



INFORMATION AND CARE ON COLD WATER FISH

ORIGINS: China/Japan

Coldwater fish are one of the most common type of pets in the world. Goldfish and Koi are the most popular Coldwater fish that people keep. Coldwater fish means they can survive in an unheated aquarium or in a pond outside. The Goldfish and Koi are members of the Carp family, but they are different from each other in that the Goldfish does not have any barbells, which are organs around the mouth area containing taste buds.

GOLDFISH - (*Carassius auratus*). They come in a variety of colours and shapes, and there are around 125 different varieties of Goldfish. For example (The Common Goldfish, Bubble Eyes, Fantails, Black Moors, Shubunkins, Orandas and Comets e.t.c) Most are suited for ponds and aquariums, although not all are suited for outdoors ponds all year round, particularly when the temperature drops and the weather becomes extremely cold.

KOI - (*Cyprinus carpio*). There are many varieties of Koi with different colours and shapes. There around 25,000 varieties. For example (Japanese Koi, Butterfly, Nishikigoi, Gasanke and Ghost Koi.) Koi are very hardy and can survive in ponds outside in extreme cold temperatures, as long as there is adequate oxygen and the pond does not completely freeze over.

HOUSING - Coldwater fish should be kept in conditions corresponding to their natural habitat. **AQUARIUM TANK** - should be big enough to allow enough room for the fish to swim around freely in. Ideally the water should be filtered and tested regularly for any Ammonia/Nitrates in the water. Do partial water changes and remember to treat your water with a water conditioner. Provide aquarium plants and gravel or aquarium sand. Provide an aquarium light. Round body Goldfish should ideally not be mixed with Long body Goldfish, but you can put other fish in with them like (Zebra Danios, Mountain Minnows, Weather Loaches and Rice Fish. **GOLDFISH BOWLS** - are popular, but it must be kept clean and well aerated to stop the risk of Nitrate/Ammonia poisoning. **PONDS** - Make sure your pond provides a natural habitat and there is enough room for the fish to swim freely. Provide a pond filter and keep it clean and working properly. Provide pond plants. During the Winter months install a floating de-icer to keep it from freezing and this allows your fish oxygen in the Winter months. After the Winter has passed you will need to clean your pond. Remove your fish and put them safely somewhere. Drain your pond of water and scrape of all the sludge and dead foliage. Refill your pond and add de-chlorinator to the water. As well as certain Goldfish and Koi being kept in the pond you can have also Tench, Goldrudd and Golden Orfes.

DIET - **FOR GOLDFISH** - Goldfish flakes, pellets, cooked peas and insect larvae. Feed twice a day in the Aquarium Tank. If they are housed in an outside pond, feed your Goldfish cold weather food in Winter and then change to an high protein food in the warmer months. This will give them nutrients to live off over the Winter.

DIET - **FOR KOI** - They are Omnivores and will eat Alage, lettuce, peas, watermelon and complete Koi food. In the Winter months they will eat very little because their digestion system slows down. Their appetite will come back in Spring when the temperature warms up.

LIFE SPAN - Goldfish can live up to 10 years +
Koi can live up to 40 years +

INFORMATION AND CARE ON TROPICAL FISH

It is recommended you start with Communal Tropical Fish that live happily together, like various species of Tetras (Tetra Neons, Bleeding Heart Tetras, Cardinals and Serpae Tetras.) Various species of Mollies including (Black, Silver, Sailfin, Balloon, Lyretail and Dalmation.) Swordtails, Glowlights, Zebra Danios, Guppies including (Fancy tail and Rainbow.) Various species of Platies including (Mickey Mouse, Wagtail, Black, Golden and Red - The list goes on and on. Bottom feeders like Plecostomus, various species of Cat Fish including Bronze, Albino, Salt and Pepper, Glass Cats and Pictus. Later with a little more experience progress to keeping other species of Tropical Fish, including Algae Eaters, Kribensis, Siamese Fighters, Clown Loaches, various species of Barbs like the Tiger and Cherry Barb. Red Tail Black Sharks, Silver Sharks and various species of Gouramis including (Dwarf, Powdered Blue, Kissing, Red and Honey - the list goes on and on.) For the more experience keepers progress to Cichlids which include the Angel Fish, Oscars, Discus, Firemouths Convicts and Golden Severums e.t.c.

HOUSING: Provide a suitable size Aquarium Tank. (Start of reasonably small and build up). Always make sure there is enough room for the fish to swim around in. Make sure the Aquarium Tank is suitably located and stay away from areas that have direct sunlight or very bright rooms. The daylight can cause excessive algae growth and overheating. Provide a good filter to remove waste products from the fish and toxic/bacterial substances. The filter also provides water movement which increases oxygen levels for the fish to breathe more easily. Provide also a suitable size Aquarium heater for your tank. Most Tropical Fish require a consistent water temperature of 76°F. The heater will provide a stable temperature all the time. Put a thermometer in the tank to check the temperature. Provide decoration in the tank like plastic/live plants, bogwood, rocks or Aquarium ornaments. Provide gravel and sand for the bottom of the tank. Provide a Aqua light system. Remember before adding any fish, add water conditioner and let the filter run for 5-7 days.

MAINTENANCE: All Aquarium Tanks need maintenance because they are a closed system and cannot run forever without maintenance. Nitrate/Phosphates build up over time. Water hardness is always increasing and evaporating. P.H. decreases due to fish waste. In the end water conditions become unfavourable for the fish. Change 25% of the water at least once a month with a gravel cleaner. This will remove waste products building up.

STEP 1: Before changing water, check the heater is lower enough in the water and unplug it.

STEP 2: Clean the Aquarium Tank glass with a algae scrapper or magnet, and remove any plastic plants or ornaments. Soak and clean any algae of them. **DO NOT REMOVE LIVE PLANTS (Just remove dead foliage.)**

STEP 3: Using a gravel cleaner, siphon the water off. Remove the fish if necessary and put in a large enough container with the siphon water.

STEP 4: Unplug the filter and remove the filter media and rinse under the tap water until clean. Put back in the tank.

STEP 5: Refill the Aquarium Tank with fresh water and slowly add water conditioner to remove Chlorine from the water. Plug everything back on.

DIET: Feed your fish twice a day, only giving a small amount of food that the fish can eat in 2-3 minutes. Provide Flake, Tablet or Pellet Fish Food. This will feed all your fish including bottom feeders. Depending on what type of fish you have in the tank, for a treat provide live food like Daphnia, Brine Shrimp, Bloodworm and Tubiflex Worms. These can also be

bought frozen. Many fish especially Cichlids and the Lori Cats have to get some sort of vegetable food like dried Vegetable Flake Food or suitable vegetables including Spinach, bits of Potatoes, Leafy Lettuce - not Iceburg, Cucumber. After a couple of days remove to prevent decay.



INFORMATION AND CARE ON AMPHIBIANS

There are three kinds of Amphibians which include Frogs & Toads, Caecilians and Salamanders (Newts and Sirens are really Salamanders). There are more than 5,000 types of species of Amphibians, and are among the most diverse groups of Vertebrates.

Description: Amphibians have descended from fish, they have lost their scales, but have retain some of the same properties. They have a smooth and moist skin, Toads are an exception. They have poor developed lungs, because of this they breathe through their skin and lungs. They are cold blooded animals which means they cannot control their own body temperature. They are ectotherms and hibernate through the cold Winter months. Most change their appearance completely as they grow. This is called Metamorphosis.

Natural Habitat: Most Amphibians live in water or on land. Most Amphibians are born and grow up in fresh water such as ponds, pools, rivers and streams. They move onto dry land when they are adults and return to the water to lay eggs. Many Amphibians live in hot places, but also like cool damp places, so they can lay their soft eggs. The eggs are laid in a jelly like substance called Spawn. Some Amphibians do give birth to live instead.

Origins: Frog and Toads are native to most parts of the world, except Antarctica, driest of deserts and Oceanic Islands. Caecilian are found on four continents in swampy places in the most tropical parts of the world. Salamanders are found in four continents including America, Northern Africa, Asia and Europe.

Handling: Handle to a minimum. Before handling wash your hands and rinse for at least 20 seconds with cold water. This lowers the temperature of your hands and makes the Amphibian feel more comfortable. Also their skin is delicate and they breathe through it. Anything you have on your hands will quickly get into their system. Remember to wash your hands again after handling your Amphibian.

Never mix any species of Amphibian together, this could turn into "Russian Roulette". Also Amphibians carry different toxins in their skin and some can adversely affect other Amphibians and even poison them.

Diet: Frogs and Toads - when Tadpoles they eat algae and aquatic vegetation. Adults - They become Carnivorous and eat pinhead crickets, fruit flies, small earthworms. Larger Frogs and Toads will eat smaller frogs, fish and mice.

Salamanders and Newts - Salamanders eat crickets, fruit flies, worms, spiders, slugs, snails and fish. Newts in the wild will also eat this, but you can provide them with bloodworm, daphnia and brine shrimp.

Caecilians - Land-dwellers eat earthworms, beetles, small frogs, crickets and termites. Water-dwellers eat insects, brine shrimp, daphnia, bloodworm and small fish.

Housing: There are 3 types of housing you need for different species of Amphibians Terrestrial (Land,) Semi-Aquatic and Aquatic. For land dwellers like Salamanders and certain types of Caecilians and Newts, provide a terrarium with a secured lid, and areas of

light and dark. Damp substrate with leaves and moss. Also you can use sterile soil, peat or sphagnum moss. Shelters made of rock and small logs. Provide a shallow water bowl, because they are not good swimmers and keep the humidity up. Semi-Aquatic Amphibians like various Salamanders, Frogs, Newts and some Ceacilians, provide an aquatic terrarium with a combination of water and land. The water area ideally should be heated and filtered with gravel. The land area can be filled with Sphagnum moss, bark or sterile potting soil. Provide a ramp for easy excess. Decorate the terrarium with driftwood, bark, rocks and plants. Aquatic Amphibians like Frogs, Newts, Axolotls and Toads, provide a Aquarium Tank with water, an heater. Use gravel on the bottom and if required a filter to make maintance less work. You can provide a light and décor like artifical floating lily pads or bark.

