

Tropical Freshwater Fish

How to care for tropical algae eaters

Algae can be a problem for many hobbyists, but unfortunately some fish may not be the best species to solve the problem as they can grow too large for most aquariums. Persistent algae problems may indicate underlying water chemistry issues caused by incorrect maintenance. Algae-eating fish aren't a substitute for regular maintenance and appropriate stocking levels.



Below is a list of species that will graze on algae in the aquarium which should fit into many community aquariums, but always ask your OATA retailer before you add any of these species. Although these species will graze on algae, they will all need their diet supplemented with prepared feeds, such as algae-based wafers or flakes and ideally fresh vegetables such as cucumber. Some vegetables may have residual pesticides on them which may be harmful to fish or invertebrates, so it is best to buy organic or thoroughly wash vegetables before use. This list is not exhaustive and your OATA retailer may also stock other fish species suitable for eating algae in tropical freshwater aquariums.

Bristlenose catfish

Bristlenose catfish are much smaller than some of their larger relatives, growing to about 15cm. They can be kept alone, in pairs or small groups, but it is usually best to have just one male per group. Males can be distinguished from females by the presence of bristles on the end of their nose. Males and females can breed in a community aquarium if there is a suitable breeding cave or crevice available. You may see small fry in the aquarium once they are large enough to be free-swimming. There are many varieties of this species with long-finned, albino and white colour morphs available.

Bristlenose catfish are quite secretive and will thrive in aquariums with lots of cover and at least one piece of wood for them to graze on.

Recommended water parameters:

Temperature: between 22-27°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)



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Clown plecostomus

Clown plecostomus are closely related to bristlenose catfish but are slightly smaller and are unlikely to grow over 10cm. They are best kept on their own or in a male and female pair as two males are likely to fight. This species will require wood in the aquarium as part of its diet and will struggle to do well long term without it.

Clown plecostomus are also quite secretive and will need lots of cover to make them feel secure.

Recommended water parameters:

| | |
|---------------------|---|
| Temperature: | between 22-27°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) |

Otocinclus

Otocinclus are small catfish which can delicately clean algae from plants, which make them very popular in planted aquariums. They stay small, only growing to about 4cm, and are highly social so it is recommended that a group of five or more is kept. They are shy and are best suited to a calm aquarium where they are not intimidated by boisterous species or larger fish that may eat them.

Otocinclus can be quite delicate at times so will need clean, highly oxygenated water. They will also appreciate places to find cover such as in wood or heavily planted areas. They do not typically breed in home aquaria.

Recommended water parameters:

| | |
|---------------------|---|
| Temperature: | between 22-27°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) |



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Shrimp

Amano shrimp are a commonly found shrimp species that grow up to 5cm. This means they can be kept with larger fish species without risk of being eaten. However, they are not as colourful as their smaller relatives and will not breed in the home aquarium. The other common species of shrimp are colour variants of *Caridina cantonensis*, which include cherry and bee shrimp. They are much more colourful than Amano shrimp and will likely breed in the home aquarium if cover is provided. They are smaller (3cm) than Amano shrimp and therefore tank mates should be selected carefully.

Both shrimp species will graze on algae in the aquarium and do not require a heater, which make them especially useful for algae control in unheated aquariums. They are social and will appreciate being kept in groups of at least five. They both thrive in an aquarium with lots of plants, gentle water flow and good water quality. Be careful when using some fish treatments with this species as they are highly sensitive to copper.

Recommended water 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) |

Siamese algae eaters

Siamese algae eaters are excellent algae-eating fish for the larger aquarium. They have a couple of look-alikes, so it is important to ensure you purchase the correct species. The true Siamese algae eaters are *Crossocheilus oblongus* and can be distinguished from others by having a cross hatch pattern on their backs and a black line through their tail fin and eye. Siamese algae eaters can be kept either individually or in groups of five or more to reduce any bullying. They can grow up to 16cm and will require an aquarium of at least 120cm long, highly oxygenated water and a well-fitting aquarium lid.

Recommended water parameters:

| | |
|---------------------|---|
| Temperature: | 22-27°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) |



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Garras

Garra is a genus of fish that will eat algae in the home aquarium. There are many different species available, and they vary in colour, size and temperament. As they have different care requirements, always ask your OATA retailer before purchasing any species of Garra. All species will appreciate soft substrate, well oxygenated water and cover in the form of cobbles and wood.

Recommended water parameters:

| | |
|---------------------|---|
| Temperature: | 22-27°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 the needs of each species, 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, but some of these species may need extra time to graze on algal foods provided. 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



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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 the 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.



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



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*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 tropical algae eater.

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

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.

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.



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- ▶ **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) 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.



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