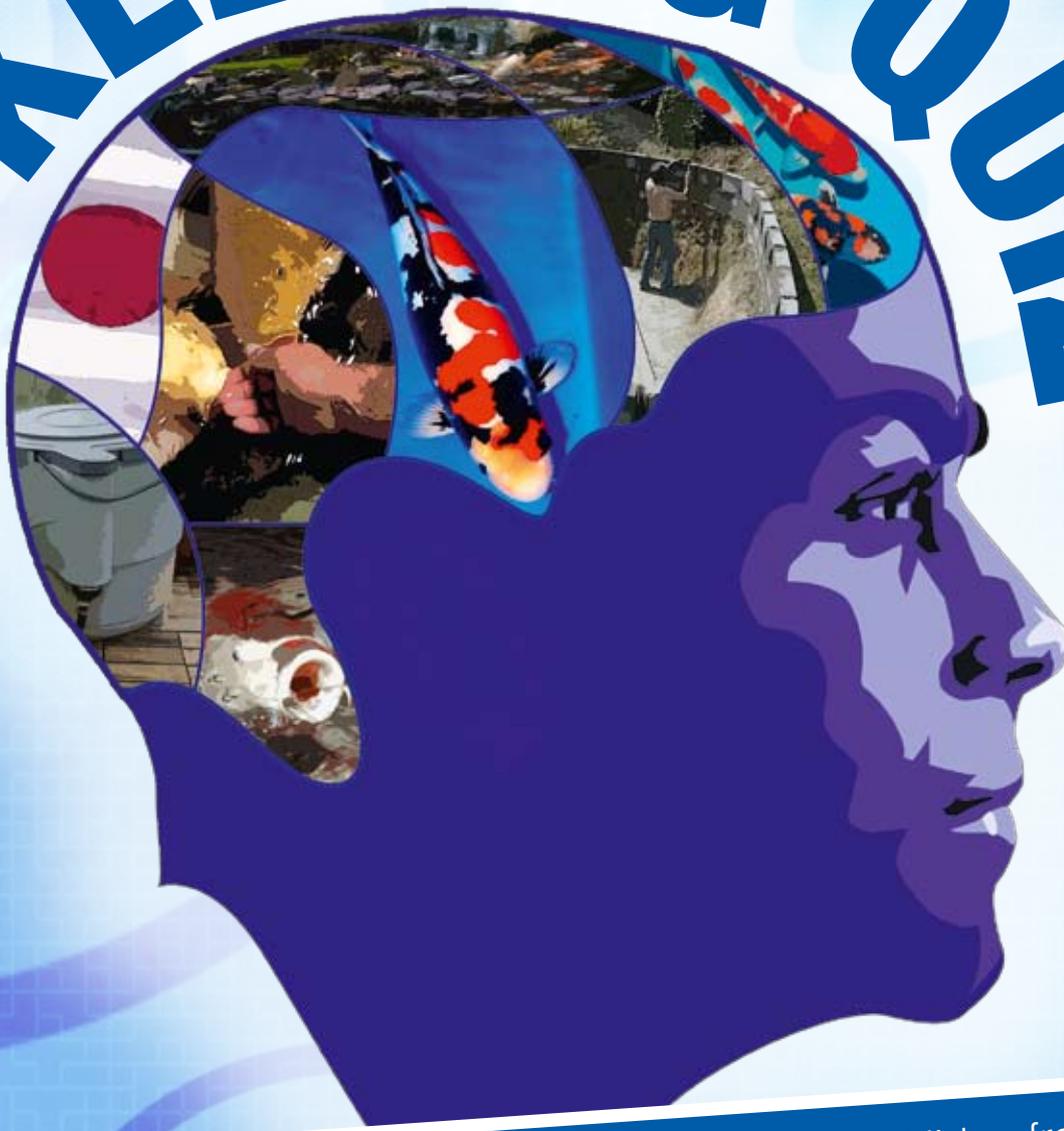
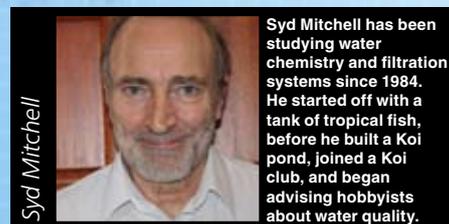


KOI KEEPING QUIZ



When it comes to Koi keeping knowledge, do you know your Nidan from your Sandan, your nitrate from your nitrite, or your specific immune system from your non-specific immune system? Find out if you're a trivia master or disaster by taking up **Syd Mitchell's** ultimate quiz challenge...

INSTRUCTIONS: The quiz is split into eight different Koi-related topics. Each topic features three multiple-choice questions. Circle your answer (A, B or C) for each question. You'll find the answers on page 36. One correct answer receives one point. No peeking, Googling or phoning a friend is allowed! Good luck!



Syd Mitchell

Syd Mitchell has been studying water chemistry and filtration systems since 1984. He started off with a tank of tropical fish, before he built a Koi pond, joined a Koi club, and began advising hobbyists about water quality.

1. VARIETIES

Q. What's the more commonly used name for a Taisho Sanshoku?

- A. Sanke
- B. Showa
- C. Kohaku

Q. What variety is this Koi?

- A. Nidan Kokaku
- B. Sandan Kohaku
- C. Yondan Kohaku

Q. What variety is this Koi?

- A. Tancho Sanke
- B. Tancho Showa
- C. Tancho Bekko

2. BREEDING

Q. What's an ideal ratio of males and females for natural spawning?

- A. One male and one female
- B. Two or three females to one male
- C. Two or three males to one female

Q. What does 'oyagoi' mean?

- A. Male parent Koi
- B. Female parent Koi
- C. Either male or female parent Koi

Q. If Koi are spawned either deliberately or naturally and the eggs are saved, how should the fry be fed?

- A. With goldfish flake food immediately after hatching
- B. With ground up hardboiled egg yolk and shrimp, three to four days after hatching
- C. With sinking Koi pellets, which should be left with the eggs for the Koi to suck on when they've hatched

3. WATER QUALITY

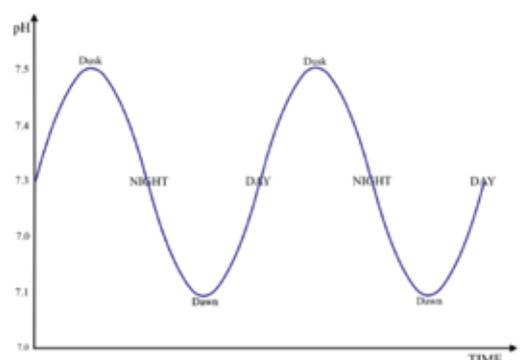
Q. What's the end product of conventional filtration used in Koi ponds?

- A. Nitrate
- B. Nitrite
- C. Nitrogen

Q. If the pH of your pond varies by 0.5 per day between morning and evening, what action should you take?

- A. Reduce the variation by buffering the water with sodium chloride
- B. Reduce the variation by buffering the water with sodium bicarbonate
- C. None, provided that the pH stays in the range 7.0 to 8.5

pH variations between daytime and nighttime



Q. Oxygen levels in Koi ponds should be as high as possible, but what's the recommended minimum level of oxygen for Koi to be healthy?

- A. 3.0 mg/l
- B. 6.0 mg/l
- C. 9.0 mg/l



4. POND DESIGN AND EQUIPMENT

Q. When planning a pond, which of these is the most important to include as a means of aerating the water?

- A. Shelves where oxygenating plants can be grown
- B. A waterfall
- C. An air pump

Q. When designing a new multibay filter system, where should air be added?

- A. In mechanical filtration bays
- B. In biological filtration bays
- C. In both mechanical and biological filtration bays

Q. When installing equipment for a heated pond, which is the best place to fit an ultra-violet clarifier?

- A. Before the biological filtration stage(s)
- B. Before the heater
- C. After the heater

5. FEEDING

Q. It's autumn and the water temperature in your unheated pond has fallen below 10°C. The Koi seem to be looking for food – how should you feed them?

- A. You shouldn't, they mustn't be fed until the water temperature reaches 10°C again in spring
- B. With small quantities of high protein food
- C. With small quantities of low protein, wheatgerm based food

Q. When Koi are digesting and metabolising food, how are their requirements for oxygen affected?

- A. The process consumes more oxygen so their oxygen demand increases
- B. They relax, which reduces their oxygen requirements
- C. Their demand for oxygen isn't affected

Q. Koi don't have a stomach, they have an

6. HEALTH AND ANATOMY

Q. How do Koi excrete most of the ammonia from their bodies?

- A. In their faeces
- B. As dilute urine
- C. Through their gills

Q. Osmoregulation is the process by which fish maintain a balance between water entering the body and leaving it. To achieve this, freshwater fish, including Koi, must continuously excrete dilute urine. Under normal circumstances, ie with no injuries present, what quantity is excreted per day?

- A. Up to 50mg per kg of body weight
- B. Up to 150mg per kg of body weight
- C. Over 250mg per kg of body weight

Q. How many immune systems does a Koi have?

- A. None, it relies on its mucus coating which possesses anti-bacterial properties
- B. One, the pathogenic immune system
- C. Two, the specific immune system and the non-specific immune system



alimentary canal (gut) which digests food and absorbs nutrients. What's the approximate length of this canal?

- A. It's half the length of the body
- B. It's equal to the length of the body
- C. It's twice the length of the body



7. JAPANESE HISTORY AND HERITAGE

Q. What does the Japanese word 'nishikigoi' mean?

- A. Living jewel
- B. Food carp
- C. Brocaded carp

Q. Carp were originally only bred for food until farmers noticed red and yellow colour mutations in some of them, and began the selective breeding that's brought about Koi as we know them today. Roughly how many years ago was this?

- A. 400 years ago
- B. 200 years ago
- C. 100 years ago

Q. Where did farmers first notice colour mutations in carp and start the process of selective breeding to enhance them?

- A. Beijing (formally known to westerners as Peking) in Northern China
- B. Yamakoshi Village in Niigata, Japan
- C. The area in Israel now known as Tel Aviv



8. CLUBS AND SHOWS

Q. At a Koi club show, who's responsible for the welfare of the fish entered into the show after benching and until debenching?

- A. The owner or appointed representative who transports the Koi to and from the show
- B. The show Chairman
- C. They both share responsibility

Q. When Koi are being judged, what's the first quality that judges consider?

- A. A well balanced pattern
- B. Body shape/conformation
- C. Skin quality

Q. The situation regarding shimmi is complicated, but, as a general rule, how should a Kohaku with black shimmi be benched?

- A. As a Kohaku, regardless of how many shimmi are present or where they're placed
- B. As a Showa, if there's a single shimmi on the head or below the lateral line
- C. As a Kohaku, unless two or more shimmi appear adjacent to each other and count as a sumi (black) pattern. The Koi should therefore be benched according to that pattern

ANSWERS Each correct answer = one point. Your final score will be out of 24.

8. CLUBS AND SHOWS
C : B : C

7. JAPANESE HISTORY AND HERITAGE
C : B : B

6. HEALTH AND ANATOMY
C : B : C

5. FEEDING
C : A : C

4. POND DESIGN AND EQUIPMENT
C : B : B

3. WATER QUALITY
A : B : B

2. BREEDING
C : C : B

1. VARIETIES
A : B : A

RESULTS

If you scored...

0-10, you're just starting out

Perhaps you're building your first pond or find it hard to devote enough time to your hobby, but you're clearly at the beginning of your exciting Koi journey. Keep reading the mag and join the koimag.co.uk forum to seek out some advice, and your score should definitely improve in a few months' time.

11-18, you've got a reasonable level of knowledge

The basics of Koi keeping are well within your grasp, but the more advanced aspects still prove to be a puzzle. Fear not, as all Koi experts were once in this position. Persevere

by putting in the time and effort, and you'll go far.

19-22, you're approaching an expert

You're clearly well versed in the language of Koi and more than capable of impressing your mates in the pub with your fact filled, knowledgeable banter. If you're not already a member of the koimag.co.uk forum, then sign up and help others by passing on your words of wisdom.

23-24, you're an expert!

You must be a Koi breeder or Syd Mitchell in disguise, right? With a top score like that, you should check out our recent Masterclass series on turning your hobby into a career. Well done!