BREEDING BEAUTIFUL AWARD WINNING NISHIKIGOI

## WHEN YOU GET YOUR NEW KOI HOME

- Float them for around 30 60 minutes (more if your water is considerably warmer or colder) in the unopened bag on the pond before you release them into their new home.
- We recommend that you quarantine new Koi purchased, wherever you buy them from, if at all possible.
- Don't try to play with them in the first few days as they need time to settle down and get used to their new environment.
- They may jump so it's a good idea to put a jump barrier around your pond or a net over the top.
- Other than that, provide your Koi with a clean and healthy environment and good food and they should flourish. The best growing temperature for Koi is around 23c. A temperature of 18c or above will keep their immune system at its most active. Adding salt (0.75%) to their environment for the first week or so can help them to cope with the stress of moving to a new home.

## IF YOU SEE SIGNS OF STRESS WHAT DO YOU DO?

- 1. Carry out water quality tests
- 2. Examine mucus/skin scrape sample under a microscope to identify any parasites
- 3. If you are unable to do step 1 or 2, contact a local fish health expert or Cuttlebrook Koi Farm

If you have any concerns or questions about your new fish now or at any time in the future, please do not hesitate to contact us and we will be happy to help.

# MOVING KOI TO A NEW ENVIRONMENT

We take every measure to ensure the fish leave the farm in good health. If we are in any doubt, we won't sell the fish, and if you are in any doubt you should not buy the fish.

Moving to a new environment is stressful for a fish. Stress reduces the effectiveness of any animal's immune system, including fish, making it more susceptible to infection or the effects of a poor environment. Poor water quality or parasite infestation can cause redness of the skin, sulking, flicking or flashing, and if not addressed can lead to death. It could take 1-2 weeks for the new fish to exhibit these signs.

As a rule of thumb, if a fish is introduced to a pond and the introduced fish later shows signs of stress, then it is reasonable to assume that the new fish is not happy with its new environment or has caught an infection from the existing stock who have become acclimatised to the water conditions.

If a fish is introduced to a pond and the existing fish later show signs of stress, then it is reasonable to assume that the introduced fish are carrying the infection.

All water regions and ponds have a different chemical makeup, and over time Koi can become acclimatised and tolerant to less than ideal water conditions.

When a fish experiences acute stress from injury, disease, handling or transport their body releases hormones and neurotransmitters that make the fish breath faster, over-hydrate and lose salt. This can lead to an osmotic imbalance as a result of ion depletion — the most life-threatening impact of stress. To counteract this, we recommend adding salt to their tank or pond water to a level of 0.75% and maintaining it at that level for one week before reducing the level gradually with your regular weekly water changes.

A freshwater fish's blood has a higher concentration of salt than the surrounding water -0.9% to be exact. Freshwater fish need salt - without it they would die. 10-15% of their energy from food is spent extracting salt from the water they are swimming in and then not losing it.

## BASIC GUIDELINES FOR KEEPING KOI

- A Koi pond should be at least one metre deep and must have a filter designed to cope with the volume of fish in it.
- Only use de-chlorinated water to fill up your pond, do water changes or clean the filters. You can use a dechlorination unit or add an appropriate dechlorinating additive.
- Clean your filter every week, all year round.
- Change 10% 20% of the volume of the water in your pond every week, all year round.
- Keep the floor of the pond clean at all times. Bad bacteria thrive in dirty ponds.
- Feed a good quality food to your Koi. The same food all year round is fine and feed them all year round if they are hungry. If there is uneaten food left floating on the surface of the water, remove it and feed less.
- Buy a microscope and learn how to use it. A basic student microscope is fine as you can see everything you need to at 100 times magnification.
- Buy yourself a good Koi health book.
- Buy a salt meter. Salt is one of the safest things you can add to a pond and it treats several different parasites. Only use salt when necessary and always use a salt meter to control how much.
- Observe your Koi daily and learn what their normal behaviour looks like. If it changes, they could be feeling unwell.
- Don't put medications into your pond unless you know what the problem is that you are treating.
- Make sure you know exactly what the volume of water is in your pond.
   You should not add chemicals to a pond without that information.
- When you add new fish to your pond, quarantine them first if at all possible. This will reduce the risk of introducing diseases to your pond with your new fish.
- Don't add new Koi to a pond unless the current population is fit and healthy.

For more information visit: www.cuttlebrookkoifarm.co.uk/articles

## LAWS OF USING SALT

- Only use it when necessary, not all the time.
- Always dissolve it first when you add it to your pond any piles of salt not dissolved can cause chemical burns on fish that might lay in or near it.
- Bring the salt level down using weekly water changes of 10 15%.
- If you are using salt, you must have a salt meter. You can't dose properly without one. If not a salt meter, then a hydrometer.
- Don't use any other medication with salt apart from those recommended by the manufacturer as being safe to do so. (Especially DO NOT use with Formaldehyde (Formalin)).
- Only use cooking salt or PDV (Pure Dried Vacuum). Other types of salt can contain iodine or anti caking agents which could be harmful to the fish.

### WHEN IT'S GOOD TO USE SALT

**0.75%** (7.5ppt): Tonic for stress i.e. handling/moving fish. Chilodonella and White Spot treatment (for 7 days). Reducing nitrite toxicity.

**0.9%** (9ppt): Costia (Ichthyobodo) treatment (for 3 days).



1kg of salt per 1,000L = 0.1% salt concentration

For example: 75kg of salt is added to 10,000L (2,200 gallons) for 0.75% salt concentration



### HOW TO CALCULATE THE VOLUME OF YOUR POND:

Length x Depth x Height (in metres) x 1,000 = Volume in litres

#### HOW TO CHECK YOUR ACTUAL VOLUME AFTER DOSING WITH SALT:

Amount of salt added (ie 30kg)  $\div$  salt meter reading (ie 0.6%) = 50Then multiply the result by 100 (50 x 100) = 5,000L

For more information visit: www.cuttlebrookkoifarm.co.uk/articles

© Cuttlebrook Koi Farm Ltd