

*If in doubt contact your  
OATA  
retail member  
for further information*

**IMPORTANT THINGS TO REMEMBER:**

**ALWAYS PURCHASE** test kits and regularly check the water for ammonia, nitrite, nitrate and pH. This will allow you to ensure that the water in your pond is not causing welfare problems for your fish.

**ESTABLISH A ROUTINE** for testing the water in your pond. Record your results to enable you to highlight fluctuations quickly.

**MAINTAIN** the water in the pond within the accepted parameters highlighted in this leaflet. You may need to undertake water changes to achieve this.

**ALWAYS** wash your hands, making sure to rinse off all soap residues, before putting them into your pond. Wash them again afterwards and certainly before eating, drinking or smoking.

**NEVER** siphon by mouth. A fish tank can harbour bacteria which can be harmful if swallowed. Purchase a specially designed aquarium gravel cleaner which can be started without the need to place the siphon in your mouth.

**NEVER RELEASE YOUR AQUARIUM ANIMALS OR PLANTS INTO THE WILD.**

Never release an animal or plant bought for an aquarium or garden pond into the wild. It is illegal and for most fish species this will lead to an untimely and possibly lingering death. Any fish or plants that do survive might be harmful to the environment.

**Checklist...**

**Equipment:**

- Pre-formed pond or good quality liner
- Filter, Pump and UV steriliser (optional)
- Appropriate foods for each time of year
- Pond Plants

**Before purchase ensure that:**

- The pond is suitable to house the fish species you wish to keep.
- You are aware of the weekly, monthly and yearly care required for the pond and the fish.
- The pond has some shade from sunlight to avoid high water temperatures in the summer months.
- You are aware of the signs and symptoms of the most common fish diseases.



**ORNAMENTAL AQUATIC TRADE ASSOCIATION LTD**

*"The voice of the ornamental fish industry"*

[www.ornamentalfish.org](http://www.ornamentalfish.org)



**How to  
care for...**



**Pond Fish**

## Introduction...

There are various species of fish including goldfish, Koi, orfe, rudd and tench which can be added to a garden pond.

All of these species are members of the Cyprinidae family and can be widely found throughout Asia and Europe.

## Water requirements...

You should try ensure the water in your pond remains within the water parameters outlined below to help your fish remain healthy, although these fish may acclimatise to a wider range over time:

Temperature: 4-24°C

pH: 6.5-8.5

Ammonia: 0mg/l (0.02mg/l may be tolerated for short periods)

Nitrite: 0mg/l (0.2mg/l may be tolerated for short periods)

Hardness: moderately soft - moderately hard (5-15°dH)

## Biology...

Fish are all poikilothermic (meaning their body temperature is the same as the water in which they are kept).

Tench, orfe and Koi can grow up to 75cm in length and therefore benefit from being kept in a larger pond.

The goldfish remain smaller making them appropriate for most pond systems. The most common maximum body length is up to 30cm. There are several popular colour varieties including Shubunkins, Sarasa, and red comets.

Currently there are many colour variations of Koi available including yellow, blue, black, red and gold making them a popular ornamental fish kept in garden ponds.

Orfe and tench are not as commonly kept as goldfish or Koi. Orfe and rudd are shoaling fish whilst tench are bottom feeders. A number of colour varieties such as Golden and Blue orfe, Golden tench and Golden rudd are popular and generally available.

These fish can thrive for many years in a healthy pond with good water quality.

## Pond requirements...

Ponds for fish should ideally be at least 45-60cm deep, preferably over 90cm for Koi. This ensures that there is a cool zone at the bottom in warm spells and a warmer area at the bottom in freezing winters. The pond should receive some sunlight as this helps to promote plant growth and to maintain warmer water throughout the spring and summer months. Shallower ledges around the edges of the pond will help you to grow a wider variety of plants.

Goldfish are suitable for most smaller pond systems, Koi, tench and orfe get much larger and it is recommended they are kept in a pond of 1500 litre or more. If a pond is only lightly stocked with goldfish, orfe, tench or rudd, a filter may not be necessary. However, when a filter is installed, it can help to prevent the build up of toxic ammonia and nitrite. A pump and fountain will be beneficial by circulating and oxygenating the water, especially where a filter has not been installed.

Koi require specialist ponds and equipment including filtration systems, pumps, UV sterilisers and different UV filters to keep the water by reducing the amount of algae floating in the water. Therefore, it is advisable to seek advice from your retailer regarding what is required to maintain these fish before purchase.

## Maintenance...

Test the water in your pond on a regular basis. Any build up of waste such as ammonia and nitrate can lead to health problems in the fish and some pollutants such as nitrate and phosphate can induce the growth of unsightly algal growth such as blanket weed or green water. Ask your retailer for advice.

As winter sets in, dead plants and leaves should be removed and marginal plants should be trimmed back. This rotting vegetation will break down in the pond and can release toxic gases. Pumps and filters could be switched off but are best kept running in larger ponds and it is advisable to add a pond heater, or floating device to ensure that the surface of the pond does not become covered with ice.

Before the start of spring, the pumps and filters should be cleaned with pond or rain water to remove sludge. If the system has a UV unit, the bulb should be replaced as per manufacturers recommendation. Be particularly vigilant about monitoring your fish for signs of diseases as the temperature rises. The immune system can be weakened following the cooler temperatures of the winter months.

## Feeding...

All these fish are omnivores, normally feeding upon insects and plant matter. These fishes metabolism and their appetite tends to follow the rises and falls in water temperature. To avoid intestinal problems, consider feeding easily digested food such as wheatgerm as the water temperature falls. If the temperature falls below 8 °C, it may be better not to feed at all. In very warm summers, over feeding must be avoided. Ask your retailer for advice.

Summer feeding will promote growth and can be used to build up the body reserves of your fish for the cooler winter months. Colour enhancing foods can be purchased to bring out the colour of your fish. Different sized pellets are also available depending upon the size of the fish.

## Common problems...

Water quality problems will affect fish behaviour and can be shown by clamped fins, reduced feeding, erratic swimming and gasping at the surface. Immediately test the water if any of these symptoms are shown.

If in doubt ask your retailer for advice.

## Compatibility...

All of these fish species can thrive together in the same pond. Therefore, more often than not, the question is whether or not your pond is suitable for each fish species. Tench and orfe grow to large sizes so only consider these species if your pond is capable of housing an adult specimen. Keeping orfe in shoals of four or five is recommended. Goldfish are compatible with most garden ponds and do not usually grow as large as the other species.

## Breeding...

Goldfish are the most likely to successfully spawn. Generally if there are more adult males than females, and the temperature reaches the correct level there may be spontaneous spawning events. A shallow area should be provided, which is heavily planted to increase the chances of the fry surviving. Goldfish are good parents and will eat the eggs before they can develop and their fry if they hatch.

Koi can be aggressive during breeding and the process can stress the fish, in particular causing permanent damage to the females and in severe cases death. This is more likely to happen if the pool contains more males than females.