April 2023–May 2023

www.akakoi.com.au

AKA Reporter





DracoDrum

DracoDrum by AussieKoi WA is Australia's number one choice of drum filters for Koi Hobbyist. DracoDrum is also becoming increasingly popular with the scientific, industrial and educational sectors. DracoDrum's are now installed all over Australia including Tasmania. Typically used in fresh water DracoDrum's are now also widely utilized in salt water applications.

DracoDrum advantages over traditional filtration:

- · Automated cleaning. No more manual cleaning of matting or brushes.
 - · Designed with simplicity in mind for exceptional value for money.
- · Very small footprint compared to traditional vortexes and chambers.
 - Unrivaled water quality equals healthier Koi with better growth.

With over 12 options to choose from DracoDrum has a model for all aplications, please see website for all products avialable.

DracoDrum Solum 25

- Fully automatic cleaning.
- Capacity 25,000 litres per hour 58micron (pump fed less 25%).
- Optional 75micron mesh increases capacity to 30,000 litres per hour.
- Suitable for pond sizes of approx 30,000 liters.
- Twin 4" inlet and outlets.
- · Easily removable bypass plates.
- Dimensions 610mm wide, 677mm long, 571mm depth.
- · Height above water level 180mm.



DracoDrum Solum 16 Capacity of 16,000 LpH



DracoDrum Solum 70 Capacity of 70,000 LpH



DracoDrum Minima Combi Capacity of 10,000 LpH

For more information www.aussiekoiwa.com or 0419 907 973

AKA Reporter



April 2023–May 2023

Administrative members and contact details	2
President's Report by Ian Andrews	3
Meeting Notices and Agendas, News, New Members, Auction Dates	4-6
AKA Mid Northern Region by Gavan Gribble	7
Country living by Graham and Lee Fameli	
A focus on metallic koi: Part one–Hikarimuji by Kate McGill-Andrews	10
Bucket list koi trip to Japan by Cam Mangiameli	16
46th Annual Sydney Koi Show ZNA Judges announced	21
46th Annual Sydney Koi Show 2023	24

Thank you to our advertisers...

Aussie Koi WA	Inside front cover
Clear Water Koi ProfiDrum	22-23
The Pond Man	20
AllCare Ponds	Back cover

For all advertising enquiries please contact Gordon Kilborn 02 9153 9012 or 0429 664 916

Cover photo: Graham Fameli, Phong Ta (WA), Allan Bennett (WA) and Cam Mangiameli enjoying the famous 53rd All Japan Combined Nishikigoi Show (locally known as the Shinkokai).

AKA Reporter is published by the Australian Koi Association Inc. ABN 91 669 147 584

Advertising enquiries: Adam Holden 0419 165 782 Newsletter production www.petergibson.com.au

All correspondence to: The Secretary, Australian Koi Association, 17 Westmore Drive, West Pennant Hills NSW 2125

Disclaimer

The opinions expressed in this magazine are those of the authors, and do not necessarily represent those of the Australian Koi Association or its management. Nor does the Association accept responsibility for the claims made by advertisers or members in respect of any service or items offered for sale herein.



Scan this tag with your phone www.akakoi.com.au

© 2022 Australian Koi Association Inc.

The Australian Koi Association Inc.

Patron: Professor Simon Chapman AO PhD FASSA

Bankstown Branch President Vice President Secretary Treasurer Public Officer	Ian Andrews Paul Miglionico Adam Holden Judi Rea Norm Verity	0418 255 897, ia222@hotmail.com 0415 834 529 0419 165 782 0418 290 084 0404 057 741
<u>Committee Members</u> AKA Show Coordinator Sydney Koi Show Chairman Sydney Koi Show Committee	Paul Miglionico Richard Power Graham and Lee Fameli Joe Borg John Zammit David Chu Mark Robinson TK Hing Ron Moylan Richard Davies	(02) 9862 0472 / 0415 834 529 0437 012 463 0400 615 977 (02) 9832 9676 0419 019 125 0402 032 750 0427 236 385 0402 305 868 0414 909 966 0414 889 724
Membership Officer Supply Officers: North West Sydney South West Sydney Eastern Suburbs Western Suburbs Membership Liaison Auction Coordinator Auction Assistant WhatsApp and Facebook	Anchard Davies Ian Andrews Heinz Zimmermann John Rhodes Phil and Judy Rea Mimi Chu TK Hing Heinz Zimmermann Joe Borg TK Hing	0418 255 897, ia222@hotmail.com 0428 478 594, zimmo55@yahoo.com.au 0418 617 627 0428 478 594 0415 034 652 0418 996 226 0418 318 333 0402 305 868 0428 478 594 0416 545 882 0402 305 868
AKA Reporter Editor Photography Advertising/Promotion Committee Support Panel Table Show Registrars Catering Social Secretary Sizing & Assets	Kate McGill-Andrews John Ling Adam Holden Paul and Dorothy Miglionico Rostered amongst Members Judi Rea Eric Wilma	0427 702 235 0411 156 648 0419 165 782 0424 133 698 0418 290 084 0417 412 159
<u>AKA Mid Northern Region</u> Chairman Dep. Chair Secretary Treasurer Event Coordinator Technical (Fish) Officer Membership Officer	Gavan Gribble Greg Collins Peter Hemmings Pooney Pun-Gribble Steph Nicholson Peter Colgan Greg Collins	0430 930 936 0411 406 519 02 6567 7576 0409 675 673 0428 493 566 0407 182 709 0411 406 519

<u>Website www.akakoi.com.au</u> <u>Facebook</u> www.facebook.com/AustralianKoiAssociation

Life Members

Ethel Allen^{*}; Ian Andrews; Joe and Rita Borg; Jack Cohen^{*}; Mary Cohen; Max Farrugia; Ron Farrugia; Barbara and Bryce Hough; Arthur Johnston; Gordon Kilborn; Yvonne Louis; Betty and George Ludbrook; Kate McGill-Andrews; Dorothy Miglionico; Paul Miglionico; Ken Newton; Dave Pogson^{*}; John Rhodes; Arthur Robinson; Alan Walter^{*}; Barbara Walter^{*}; Harry Watson^{*}; Robert Wood^{*}; Heinz Zimmermann. *Deceased

All correspondence

Australian Koi Association, 17 Westmore Drive, West Pennant Hills NSW 2125

President's Report



Where has the year gone? Once again it's almost koi show time...the most important time of the year for both the AKA and KSA Clubs as we head towards our 46th Annual Sydney Koi Show on Sunday 28 May at Sydney International

Equestrian Centre, Horsley Park. Every year we aim to make our koi show bigger and better to be a world-class koi show, one we can all be proud of. We hope you will be there to be part of it!

The Show Committee has been actively at work since February to make the show this year one of the best koi shows to be held in Australia and a premium koi show on the world stage. We have secured four international guest ZNA Judges this year to judge all the koi, including Shoji Saito from Tokyo as our Head Judge.

We need to ensure our Members support the show by entering their koi. Last year we had 614 koi—a record, so please consider entering a few koi. Exhibitors will be able to drive right up to their show vats, unload koi safely and then take their vehicles back outside to park.

Koi entries are online via www.sydneykoishow. com, or you can contact me directly if you need any assistance entering your koi.

Once again, our good friends Ros and Lars of Allcare Ponds will host breakfast for all exhibitors and show helpers; as well, everyone involved with the show will be treated to lunch and drinks. Another reason to make sure you make the effort this year to exhibit some koi or offer your services as a helper.

This is a great event to attend, so why not bring the children, grandchildren and friends to support your fellow members who are exhibiting their koi on the day?

Our show prize giving Presentation Dinner night will be held in the Kokoda Room at Smithfield RSL Club. Another great event and a lot of fun! Arrival 6.30–7.00 pm with dinner served at 7.45 pm. Please support your koi clubs and book the dinner via Judi Rea on 0418 290 084. A great line-up of International Friendship Awards will be up for grabs across the whole koi size range. Hikari have confirmed their sponsorship once again.

Our annual Dave Pogson Breeders Trophy will be held on the May meeting night. Each entry must be of 10 koi bred or raised from last spawning season. Entries can be all one variety or a mixture of different varieties, so members can now bring in as many lots of 10 koi as they can manage. Just remember, bring a suitable container to hold your 10 koi and also an airline and air stone.

The next couple of months are going to be a really busy time and I hope that all members continue to offer the AKA support and attend as many of these functions as possible, plus say hello to our international guests. See you at the Sydney Koi Show!

(Sydney Koi Show set up starts at 8.30 am on Saturday 28 May and we would welcome any helping hands.)

Yours in koi Ian Andrews, President, AKA



AKA News and Events

Meetings of the AKA

Our monthly meetings are held at the Georges Hall Community Centre. Meetings are on the second Monday of each month with the exception of December when no meeting takes place. Details of all our meetings are also on AKA's Facebook page.

Remember all members and visitors must register, preferably using the QR code via the Service NSW app, as AKA is now a registered COVID Safety Plan business. ■

Meeting of the AKA, Monday 17 April 2023

The April meeting of the AKA will be on Monday 17 April 2023 at the Georges Hall Community Centre 188 Birdwood Rd, Georges Hall, 7.30 pm. NOTE THAT THIS DATE HAS BEEN

CHANGED FROM OUR NORMAL MEETING DATE WHICH CLASHED WITH EASTER HOLIDAY.

- 1. Welcome to members and guests
- 2. Apologies
- 3. Confirmation of minutes of previous monthly general meeting.
- 4. Raffle
- 5. Reports
- 6. General Business
- 7. Guest speaker.
- 8. Raffle Draw 🔳

Meeting of the AKA, Monday 8 May 2023

The May meeting of the AKA will be on Monday 8 May 2023 at the Georges Hall Community Centre 188 Birdwood Rd, Georges Hall, 7.30 pm.

- 1. Welcome to members and guests
- 2. Apologies
- 3. Confirmation of minutes of previous monthly general meeting.
- 4. Raffle
- 5. Reports
- 6. General Business
- 7. Guest speaker.
- 8. Raffle Draw 🔳

Koi food

It is hoped that we can continue to provide as necessary any koi food requirements from our four outlets. We will require payment upfront or similar, and with no direct contact—our suppliers (see advertisement in this magazine) can arrange for food orders to be left out ready for pick up, having nil face-to-face contact.

Have you tried AKA's Sinking Koi Pellets yet? Seems that many of our more experienced koi keepers have given this food a big tick and are getting great results feeding it to their koi. It's best to feed one lot of floating and next feed give them the sinking. Give it a try and I'm sure you will see the improvements in your koi. ■

New members

New members are always assured of a friendly welcome when attending the AKA's monthly meetings. Help and advice is available if required and our Supply Officers can provide you with koi food and accessories at favourable prices. Call our membership officer (details on page 2). Recent new members are:

Sam and Pam Brunno Teon (Cheng) Heng San Khun James King Chris Nguyen Van (Son) Nguyen Kien (Nam) Quach Boon Quah Ray Rama Mike Rosenbaum Gabriel Tugrul ■

New outlet for AKA Supplies

We have a new outlet for AKA Supplies. Thanks to Heinz Zimmerman (0428 478 594)for establishing the Bass Hill location for koi food, etc.

AKA News and Events

AKA Auction Dates



Held at Fairfield City Showground (bottom of markets) Commencing at 10.00 am. Quality fish at reasonable prices! Food and refreshments available. Fish

food and other fish keeping supplies also available.



Bankstown City NSW Chapter Zen Nippon Airinkai

Saturday 3rd June 2023 Saturday 5th August 2023 Saturday 30th September 2023 Saturday 18th November 2023



Understanding Koromo..the basics

<u>Ai Goromo</u> has blue netting and no black on the head. <u>Sumi Goromo</u> has black netting and always develops black on the head. The red on <u>Budo</u> <u>Goromo</u> (grapes) looks almost purple, very dark.

Understanding Koromo





Ai Goromo

Ai Goromo





Sumi Goromo

Sumi Goromo







Budo Goromo

AKA News and Events

Important message from ZNA about Nichirin Magazine.

From April 2023, our cooperated company Epochart Co. Ltd has decided to withdraw the comprehensive production of the *Nichirin Magazine* including its edit, print, and shipment at the end of March 2023.

We have examined several companies instead of Epochart Co. Ltd that would take on the *Nichirin* work, however, it became clear that the new cost of *Nichirin* would rise nearly three times. In addition to the remarkable rise of the production cost, and also shipment cost as well, the delivery circumstance in each country has worsened. A lot of copies have been sent back to the ZNA office. Taking the situation above into consideration, ZNA reached the conclusion that *Nichirin* will be changed as follows.

Japanese Nichirin

Japanese *Nichirin* will be combined with *Rinko* magazine. Considerable pages in each issue of *Rinko* will be especially edited for ZNA members.

The ZNA basic subscription fee for members who select the Japanese version is 20,000 yen, same as this year. However, an additional overseas shipment fee 5,000 yen will be required.

English Nichirin

English *Nichirin* will take an e-mag style. The e-mag *Nichirin* will consist of original articles, independent from other koi magazines. The membership fee for members who select the English version is 12,000 yen same as this year. ZNA plans to publish a printed useful koi handbook and send to subscribers of English *Nichirin* each year.

From the 59th International Koi Show in 2023, ZNA will give commemorative show pins to each chapter so that the chapters may use them to promote ZNA membership.

We would appreciate if you could understand the difficult situation and the new *Nichirin* style. From April 2023, ZNA will make efforts to provide more digital koi information such as videos and e-books. ■

SHIRASAKA Daishiro, ZNA Chairman

AKA's banking details

Australian Koi Assocation, NAB BSB 082 343 A/C 8525 90813. Please always enter your name on the transaction.

KSA Auction Dates

Saturday 6th May 2023 Saturday 8th July 2023 (Northern Branch) Saturday 2nd September 2023 Saturday 28th October 2023 (Cumberland Branch) Saturday 9th December 2023

Current Covid-19 restrictions as administered by Fairfield Council means that all these dates are tentative and will be confirmed or cancelled at a date closer to the auction date. New venue for KSA auctions is Fairfield City Showground (bottom of markets), Smithfield Road. Prairiewood

46th Sydney Koi Show

Online entries now open at www.sydneykoishow.com. Closes midnight Sunday 14 May 2023.

AKA Mid Northern Region Chairman's Report



I've taken the opportunity in this month's edition of our newsletter to profile two of our husband-andwife members up here on the Mid North coast.

Steve and Dee are amongst our most experienced koi keepers having kept koi for a great

many years. It's a pleasure to introduce their koi keeping story to all the members of the AKA.

Gavan Gribble Chairman, AKA Mid Northern Region

Member profile-Steve and Dee Tomvald

We started collecting koi over 30 years ago, then taking it more seriously after seeing a Sydney Koi Show.

We went to Japan, met several breeders and saw a Japanese National Koi Show. The quality difference was extreme compared to what we could purchase in Australia.

Saying that, many people here in the hobby have achieved marvellous results with their koi. Australian koi have continued to improve in size, quality and colours as well as the many varieties we now have.

We were lucky enough to have Ralf Boehner of the Australian Koi Farm work for a company of ours and during that time we became friends.

Ralf showed us what to look for when





purchasing koi and on occasions I assisted him with judging in some shows.

We also had Tim Waddington from London stay with us. Tim's father, Peter Waddington, has written several koi keeping books including *Koi Kichi*, which he gave us a signed copy of. Tim also judged koi when he was here in Australia.

We have had wins in various shows with different sizes and varieties.

Our ponds have been seen on 'Harry's Practice', 'Burke's Backyard' and the ABC's 'Creature Features'.

Our favourite fish was a Gin Shiro Utsuri which won its class every time. It was ultimately purchased during a koi show and flown to Western Australia for breeding.

We also loved some Koromos, and a Tancho which also won every time it was put in a show.

After a break we have only recently started collecting koi again and are very happy with the quality of the koi we now have. We will be breeding again over the next couple of years.

We have also found an excellent koi club to belong to; it offers us the right balance of friendship, expertise and support. We could not have asked for more and it was a pleasure to host the Mid Northern Region chapter at a recent pond tour.

Steve and Dee Tomvald, Verges Creek NSW

April 2023 - May 2023

Country living (part two)

Graham and Lee Fameli

Since writing the previous article, I've been toiling through the summer, sweating it out building ponds in a hot house.

The main pond has been built out of 200 mm x 100 mm sleepers, which have been laid on edge seven layers high. The sleepers have been supported by 90 mm x 90 mm x 3 mm thick galvanised posts that are concreted 1.2 m into the ground. All of the sleepers have been overlapped like brickwork and screwed together with 200 mm screws to stop the timbers from cupping.

Over 100 sleepers used to build the main pond which is 9 m x 3.6 m x 1.4 m deep and the breeders pond which is 4.5 m x 3.6 m x 1 m deep. They have been lined with Villaboard to protect the EPDM liner that arrives soon.

The bottom drains are in and connected to a new 70,000 L Draco drum and all the filter bays are now hooked up. I will be using a chamber of aerated Japanese matting after the drum filter, which flows to a chamber of K1 which will also



The main Pond ready for the liner to be installed.



Spawning tub and filter ready to go.



Slowly making progress.



be the pumping chamber. Both of the ponds will be filtered by the same filtration.

Once the liners have been installed, it will free up the space in the middle to put the last two fiberglass ponds in, which are freestanding, so much quicker and easier than building from scratch.

I have installed a common drainage line connected to all filters, which will feed a large holding tank and the fish waste will be recycled to the gardens and vegetable patch.

The push is on to get the main doors built and all the gaps closed off before winter kicks in, as it is common for winter days to go well into the minuses and not reach double digits.

I hope to be able to report that all the ponds are up and running in the next episode, with only aesthetics to be completed and happy fish adorning their new home. ■

Breeders pond, ready for the liner to be installed.



Main pond filtration system almost complete.

AKA Honorary Auditor

The Australian Koi Association is looking for a new financial auditor to replace our Mr Andrew Delahunt who is heading off to retirement.

On behalf of AKA I would like to formally thank Andrew and his staff for their kind support over many years.

If you know of someone that may be able to help in fulfilling this important role, please contact either our Treasurer Judi Rea on 0418 290 or Ian Andrews on 0418 255 897.

A focus on metallic koi Part one–Hikarimuji

Kate McGill-Andrews

Introducing-the Ogon story

This tale has been told before, but is so evocative; it is worthy of a revisit when introducing Hikarimuji. The Ogon story is truly, an inspirational tale of a man with a dream, his courage and determination to see it through and a family prepared to selflessly support him to the realisation of his goal: a shining golden koi.

There are definitely parallels in Australia. The sheer dedication of koi breeders here has produced some spectacular improvements in the quality of our koi and has also resurrected lost varieties. Anyone who has spawned koi knows just how difficult a job they face to hatch and raise the fry. Also, just how few, if any, excellent koi will be the result. However, the dream remains for everyone–one day–that "koi of a lifetime" will appear.

In 1962 Hoshide Takehira, founder of the Hoshide Nishikigoi Farm in Yamaguchi Prefecture. detailed the fascinating history of the very first koi with an entirely shiny, reflective skin, like a sheet of metal. The story first appeared in an early edition of Rinko magazine and was reproduced in the November and December editions of Nicherin in 2000 and is one we should not forget. It is hard to imagine the level of dedication to the dream of a golden koi, almost starving an entire family to death in the post-World War II era of Japan. Twenty five years after buying a Magoi with a partly shiny dorsal fin in 1921. Sawata Aoki had bred and improved a collection of black-based koi with some gold or silver shine on the head or body; respectively Kin and Gin Kabuto, Kinbo and Sakin. In 1946, already in straitened circumstances from purchasing parent koi to improve his semimetallic line, Sawata found a female "Shiro-Fuji", an essentially white koi with brightly shining markings on the head. Sawata's daughter, Kinuko, sacrificed her precious savings of ¥60 to enable her father to buy the koi and with it, Sawata finally produced just two, completely golden koi out of an entire spawn. First named "Ogon-no-Taki" (golden waterfall), the Ogon had arrived (photo 1). This is not the end of the story however, because to raise the two golden and twenty-eight



(1) A truly golden Ogon.

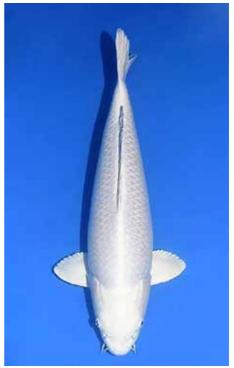
other promising fry, the family actually had to reduce their own meagre rations of food, so the koi could eat. Sawata even caught and chewed up locusts for his young koi. The love of the Aoki family for their koi is legendary and Hoshide Takehira reflects that it is no wonder that Ogons have developed with such a friendly nature.

Although Sawata Aoki's Ogon is first, quite independently, Ogon were also produced in Akita Prefecture by Takejiro Takahashi in 1955, who made a gift of them to the Emperor in 1958, bringing the Ogon into the limelight for the first time.

Hoshide Takehira took up the initial specialist challenge of breeding Ogon in large numbers. At this time very few Ogon were available, but he managed to find twelve to use as parents (*oyagoi*) and through the late 1950s and early 1960s realised his dream.

Early "classic" metallic Ogon were single-





(2) Orenji Ogon.

(3) Parachina or Platinum Ogon.



(4) Very light grey or Nezu Ogon.



(5) Doitsu Kin Matsuba.



(6) Fully scaled Kin Matsuba.

coloured, fully-scaled (wagoi) koi with a slightly brownish golden colour, which darkened when temperatures rose above 20°C. An immediate goal was to brighten the appearance of Ogon and stabilise the colour at any temperature. This was achieved by crossing Ogon with the non-metallic, single-coloured vellow Kigoi, resulting in the modern Yamabuki Ogon we see today, credited to Masamoto Kataoka in 1957. This breeder also produced the orange (orenji) and red (rose, hi) Ogons (Photo 2) by originally crossing Asagi into the Ogon lines, a process which took almost ten years to produce the sought-after, deeply coloured metallic orange and red koi in 1956. Platinum and cream Ogon followed in the early 1960s. The spectacular silver, Purachina or Platinum Ogon (Photo 3) was first bred by Tadao Yoshioka in 1963 from a light grey Nezu (mouse) Ogon (Photo 4) crossed with a red-eyed Kigoi. Murashige Koi Farm in Yamaguchi Prefecture became famous for Platinum Ogon, originally using Yamabuki Ogon parents, also producing the cream variant in 1987 incidentally (Nicherin: August 2005, Nishikiqoi Mondo: 2009). Platinum Ogon were also produced by Setaro Hirasawa of Marusei Koi Farm; beginning in 1965 using "Shiro Ogon" parents he had managed to purchase (Koi: Harald Bachmann 2008).

The late 1950s and early 60s saw the birth of



(7) Kujaku.

many new varieties of metallic koi, including doitsu versions, the most prized of which present two perfectly aligned rows of large scales along the entire length of the back (kaqamiqoi). A row of scales is also acceptable along each lateral line, but extra, (redundant) scales demerit the koi. Doitsugoi may also be completely scale-less (kawaqoi) or have incomplete rows of scales along the back. Doitsu Ogon first appeared in 1958, when Tomisaku Sakai (Matsunosuke) of Mushigame crossed a black doitsugoi (Kuro Doitsu) with an Ogon (Nicherin: Dec 2000). The first Matsuba Ogon (each scale area has a dark wedge, giving a "pine cone" pattern) appeared in 1961 and is credited to Eizaburo Mano (Rvuzo) of Iwamagi. He mated an Ogon with a Matsuba offspring bred by Masamoto Kataoka from a cross between an Asagi and an Ogon (Photos 5 and 6).

The creation of the Ogon koi was also recorded and commented upon by Masamoto Kataoka in the 1960s:

"Since the colouring of the Ogon is particularly austere, once the novelty wears off, I imagine there will be a limit to demand. I have started breeding with the aim of putting showy markings on the Ogon" (*Nicherin*: December 2000).

A farsighted breeder? Since their introduction, Ogon, particularly Platinum Ogon, have been crossed with probably every other variety of Nishikigoi, resulting in many popular multi-patterned metallic koi, for example, the complex metallic orange/red patterned, silver based, black reticulated Kujaku (photo 7). Kujaku is essentially a metallic "Goshiki equivalent", but



(8) An eye-catching golden Ogon.



(9) Kin Hi Matsuba.







(10) Lemon Ogon.

(11) Gin Matsuba Ogon.

(12) Mukashi Ogon.

was first produced by Toshio Hirasawa in 1961 from a doitsu Matsuba and a "Momiji Ogon" cross. Today, Kujaku is a stabilised variety, although said to have a very complex bloodline (Nishikigoi Mondo 2009). Other well-known examples are the Hariwake Ogon, Platinum Kohaku, Yamatonishiki (metallic Sanke) and Kin Showa (metallic Showa).

<u>Strangely enough, forty years later, basic</u> golden Ogon still retain the reputation of attracting more people to the Nishikigoi hobby than any other variety of koi.

Introducing-some basic facts about metallic koi

"Hikari" means "shiny" and "Ogon", simply "golden." Metallic skin on a koi has a completely different appearance from non-metallic skin, having a flat reflective finish, rather like the dull side of metal baking foil. Fins look solid to the edges, as opposed to non-metallic fins, which usually have a translucent edge, even on large koi. All fully scaled metallic koi display the delicate netting effect (or amine) called fukurin (see Photo 1). Fukurin is an important point of beauty on metallic koi created by a combination of the layering effect of skin and scales, the subtle or dramatic differences in pigmentation and lustre between the layers and the difference in light reflection of scales and surrounding skin.

Because of their shine, most metallic koi are particularly eye-catching. They stand out immediately, amongst any collection and perhaps for this reason alone, are very appealing to anyone unfamiliar with koi in general. Some experienced hobbyists and serious koi show exhibitors (elsewhere in the world) do not take metallic koi very seriously, since many are considered relatively easy to produce and rarely take any award at a show above variety champion. Anyone having bred ogon however, can tell you that producing an excellent koi of this variety is just as difficult as any other!

At the end of the day, it is undeniable that a large, pure gold, gleaming, koi like a Yamabuki Ogon adds a wonderful touch of colour in the pond (Photo 8), beautiful to watch and they are probably the most commonly kept metallic koi.

There are three metallic categories of koi for showing purposes, the first of which will be detailed in this article.

Hikarimuji (single coloured metallic koi)

Hikarimuji comprises a group of single coloured shiny koi collectively known as Ogon (see Photos 1, 2, 3, etc). The group includes Matsuba Ogon, because the reticulated scale effect (vignette), involving the entire body equally, is not regarded as a pattern (photo 9). All Hikarimuji may be either fully scaled or doitsu. Colours vary from the pure silver Platinum Ogon (see Photo 3), through grey (Nezu or mouse Ogon—Photo 4), cream, lemon (Photo 10), light and deep gold (Yamabuki Ogon—see Photos 1 and 8) to orange and red (Orenji and Kin Hi Ogon—see Photo 2). All may appear as Matsuba and doitsu variations. A Platinum Matsuba is called a Gin (silver) Matsuba (Photo 11); a golden yellow Matsuba a Kin (gold—see Photos 5 and 6) Matsuba and an orange or red metallic Matsuba is called Kin Hi Matsuba (see Photo 9). A very deeply coloured doitsu Kin Hi Matsuba is called Mizuho (rice ears) Ogon and is very rare. Interestingly, a very old-fashioned, creamy or grey Ogon with a faint vignette has regained immense popularity in recent years due (we think) to its ability to achieve a huge size. It is called the Mukashi Ogon (Photo 12).

Important appreciation points for Hikarimuji include a completely homogeneous colour from nose to tail and ideally to the tips of all fins (compare Photos 3 and 14). The metallic shine should be as bright as possible over the entire koi (compare Photos 2 and 3). Unfortunately for metallic koi, the deeper the colour, the more difficult it is to achieve an excellent shine or lustre. Scaling must be meticulously neat, for both fully scaled and doitsu koi. On a Matsuba, the pinecone vignette effect must look neat and clearly bordered as well as being deeply coloured for excellence (compare Photos 9 and 14). It goes without saying that the figure of the koi must also be excellent, but unfortunately Hikarimuji quite often display fins either too large or too small and they are prone to developing a "stumpy" shape, (Photo 13) too broad for their length. When they do grow well, Hikarimuji can achieve enormous size and volume and often take Jumbo



(13) Ogon showing a stumpy shape.



(14) Gin Matsuba with stained head and pectorals.



(15) Example Ginrin Platinum Ogon.

koi awards at major shows. Finally, the forehead of an Ogon should look beautifully smooth, without spots, stains or wrinkles.

Kin-Gin-Rin Ogon (several rows of very brightly shining scales along each side of the dorsal fin) also occur. However, because the excellent organisation of the scale rows is such an important appreciation point for ogon, kin-gin-rin scaling may be disruptive to the impression, rather than adding to it. Rather than admired, kin-gin-rin has been denigrated in the past by some hobbyists as an "add on" feature to improve the appearance of poorer quality koi. It is sometimes difficult to assess the overall lustre of a metallic koi, in the presence of kin-gin-rin.

The purity of the gleaming colour on an excellent Hikarimuji is incredibly appealing, hence their continuing popularity. Certainly in Australia, breeders have found that although Hikarimuji fry are easy to produce in huge numbers, a really superb, perfectly conformed, large example is not at all easy to accomplish, therefore, treasured. All too often, the young koi develop orange spots on their heads and/or bodies; the fins or parts of the body turn out white, darker areas may develop along their sides and of course, deformities (twisted tails, flared gills, malformed mouths, bent bodies) are distressingly common. Out of many thousands of fry, if you end up with a promising dozen to grow on to maturity, you consider it a job well done.

Judging metallic varieties

Metallic varieties present judging difficulties because you are not always comparing like to like, especially for Hikarimoyo and Hikari Utsuri (see parts 2 and 3 of this series). For example, a class of Hikarimoyo might include Yamatonishiki, Hariwake Ogon, Kikusui, Kujaku, Gin Bekko, Shochikubai, (metallic Koromo), Ki Kokuryu and Kin Ki Kokuryu. Shape and lustre are common to all as judging criteria, but after that, you must consider doitsu against fully scaled, dual and multi-coloured koi, with and without a vignette, together. As in a Best in Size class, multi-patterned metallic groups require each koi to be assessed against its "ideal", that is, to what degree it achieves all the appreciation points pertinent to that particular variety, not forgetting how difficult it is considered to be, to do so. If the koi that scores highly has also a good figure and shine, it is the winner of the class.

Hikarimuji also, present their own unique problems. There are few appreciation points to focus upon, following basic shape, proportions and shine. Hence it is important to examine each koi closely, to assess very small differences. For example, are all the scale lines neatly laid out? Is the forehead smoothly lustrous? Are there any small imperfections in the colour or skin? Is the colour completely homogeneous? Does the colour reach to the edge of every fin? On a Matsuba Ogon, is the vignette sharply outlined on every scale? Points that would often be considered very minor, on a patterned koi, assume considerable significance on koi of a single colour. ■

Jargon busters

<u>Momiji Ogon</u> (Japanese maple leaves) is described as an Ogon with red Kohaku-like patterns on an Asagi-like base skin, from an Ogon bloodline (*Nishikigoi Mondo* 2009). This gives the impression of a metallic koi like a modern Goshiki, with the vignette only on the white (or silver) skin.

Kujaku–or "peacock" is a white-based silver koi (i.e. ideally no black staining around the head or on the fins) with metallic red (hi) patterns in the Kohaku style. A white window on the forehead is desirable to better show off a good shine. A vignette, or reticulated scale pattern covers both hi and silver.

<u>Goshiki</u> (five colours)—a non-metallic white-based koi with red patterns and a blue or black vignette, which varies enormously, koi to koi. Modern Goshiki demonstrate the vignette only on white skin.

<u>Gin Bekko</u>—metallic white-based silver koi with metallic black (sumi) patterns in the Sanke style.

<u>Ki Kokuryu</u>—"shining black dragon" a metallic version of the Kumonryu. Always doitsu with black patterns running laterally around the head and along the sides of the koi, including black pectoral fin joints. <u>Kin</u> <u>Ki Kokuryu</u> have additional metallic red or gold patterns. Both varieties are very variable in appearance (see part 2 of this series).

<u>Hariwake Ogon</u>–A silver koi with metallic red, orange or gold patterns in the Kohaku style. The doitsu version is called a <u>Kikusui</u>. Hariwake with very deeply coloured hi may be called Platinum Kohaku, but they are essentially the same variety.

Sakura Ogon–A Platinum Kohaku with some blurring to the red pattern, for example inclusion of kanoko or dappled colour.

Bucket list koi trip to Japan

Cam Mangiameli

It was in the middle of May 2022 while watching a koi YouTube video, that I decided I needed to fulfil a 22-year-old bucket list dream—attending the All Japan Koi Show (AJKS).

I had been to Japan in 2019, with fellow hobbyists Graham Fameli and Shayne Murray, and on that trip we spent our time in the Niigata Prefecture, where we were able to see many breeders, their mud ponds and a large number of quality koi, particularly at the famous Dainichi Koi Farm. It was an absolutely brilliant trip, but there was still something missing: the All Japan Shinkokai Koi Show in Tokyo–arguably the premier show in Japan.

I telephoned Graham and told him of my decision to attend the All Japan Koi Show in 2023. He initially thanked me for the invitation to join, but didn't think it would work for him. Fast forward three weeks, and not only Graham, but Allan Bennett and Phong Ta (from Perth), all wished to join me in Japan this year.

The trip was only very basically outlined, so detailed itinerary planning came next. This time I wanted to go south after the AJKS and see the famous breeders, including Sakai Fish Farm, Momotaro and Omasako, but the south is very different to Niigata Prefecture—only a handful of breeders are there! I knew I needed to organise a guide, someone who was well-known to the breeders in the south. I contacted koi dealer Mike Snaden from Yume Koi, (Mike is originally from the UK and now resides in a town called Sera, 30 minutes' drive from Hiroshima), located right at the heart of all the breeders' farm areas.

At last, Friday 27 January, 2023 arrived, and I landed in Tokyo, very excited at the thought of the show, after hearing so much about it and the magnificent koi it attracts. After checking into the hotel and a short rest, I made my way to the Ryutsu Center, where the AJKS is held. In the meantime, Phong arrived so we travelled together to the Center, (Graham and Allan were expected later in the afternoon). Unfortunately only a small section was open to the general public, as judging was still taking place, but we were able to see some amazing koi. Now the excitement was really building!

We made our way back to the hotel after enjoying as many koi as possible and caught



1. All Japan Sakai 1 metre Grand Champion Sanke.



1a. Judging of the small koi underway.

up with Graham and Allan for dinner. After breakfast on Saturday, it was then time to make our way to the Ryutsu Center looking forward to viewing a one-metre Sanke, (Sakai Fish Farm) declared Grand Champion—social media was buzzing! (Photo 1 and Photo 1a).

It is said that a picture is worth a thousand words, but no number of pictures or videos can adequately demonstrate the truly phenomenal





2. Catching up with a popular YouTuber Yvo—The Koi Partner.

3. A stunning scene to awaken to.

size and conformation of Japanese koi. The Grand Champion was incredibly impressive, a well-deserved win for Sakai. I congratulated Kentaro Sakai, not knowing at this point that I would get to spend time with him later in the week. As the day progressed I caught up with several koi dealers, hobbyists and YouTube video makers. I met Darren from Absolute Koi, having previously spoken to him on a number of occasions through phone calls, a real pleasure to meet him in person.

I also caught up with a popular YouTuber, Yvo–'The Koi Partner'–whose koi videos are amongst the best videos in the world (Photo 2), along with Tim Waddington (Peter's son, who is also a very well known koi YouTube contributor) and two well-known UK hobbyists, Donald Kerr and Raad Hassan. The day was absolutely brilliant, and it just kept getting better.

Allan Bennett had been asked to have dinner with his friend and fellow ZNA judge, Shoji Saito, who very kindly included us all in the invitation to a lovely Japanese seafood restaurant. Also joining us for dinner was Bernie Woollands, (a ZNA and BKKS judge from the UK), plus three other koi

hobbyists from around the world; it was a memorable evening.

After breakfast on Sunday, it was decided we should travel to Sera, (a four-hour trip on the Shinkansen train). Unfortunately, it was not possible to break our journey in Nagoya at Narita Koi Farms (another bucket list item), closed because of the AJKS. We arrived in Sera late in the afternoon, checked into our hotel, then made our way down for dinner. I must thank Graham Fameli for his ability to order four beers in Japanese, this came in very handy I must say.



4. Mike Snaden's Yume Koi Farm.



5. Wonderful times over dinner.



6. Kohaku to dream about.

Monday morning we woke to a landscape of snow. A bit different for us Australians! (Photo 3). We started our day with breakfast, joined by the fifth member of the party, a gentleman from the UK, Raad Hassan, a serious koi hobbyist. Afterwards, Mike Snaden picked us up at 8.30 am



7. More dreams from Sakai.

and took us to his fish house. (Photo 4).

Mike had a very impressive setup, as well as some magnificent koi. He had two concrete ponds, the first pond size almost 40,000 litres and the second 60,000 litres. Mike had koi in both ponds from hobbyists all around the world. After lunch, we made our way to Omosako Koi Farm, (almost a two-hour drive). There's a reason why it has the reputation for having the best Shiro Utsuri in the world, they were just next level for quality, body shape and skin. Just unbelievable! We were fortunate to have the opportunity to take part in watching Takahiro Omosako, Mike



8. Just a small part of Sakai Fish Farm.



9. Raad on the right and Kentaro on the far left.

and Raad bowl three Shiro Utsuri, as Raad was interested in purchasing one of these. (We soon realised that Raad was determined to obtain a superb koi). It's opportunities like this that are so invaluable to learn and examine really special koi at close quarters.

All too soon it was time to make our way back to Sera, we arrived back around 6.30 pm, time for a quick freshen up then off to dinner. I must say it was so easy having Mike organise our lunch and dinners each day. We also had the pleasure of meeting Mike's wife Rina and their beautiful 20-month-old daughter Hanna, who was just adorable. (Photo 5).

Tuesday morning after a quick breakfast, we were off to Momotaro Fish Farm, almost another two-hour drive. Momotaro Fish Farm was very impressive, the 1,500 tonne concrete pond was absolutely huge. I had seen this pond on *The Koi Keepers* DVD series, 20 years ago, but nothing beat finally getting to view it in person after all these years. (Another tick off the bucket list). Mike introduced us to Mr Momotaro and his son, who was kind enough to take us for a tour around the farm, a very a nice guy!

We travelled on to Matsue Koi Farm (another two-hour journey), a long way from Momotaro, where we had a quick lunch. There was a lot of snow on the way and more snow at Matsue, (sometimes in life you have to take a leap of faith, this was one of those scary moments. Mike was traveling at 130 plus kilometres an hour, texting, reading messages and trying to converse with us, all at the same time-serious multitasking). We finally arrived at the farm, snow absolutely everywhere and very glad we made it in one piece! The quality of the koi was impressive to say the least. Raad requested to bowl what I can only describe as magnificent Nisai Kohaku, they were spectacular. (Photos 6 and 7).

After a lot of discussion and conversations between Mike, Raad and Matsue it was time to make our way back to Sera...another two-hour drive ahead of us. We had a terrific night out for dinner, and this was the last night for Graham, Allan and Phong, as they were heading back to Australia the following day.

Wednesday morning after breakfast, the reduced company made our way to Sakai Fish Farm, which happily was only a 30-minute drive, and WOW, talk about saving the best until last. Sakai Fish Farm was enormous, there were just so many ponds, every one holding magnificent koi. (Photo 8).

Raad had two Sanke growing on at Sakai



Our host Mike Snaden (left) of Yume Koi Japan was the perfect companion to show us around the various koi farm including the famous Sakai Fish Farm.

Fish Farm and wanted to see how they had progressed over the past three years, but unfortunately Kentaro was busy with some European buyers. We had a quick look at Raad's fish as well as the Europeans' koi (they had bowled a very large Kohaku, with a price tag to match). Raad and Mike thought it might be better to return the next morning and catch up with Kentaro to discuss the two Sanke. Sakai Fish Farm has the reputation as being the best koi farm in the world and I now know why, the quality of the koi is absolutely amazing. We needed to keep moving however, as some of our group had a plane to catch at 1 pm. We headed next to Sakai Fish Company, (this is Kentaro's uncle, from my understanding unfortunately there was a split in the family after Kentaro's father passed away). This farm also had some breathtaking koi, there was a particular Sanke Allan pointed out, just amazing.

All too soon it was time to head for Hiroshima Airport. We said our goodbyes to Allan, Graham and Phong. Mike, Raad and I then made our way back to Sera for some lunch. After lunch Mike drove Raad and myself around Sera and showed us some of his mud ponds, explained his future plans on growing his business, and the great location for his new house he hopes to build in the next few years. Dinner was at a lovely Italian-inspired (Japanese) restaurant for our last night and I must say the food was lovely. Mike being the host he is, decided we needed to experience a host bar, (equivalent to a karaoke bar), so off we went. This turned out to be so much fun, a great night!

Thursday morning after breakfast, Mike had organised for us to go back to Sakai Fish Farm, then make our way to Sakai Fish Company. Raad and Mike had unfinished business to take care of with Kentaro. This would turn out to be one of the most exciting koi experiences that I have had the pleasure of being involved with. Raad was working out what to do with his two Sanke, but after much discussion between Raad and Kentaro, what I can only describe as an outstanding quality Kohaku was bowled and brought into the mix with the two Sanke, and after much wrangling between the three of them a deal was finally done. (Photo 9).

It was time to say goodbye to Kentaro, and make our way over to Sakai Fish Company, where Mike had to pick up ten beautiful Nisai Kohaku that he had purchased. Once they were bowled and bagged, we made our way back to Mike's koi house, settled the koi in, then headed into town for lunch. All good things must come to an end and before long, it was time to make our way to the Hiroshima Airport. Raad and myself were flying out at 5 pm to Tokyo then home and Mike was kind enough to drive us back to the airport. We said our goodbyes and thanked Mike and Rina for being such wonderful hosts. At the airport at Tokyo I farewelled Raad, and told him that I will be in London in July, so if we can make it work I would be delighted to go and visit him and see his magnificent pond and koi.

It is such a wonderful feeling when a hobby connects you with people from all over the world. Flying home, I couldn't help but reflect on the week we all had had, the AJKS and Grand Champion, the people we met, the friends we made, the places we experienced and all the beautiful koi we saw. After 22 years of enjoying koi, I can now officially tick that off my bucket list.

ZNA Judges for 46th Sydney Koi Show

It is a pleasure to introduce our four ZNA Judges for the forthcoming 46th Annual Sydney Koi Show.



Mr Shoji Saito, Head Judge (ZNA Certified Judge), Tokyo Chapter.



Mr King-Wen Hung (ZNA Assistant Certified Judge), Taiwan District. Chairman.



Mr Kittiphong Arjsamat (ZNA Assistant Certified Judge), TKKG Thailand Chapter President.



Mr Jerome Ng (ZNA Local Certified Judge), Secretary of the Koi Club Singapore.

ProfiDrum

ProfiDrum is pleased to announce that it has partnered with Clear Water Koi as Australia's sole distributor for ProfiDrum Filters.

ProfiDrum is the worlds No:1 choice for Koi hobbyist who want the very best in pond filtration as they know the best possible water quality creates the perfect environment for producing outstanding healthy Koi.

ProfiDrum's extensive range has a solution for every pond application. ProfiDrum's Eco range features 6 models with flow rates from 25,000 to 90,000 liters per hour. The ProfiDrum Combo range with integrated K1 moving bed chambers and optional integrated Bakki Shower features 6 models with flow rates from 20,000 to 75,000 liters per hour. The ProfiDrum Stainless range features 4 models with flow rates from 35,000 to 90,000 liters per hour. For all ProfiDrum models available please see clearwaterkoi.com.au.

No other rotary drum filter has the build quality, reputation or reliability of a ProfiDrum Filter.

ProfiDrum Eco 45/40

The ProfiDrum Eco 45/40 has been designed for the Koi hobbyist who wants the very best in Koi pond filtration. All critical components are made from durable 316 stainless steel whilst the housing is made with economical polypropylene. The ProfiDrum Eco 45/40 uses a 70 micron stainless steel mesh for the best possible water quality with a maximum flow rate of 25,000 liters per hour.



The ProfiDrum Eco 45/40 is fully automatic and comes complete with an electronic control unit and high pressure water pump for cleaning. The innovative control panel gives you access to a fully adjustable duration of the rinse cycle, any duration from 12 seconds to several minutes depending on the amount of food you are feeding your Koi and time of year.

ProfiDrum Eco 45/40 Specifications: 94cm L x 60cm W x 54cm H, 3 x 110mm inlets, 2 x 110mm outlets, 1 x 110mm waste, 25,000 litres per hour.

ProfiDrum CombiBio 50

The ProfiDrum CombiBio 50 combines all of ProfiDrum's experience in the area of mechanical and biological filtration with a maximum flow rate of 50,000 liters per hour.



on the same principle of the successful ProfiDrum Drum Filter with the addition of a moving bed filter using the award winning Kaldnes K1 Bio Media that is agitated via the built in aeration system. The system is supplied with 100 liters K1 Bio Media with a capacity of up to 200 liters K1 Bio Media. A integrated Bakki Shower can be fitted for additional bio filtration and water quality.

ProfiDrum.com

The ProfiDrum Combi Bio 50 system comes complete with integrated high pressure pump utilizing pond water to clean the Drum Filter. The internal air pump and gearbox are contained in a secured dry chamber creating a neat and tidy, compact all-in-one filtration system.

ProfiDrum CombiBio 50 Specifications: 207cm L x 82cm W x 97cm H, 4 x 110mm inlets, 2 x 110mm outlets, 1 x 110mm waste, 100 to 200 liters K1 Bio Media, 50,000 liters per hour.

Bluelab Guardian Monitor

The BlueLab Guardian Monitor is the industry standard for aquaculture, hydroponics and professional Koi hobbyist alike. The BlueLab Guardian Monitor provides 24/7 continuous monitoring of pH, TDS and temperature so there's no need for manual measurements and spot checks. This not only saves you time and money but provides you with continuous and accurate measurements of your pond water allowing you to maintain the perfect environment for your healthy Koi.



CombiBio 50

The BlueLab Guardian Monitor features a large backlit LED display allowing you to view your pH, TDS and temperature at a glance, high and low alarms to alert you when parameters are out of range and easy pH calibration function with on-screen instructions.

For all inquiries please call 0419 165 782 or info@clearwaterkoi.com.au



28 May 2023 9 am - 3 pm

Sydney International Equestrian Centre

Saxony Road, Horsley Park Just off the M7

Celebrating over 46 years of Koi shows in Sydney

Show

Japanese Koi, Koi equipment. Plants, bonsai, cactus, orchids, rabbits, birds and reptiles.

FREE ADMISSION



Sponsored by







Hosted by Australian Koi Association & Koi Society of Australia

The 46th Annual

idney



Supplies available to AKA members

FOOD

FUUD		
Flake-Tropical: POA, ring for	r sizes	
Fry Food	1 kg	\$25.00
No.1 High-protein Crumble	1 kg	\$25.00
No.2 High-protein Crumble	1 kg	\$25.00
No.3 High-protein Crumble	1 kg	\$25.00
No.4 High-protein Crumble	1 kg	\$25.00
Baby Koi Pellets	1 kg	\$25.00
Pond Sticks (great in winter)	4 kg	\$50.00
AKA Growth Food	5 kg	\$40.00
AKA Growth Food—Australi		
sourced and made (small pel		\$40.00
AKA 42.5% Hi Protein Sinki	na 5 ka	\$60.00
Orca Quick Grow Medium	10 kg	\$95.00
Orca Quick Grow Small	10 kg	\$95.00
	TORS	φ/0.00
MEDICINE		
Malachite Green	20 g	\$30.00
Clean Fish CF 50	1 litre	\$45.00
Condy's Crystals	200 g	\$30.00
Oil of Cloves	100 ml	\$30.00
Hydrogen Peroxide	1 litre	\$17.00
Paragone for parasites	1 1110	\$60.00
Fungonex		\$40.00
Formalin		\$60.00
Melafix		\$55.00
Meidlix		ψ33.00
PUMPS (Japanes made)	
HIBLOW 20 litre/hour	1	\$366.00
HIBLOW 40 litre/hour		\$420.00
HIBLOW 60 litre/hour		\$500.00
HIBLOW 80 litre/hour		\$530.00
HIBLOW 200 litre/hour		\$780.00
NB: Parts available, POA.		Ψ/ 00.00
		* ~ ~ ~ ~ ~

Aquarium Air Pump

Battery Air Pump

WATER

Sodium Thiosulphate	1 kg	\$15.00
Powder for ammonia and water stabilisation Stress coat Bio start to start up filter bac Algicide	1 litre teria	\$20.00 \$45.00 \$75.00 \$30.00
MISCELLANEOUS Air Tubing (UV resistant), per metre Plastic Bags (large) each Glass heater 300 W		\$4.00 \$2.00 \$28.00
NETS 6' Nets 10' Nets		\$8.00 \$12.00
TEST KITS Ammonia Test Kit Carbon Hardness Test Kit Nitrite pH Test Kit pH up pH down	1 kg 1 kg	\$25.00 \$25.00 \$25.00 \$10.00 \$13.00

Please Note: If you require a particular ingredient in food, contact Anthony Waring to discuss, as prices have increased, especially medicines.

Orders for supplies for delivery at the monthly meetings are to be in the Tuesday prior to the meeting.

For postal orders email Anthony Waring at anthony@ personalautomotive.com.au with your order and address, and Anthony will calculate delivery costs.

Supplies by appointment, phone:

\$25.00 \$25.00

North West Sydney: Anthony Waring, 0418 617 627 South West Sydney: Heinz Zimmerman, 0428 478 594 Eastern Suburbs: John Rhodes, 0415 034 652 Western Suburbs: Phil and Judy Rea, 0418 996 226

AllCare Ponds Pond builders, all work guaranteed

Specialising in pond construction, after care maintenance, fibreglassing on site

Tel 02 9610 0383 Fax 02 8786 0281 Mob 0409 749 454 Email allcare@bigpond.net.au

LIC No. 159135C ABN 11065879598

Full range of product now available direct

FILTERS

Nexus, Easy, Pressure filter, custom made and many more. Filter media's, bio mats, K1, bio balls and more.

PUMPS

Mebner, Continental, Sequence and many more. Air pumps from 15 lts - 200 lts. Airline, stones and bottom drains.

KOI FOOD

Hikari, Fujikawa, Sakura, Nobori, Medicarp, Yamato, Clay products and Refresh.

UV LIGHTS

To suit any size pond.

(NSW AGENTS FOR AUSSIE KOI) Check out the website: www.aussiekoi.com.au