#### Checklist

Before purchase make sure that:

- 1 You have the appropriate equipment and position for the aquarium.
- 2 You have researched all the species you are interested in 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.

#### Equipment

- 1 Glass or plastic aquarium
- 2 Gravel cleaner
- 3 Water testing kit
- 4 Tap water conditioner
- 5 Gravel, bogwater and rocks
- 6 Filter
- 7 Food
- 8 Heater & thermometer

Before purchase make sure:

- 1 Water parameters are as advised in this leaflet.
- 2 The aquarium in which the fish is to be housed is large enough for the adult of the species
- 3 If adding to an existing set up ensure the fish are compatible.



# Never release your aquarium animals or plants into the wild

Never release an animal or plant bought for a home aquarium into the wild. It is illegal and for most fish species this will lead to an untimely and possibly lingering death because they are not native to this country. Any animals or plants that do survive might be harmful to the environment.

#### Important things to remember

#### 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 fish.

#### Establish a routine...

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

#### Maintain...

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

#### Always wash your hands...

making sure to rinse off all soap residues, before putting them into your aquarium. Wash your hands 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. Buy a specially designed aquarium gravel cleaner which can be started without the need to place the siphon in your mouth.



Scan this code to download an electronic copy If in doubt contact your OATA retail member for further information



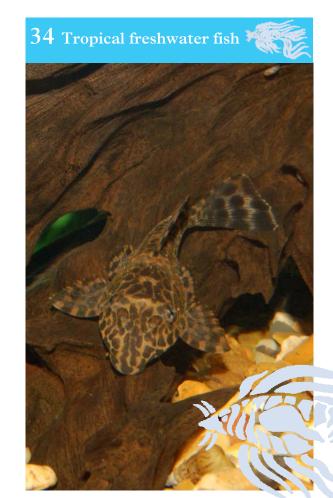
Ornamental Aquatic Trade Association Ltd
The voice of the ornamental fish industry

0870 043 4013 info@ornamentalfish.org www.ornamentalfish.org

How to care for...



# Tropical algae eaters



#### Introduction

Tropical freshwater algae eaters are often added to aquariums in order to help remove the build up of algae which grows in the tank.

The largest group belong to the family Loricariidae and are commonly known as the *Plecostomus* (Plecs). This is the largest catfish family in the world with more than 700 species described. There are smaller algae eaters like the *Otocinclus* (Otos).

#### Water requirements

Algae eating fish require good water quality and, wherever possible, this should be within the following parameters:

Temperature: 20 to 28°C

**pH**: 6.0 to 8.0

**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 to very hard (5 to 28°dH)

### **Biology**

The algae eaters have a large range of sizes. The smallest are *Otocinclus* at about 5cms, while the largest plecs can reach nearly 50cms. In between are bristlenoses and Clown plecs which generally get no larger than 15cms. The non-catfish algae eaters, such as the Siamese Algae Eater and the Flying Fox, also generally grow to about 15cms.

Plecs have the ability to absorb oxygen through their intestines and can sometimes be seen to swim to the surface to ingest air.

The life span of algae eaters can be substantial. There are reports of some plecs living for up to 20 years and the smaller species up to 10 years in good water quality.

Some of the smaller species look quite similar. The Siamese Algae Eaters can be distinguished from the Sucking loach (*Gyrinocheilus aymonieri*) by the black lateral line which runs the length of the body through the tail. If you are unsure ask your retailer for advice.

Plecs are able to lock their pectoral fins at a  $90^{\circ}$  angle which can be used to prevent predation and to fight with other individuals. Care should be taken when handling and netting these species.

# Aquarium requirements

The tank requirements depend upon the type of algae eater which you purchase. Otos are suitable for most small community tanks due to their small size, as are Flying Foxes and Siamese Algae Eaters. The plecs however vary in size from species to species so the tank would need to be large enough to accommodate a fully grown specimen or you may need to upgrade in the future.

If you are keeping plecs, the aquarium may require bogwood as some species rasp on this wood which aids digestion. Otos, Siamese Algae Eaters and Flying Foxes should be kept in groups of 4 to 5 as they are shoaling fish.

A secure lid is a must for all of the algae eating fish. The smaller streamlined species are active swimmers and may leap from the water, whilst the plecs are known to leap from one pool of water to another in the wild in search of new habitats. The water flow on the tank should be relatively strong with high aeration as these fish prefer higher oxygen levels.

Live plants are not essential for these fish. Larger plec species may uproot and eat some plants, therefore artificial or robust plants such as Java moss and Java fern are recommended. The aquarium should contain plenty of caves and retreats for these fish though as they are all relatively shy and reclusive. Territories will be established in a well decorated aquarium.

#### Maintenance

At least once every two weeks a partial water change of 25 to 30% is strongly recommended (a siphon device is useful to remove waste from the gravel). The water should be tested regularly to ensure pollutants such as ammonia and nitrites do not build up. Ensure you either allow the replacement water to stand or aerate it to remove any chlorine present. Ideally treat all replacement water with tap water conditioner before adding to the aquarium.

Filters should be checked for clogging and blockages. If the filter needs cleaning then do not run it under the tap as any chlorine present may kill the beneficial bacterial population that has established in the media. Instead, it can be rinsed 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 fish can be stressed by even the smallest amounts of ammonia and nitrite. Test the water to monitor the ammonia, nitrite and nitrate levels every week, especially during initial set-up and after adding extra fish.

#### Feeding

Although these fish are known as the algae eaters they are in fact omnivores. Feeding upon phytoplankton, algae, zooplankton and insect larvae in the wild.

A good balanced diet is required for these fish to thrive and you should strive to ensure these fish have plenty of food to avoid malnutrition. Catfish tablets, algae wafers, frozen and live foods and fresh vegetables should all be offered. Make sure the food you supply is eaten by your catfish. Sometimes in community tanks other fish may eat the food more quickly than these often reclusive fish. If this is the case try feeding at night, many of these species are nocturnal. These fish should be fed what they can eat within a few minutes 1 to 2 times a day. Remove any uneaten food to reduce waste build-up.

## Potential problems

A water quality problem 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 OATA retailer for advice.

# Compatibility

All of these fish are suitable to be added to a community aquarium if the tank size is large enough to house an adult. Be aware that as Sucking loach and Flying Foxes grow, they may become territorial.

The Otos, Flying Foxes and Siamese Algae Eaters should be kept in small shoals of four or five. Keeping more than one plec is species dependent. Some will not tolerate others unless enough space is provided in a tank. There are some exceptions which will live happily with other plecs, such as the bristlenose.

# Breeding

Breeding the majority of these algae eaters is hard and few people have been successful. One exception is the bristlenose which will readily spawn in an aquarium. They do not require much time or effort because the males will protect fry from predation and keep them safe within a designated breeding site. Ask your OATA retailer for advice.