

Prevention of fish diseases



Any dealer in livestock is responsible for the wellbeing of their fish and it is important that they are able to recognise and prevent fish diseases.

Importance of prevention

Fish diseases have a serious impact on a company's net profit. Still, most managers in the fish industry currently have limited time and have to make a quick decision without a good diagnosis of the problem, and use an easily available treatment, in the form of medicine.

As a dealer in livestock, it is crucial to take precautions to prevent fish diseases and reduce the risks of harming the health and wellbeing of the fish under your care, as well as to reduce the risk of introducing pathogens.

Why do fish become sick?

Fish have a natural defense system that protects them from pathogens. If that immune system is compromised and fails due to a certain cause, usually stress, fish can become sick. Fish disease mainly are a secondary problem so if the primary problem is not found or not resolved it is useless to apply medication. It is up to us to find out which stress factors can weaken the natural defence system of fish. There are clearly noticeable stress factors, those we can measure with tests, and non-clear stress factors, which we cannot test nor see.

Common causes

Poor water quality

When fish become sick most people generally do not realise that water, which appears to be clear, could

be the reason. But pH values, ammonia, nitrite, and chlorine have no colour. We have plenty of test kits available on the market, but usually people start testing when it is too late. Water tests should be done on a regular basis (every two to four weeks).

Temperature changes

Fish do not like fluctuations in temperature and it causes them stress. For us, humans, some draft cools us down, but many fish do not like open doors or windows. The same goes for water changes with cold tap water being used, mostly in winter. Minor changes in the water cannot be measured in temperature readings, but the fish still become unnoticeably stressed. They will show clamped fins, sometimes fin rot and infections of white spots within several days.

Do not rely on your thermometer too much and check the temperature of all aquariums on a regular basis, because thermometers have a limited lifespan.

Poor quality of fish food

The food that is given is decided on by man, not by the fish. This means that people choose the fish food according to the food they sell on the shelf, advertisement or promotion. But we should try to understand that good food makes your fish healthy and strong – it prevents them from becoming sick. These days good food is available that builds up the natural defence system with immuno-stimulants.

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There are also functional fish feed available that help to repair tissues/organs, and algae and herbs to control pathogens. No more need for an excessive use of medications or the loss of your valuable fish.

Bad feeding pattern

The way we feed our fish is a much overlooked problem. Some people feed their fish too little because of a lack of time or because it fouls up the water/filter, while some feed them too much, usually too much food at once. This all affects the defense system of fish, making them susceptible to diseases. If you choose good quality food it suffices to feed them once a day, preferably in the morning and give as much as the fish can eat within a few minutes, six days per week. Why feed your fish in the morning? So you can check during the day whether he has eaten properly. If not, he may be sick and not ready for sale.

Lack of good biosecurity

Bio-security in this context means the safety measures installed to prevent the spread of fish diseases. When you have an aquarium, with diseased or healthy fish, you should take all preventative measures available to ensure that diseases are not transferred to the other aquaria. Keep one net per aquarium or use a good net disinfectant; going from tank to tank while siphoning the water could spread diseases.

Badly organised fish community

Some fish cannot be kept together. Aggression is a real cause of stress, damage and a secondary disease. Large fish usually cause stress and compete for food with smaller fish. The smaller fish do not have access to food, and consequently get more skinny and waste away or die from the secondary disease.

Lack of good quarantine

The import and trade of fish can trigger serious stress, so good practices of handling and quarantine help to prevent fish becoming sick. When new arrivals of fish are introduced to the 'old' stock there is a risk of introducing diseases, especially when you mix fishes from different origins. In many cases the 'new' fish look healthy, but they may carry pathogens which are not detectable. When introduced in a new environment, the newly introduced pathogens could infect the 'old' inhabitants who have not (yet) developed resistance against these pathogens.

Poor handling of fish and aquarium water

Fish should be caught gently. Too often we see rough, bad handling that causes not only stress but also damage and lesions to fish. Water changes should be done slowly at the appropriate temperature and water quality.

Checklist

If you want to prevent fish diseases you should work with a checklist that allows you to control and manage the different stress factors. At the same time, you and your staff will be much better equipped to provide a good service to your customers. ♦



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