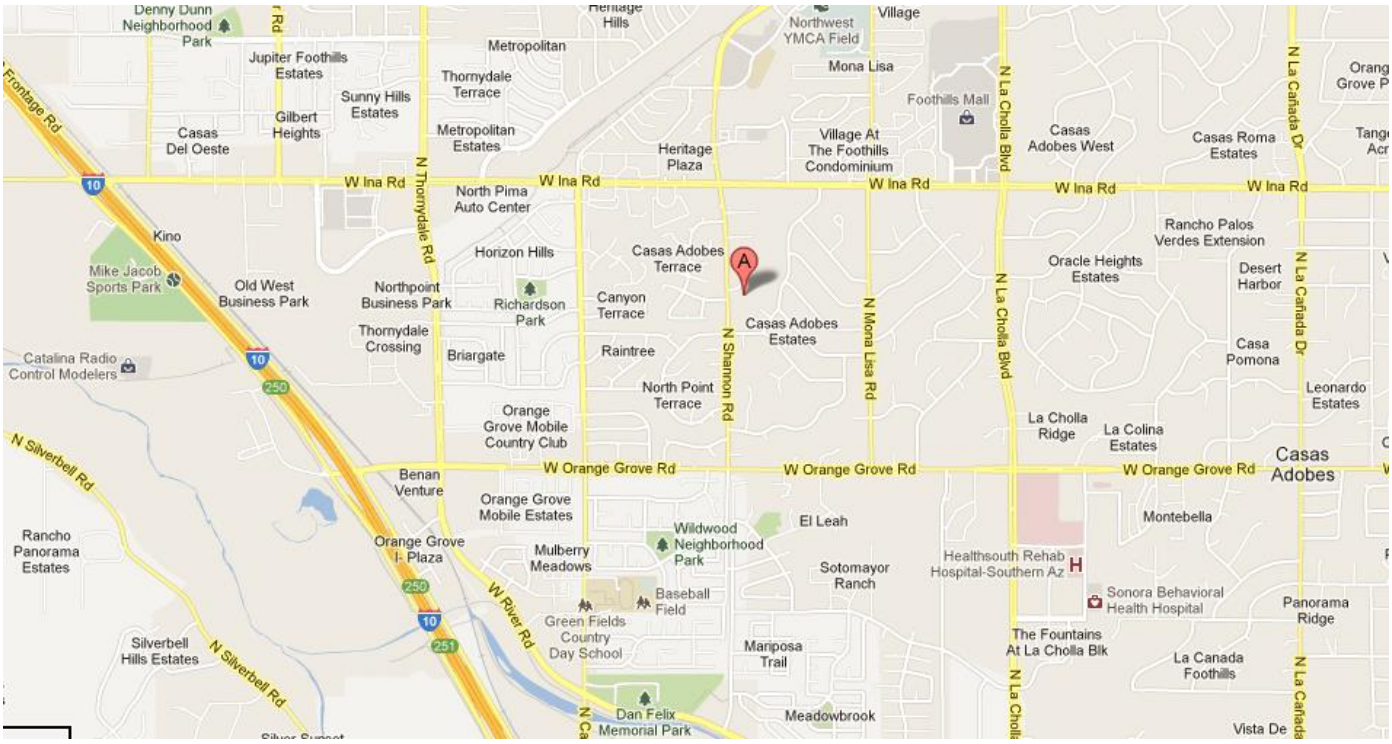

Dan and Martha Cover

2841 W Puccini

Meeting begins at 3:00, May 26, 2013

From I-10, east on Ina, South on Shannon, West on Puccini to address.

Starts at 3:00

Please let Brent know if you are interested in hosting a meeting.

SAKA, Inc Club Officers

President	Bob Panter sakabob@cox.net (520) 747-7278
Vice President	David Young koiman@mindspring.com (520) 403-2949
Secretary	Karen Johnson (520) 400-2073
Treasurer	Dan and Martha Cover mardan79@msn.com (520) 297-4071

Committees/Points of Contact

2013 Pond Tour	

33rd Koi Show Co-Chairperson(s)	Brent VanKoevering bvankoevering@longrealty.com (520) 780-3980
AKCA Representative	Debby Young debbyt@akca.org (520) 682-7697
Newsletter Editor	Brent VanKoevering bvankoevering@longrealty.com (520) 780-3980
Koi Health Advisor	Noel Shaw koidoc@noelshawdc.com (520) 400-0335
Membership Chairperson	Faye Hall (520) 297-1253
Education Committee	TBD

Editor's Note: Articles published herein are intended for the enjoyment of all and come from a variety of sources. The articles are not intended to replace veterinary advice. Pond owners, and not the club, are responsible for the health of their koi, water changes, what to do, and how to treat their pond. Reasonable effort is made to review these articles for accuracy before including them in the newsletter.

SAKA, Inc 10% Discount

With your SAKA, Inc Membership Card at:

Boyd Equipment Center
3625 S Country Club Road
Tucson, AZ
(520) 792-2244 or
1 (800) 844-2244

Mountain View Koi Fish & Aquatic Plants
3828 E. Keeling Road
Hereford, AZ 85615
(520) 378-3710

Oasis Tropical Fish
3865 N. Oracle
Tucson, AZ
(520) 408-9700

Patty's Water Plants
By Appt Only
E. Benson Highway, Tucson AZ
(520) 294-0748

Club Meetings

Hosting Meetings: For those wishing to host an upcoming business/education meeting, the club will reimburse the host up to $50 (with receipts) toward food/beverage for the meeting. **We would like to see your pond!** Please contact Bob Panter or Brent VanKoevering if you are interested in hosting a meeting.

Club Announcements

Business Meeting Minutes

Koi Meeting Minutes April 27, 2013

Bob Panter called meeting to order.
Correspondence: None
Treasurers' Report: Total in checking: $13,643.66
Savings: $5,200.00
Committee Reports: AKCA: Nominations for Koi Person of the Year, Mike Herndon, Jim Daunheimer, and Dave Young.
Nominations closed and the vote was cast for Jim Daunheimer for Koi Person of the Year.

AKCA called and contacted this club. No news, but they did make contact.
Membership Committee: 29 members
We need name tags.
Old Business: Pamphlets Done
Volunteers to set up holders and maintain as needed.
Call Deb Young to get more.
New Business: Martha Cover asked how do we get guest speakers?
Carol Herndon suggested the club put up a facebook page for the club. Dan Cover said he would do it.
Mrs. Everett Kult donated pumps and other items to the club.
Motion to adjourn, seconded, moved.

Featured Articles

GREEN WATER AND STRING ALGAE

Green water and string algae are different forms of algae. Both can cause considerable problems for ponds throughout the year. Green water differs from string algae in that it cannot be physically removed from the pond; whereas string algae is stringy or hair like, and can be physically removed.

What Causes Green Water?

Green water is caused by the presence of millions of microscopic algae particles, each consisting of one cell. This algae occurs naturally in almost all bodies of water, and can be a problem in ponds during the spring and summer months. In order to grow, algae requires light and nutrients. An excess of either can result in heavy growth and very green water. The nutrients required for algae to grow are normally nitrate and phosphate. Green water is normally worse during summer months when days are longer, temperatures are warmer, and light is stronger. These factors greatly increase the rate at which green water can occur.

What Causes String Algae?

String algae occur naturally in almost all bodies of water and is encouraged to grow by the presence of phosphate, nitrate and sunlight. Phosphate is a vital component of fish foods and therefore enters the water through uneaten food and fish waste. Nitrate is produced as the end product of the biological filtration and through the natural breakdown of organic matter in the pond. Nutrient concentrations tend to build up in the pond over time particularly in the summer when the fish are more active and being well fed. The increased sunlight plus these increased nutrient levels dramatically accelerate the growth of string algae with some species being capable of doubling its weight each day or two.

Steps for Avoiding Green Water and String Algae Problems

There are a number of pond management techniques that can be called upon to help reduce the growth of algae:

- First, you should feed your fish only high quality fish food. Poor quality diets are not well digested by the fish, resulting in excess waste being produced that contribute greatly to a high nutrient load into the pond. This excess of nutrients will stimulate an increased growth of both types of algae.

- Adding plants to the pond can also help limit the growth of algae, since aquatic plants compete with the algae for the nutrients in the pond water. Water lilies in particular are great for this purpose, since their leaves help cover the ponds surface and shut out much of the sunlight required to stimulate the growth of algae.
- Keep the pond bottom clean and clear of sediment. Decaying of this sediment increases the nutrient load for stimulating the growth of algae.

Controlling Green Water

The most effective way to control green water is the addition of ultraviolet lights (U.V. lights) to the pond water circulation system. These devices work by irradiating the pond water that flows through them with ultraviolet light. This ultraviolet light kills green water algae, allowing it to clump together, so that it can be separated from pond water by a filter. This is an excellent method of keeping a pond free from green water year around. It is important to size the ultraviolet light correctly, as its effectiveness depends on the contact time between the light and the water passing through. In general, an ultraviolet light should support a flow rate that allows the pond total water volume to pass through the light every hour. U.V. bulbs should be replaced approximately once per year in order to keep the unit working effectively. The quartz sleeve containing the bulb should be checked and cleaned periodically. If it gets dirty it will cut down on the amount of ultraviolet light reaching the water.

There are other means of removing green water if you do not have an ultraviolet light. These methods are more temporary. There are many products on the market for adding to pond water to remove green water algae. One I will mention is called AlgaeFix. This product when added, as directed to your pond water, causes the green water algae to clump, so it can be filtered out with a pond filter, or can be skimmed off the water surface with a skimmer net.

The addition of aquatic plants to compete with the algae for nutrients, and to shade the pond to deprive algae of essential light are two natural means of reducing the green water effect. A large water change will remove green water temporarily; however it returns rather rapidly.

Controlling String Algae.

The most effective way of removing string algae is by mechanical means; however this method is distasteful to most people. Again, there are numerous products on the market that will kill string algae. AlgaeFix does a very effective job of killing string algae and eliminating green water when used as directed. After the string algae is killed, you will need to remove the floating dead algae from the pond. Numerous plants in the pond will reduce algae by competing for nourishment from pond water. The addition of shade to the pond will decrease the growth of string algae, since it deprives it of needed sunlight in order to thrive.

Don Harrawood

POND TREATMENTS (not for food fish)
Noel L. Shaw, KHA October 2012

NOTES: 1) Use the following treatments with caution and discretion. Do not allow dust or fumes from these chemicals to get near your mouth, your eyes, or anything else, such as your pets or children. They are generally safe for koi when used at the recommended dosage schedules. Avoid direct contact of fish with treatment chemicals.
2) Know your pond volume. Calculate volume with salt method (see "POND TREATMENT BASICS". Measure doses carefully. More is not better. These treatments WILL consume available oxygen. They may kill weak fish. They may disable a weak bioconverter (BC) / filter.
3) ALWAYS: • Disperse treatment chemicals as evenly as possible; pre-dissolve and add slowly to a return water stream.
• Maximize aeration and circulation to the pond (waterfall, air stones, extra pump, etc.) during treatments.
• Bypass BC / filtration where noted. Flush BC thoroughly to waste before start up if BC is off line for more than a few hours.
• Be prepared in advance (with dechlorinator, etc.) to perform massive water changes after treatment as directed.
• Treatment efficiency is maximized in clean water: Clean pond well with initial 30 - 50% water change (dechlor except with PP)

SODIUM THIOSULFATE
This solution neutralizes chlorine in any new water added to your pond. Dose only for the amount of new water, not the total pond volume.
In clean gallon jug, add one pound of Sodium Thiosulfate to a half gallon of water. Shake until dissolved. Add water to make a full gallon, shake again.
Dosage: 10 ml / 100 gallons new water. 1250 gallons- ½ cup. 2500 gal = 1 cup solution. etc.

SALT / SODIUM CHLORIDE - INDICATION: soothes new fish, helps maintain osmotic balance, control string algae, reduce nitrite toxicity. MAY control SOME parasites and protozoa. SAFE FOR BC. CAUTION: Salt is a cheap old school remedy that many people indiscriminately throw at pond problems as a safe first line of defense. Salt has become increasingly less reliable. It is not effective against crustacea, and salt resistant strains of protozoans and flukes have developed. Nonetheless, it does have significant benefits in certain circumstances. BEST BET – Scrape and scope FIRST to diagnose for parasites – if you end up with other treatments anyway, you may need to water change down to .1% salt to avoid oxygen starvation.
EFFECTIVE DOSE: a constant 1 ppt (.1%) helps with string algae, helps healthy koi maintain osmotic balance, is safe for almost all plants.
2 ppt (.2%) generally controls string algae, but may slightly brown the tips of pond plants. Eases osmotic balance in sick fish.
3 ppt (.3%) for two weeks clears some protozoans and flukes. Don't count on it. String algae becomes mush and falls apart, so filter will need frequent attention. Reduces nitrite toxicity.
6 ppt (.6%) for two weeks clears most protozoans and some flukes. MOST PLANTS WILL DIE.
10 lb "SOLAR" salt per 1000 gallons yields a .12% (1.2 ppt) solution. 25 lbs of salt per 1000 gal yields .3% or 3ppt. Add over two days. In sudden fish mortality, add .3% all at once (but not directly through filter or BC). Maintain .3% for two weeks, then allow salt levels to fall with regular water changes.

DIMILIN / TRICHLORFON / ORGANOPHOSPHATES (hereafter "TRICHLORFON") – INDICATION: Crustacea (anchor worms, fish lice), some flukes. SAFE FOR BC. TRICHLORFON is an organophosphate arthropod development inhibitor. TRICHLORFON stops the life cycle of Anchor Worm (Lernea) and Fish Lice (Argulus) by inhibiting molting and growth. TRICHLORFON is toxic to unintentional chitin shelled invertebrate targets as well (crayfish, water fleas, dragonflies, etc.); do not let treated water run into rivers or creek beds. Use responsibly. Trichlorfon (and its analogs) are available in several formulations: Neguvon [Miles or Bayer]; Dipterrex [Bayer]; Masoten [Miles or Bayer]; Dylox [Bayer]
EFFECTIVE DOSAGE: .25ppm (point 25 ppm)
1 gram (1/2 teaspoon) per 1,000 gallons. Dissolve in some warm water, and sprinkle the suspension over the surface of the pond. For QT's and small ponds, dissolve 1 gram (1/2 tsp) in 100 cc water. Use 10 cc (2 tsp) of the suspension per 100 gallons, and discard the rest. Apply weekly for four weeks. Repeat at 30 day intervals for season-long control.

CHLORAMINE-T - INDICATION: Bacterial gill disease, bacterial infection, flukes. LETHAL TO BC FILTER BACTERIA.

EFFECTIVE DOSAGE: varies with the pH of the system. Dosage increases with pH; 20ppm (eighty grams per 1000 gallons of water – roughly eight tablespoons) at a pH of 8.0 (most Tucson water). Repeat every other day for four treatments. 25-30% water change after 4 hours. Dechlorinate for entire pond volume after each treatment (sodium thiosulfate). 1000 gal = 80g. 3000 gal = 240g (1/2 lb)

WHEN USING FORMALIN (ProForm C or Rid-Ich) OR POTASSIUM PERMANGANATE AGAINST PARASITE OR FUNGAL INFECTIONS, MULTIPLE TREATMENTS ARE REQUIRED, AT INTERVALS BASED ON THE LENGTH OF THE PARASITE LIFE CYCLE, WHICH IS DEPENDENT ON WATER TEMPERATURE.

- < 60° F, repeat every third day for 4 total treatments.
- Above 65 ° F, repeat every other day for 4 total treatments.
- 25-30% water change after every other treatment

FORMALIN / MALACHITE GREEN (F/MG) –"PRO-FORM C" &/or "RID-ICH" INDICATION: Flukes, protozoa, fungi, some bacteria; disinfect new plants
SAFE FOR BC AT 25ppm. Toxic to fish under 45˚ F.
EFFECTIVE DOSAGE RANGE: 15 - 25ppm
Proprietary formalin / malachite green products (Pro-Form C, Rid-Ich) recommend a dose rate of 10 ml per 100 gal that only yields 15 ppm of formalin. I adjust the manufacturer's dosage rate to achieve 25 ppm of formalin. Use a correction factor of 1.66 (25 ppm divided by 15 ppm) to yield 25 ppm with these products: 16.6 ml per 100 gallons. That is 166 ml (2/3 cup) per 1000 gallons of pond to achieve 25 ppm of formalin. (*16.6* ml per 100 gal X *10* hundred gal). A 2000 gallon pond would dose at about 330 ml, or 1 1/3 cups of F/MG. 250 ml is about a cup.
DISINFECT NEW PLANTS - 125 ppm (5 ml (1 tsp) per 10 gallons) for 8 hours. NOT to be used for fish at this dosage, but used to disinfect plants.

POTASSIUM PERMANGANATE (PP, KMnO4) - INDICATION: Flukes, protozoa, fungi, sometimes helps bacterial infections. Have 3% drugstore hydrogen peroxide or sodium thiosulfate (chlorine neutralizer as well) on hand as an antidote. LETHAL TO BIOCONVERTER FILTER BACTERIA. You MUST bypass your BC to use permanganate at these dose levels. Potassium permanganate, a dark purple-grey granular powder, becomes vivid purple in water, stains skin dark brown for a couple of days, and clothing permanently.
EFFECTIVE DOSAGE: 2.5 ppm to 4ppm.
1 tsp (6g) per 600 gal doses a pond at between 2.6 and 4 ppm (depending on your teaspoon – some hold 8g- both ends of the range are OK).
INSTRUCTIONS:
1) bypass BC (bioconverter), maintain full aeration and circulation
2) pre-dissolve permanganate crystals (1 gram of per 100 gallons of pond = 2.6 ppm ≈ 1 tsp per 600 gal) and disperse mix evenly around pond.
3) Goal is pink for 4 hours. If turns tan in less than two hours, add ½ more of 1st dose quantity. May repeat this additional ½ dose a second time if necessary, for a total of double the initial dose. When pond water viewed in a white cup appears tan, NOT pink, resume BC filtration. Always restart BC with a flush to waste.
• IF WATER TURNS TO "CHOCOLATE MILK", FISH ARE GASPING, OR ACCIDENTALLY OVERDOSED, IMMEDIATELY ADD 16 oz OF HYDROGEN PEROXIDE (drugstore variety) PER 1000 GAL TO NEUTRALIZE THE PERMANGANATE, THEN PERFORM A 30-50% WATER CHANGE.
Time to "tan water" becomes longer with each treatment. After 4th treatment, neutralize residual Permanganate with Peroxide, 1 cup per 1000 gallons.

2012 SAKA Koi Show Vendors

Mountain View Koi Fish
3828 Keeling Rd
Hereford, AZ 85615
520-3678-1271

GoldFishNet.com
水 晶 宮
Tommy Hui
A's Aquarium

ULTRA BALANCE
PREMIUM KOI FOOD
KOI FOOD

Desert Rainbow
Koi Farm

Laurel Nason

Kawarigoi Korner

SAKA has the Emergency Supply Stations - Praziquantel, Dimilin, Potassium Permanganate, Sodium Thiosulfate, ProForm C. Parasites begin to revive from the cold much sooner than the Koi. The Koi's immune system is at its weakest right now and until the water temperatures hit 60F. Watch your fish for signs of distress. Do not start feeding until the water is above 55F and will continue to increase in temperature, at this point feed a wheat germ feed or Cheerios.

Click Here to see new items for sale on the SAKA Website.

If you have suggestions for the newsletter or items to be included in Karawagoi Corner or the Calendar, Please contact Brent VanKoevering at 520.780.3980 or bvankoevering@longrealty.com.

Upcoming SAKA Education and Business Meetings

Date	Location
May 26	Dan and Martha Cover
June 23	
July 28	Curt and Lisa Ogren. Mountain View Koi
August 25	Michael and Carol Herndon
September 22	
October 27	
November	No Meeting. See you at the show
December	

Shows, Pond Tours and Seminars

Event	Dates/Location/Links
Tucson Japanese Garden Opens	http://tucsoncitizen.com/community/2013/01/14/lovely-new-japanese-garden-to-open-in-tucson-on-january-19/

Mail for KOI USA Subscription to
P.O. Box 469070
Escondido, CA 92046
Or
Subscribe on-line at
subscribe@koiusa.com
Or
Subscribe by phone at
1-888-660-2073

For 1 year subscription (6 issues)
____ $24.95US for any person in US or Canada
____ $20.00US special price for AKCA Koi Club members

Club affiliation (for special price)
_____

Subscribers' name _____

Subscribers mailing address
_____

City, State, Zip
_____

Phone number
_____

Method of payment

___ Check made out to "KOI USA"

___ Visa or Master card

_____

Expiration date ___ ____-____ _____
Month year

http://www.sakoia.org
Annual Membership
Dues are $30.00 per family from March 1 to February 28 or 29 of the next year.

Membership Type
_____ Renewal
_____ New Member

Name: _____

Address: _____

City: _____

State: _____

Zip: _____

Phone #: _____

E-mail _____

Today's Date: _____

# of Koi _____

Years Keeping Koi: _____

Pond size: _____

Would you like to host a meeting?
_____

Would you like to serve on a committee?

_____ If yes which one?

_____

Make Checks payable to: SAKA, Inc.

Mail to: Martha and Dan Cover
2841 W. Puccini Place
Tucson, AZ 85741