



Why fish should NOT be kept
in an aquarium?

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About us:

The Elsa Foundation is a non-profit charitable trust that focuses on the conservation of biodiversity, the prevention of cruelty to animals, and animal rights issues affecting both domestic and wild animals. It opposes keeping wild animals in captivity.

We have been to several countries to study best practices and implement them in India.

The foundation supports various government bodies in informed policy-making and decision-making on critical issues impacting biodiversity and the rights of animals.

Our work areas are research, advocacy, awareness, publication, and support in policy and decision-making.

Website: www.elsafoundation.org

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**Why dogs should
not be
Chained
(or)
Caged?**



**Dog
Owner's
Guide Book**

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Introduction

Due to a lack of awareness related to complex problems in having fishes in an aquarium, several people set up an aquarium out of curiosity and also by thinking that fish is an ornamental exhibit. Unfortunately, within a few weeks of setting up the aquarium, they lose all the fishes in the aquarium. This document gives an idea of what it means to keep fishes in an aquarium and to maintain it.

Summary of facts about fishes kept in an aquarium

- ✚ Fish are intelligent with a highly developed cognitive ability. Confining them in a small tank, denies the opportunity to explore the vast natural environment, use their cognitive skills, take decisions, use their escaping skills (prey fish), use their hunting skills (predator fish), search for food, protect their young ones, breed etc. This leads to severe boredom and it is extremely cruel.
- ✚ Species of fish are categorised according to their living temperature and living habitat (cold, tropical, marine, brackish etc.). They cannot be combined in one aquarium
- ✚ Needed to create suitable water temperature using external heating devices.
- ✚ Non-compatible fish from different species and also the same species (male to male) fight will occur
- ✚ Fish diseases (normal and contagious) will occur regularly
- ✚ Isolation tank mandatory for medical treatment
- ✚ Water heater mandatory for isolation tank.
- ✚ Need to grow bacteria in the tank to remove toxic ammonia that is in fish excretion
- ✚ Exposure to artificial light for 24 hrs, impacts circadian rhythm (body clock) and sleep / resting cycle. This in turn becomes fatal. (Note: night shift employees at an office where the aquarium is kept, keep the lights 'ON' at the night)
- ✚ Lack of - sunlight during the day and darkness during the night impacts the circadian rhythm
- ✚ Conditioning of new fish before letting it into the tank is mandatory
- ✚ Excretion, urine, and carbon-dioxide production by fish are toxic. Scheduled water change is mandatory.
- ✚ Oxygen from plants is not available. Need an external device (filter) to pump oxygen
- ✚ Fish needs a variety of food but in aquariums, they are restricted to one type of pellet. Other varieties (live worms, dry worms, other types of pellets etc.) are rarely given
- ✚ Pellets use artificial colours, preservatives and flavours that are harmful in a long run
- ✚ Large fish will consume all the food not allowing small fish to eat.

- ✚ Delay in medical treatment leads to fatality
- ✚ Fish are regularly infected with various diseases. Examples: eye problems, lice, anchor worms, internal parasites, bacteria, fungus, unable to swim etc.
- ✚ Fish that had been used to eating live food need to be trained to eat pellet food (if the owner decides to feed pellets) Ex: Arowana fish.
- ✚ Scale will be formed on tank walls due to salts in the water.
- ✚ Excess-intensity artificial lighting leads to algae formation in water.
- ✚ Due to confinement, fishes eat excretion and spit it, which in turn leads to an internal infection.

Scheduled maintenance (daily, weekly, monthly)

- ✚ Cleaning excretion and urine by changing the specific quantity of water on planned intervals. (Note: Fish urine is colourless)
- ✚ Cleaning tank wall that has scales due to salts (regular cleaning with chemicals will destroy the transparency of the glass)
- ✚ Clean the devices used inside the aquarium
- ✚ Remove food particles (leftover and expelled from fins) after every feeding, as they create fungus
- ✚ Deworming initial stage (for bacteria)
- ✚ Giving general wellness medicines

Regular water quality measurements and using only suitable water

- ✚ Measure TDS, PH, Ammonia, Nitrate, and Nitrites by giving water samples at a testing lab
- ✚ Bore water has excess salts and low oxygen
- ✚ For increasing oxygen level in bore water, need to store it in an open container and allow it to absorb atmospheric oxygen (this process is called ageing)
- ✚ Government supplied water has excess chlorine, need to use chlorine removing chemical
- ✚ If bore water / corporation water quality is not suitable, then water has to be purchased every time.

Caretaker's responsibilities:

- ✚ Do all the actions mentioned in the scheduled maintenance chart
- ✚ Regular water quality check.
- ✚ Daily feeding at scheduled intervals.
- ✚ Consult the doctor and purchase medicine.

- ✚ Daily treatment of sick fish at specific times.
- ✚ Do conditioning of new fish before releasing them inside the tank.
- ✚ Monitor the fish daily, to detect any illness at the early stage.
- ✚ Monitor the excretion of the sick fish to notice the colour and inform the doctor.
- ✚ Replace or repair the defective devices in the tank
- ✚ Travel to the specific pharmacy to purchase fish medicine (or) get it by courier from another city.
- ✚ Call the doctor daily to give a status update about the health of sick fish.
- ✚ Purchase food only from authorised dealers to avoid fake food.
- ✚ Give first aid to fish
- ✚ Advanced deworming involves hand feeding of medicine inside the mouth, to remove parasitic worms that are inside the intestine.
- ✚ Go to a fish shop, in person and purchase only healthy fish

Important queries for aquariums kept at an office:

- ✚ Who will feed the healthy fish plus give medicine and food to sick fish on weekends / long holidays?
- ✚ Who will be the caretaker handling all the complex daily, weekly and monthly responsibilities?

Specific issues with aquarium fish

Isolating social fishes

Fish that are social animals are kept alone in tiny jars, bottles and small tanks. Fish interact with other fish regularly. The group gives a company, which in turn promotes activity. Solitary fish exhibit depression and lethargy.

Fish eating other fish in the tank

Certain species of fish eat other smaller fish. In such a scenario the other fish should be larger than the mouth of the predator fish. This is ignored in many cases and small fish are consumed by the large fish. The small fish are trapped in a confined space and cannot protect its life (which is fundamental to any living being).

New tank syndrome & Nitrogen cycle

The nitrogen cycle is a process in which the bacteria in the tank convert the ammonia from fish excretion to nitrites and finally to nitrates. If this process is not done, then the tank will be contaminated with ammonia and all the fish will die. This bacteria for establishing the nitrogen cycle needs a few weeks time to form. It is formed on the filter sponge. Several people and children without allowing sufficient time for the bacteria formation, directly dump several fish into a new tank. Some people without having a medium (filter sponge) for bacteria formation will try to manage the tank. In such scenarios, bacteria will not be there. This is called “New tank syndrome”, which is fatal to the fish

Fish attacking another fish

Certain species of fish attack other fish and nip their fins. Such fish when kept in a single tank will lead to fatalities.

Swimming abilities matter

Fish with faster swimming ability grab the majority of the food dropped in the tank. When species of fish with fast and slow swimming abilities are kept in a single tank, the slower fish will die due to lack of food.

Fish that grow too big

Several fish species grow too big. There are several cases of too-large fish kept in a small tank (or) jar (or) bottle. The movement of fish is highly restricted in such scenarios. This is extremely cruel.



Goldfish grow to a large size

Digestion depends on the temperature

Water temperature influences the digestion of fish. Feeding should be limited when water temperatures fall below 8 degrees Celsius because, being homoeothermic, certain species of fish are less able to digest the food at these lower temperatures.

Fish territory & Swimming height

Several species of fish have their preference about the portion of the tank they swim. They establish their territory in that portion of the aquarium. Having multiple species of fish that claim the same territory will lead to fight and death of fish. Ex. Siamese fighting fish often claim the upper sections of the tank.

Tank size matters

Several species are very curious and have highly developed cognition. Such species of fish need a large tank with enormous enrichment. Trapping them in small tanks/jars without any enrichment will not satisfy their behavioural and psychological needs.

Fish eating the aquarium plants

Certain species eat the plants in the aquarium. Plants are sources of oxygen for the fish. In such scenarios, plants that the fish do not consume need to be kept.

Jumping

There are fish species that jump out of the tank.

Ex: Siamese fighting fish (aka Betta) are excellent jumpers

Reason for jumping:

Siamese fighting fish also require surface air for oxygen (along with oxygen in water). They possess a specialised labyrinth organ which allows them to take in surface air. The ability to supplement oxygen with surface air is a survival strategy that helps them to survive even while they are forced to live in muddy puddles (during summer) / dense vegetation. They attempt to escape to deep water bodies by using their excellent jumping abilities. When such jumping fish are kept in a tank, they jump outside the tank and die.

Species that live in different water temperatures

Fish live in different water temperature levels in their natural habitat. Fish that live in tropical countries cannot be kept in the same tank with a fish that live in cold waters. The temperature requirements for the survival of both fish species are different. Combining such fish in a single tank leads to death. Permanent water temperature maintenance, using external heaters, becomes mandatory, if you are having fish that is not suitable to your location's weather.

Water testing problems

Tank water's pH, GH, KH, ammonia, nitrite and nitrate should be checked at regular intervals. Non-availability of water testing labs (except in large cities), people not interested in spending money in a lab and not investing efforts in giving samples to a lab are leading to poor water quality and death of fish.

Water conditioner

A water conditioner is needed to remove chlorine and chloramine from tap water (supplied by govt.) before adding it to the tank.

GH & KH supplements:

According to the water's GH 'General Hardness' and KH 'Carbonate Hardness' levels supplements may be needed to match the suitable GH / KH values. Ex: Siamese fighting fish require a pH of around 7.0, GH 7-9°, KH 5-8°.

Environmental enrichment

Several intelligent fish species require an interesting and varied environment. They originate from densely vegetated areas and tend to prefer a tank with several plants and other forms of cover in which they explore, rest and hide if they feel threatened. This will provide a stimulating environment and reduce stress to the fish. If such fish species are kept in a tank without any enrichment, then they will die (E.g. Siamese fighting fish)

Fin tear

To ensure fins are not torn, tank bottom gravel should be smooth and decorations such as silk or live plants should NOT have any rough edges. Male fish with long fins are particularly prone to fin tears. Sharp edges and points on some decor and driftwood can damage the fins.

Problems with small tanks

Keeping any fish in a small volume of water is a serious welfare problem for several reasons. Firstly, the water will rapidly become toxic as the available oxygen is quickly consumed and ammonia accumulates from the fish's waste. In addition, small tanks cannot hold the correct temperature required for tropical fish and do not provide sufficient space for exercise or behavioural stimulation, both of which are fundamental in providing a healthy, stress-free environment.

Food varieties

Fish species have different dietary needs. In a tank with mixed fish species, providing each species with an appropriate diet is impossible. This leads to diseases / death of fish

Lack of aquarist / fish doctor

Regular vet doctors lack knowledge about fish disease treatment. Specialised fish doctors are rare to find and very few (one (or) two) are found only in very large cities. Lack of medical treatment for fish with disease leads to death of fish.

Starvation of fish while moving out of town

In many cases, when the whole family moves out of town, they starve the fish for several days without any food. In such scenarios, several fish die. This is highly cruel

Non-stop disturbing air current and noise from filters

As filters are run 24/7 the air current and noise from filters pose a huge disturbance to fish (specifically when they try to sleep)

High in-breeding in tanks

Results in genetically weak fish. They have parasites, worms and many other diseases (ex: guppies). They die soon

Fish producing too much waste

Some species grow too big and produce too much waste (e.g. Goldfish) contaminating the tank very fast.

Reproduction (spawning) affected

An aquarium cannot provide a *suitable* place for spawning.

Fishes also must migrate to lay their eggs in places where oxygen concentration in water is more. This is not possible in a tank.

Aquariums at business establishments – the shocking truth

In business establishments, the responsibility of maintaining the fish is given to any random housekeeping staff. They (and also the management) do not have any idea about the complex science and biological problems involved in managing the fish in a tank, which in turn leads to the killing of fish.

Over / underfeeding

Many people do not know the quantity to feed. They either overfeed or underfeed the fish.

Fish control mosquito population

In their natural habitats, fish eat mosquito larvae and controls their population. When fish are kept in tanks this natural process is destroyed.

Children developing addiction

Children attracted to the colourful fish develop an addiction to buy more and more fish (as the existing fish die continually) without having any scientific knowledge about fish.

Parents not ready to invest

Variety of Enrichment, filters, plants, gravel, buying a bigger tank etc. involves a huge amount of money. Out of pressure from children parents buy a small aquarium initially, later they are not interested in investing any money in the above-mentioned items and the fish are forced to live in an appalling condition

Migration prevented

Migration is the movement of a large number of animals from one place to another for feeding, reproduction (or) to escape weather extremes. The instinct for migration is exhibited in the form of schooling (swimming with a high degree of coordination and synchronized manoeuvres). When a need for migration arises the tank fish become restless and develop a strong urge to migrate in groups. Since there is no way they can migrate, it leads to serious problems mentally and physically

Aquarium fish diseases chart (partial list)

<i>Bacterial</i>	<i>Parasitic</i>	<i>Protozoan</i>
<ul style="list-style-type: none"> • Red Pest • Columnaris - Mouth Fungus • Tuberculosis • Dropsy • Scale Protrusion • Tail Rot & Fin Rot • Fish Vibriosis 	<ul style="list-style-type: none"> • Argulus • Anchor Worm • Black Spot - Black Ick • Ergasilus • Flukes • Nematoda • Leeches • Uronema marinum 	<ul style="list-style-type: none"> • Velvet or Rust • Marine Velvet • Brooklynella/Clownfish Disease • Costia • Hexamita • Ich - White Spot • Marine Ich - Crypt/Marine White Spot • Neon Tetra Disease • Glugea and Henneguya • Chilodonella • African Bloat 'Malawi Bloat'
<i>Fungal</i>		
<ul style="list-style-type: none"> • Fungus • Ichthyosporidium 		
<i>Non-infectious</i>	<i>Viral</i>	<i>Miscellaneous</i>
<ul style="list-style-type: none"> • Tumors • Congenital Abnormalities • Injuries • Constipation 	<ul style="list-style-type: none"> • Lymphocystis 	<ul style="list-style-type: none"> • Head and Lateral Line Erosion • 'Hole-in-the-head' Disease • Eye Problems • Swim-bladder Disease

Source: Animal World

Images of aquarium fish diseases (partial list)



White Spot Disease



Above & Below: Fin Rot (a.k.a. Tail Rot)





Above & Below: Cotton Mouth Disease





Bacterial Dropsy (Swollen Belly)



Viral Lymphocystis

Goldfish with Swimbladder disease and dropsy



Floating upside down - Swim bladder and Dropsy



Velvet Skin Infection



Tuberculosis



*Cloudy Eye (caused by *Vibrio anguillarum* Bacteria)*



Pop Eye



Bacterial Furunculosis



Cymothoa Exigua Parassita (Parasite infecting tongue)





Viral Hemorrhagic Septicemia (causes bleeding)



Fish Tank Granuloma-caused by Mycobacterium marinum



Vibriosis (caused by Vibrio anguillarum Bacteria)

How aquarium businesses thrive?

Aquarium business uses the lack of awareness of general public and children to their advantage. The never explain the complexities of keeping fish in aquarium to the buyers. Due to various problems mentioned in this document, fish die continually and the owner of the tank keeps buying new fish to replace the dead fish (refer to the heading addiction). This becomes a non-stop revenue cycle for the aquarium businesses.

Concluding Summary

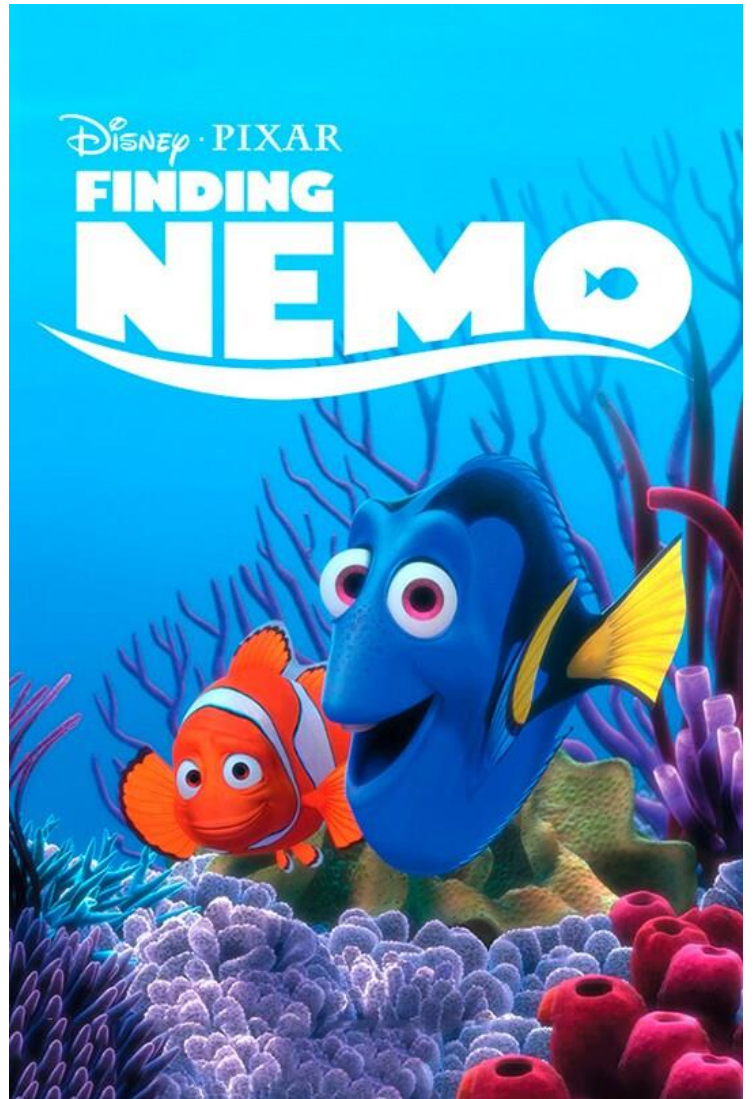
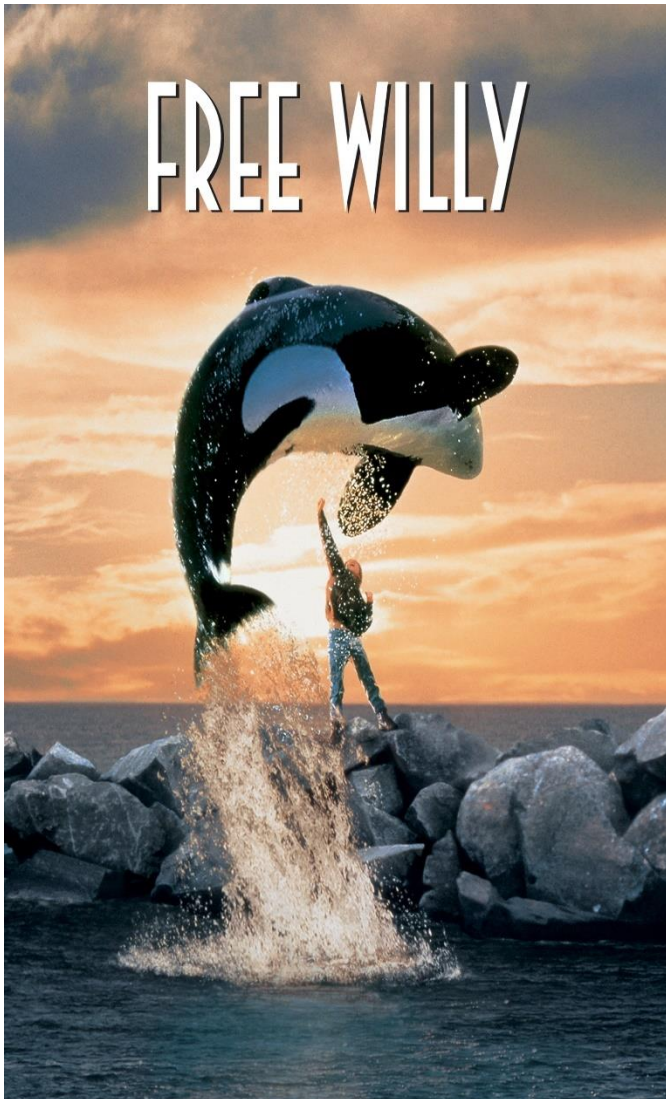
- Any animal / bird / fish is not a toy (or) an ornamental exhibit.
- They have biological, physiological, psychological and sociological needs that need to be satisfied every day.
- Captivity can never satisfy any of the above parameters and can never replace nature.
- Captivity is extremely cruel to the fish
- It traps the fish that moves around in a very vast lake (or) ocean (or) river for several kilometres every day, in a small container
- Non-stop rotational movement in a confined space leads to serious psychological stress and becomes fatal to the fish
- Fishes are forced to get contagious diseases due to close contact with infected fish.
- They are forced to live and suffocate in contaminated toxic water if the owner is not changing the water.
- They are forced to fight with incompatible species
- They are forced to get a fungal infection
- Their day-night circadian rhythm is affected, leading to a lack of rest/sleep
- Unnatural living and feeding conditions as explained in this document.

Recommendations

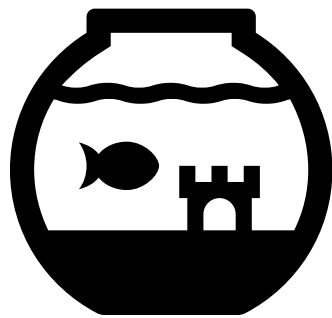
- An aquarium is unethical, highly cruel, very complex to maintain and involves enormous efforts to manage.
- Based on the facts presented in this report, we strongly recommend NOT keeping fishes in an aquarium.
- Let the fishes live a free, healthy and happy life in their natural habitat, which is their real home.

Hollywood movies explaining the cruelty in the aquarium business

Please watch them on OTT platforms



Elsa Foundation



HORRIBLE

FACTS

ABOUT FISH

KEPT

IN AN

AQUARIUM