California and several of us left knowing we were going to try the food. Since returning from Florida I learned that The Koi Store is the Georgia rep for Nijikawa which is great news for the club. The Koi Store will ship the food for free to AKC members. This newsletter contains a very informative article on koi nutrition written by Shane of The Koi Store.

The auction is this month and it's going to be great. As of now Gary says we are out of tanks. There are going to be some amazing fish this year and will hopefully be our most profitable auction ever. Remember – if you are bringing fish to the auction stop feeding a week before. We still need some help and there is still time to sign up - here is the Sign Up Genius link: <http://www.signupgenius.com/go/9040a48afae22a75-2016>

There is no regular meeting this month because of the auction.

Hope to see everyone at the auction.

Diane

Central Florida Koi Show in Orlando



Here is the real Gary!!!

You read all the literature on how many gallons per fish do you need for optimal growth . Answers range from 50 to 1,000 gallons per fish. What if I said you could raise large koi in 8 gallons per fish? Can't be done.....well not supposed to be possible anyway.

Went on the strangest rescue yesterday. First rescue I had to take an elevator to get to. 15th floor of a downtown office building. Owner told me he had about 6 fish from 12-18 long in a tank in his office. I take a smaller aquarium net and one tote, threw a second tote just for the heck of it. Imagine my surprise when I turn the corner into his office and there in a 70gal aquarium are not 6 but 9 fish from 8-22" long. I have never seen so many big fish in 70 gal. Now here is the kicker- he grew them in that aquarium. He bought these online at about 4-6 inches apiece. Now that works out to slightly less than 8 gal a fish.....impossible growing conditions.

Think about all nine of the fish in the pictures in a 70 gal tank. How did he do it? He kept great water and fed them well. There were two canister filters, a 40 watt UV set up and two spray bars for a return. Probably had a turnover rate of about 10. He also used some high quality food.

Good thing I took an extra tote, would never have gotten those fish In one bag. Bottom line is that whenever you get into a discussion about what gallonage you need to have, just remember it is not how many gallons you have but how the water is kept. Good thing this pond owner didn't know he could not do this , might have gotten in his way.....

Gary Elmore

MEMBERSHIP Melanie Onushko

We would like to welcome Dan Russler and Harlan Hampton to the club! Please look for them at the next meeting or auction and welcome them to the group.

We currently have 101 members. Keep those renewals coming in. We are only missing a few of you. You can pay on Paypal at atlantakoiclub.org or send a check made out to Atlanta Koi Club. To: Melanie Onushko/520 Fawn Run/Alpharetta, GA 30005 \$40 for individuals \$60 for couples.

POND TOUR

We have had to cancel the Pond Tour for 2016.

Ideally, we would have 10 homes in an area that could be driven to in an hour and a half. We have 3.

I appreciate those of you who volunteered your ponds and I know that you will be anxious to be on the tour next year. We have a great starting point for next year!

Melanie



The Atlanta Koi Club
"Dedicated to Sharing the Joy of Keeping Koi"

2016 Annual Koi Auction Registration Form

Sellers Name: _____
Address: _____
City, State: _____ Zip: _____ - _____
Home Phone: _____ Cell Phone: _____

Koi in Auction Total: _____
Goldfish in Auction Total: _____
Total number of fish: _____

Number of Tanks requested: _____
Number of Tanks: _____

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Goldfish in Auction Total: _____
Total number of fish: _____

Number of Tanks requested: _____
Number of Tanks: _____

During an auction, there comes a time where the auctioneer will start selling more than one fish at a time. Until that time, fish will be sold one at a time. Auctioneer will start selling fish in pairs or more at the beginning of a set of rounds.

Are you only selling small fish and wish the auctioneer to sell fish in pairs or more? _____

Do you require Friday drop-off of Koi? (available 5PM-7PM if needed) _____

If possible, do you require club assistance in catching and transporting fish? _____

Will you be selling plants/equipment/both? _____ Do you require tubs for water plants? _____

Owners must certify that the fish they are selling have not been exposed to the Koi Herpes Virus and are not knowingly carriers of KHV. Fish should be healthy and not actively showing signs of illness or disease. Any fish brought to the auction in less than healthy condition may be rejected and owners will be required to take the fish home at the auction chairperson's discretion.

Auction Rules

Who Can Sell?

The auction is open to active members who wish to cull their ponds: either individual members or household memberships. There is a limit of one seller per household. Active members are classified as those who attend 5 or more meetings in a year or have volunteered for 3 or more Club events within the past year. Members who meet combinations of these requirements will also be classified as active per the Membership and Auction Chairs' discretion. Membership must be current and the Membership Chair will determine eligibility of members who wish to participate. Members who do not meet the above requirements will be considered non-active. Non-active members will be able to auction fish at a reduced percentage. Non-members will not be able to have fish auctioned or sold.

Percentage of Sales

All sales are divided into the following classifications. Active members will receive 75% of any sale with 25% of any sale going to the club. Non-active members will receive 50% of any sale with 50% of any sale going to the club. Active members who need assistance from the club catching and transporting fish will be required to use the 50/50 split classification. Non-active members who need assistance from the club catching and transporting fish will be required to use a 25/75 classification. 25% of any sale will go to the member and 75% will go to the club. All sales are final, no refunds are available.

It's once again time for the largest koi auctions in the State of Georgia! I think it's the only one so I am Pretty sure it's the largest.....

This year the selection being auctioned is one of the largest and certainly the highest quality of any auction in the last 10 years that I know about. There will be show quality down to pond grade so there will be a fish to fit any ones budget.

As always we will need all hands on deck to pull this off. This year Bill is having to run shorthanded so we will have to do all the Setup and Takedown our selves. Thursday's set will require at least two strong backs to make this possible. I can no longer physically do the tank setup[without some help.....I will be there and will help as much as I can Same on Saturday afternoon.

This is the most profitable event we have for the year. it is also THE most fun . So bring some money , help out, have fun.....and met your next great fish , at a Bargain!

You can start bringing fish at Noon on Friday and I will be there until that evening around 6...if you need to give me a call at 404-532-5301 and I will stay later. If you have not saved a tank to sell fish with by now , then the best I can do at the moment is to put you on a waiting list and see how it all comes together. Should be able to accommodate 1 or 2 more. DO NOT bring fish that have sores, bent backs, or strange bulges. They will have to be removed before the auction. do not feed for the week before the auction.

Any questions or concerns you can call or shoot me an email at gelmore54@live.com See ya on Saturday'

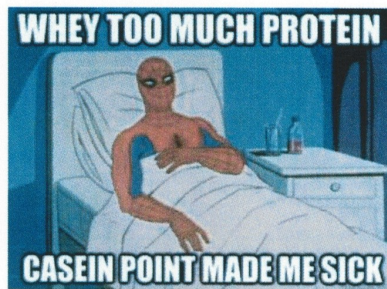
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Gary

Koi Nutrition Demystified

by The Shane
Director of Sales & Marketing
The Koi Store

"That food has too much protein... doesn't it?" What nutritional values does your koi require to remain healthy? Through much research we have determined what every koi hobbyist needs to know about the nutrition of their koi food.



Nutritional Chart
(How to keep your koi healthy)

Koi Diet	Protein	Fat	Carb	Fiber
Fry	50-55%	5-10%	< 10%	< 10%
1-3 year old	35-45%	5-10%	< 10%	< 10%
3+	25-30%	5-10%	< 10%	< 10%

Crude Protein.

When dealing with koi food, most companies list "Minimum Crude Protein" and very rarely discuss how much comes from good protein sources (aquaculture proteins) and how much comes from not so good protein sources (carbohydrate sources, etc.). In fact, the crude protein percentage is usually higher than the protein that is bioavailable to the koi. I suggest feeding at the top end of the percentage or maybe even a little higher. Koivet.com about protein percent states, "I don't know that feeding MORE than that is a 'Bad Thing' because fish will simply pass what they don't digest."

Where does the protein come from?

This is a very important question. As I stated before, not all of the protein in a koi food is readily digestible by your koi. Therefore, it is important to know where the protein is coming from! Koivet.com says, "... if you find food with FISH MEAL as the first ingredient and THEN wheat germ meal or similar, they are using the plant ingredient for protein AND energy, letting the fishmeal carry the bulk of the protein requirement, which is as it should be."

A couple of side notes...

Rancid fish food can kill fish faster than most disease. Take the extra effort to make sure you are feeding fresh food by:

- buying smaller quantities. (Don't buy 5 years worth of food because it is on sale!)
- freezing what you don't need. (Vacuum seal and freeze extra food.)
- protecting your food from moisture. (Store food in a dry/waterproof container)

Pellet size matters. A common misconception is that bigger fish need bigger pellets. THIS IS NOT TRUE! Small pellets are easier for the koi to ingest and digest. Larger the pellet sizes increase the risk of intestinal impactions.

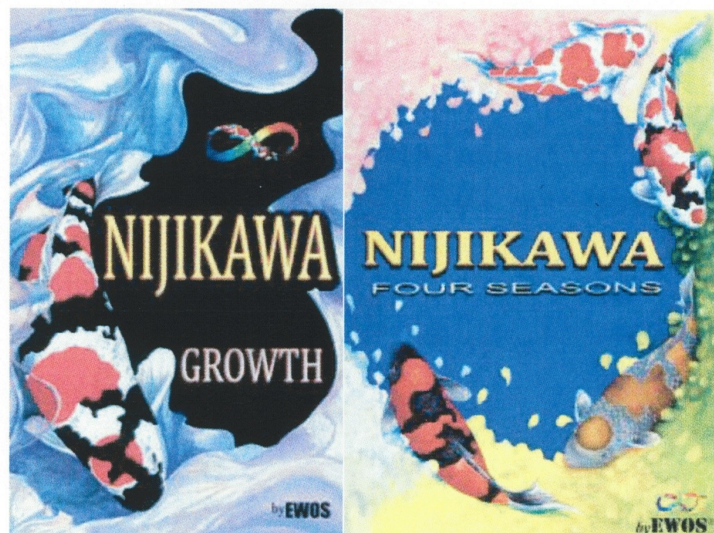
Protein requirements decrease with koi age.

Koi require linolenic and linoleic fatty acids. These fatty acids are found in fish oils. Make sure you food has fish oils!

Carp in the wild require between 10-40% fat, but in captivity that number greatly reduces to 5-10%.

Looking for food?

[Check out our article on why we switched to Nijikawa!](#)



Members of the Atlanta Koi Club receive free shipping on select Nijikawa feed. Just email sales@thekoistore.com with your order (Do not place order through website).

March 20 Meeting

March's meeting was held at Atlanta Water Gardens on March 20th, and was attended by 41 members. Our very own Mike Anderson touched bases on the use of potassium permanganate to enhance water quality. There was a lot of interest shown, with several questions and answers (and opinions) discussed. A copy of Mike's presentation follows on the next page.



PP for the Pond

What is PP? Potassium permanganate (PP) is an inorganic chemical compound with the chemical formula $KMnO_4$. It is a salt consisting of potassium and manganese. PP is typically sold as powder that is purple in color. PP is a strong oxidizer, thus should be kept separated from oxidizable substances such as skin, paper, and clothing. Do not allow PP to get into your eyes or other sensitive areas as it will oxidize/burn organic materials. PP can rapidly stain virtually any organic material such as skin, paper, and clothing. One of the by products of PP oxidizing organic material is the creation of dark brown manganese dioxide.

What is the Main Use for Koi Ponds? Due to the strong oxidizing effects of PP, it (like chlorine) can be used to kill living organic matter in the water column. Remember that PP molecules can not be trained. They oxidize any organic material they contact. PP does not know or care if the organic matter is a lump of algae, a koi parasite, koi gill lamella, the bacteria in the pond filter or your eyeball. Too little PP is always better than too much! You can not un-burn what PP just fried.

How do I Know the Right PP Dose? Same as if you want to know how fast your are driving, you use a meter. "That sounds technical and expensive. Can't I just calculate the amount of grams of PP I need based on the water volume of my pond." (Said in very best whining voice.).

You *can* do anything you like. What we *should* do is to act based on facts and observed measurements. Trying to do calculated measurements has many fundamental problems: folks do not accurately know the water volume of the pond system, many folks do not have an accurate digital scale to measure PP in grams, there is no way to accurately calculate the existing pond condition, the impact of X grams of PP, and how long the effect will last in their pond.

Measuring the Pond Cleanliness: ORP is one more those three letter acronyms (TLAs) you get to learn when you read books and magazine about nishikigoi keeping. Simply put, ORP is an indication of how free the water is from organic pollution. In general, cleaner, less polluted, water is better for our nishikigoi. Cleaner water means our nishikigoi can spend their energy on growth and skin quality. They will not have to spend energy trying to overcome poor water conditions.

OK, so how do we measure ORP? An ORP uses a special probe in the water to measure how easy it would be to move electrons in the water. The cleaner the water, the easier it is to move electrons through the water. This is why we measure ORP in millivolts.

Personally I use an ORP meter that I can calibrate. I follow the manufacturer's instructions on how to clean the probe and calibrate the meter. I definitely clean and recalibrate before any chemical treatment such as the use of potassium permanganate. I want to know the impact of the dose, not just the theoretical calculated impact. Neither the nishikigoi nor I like surprises when it comes to pond chemistry.

What are ORP Ranges? What was meant by saying an ORP can be too high? Can the water be too clean? Simple answer. ... yep. Water can indeed be too clean or oxidative for our fish. In our pond we are NOT trying to create sterile water. Sterile water means no filter bacteria no algae ... and no fish. Bad karma. Bad joss. No thanks.

- Here are some ORP ranges you might see in a nishikigoi pond and what they may indicate:

<120mv: The water is very polluted .•• The pond filtration and aeration has not kept up with the organic load.

120mv-200mv: The water is polluted. The pond filtration and aeration are struggling to keep up with the organic load.

200-300mv: The water is relative clean. The pond filtration and aeration are keeping up with the organic load.

300-400mv: The water is extremely clean. The pond filtration and aeration are more than keeping up with the load. This should be the target range for all nishikigoi ponds.

400-500mv: This range may be too oxidative for long range good nishikigoi health. May indicate presence of a chemical oxidizer such as potassium permanganate, chlorine, or ozone.

500-550mv: Very oxidative water suitable for killing parasites. Exposure should not be longer than 8 hours.

550-650mv: Too oxidative for nishikigoi long term or short term.

650-700mv: In this range bacteria are killed within a few seconds and the water is considered sterile enough to be potable. This is the range the World Health Organization recommends when sterilizing water with oxidation chemicals like chlorine.

There are many practical uses of ORP for the average nishikigoi hobbyists.

Checking Filtration: Measure the ORP of a stable pond system. This will tell you how well the pond's filtration and aeration are handling the load. Expand the filtration and aeration as needed. You can monitor the ORP over time to see if there is any indication that with a growing load (Le., larger fish, more fish) the pond system is nearing its current limits.

Measuring Pond Treatments: You can ORP reading to help you perform a pond treatment for parasites with an oxidizer such potassium permanganate. Slowly add the chemical and constantly monitor the ORP levels using a calibrated meter. Bring the ORP level to the target level for the target duration.

Checking Dechlorination: Chlorine is one of the most potent oxidizer chemicals available. That is why it is used by government agencies to provide potable water to your home. As koi keeper we do not want the chlorinated water (ORP typically around 650mv) to drive up the pond's ORP. We can use the ORP readings to add enough dechlorinating chemical, such as sodium thiosulphate, to just offset the impact of the chlorine. Ideally when all the new water has been added, the ORP is the same, or only slightly higher, than before the new water was added.

Summary: PP, like chlorine and ozone, is a very powerful chemical that can be used to oxidize organic matter in the pond system. The uses can be from a simple cleanup after a storm has put debris into the pond, or the fall leaves have overtaken the pond's capacity. And of course PP can be used to treat for some koi parasites. But for most parasites, there are less hazardous treatment protocols compared to using PP. But that, as they say, is another kettle of fish for another time.

Atlanta Koi Club

20 MAR 2016 – Atlanta Water Gardens – Atlanta, GA

Topic: Potassium Permanganate - $KMnO_4$

Attendance: 41

Monthly Officer Meeting Minutes

Executive Officers:

Office	Name	Term	Present
President	Diane Giangrande	2015-2016	
Vice-president	Jerry Johnson	2016-2017	x
Secretary	David Pugh	2015-2016	x
Treasurer	Ron Scott	2016-2017	x
Equipment Manager	Gary Elmore	2016-2017	x

2016 Budget

The executive board approved the 2016 budget.

Koi and Goldfish Show

Planning continues watch the newsletter and check out the website for details as they unfold.

Updated Website

The club website is under construction.

Other Meeting Minutes

Auction Update - April 16 @ Coastal Pond bidding starts at 11:00 am

Gary Elmore provided the club members present with an update. 33 tanks have been reserved. Volunteers can sign up through signup genius or just show up that Saturday.

Central Florida Koi Show

The club was well represented at the Central Florida Koi Show and several returned with trophies.

Introductions (New or Returning Members)

Dan Russler and Harlan Hampton recently joined the club, welcome.

In Memoriam

None

Updates/Corrections

Please send corrections or updates to David Pugh at doubledavid@aol.com with "AKC Meeting Minutes" in the subject line.

No corrections were identified in last month's minutes.