# The Inland Koj Confiection

THE OFFICIAL NEWSLETTER OF IKS · ISSUE 287 · SEPTEMBER 2022



### Sunday, September 25 Potluck Meeting Hosted by Steve & Laura Nyirady ~ 2-5pm 38431 Acorn Way, Yucaipa 92399 ~ 909.790.7607

It will be exactly six years to the day that we last visited Steve & Laura Nyirady. They had two ponds and had just installed a ProfiDrum CombiBio "all-in-one" rotary drum filtration (RDF) unit on the larger pond, to replace the Cetus/Nexus filters they had been using. Made in and shipped from Netherlands, the unit arrived at BridgeWay Koi, the US distributor, damaged, with the core broken. It was a major delay, but the replacement did arrive in time for Steve to have it up and running for us. A couple of other members were also using the RDF, a fairly new technology, so we had opportunities to see a few of the units in operation. Now, six years on, Steve admits that he has had a few problems with both the Profidrum and RedLabel RDF; he'll explain the issues during his pond talk, as well as give a review of both filters.

**We will also welcome** a guest speaker, **Don Fredricks**, who will discuss "Koi and Aquaponics." You've seen **Aiko Howo**'s stand-alone aquaponics system for growing veggies; Don will explain how to combine koi with a green thumb....

~ continued on page 3



#### CLUB NEWS. . .

#### NOTES FROM IKS BOARD MEETINGS

- The Board continues to meet monthly for dinner and planning.
- Meetings: Brenda has confirmed hosts for September, October and November, and as usual we will not meet in December. Hosts are needed for the new year. Please contact Brenda Aker to offer your pond for a visit.
- Treasury: The board is studying options for purchasing a shipping container for storing club equipment instead of paying monthly for a storage unit. We have a place to house it if one is found.
- Rescue: About 20 QT koi are available for purchase, \$50-\$200 depending on size and quality...less than retail! Contact Ed Kushner—he's home again.
- **Koi Auction**: With rise again of Covid, and with some key leaders actively dealing with cancer treatments, the Board voted to revisit this in January to decide if and when....

9/4	IKS BOARD MTG ~ 5:30pm / Hosted by Larry Leverett ~ 5349 Jasper Lane, Riverside 92506 ~ 951.781.3887
9/24	Friends of Koi Auction by Koi Club San Diego ~ at San Diego Pond & Garden, Poway ~ 9am-3pm ~ see pg. 8
9/25	Potluck Mtg ~ 2-5pm ~ Hosts Steve & Laura Nyirady, 38431 Acorn Way, Yucaipa 92339 ~ 909.790.7607 ~ Speakers: Steve Nyirady will compare Filter Systems; Don Fredricks on Koi & Aquaponics
10/2	<b>IKS BOARD MTG</b> ~ 5:30pm / Host <i>Nick &amp; Peggy Milfeld</i> , 1644 Northhampton Dr, Riverside 92506 ~ 951.780.7395 ~ <i>Interested members are welcome: call ahead to confirm.</i>
10/23	<b>Potluck Mtg</b> ~ 2-5pm ~ Hosts <i>John &amp; Cricket Mouw</i> , 16187 Porter Ave., Riverside 92504 ~ 951.776.8323 ~ Speaker: <i>Paul Palacios</i> , Pond Automation
11/6	IKS BOARD MTG ~ 5:30pm / Host Scott Zehm, 6726 Dove Lane, Riverside 92506 ~ 951.237.2508 Interested members are welcome: call ahead to confirm.
11/20	<b>Potluck Mtg</b> ~ 2-5pm ~ Hosts <i>Jerry &amp; Pat Mall</i> , 43024 Via Las Rocas, Temecula 92590 ~ 951.506.4814 ~ IKS Annual Thanksgiving Feast.
12/4	IKS Board Mtg ~ 5:30pm ~ Hosted by Theo Zoetemelk, 1407 Second St., Norco 92860 ~ 951.735.9896 Interested members are welcome: call ahead to confirm.

#### New Members . . .

Welcome to our Newest Members ~ look for unfamiliar faces and greet them!

Eric, Wyatt Rice ~ Charlene Peters (4/22)

Paul & Angel Palacios (2/22)

**Howard & Kimberly Newton** (12/21)

Richard & Janna Grushen (10/21)

Raymond Aguilar (9/21)

David & Belinda San Jose (9/21)

Jason & Kristine Zara (9/21)

Look for these members & welcome them back:
John & Cricket Mouw ~ Riverside
Chuck & Ping Hille ~ Riverside

Missing a badge? The last order of original style badges was received 4 March 2020. the following unclaimed badges will be at the registration table:

Armand & Eve Blais Ben Israel Jerry & Pat Mall Kelly McHan Frank Painter

#### 2021 Officers & Directors

Ed Kushner, President	951	.520.0092
Koi Re-Homing ~ Web	Liaison	
D J . A1 37 D	0.5.1	216 0262

Brenda Aker, V.P. 951.316.0263

Meeting Sites & Speakers

Monica Dirac, Secretary 909.887.7497 Nick Milfeld, Treasurer 951.780.7395

Membership

**Peggy Milfeld,** Editor 951.780.7395

#### Directors

**Rob & Deanna Fales** 951.279.0181

Raffles ~ Koi Re-Homing

**Larry Leverett** 951.781.3887

Properties Manager

 Linda Kushner
 951.520.0092

 Alvin Watson
 951.764.6387

 Security Television
 051.237.2588

**Scott Zehm** 951.237.2508 **Theo Zoetemelk** 951.735.9896

**Buffet & Banquet Supplies** 

#### Steve & Laura Nyirady, Yucaipa

**Let's meet Steve & Lawra.** Laura was born in China to missionary parents and grew up with two languages. As an adult, she came to America for college and met Steve. Both finished their schooling, she with an MS in nursing, he with a PhD in microbiology; then, as a team, they traveled and taught, serving stateside in Massachusetts and Tennessee, and further afield in Hong Kong and the Philippines. In Tennessee, they enjoyed teaching an *Intro to Tropical Marine Biology* class, which involved two weeks on campus and a week of diving with their students. Diving is a shared passion that pairs wonderfully with classes in *Tropical Ecology*, which Steve & Laura have also taught in the Bahamas, Grand Cayman, Belize and Indonesia, allowing them to dive in the best of places.

J remember the first time the Nyiradys visited an IKS meeting, in August 2004. Newly moved from Tennessee, they had bought a house in Yucaipa with an unfinished pool full of several years of debris and rain scum—but they envisioned gardens and a pond. They wanted to learn more before they began the project, so they joined. By 2006 they were gone—very busy building that dream—and then returned several years later, as finished with their pond as they thought they ever would be. They both retired in 2012 and have been enjoying various passions ever since.

**Their new Yucaipa yard** disappeared, giving way to fruit trees and a kitchen garden which satisfy their vegetarian preferences with the fruits of their own labor. The



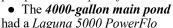
pool, too, disappeared, becoming two ponds and a stream with bridges, low waterfalls, flagstone and gravel paths, wooden decks and a lovely gazebo, all set in a carefully planted landscape. The ponds have EPDM rubber liners and

are about 2-4½ feet deep. The stonework concealing the liner above the water line was beautifully done, and the Nexus drains are plumbed so they can use the water to irrigate their gardens when the filters are cleaned.

The 'pond' is *three separate systems* that look like one. To help with aeration, Steve added aerators to each of the ponds and a shade sail over the smaller to reduce sunlight:

• A 45' stream isn't filtered but has a drain / recirculation system.

• The 2700-gallon smaller pond has a Savio Compact Skimmer-filter and a 16w UV light; the bottom drain gravity feeds a second Cetus II and Nexus 200, returning water through a 40w Emperor Aquatics UV unit. The pump is an 1/8-hp Reeflo 2400.





Skimmer-filter with a bottom drain that goes to a Cetus II gravity-fed sieve feeding a Nexus 200 filter and a 110w Evolution Aqua UV unit; all powered by a 1/4-hp Sequence pump. This is the filtration that Steve had replaced with the RDF.

Why the change? The Cetus sieve removed a large part of suspended solids; however, its sieve pore size was only 300 micrometers, and that allowed a fair amount of smaller particles through. Steve had added a filter pad to the outflow from each Nexus to collect more algae and fine debris, but during the summer he ended up cleaning the filter pad for the large pond every day! The Profi-Drum had a 70 micrometer pore size that would filter out a lot more solids and hopefully would reduce the need for daily cleaning. We'll find out how that has been working....

**Enough about the pand**; how about the koi? Well, they probably still have too many, but don't we all? But Laura knows and named them all; she has stories to go with many, and a lesson from at least one. In the small pond is a *Chagoi* named Charlie Chagoi, and his slightly misshap-

en mouth taught them that when buying a koi, you need to look not only at the shape and condition of the fins, body, and head, but also of the mouth. Nevertheless, Charlie's golden brown color made him stand out as most people's favorite when they first saw the koi. I hope he's still there.

Just a reminder to bring your chairs, something for the buffet, and please make sure you're healthy!





By John Seifert, CKK ~ Spokane WA Inland Empire Water Garden & Koi Society

The **Secchi disk**, as invented in 1865 by Angelo Secchi<sup>1</sup>, is a plain white, circular disk, approximately 12 inches in diameter, used to measure transparency<sup>2</sup> in bodies of

water. The disc is mounted on a pole or line, and lowered slowly down in the water. The depth at which



the disk is no longer visible is taken as a measure of the transparency of the water. This measure is known as the *Secchi depth* and is related to water turbidity<sup>3</sup>. This 12 inch white disk remains the standard design for *marine* studies. In 1899, George C. Whipple modified the original all-white *Secchi disk* to a disc about 8 inches in diameter, divided into quadrants painted alternately black and white. This modified black and white *Secchi disk* is the standard disk now used in *freshwater* studies.

The depth at which the disk is no longer visible is taken as a measure of the transparency of the water.

While you can purchase a ready-made black and white *Secchi disk* for about \$25, it is very easy to make your own in a few minutes. Here is how I made mine:

I used a white bucket lid and cut a circle 7 inches in diameter. Then I divided the disk into four quadrants, applying black electricians tape over

two of the quadrants. I drilled a hole thru the center for an eye bolt. On the underside of the disk, I added extra weight. I used a lead concrete anchor, but extra washers, nuts, or iron pipe connectors would also work. After attaching a light nylon rope, I marked the rope in 1 foot increments from the disk. For these marks I used various colors of electricians tape so I can easily calculate the transparency depth.

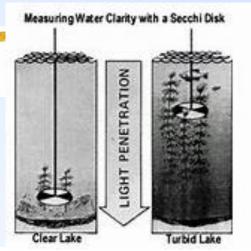
To use a *Secchi disk*, simply lower the disk into the water until you can no longer see it. For more accurate measurements, do the calculation midday when the sun's glare off the water will be minimized, and try to take the measurement in a shaded area. Lower the disk until it disappears. Slowly raise the disk until it reappears then lower it again. Do this several times to get the best estimation of the disappearance depth. Remember that people have different eye sights so results can be slightly different.

I intend to my *Secchi disk* from time to time to monitor water clarity, especially when I am making changes to my filtration or doing chemical treatments such as potassium permanganate. In my case, it is mostly just a tool to satisfy my own curiosity and to compare (or to brag) about my "clarity" depth with other club members. In a practical sense, if you are fortunate to see a dime at ten feet, it will not be of much use. In most ponds, it does take the guess out of how far down in your pond you can actually see.

<sup>1</sup> http://en.wikipedia.org/wiki/Angelo Secchi

<sup>2</sup> http://en.wikipedia.org/wiki/Transparency (optics)

<sup>3</sup> http://en.wikipedia.org/wiki/Turbidity



#### Koi Organisation Int'l



#### The Koi Club of San Diego Annual Friends of Koi Auction



#### Saturday September 24, 2022

http://KoiClubofSanDiego.org/

Hundreds of Beautiful Koi from 6" to jumbos will be looking for new homes at bargain prices as well as some gently used pond equipment.

Held at

San Diego Pond & Garden 12257 Old Pomerado Road

Poway, CA, 92064

Sellers

7:30 a.m.

Check in of your pre-bagged Koi and used equipment. Oxygen

is available upon arrival, if requested.

Note each bag received will be auctioned as a single lot; please

separate your Koi into individual bags prior to arrival.

The club reserves the right to reject any Koi for health concerns.

**Please note** the 6" minimum size and if you wish to bring more than 20 Koi you must have prior approval; contact Tamsie at (619) 427-9008

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**.

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

For more	information please
contact T	amsie

Tamsie@cox.net

(619) 427-9008



Koi Organisation International

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September 2022

August 2022

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# Here's Even MORE



### Koi Health Info

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- . GIVE BACK to your hobby!
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- · Work at home, whenever convenient.
- We will train you.

Contact: pattist@snet.net



#### Marc Descollonges

for being a generous K.O.I. donor

## TIPOFTHEMONTH

#### More sick fish?

- Clean system
- Do water changes

#### Specifics and caveats:

Remove debris and mulm.

Potassium permanganate (PP) is a good cleanup tool but can be dangerous when not used correctly. It is an indiscriminate and powerful oxidizer. Sequential 2 ppm (one level teaspoon/1000 gallons) treatments can be helpful to clean the pond water and system. Caution: One drop of PP in your eye can cause irreversible blindness. You MUST wear eye protection when mixing or putting PP in the pond! If you don't know all the other safety issues, and don't know how to assess when it will do more harm than good, don't use this stuff! Don't point that gun at your foot!



#### **NEW CKK Graduate**

Tony Ferry (in the UK) Sandra Dobbins, Washington

November K.O.I. Pondside



Syd Mitchell

#### **Anoxic Filration**

#### by John Seifert, CKK

#### ANOXIC FILTRATION ~ Why You Should Use It

By John Seifert, CKK Inland Empire Water Garden & Koi Society Spokane, Washington

*I am* a fanatical fan of Anoxic Filtration. In my humble opinion it is the next best thing since sliced bread and pre-shredded cheese, and better than virtually all other biological filters available. I'm a DIY'er. I have a 14,000-gallon koi pond with three 100-gallon ANOXIC FILTRATION tanks, two former shower filters that have been converted to ANOXIC and four 50-gallon *Kaldness* moving beds that will be converted to ANOXIC by the end of this month. So soon I will have 100% ANOXIC for all my biological filtration.

For years, my water quality has generally been good except for algae blooms and nitrates well over 50ppm. Within a couple of weeks of adding the first three 100-gallon tanks, my nitrates had dropped to 10ppm, and after about six weeks, nitrates were at 5ppm. Today, I have only a trace of nitrates, just slightly above 0ppm.

#### Here's what you can expect using an Anoxic System:

- No detectable Ammonia (NH3, NH4).
- No detectable Nitrite (NO2).
- Very low Nitrate (NO4).
- A reduction in Phosphate (PO4).
- Reduced Pheromones and less spawning.
- Improved skin quality.
- Brighter shiro (white), hi (red) and sumi (black).
- Reduction in shimis.
- No reduction in dissolved Oxygen.

#### Some personal observations:

- I had three Koi with substantial *shimis*: one nice Kohaku had very little reduction in *shimis*, another Kohaku that once looked more like a speckled Bekko now has one pin-head sized *shimi*, and an Asagi had a large *shimi* on its head (for over twenty years) that is no longer visible.
- My Koi, before Anoxic Filtration, use to spawn several times each season. I am only aware of once in the past three years.
- I do have a meager 40-watt UV light but I have very little floating algae and no string algae.
- This year, I added a floating plant ring to my koi pond to provide some shade. The pond is in full sun. The hyacinths all died, water lettuce is turning yellow

and the Azolla (fairly moss) is not spreading. I attribute this to a lack of Nitrate and Phosphate.

- It takes time, well over a year, to see substantial improvement in skin quality, color intensity and reduction in *shimis*. Have patience, it will happen.
- As with any filtration system, it must be sized correctly for your pond and fish load. A few ANOXIC baskets will not do much for your pond or Koi.

#### A few other reasons to consider Anoxic Filtration:

- Very low cost when compared to other biological filtrations systems.
- An easy DIY project if you so desire.
- You can feed it by gravity, a pump or an airlift.
- Can have a small foot print or, if your landscape allows, a spacious design.
- Very low maintenance depending upon the efficiency of your mechanical filter (pre-filter) and if you do not incorporate plants with the ANOXIC FILTRATION.
- Extremely water efficient: you may only need to flush the system once per year.

K.O.I has an excellent E-book on the basics of ANOXIC FILTRATION, cost is only \$5.00. For those that really want to learn all the nitty-gritty details on how this all works, go for the *K.O.I 311 Anoxic Filtration* course for \$50.00; it's well worth the bucks. You can find both at <a href="https://koiorganisationinternational.org">https://koiorganisationinternational.org</a>. At the K.O.I. Pondside in August, I discussed Anoxic Filtration and how I built mine.

Many thanks and credits to Kevin Novak, PHD, the original developer of the Anoxic Filtration System and to Syd Mitchell who further explained the system for us koi hobbyists. I welcome any comments or questions. Please contact me at spokanekoi@comcast.net

I did some research because this article only rouses your curiosity but DOES NOT explain what the filter is or how it's made or how or why it works. If you would like to read further, do some research at:

http://www.mankysanke.co.uk/html/anoxic filtration part 1.html

I will <u>try</u> to have an info sheet at our coming meeting, no promises.... ~Peggy



INLAND KOI SOCIETY 5198 ARLINGTON AVE., #146 RIVERSIDE, CA 92504-2603

**Return Service Requested** 





Visit our website: www.inlandkoisociety.org