Fish Tank Problem Solving and Trouble Shooting

The following Problem Shooting ‘questions and answers’ can be used to assist with common problems with fish tanks:

Q1. Why is there is no air going in to the tank?

It is essential that there is always air going into the tank. The tank cannot be without air for more than a day. If there is no air - you need to act fast.

- Check the air tube connections to the air pump. If they are all connected, check that the air pump is working.

You can do this by taking the air pipe off the pump, and putting the air outlet on the pump to your face. If the pump is working, you should be able to feel a rush of air against your face. If you cannot - this means the air pump is not working.

If the pump is not working - you will need to buy a new air pump straight away. If you have bought a new air pump from a shop, check the guarantee. Most new air pumps come with a year’s guarantee. If it has broken down within a year, you should be able to get a free replacement.

For marine related lesson plans, worksheets and activities see www.marine.ie
Q2 The water has gone cloudy, why is this and what should I do?

If the water in the tank has gone cloudy there are two possibilities:

- First, check that the filter is still working. Look for water bubbling out of the top of the pipes. If there are no bubbles, the filter may not be working. Therefore, repair or replace the filter.

  The most likely cause is that the air pipes of the filter are disconnected or blocked or the air pump has broken down (See Q1). Once the pipes are cleared or reconnected or the pump has been repaired or replaced - the filter will work again and the tank will clear.

- If the filter and pump is working and the tank is still cloudy, then the water is contaminated.

  Check the entire tank for uneaten food or a dead animal. If there is any uneaten food or dead animals in the tank, take them out with the net and carefully dispose of them. Change the water in order to help the filter clear the tank.

Remember to record incidents of dead animals in the logbook.

NB Occasionally the water will go cloudy if an animal (e.g. a starfish) has released eggs. This will make the water look milky rather than dirty and should clear itself in a matter of hours.
Q3 The fish are gasping for breath and look distressed.

If fish are raising their heads out of the water gasping for breath, the situation can be serious and needs to be resolved immediately.

- If the weather is hot, check the water is not overheating. Check temperature using your thermometer. If the temperature is above 19°C then the water is quite warm. Consequently, the salinity in the water becomes too salty and there is less oxygen in the water. This makes it difficult for the fish to breathe.

  Note: the warmer the water is, the less oxygen there is in the water for the fish to breathe.

Therefore, during warm weather or if the heat is on in the classroom, try and keep the tank in a cool area in the class room – out of direct sunlight. If you have a small tank, replace some of the water with ice to cool it down. If you have a large tank, you may need to replace some fresh salt water.

- In addition, it is very important to make sure that the air pump is working properly at all times (see Q1). If the pump is working, identify which fish and how many are in difficulty. Sometimes the fish may get distressed if the tank is overcrowded.

  Keep an eye on the fish and be prepared to return the fish to their natural habitat if things do not improve.

- If the fish look sick contact your local aquarium straight away so an aquarist can advise you what is best to do.
Q4 Some of the animals don’t seem to be eating

If the animals are not eating, take a little time to investigate.

- Some fish such as mullet and blennies will eat the food as soon as it goes in to the tank. Other creatures, such as crabs and starfish will often take their time before eating, sometimes over 30 minutes after you have put in the food.

- The following tips can help make sure all the animals in the tank get a chance to feed.

  1. Never turn the light off straight after putting the food into the tank - as some fish do not eat in the dark.

  2. Make sure you put in enough food into the tank so that once all the hungry fish have eaten there is still some in the tank for the shyer creatures.

  3. Make sure one fish does not become the “bully” of the tank. If this happens, the “bully” can eat all the food and stop everything else from getting anything. Be prepared to return the “bully” to its natural habitat for the good of all the other creatures.

  4. Make sure you do not over feed the fish in the tank. If you place too much food in the tank, the fish will not eat! If they are full all the time, then they can suddenly go off their food and stop eating for a few days. Too much food in the tank can also make the water dirty, which will also stop the fish from feeding.
Q4 The fish are being eaten by other animals

On the seashore, there are herbivores, scavengers and predators all living in a harsh environment. When you are “bringing the seashore” to the classroom ensure that a safe environment is created for the animals.

- Make sure that each fish has a place in the tank of its own, where it can get some “peace and quiet”. Hiding places can be created, by putting larger rocks with crevices into the tank.

  Try not to select predators for the tank. If predators are chasing other fish around the tank to eat, remove the hunter from the tank and return it to its natural habitat. Alternatively, put an extra rock in the tank to give the fish a place to hide.

- You may want to consider having predators in the tank for a short time.

- Ensure that there are not too many animals in the tank. Animals will fight for their space.