

The Inland Koi Connection



THE OFFICIAL
NEWSLETTER
OF IKS
ISSUE 246
AUGUST
2017

Summer Schedule ~ 3-6 pm

A large, vibrant photograph of several koi fish swimming in a pond. The fish are in various colors, including orange, white, and red. The water is dark, and the background is slightly blurred.

Catered ~ so
RSVP required
call Peggy at
951.780.7395 by 8/21

Sunday
August 27
Pot Luck Meeting
3:00 - 6:00 pm

Our Hosts~
Mark & Carrina Corser
3851 Ashwood Circle
Corona 92881
cell 951.741.0389



The IKS Board meets monthly, generally on Wednesday evening following the Sunday regular meeting. The meeting begins at 7:00pm and is open to any interested members.

The July 26 meeting was held at Marie Callendar's, Corona; Larry & Tom Wright were excused.

- **A turnout of 56** at the Milfelds' included several neighbors drawn in by the signs. Four EZ-ups extended the patio and shade and all tried to crowd under because of the heat. Jeff Fleischer, AKCA Chairman, came with four pre-filters to illustrate his talk; offered one for a quick auction, asking proceeds to go to KHV research, but no one wanted/needed the tank. Spike had lots of news from K.O.I. to share.

- **Confirmed** end of year meetings:

- **August 27** at **Mark Corser's in Corona**, catered BBQ. The sign-ups at July meeting brought count to 52; deadline will be 8/21. Summer schedule, 3-6 PM. Mark will provide tables and chairs, too. Board agreed to have someone at the gate callbox from 2:45 on, to check people in and open the gate, instead of trying to send a temporary code to everyone the day before. Mark arranged for the pond builder, Russell Peters, Peters and Sons Koi, to be our speaker; need Nick's projector and a big screen. Mark specified no alcohol, and no smoking at his home (on artificial turf).

- **Sept. 24 Field Trip to Barstow Koi**; arrangements by T. Wright. Rob ordered bus thru JC Tours, formerly Able Charter; seats 49. Voted to charge \$15 per person for the bus, continental breakfast, and box lunches, to be paid in advance, not at the door day of the trip. Jeanne & Theo will arrange the breakfast; Rob & Deanna will order the lunches; club will provide the usual beverages. We'll meet bus at Marrins' business parking lot, 6531 Box Springs Blvd., Rvsd 92507, time to be set, but the bus will not wait for late people to get there.

- **Oct. 29** at the **Zoetemelks' in Norco**; they had a family conflict with regular 10/22 date, so Board agreed to move it to 10/29, a week later.

- **Nov. 19** return to **Malls' in Temecula**; sign-ups begin September.

- **Looking for hosts for the new year; call Rob to volunteer.**

- **New Business:** Nick began discussion of **2018 Pond Tour**; Ed & Rob will co-chair. Tentative date set for Saturday, May 12.

- **Library:** Jim & Tess Poyle volunteered to take over the Library; will arrange with Audrey to get it.

- **Next Board meeting: Wed., August 30, 7pm** at the Zoetemelks'.

Peggy Milfeld, Secretary Pro tem _ (' . ') _ /

*Members wishing to attend a Board mtg. should let the host know.

Printing Connection, Inc.
Austin Cords
951.351.9437
printingcolor@yahoo.com
9671 Magnolia Ave.
Riverside, CA 92503

Wall to wall, we print it all! 800.491.1964

BOARD OF DIRECTORS

President: Position Open

Vice President: Rob Fales ~ Meeting Sites & Speakers
951.279.0181 ~ Rob_fales@inlandkoiociety.org

Secretary: Position Open

Treasurer: Nick Milfeld ~ Membership
951.780.7395 ~ NickMilfeld@inlandkoiociety.org

Newsletter Editor: Peggy Milfeld
951.780.7395 ~ PeggyMilfeld@inlandkoiociety.org

Director: Deanna Fales ~ Raffles
951.279.0181 ~ Rob_fales@inlandkoiociety.org

Director: Ed Kushner ~ Koi Rescue
951.520.0092 ~ edkushner@inlandkoiociety.org

Director: Linda Kushner ~
951.520.0092 ~ lindakusner1@gmail.com

Director: Larry Leverett ~
951.781.3887 ~ LarryLeverett@inlandkoiociety.org

Director: Jack Marrin ~ Info, Club Properties
909.792.3603 ~ jack@marrin.com

Director: Tom Wright ~ Koi Health
951.990.5479 ~ TomWright@inlandkoiociety.org

Director: Theo Zoetemelk
951.735.9896 ~ theozoet@charter.net

IKS HELP LINE

Koi Health ~ K.O.I. Rep.: Spike Cover ~ 949.855.2371

AKCA Representative ~ Mac McClain 951.398.7048

NEW LIBRARIANS: Books & Videos listed on IKS web-site
Jim & Tess Poyle ~ 951.797.3007

Database: Orville Hanson ~ 951.682.3107

Web Master: Alecia Everett ~ ikswebmaster@yahoo.com

Badges: Jack Marrin ~ 909.792.3603 ~ jack@marrin.com

Sunshine: Francine Hoffman ~ 951.781.8209

- **When calling our volunteers, you might get a recorded message. Please suggest a time when you're home to receive a return call, or when you would like to call back.**

- **Remember that phone advice is given based on your input; the ultimate responsibility for treatment remains with you.**

- **You can call our Librarians to request information on a particular topic and they will bring it for you to the next meeting, or make other arrangements to get it.**

This month we visit another new pond—really new—and the water will be fully settled in, having reached the quality parameters for which the filtration system was designed, i.e., perfect!

Mark Corser's pond is not a water feature built to complement the landscape. Rather, it is a purpose-built home for about 20 hand-picked koi, mostly *Kohaku*. Hopefully the evolution of this pond has come to completion in this, its third incarnation: it has state-of-the-art filtration designed to solve all the problems of water variables and to keep Mark's koi in pristine condition for competition. On display at the meeting will be the Grand Champion from this year's Gardena Koi Show, a beautiful 91cm *Kohaku* which needs to have her official photo taken.

Mark & Corinna Corser moved here in 2008 from the UK. Both from Birmingham, England, they went to the same schools together, she being two years behind him. Mark came to the US as a consultant for "Fresh & Easy," and brought Corinna and their daughter Helena, now 16, with him. When they decided to stay, Mark opened his own business, designing food processing equipment for the likes of Heinz, Kellogg's, and Pilgrim's Pride. Since then, they have added Lilly (8) and Lauren (2) to their family.

In the UK, Mark fished for carp for two different teams in sport fishing competitions. They used barbless hooks and all fish caught were released; the team catching the greatest combined weight of fish—not the greatest number—won. Perhaps that's where his interest in carp began, but at this point he's taken the interest to the highest level: besides his home pond for stateside competitions, he also maintains a number of koi in Japan so that next year he can possibly compete at the All Japan Koi Show.

The Corsers' pond-building began in 2013, but within three months of completion it needed to be 'changed' or redesigned and rebuilt, becoming an 18,000-gallon pond. A year and a half later, it needed to be changed again, reincarnated as an informal freeform design. Then in March of this year, still dissatisfied and with the help of Russell Peters from PS Koi, Mark decided that it all had to be "smashed out and rebuilt, up and running in five weeks." As they had both sets of parents visiting from the UK, and Corinna did not want the yard in such a state, PS Koi oversaw the build and the company which supplied the drum filter sent one of their engineers over to ensure that the filter was working correctly and efficiently [which we learned when we noticed the European electrical outlets and plugs on the equipment, the first such system in the USA].

Let's talk specs. This pond is 31' x 18' x 6'; do the math and it's 25,110-gallons; add the filter system, it's considerably more. The pond is situated widthwise at one end of the block-walled yard; it's fenced in to protect little Lauren. Four identical 4-tier *Bakki* showers create a background wall for the pond [I envisioned some wonderful etched or enameled artwork spreading across the stainless steel walls...]. Out of sight behind that wall is the most complex filtration system we've encountered since joining IKS, and I trust Mark will lead small groups to see it, if it isn't satisfactorily shown during the AV presentation we will receive from the builder.

Viewed from a second-story deck, the pond is protected by a large sail and a sliding curtain. Partly above ground, there's room to sit on three sides of the pond. The Bakki showers create a wall at the back.



If you step behind the Bakki wall, you'll see the beginning of an awesome system. The large black tank is a carbon filter, the first step in purifying the local Corona water. It feeds the water-softener units next to it, which then feed an RO (reverse osmosis) unit. The RO strips everything (all minerals, salts)

from the water and throughout the day it tops off the pond at 4gpm — that's about 2500 gallons a day — so in effect it's a flow-thru system.

A total of nine 4-inch lines from the pond, including 6 bottom drains, 2 skimmers, feed into a RedLabel AQUA-KING 100/200 COMBI FILTER (the 'big box' unit shown). Lifting the nearest cover panel reveals a doubled rotary drum filter (RDF) system, with 60-micron screens. Beyond those are two chambers of filter media and air stones, which lead to a final section containing four separate 92-watt UVs.



The four Bakki showers are filled with over 2200 pounds of genuine Momotaro Bacteria House media supplied by Momotaro Koi Farm, Japan. They are fed by four 4" lines; each will turn approximately 10,000-gpm to 40,000-gpm combined, effectively turning the pond twice every hour. Six drains control three air pumps to the pond; monitors are on everything.

Mark's goal is to keep the pond at a constant 72°F, down to 60°F in Winter; there's a heater built into the system, too. He will not stop feeding because the water temperature won't get cold enough to demand it. Two automatic feeders holding Summer-formula pellets only (heavy in bulk protein) distribute 3.5 pounds of feed daily, and Mark adds a tray of fine cubed tofu every day as a regular treat.

Have there been any problems? Yes, and no. Only two months old when we visited it, the pond hadn't fully settled in yet. Nitrites had been high, and Mark had to salt the pond, but in a few months the machinery behind the wall will keep it at a constant pH of 7.

The pond and koi are certainly not all there is to the Corsers' yard, nor what you'll see first as you enter. Beyond the house it's a whole new world:

the fenced pool full of floaties, including a cool bull-ride inflatable; fire pits and fountains amidst the waterfalls, a rock waterslide and spa -- and all remotely controlled by phone; a huge patio for entertaining and play; a step-up covered family room inviting you in...you could lose a week in its comfortable seating, with a fireplace, big screen, and nothing better to do than to relax. An outdoor kitchen, dining for six, a nearby fire pit; beyond it all, easy-care artificial turf to complete this secluded family oasis. —▶ pg 4



Continued from page 3....

The August 27 meeting at Mark Corser's in Corona will be a joint meeting with our fellow hobbyists from ZNA-SoCal. Our hosts have graciously offered to treat us to a meal catered by Mariano Palpallatoc from L&L Hawaiian BBQ, asking us simply to provide the desserts. And to make it even easier on us, they will bring in tables and chairs for our use. Obviously you do not need to bring your chairs, but please do bring your favorite dessert to share. IKS will provide the usual beverages.

For the meal and accommodations, we need members to make reservations to attend this meeting. Sign-ups were taken at the June and July meetings; if you were not at either, or aren't sure if you signed up...

...please call Peggy Milfeld at 951.780.7395 to RSVP. Please do leave a message if we don't catch the call.

Our guest speaker this month will be **Russell Peters** of Peters and Sons Koi, through whom Mark acquires all of his koi. Mark has had the privilege of traveling to Japan with Russell, visiting various breeders to select champions. We will enjoy a screened presentation explaining the build-out of this pond, the intricacies of the filtration, and perhaps some info about selecting koi in Japan.

Mark will be fresh from a trip to the UK and Holland where he will be visiting the Holland Koi Show, August 18-20; he will present two friendship awards on behalf of ZNA So Cal chapter and the San Diego Koi Club

A couple of reminders: No chairs, and we are bringing **desserts only** [Mark is hoping for bread pudding]. Additionally, the Corsers have asked that there be **no smoking** in their yard because of the artificial turf. That shouldn't be an issue for us: I rarely see it at meetings, but this time it's a definite no-no.

The Corsers' home is in a gated community; thus, we will have someone stationed at the gate to check people in. Since we do not have much to set up, **please don't plan to arrive before 2:45 for the 3pm meeting.**

CORSER: 3851 ASHWOOD CIRCLE ~ CORONA 92881

Driving Instructions, approaching from the South on the 15 Fwy:

- Exit to **Cajalco Road** and turn left; crossing the freeway it becomes **Eagle Glen Parkway**
- Take the second right onto **Masters Drive**; follow it to **Christopher Lane** and turn left
- Go one block to a 'T' and turn left onto **Sunmeadow Street**
- Go one block to another 'T' and turn left onto **Lemon Grove Lane**
- Take the forced right onto **Seven Oaks Drive** and to the gate
- Once through the gate, make an immediate left, **3851 Ashwood** is on your right. Please do not park in the driveway.

Approaching from the North, use the 91 to the 15 South:

- Exit at E. **Foothill Parkway / El Cerrito Road**, and turn right
- Take a left onto **California Avenue**
- Make a left onto **Lemon Grove Lane**
- Take the forced right onto **Seven Oaks Drive** and to the gate
- Once through the gate, make an immediate left, **3851 Ashwood** is on your right. Please do not park in the driveway.

If you are delayed and will be later than 3:15PM, please call Peggy at 951.892.4270 for the gate code so you can get in.



Peters & Sons Koi & Pond Supply
www.pskoi.com

3850 Alhambra Ave., Martinez CA 94553-3806 ~ 925.313.9351
[northeast of Oakland, north of Walnut Creek]

WELCOME TO OUR NEWEST MEMBERS!

Write these folks into your Directory, seek them out at meetings, make them welcome! More than members, make them friends!



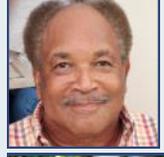
Referred by Tom Wright, Joe & Peter Cao:
02/26: Alex & Angela Franco
1151 Windsor Lane ~ 714.782.4122
Tustin 92780
AJHorticultureOC@gmail.com



Referred by Tom Wright, Joe & Peter Cao:
02/26: Mitch & Connie Lentz
26762 Cadiz Circle ~ 949.306.7674 (Mitch)
Mission Viejo 92691 ~ 714.400.8597 (Connie)
lentzc@icloud.com ~ mjlfloor@gmail.com



Referred by Rob Fales:
03/10: Pat Brotman ~ Victory Tischler-Blue *
2920 E. Via Vaquero Rd. ~ 760.902.3789 (cell)
Palm Springs 92262
Pb@cvdermatology.com



Referred by Ed Brown:
05/16: Tony Coby
24888 Agusta Ct. ~ cell 951.486.1816
Moreno Valley 92551



Referred by Ed Brown:
05/16: Mike Ector
4799 Elderwood Ct. ~ 951.415.5452
Riverside 92501
Michael.Ector@amerigas.com



06/03: Charles (Chuck) Hille *
16842 Stallion Pl. ~ 951.565.0946
Riverside 92504
chuckhille@netzero.com



06/03: John & Cricket Mouw
16187 Porter Ave. ~ home 951.776.8323
Riverside 92504 ~ cell 951.398.9139



06/03: Vicki Weston
8439 Shalimar Place ~ 951.237.2784
Riverside 92504



Referred by Tom Wright:
07/05: Jack Chapman (KCSO, "Koi Jack")
3340 Rancho Diego Circle ~ 619.669.0490
El Cajon 92019



Referred by Tom Wright:
07/05: Jeff Fleischer (ZNA SoCal, AKCA Chair)
16649 Superior Street ~ 818.826.9001
Northridge 91343

** I need photos of new members! Please, send me a selfie, or come to our next meeting!*

Now that's what I call a *Wow!* Meeting: *Wow!* Was it hot. And humid. *Wow!* A lot of new members showed up for the first time. *Wow!* Neighbors came out we didn't know had ponds — came early, came back, stayed. *Wow!* Our speaker drove all the way from Northridge to see us, and carted out several filter styles to illustrate his talk. *Wow!* Nick was overwhelmed with questions from every side all afternoon. *Wow!* Seems like a lot of folks thought, *Nick has all those big stuffed patio chairs; I'm just gonna nab one of them and 'forget' our chairs this time!* So wow! We were short on seating.

Everyone — 56 at best count — seemed to crowd in under the patio, extended by four EZ-ups for maximum shade. Tried to use the misters, but just made the humidity worse. Somebody jump-started lunch before it was all set up, and the crowding got worse, too. As usual, there was a big assortment of dishes that seemed to run out early, then *Cricket & John Mouw* came with an enormous pan of bacon-topped mac'n'cheese, and all were happy again. *We're gonna like them!*

Warm IKS welcomes to first-timers *Tony Coby* and *Mike & Marcella Ector*; to visitors *Bob Holcomb, Gavin & Stephanie Alexander* and *David & Connie Threlkeil*; and welcome back to *Ed Brown, Aiko Howo,* and *Randy & Pauline McGarvey*...we've missed you the last few months!

Following a satisfying lunch we settled down to business. Rob called out new members and visitors for recognition in the crowd. He introduced our hosts, *Nick & Peggy Milfeld*, then gave the mic to Nick for a Pond Talk. Nick explained the development of his property, from new construction and bare dirt to the realization of his dream of "mountain woods, waterfalls, ponds and pools"—a year in the making—and the retrofit of the pond filtration system, made necessary after his 'woods' attacked the original filter.

AKCA's new Chairman, *Jeff Fleischer*, joined us again this month, this time as our featured speaker. Jeff is a member of ZNA-SoCal first, but he is also making the rounds on behalf of AKCA. He brought us an informative teaching on Pre-Filters. Jeff tried to promote the AKCA-funded KHV research by offering a vortex filter tub for auction, but no one had a use for it at present.



Speaker Jeff Fleischer

Contemplating the building of a pond, Jeff talked about the importance of designing the filtration system with as much care as you give to the pond design itself. Adequate filtration is critical to keeping a pond clean and healthy, and pre-filtration is extremely important. Solid waste accumulates daily in the pond and is the number one filtration problem. Algae growth, excess food, fish waste, leaves, yard debris and aquatic plant material all accumulate and foul your pond. A pre-filter focuses on removing these solids regularly while protecting the pump from clogging and preventing heavy debris from entering the biofilter. Manual maintenance is mostly focused on removing solids, sometimes just beginning with cleaning the skimmer traps, which is only one form of pre-filter...and certainly not the only one you need.

Ease of maintenance is the goal of good prefiltration. Jeff discussed the series of filters Nick has in play as examples, like the big vortex settling tank he had on display, or a Cyclone tank that spins dirt to the center to facilitate the settling of solids before the water reaches the pump and biofilters. Some pre-filters attach to external pumps, like leaf traps; others attach to a submersible pump; they may be gravity-fed or pump-fed. A pre-filter such as a Cetus Sieve will help protect a circulating pump from clogging and prevent solids from entering the bio filter, overloading it and reducing its effectiveness; it will also reduce maintenance, so you won't have to clean a small pump basket every day or so. Sieves force water through a screen of maybe 300 microns, which removes vast amounts of solid wastes. A cyclone is a centrifugal solids separator, literally spinning particles out of suspension in the water, then letting them settle out. Endless variations on the need to remove larger debris first, before biological filtration begins. *Thank you, Jeff...*

Seems time just flew and Robs making announcements about signing up for next month's meeting and for the bus trip to Barstow Koi in September. As the drawing was called, people continued connecting, asking questions of Nick, collecting Spanish moss by the bagful, and generally just relaxing in the company of each other. Even when it was time to clean up and go home, it was decided a team would stop first at a visiting neighbor's home to check on his pond. Reaching out with help, that's something we do well.



Spike Cover, K.O.I. Talk ~ Jeff Fleischer, Pre-Filtration Talk

~ Assorted Pre-Filter Styles ~

Seems there is always another pond full of koi needing help, help to survive their environment, help to a new home and caregiver. We're proud of our Koi Rescue team, led by Ed Kushner. Here he reports on the latest rescue operation....

Linda, my cousin Holli, and I did a koi rescue on Sunday, July 30, in Indio. We had received a call earlier in the month from Steve Freers who is handling the estate of Craig Shourman. I was told that Craig, the pond owner, had passed away recently and they were very concerned for the welfare of his koi. I was told that the koi were Craig's passion and he would want to make sure that the koi would be well taken care of.

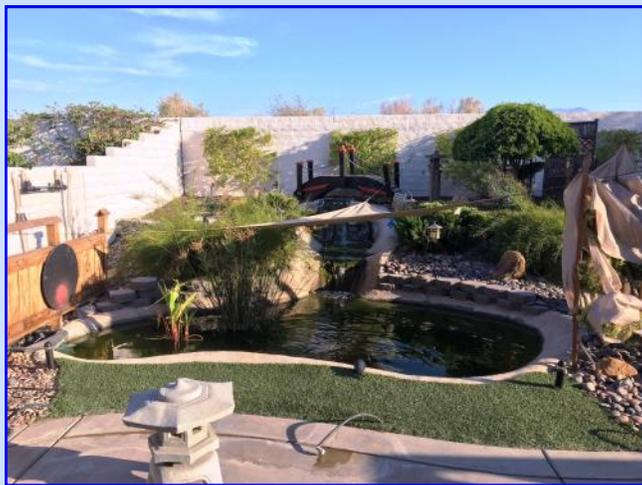
We left our house around 5:30AM, picked up my cousin, and arrived at the Indio pond around 8:30AM. We found six large koi and between 50 and 75 small koi, plus two turtles, in this pond. We had to drain most of the water first, after which I got into pond. I netted the koi, and passed them up to Linda and Holli, who started the bagging process. We were able to finish by 11AM, with the temperature hitting 96 degrees.

My main concern was getting the fish into my quarantine tank before the water they were in could heat up. We were actually able to get all of the koi and the turtles inside the car for the trip back. We got back to our house around 1PM and there had the help of Rob, Deanna and Eric Fales to move the fish to quarantine. Rob took home both of the turtles, for which he had already found a new pond, and most of the small koi.

After the rescue, I receive this message from Steve Freers:

"Again, on behalf of a lot of concerned friends of the late Craig Shourman, we are relieved and thankful for your rescue efforts. It meant a lot to everyone."

Knowing how much the koi meant to Craig and his friends made the time and effort of the trip worthwhile. ☺ ~Ed



Craig Shourman's koi pond in Indio. Two turtles and 55 to 80 koi have new homes after the death of their keeper.

How Hot is Too Hot?



Our final concern with warmer water temps and stressed fish was the increased susceptibility to parasites. Use your feeding times for check-ups: feed slowly and look closely for the visible bugs like anchor worm (which multiply rapidly in warm water) and fish lice ('freckles' that move).

Anchor Worms in pond environments are common. Crustaceans, they have an exoskeleton that they continually shed as they grow. A parasite, it is aptly named for the anchor-shaped appendages on its head used to attach to and hold on to its host. Anchor worms hibernate in winter, break dormancy when water temps reach 57°F, and multiplying rapidly when water temps top 77°F. Your koi need not be ill, or stressed, to contract them.

Juvenile anchor worms are microscopic and free swimming. Upon sexual maturity the juvenile parasites find a host, congregate on the gill tissues to mate, and then the males die. The female migrates onto the host's body in search of a site; she will burrow her head through the slime coat, into the koi's tissue and under a scale, and begin dining on blood and tissue. Only body and tail are usually visible.



The adult has a long cylinder shaped body that can grow to 1" long. It looks like a thick thread extending out of the surface of its host. Two egg sacs often extend from the posterior of the adult female, and each contains about 250 eggs. The eggs are shed into the pond environment and will hatch in 2-3 days or up to 15 days depending on water temp.

An adult parasite may spend three or more months attached to the muscle tissue of its host, creating quite a lesion and leaving a serious wound on the fish at the point of attachment. The wound will make the host susceptible to bacterial, fungal, or secondary infections.

Anchor Worm removal is tricky. If you are sure the worms are dead, gently remove them with tweezers. Be careful not to break the anchors off under the koi's skin: any piece of the worm remaining will cause future problems if not fully removed. In the unfortunate incidence of breakage, press down on the scale with your thumb and ease the anchor to the surface.

Fish Lice, *Argulus*, another crustacean parasite, are visible only as adults; juveniles are microscopic but become visible at about 6 weeks of age. Sometimes mistaken for a small patch of green algae on the fish, they are a major threat to your fish's health, and they're especially common in Fall.

The adult is a flat up-to-1/2" oval shape with four pair of swimming legs. Looking like a glob of clear jelly infused with pepper, the eyes are appear as two prominent black specks; it has suction type discs used to adhere to the host. Fish lice are quite mobile—you can see them move on the fish—and they swim freely in the pond to lay eggs on plants (up to 500 fertilized eggs at a time, which hatch in 2-8 weeks, depending on water temp); and survive several weeks without a host.



Constantly moving about, tiny mouth stingers pierce the host's flesh; they dine on blood and mucus, leaving the skin red and irritated, the slime coat broken and susceptible to bacteria, sores and ulcers. Infested koi will twist and rub pond edges as if trying to scrape something off; a dense infestation will lead to death.

Effective management of an outbreak must include proper ID, treatment of all life stages on the fish and in the pond, and proper drug use. Drugs available for treatment of *Argulus* infestations are limited, so inclusion of a fish health professional is vital. ☺



Koi Horoscope: Moving on.... to year 2024, *Year of Utsuri*, a parallel to the Chinese Year of the Dragon.

Utsuri	1940	1952	1964	1976	1988	2000	2012	2024
--------	------	------	------	------	------	------	------	------

Dragon is seen as lucky, flexible, eccentric, artistic, imaginative, spiritual, charismatic.



That's a lot to put on any fish, and I'm not even going to try to make applications beyond the aesthetic artistry inherent in a beautifully patterned *Shiro Utsuri*. It may be, though, that some of us are inspired by our koi in different ways; perhaps some of your koi bring out some unique personality traits in you...

Year of the UTSURI, aka UTSURIMONO

Shiro Utsuri has achieved a status only little lower than that of the big three, *Kohaku*, *Sanke* and *Showa*. The pattern is much bolder and stands alone as the key feature of the breed; it is more interesting and variable than in *Bekko*, which rely on simplicity and understatement, qualities that tend to work against them as too simple, too un-bold.



Shiro, Hi, and Ki Utsuri

Shiro Utsuri are benched as *Utsurimono*, literally translated as "reflections" or "reflecting ones." This category is made up of three different color varieties that share the same type of *sumi* (black); the black is actually the primary skin color. Thus you have the *Shiro Utsuri* (white on black), the *Hi Utsuri* (fire or red on black), and

the *Ki Utsuri* (yellow on black), even though all look more like black on the named color. All three variations are accentuated by the *sumi* (black) base which emerges from under the white, red, or yellow field to create a pattern that suggests the "reflection" of color on a black background.

The bloodline is argued to be a direct Magoi descendent, or a more recent *Showa* descent. The *sumi* is wraparound in style, not restricted to above-the-lateral-line as in *Bekko*. *Utsuri* often shows up in *Showa* spawns when the red *hi* is lacking.

•Pattern Development

In all young koi, it's difficult to predict how the pattern will develop. Looking at a net full of *Tategoi*, you may see only shadowy *sumi* that appear blue-grey under the skin. The skin may have a bluish tone and a yellow tinge to the head where there are no scales. You hope for the head to turn white as skull bones and skin thicken.



The *caudal peduncle*, or 'wrist' of the tail, is where the first indication of the final quality of the white ground color will appear; if everything else looks good, select the koi with the palest wrist. Once in your care, that illusive trait of luck may count as much as good water management for the ultimate outcome. Hard, alkaline water brings out *sumi* to a finished deep and glossy black; on close inspection of inferior *Shiro Utsuri*, in good light, you may find the *sumi* to be more of a chocolate brown. Ultimately, the best guide may be the parentage or a specific breeder's tendency to produce light or heavy markings on adult koi.

•Head Sumi

Because the *Utsuri* are considered to be basically a black koi, the strength and quality of the black is very important. This does not necessarily mean that there has to be a lot of black but the strength

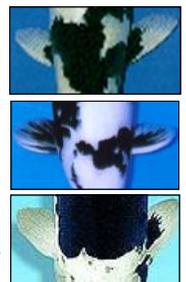
of the *sumi* is a key point in judging these koi. Head *sumi* may take years to emerge and can be compared to *Showa*; they may be the traditional *menware* (lightning strike) pattern, or sparing and more subtle, but an over-fussy or excessively heavy pattern will detract from the appearance. The pattern should wrap around the body and travel down the face; white lips are a pleasing counterpoint. Symmetry is not important, but clean edges and overall balance is: too much or too little *sumi* in the tail region is a common fault, not balancing with the overall pattern.



Judge these *sumi* patterns

•Fin distinctions

Classic *Shiro Utsuri* pectoral fins show a solid black *sumi* pattern around the ball joint, called *motoguro*. In comparison, the equivalent pattern in *Sanke* is made up of separated, individual stripes like brush strokes following the fin rays. However, as *Sanke*, *Showa* and *Utsuri* are interbred, the intermediate or brush stroke *sumi* is becoming more common. All-black pectorals is a definite demerit; neither should clear and *motoguro* fins appear on the same fish.



•Choosing Shiro Utsuri

Shiro Utsuri breed relatively true to variety. Choose thick shoulders and caudal peduncle, rejecting any that seem pinched-in behind the gill covers and those with long, pointed heads. In *Gin-Rin Shiro Utsuri*, reflective scales show silver over both white and black skin; look beneath the glitter and see if the fish is otherwise a good representative of its variety. *Doitsu Shiro Utsuri* can be confused with *Kumonryu* —head patterns are similar— but *Kumonryu* patterning runs head to tail, while *Utsuri*-style is a body wrap.

•Hi Utsuri and Ki Utsuri



Black koi with red or orange markings are essentially *Showa* without the white; the *hi* quality has been improved by cross breeding with *Kohaku*, even with *Magoi*. Pectoral fins of *Hi Utsuri* rarely show *motoguro*, tending rather to be candy-striped black-and-red, with red on the leading edge; there will be no white anywhere, and there should be minimal or no *shimis*, or black flecks or freckles, on the red.

Ki Utsuri first appeared in 1875 and was known as *Kuro-Ki-Han*. It was stabilized as a variety and re-named by Hoshino, who also helped develop the modern *Sanke* bloodlines. The variety is seldom seen today without a strong tendency to disfiguring *shimis*. ☞



**hi*, *ki*, are pronounced HEE, KEE.

INLAND KOI

Quality Japanese Koi
& Pond Supply



Importers of high quality
Japanese koi.
Complete line of koi &
pond supplies.

There are beautiful koi in
our latest shipment!

Check our New Arrivals page.

If you see a fish that you like,
please call or email us and
we'll reserve it for you.

18122 Mt. Washington St.
Fountain Valley CA 92708

Winter Hours:
Daily 10:30am-5:00pm

Phone: (714) 438-0087
Website: www.inlandkoi.com
E-mail: inlandkoi@inlandkoi.com

THE BEST QUALITY
Japanese Koi
AT A REASONABLE PRICE!

COMPUTER REPAIR & SERVICE



\$45
Per Hour
for Repairs

Special Service
Pkg. Available
(Commercial
& Residential)

L and E
Integrated Solutions

Linda Kushner
951-333-4147
lindakushner1@gmail.com

- Remove viruses & Malware
- Install security protection
- Maintain & manage computer via remote access
- Train you in Windows applications
- Backup and data recovery
- Will be your IT consultant
- Troubleshoot any hardware
- Cell phone apps installation & training
- Expert staff with over 30 years experience

\$500 OFF
Repairs

1st time customers
Valid w/coupon only • Not valid w/other offers

HARRISON'S KOI FARM

POND KOI • SHOW QUALITY KOI
2000 KOI on display from 3" to 30"

Specializing in hard to find varieties

- KOI FOOD
- SUPPLIES
- EQUIPMENT
- CONSULTATION



Terry & Koren Harrison
5580 / 5582 Rio Road
Riverside, CA 92509

(951) 369-9998 ~ Open T-W-Th

What is a Bakki Shower? It's a type of trickle filtration. First developed by the *Momotaro Japanese Koi Farm*, the Bakki shower attempts to simulate nature's way of filtering water, similar to a mountain stream where water cascades over rocks. In the stream, biofilms and algae grow on the rocks and feed on the nutrients, essentially filtering the water. In the case of the Bakki shower, ceramic is placed in a stack of filter trays, water is pumped to the top of the filter stack, and it trickles through the media, eventually flowing back to the pond.

Momotaro Koi Farms developed the Bakki shower with stainless steel trays. Since that time many "DIY Bakki showers" have been designed with variations on them. Plastic and fiberglass boxes or crates have been used with success. In all its simplicity, there is a lot of higher chemistry going on between the bio film and the water column. The advantages of this type of filtration are:

- Conversion of nitrogenous wastes
- Off gassing of CO2 maintains pH
- Oxygen is reintroduced

This method of off-gassing / aeration is used widely in aquaculture.

Filter media choices vary greatly. Each filter media has different properties and therefore different performance. *Bacteria House*, the media designed for the Bakki Shower, is the result of over six years of research. It's a man-made ceramic blend that has been heat treated at 1300°C for 60hrs. This tremendous amount of heat causes the ceramic to break its internal bonds thereby creating an extremely porous structure that has a much greater surface area to allow very large bacteria populations to colonize. Due to the large quantities of tiny holes, mechanical filtration is also achieved. Large organic solids and decaying matter are degraded at a far greater speed than conventional media, and without blocking up! This is Mark Corser's filter media.

Bacteria House reacts in a seemingly 'electrostatic' manner with floating organic matter causing an increase in adhesion rate. This produces clear clean water at a rapid rate. Water in its natural state creates multiple bonds with surrounding water molecules creating a cluster. The bacteria house emits FAR infrared rays that break the bonds of the neighboring water molecules thereby allowing more oxygen to be dissolved in the water. *Bacteria House* is also extremely fast at colonizing bacteria, is effective at de-odorizing the water, very resistant to damage from power failures or chemicals, and very fast at 'bouncing' back after pond medications have taken place.



"...is a group of koi hobbyists who want to keep FUN in the hobby; healthy fish are part of this fun. Their website strives to teach good koi husbandry by providing current, accurate and useful information on all aspects of koi and pond keeping. They specialize in science, not hearsay!"

Spike Cover, our K.O.I. Rep, announced a new math class at our last meeting, and he has shared even more for your consideration:

Applied Math for Koi ~ Spike Cover, instructor.



Having healthy koi is essential to a keeper's fun; math lets you understand and confidently apply solutions that promote koi health, such as dosing medication and sizing equipment.

Pond Science ~ This is a new certification program for which the successful applicants complete four related courses:



- Water Quality
- Pond Construction
- Pond Filtration
- Pond Modifications

Koi Photography ~ a new course to be offered soon.

Pond Modifications ~ another relatively new course (*Advanced Level 3*) taught by Cindy Badder. This training module will help pond owners decide what needs to be modified and explains the considerations required for making good decisions.

K.O.I. 101 ~ a course in basic koi keeping that provides virtually everything you need to know to keep koi alive and healthy. A free downloadable copy is presently available online to K.O.I. members.



Individual K.O.I. membership [\$24] runs from October 1 one year thru September 30 of the following year. New members receive the K.O.I. Guide; with renewal, they receive the new Supplement, typically issued around renewal time. Members get discounts on E-Books and courses, as well as access to new and archived articles. Registering on the K.O.I. website is quick

If you're not havin' fun, you're not doin' it right!



Pandasia Koi and Garden

21185 Canyon Drive, Wildomar 92595
 951-265-3691
 infopkoi@gmail.com
 www.pandasiakoi.com



Thank you to
Dain Corrales of Nijikawa USA
 and
Iva Gaglione of Ultra Balance
 for so graciously supplying
 Inland Koi Society
 with a nutritional food supply for our
 Koi Rescue Program.



HAI FENG

PROFESSIONAL QUALITY KOI FOOD

- . DOES NOT CLOUD WATER
- . EASY DIGESTION
- . IMMUNE SUBSTANCE ADDED
- . COLOR ENHANCING



ISO 9001:2000 REGISTERED (UKAS,ANAB)
YOUR QUALITY ASSURANCE

Aqua Delite®

FREEZE DRIED SHRIMPS & FREEZE DRIED SILKWORM PUPAE



- . HIGH IN PROTEIN AND NATURAL NUTRIENTS
- . GOOD SUBSTITUTE FOR LIVE AND FROZEN FOOD
- . FOR FRESH OR SALT WATER FISH



- . HIGH IN PROTEIN FOR RAPID GROWTH
- . BETTER SLIME PROTECTION
- . HELPS TO RESIST BACTERIA AND PARASITES

DISTRIBUTED BY:
UP RIGHT TRADING CORP.
TEL: 626-579-0578
TOLL FREE: 877-424-3364
E-MAIL: sales@uprighttrading.com

© 2012 Up Right Trading Corp. All Right Reserved.



We're Back!

Camellia Koi Club will be hosting an AKCA Koi Show at The Old Sugar Mill Wineries Tasting in Clarksburg, CA This Labor Day weekend, September 2 & 3, 2017



- Koi Auction
- Awards through size 9
- Raffle
- Artisans
- Koi Dealers and Vendors
- Wine Tasting!
- UC Davis Veterinary Medicine will be represented.
- Dr. Jesse Sanders, DVM, CertAqV will be there too.



We need your support. Reserve your tank for the show now, Only \$60! There's also space left for vendor booths. Booths will be on the lawn and in the shade. Prices start at only \$350. See www.Camellaikoi.org or Email Bob...TheNewMrBob@gmail.com



AUG	7/5-8/31	Festival of Arts — Laguna Beach / 85th year: 1140 artists, plus tours, workshops, concerts / 949.494.1145 / lagunafestivalofarts.org
	27	IKS POTLUCK MEETING — 3-6pm / Hosted by Mark Corsser, 3851 Ashwood Circle, Corona 92881 / RSVP REQUIRED ~ call Peggy at 951.780.7395 if you are not already on the list.
	30	IKS BUSINESS Meeting — 7pm / Host: Theo & Jeanne Zoetemelk, 1407 Second St., Norco 92860 / Interested Members welcome, call Jeanne at 951.735.9896

SAVE THE DATE!

IKS has started planning the **2018 Pond Tour**. We will be looking for at least 5 or 6 members, preferably in the greater Riverside area, willing to share their ponds with the public. The tentative date is Saturday, May 12, 2018.

And, **Riverside Community Flower Show** has approached us: "We are looking for gardens for next year's tour, so I thought I would reach out to you to see if any of your koi club members might be available or interested. Francine Hoffman was an absolute delight (both she and her garden), but we are always open to different styles, sizes, etc. We like to have one pond garden every year, if possible. If you know someone who might be interested, please forward their info to me. Our dates are April 14 & 15, 2018."

Want to take part? Call Peggy at 951.780.7395

THE KOI CLUB OF SAN DIEGO
ANNUAL FRIENDS OF KOI AUCTION
SATURDAY, SEPTEMBER 30TH, 2017

Hundreds of Beautiful Koi from 6" to jumbos will be looking for new homes at bargain prices.

Returning this year, the used Equipment Auction!

Held at
 Freshwater Flora & Fauna 2137 Via Corte Escondido, CA 92029
 David Curtright, Owner

Sellers please stop at the first driveway to register and save time Saturday morning.

Sellers	7:30 a.m.	Check in of your <u>pre-bagged</u> Koi and used equipment. Oxygen is available upon arrival, <u>if requested</u> . Note each bag received will be auctioned as a single lot; please separate your Koi into individual bags prior to arrival.
		<i>The club reserves the right to reject any Koi for health concerns.</i>
		Please note the 6" minimum size and if you wish to bring more than 20 Koi you must have prior approval; contact Linda at 619-200-4145.

Bidder registration is \$5.00 and includes a lunch & drink ticket for one. Additional sandwiches, chips and drinks are available for purchase.

Buyers	9:00 a.m.	Viewing of the Koi and used equipment for Sale
	10:00 a.m.	Auction starts
	12:30 p.m.	Approximate 30 minute lunch break
	3:00 p.m.	Approximate end of the auction and your new Koi are available to be picked up. Please note Koi cannot be removed until the end of the auction, without approval prior to the day of the auction .

Buyers should quarantine their purchases; the club makes no guarantee of the Koi's health. Bring boxes/coolers to transport your new fish safely.

Payment is accepted in cash, check or credit card. Sales tax is added to each purchase. Your Koi will be in a new plastic bag with oxygen; all you will need are boxes/coolers for the trip home.

For more information
 Please contact
 Tamsie Pierce (tamsie@cox.net)
koiauction@koicsd.org / 619-427-9008
<http://KoiClubofSanDiego.org/>

SAVE THE DATE!

IKS is planning a Field Trip to **Barstow Koi Farm** on September 24, our regular Sunday date. We'll continue taking reservations this month for the rental of a bus. We ask a **\$15 fee per person**, to be paid in advance*, to reserve a seat on the bus. IKS will provide a continental breakfast before we board the bus, as well as boxed lunches and the usual assortment of beverages.

This can be a buying trip for anyone who wants to add to their collection, and Barstow specializes in some very special varieties. If you're even thinking about buying, **have your QT tank ready** in advance and **plan to bring a box or preferably a cooler for transport**. Better to have one and take it home empty than to find that perfect fish and not have a safe, way to get it home.

Put this on your calendar and sign up at the meeting or call the Milfelds at 951.780.7395. **Please leave a message if we're not home to answer!**

* Payment may be made payable to IKS and mailed to:

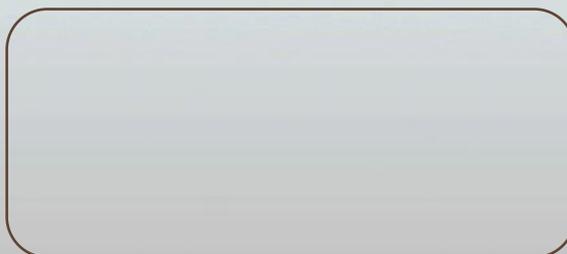


IKS Treasurer
 5198 Arlington Ave., #146
 Riverside CA 92504



INLAND KOI SOCIETY
5198 ARLINGTON AVE., #146
RIVERSIDE, CA 92504

RETURN SERVICE REQUESTED



Air pumps, heater, reverse osmosis unit, carbon filter, water softeners, double rotary drum filters, *Bakki* showers, UV units and monitors on and for *everything!*

Visit our website: www.inlandkoi.org