

*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
- Tap water conditioner
- Gravel
- Filter
- Heater and thermometer
- Food

**Before purchase ensure that:**

- The aquarium is suitable for an adult of the species chosen.
- The water parameters are as advised in this leaflet.
- If adding to an existing set up ensure this fish is compatible.



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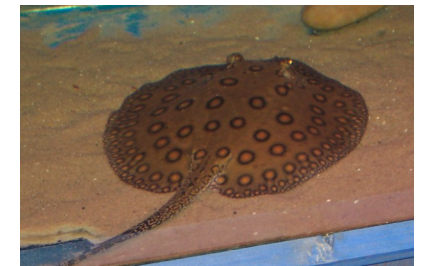
*"The voice of the ornamental fish industry"*

[www.ornamentalfish.org](http://www.ornamentalfish.org)

Photographs courtesy of INTERPET & A VALOVEC



**How to  
care for...**



**Rare and Unusual  
Species**

## Introduction...

If you would like to keep a more unusual species in your freshwater tank, then the following three species could be an option. They are the freshwater river stingrays, knifefish and elephant noses.

This fish are not recommended for beginners due to their demanding needs and in the case of stingrays, their dangerous nature

## Water requirements...

These fish all require very good water quality. The guide below is a guideline as they can be acclimatised to other water types:

Temperature: 20-26°C

pH: 6.0-7.5

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: Soft - hard (0-18°dH)

## Biology...

These fish get relatively large,. The stingrays can reach between 20-100cm width (the larger size is unlikely in an aquarium). Elephant noses may reach between 20-30cm and the knifefish between 30-100cm (again the larger size is unlikely in the home aquarium).

Stingrays are closely related to sharks as members of the Elasmobranchs, meaning they are cartilaginous fish. They have a venomous spine in their tails. Males can be identified by external sex organs known as claspers.

Elephant noses have an elongated lower jaw which looks similar to an elephants trunk. This is used to find food and these fish can often be found probing the substrate in search of a meal.

Knifefish belong to the family Gymnotiformes and are characterised by the lack of dorsal and pelvic fins and a elongated anal fin which runs the entire length of the body. Much like the elephant nose, they have limited eyesight. Instead, they navigate their surroundings by emitting weak electrical impulses into the water and "listening" to the electrical echoes in a similar manner to a bat using echolocation.

These fish can live for many years in a home aquarium with good water quality and without ailments.

## Aquarium requirements...

Due to the size this group of fish grow when mature, a large aquarium is required. The knifefish and elephant noses might be best provided with tanks of minimum volume 150 litres and the stingrays require a tank with a large base and volume of 300 litres minimum (the bigger the better).

Elephant noses are nocturnal species which do not like bright lighting, therefore the use of subdued lighting is recommended. The tank should have a soft substrate base such as sand so they can sift through it using their mouth extension.

A thermometer and heater are also required and if keeping these species a protective cover should be placed onto the heating element to avoid the fish burning themselves.

If keeping elephant noses or knifefish, the tank should be heavily planted with live plants. This helps to provide a natural environment for the fish as well as sheltered areas to retreat into as they are often shy and reclusive fish.

## Maintenance...

At least once every two weeks a partial water change of 25-30% is strongly recommended (a siphon device is useful to remove also waste from the gravel). The water should be tested regularly to ensure that pollutants such as ammonia and nitrites don't build up. Ensure that 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.

If this maintenance is taking place in a Stingray aquarium then great care needs to be taken if placing your hands into the aquarium. These fish have a venomous spine on their tail and can inflict injuries if threatened in their territory. Ideally hands should not be placed into the aquarium if it can be avoided.

## Feeding...

In the wild, these fish eat insect larvae and small crustaceans, and when adults can also feed upon small fish.

In the home aquarium, they should be fed sinking granules or pellets and supplemented with shrimps, prawns, beef heart, and live foods. If these fish are kept with fish which are aggressive feeders they may struggle to gain enough food, this is especially true for the elephant noses. These fish should be fed what they can eat within a few minutes 1-2 times a day. Remove any uneaten food to reduce waste build up.

## Common ailments...

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 advice from your retailer.

## Compatibility...

It is recommended that stingrays are kept in species-only tanks, however they can be housed with larger non aggressive species if care is taken. The tank mates should be monitored to ensure compatibility.

None of these fish are compatible with small species as they will eat them, however they can be kept with larger peaceful fish.

Avoid housing the elephant noses with aggressive feeders as they will not receive enough food.

## Breeding...

Successful breeding of any of these fish species in home aquaria is rare and difficult. There is no discernable way to sex knifefish or elephant noses and little is known about their reproductive strategies.

There are a few cases of stingrays producing pups, although again it is difficult to mimic the required environment in a home aquarium.