

President: Chad Bishop pres@atlantakoiclub.org Vice-Prescient: Kevin McDonough vp@atlantakoiclub.org Secretary: Cheryl Jacobs scribe@atlantakoiclub.org Treasurer: Angle Jones money@atlantakoiclub.org Equipment Manager: Alan Puch stuff@atlantakoiclub.org Membership Melanie Onushko membership@atlantakoiclub.org Auction Chairs: Alan Puch stuff@atlantakoiclub.org Diane Giangrande koishow@atlantakoiclub.org Koi Show Chairs: Diane Giangrande koishow@atlantakoiclub.org; Chad Bishop pres@atlantakoiclub.org Pond Tour Chairperson: Melanie Onushko tour@atlantakoiclub.org Public Relations Chair: Cheryl Jacobs pr@atlantakoiclub.org AKCA Director: (vacant) Volunteer Coordinator: (vacant) editor@atlantakoiclub.org Newsletter Editor: Bob Chaffer Webmaster: Diane Giangrande wizard@atlantakoiclub.org

April, May 2020

By the Pond

Hello fellow AKC mask-wearing, fish-lovers,

Like so many of you, the last two months have been an unmistakable challenge, affecting all aspects of our lives personally and professionally.

Some of you tried desperately and are still trying at all costs to keep your families, friends and yourself safe...and some are of you are trying to keep your businesses...in business.

"The Times They Are a-Changin". And our focus will be to change as needed with our primary focus to make proper decisions for the safety and well-being of the AKC, its members and beyond.

We're working on some upcoming zoom meetings and if you want to help by speaking or showing off your pond, whether through upgrades, modifications or just want to show off your koi, please let me know. Thanks to a few of our AKC members, we're moving in this direction. Some of you have the "gift of gab" and some are just plain smart as heck. Please help by volunteering to speak at meeting...even if you trail off talking about yourself and how awesome you are...just bring it back to the Koi topic as quickly as possible. If you're interested, please email me personally.

A special thank you to Carl and Vicki of The Koi Store - Carl and Vicki have been strong supporters of our AKC. Their volunteer efforts have made possible three meetings this year alone! Please reach out to them if you need beautiful Koi or supplies. We were at The Koi Store just a few weeks ago and the number of beautiful fish is just fantastic.

Another special "thank you" to Diane and John Tigue for hosting our March meeting. We really appreciate this!

Another special shout-out goes to Angie Jones (our AKC Treasurer) and Sue Chaffer, who stepped up during these dire times and tirelessly made an untold number of face masks for hospitals and children's hospitals. Thank you all, from all of us! And for any of you who have, even in a small way, made the life of even one person better or safer, thank you!

(Giving all of you a an elbow bump and virtual hug)

Lastly, if you haven't already, consider helping your local small businesses. Some urgently need our help now, and into the future.

Stay safe, healthy and be mindful of your water quality :) Best wishes, Kevin McDonough *Your* AKC VP

Remember.....Koi Auction June 6!!!

Did you know that we have a FaceBook page?

Our Atlanta Koi Club has a FaceBook page. Quite a few members are using it, and it's a great way to show off your pond and to get answers to questions. Anyone can be a member of our FaceBook page. To be accepted, you have to answer the 3 questions, one of which is you agree not to advertise on our page. Only our sponsors can advertise, and that's a perk we offer them. Angle is managing the page. She will send non-sponsor advertisers a private note, telling them they can't advertise, or to just delete the post.

Please remember our Sponsors:

Randy's Perennials, Splendor Koi and Pond, Koi Koi Pondscapes, Coastal Pond Supply, T&T Uniforms, and The Koi Store



www.TandTuniforms.com





2

As I am sure you know, the auction was moved to June 6th.

Hopefully we will be off lock down by then. The Sign Up Genius has been updated. If you signed up to volunteer in April, you are still in that slot for June. If you can't do that job, please log in to the Sign Up Genius and remove yourself ASAP. We need more people to sign up to pull this off please. Here is a link: <u>https://</u> www.signupgenius.com/go/4090445a5a629abf49-2020

If you signed up for a tank or tanks to sell fish, you need to do so again. Please click on the following link and complete and submit the Seller Registration Form: <u>https://form.jotform.com/70255302898157</u> The limit is 2 tanks per person. Please reply to this email if you would like more than 2 tanks - we will keep a list and let you know the week of the auction if we are able to accommodate your request. The link can also be found on the auction page of the web site. Again, you need to sign up again for a tank(s).

If you are bringing plants and/or equipment to sell, please make sure all items are marked with your name, item description and price. In addition, please submit a master list (name, description and price) of what you are selling to the cashiers so they can keep track of the items.

Any questions, please reply to this email.

Thanks, Diane & Alan

For Sale by Member

GC Tek Zapp Pure ZP-20 UV - \$300

Needs new bulb (\$199.99), ballast (\$169.95) and maybe quartz sleve (\$144.95)- retails for \$1,559.95. Replace part costs are from GC Tek - you can get less expensive parts online.

Specs as follows: High Intensity-70,000 microwatt output. 316 Stainless Steel- not 304 like most stainless units. Longlife Electronic Ballasts. Optional GFIC protector. Long 12' cord or longer by special order. 2" inlet/outlet. 4" Diameter keeps the water close to the lamp for maximum kill in a single pass. 4" Diameter vessel is the perfect size for no restriction flow. Quartz Sleeve LeakTite fitting is all stainless, including the lock down nut - not troublesome plastic like some units. Lamp changing is easy - takes only minutes. Adjustable pressure switch equipped for automatic easy on/off as flow demands. If your pump fails this unit shuts off so you don't cook it. Pressure switch bypass button equipped for easy testing of lamp and ballast. Can be mounted horizontal or vertical. Polished inside and out for maximum effect- some stainless steel UV's are polished only on the outside. ZAPP 20.....43 in. tall....for ponds up to 20,000 gal. with optimum flow rate of 6000 gph. Draws only 86 watts. (If you buy it, contact Bob Chaffer, who might be able to advise on costs for repair parts.) Contact Diane Giangrande @ dianewg@aol.com

KOIUSA magazine has ceased operations

From Michael Anderson:

It is my understanding that KOIUSA Inc. has ceased its operations and will no longer publish the KOIUSA magazine. It is indeed sad news for the koi keeping hobby.

"FOR RELEASE 5/3/2020

Dear KOIUSA Advertiser and Consumer:

As the last Chairman of KOIUSA, Inc. I am incredibly sad to inform our loyal and long-time advertisers that we have been forced to shut down our operations.

One issue shy of 45 full years, we have published our last and final issue (44.5 Mar/Apr 2020). May the hobby long remember how much KOI USA and its advertisers have contributed to supporting the AKCA and all the koi hobbyists throughout the US and Canada!

You were invoiced for issue 44.6 (May/Jun 2020) in full expectations that we would continue publishing. Unfortunately, we can no longer continue to fund our magazine's operations.

Therefore, we are cancelling all open invoices for issue 44.6 (May/Jun 2020) and reimbursing advertisers who have already paid their invoices in expectations of continued operations.

Reimbursement checks for those advertisers will be forthcoming from the AKCA.

FYI: Since 2008, we have been slowly but gradually losing both advertising and subscription revenue. We have tried cutting back on operating and publishing costs and increasing advertising costs as well as subscription costs. That has barely sufficed to keep our heads above water – until now.

As compared to the May/Jun 2019 issue, three full or part-time advertisers (that advertised in this month's issue last year) have reduced their ad sizes to reduce costs.

Furthermore, as compared to the May/Jun 2019 issue, eight full or part-time advertisers (that advertised in this issue last year) no longer signed up to advertise in KOIUSA.

Additionally, we have several advertisers who have not paid their outstanding invoices for advertisements in prior issues and/or for 2019/2020 Dealer Listings. No names here.

I am sure that cash flow matters to our advertisers; but it matters to us, too. Enough on that, for now.

I am positive that Covid-19 has helped break the back of not only KOISUA but that of some of our advertisers, too -- and that it has damaged the koi hobby in general.

May we all just hang in there, remain safe and eventually come back stronger than ever.

In closing, the Board of Directors of KOIUSA, Inc. wishes to thank you and your company for all the support you have shown us through the years.

Don Chandler

Chair, KOIUSA, Inc."

For Sale by Member





I'll bet you don't know what this is! (It's sort of related to fish) (Answer on page 12)

Parts Per What?

By Norm Meck KOI Organisation Interntional

(PPM), Parts per Thousand (PPT), and Percent volume of our water to the weight of our water. concentrations of stuff. What is really being I prefer to work in metric units for this task betalked about? They all refer to exactly the same thing since 1 Percent is 1 Part per Hundred, which is 10 Parts per Thousand, which is 10,000 Parts Per Million. Similarly, 1 Part per Million is 0.001 Parts per Thousand or 0.0001 Percent (or Parts per Hundred). One just selects the units to make it easier to write down the value. Technically, these measures of concentration have to do with the amounts of the two substances being mixed together based on their relative molecular weights. We can usually get by with just using the weights of each substance that we determine by using a scale or balance beam. So for our definition, One Part per Million is One WEIGHT measure of the first substance mixed with enough of a second substance to give a total of one million WEIGHT measures. The important part of this definition is that the weight measures must be of the same type. For example if we add one Pound of salt to 99 pounds of water we would end up with 100 pounds of a mixture that has concentrations of 1 percent (1 part per hundred) salt and 99 percent (99 parts per hundred) water. The concentrations would be the same if we mixed one gram of salt with 99 grams of water, or one ounce of salt to 99 ounces of water, or one ton of salt to 99 tons of water. But NOT one POUND of salt to 99 GALLONS of water. Gallons are not a unit of weight and the resulting mixtures units grams. So one gram of a substance in one US are meaningless.

Note that we will usually just mix one part of the first substance with 1000 parts of the second substance and call it a one Part per Thousand concentration although it truly is one part per this small amount of error is not important. We are normally concerned with mixing something with water to obtain a given concentration and we normally don't measure the amount of our water by weight. Here is where problems often

We hear a lot of talk about Parts per Million arise, we have to make a conversion from the cause it makes the math much easier. In metric units, 1 cubic centimeter (cc) of water is one milliliter (ml) and weighs one gram. This makes things work out nicely in that 1 gram of a substance mixed with 1 liter (1000 grams) of water is 1 part per thousand or 1000 parts per million. For some reason, in US units, one fluid ounce of water weighs 1.0425 ounces (avoirdupois). Therefore, in US units, to get our 1 part per thousand mixture, we would have to use 0.03336 ounces of the substance in a quart of water (32 fluid ounces, which is 33.36 ounces by weight). A US Gallon of water weighs 8.33 pounds. If we would add 8.33 pounds of a substance to 1000 gallons of water we would have a 1 part per thousand mixture.

> To confuse the whole thing even more, the British use the Imperial gallon, which is 1.2 US gallons and therefore weighs 10 pounds (maybe they used some logic in this selection). We would have to add 10 pounds of a substance to 10000 Imperial gallons to achieve the 1 part per thousand mixture. Don't ask why, just go metric. It is suggested that as you read through the calculations below, that you do the computations yourself to make sure you understand where each number comes from (and why). Let's take a look at an example: A US gallon of water is 3.79 liters and therefore weighs 3790 gallon of water will produce a concentration of 1/3790=0.000264 or 264 parts per million. Or one gram in 100 US gallons will give a concentration of 2.64 parts per million.

If we have a 5000 gallon pond (50 hundred thousand-and-one parts. For our applications, gallons) and desire a 2.0 PPM concentration (of Potassium Permanganate perhaps), we should add 2/2.64 = 0.76 grams per hundred gallons or $50 \ge 0.76 = 38$ grams for our 5000 gallon pond. That one wasn't too bad, let's try another one: Another number of interest is that

one hundred US gallons of water weighs 833 pounds. If we add one pound of a substance to that, we end up with a concentration of 1/833 = 0.0012. This is the same as 0.12 percent, 1.2 parts per thousand, or 1200 parts per million. Knowing this relationship makes it easy to calculate how much salt to add to our 5000 pond for a given concentration. Assuming we want to make an initial dosage of salt at a 3 part per thousand (0.3%) concentration. 3/1.2= 2.5 pounds per hundred gallons. We should add 2.5 x 50 or 125 total pounds of salt. What if we measure the salinity of our pond and find that it is 1.0 PPT (0.10%) and we want to increase it to 3 Parts per Thousand? Since we need to increase the concentration by 3.0-1.0=2.0 PPT, we should add 2/1.2=1.67 pounds of salt per hundred gallons or 83.5 pounds to our 5000 gallon pond. Here is an example where interpretation problems can occur:

We are told that a 25 PPM dosage of Formalin is appropriate for handling most parasites. (Formalin is a mixture that consists of 37% Formaldehyde, 10% Methanol, and 53% water). The Formaldehyde is the active ingredient so the question must be asked what the dosage refers to. Does it mean 25 ppm of Formaldehyde or does it mean 25 ppm of Formalin? Since the Formalin is 37% Formaldehyde, a 25 ppm Formalin concentration is a 25 * 0.37 = 9.25 ppm Formaldehyde concentration. We are also told that we should dose at 1 milliliter (ML) of Formalin per 10 gallons of water. This makes it easy, we just have to add 500 ML of Formalin to our 5000 gallon pond. Let's check to see what this dosage really gives us. If we assume that the Formalin mixture weighs about the same as pure water, 1 milliliter would weigh 1 gram and 10 gallons of water weighs 37900 grams so the dosage level would be about 1/37900 = 26 PPM (of Formalin). Obviously, it was intended that the dosage refered to the Formalin mixture, not the actual Formaldehyde concentration (9.75 ppm). If we dosed at a 25 PPM of Formaldehyde, we would be at about 2 1/2 times the recommended dosage and probably be killing our fish (as well as the parasites). Some products come pre-mixed at various

concentrations. It is important to read the label carefully to determine how much to actually use. Suppose we have a bottle of Malachite Green solution. The manufacturer recommends a dosage of 1 teaspoon (5 milliliters) per 100 gallons.

The next time, we didn't get the same product, we got pure, dry Malachite Green instead. We want to dose at the same level as the liquid product we had been using so we find the old empty bottle and it states that it is contained 1% Malachite Green. Each 5 milliliters of the solution would have weighed approximately 5 grams, so we must have been dosing with 5/100 = 0.05 grams of Malachite Green per 100 gallons. This means we should use $0.05 \ge 50 = 2.5$ grams of the pure, dry Malachite Green as the proper pond dosage. Note that since 100 gallons of water weighs 379,000 grams, the actual dosage for both cases was 0.05/379000 =0.13 Parts per Million. In any of these computations it is necessary to know the amount of water in your pond as accurately as possible. I consider it a good idea to compute the amount of a substance to add to your pond to give a one Part per Million concentration and a one Part per Thousand concentration. Double and triple check your math, then write these numbers down and save them to help make your treatments easy in the future. Be sure and measure your dosages as accurately as possible (and don't forget to use the proper units). Here is a set of numbers that might make your computations easier: 1 Part per Million = 0.379 grams per 100 US Gallons = 1 gram per 1000 liters. 1 Part per Thousand = 0.833 pounds per 100 US Gallons = 1 gram per liter. 1 Part per Hundred (1%) = 1.33ounces (avoirdupois) per US Gallon = 10 grams per liter. My large pond is 8500 gallons (including the water in the filter system). For a 1 PPM dosage, I would use 32.2 grams; and for a 1 PPT dosage, 70.8 pounds. Check my math to see if you agree.

March's meeting at Diane and John Tigue's house

March came in as a lamb, at least at Diane and John Tigue's house in a rural setting. The weather was great, and so was the food. Carl Forss demonstrated the proper method to net and handle fish. Coincidentally, his trailer was also there (he constructed the pond), and he offered an inventory of oxygen tanks, boxes, and bags, and other good stuff. If you didn't make the trip, you really missed an exciting day!



CFKS in Orlando that show how well our club members did. They done good!

23rd Central Florida Koi Show

March 13-15, 2020 Avanti Palms,Orlando Florida



Grand Champion **Reserve Grand Champion** Sakura Champion Tsubaki Champion **Botan Champion** Mature Champion **Adult Champion** Young Champion **Baby Champion** Best Male Koi Most Unique Koi Jumbo Award **AKJA Judges Award** Novice Award Koi Show Chairman Award Atlanta Koi Club Friendship Award Florida East Coast Friendship **Gainesville Pond Hoppers Friendship** Greater Louisville Koi Society Koiphen Friendship Award BEST IN SIZE

Margy & Jim McManus - Showa - Over 28" Michael & Bonnie Glefke - Showa - Over 28" Henry Culpepper - Kawarigoi-S - Over 28" Chad Bishop - Hikari Moyo-T - Over 28" Katie & Alice VanLennep - OtherUtsuri B(HI/KI) - 24-28" Henry Culpepper - Kohaku - Over 28" Chad Bishop - Sanke - 20-24" Chad Bishop - Shiro Utsuri - 16-20" Joel Stoyer - Kohaku - 8-12" Al Blanco - Sanke - 24-28" Stephen & Sharon Spanik - Hikari Moyo-T - 24-28" Henry Culpepper - Showa - Over 28" Margy & Jim McManus - Kohaku - 24-28" Jason Gonzalez - Kawarigoi-S - Under 8" Daniel Chamyszak - Hikari Muji-B - 20-24" Gary Lai - Doitsu-T - 16-20" Chad Bishop - Hikari Moyo-T - 24-28" Kyle Brech - Koromo/Gos-S - Under 8" Daniel Chamyszak - Hikari Muji-B - 8-12" Stephen & Sharon Spanik - Hikari Moyo-T - 24-28"

| BEST IN VARIETY | Size 1 Under 8" | Size 2 8-12" | Size 3 12-16" | Size 4 16-20" | Size 5 20-24" | Size 6 24-28" | Size 7 Over 28" |
|---------------------------------------|---------------------------------------------------|----------------------------|--------------------------|--------------------------------------|-----------------------------------|----------------------------------|----------------------|
| Hikari Movo-T M Yen 16-20" | 1st B&A Albright 2nd M McMahon 3rd H Carter | C Bishop S&S Spanik | J Stoyer B&C Young | R &H Forbiss A Valdez | M Glefke A Valdez B&C Young | C Bishop S&S Spanik | C Bishop |
| Hikari Utsuri-T C Bishop 20-24* | 1st S&S Spanik 2nd M McMahon 3rd | C Bishop | G&J Elmore S&S Spanik | | | | |
| Doitsu-T R Fischer 24-28" | 1st 2nd 3rd | B&C Young R Cross | | S Voje M Glefke G Lai | M McMahon B&C Young | | |
| Asaøi/Shusni-R M Glefke 24-28" | 1st Tiller 2nd 3rd | S Stone | C Bishop | S Childers M Onushko S Sargent | G&J Elmore | R &H Forbiss | K&A VanLenne |
| Hikari Muii-B R Fischer 24-28" | 1st M McMahon 2nd 3rd | D Chamyszak D Chamyszak | | R & L Porter | B&S Bailey D Chamyszak | M Glefke C Bishop M Guerra | J Stoyer M Glefke |
| OtherUtsuri B&C Young | 1st 2nd | | S&S Spanik | | M Guerra | K&A VanLenne | |
| 20-24* | 3rd | | | | | | |
| Rekko-R C Bishop 20-24* | 1st S Stone 2nd 3rd | | | S Stone | | | |
| Longfin B&A Albright 12-16* | 1st 2nd 3rd | | F Santos R Cross | | | | |

| : | Size 1 Under 8" S Stone Sanke | 8-12" L G&J Elmore J Jo | 2-16" 16 rdan S St | -20" 20 one GL | ize 5 0-24'' ai H ohaku | Culpepper K&A | e 7 r 28" VanLenne mono-S |
|--------------------------------------|-------------------------------------|---------------------------------------------------------------------|---------------------------------------|-----------------------------------------|--------------------------------------|-----------------------------------------|------------------------------------------|
| BEST IN VARIETY | Size 1 Under 8" | Size 2 8-12" | Size 3 12-16" | Size 4 16-20" | Size 5 20-24" | Size 6 24-28" | Size 7 Over 28" |
| Kohaku M & J McManus 24-28° | 1stS Stone 2ndJ&S White 3rd | M McMahon S&S Spanik | S&S Spanik S Stone K&A VanLenne | K Brech S Stone | L Barrosso S Stone | M Guerra S Childers | |
| Sanke L Barrosso 20-24* | 1st 2nd 3rd | S Stone | R & L Porter S Stone | S Stone R & L Porter R & L Porter | | A Blanco G Lai A Blanco | |
| Showa M Glefke 24-28" | 1stS Barry 2nd 3rd | N Nguyen S Barry K&A VanLenne | S Stone S&S Spanik S Childers | S Childers | H Culpepper B&C Young A Blanco | H Culpepper M & J McManus S Stone | M & J McManus M Glefke H Culpepper |
| Shiro Utsuri A Blanco 24-28" | 1st 2nd 3rd | G&J Elmore D Giangrande | | | B&C Young | | |
| Koromo/Gos-S B&C Young 12-16* | 1st K Brech 2nd J&S White 3rd | C Bishop G Lai M McMahon | S Sargent | M Guerra R Fischer | B&C Young | | |
| Kawarisoi-S S Voje 20-24" | 1stJ Gonzalez 2nd 3rd | B&C Young B&A Albright B&C Young | M Glefke S Stone K&A VanLenne | A Valdez A Valdez R &H Forbiss | J Stoyer M Guerra | B&S Bailey | H Culpepper |
| Muiimono-S R Fischer 20-24* | 1stD Giangrande 2nd 3rd | J&S White D Chamyszak J&S White | | B&S Bailey | M McMahon M McMahon R Fischer | | |
| Gin Rin "A"-S B&C Young 20-24" | 1stB&A Albrigh 2nd 3rd | t G&J Elmore M Glefke | J Stoyer | S Voje K&A VanLenne A Valdez | J Stoyer e | | |
| Gin Rin "B"-S G Lai Over 28" | 1st 2nd 3rd | B&C Young | | A Valdez M Glefke K&A VanLenne | J Stoyer M Glefke | L Barrosso M Guerra B&C Young | |
| Tancho-T G Lai 20-24* | 1st 2nd 3rd | A Blanco | M Glefke | S Stone | | | |

Monthly Officer Meeting Minutes

Executive Officers:

| Office | Officer Name | Term | Present |
|-------------------|-----------------|---------------------|---------|
| President | Chad Bishop | Jan 2019 - Dec 2020 | Y |
| Vice President | Kevin McDonough | Jan 2020 - Dec 2021 | Y |
| Secretary | Cheryl Jacobs | Jan 2019 - Dec 2020 | Y |
| Treasurer | Angie Jones | Jan 2020 - Dec 2021 | Y |
| Equipment Manager | Alan Puch | Jan 2019 - Dec 2020 | Y |

Executive Team Discussion Items:

| Accultive Teum Discussion Items. | |
|--------------------------------------------------------------------|--|
| AKC Auction | |
| Consider moving out to a different date due to change in show date | |
| AKC Show | |
| March discussions no longer valid as show has been moved to Oct | |
| Possible food truck in lieu of club selling food and beverage | |
| KOI USA | |
| Renew membership | |
| Trailer | |
| Renew tag | |
| | |
| | |

Particularly for those in Greater Atlanta: **Ammonia** is produced primarily by your fish processing their food It is eliminated primarily by the good bacteria lovingly known as your biofilter. That bacteria in Greater Atlanta may not be healthy if your pond lacks a necessary component of the bacteria's diet - carbonate. AKA Baking Soda. Other parts of the country may have this problem also, but the lack of carbonate in Greater Atlanta's waters is a very serious problem for successful pond health. Your KH (Carbonate Hardness) needs to be maintained at a safe level - say 8 drops or 120ppm - so that the good bacteria can keep the deadly ammonia levels down at a safe level. PM me for more info if needed. Bill Dowden (also posted on club's Facebook)

My test kit had no instructions for measuring KH..... Michael explains it all here:

Michael Anderson When the water changes to bright yellow you know that you have reached the level of the pond water KH. Each drop equal 1 degree on the German hardness scale or 17.9 parts per million (ppm). So you would want to color change after you have put in at least 5 drops. Most of us in this area have very soft water in our supply from the city or county. So you could have tap water that changes with the first or second drop of solution. If so, definitely time to build up the KH. "Directions for Testing Carbonate Hardness (KH): Rinse a clean test tube with water to be tested.

Fill the test tube with 5 ml of aquarium water (to the line on the test tube).

Add Carbonate Hardness Test Solution, one drop at a time, holding dropper bottle upside down in a completely vertical position to assure uniformity of drops. After first drop is added, solution will turn blue. If the water sample contains only 1°dKH, the solution will turn from clear to its yellow endpoint after the first drop is added.

Cap the test tube and invert several times after each drop. Keep count of the drops being added. Do not hold finger over open end of the tube, as this may affect the test results.

The test is completed when the water in the test tube, after having been shaken, turns from blue to yellow. If you have difficulty discerning the color after the first drop of test solution is added, remove the cap from the test tube and while holding it over a white background, look down through the tube.

The Carbonate Hardness value is determined by the number of drops of the reagent that must be added to turn the water in the test tube bright yellow. Each drop is equal to 1 °dKH or 17.9 ppm KH,

Atlanta Koi Club Financial Statement

As of March 31, 2020

| DECIMN | NC CHECK | | | arch 31, 2020 | |
|---------------|---------------------|--------------|--------------------|---------------|---------------------------|
| | ING CHECKI | VG ACC | COUNT | | |
| <u>BALANC</u> | | \$15,371.46 | | | |
| INCOME | STATEMEN | Т | | | |
| Incom | ie | | | | |
| | 2700 M | embershi | р | | |
| | | 272 | 20 Name Badg | ge | \$8.00 |
| | | | | | |
| | | 273 | 30 Dues Koi USA | | \$72.00 |
| | | | | | |
| | | 273 | 35 Subscriptio | n | \$0.00 |
| | | 274 | 45 Sponsorshi | ps | \$0.00 |
| | Total Income | | | | \$80.00 |
| | | | | | |
| Expense | es | | | | |
| | 500 Ka | oi Show E | Expenese | | |
| | | | Show | | |
| | | 5 | 10 Awards | | \$1,648.81 |
| | 700 M | iscellaneo | ous Expenses | | |
| | | | Monthly | | |
| | | | Club Meet- | | |
| | | | 40 ings | | \$300.00 |
| | 1100 Re | ent | | | |
| | | | Monthly | - 1 | * 4 • * • • |
| | | | 01 Rent | Feb. | \$185.00 |
| | Total Expenses | | | | \$2,133.81 |
| | | | | | |
| Month Net | Income/(Loss) | | | | (\$2,053.81) |
| | | | | | |
| | CHECKING A | <u>ACCOU</u> | <u>NT BAL-</u> | | |
| <u>ANCE:</u> | | | | | \$13,317.65 |
| | | | | | |
| PETTY C | CASH: | | | | |
| | | | | | 00.02 |
| Beginning | g Balance: | | | | \$0.00 |
| Income: | | | | | |
| | 2500 Miscellane | ous Incor | me | | |
| | | | Raffle - | | |
| | | | Monthly | | |
| | | 2545 | Meeting | January | \$94.00 |
| | | | Raffle - | | |
| | | | Monthly | | |
| | | 2545 | Meeting | February | \$42.00 |
| | Total Income: | | | | \$136.00 |
| Expenses: | | | | | \$0.00 |
| Expenses. | T 1 T | | | | |
| | | | | | \$0.00 |
| | Total Expenses: | | | | • • • • |
| | Total Expenses: | | | | |
| Ending B | - | | | | \$136.00 |

Atlanta Koi Club **Financial Statement** As of April 30, 2020 **BEGINNING CHECKING ACCOUNT BAL-**ANCE: \$13,317.65 **INCOME STATEMENT** Income \$0.00 **Total Income Expenses** 1100 Rent Monthly 1101 Rent Feb. \$185.00 \$185.00 **Total Expenses** Month Net Income/(Loss) (\$185.00) **ENDING CHECKING ACCOUNT BAL-**ANCE: \$13,132.65 **PETTY CASH: Beginning Balance:** \$0.00 Income: 2500 Miscellaneous Income Raffle -Monthly 2545 Meeting January \$94.00 Raffle -Monthly 2545 February \$42.00 Meeting \$136.00 Total Income: \$0.00

Expenses:

Total Expenses:

Ending Balance:

\$136.00

\$0.00

Answer to page-5's quiz: It's a "Grunting stick". It is used to draw worms to the surface. The rattle sound of the stick scares the worms into thinking that a mole is nearby (moles eat worms), and they escape to the surface. The worms are then used for fishing. See...it's "related" to fish. Got any interesting photos or stories to share? Send them to editor@Atlantakoiclub.org. Ps: By the way...the stick didn't work very well!