

*If in doubt contact your
local OATA
retail member
for further information*

IMPORTANT THINGS TO REMEMBER:

ALWAYS PURCHASE test kits and regularly check the water for ammonia, nitrite, nitrate and pH. This will allow you to ensure that 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 undertake 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 them 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. Purchase a specially designed aquarium gravel cleaner which can be started without the need to place the siphon in your mouth.

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 as they are not native to this country. Any animals or plants that do survive might be harmful to the environment.

Checklist...

Equipment:

- Aquarium
- Gravel cleaner
- Water testing kit
- Marine salt
- Marine substrate and live rock
- Reverse osmosis/De-ionised water or tap water conditioner
- Heater, thermometer and hydrometer
- Filter and protein skimmer

Before purchase ensure that:

- The aquarium is well established.
- Water parameters are as advised.
- You are aware of the requirements of your chosen species.



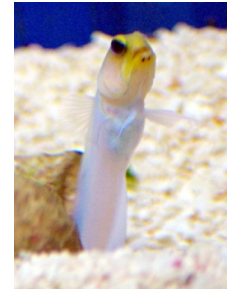
ORNAMENTAL AQUATIC TRADE ASSOCIATION LTD

"The voice of the ornamental fish industry"

www.ornamentalfish.org



**How to
care for...**



**Blennies, Gobies,
Jawfish, Dwarf Wrasse
and Dartfish**

Introduction...

This group of fish includes the gobies, dartfish, blennies, jawfish and dwarf wrasse. They all have similar requirements of aquarium conditions.

These fish belong to five different families, Blenniidae, Gobiidae, Opistognathidae, Ptereleotridae and Labridae, and encompass over 3000 species spanning almost 400 genera.

Water requirements...

These fish should only be added to a established aquarium as time is needed to supply the fish with food they require. The following is a guide as these fish may acclimatise to different water:

Temperature: 23-28°C

pH: 8.0-8.4

Ammonia: 0mg/l (0.01 may be tolerated for short periods)

Nitrite: 0mg/l (0.125mg/l may be tolerated for short periods)

S.G: 1.020-1.025

Biology...

The species concerned in this leaflet do not get large, between 5-20cm, making them good aquarium additions.

Many of the wrasse species show sexual dimorphism in both the colour and size of the males and females. They are also known to undergo a special sexual reproductive strategy which is known as sequential hermaphroditism. This is where a fish born as a female may become male in the absence of a dominant male.

Blennies are known as “combtoothed”. This is due to the presence of many small canine teeth which are used to scrape algae and microorganisms from rocks.

Dartfish species have an extended dorsal ray which is thought to be used to communicate with other dartfish.

Some goby species have developed symbiotic relationships with blind shrimps. In the wild they can be found cohabiting the same burrows. The shrimp communicates with the goby through the use of an antennae.

In good water quality and without ailments these fish can thrive for several years in an aquarium.

Aquarium requirements...

These small fish can be shy and are easily frightened. It is therefore important to ensure that your aquarium has a tight fitting hood to prevent them escaping.

Due to their small size, these fish can be successfully kept in “nano” aquaria if water quality is closely monitored. Larger tanks of 100 litres or more are ideal and may be easier to maintain.

In addition to the filter, heater, hood, lighting and thermometer, a protein skimmer is also highly recommended. A hydrometer or refractometer should be used to determine the salinity of the water. A UV steriliser can also be added to the system. This may help to reduce disease causing organisms within the aquarium.

The bottom of the tank is best covered with marine sand or gravel. The addition of live rock is also beneficial and will aid biological filtration. Live rock will also provide these shy fish with cover which will make them feel more secure. Due to the burrowing nature of these fish, make sure any rocks are securely positioned.

Maintenance...

At least every two weeks, a partial water change of 25-30% is strongly recommended (a siphon device is also useful to remove waste from the gravel). This help to reduce the build-up of potentially harmful nitrates and other pollutants. Replacement water should be dechlorinated using strong aeration or a tap water conditioner (if not using reverse osmosis water). Ideally, replacement water should be heated and enough salt should be added to achieve the correct salinity.

Filters should be checked for clogging and blockages. If the filter needs cleaning, then do not wash it using tap water; any chlorine present may kill the beneficial bacteria that has established within the media. Instead, it can be rinsed in tank water which is removed during a partial water change. This should reduce the number of bacteria lost.

Good husbandry is essential as these fish can be stressed by even the smallest amounts of ammonia and nitrite. Test the water weekly to monitor ammonia, nitrite and nitrate, especially after initial set-up and after adding new fish. Don't forget to check the salinity as this may increase due to evaporation of water.

If live rock and invertebrates are present in the aquarium, never use copper based medications. Copper is highly toxic to invertebrate species, including those found within live rock.

Feeding...

These fish are omnivores, feeding upon a mixture of algae, detritus and microorganisms. In the home aquarium they require a mixed diet, which includes prepared foods such as marine flake and frozen diets, alongside the natural build-up of blue / green algae and microorganisms.

These fish should be fed what they can eat within a few minutes 2-3 times a day. Remove any uneaten food to reduce waste build-up

Common 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 retailer for advice.

Compatibility...

Fish from this group are generally good additions to fish tanks which house other non-aggressive marine species. It is not advisable to house them with larger aggressive species as these fish may struggle to feed, be harassed or eaten.

These fish are thought to be reef safe. However, if the blennies and jawfish are not provided with enough food, they may try to nip at hard coral polyps, clams, invertebrates and small crustaceans.

These fish will be peaceful towards most other fish, however aggression will be shown between same species and similar looking fish. Therefore unless you have an extremely large aquarium, it is advised that only one of each is added to your set-up. If in doubt ask your retailer for advice.

Breeding...

There are few reports of successful breeding of these species in the home aquarium. They are predominantly egg layers, with the exception of the jawfish, which are mouth brooders.

These fish will display courtship dances before spawning. However, such behaviour may be noticed in your aquarium without successful spawnings.