

PRESIDENT CORNER

I can still taste the apple pie. Thank you Kathy and Dennis Leonard for sharing your desert oasis with all of us. Big thanks to don Harwood for educating us on Koi Health Advisor and the update on your first year as well. We would like to thank Don's wife for letting him come and keeping him awake on the drive back to El Paso.

An advance thanks to Darleen & Bob Panter for host the September 28th meeting I am sure we will see you all there.

School is back in session; all the young are hard at work. As always so are their parents. Even for some adults school is the education they have been seeking to complete this life. Having a pond and keeping Koi is also an education. Every pond and Koi keeper alike is continuing their education each day. A pond is an ecosystem by itself add Koi, you have an aquatic fish habitat. Add a filter (Bio or Veggie or both) and soon form of aeration you have a complete aquatic fish habitat. One to be proud of.

Just think every time you add fish, plants, water or anything to your ecosystem you learn by watching your fish, feeding habits, exercise, etc. Your plants, waterfalls. They all will teach you something. Education leads to success.

This month we are pleased to have Dr. Nick Saint-Erne, DVM visit our club. Thank you for spreading your knowledge of koi to help educate "all of us" Knowledge is the key. Coming up is our annual Koi show and Auction. This will be our 24th show. How time flies. Will one of your fish be our next grand champion? Take a look and decide. It would be great if everyone embraced the show. You are always welcomed. After sow festivities Sanke Santa will be greeting us all for our annual

Christmas Potluck and gift exchange. Just can't wait to see what Sanke Santa has for me. What about you?? For the love of Koi.

Bob Panter

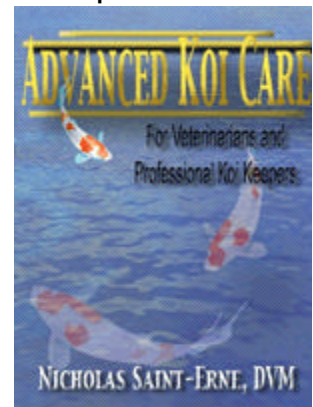
Bob Panter, SAKA President

Our Guest Speaker



Our guest speaker at this months meeting is Dr. Nick Saint-Erne. DVM. He specializes in Koi Care. He has just come out with his new book. Here is a great chance to learn about Koi care and pick up a great reference book on the topic. Nick has said that he even autograph it for you.

**Advanced Koi Care
for Veterinarians
and Professional
Koi Keepers**
by
Nicholas Saint-Erne,
DVM



This book contains comprehensive and extensive information regarding every aspect of koi health. With detailed information on husbandry, prevention, treatment and a multitude of other topics, all illustrated with high quality color photos, this is the must have koi book for every serious koi keeper.

Here Comes the Raffle Items

Keep a careful watch on this list. The prizes list will be getting larger as we get closer to the show. There is already some great stuff and more to come. Great job!!!!

Funtasticks Miniature Golf

For 4 People

C. Jill Hofer

221 E. Wetmore

Tucson, AZ85705

E; jill.hofer@funtasticks.com

Tucson Botanical Gardens

Admission for 4 people

2150 N. Alvernon Way

Tucson, AZ 85712

E: TBG@tucsonbotanical.org

SAKA NEWS

Reid Park Zoo

4 Admission passes to Zoo
Mary R. Chajewski
1100 S. Randolph Way
Tucson, AZ 85716
E: mchajew1@ci.tucson.az.us

The Pond Guy

10-Microbe-Blend Bacteria
6135 King Rd.
Marine City, MI 48039
www.thepondguy.com

Koi Care Kennel

8 bottles KoiZyme
Tom Holder
5062 Gillingham Circle
Westminster, CA 92683

VitaKraft

8- Algo-Clear
Peter Landy
12 E. Chimney Rock Rd.
Bound Brook, NJ 08805

Tetra

Numerous Pond Items
Andrea M. Akers
3001 Commerce St.
Blacksburg, Va. 24060

Aqua Ultraviolet Advantage

UV Light
Alex
42371 Avenue Alvarada
Temecula, Ca. 92590

Ecological Laboratories

12- QT. Microbe-Lift
Nick Simone
2525 NE 9th Ave.
Cape Coral, Fl. 33909

E.G. Danner MFG.

Pondmaster pump/filter.
Numerous pond additives
160 Oval Drive
Islandia, NY 11749
Sales@dannermfg.com

OASE Pumps Inc

Filtoclear 1600 Pressure Filter
with 9WT. UV
Carol Blackmann
400 E. Parkridge Ave. #101
Corona, CA 92879
www.oasepumps.com
E: info@oasewaterscapes.com

Water Gardening Magazine

1 year Subscription to Water
Gardening magazine
Susan Spicer
PO Box 607
St. John, IN 46373

Sanke Santa

Soft Side Show Tank, Pond
pump, battery air pump
1 Southpole, Bottom of the
World, Super Cold

Hikari Sales

12 bags Koi Food
2804 McCone Ave.
Hayward, CA 94545

Nycon Products

Koi sock net, feeding ring, 2
pond thermometers
1602 SW Jefferson Street
Lees Summit, MO. 64081

Kaytee

2- 5# Koi Food Coupons
Jennifer Bauknecht
PO Box 230
Chilton, WI 53014
www.kaytee.com

M & S Ponds

5- Bamboo Deer Scarer's
12635 Danielson Court #202
Poway, Ca. 92064
www.msponds.com
E: CS@msponds.com

Petsmart

Gift Certificate

September 2003

Cyprio

1450 Titan Pump
961 Bethel Ave.
Pennsauken, NJ 08110
E: info@hozelockbyprio.com

Novalek

Gallon AmQuel
2242 Davis Court
Hayward, CA 94545

Willcox Beauty Shop

20" Color TV
Phoenix Mini-Bike
256 S. Haskell Ave.
Willcox, AZ 85643

California Koi Farm

Live Fish
Takemi Adachi
3360 Gird Road
Fallbrook, CA 92828
(760) 728-1483
E: cakoiinc@hotmail.com

Natural Solutions

Barley Bales
Diana Niver
Box 114
Keuka Park, NY 14478
www.kinkny.com/barleystraw
E: dniver@linkny.com

Biosphere 2

2- 1 year Family Passes
32540 S. Biosphere Rd.
Tucson, AZ 85623

Have you
got your
tickets
Yet!!!

Test Your Knowledge of Koi Varieties

By Wayne Warzecha, Practical Koi Keeping vol #3 Koi USA

1. A white-colored Koi with a red pattern is known as a:
 - A. KOHAKU
 - B. AKA BEKKO
 - C. OGON
 - D. SHOW
2. Which of the following does not describe a Kohaku pattern type?
 - A. NIDAN
 - B. INAZUMA
 - C. KAGE
 - D. SAN DAN
3. A "doitsu" Asagi is better known as a
 - A. KIKUSUI
 - B. BUDO SANKE
 - C. GOSHIKI
 - D. SHUSUI
4. Which one of the following types is classed as a kikari muji?
 - A. KIKUSUI
 - B. GINSHIRO
 - C. PLATINUM OGON
 - D. SANKE
5. A "red tortoiseshell" patterned Koi is better known as:
 - A. HI AKA
 - B. BENI GOI
 - C. AKA BEKKO
 - D. HI SHOWA
6. The two principal types of red, black and white tricolored NISHIKIFOI include the TAISHO SANKE and the:
 - A. SHOWA
 - B. KOHAKU
 - C. GOSHIKI
 - D. ASAGI SANKE
7. Which of the following descriptive terms would not apply of a SHOWA?
 - A. KAGE
 - B. BOKE
 - C. KINDAI
 - D. HANA
 - E.

8. A "metallic" Sanke is called:
 - A. AKA SANKE
 - B. YAMATONISHIKI
 - C. KINSUI
 - D. KUJYAKU
9. A "metallic" Goshiki is called.
 - A. SHUSUI
 - B. YAMATONISHIKI
 - C. KIKUSUI
 - D. KUJYAKU
10. All of the following types belong to the GOROMO class with the exception of:
 - A. BUDO SANKE
 - B. AI SHOWA
 - C. SUMI GOROMO
 - D. KUJYAKU
11. Both BEKKO and UTSURI may exist in three color forms dependent on the background (or accent) color. Which of the following is not one of the three background color forms that might be used to describe a BEKKO or an UTSURI?
 - A. SHIRO (WHITE)
 - B. KI (YELLOW)
 - C. SUMI (BLACK)
 - D. HI (ORANGE/RED)
12. Which one of the following is not a type of SHUSUI?
 - A. HI
 - B. HANA
 - C. KI
 - D. MATSUBA
13. Which of the following Koi can never be called TANCHO?
 - A. KOHAKU
 - A. SHOWA
 - B. BEKKO
 - D. HAREWAKE
14. All but one of the following koi belong to the KARASU family within the KAWARIMONO. Identify the exception:
 - A. KUMONRYU
 - B. KANOKO SHOWA
 - C. HAJIRO
 - D. HAGESHIRO
15. Which one of the following Koi types is a member of the original and oldest types of Nishikigoi?
 - A. SANKE
 - B. ASAGI
 - C. OGON
 - D. GOROMO

16. If the HI Patches of a KOHAKU or SHOWA are dappled, the Kohaku or Showa is called:
 - A. SICK
 - B. KAGE
 - C. KANOKO
 - D. BOKE
17. ASAGI and AKA SANKE crosses produced the GOSHIKI, a Koi theoretically having:
 - A. FIVE COLORS
 - B. FOUR COLORS
 - C. A PURPLE METALLIC COLOR
 - D. NO BLACK PIGMENT
18. "DOITSU" Koi may be generally described as:
 - A. METALLIC KOI
 - B. ALBINO MUTATIONS
 - C. DIAMOND SCHALLED
 - D. VIRTUALLY SCALELESS
19. A SHIRO BEKKO is as analogous to a TAISHO SANKE as a SHIRO UTSURI is a
 - A. KINAI SHOWA
 - B. TAKI ASAGI
 - C. TANCHO SHOWA
 - D. AL-GOROMO
20. All of the following Koi are classified as HIKAEI UTSURIMONO with the exception of:
 - A. KIN SHOWA
 - B. GIN BEKKO
 - C. GINSHIRO
 - D. KIN-KI-UTSURI
21. A single colored, non-metallic Koi of a light brown or saffron color like tea is called a:
 - A. MAGOI
 - B. BUNKA SANKE
 - C. CHAGOI
 - D. KI GOI
22. The KAWARIMONO Koi of bluish-grey with brown patterns that is called "AUTUMN LEAVES ON THE WATER" is more properly known as:
 - A. HANA SHUSUI
 - B. HI ASAGI
 - C. OCHIBA SHIGURE
 - D. KUMONRYU
23. Which of the following is the name to describe a green Koi?
 - A. KI SHUSUI
 - B. MURASAKI
 - C. MIDORI GOI
 - D. KIGOI

24. A metallic AL-GOROMO in the HIKAEI MOYO-MONO is called:
- KINZAKURA
 - SHOCHIKUBAI
 - GINSUI
 - KINMATSUBA
25. KIN GIN RIN appears in different forms depending on how the shiny deposit is located on each scale surface. All but one of the following is a form of KIN GIN RIN. Find the exception:
- TAMA-GIN
 - BETA-GIN
 - KADO-GIN
 - TAKA-GIN
26. Which of the following statements is most correct?
- THE CHAGOI AND SORAGOI ARE SLOW GROWING, PATTERNED KAWARIMONO.
 - ONLY THE KNOHAKUS, SANKES & SHOWAS WILL GROW TO BECOME JUMBO KOI.
 - OGONS WERE AN EARLY DEVELOPED NISHIKIGOI.
 - KI UTSURI WERE ONE OF THE ORIGINAL KOI TYPES USED TO DEVELOP THE SHOWA.

(See Page 14 for Answers)

KOI CLASSIFICATION & JUDGING CRITERIA

By Douglas Dahl

KOHAKU

It is said "appreciation of koi starts and ends with Kohaku". What that means is Kohaku was the first class to be bred consistently or stabilized in about 1890. It also means that after a person has studied all of the classes of koi and has become experienced, they will come back to appreciate Kohaku for its simplicity and beauty. I will keep the amount of Japanese terminology to a minimum in this lecture. A Japanese term dictionary will be available soon in KOIUSA magazine and on the AKCA website.

Before I continue on Kohaku, I want to take a minute to discuss judging points common to all classes. Koi are judged as a whole or holistically and are not judged on a positive or negative point

system. Negative points can come into play in close contests. Koi are judged side by side based on what we see today and not what may be there next week or next year. Japanese Judges have a disadvantage in often being able to recognize bloodlines, which can cloud their "judge for today" decisions because they know which koi cost more and has more potential. A Japanese Judge once answered a question on why a koi won an award replying, "because it was the most expensive fish". Koi may lose today only to come back to win tomorrow based on the competition tomorrow.

1. First, the koi cannot be missing anything like a fin or have any abnormalities like a pushed in mouth all of which will disqualify the koi from judging. The exception is the second set of barbels.

2. Second the koi must be healthy and not show signs of disease or parasites, which could disqualify the koi from judging. An exception is made for split fins or bruises judged to be caused during transportation.

3. Third, is the importance of body conformation. Broad, thick body shape of female koi is preferred giving an imposing appearance when compared to the thin trout shaped body of a male koi. Shape and size of the fins are important to be in proportion to the body. The head shape is important that it not be too short or too long or turn to one side. The koi when viewed from above should be symmetrical on both sides and not have one side flatter than the other. Even the way a koi swims is taken into account on conformation. Not all female koi hold their eggs well, which could affect conformation.

4. Fourth, in my opinion is quality of skin and deep, vibrant colors, which makes koi "living jewels". This also includes how well the koi is "finished", are all of the colors up, and is there a good sheen on the skin. It is conformation and quality that will catch a Judges eye from a distance.

5. Fifth is pattern that is artistically balanced and not front, tail or side heavy. Pattern must also be proportional to the size of the koi and not have a small pattern on a huge body or a huge pattern on a small body.

6. Last is uniqueness or character usually of the pattern on the head that makes this koi special. Now for Kohaku. We have a snow white (shiro) base color with a red (hi) pattern. The pattern may be stepped or continuous. The white must be without blemish or yellow tint. The hi may be any one of the many hues from deep persimmon orange to Ferrari red but the red must be thick without any thin spots and the pattern must be the same color from head to tail. Some Judges prefer the persimmon orange hi to the Ferrari red because the orange appears soft and the purple red appears hard and gaudy. Kohaku must have red pattern on the head. The pattern on the body must be artistically balanced and the kiwa or rear edges of each spot must be sharp like cut with a razor. A new bias in Japan has started to favor bloodlines that have the kiwa stop at the edge of each scale forming a scalloped edge rather than a straight edge across the center of a scale. The front edge of each spot (not on the head) may have blurred red color that is called "sashi" or insertion. Sashi indicates the koi is still improving in quality and is not finished yet. It is elegant if a Kohaku has a white nose and a white area with no red pattern just in front of the tail called a "tail stop" and several other names. Some subtleties of pattern not liked are a totally red head or red down the face to the nose that are heavy in appearance. Red pattern wrapping below the lateral line suggests a future koi when the red and white are better balanced. Red spots below the lateral line are disliked. The lateral line is a raised sensory organ running the full length of a koi half way up the side of a koi. A red head pattern with an additional red lip mark is called "kuchibeni" and can be cute if it balances the overall pattern. Red pattern at the base of the pectoral fin was considered unfavorable but is

being accepted now if it adds to the overall balance of the pattern. Red into the tail or into the dorsal fin is still disliked. Kohaku tend to get black specks "shimis" in hard water with high pH.

SANKE

Sanke or "Taisho Sanshoku" is a Kohaku with an added black spotted pattern overlaid onto the body. Sanke were first stabilized round 1917 (the Taisho Emperor era). All of the criteria for Kohaku also apply to Sanke. In addition, the black spots must add to the overall balance of the pattern. The black or "sumi" spots must all be the same color, must be thick with good kiwa, may have sashi, must be shiny, lacquered black and are preferred on top of the white instead of on top of the red. Sanke sumi spots are usually above the lateral line on the back. Sanke may or may not have black stripes in their fins but too many stripes can make the fins appear heavy. Sanke have a tendency to get too much sumi on the back half of the koi making it appear tail heavy. It is difficult to finish the quality of the hi and the sumi on a Sanke at the same time because the hi peaks early in age and the sumi peaks later. Many Sanke have lost to Kohaku because the sumi on the Sanke was not finished which detracted from the appreciation of the Sanke even if the white and hi of both koi were equal. It seems unfair but on the other hand a Sanke with all colors finished has the advantage of difficulty and rarity over Kohaku. This advantage is not often discussed but definitely an advantage in judging. A Sanke with a circle red Tancho pattern on the head in addition to a red and black pattern on the body is a Maurten Sanke. A Sanke with a red pattern running the full length of the body almost covering the complete top is Aka Sanke. Aka is another term for red.

SHOWA

Showa or "Showa Sanshoku" is a Kohaku with an added black, spreading pattern overlaid onto the body that wraps from the back down below the lateral line. The black is not spots like in Sanke. Showa were first stabilized round 1920 (the Showa Emperor era). The earlier Showa

bloodlines were a checkerboard of black and red with very little white showing making people call it a black koi with white markings. In fact, breeders kept only all black babies. Modern "Kindai" bloodlines have a more balanced amount of white, red and black showing. Not until the creation of the modern Kindai Showa did Showa compete on an equal basis with Sanke and Kohaku. All of the criteria for Kohaku also apply to Showa. In addition, the black wrapping pattern must add to the overall balance of the pattern. The black or "sumi" pattern must all be the same color, must be thick with good kiwa, may have sashi and must be shiny black. Early bloodlines had dull or matte finished sumi and were not as popular as the modern Showa. Showa MUST have all three colors on their face. Often there is a lightning pattern across the head down to the nose called "Menware" or a V pattern on the shoulder. Showa usually have black in their fins including black base of the pectoral fins called "motogoro". Showa have a tendency to get too much sumi on the pectoral fins or on the back half of the koi making it appear tail heavy. It is difficult to finish the quality of the hi and the sumi on a Showa at the same time because the hi peaks early in age and the sumi peaks later. Many Showa have lost to Kohaku because the sumi on the Showa was not finished which detracted from the appreciation of the Showa even if the white and hi of both koi were equal. It seems unfair but on the other hand a Showa with all colors finished has the advantage of difficulty and rarity over Kohaku. Again, this is not often discussed but definitely an advantage in judging. Some Showa have light gray sumi under the surface of the scale called "boke" but many judges call it unfinished if some of the sumi is up and black but not all of it. Local, unfinished sumi marks on Showa are currently being evaluated whether they should be judged a beauty mark if the quality of the koi is high. Should a Showa with some unfinished sumi be less appreciated than another koi variety that is finished? It is not a simple answer because you have to see both koi to

make that holistic judgment.

However, these judgments have been questioned in the past. Showas with underlying sumi that forms a reticulated pattern like Goromo are called Kage Showa and are put into Kawarimono class. Go figure.

GOSANKE

(a collection of

Kohaku, Sanke and Showa classes)

The first three classes I discussed (Kohaku, Sanke, Showa) are the oldest koi classes to be stabilized and as a group are called Gosanke. Breeders have had 8 decades to perfect the many bloodlines of Gosanke and also 8 decades to perfect the judging criteria for these big 3. Gosanke are highly valued because they have to breed 100,000 babies to get 10 koi with high quality patterns acceptable to the All Japan Koi Show. Again, with rarity and cost comes appreciation and rewards with Gosanke winning almost all of the Major Awards at koi shows. Most of the other koi classes have been stabilized since World War II. Breeders of these koi classes usually get 90 percent or more high quality show koi from each breeding making the koi less expensive and much less rare than Gosanke. One exception is the new Shiro Utsuri (white with black wrapping pattern) and I will discuss this class next. I believe Gosanke, in addition to tradition and cost; also have the advantage of good contrast of color with white as the base that shows of the red and black pattern very well.

UTSURI

Utsuri are white (Shiro), yellow (Ki) or red (Hi) base color koi with wrapping black pattern forming a checkerboard pattern that starts on the back and wraps below the lateral line. Utsuri were originally stabilized around 1925. Just as the early Showas evolved from the dark, heavy patterns to the modern Showa, so has the new Shiro Utsuri very recently (1990s) evolved to the balance of white and black and from dull sumi to jet-black sumi. The Ki and Hi Utsuri bloodlines have generally not evolved to this balance or to this jet-black sumi. As a result Ki and Hi Utsuri are not as highly valued and their sumi

tends to fade away when moved from a dark pond to a blue show tank. They also have a tendency to get scattered sumi specks on their base color making it look dirty. Utsuri also may have the motogoro at the base of their pectoral fins and sumi in the other fins. Utsuri need to have black on the face sometimes in the form of a lightening pattern down the head. Like the modern Showa, only the new Shiro Utsuri can compete with Gosanke on an almost equal footing. Shiro Utsuri do not have the difficulty Showa have of finishing two colors which gives the new Shiro Utsuri an advantage over Showa in finish but Showa have the advantage in difficulty, rarity and high cost. Many of the comments I made earlier about Showa and also about Gosanke can also be said of the new Shiro Utsuri. I expect to see more Major Awards going to the new Shiro Utsuri in the future.

BEKKO

Bekko are white (Shiro), yellow (Ki) or red (Aka) base color koi with lacquered sumi spots on the back, like Sanke. Yes, the Japanese have several terms meaning red. Shiro Bekko often result from Sanke breeding but are koi that never developed a red pattern or lost their red pattern. The most difficult and important thing with Bekko is to get a clear, unblemished head with no sumi pattern. The fins are the same as Sanke. Ki and Hi Bekko have the same problem as Utsuri in the tendency to get many small black spots but the sumi does not fade at shows like Ki and Hi Utsuri tend to do. Hi Bekko with this condition are referred to as pumpkin fish (not meant as a compliment). I believe Bekko are not valued because they are culls from Sanke breeding making them second-class. Their appreciation also suffers from not having a head pattern that Shiro Utsuri does have.

TANCHO

In Kohaku, Sanke and Showa breeding, many koi turn out to have only a single red spot which is on the head. We call these koi Tancho, Tancho Sanke and Tancho Showa respectively and they are shown in

Tancho class. The Tancho spot must be between the eyes and preferable perfectly round. It must not go back onto the shoulder of the koi or down to the nose of the koi. Red may not appear anywhere else on the koi to be shown in Tancho class. A sumi pattern may cross the Tancho mark on a Tancho Showa. No other variety with a spot on the head may be shown in Tancho class. This includes Goshiki with red spot on the head, Bekko with black spot on the head and Ogon with orange spot on the head to name a few.

DOITSU (in all classes of koi)

Doitsu are Japanese koi crossbred to display the characteristics of the German "leather" carp with no scales at all or with the German "mirror" carp having large scales only along both sides of the dorsal fin or with large scales along the dorsal fin and also along the lateral line on both sides of the koi. Doitsu koi have been crossbred in Japan for most all of the classes and typically compete against scaled Japanese koi in the same class unless there is a special Doitsu class. Doitsu koi can easily have sharp kiwa due to not having scales so scaled koi are given the difficulty advantage in judging. All judging points being equal, scaled koi will beat Doitsu koi.

ASAGI / SHUSUI

Asagi koi have red below the lateral line to the under side, often some red on all fins and the red can come up from the belly to cover the gill covers and to the base of the mouth. Blue color is above the lateral line. The blue color can vary from dark almost gray to a very light blue depending on the bloodlines. The lighter shade of blue of the Narumi bloodline is preferred. The blue color of each scale is surrounded by a lighter ring around the edge of the scale giving a netting appearance which is very pretty when all of the scales line up in straight rows. This last point is very important in judging Asagi. Also, it is difficult to have a clear head with no blemishes so this also is a strong judging point. Asagi were documented over 160 years ago and have evolved to the beautiful

specimens we find today. The Asagi is fully scaled.

Shusui is the Doitsu version of the Asagi. All criteria and characteristics of Asagi also apply to Shusui except there is no netting pattern but a sky blue top half of the koi. It is very important there is no break in the line of mirror scales from the back of the head along the dorsal fin and the scales line up in straight rows. Again, a clear head is very important. It is difficult to keep black spots from appearing on Shusui in hard, high pH water. A Shusui with red almost covering the back above the lateral line is called Hi Shusui. A Hi Shusui with the addition of blue mirror scales on both lateral lines separating the red top and bottom is called "Hana Shusui".

KOROMO

Koromo meaning "robed" is a cross between Kohaku and Asagi. The result is a white base koi with a red Kohaku pattern that has blue edged scales forming a reticulated pattern only on top of the red pattern. Ai Goromo has beautiful blue netting. Sumi Goromo adds sumi spots. Budo Goromo has what appears to be clusters of grapes on the red pattern. There are also crosses of Sanke and Showa with Asagi to create Koromo Sanke and Koromo Showa.

KIN GIN RIN

Literally means Gold and Silver scales. A chemical deposit creates a sparkle effect on each scale. Many of the koi classes have been crossbred to have Kin Gin Rin scales but if a koi has two rows of Gin Rin scales, it is shown in Kin Gin Rin class. Koi with less Gin Rin scales are usually shown in their normal class and the scales may or may not affect the judging. There are four types Kin Gin Rin scales. Pearl Gin Rin has a sparkle deposit in the center of each scale like a pearl. Diamond Gin Rin or Hiroshima Gin Rin looks like brushed aluminum sparkle. Beta-Gin is where the whole scale sparkles and is the most valued type. Kado-Gin has only the aft edge of each scale covered with this sparkling deposit. Gin Rin

SAKA NEWS

shows up best on white and red and does not show very well on black. It needs sunlight to be appreciated.

HIKARI MUJI

(also called Hikarimono)

Hikari means metallic. These are koi with one metallic color. Koi in this class include Platinum Ogon, Kinbo (shiny gold), Ginbo (shiny silver), Orenji (orange) Ogon, Yamabuki (yellow) Ogon and Nezu (silver gray) Ogon. All of those koi are solid color koi with metallic sheen. With no pattern to judge, all you have is a strict requirement for a clear head with no blemishes and a requirement for the color to be consistent from head to tail. The sheen on the fins, especially the pectoral fins, is important when judging ALL metallic koi. Hikari koi seem to have more problems with deformities of the mouth, fins and back than the other classes so look closely when you buy them. Also in Hikari Muji is the Kin Matsuba and the Gin Matsuba that have black reticulation in the center of each scale to form a pinecone pattern.

HIKARI UTSURI

(also Hikari-Utsurimono)

Metallic versions of Showa and Utsuri. Koi in this class include Kin Showa (metallic Showa with golden luster), Gin Showa (metallic Showa with silver luster), Gin Shiro (metallic Shiro Utsuri), Kin Ki Utsuri (metallic Ki Utsuri), Kin Hi Utsuri (metallic Hi Utsuri) and Kage Gin Shiro (metallic Showa with kage sumi). All of these tend to fade out when removed from a dark pond and placed into a blue show tank so they don't show well but will return to their splendor when returned to the pond. All of these also tend to have a dirty sumi look caused by the metallic. Again the clear head and sheen is very important especially in the pectoral fins.

HIKARI MOYO

(also Hikarimoyo Mono)

Koi with two metallic colors like Platinum and red. Koi in this class include Platinum Kohaku, Gin Bekko, Yamabuki Hariwake (yellow and Platinum), Kikisui (literally Water chrysanthemum Platinum Kohaku

with wavy red lines on both sides) and Orenji Hariwake (orange and Platinum). Also included with two metallic colors plus black are Kujaku (Platinum Hariwake with black pine cone pattern), Doitsu Kujaku, Yamatonsihiki (metallic Sanke), Tora Ogon (Tiger koi actually a gold metallic Ki Bekko), Hariwake Matsuba (Platinum Hariwake with black reticulation). Metallic Shusui are called Kinsui and Ginsui with the former having more red markings. Shochikubai are metallic Ai Goromo.

KAWAIRMONO

(ALL OTHERS)

(no metallic koi allowed)

We finally get to the end and it is a catch all class for all of the other koi that do not fit into one of the other classes. The list is huge but here are some of the favorites.

Included are all of the Karasugoi or crow carp family that are black with various white markings on the body and fins. Depending on how much white you have Hajiro (black with white only on the tail and pectoral fin tips), Hageshiro (black with white on tail and pectoral fin tips and on the head), Yotsushiro (Hageshiro with all white head), Kumonryu (Doitsu koi with killer whale pattern) and Matsukawabake (koi that changes from black to gray depending on water temperature forming a net black pattern).

There is a very new koi that has been put into Kawarimono due to lack of a better place because it is metallic and does not belong in Kawarimono.

This is the Bene(red) Kumonryu called Kikokuryu. It is a metallic Kumonryu with a red pattern. It probably should be moved to Hikarimoyo because the black looks metallic so it has black, white and red metallic colors.

Next in favor is Goshiki meaning 5 colors that are white with a red Kohaku pattern and two shades of blue and black netting not only on the red but also on the white. Cool water makes the colors darken. It is important for Goshiki to have a clean red and white head with no sumi markings.

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The next favorite is the Chagoi or brown/green tea colored carp. These koi grow fast and very large and become the favorite in the pond by their gluttony. Also in solid colors are the Kigoi (yellow koi), Soragoi (gray blue koi), Midorigoi (green koi), Benigoi (red koi), Aka Hijiro (red koi with white fin tips) and Shiro Muji (white koi).

Next is a very recent cross between Chagoi and Kohaku or Asagi called Ochiba Shigure. This koi reminds people of autumn leaves because the hi shows up as a bright mustard pattern on a gray body with black netting over the whole body. The Doitsu version of Ochiba Shigure has been called "antique" due to the colors.

The next group is the Kanoko group. Kanoko means "fawn" describing a dappled Kohaku red pattern that looks like cherry blossoms. This group includes Kanoko Kohaku, Kanoko Sanke and Kanoko Showa.

The next group are the Kage (robed) group. They include Kage Shiro Utsuri, Kage Hi Utsuri, and Kage Showa.

The last group are the non-metallic Matsuba koi. They are Aka (red) Matsuba, Ki Matsuba and Shiro Matsuba. There are also Doitsu versions of all of the above.

Selecting a Young Showa

By Dr. Arthur Lembke

Selecting a young showa is one of the toughest young koi to choose. Showas go through many changes as they grow. Many times the black is very deep and only comes out as the fish grows. For this reason, if you see gray areas, it might not be poor quality white but deep black that will appear later. Start selecting a young showa, as with other young koi, by looking at the head. The head should have all 3 colors (red, black and white), preferably in equal amounts. Best would be to have a good kohaku head with either a lightning stripe or a v-shape in black on the top of the head. Many showas don't develop this until

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later, so just try to pick one that has good red and white with some black coming out.

Next look for a good kohaku pattern on the body. It should be balanced and be placed all through the body. Then check to see if black is either present or coming up all over the body. Don't worry if the black is of poor quality at an early age. Black develops later in most good quality showas. It is also okay to have an orange-red at this point because the red gets better as the fish grows.

The next very important thing to look for is the pectoral fins. Ideally, almost all of the pectoral fins, except for the outermost tips, should be black. As the pectoral fins grow out, the black seems to stay the same and the white area on the outside seems to spread out. If the pectoral fins are all black at this time, it is often alright, as this too can grow out to have good showa fins. Fins that are not acceptable are fins with any red, all white fins, or fins with very little black at the base. All other fins should preferably be white, but some black is acceptable. Red is not acceptable in the fins.

Look for a good, strong body, large pectorals, and a disease free fish. One must know how to pick a good kohaku and a good shiro utsuri to choose a good showa. If you take all the black away on a showa you should have a good kohaku and if you take all the red away you should have a good shiro utsuri.

Another thing to look for in this particular fish is the percentage of the 3 colors to the total fish. The classic showas used to be about 40% black, 40% red, and 20% white. The modern showas, that many judges like, have equal amounts of all 3 colors.

As you can see, the showas are one of the most difficult koi to select at a young age because they change so much as they grow. It is this complexity that makes this one of my favorites of the varieties of koi.

SELECTING A YOUNG KOHAKU

By Dr. Arthur Lembke

Many people have asked me to help choose fish for them that I think will become a show winner. For this reason, I am writing some articles on what I think people should look for in small koi if they plan on showing them someday. I wanted to write about the kohaku first, because I believe that is the most important fish if you are looking for a future grand champion and it is the basis for other varieties. When looking at a large number of kohakus, perhaps hundreds at a time, the first thing I look for is a white tip at the front and back of the fish. It is preferable to have the red on the head of a kohaku to only go down about as far as the nostrils. Also, the head must have red on it. Don't pick a kohaku with an all white head. Red over the eyes of the koi used to be looked down upon, but in modern times it may come down over the eye.

However, I think it is better if the red only comes down over one eye, not both eyes at the same time.

The head is generally one of the most important parts in an early koi. Now that you have several koi with acceptable head patterns, I look at the rest of the body. As I said earlier, I also look to see if there is a white patch right before the tail. If at all possible, I would like one there, but if all the rest of the koi has positive characteristics, this is not as important as the head.

For the body, I look for red that is balanced side to side and covers 70% of the body. This is so that as the koi grows up, and the white comes up, there is still adequate red on the body.

The red on the body can be in a zig_zag pattern (inazuma), a three or four step pattern, or anything else that looks eye catching. If the red is straight with no signs of breaking, the pattern may be uninteresting as the koi grows. I also look for koi that are broad at the shoulders, have a large skull, and have relatively large pectoral fins. This generally means the koi will grow larger to compete in shows.

When buying young kohakus, don't worry too much about the color. The white should preferably be snow white but may also be pink if it was color fed before shipping. Avoid kohakus

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with a dirty grayish_white. As for the red, it may be either bright red or orange_red. Many orange_red young kohakus turn a pretty red as they grow. Next make sure there are no red or black marks on any of the fins. A small red patch at the base of the pectorals may be okay. Also, make sure there are no black marks on the body. All red on the body should also be in sizeable patches, not in single scale areas (ie. small red spots). Last, but not least, take the koi out in a show tub and check for any body defects or any signs of disease. If these exist, do not buy the fish no matter how nice it looks. I hope this information can give you some help in selecting kohakus. Who knows? In 7 years you may have a grand champion.

24th Southern Arizona Koi Association Koi Show



SO YOU WANT TO KNOW WHAT GOES ON IN A KOI SHOW?

By Debby Young, Edited by Tom Ayers

- ❖ These are some of the many different jobs and activities that go on during a Koi Show. On November 7-9, 2003 SAKA will be have its 24th Annual Koi Show.
- ❖ Here are some of the jobs at the show and their duties:

Show Chairperson

- ❖ Oversees all committees and makes sure they are getting things done on time
- ❖ Makes final decisions on sizes and classes and awards to be given out.

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- ❖ Makes final decision on disqualification due to disease.
- ❖ Makes final decision on any controversy that may arise.
- ❖ Prepare opening speech and introduces judges.
- ❖ Selects a committee to select the AKCA Koi Award Fish.
- ❖ Procure Head Judge and at least one Candidate Judge for the show.
- ❖ Mail these judges a copy of SAKA rules and regulations two weeks before the show.

Site Selection

- ❖ Find available site from Friday 9:00am to Sunday 6:00pm.
- ❖ Site must have level area about 60' X 30' and 50' X 50' for vendors
- ❖ Site must have 2 water hose bibs and 2 electrical outlets.
- ❖ Get permission for use of land on dates needed in writing
- ❖ If they need proof of insurance see your AKCA representative.
- ❖ Provide 200 feet of hoses, 2 heavy-duty electric cords and 8 -8 foot tables and 12 chairs.

Set Up & Take Down

- ❖ Pick up at storage and return to storage - tanks, tents, netting, clothes, pins, air pump, air lines, Tori gate, "Show" billboard, flag pole bucket, air stones, SAKA flag with poles, Tub of Towels, Clorox.
- ❖ Provide - bring a pocketknife, hammer, string or electric ties, 3 tubs/floaters and 2 nets,
- ❖ Provide tanks signs for every size and class (Japanese Style) Tank # for English Style.
- ❖ Provide tank signs for major award winners. (In computer program)

Trophies

- ❖ Determine sizes and classes
- ❖ Get with chairperson to determine what sizes, classes and awards will be given out
- ❖ Assemble or purchase trophies as needed
- ❖ Order AKCA Koi Award Trophy
- ❖ Delivery of Trophies

- ❖ Deliver trophies to show site Saturday 10:00am and setup display table
- ❖ -Deliver trophies and winners board to banquet site Saturday Night.

Judges

- ❖ Make arrangements for judges pick up and return to airport
- ❖ Make arrangements for judges hotel rooms
- ❖ SAKA will pay for Head Judge room for Friday and Saturday only and all meals Saturday and Sunday and Friday night Dinner (Judge & Spouse)

Pond Tour

- ❖ Organize a small pond tour for about 3 or 4 ponds
- ❖ Provide transportation for the judges and spouses to view the ponds.

Photography

- ❖ Take photos of the top 6 winners on Sunday AM
- ❖ Submit Photos
- ❖ Develop film (two copies of each print
- ❖ Send a negative and snap shot of each winning fish with owner's name and award won to KOI USA.
- ❖ Send negative and a snap shot to Debby Young for "Koi of the Year" & "Champion of Champions"
- ❖ Obtain a large tub for photographing the fish,

Advertising

- ❖ Radio, Newspapers, Pet magazines about the show and action.
- ❖ Make a poster/flyer and distribute to garden centers, pet stores, and feed.
- ❖ Send flyer and/or Rules & Regulations to Tucson Koi Society and Valley of the Sun Koi Club and other clubs in the region

Water Quality

- ❖ Test water for pH, Chlorine, Ammonia, O₂, and Nitrite

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- ❖ Test water supply Friday before filling tanks
- ❖ Need to make sure we have water test kit, salt (non iodized), dechlor, amquel, nova agua, etc.

Raffle/SAKA Booth

- ❖ Obtain raffle items
- ❖ Make flyer telling about raffle
- ❖ Make tickets and distribute a minimum of 10 tickets and a flyer to each member for them to sell.
- ❖ Get SAKA pamphlets, KOI USA, SAKA membership applications, etc for handouts.
- ❖ Have pencils, a potential member sign up sheet, and change.
- ❖ Take entry money, banquet money, auction, etc

Auction

- ❖ Obtain fish (form members, vendors, etc)
- ❖ Receive fish at the show site Friday evening & early Saturday morning and up to before the action.
- ❖ Help provide tow tubs/pans, a net, bags, rubber bands, o2 and some boxes.
- ❖ Provide numbers for bidders to hold and bid on fish.
- ❖ Set up a system to keep track of the highest bidder.
- ❖ The following people will be needed as the auction is going on: an auctioneer (Brent), one person to keep track of winning bidders, one person to net and tub the fish, one person to bag the fish, and one person to collect the money.

Banquet

- ❖ Book a reservation for Saturday night Dinner
- ❖ Approximately 40 -50 people a 7:00p.m.
- ❖ Price range of no more \$35.00 per person including tax and gratuity and coffee and tea.
- ❖ If alcohol is served, it will be handled "NO HOST"
- ❖ Do not guarantee the number of people, you will confirm number of people 4 days prior and again on Saturday at noon.
- ❖ Plan and present a menu
- ❖ Ask for a quiet corner or area so we can have an awards ceremony

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- ❖ Obtain and set up table for trophies and awards
- ❖ Have a head table for the judges, spouses, Show Chairperson, and SAKA president and spouses
Pay the bill (obtain a check from the treasurer)

Security

- ❖ Make a schedule of volunteers to be at the show site.
- ❖ Arrange for security for Friday 7:00 p.m. to Saturday 7:00am and Saturday 6:00 p.m. to Sunday 6:00 am
- ❖ Get or arrange to have flood lights

Fish Check IN/OUT

- ❖ Provide the following items: extra entry forms and Rules & Regulations have pen, pencils and clipboards, measuring device and net.
- ❖ Check and inspect each fish for signs of disease.
- ❖ Measure and classify each fish as they arrive (owner/agent must be present)
- ❖ Fill out an entry form, checking off each fish in the proper size, classification and tank number.
- ❖ Help take photos of all the entered fish.
- ❖ Send the owner, with entry form to raffle committee booth to pay entry fees (all entries not paid by Judging are disqualified)

Judging Score Keeper

- ❖ Show the judges which tank will be judged next
- ❖ Keep track of move ups and 4th place.
- ❖ Avoid unnecessary conversation with judges
- ❖ Keep people back from getting in the way of the judges and fish handles
- ❖ Help provide a microphone for a judge's commentary

Lunch Saturday

- ❖ Arrange to have a light lunch to be brought to the show site on Saturday @ 1:00 p.m.
- ❖ Expect 30 people (Judges, handlers, exhibitors, restrations and SAKA info table people

- ❖ Have beverages (sodas or other beverages depending on the weather) at the show site for Saturday
- ❖ Judges eat first

Vendors

- ❖ Obtain and confirm a minimum of 5 vendors
- ❖ SAKA will provide one 8-foot table and 2 chairs for all booths.
- ❖ Fish vendors, we will provide an tent (11 X 11), amquel, salt, and Nova Aqua, vendors will provide there own bags, O², nets, pans, rubber bands, and tanks are available at \$10.00 per tank.
- ❖ As you can see it takes a lot of people to put on a great show. So if you see something that you might like to do or learn how to do, please ask or sign up for one of the tasks. The Show

Chairperson clipboard will be available every month.

If you think you might be able to help in one or more of these jobs or would like to learn how to do one of these jobs please sign up at the next meeting. It is a great chance to learn more about the hobby.

Meet the Judges Head Judge



Name: Grant W. Patton, Jr.
Address: Home - 6 Gibbes Street
Charleston, SC 29401
Office - 1375 Hospital Drive Mt.
Pleasant, SC 29464
Phone:(843)881-3900 Office, (843)
881-4729 Fax, (843) 577-4370 Home
Email Address:
Gpatton@sefertility.com
Profession: Physician, Director of an

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In-Vitro Fertilization Size of Pond:
24,000 gallons

Year Certified as Judge: Local
Certified ZNA Judge 1995, AKCA
Certified Judge 1997

Years in Hobby: 20

Affiliated Club: Member of ZNA
Southern California, 1986

Positions Held in Club: Founder and
Member of Showa Koi Club, 1990
Co-Founder and Past President of
Showa Koi Club. Originated the
Showa Club Newsletter. AKCA
Representative Show Co- Program
program Chairman, ZNA Potomac
Koi Club, Washington, DC

Other Koi Activities: Interest in Sanke
breeding. Developed a number of
outstanding individual koi from the
jimbei-terzao bloodline. Four trips to
Japan, most recent of which was the
All-Japan Show in January 2002.

Accomplishments: Have been voted
"Koi Person of the Year" twice.
Developing a large jumbo koi.
Visiting clubs across the United States
as a koi judge

Assistant Judge

Name: Penny Patton
Address: Home - 6 Gibbes Street
Charleston, SC 29401
Office - 1375 Hospital Drive Mt.
Pleasant, SC 29464
Phone:(843)881-3900 Office, (843)
881-4729 Fax, (843) 577-4370 Home
Email Address:
Gpatton@sefertility.com
ZNA certified judge
(more to come)

Assistant Judge



Name: Steve Drake
 Phone/Fax: (760) 729-3649
 e-mail: SteveDrake@aol.com
 Profession: Technical Director -
 Ophthalmic Optics

Size of Pond: My pond and water system measures 3000 gallons.

Year Certified as Judge; 1999

Years in Hobby: 16 years

Affiliated Club and how many years:
 Koi Club of San Diego since 1989

Positions held in club: President, VP of Program, VP of Venue, and Show Chairman

Other koi related Activities: I have been to Japan 6 times and have brought Koi home from other counties as well. I have written articles on a number of topics for KOI USA including Koi Terms, Buying and transporting Koi from Asia, Japanese versus English shows, etc. My pond was selected for a feature photo layout in a Koi publication in the UK. I have been the auctioneer several times at San Diego's largest Koi auction, I was chosen with only two others from our county to speak about Koi, my pond and my garden on a KPBS TV program. It has been shown, so far, for three years due to its popularity with the general public.

Accomplishments: My involvement with Koi has been, by both scale and expense, within the average suburban homeowner's capability. The investment of my time to study Koi and their care has been very satisfying. While I love to study and judge large Koi, I specialize in buying smaller fish and raising them for shows in classes up to 21 inches long. My fish have won many high level Koi show awards. I consider my Koi as fine art, which understandably, are much more appreciated because they are framed by a collection of rare palm trees, ferns and other garden features.

Candidate Judge

To be announced

Follow-up Story

The KHV - CNGV Timeline by
 KEITH & LINDA KINNEY - DAYTON KOI CLUB

May 24, 2003 - Purchased beni kumonryu from Bill Jones at Louisville koi show. The fish had been purchased 1 hour before from Ray Abell (And had been in quarantine for 7 weeks.) This fish had been in pond with Bill's infected fish for that 1 hr. - then the beni kumonryu was bagged and floated in that pond water for rest of day until 7:00pm when *it was introduced directly into my 10,000 gal. Koi pond @ 71-72 degrees.*

May 30, 2003 - Still eating, but not swimming with other fish.

June 1, 2003 - (8 days later) Kumonryu staying at top of pond - quit eating.

June 7, 2003 - Put kumonryu in quarantine.

June 9, 2003 - Main pond: 4 koi gulping air and forcing out gills.

June 10, 2003 - Large kohaku (22") had red blotches, a scraping showed costia.

- Started Proform C treatment

June 11, 2003 - 30% water change, 2nd [Proform C](#).

June 12, 2003 - 30% water change, ProformC + [Prazi](#).

June 13, 2003 - Kumonryu died in quarantine. We had to leave for business trip, returned late Sunday night, June 15.

June 16, 2003 - First view of fish - they looked terrible. We thought it was some sort of chemical burn from the Proform C. We did a 40-45% water change. *The fish had no slime coat.*

June 17, 2003 - 35% water change. - Salt at .18%. First of our fish died - 17" showa. I called Bill Jones and *he reluctantly told me that a batch of his fish had been diagnosed with KHV.*

June 18, 2003 - Sent 2nd dead fish to Georgia (KHV Positive), *started raising temperature from 71 degrees, reached 75 degrees. (Why?) Added extra aeration.*

June 19, 2003 - Temperature at 82 degrees, salt at .3%, two more fish died.

June 20, 2003 - Four more fish died.

June 21, 2003 - Our annual club auction. Thank goodness I knew what I had. Started using KoiZyme twice a week instead of once a week. Ordered [antibiotic food](#) from [Pond RX](#). Lost 9th fish.

June 24, 2003 - Started on antibiotic food for 11 days, but they ate very little, for 3 weeks. Four required further treatment with Baytril, but **all remaining fish survived** (29 out of 38 + 2 small 6" fish & kumonryu) - *Heated to 83 degrees for 11 days*, starting the 19th.

Now Aug.12, 2003 - **9 weeks after outbreak, all are eating well and acting normal.** Several lost some color and several still have sunken eyes. No more infections.

I should mention that I did a scraping of two fish 7 or 10 days before introducing the new fish just to be cautious - I didn't see any parasites. However, the very first indications I got of the problem was the obvious presence of costia and the scraping showed them to be heavily infested. This was before any "disease-like" symptoms, but 16 days *after* I introduced the KHV fish.

June 17 (24 days after introducing fish and 18 days after it appeared ill) was when a friend called me and told me about *three* other ponds already wiped out from the same purchases at Louisville. *It really appears as if treating for costia, either before or during the heating process might make a big difference in survival rates.* My first mortality, other than the initially infected fish was not until this date. And [Proform C](#) does seem ideal as it is so quick.

Linda: Something I really want to know and forgot to ask, do the sunken eyes come back to normal?

Doc: Answer: *Yes, they do as the fish recover their strength. heat seems to make a big difference in how fast this recovery is.*

Linda Kinney

President, Dayton Koi Club

Letter from a member

We will restock our pond with Koi from Don or Brian Conolly of

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Crosstimmer next summer with 40 to 60 show koi. For anyone from Phoenix or Tucson is say that Crosstimmer was responsible, please stop now as it is not true. Watch for us the show, we will be back. Thank you.

Rick and Barbara Shook



~~Kawarigo Komo~~

**Special Events Coming
UP**

September 28, 2003
Bob & Darleen Panter

October 4 & 5, 2003
ZNAOC

Koi Show & Auction
Andrews Koi
Anaheim, CA

October 26, 2003
Linda Wallace

November 7-9, 2003
24th SAKA Show

Kino Veterans Memorial Center
Tucson, AZ

December 13, 2003
Open

January 18, 2004
Open

February 6-8, 2004
Valley of the Sun Koi
Show

February 13-15, 2004
San Diego Koi Show

February 22, 2004
Open

March 28, 2004
Open

April 25, 2004
Open

May 23, 2004
Open

June 20, 2004
Open

We are looking for members to host the open dates. (Contact Tom Ayers) It is a great chance to show off your pond and everybody would like to see it know matter what the size is, big or small.



New Club Web site!!!

Come visit it and make your comments. It is your site and I need your help. Go to

<http://sakoia.org>

Have Fun Surfing it.

SAKA Sites wins

Navigation 1st place

And a \$100. Come visit our award winning site.

September 2003

Free Stuff

Ken Burke has elephant ear plants and tons of mosquito fish to give away. Call 520-883-6506

ANSWERS

- | | |
|-------|-------|
| 1. A | 2. C |
| 3. C | 4. C |
| 5. C | 6. A |
| 7. D | 8. B |
| 9. D | 10. D |
| 11. C | 12. D |
| 13. C | 14. B |
| 15. B | 16. C |
| 17. A | 18. D |
| 19. A | 20. B |
| 21. C | 22. C |
| 23. C | 24. B |
| 25. D | 26. D |

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3625 S Country Club Road
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Mountain View Koi Fish & Aquatic Plants

3828 Keeling Road,
Hereford, AZ
378-3710

Ponds, Plants & More

(Near the corner of La Cholla &
Ruthrauff)

2060 West Ruthrauff,
Tucson, AZ
292-6774

Rancho del Koi

3400 S. Sagauo Shadows Drive
Tucson, AZ
886-8797