### Checklist

Before purchase make sure that:

- 1 You have the appropriate equipment and position for the aquarium.
- 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 Marine salt
- 5 Marine substrate & live rock
- 6 Filter & protein skimmer
- 7 Food
- 8 Heater, thermometer & hydrometer
- 9 Reverse osmosis/de-ionised water or tap water conditioner

### Before purchase make sure:

- 1 Water parameters are as advised in this leaflet.
- 2 The aquarium is well-established and large enough
- 3 The fish are compatible with existing set-up



# 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



How to care for...



# Butterflyfish & Tangs



### Introduction

The Butterflyfish are often one of the most sought after marine species and belong to the family Chaetodontidae, of which there are 90 species.

The tangs are also colourful active marine species which belong to the family Acanthuridae which is divided into six genera and contains about 80 species in total.

### Water requirements

These fish should not be added to a new aquarium because they will not tolerate ammonia or nitrite. The water parameters below are a guide only, these fish may acclimatise to different water:

Temperature: 23 to 28°C

**pH**: 8.1 to 8.4

**Ammonia:** 0mg/l (0.01mg/l may be tolerated for short periods) **Nitrite:** 0mg/l (0.125mg/l may be tolerated for short periods)

**S.G**: 1.020 to 1.025

# **Biology**

These strikingly coloured fish are popular in the aquarium trade. Maximum sizes range between species and groups, however in general the most common species found for sale are between 12 to 25cms.

If kept in good water quality and without any ailments, these fish can survive for many years in the home aquarium.

Tangs are characterised by the presence of a sharp spine known as the 'scalpel' situated at the base of the tail (or caudal peduncle). This feature gives rise to their alternative common name of 'Surgeonfish'. Care should be taken when netting and handling these fish because this can cause injury.

The Bannerfish is a member of the butterfly family and has similar markings to the Moorish Idol. It is often referred to as 'the poor man's idol', but is somewhat better at acclimatising to the home aquarium.

The Copperband butterfly (*Chelmon rostratus*) also belongs to this group. These attractive but delicate fish identified by their long snouts and golden vertical bands. They are often found in aquaria to control populations of pest glass anemones *Aiptasia* species.

# Aquarium requirements

Due to the large size adult size of these fish, a large marine aquarium is required. A minimum volume of 250 litres is recommended. If you wish to keep more than one species, a larger aquarium would be preferable.

The addition of live rock is beneficial and will aid biological f iltration. In addition, the live rock will support a number of marine organisms that will contribute to the diet of the fish. However, because some of these fish, like tangs, are active swimmers, ensure the live rock does not occupy too much swimming space within the aquarium.

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.

### Maintenance

At least every two weeks, a partial water change of 25 to 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. Do not forget to check the salinity because 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

Both these fish groups are omnivores, and will feed upon algae, plankton and coral in the wild. Some of the tang species have a much heavier dependency upon algal food types.

In an aquarium a wide range of foods should be offered, including mysis shrimps, algal tablets, seaweed and flakes. For the finicky feeders it is essential the aquarium is developed so that there is plenty of natural food to be grazed upon which has grown in the aquarium. These fish should be fed what they can eat within a few minutes 2 to 3 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.

Tangs are notoriously susceptible to marine whitespot, Cryptocaryon irritans. Always ensure water quality and suitable diet have been provided before starting any treatment. Make sure treatment used is copper-free if invertebrates and/or live rock are present. If in doubt ask your OATA retailer for advice.

# Compatibility

Butterflyfish and tangs make good additions to fish only tanks with plenty of swimming room. Not all species will be reef safe therefore check with your retailer before adding your chosen species to a reef set-up.

Butterflyfish are generally tolerant of others and mix well with tangs. Some tangs can be aggressive towards other tangs, therefore ensure your tank is large enough to house more than one and purchase them at the same time.

# Breeding

There are no reports of either of these species breeding in a home aquarium therefore it is unlikely to occur. This is due to the complex breeding strategy which relies upon environmental signals such as lunar cycles.