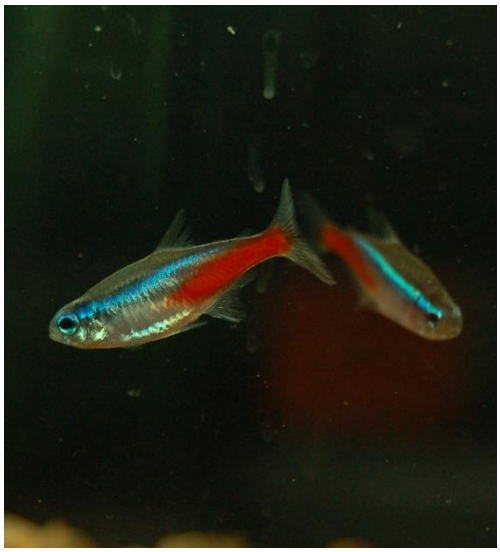
Tropical Freshwater Fish
How to care for tetras & pencilfish



Tetras are some of the most recognisable aquarium fish. They are from the family *Characidae* and originally occur in South America and Africa, although the majority of those in the aquarium trade are now captive bred. Pencilfish are less well-known and are from the family *Lebiasinidae*. They also occur mainly in South America, with much fewer species being captive bred for the aquarium trade. Both tetras and pencilfish are generally small, colourful and peaceful fish, however, there are some exceptions. Most tetras and pencilfish are undemanding aquarium inhabitants and are easy to keep.

Water requirements

Captive bred tetras and pencilfish are usually undemanding of water chemistry and their suggested parameters are shown below. These parameters are a general guide for these groups of fish, so it is important to check with your OATA retailer for any species-specific requirements before purchasing.

Temperature:	between 22-27°C
pH:	6.5-8.0
Ammonia:	Zero mg per litre
Nitrite:	Zero mg per litre
Nitrate:	Not to exceed 20 mg per litre above normal tap water levels
General hardness:	Soft-medium (4-12°dH)
Carbonate hardness:	Soft-medium (3-10°dkH)

If your tetras or pencilfish are wild caught, ask your OATA retailer for advice on what parameters they recommend.

Biology

Tetras grow to a range of sizes, but most stay between 2-5cm, with some larger species reaching nearer 10cm.

There are fewer species of pencilfish, and even fewer in the trade, but they generally stay smaller and don't often grow above 5cm.

Sept 2022
www.ornamentalfish.org info@ornamentalfish.org

Although small, these fish can live several years in a well matured set-up with good water quality.

Tetras and pencilfish are shoaling fish and should be kept in groups of at least five in the home aquarium, but more is better. Tetras or pencilfish kept singly or in too small groups will often become stressed.

It is difficult to sex most species of fish unless they are breeding, but in some species such as the Congo tetra the males are more colourful and have longer fins than the females. Similarly, spawning male pencilfish will become a lot brighter in colour.

Aquarium requirements

As a general rule you should, within reason, buy an aquarium as large as possible. Ideally, it should be able to accommodate at least a small shoal of tetras or pencilfish. It is recommended that an aquarium of at least 45 litres for a small shoal of a smaller species and at least an 80 litre aquarium for the larger species (5cm+). The larger the aquarium, the more stable the environmental conditions such as temperature and water quality will be. Whatever the size, **a filter is always essential**.

The tank should also have aquarium gravel or sand and ideally live plants present to provide cover. If live plants are not used, then the addition of plastic plants and suitable ornaments is recommended, such as plant pots or model caves, which supplies the fish with shelter. It is also important to provide tetras and pencilfish with space to swim, and a gentle current for the smaller species.

A heater is required to maintain a suitable temperature all year round. To minimise fluctuations in water temperature, the aquarium should not be situated near any draughts or heat sources. It should also be out of direct sunlight and away from loud noises, vibrations and sudden movements. Overhead tank lighting is recommended to maintain correct day-night cycle.

Water testing kits are essential so that water quality can be checked on a regular basis (once a week) to ensure it does not slip below the water requirements stated above.

Introducing your fish

Before adding any fish, seek advice from your OATA retailer to make sure that your aquarium is an appropriate size for the number of tetras or pencilfish you would like to keep. Check that the water quality in your aquarium is suitable i.e. levels of ammonia and nitrite are zero. Only increase the number of fish you have in your aquarium slowly as the population of beneficial bacteria established when maturing your aquarium filter need to increase every time more fish are added and feeding increases. Overstocking or stocking your aquarium too quickly can result in 'new tank syndrome'. This occurs when there

are not enough nitrifying bacteria to cope with the increased waste from the fish, leading to unhealthy levels of ammonia and nitrite, which may cause fish to become ill or die.

Healthy fish have clear bright eyes, undamaged fins, intact scales, no ulcerations or bumps, appropriate swimming behaviour and steady breathing. Do not purchase a seemingly healthy fish if sickly fish are present in the tank with it. Signs of disease can include clamped fins, flicking against gravel or décor and shimmying (shaking). Diseases can be easily carried by fish that do not show any clinical signs. If in doubt, ask your OATA retailer for advice as they will have in-depth knowledge and experience.

Your OATA retailer will usually sell your fish to you in a plastic bag. Try not to keep them in this for too long. Once purchased, take your new fish home as quickly as possible because fish are easily stressed by bright lights, extreme temperatures, noise and movement.

Once home, your fish will need to acclimatise to their new environment and a common method of doing this is known as the 'floating bag' method. Switch off the aquarium lights and take the bag containing your new fish out of its outer wrappings carefully, avoiding exposure to bright light. Float the bag in the water of your tank to ensure the temperature in the bag is the same as the aquarium water. After 10 minutes, slowly introduce small amounts of aquarium water into the bag containing the fish for up to 20 minutes. Once complete, carefully release the fish into the aquarium whilst introducing as little bag water into the aquarium as possible. After this, dispose of the bag and any excess water appropriately. Monitor your new fish carefully for the first week, paying particular attention to water quality. If in doubt, contact your OATA retailer for advice.

Maintenance

At least once every week, a partial water change of 25% is strongly recommended (a siphon device is useful to remove solid waste from the gravel). The water should be tested regularly (at least once per week) to ensure that ammonia and nitrites don't build up. Ensure that the replacement water is treated with tap water conditioner to remove any harmful chlorine or chloramine present before adding to the aquarium.

Filters should be checked for blockages. If the filter needs cleaning, do not run it under the tap because any chlorine or chloramine present may kill the beneficial bacterial population that has established in the media. Instead, it should be rinsed lightly in the tank water which is removed during a partial water change as this reduces the amount of bacteria which are lost.

Good husbandry is essential as tetras and pencilfish can be stressed by even the smallest amounts of ammonia and nitrite which may then cause them to develop various diseases. Test the water to monitor the ammonia, nitrite and nitrate levels, together with pH and water hardness every week, especially during initial set-up and after adding extra fish.

What to watch out for

All fish will have slight variations in their behaviour or appearance, but keeping an eye on any changes in the following will help to identify any potential problems before they become a real health issue:

- swimming behaviour – hanging at the surface, sitting on the bottom or erratic swimming
- colour – turning a darker or paler colour than normal
- temperament – changes in level of aggression or hiding more than normal
- breathing – gill covers moving at a slower or faster rate than normal
- appearance – development of white spots or fluffy growths, loss of fins or scales
- condition – increase or decrease in body weight and condition
- feeding – reduced intake or lack of interest in food

If you are concerned about the health of any of your livestock, then test your water quality and contact your OATA retailer for further guidance.

Feeding

Both tetras and pencilfish are omnivorous and will take most food types. In the home aquarium, they should be fed with a good quality flake or granule. They will also benefit from being fed small items of live or frozen food such as daphnia, small bloodworm or tubifex.

Tetras and pencilfish should only be fed what they can eat within a few minutes once a day. Take care not to overfeed as this can lead to a build-up of uneaten food which breaks down releasing toxic waste into the water. If in doubt, ask your OATA retailer for advice on appropriate feeding levels.

Compatibility

The smaller species such as neon tetras or Beckford's pencilfish should not be kept with any fish large enough to eat them. The larger or more boisterous species such as Buenos Aires tetra should not be kept with any timid or long finned fish as they may nip their fins. Tetras and pencilfish mix best with species of a similar size and temperament to themselves.

Breeding

Tetras and pencilfish can be bred in the home aquarium, although it is unlikely to be very successful, particularly in a community aquarium. Spawning can be induced by feeding lots of frozen or live food and decreasing the temperature to mimic the rainy season. Both are egg scatterers and will scatter eggs over plants, leaf litter and in the substrate. Any eggs that aren't eaten by the aquarium inhabitants will hatch within a couple of days and after a

couple more days, small fry should be seen. For best results, a dedicated set-up and specialist fry foods are required.

Checklist

Before purchase make sure:

1. You have the appropriate equipment and position for the aquarium.
2. You have researched all the species in which you are interested and your final choices are all compatible.
3. You are familiar with how to transport and release your fish.
4. You are aware of the daily, weekly and monthly maintenance your aquarium will require.
5. You are prepared to look after your fish properly for the duration of their life.

Shopping List

- Glass or acrylic aquarium
- Filter*
- Heater
- Lighting (required for live plants)*
- Gravel or sand
- Tap water conditioner/dechlorinator
- Water testing kits (ideally ammonia, nitrite, nitrate, pH and water hardness)
- Gravel cleaner/siphon cleaning device (recommended)
- Aquarium decorations and/or live plants
- Bucket for water changes

*may be included in branded aquarium sets but can be purchased separately.

Before purchase make sure:

- The aquarium is of a suitable size that ideally can accommodate the fish once they are fully grown
- Water parameters are as advised in this leaflet.
- Aquarium is cycled and ready to receive fish.

Always buy...

test kits and regularly check the water for ammonia, nitrite, nitrate and pH. This will allow you to make sure the water in your aquarium is not causing welfare problems for your tetras or pencilfish.

Establish a routine...

for testing the water in your aquarium. Record your results to enable you to identify fluctuations quickly. Also check the temperature of the water.

Maintain...
the water in the aquarium within the accepted parameters highlighted above. You may need to do regular water changes to achieve this.

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

Always wash your hands...
making sure to rinse off all soap residues, before putting them into your aquarium, or use long sleeved rubber gloves. Wash your hands again afterwards and certainly before eating, drinking or smoking.

Five Welfare Needs Checklist:

The Animal Welfare Act 2006 states that all pet owners have a legal duty of care to their pets. Anyone who is cruel to an animal or is found not to be providing the five animal welfare needs, as listed below, can be prosecuted.

- A **suitable environment** e.g. appropriately sized tank (with water heater if tropical set up) within a suitable location in your home.
- A **suitable diet** which meets the needs of your chosen fish.
- **Behaviour** - Fish are able to exhibit their normal behaviour e.g. hiding places for timid fish, enough room for fish to swim freely.
- **Companionship** - Ensure you know whether your chosen fish need to be kept with, or apart from, other fish.
- **Health** - Protected from pain, injury, suffering & disease e.g. you are aware of the daily, weekly and monthly maintenance that your aquarium will need.

- **Water quality test kits are a necessity not an optional extra**
- **You must be prepared to look after your fish properly for the duration of their life and provide an aquarium which can accommodate your fish when fully grown**

*Never release your aquarium animals or plants into the wild It is illegal and for most fish species this will lead to an untimely and possibly lingering death. Any animals or plants that do survive might be harmful to our native countryside. Take care to properly dispose of any soiled substrate (e.g. sand or gravel) water or decorations so that non-native organisms do not enter natural watercourses.

Visit ornamentalfish.org to find a full range of how to guides and species-specific care sheets to help you look after your fish successfully.

Sept 2022
www.ornamentalfish.org info@ornamentalfish.org