Buying Healthy Fish

Buying healthy fish means buying fish which have been in the country for more than a month. Why? Because stress suspends a fishes' immune system for about that long. Also, diseases should show up in the first few weeks after overseas shipments. Once a Japanese fish has been in the USA for a month or so, it is about as safe to buy as any other Koi.

Look for fish that are eating. If you're buying fish on the Internet, you should be able to request additional pictures of the fish you want to buy to make sure that you're getting exactly what you want, if the pattern matters very much.

Make quite sure the <u>warranties on the fish make sense</u> and are clear to you. The fish should be disease free and perfectly alive on delivery. Your warranty on it's well-being should extend for <u>at least</u> 48 hours, but there may be conditions in case the fish dies because the vendor will want to know beyond a doubt that the fish died of illness or stress, not because of some neglect on your part.

Receiving the Fish

UPS Red – UPS and other common carriers offer an overnight delivery with delivery before ten in the morning. This type of shipment is relatively safe but if a bag bursts, they don't care. The fish will be delivered wrapped in it's plastic death-shroud.

Delta Dash and Courier – Delta Dash and other airline carriers have the fish for MAYBE four to six hours tops, and accidents are extremely rare. This is why most vendors will warranty live delivery with these services. The courier (Look under "Courier Services") will pick up the fish from Delta Dash for about \$80 - \$100 and carry it to you. This is ALWAYS how I (ELJ) get my fish. In Atlanta, I have my fish sent Delta Dash and then have "Apple Courier" pick up my fish and bring them to me. (I live four hours from the airport). For me, it's worth the extra money.

Delta Dash and Self-pickup – This is the **cheapest**. Delta Dash brings the fish to the Air Cargo Terminal and you simply go pick it up. Done.

Receiving Bag

It's great to have a "receiving bag". This represents two bags, actually. One bag contains pure oxygen obtained from a local veterinarian or perhaps you rent a n oxygen tank for eighteen dollars at a pharmacy. The second bag contains water, which has been dechlorinated, pH-buffered to 7.4 and lightly salted, (0.3% or 3 teaspoons per gallon in the bag)

When you get the fish, **immediately** feel its water and see if it's close to the water your brought. You can ask the vendor what temperature the fish you're buying has been at. As soon as you've made your receiving bag as cold or as warm as the shipping water, transfer the poor fish to the receiving bag and put your pure oxygen in the bag with it. Twist up and rubber band the top. Leave the fish in there for at least two hours. You can acclimate the fish to the pond during the wait.

Why is this so good? First, getting out of the fetid shipping bag as soon as possible is nice for the fish. Secondly, getting under pure oxygen is extremely balming to the gills and the stress level of the fish is ameliorated.

At Your House

At your house, the fish should be transferred to a holding vessel of at least 150 gallons or more. Quarantines **under** this size are worse than no quarantine at all except for the very small one year old or younger baby Koi.

The quarantine should be well cycled, running for a month before the fish comes to your house, and should possess a <u>healthy algae carpet on the bottoms and</u> sides of the vessel.

Ammonia and Nitrite should be checked daily and the fish should be stressed as little as possible. New fish like to jump out of their new vats. <u>Cover the quarantine</u> vessel then!

Quarantine

Quarantine prevents a new fish from bringing your resident fish a disease. It also gives you time to examine and treat any potentials disorders of the new fish. Quarantine should provide an environment AT LEAST as "accommodating" and healthful as your main pond. If the quarantine is small, cramped and possesses poor water conditions, the new fish will get sick within two weeks. Small facilities are worse than no facilities.

Quarantine Protocol

Examinations - should be done once per week to make sure the mouth and belly are not rotting away without being noticed. Handling and shipping represents a stress for fish. Your quarantine facilities may need water changes which they are not getting. You may be overfeeding in quarantine. So if the fish starts getting sick, your regular examinations should allow early detection.

Treatments – You can treat the fish with salt at 0.3% and simultaneously treat with <u>SupaVerm</u> (http://www.pondrx.com) and be 99% sure you're eliminating all parasites from the fish. You can also feed the well accepted and highly potent <u>MediKoi</u> (also pondrx.com) to prevent bacterial infections. These remedies and only these remedies should be applied to quarantined Koi. More aggressive treatments are seldom necessary and should be reserved for fish which really need it.

Quarantine Duration

To be absolutely, positively, 100% sure that an incoming fish has no virus infections such as KHV (Koi Herpes Virus) or SVC - Spring Viremia of Carp (Rhabdovirus carpio) they would have to be <u>tested</u>, then <u>quarantined</u> for 18-24 months. This is NOT practical nor is any vendor undertaking it.

Not a single vendor at present is testing for SVC because most fish have antibodies to SVC, which suggests exposure. A positive test, even for antibody could get them, and their customers' ponds <u>slaughtered</u>. So the US is living with SVC.

A few brave vendors are testing for KHV. These tests are useful and can show the fish to be negative for KHV AT THAT TIME but it does not completely rule out a latent viral infection that could show up later.

If the vendor also raises and lowers the fish's temperature during acclimation from Japan, this can reduce the chances of viral carriage.

Only a 24-month quarantine gives you the near certainty of non-infected status.

"I (ELJ) simply buy my fish from vendors who test against KHV. I then quarantine the fish, warming it to the mid seventies for two weeks. I usually use a microscope to show it has no parasites; however Supaverm and salt can accomplish the same end-result. Then after two weeks if it's unblemished and eating well, I release the fish into my pond. I do not allow the specter of a virus ruin my enjoyment of the hobby as long as I have bought a fish which has been tested negative for KHV and as long as I have done my share in quarantine."

If fish get sick in quarantine

If fish get sick in quarantine despite your Salt, SupaVerm and MediKoi – you may be out of luck. You see, Salt, SupaVerm and Medicated food cover the gamut of possible pathogens that could affect (or infect) your new fish.

If despite these three medicaments your new fish still becomes ill, it might be due to a small quarantine or some other stressor, which was not controlled.

Summary

If you've understood the receiving bag technique, and the crucial elements of quarantine including large quarantine size, the importance of a healthy algae carpet, of a temperature supported in the seventies, and of the **three** essential medications to cover pathogens of Koi (Salt, SupaVerm and MediKoi) – failure is extremely unlikely.