Indoor Coldwater Fish How to care for unheated aquarium inhabitants

Generally, tropical species will require a minimum temperature of at least 22°C and, therefore, a heater is required. Goldfish are often incorrectly sold for small unheated aquariums, however, there are many other species which will thrive in smaller aquariums without a heater. Although these fish can live in subtropical conditions, a filter is still essential. This list is not exhaustive and your OATA retailer may also stock other species suitable for unheated aquaria. For husbandry advice and information on how to set up a freshwater aquarium (heated or unheated), please see our "How to set up a freshwater aquarium" care sheet. If you are interested in any of the following species, please see our more detailed care guides for more information. Although these species are suitable for unheated aquariums, they are not legally permitted to be kept outdoors for biosecurity reasons and therefore must only be kept in indoor aquaria (Introduce or keep non-native fish and shellfish - GOV.UK (www.gov.uk)).

With unheated aquariums it is especially important to consider the environment in which the tank is placed. 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.

Danios

Some species of danio, such as zebra and leopard, can be kept in unheated aquariums. They stay small (approximately 5cm), are active and easy to look after. **Always** ask your OATA retailer if the species of danio you are interested in can live in an unheated aquarium. Danios are active fish and although they will appreciate areas of cover (such as live or artificial plants) in which to hide, they will require an area in which to swim and a moderate current. Danios are a social species and need to be kept in a group of at least five. Danios kept singly or in too small groups will often become stressed. Danios 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.

Recommended parameters:

Temperature: 17-27°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)



Barbs

Although most species are tropical, there are some barbs which can be kept in an unheated aquarium. Two common species are rosy and golden barbs, both of which can grow to roughly 10cm. Always ask your OATA retailer if the species of barb you are interested in can live in an unheated aquarium.

Barbs are active fish and will enjoy space to swim, but they will need some areas of cover, ideally live plants. Some species can be boisterous and nip fins so do not keep these with any shy species or species with long fins. Barbs are social and will need to be kept in a group of at least five. Those kept singly or in too small groups will often become stressed.

Barbs 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 live or frozen food such as daphnia, small bloodworm or tubifex.

Recommended parameters:

Temperature: 17-27°C pH: 6.0-7.5

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)

White cloud mountain minnows

White cloud mountain minnows are a popular, easy to keep inhabitant of an unheated aquarium. They are small fish and grow to about 5cm. They are available in their natural colouration as well as golden and long finned varieties.

White cloud mountain minnows are active fish and will enjoy space to swim, but they will need some areas of cover, ideally live plants and a moderate water flow with high levels of oxygen. They are a social species and will also need to be kept in a group of at least five. Those kept singly or in too small groups will often become stressed.

White cloud mountain minnows 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.



Recommended parameters:

Temperature: 17-23°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)

Variatus Platy

Variatus platies are popular because of their small size (6-8cm), bright colours and calm temperament. They also readily reproduce in home aquariums: another reason they are so popular.

Variatus platies are active fish and will enjoy space to swim, but they will need some areas of cover, ideally live plants. To prevent unwanted male attention, they should be kept in either single sex groups or small groups of two females for every male.

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

Recommended parameters:

Temperature: 17-27°C pH: 7.0-8.0

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)

Bronze and peppered corydoras

Many corydoras live in tropical aquariums but both bronze and peppered corydoras can live in an unheated aquarium. They are small fish and only grow to around 6cm.

Both corydoras have sensitive barbels or 'whiskers' and so should be kept on a substrate of either fine gravel or sand. They are sociable and should be kept in a group of at least five otherwise they are likely to become stressed.

Sinking catfish pellets are a perfect food for both species, but they will also consume small frozen items such as daphnia, bloodworm or tubifex.

Recommended parameters:

Temperature: 17-27°C pH: 6.0-8.0

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)

Hillstream loach

Although hillstream loach can be kept in unheated aquariums, they have a very particular set of needs and shouldn't be used as 'cleaner fish'. They stay small and will grow up to 6cm.

Hillstream loaches require fast moving, highly oxygenated water and a mature tank which contains algae for them to graze on. The tank should be decorated with large, round pebbles which make ideal grazing surfaces. The substrate should be either sand or fine, smooth gravel. They are likely to become stressed if kept alone so plan for a small group of at least three or four with other species that will thrive in these conditions.

Hillstream loaches will need to be fed prepared foods, such as sinking catfish pellets, algae wafers, fresh vegetables and live or frozen daphnia, bloodworm or brine shrimp.

Recommended parameters:

Temperature: 18-24°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)

Weather loaches

Weather loaches can make excellent aquarium inhabitants as they are easy to care for, peaceful and compatible with many other species. They can get relatively large, up to 25cm.

They are a social species and should be kept in groups of at least three to allow them to interact with each other. They also have sensitive skin, so won't appreciate sharp or rough ornaments and substrates.



Weather loaches are omnivorous and will take most food types. In the home aquarium, they should be fed with a good quality sinking catfish pellet. They will also benefit from being fed small items of live or frozen food such as daphnia, bloodworm or tubifex.

Recommended parameters:

Temperature: 17-24°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)

Amano and cherry shrimp

Both Amano and cherry shrimp are small colourful shrimp that do not require a heater in their aquarium. They stay very small with adults reaching approximately 3cm and, as they are social, they will appreciate being kept in groups of at least five.

They thrive in an aquarium with lots of plants, gentle water flow and good water quality. Be careful when using treatments with this species as they are highly sensitive to copper.

Both species will graze on algae in the aquarium but will also need a supplementary feeding of algae wafers or other sinking pellets.

Recommended parameters:

Temperature: 17-27°C pH: 6.0-8.0

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)

Aquarium requirements

For a more detailed assessment of each species' needs, please see our specific care sheets. Your OATA retailer will also be able to provide you with more species-specific advice.

As a general rule you should, within reason, buy an aquarium as large as possible. 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.

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.

Fish 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.

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 species and number of fish 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 these species 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.

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

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 unheated aquarium inhabitants.

Maintain...

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

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.

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.



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

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

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.