

Fish

Information Pack

Keeping aquarium fish can be extremely rewarding, but it's a big responsibility. As an example, **goldfish live on average 10-15 years**. There are many different species of fish, and each has different needs.

Are you ready to welcome fish into your home?

It is recommended to go in person to a rehoming centre or reputable aquatics retailer who'll advise you on how to keep your fish happy and healthy. Fish should never be sent in the post unless via specialist couriers who can meet their welfare needs.

Remember the following when choosing fish in a shop:

- Tanks should be clean and well maintained, without any dead fish
- Tanks should not have cloudy water
- Fish should be swimming effortlessly
- Watch out for split fins, white spot disease, open sores or underweight fish
- Ask your retailer about where their fish come from
- If you already have a tank, reputable retailers will ask that you bring in a water sample so they can test it to see if the tank is ready to add fish

Under the Animal Health and Welfare (Scotland) Act 2006, pet owners are legally obliged to care for their pets by meeting their **five basic welfare needs**:

- suitable environment
- suitable diet
- ability to behave normally
- appropriate companionship
- be protected from suffering, injury and disease.

This pack provides information on how to meet these needs, and where to go for support if needed.



1. Environment - creating the ideal home for your fish

Fish should be kept in an aquarium. Decorative or ‘fun’ tanks, like goldfish bowls, jars, or children's tanks, have not been designed with welfare in mind so avoid those.

Aquarium size

- Bigger is better when it comes to aquariums, so go for more space than the minimum required. Larger volumes have more stable temperatures and water conditions. Only get a tank larger than **45 x 30 x 30cm (about 40 litres)**.
- Remember to think about how big your fish will grow.
- Too many fish in a tank will pollute the water, which can lead to disease and death. There are guidelines for the volume of water to be allowed per length of fish:
- **For tropical fish allow 1.5–2 litres of water per 1cm of tropical fish length** (excluding their tails)
- **For goldfish allow 2 litres of water per 0.5cm of goldfish length** as they require more space.
- These should only be used as guidelines because water quality is affected by many factors, including temperature, water source, filtration power, how well you tend to the tank and more.

Working out tank volume

To calculate the volume of a tank before buying it, you can use this simple technique:

$$\text{width (cm) x depth (cm) x height (cm) / 1000 (volume)}$$

For example, a tank measuring 60cm wide by 30cm tall by 30cm deep has a volume of 54 litres.

Aquarium shape

Wide tanks are better than tall tanks as they have a larger surface area for the water volume. Aeration equipment such as an air bubble stone will increase the amount of oxygen in the water.

Position

Don't put your aquarium near heat sources like direct sunlight and radiators and make sure it is on a sturdy surface. Consider pollutants in the air – cigarette smoke or aerosol sprays can be toxic to fish so this might be a factor when deciding where to locate your tank. An aquarium with a lid can help in preventing some pollution.

Aquarium filters

Filters are vital for keeping your tank clean as they remove waste from the tank. Fish pee and poo in their water, so build-up of toxins can happen very quickly. An appropriate choice of filter should produce a minimum turnover of 4 times per hour e.g., if you have a 100 litre aquarium you should look for a filter that can process 400 litres per hour. You may need more powerful filters if you have lots of fish, or species like goldfish which produce more waste.

No fish should be kept in tanks without a well set up and maintained filter.

Filters can't break down all the waste that fish produce, so you'll also need to carry out regular water changes. You should change up to 25% of the water each week and clean the filter at the same time. Use the old water to clean your filter, not tap water, as tap water will kill the good bacteria that you need in the filter.

Water quality

Chlorine present in tap water is dangerous to both fish and bacteria. Therefore, it's vital to add a dechlorinating product to the new water or leave it standing for 24 hours for the chlorine to leave the water. When refilling the tank, you don't want the new water to be a different temperature to that in the tank as this will shock the fish. It is a good idea to get a separate fish tank heater to heat the water before you add it.

Buy testing kits and **check the water quality once a fortnight**, kits for ammonia and nitrite are essential.

The safe levels of these are:

- **0mg/L of ammonia**
- **0mg/L of nitrite**

If your tests show that the waste levels are higher than this, you'll need to change half of the water every day and keep testing until conditions improve. If the chemical waste levels don't decrease over time, ask your aquatics shop for help to improve the water quality.

Temperature

You must research the temperature requirements of the fish species you want to keep.

- **Goldfish** need to be kept within 10–21°C, so a heater isn't normally necessary.
- For **tropical fish**, you must include a tank heater and set it to the correct temperature for the species.

Please visit [The Ornamental Aquatic Trade Association \(OATA\)](#) for more information.

Lighting

Use artificial lighting during the day so the fish have a steady light cycle, just as they would in the wild. A light cycle of eight to 10 hours a day, switched off at night, is suitable for most species. Don't place the tank by a window as this can raise the water temperature dangerously high.

It is recommended to use '**fishless cycling**' when you first set up your new tank. Please find more information about that and how to give your fish the best living environment [here](#).

2. Diet - providing a suitable diet for your fish

You need to buy the right type of food for your fish as they contain different levels of nutrients for different fish species. It's important to supplement fish food flakes with other foods for balanced nutrition and enrichment. For example:

- Goldfish love chopped vegetables such as peas and spinach.
- Tropical fish vary in what they'll eat. You could try frozen (fully thawed first) fish, crumbled boiled egg yolk and some lettuce leaf depending on the species.



- Certain species of pleco need vegetables, such as potatoes, or pieces of wood that they graze on.
- Water fleas (daphnia) or brine shrimps, are an excellent supplement for tropical fish and are widely available in frozen packs. Only feed small amounts of them to goldfish due to their high protein content.

How much to feed your fish:

- Build a feeding routine for your pet fish
- Adjust the quantity of food according to the size and quantity of fish in your tank
- Always feed as much as the fish can eat within two to five minutes
- Don't overfeed them
- Feed fish two or three times a day rather than just once a day



3. Behaviour - ensuring your fish is able to behave normally

Enrichment

Give your fish an interesting environment to live in by including the following in your aquarium:

- **Substrate:** this is the sand or gravel on the bottom. Make sure it's suited to your fish and wash it well before use.
- **Plants:** these provide shade and shelter. It's better to provide real plants than plastic, as they release oxygen and nutrients into the water.
- **Shelter:** branches and sturdy rocks also provide shade and shelter, which are important for your fish to feel secure.

What you should provide will vary according to the specific needs of your fish. Avoiding overcrowding is important to ensure fish can behave normally.

4. Companionship - making sure your fish has appropriate company

There are a number of factors to consider when keeping fish together in an aquarium:

- Species of fish
- Water quality
- Behavioural needs of fish - lots of fish in a tank will compete for food which could cause stress.

Goldfish

- Goldfish don't need the company of other fish, so they can be kept on their own.
- Don't keep single and twin-tailed varieties together, because the twin-tailed fish are slower moving and so will often miss out on food.

Tropical fish

- Choose species that are happy to live at different depths of the aquarium to maximise the available space.
- Many tropical fish, including danios, tetras, rainbowfish, rasboras and many catfishes are 'shoaling fish'. This means you should keep them in **groups of six** or more, otherwise they may feel stressed.
- Other tropical fish species aren't very social and will fight with either their own kind or other species kept in the same tank.

It's important that you research the species to find out their exact requirements, including:

- Their natural environment
- The water hardness they prefer
- Their specific needs
- Compatibility with other fish

5. Health - **making sure your fish is protected from pain, suffering, injury and disease**

Signs of a healthy fish:

- Good appetite – eating quickly and enthusiastically
- Breathing well – gills rising and falling rhythmically
- Behaviour – active, alert and sociable
- Eyes – bright and clear



- Fins – no sign of tears, splits, spots or streaks of blood; held away from the body, not drooping or folded
- Position – swimming freely and evenly
- Healthy scales – smooth, no sign of injury or fungal growth
- Clean bottom, without stringy poo

Signs of poorly fish:

- Sunken or distended bellies (except when carrying eggs)
- Sticking-out scales
- Pale patches on scales
- Tiny white spots on the fins, gills or skin
- Milky eye
- Swimming unusually – a fish either sinking to the bottom or swimming to one side is a bad sign
- A change in activity levels
- Oxygen starvation – a fish continuously gulping and gasping at the surface (except labyrinth species, for example, gouramis) is a sign of oxygen starvation or poor water quality
- Fungus disease (saprolegnia) – body and fins covered in white tufts. If they're around the mouth, then it's likely a different condition known as mouth fungus
- White spot disease – tiny white spots covering skin, gills and fins

Most of these conditions are caused by **poor water quality**. If you notice any of these issues, check your water quality first. You can buy water testing kits to help with this from many pet shops or garden centres. Visit [here](#) for more information.

Visit Tetra for help [identifying fish parasites](#) and the medications you can use. If you need help in diagnosing and treating fish disease, please [contact a specialist fish vet](#).

This guidance is provided for information purposes only and it should not be relied on as formal advice for your specific circumstances. Dog Trust accepts no liability for any loss or damage caused as a result of your reliance on it.

Support for fish owners

- **Blue Cross** run a Pet Loss Support service so that no one has to face the pain of losing a pet alone. The service is free and confidential and can be accessed via emailing plsmail@bluecross.org.uk or calling 0800 096 6606. You can find more information [here](#).
- Visit the [Ornamental Aquatic Trade Association website](#) for species specific care sheets and lots more information.
- To find a vet that can treat your fish please visit [here](#).
- It is wise to have a plan should you ever become unable to care for your fish, a family/friend might be able to help. [Pet Fostering Service Scotland](#) is a service available if you are unable to look after your pet through illness, homelessness or domestic abuse and cannot arrange any alternative care. Please phone 0344 811 9909 to access the service or email fosterenquiry@pfss.org.uk to arrange a call back.
- Animal rescue charities like the [Scottish SPCA](#) may be able to accept pet fish if they need to be rehomed. Rehoming through a reputable charity is recommended over selling your pet online, to make sure they go to a loving home