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Introduction

Aquariums are becoming a hot item. Since nature is highly polluted people are starting to appreciate the beauty of nature, thus today they are bringing nature to their home. The new aquariums today make it easy, since technology has combined technical, electrical, and natural resources to pool aquariums together, which includes switches, controls, etc. The features enable aquarium users to do less and have more.

This new changes has brought on the need also to research information to help aquarists learn how to maintain fish tanks, and learn fish care. With this in mind, we have compiled all information needed and related to fish care and aquariums. In the report, you will learn the types of fish, aquariums, care, filters, and more.

With this in mind, we have compiled 50 chapters related to fish care and aquariums. In the report, you will learn the types of fish, aquariums, care, filters, and more for setting up and maintaining your home aquarium set.

Chapter1 - Life Sustaining Fish Care and Aquarium

How to Sustain Freshwater Fish

Freshwater fish

Freshwater fish have advantages, since the fish will adapt to most Aquarium types. Freshwater fish tend to be more relaxed and informal than saltwater fish. For that reason, freshwater fish is the choice for starters. Freshwater fish embrace the tropical and the Coldwater fishes. Saltwater fish include the Powder Blue Surgeonfish and the Clown Surgeonfish. Additional saltwater fish include the Gold Rim Surgeonfish, Leopard Filefish, Orange Fin Anemone, Black Back Anemone, Clown and Red Girdled Anemone, Frogfish, and the Yellow-Tailed Anemones. You will find a wide selection in both saltwater fish and freshwater fish. The freshwater fish include the common goldfish, Reedfish, Banjo Catfish, Bumblebee Goby, and so on. Most freshwater fish adapt to peaceful waters, as well as clean waters, however few prefer peaty waters. Once you establish the type of fish, he will need to move on to choosing your tank. Saltwater fish tend to enjoy the Reef Tanks. Reef tanks comprise underwater ridges. The ridges comparable to scientifically studied ridges, which include biology, chemistry, and geology. The reef tanks generally include rock and coral. If you are considering goldfish, the reef tank is not a preferred tank by goldfish.

Goldfish

Goldfish tend to live well in slow, flowing dwellings. The fish adapt to a variety of water temperatures, yet the plants must have fresh water and plenty of plant

stuff. Open pools is the leading choice of water environments for goldfish. Goldfish are small colorful fish, which come from eastern Asia waters. Goldfish are normally housed in tanks, aquariums, or ponds.

Once you decide your choice of fish and aquarium, you want to learn details such as where should you locate the aquarium in your home. You want to make sure that your floors will support large aquariums. The aquarium should be placed on sturdy flooring, and stands. In addition, you want to avoid putting the tank near windows, heaters, and doors. Light will increase bacteria and algae build up.

How do I set aquarium room temperature?

The room temperature should be stabilized at all times.

What should I consider when I buy my aquarium?

You should consider medicines, equipment, food, electricity supply, filters, air supply, heaters, etc. You will also want to add gravel, floss, buffers, etc to your list of get items. Most fish enjoy gravel, plants, light, etc; mostly fish enjoy food and water.

Filtration systems are necessary, since the filters help to keep your aquarium free of algae and harmful chemicals, which can lead to poor health and even death. Filtration systems include chemical, carbon, mechanical, and biological. The variants of the filters include the internal, external, and under-gravel filtration systems.

In addition to filtration systems, you want to toss in water treatments. The water treatments will remove what filtration systems miss.

Coldwater fish such as the Goldfish tend to adjust to cool waters. Therefore, you may not need to purchase a heater for this breed, providing you are only housing goldfish, or compatible fish. Goldfish tend to live well in tropical

environments. Still, you want to maintain a balanced water temperature. Goldfish are adaptable fish, yet they demand oxygen. Most goldfish swim to the surface to gulp air, oxygenating their system.

Reedfish

Reedfish require water temperature set at 73 degrees or 79 degrees Fahrenheit. Reedfish tend to enjoy well-planted tanks, therefore, this breed may not dwell in goldfish water. If you are purchasing your fish at local pet shops, check the manuals provided at the stores to learn more about fish and which fish dwell best with other fish. Now we can review a few tips to learn more.

Chapter2 - A Variety of Fish Care and Aquarium Tips

Today's aquariums are the green colored ecosystems, which is going in many homes worldwide. Due to air and water, pollution people are trying harder than ever to preserve what is left of nature. Aquariums today are constructed by technological personnel, which today you can purchase aquariums designed like real water environments. Still, the aquariums are substitutes for nature.

Nowadays, you can purchase tanks, which allow you to raise or lower the water. The lights vary in intensity as well. In addition, you have a wide array of on and off switches, which use automatic timers to allow you to chain the lights intensity, as well as the water.

Tanks today are easier to maintain, since you can use filtration systems to purify the water, keeping it balanced and clear of pollutants. In addition, optimum water values are easily maintained with electrical controlled procedures. Food, as well as dosage is easily maintained by usage of automated devices. You can purchase tanks, which come in all sizes and shapes, as well as resistant water tanks. Today, tank quality, as well as electrical security has advanced.

In addition, you can stock a variety of plants and fish in a single tank. The tanks are ideal to present nature in your environment, as well as help you to relax from a stressful day. Choosing a tank nowadays is easier than ever. Most tanks today have panels made of glass, which join with silicon sealants. The aquariums come in an assortment of sizes, which include thickness, weight capacity, and security.

How does the sealant affect cleaning, and does it affect the fish?

No, unless the sealant is less or more than 1 mm or 1/16 inches the fish and tank is fine. You want to make sure that the non-toxic sealants are watertight when cleansing the tank. Larger tanks should have 20 gallons.

How do I position my aquarium?

You should position your aquarium on a sturdy stand. It depends on the tank size; however, the water and tank capacity is calculated by multiplying the length of the aquarium, width and height, as well as the water capacity. For instance, if you have 1 gallon of water in the tank, it will weigh around 10 pounds, i.e. the water alone. If you have a larger tank, you want to divide your multiplied results by 1000. This will provide you figure in litre. By the time you finish multiplying and dividing a large fish tank, you should come out with a stand capacity at ½ tons. You want to make sure the floor beneath the stand can hold the weight as well. It is recommended that you place aquariums on load bearing beams, as well as against the wall. However, you want to avoid placing the aquarium near windows, doors, or heaters.

How do I choose aquarium equipment?

Basically, you will need a sturdy stand, tank, lighting system, heater, thermostat, and a sufficient filtration system. In addition, you will need to consider plants, décors, etc. Decorations may include stones, roots, substrates, etc. Water conditioners are ideal to help neutralize chemicals, such as chlorine. In addition, you will need a bucket and net. Don't forget fish food.

How do I choose filters?

The basic filtration systems include the chemical, biological, and mechanical filters. The variants of these filters include internal, external, and the under-gravel filtration systems. The external filters are the best if you can afford around \$150. The under-gravel is least desirable; however, you can entwine the under-gravel

filter with an internal or external filter to achieve good results. Once you get your tank together we can consider the African Carps.

Chapter3 - African Carp Aquarium and Fish Care Info

The all-time favorite Carp fish include the Genus Aphyosemion African Tooth Carp. What a name. The Genus Aphyosemion species do not house well in communal tanks, yet these fish are some of the prettiest fish on the market. The fish will die quickly; therefore, it is recommended that you provide the fish their own separate aquarium. The hiders will fold their fins and conceal themselves in corners of aquariums. The male counterparts, i.e. the larger breeds are highly aggressive and will not habit with other male fish of its kind. Therefore, only house the male carps with females.

Tank recommendations:

You should provide the Genus Aphyosemion African Tooth Carp with floating plants and a shady environment. Cover the bottom section of the tank with purified overcooked peat. The water condition should be moderately hard, or else slightly acidy. You can also add 1 teaspoon of table salt to a gallon of water to produce alkalinity water for particular carps that prefer to breed in such water conditions. Since these fish do not tend to live long, it is advised that you place these fish in separate aquariums and categories. The fish include surface breeders, midlevel breeders, and the bottom breeders. The first spawn should be provided floating plants, which the eggs will stick to. The second breeders should be provided peat, which is situated at the bottom area of the aquarium.

The fish rate in two separate categories, which include bottom and surface

spawners. The fish prefer to live in glass tanks. You can use nylon mops, insert it into the tank to preserve fry. After the eggs arrive, you want to prepare to remove the parent fish to a different tank. Carp will eat their own kin. The water temperature should remain at 25 degrees Fahrenheit; unless the fish are in peaty waters then the temperature should be set at 65 degrees Fahrenheit. You want to avoid drying of peaty, since the eggs will not survive. To avoid fatality refresh the tank with soft water, while shaking the peat. Raise the water temperature to 75 degrees Fahrenheit.

Bottom breeders require sterile peat at the bottom of the tank. The fish also require plants, which float. You can breed the bottom spawners in smaller tanks. After the eggs are delivered the parent fish demand removal from the tank, as well the water must be siphoned. You can use a small tube to siphon the water. You want to avoid siphoning the eggs and peat. The water temperature should be at 70 degrees Fahrenheit. The temperature should remain constant for a couple of weeks. After the weeks are finished, break the peat up into lumps. You can now adjust the temperature to 65 degrees Fahrenheit. During egg transfer, occasionally you want to adjust the temperature to 60 degrees Fahrenheit.

If you are a beginner in fish care and aquarium, it is wise to avoid this species until you become better skilled and knowledgeable to fish care. Other types of fish kin to this Carp family may be more suitable for starter kits.

For instance, the Brachydanio Rerio or Zebra Danio is less demanding than the Carp. The fish derived from the Eastern regions of India. Rerio has a small slim body, and grows around 1 ¾ inches in size. The fish are shaped like cylinders and have attractive colors, including gold, silver, blue, and black. Rerio is one of the smarter fish available, which these fish prefer to habitat in peaceful waters. Rerio is not demanding that is the fish will eat most foods, and do not expect catered water conditions. Angelfish is another type of aquarium species you may find of interest.

Chapter4 - Angelfish Aquarium and Care

Angelfish is a large breed. The Pterophyllum spp. Cichlidae family includes the black Angel come from the Amazon Basin. As well, the fish are found in Orinoco and Rio Tapajos. Angelfish are choice aquarium fish, since the breeds will feast on huge live bait.

The body of Angelfish differs, but many have deep shape bodies. The fish include anal and dorsal fins, which also differ in color. Angelfish has curvature eyes, which offset small pouting lips. Some Angelfish have blue sheens and black spots, which make the fish one of the most desirable. The fish will live in water temperatures 72 degrees Fahrenheit, except when breeding then the water temperature must rise to 77 or 86 degrees Fahrenheit.

pH Balance:

Maintain a pH balance at 7:

The lighting should be subdued. The fish prefer to live in wild natured environments, and enjoy flourishing vegetation. In summary put the fish in large, deep, and wild water conditions. Angelfish have required sufficient covering; otherwise, the fish tend to feel nervous. The fish have bones located in the throat area, therefore when they start breeding and you hear a noise, don't sweat it.

Harlequin fish, which include the Rasbora Heteromorpha, The fish is kin to the Cyprinidae family and is spotted in eastern Sumatra, Thailand, and the Malayan Peninsula waters. This is one of the cutest little critters, which ahs a thickset, deep shape. The fish has a silver-gray tone with shimmering sheens. In addition,

the Harlequin has a light underside, as well as a patch of purple-black and/or blue body. The fish grows up to 1 ¾ inches in size. Harlequin fish tend to prefer warm waters, which the tank should be set between 75 degrees and 77 degrees Fahrenheit. During breeding set the waters at 82 degrees Fahrenheit. The pH balance should be set at 5.3 and no higher than 5.7. The fish prefers hardness water conditions, which rate at 1.5 and no higher than 2.5. You want to provide sufficient swimming room, slighting filtered peat water, and subdued lights. Peat water can be supplied from woodland streams.

Scat comes from the Scatophagus Argus group and is family to the Scatophagidae. The fish derives from eastern parts of India. The fish has a golden brown tone, which has brownish spots sprinkled about. This fish shaped like a hexagonal. In addition, the fish grows up to 11 ¾ inches in size. Scat fish prefer brackish, seawater, or even freshwater to dwell in. The fish requires a neutral pH balance and strong alkalinity, as well as hard waters. You should supply 2 gallons of water to 3 or 4 teaspoons of salt. As for light, the fish prefers good lighting and prefers substrate areas.

You should furnish his home well, and provide sand to the bottom of your tank. This fish will eat plants, yet you should supply him with the tougher plant group.

As for feeding, well the Scat fish tend to enjoy live food, and a bit of matter from vegetation. You will need a sturdy filter to house this fish, as well as willingness to change the water frequently. Scat fish have a biological peaceful nature. The fish swims in a wobbling motion, and prefers to dwell with compatible fish.

If you are a starter in fish, care and aquarium sway away from fish difficult to maintain, as well as the dangerous fish. Piranhas are unfriendly fish, which requires detailed instructions to maintain, therefore the piranhas is an example of fish you want to avoid. After you learn and gain experience, you can try piranhas later.

Chapter5 - Aquarium and Fish Care Assistance

Fish care is extensive, since it depends on the type of fish you have. If you have damsels, which are saltwater fish then you should have a large reef tank, or marine tank. Damsels are resilient, which the fish are capable of withstanding harsh water conditions. In addition, the fish do not fuss over what they eat. Damsels however are not in distress; rather the fish can be aggressive. It is recommended that you put no more than two damsels in the same tank. If you add, more damsels or different fish prepare to lose money. If you intend to add other types of fish, make sure the creatures are aggressive also. Otherwise, purchase a new tank to store less aggressive, or delicate fish.

If you haven't purchased saltwater fish at this time, look for the yellow tail damsels, blue damsels, and so on, since these fish are less aggressive. The Domino and 3-striped damsels are much more aggressive. Most people purchase damsels, since the fish are easiest to take care of, as well the fish are not as costly as other types of fish.

If you have other types of fish, you want to maintain the tank, making sure that the waters hardness is balanced. Waters alkali is concentrated and measured in terms of pH. It depends on the amount of magnesium and calcium dissolved in fish water, as to how hard the water is measured. Carbonates, hydroxides, bicarbonates, borates, and silicates dissolved in water determine the alkalinity balance. You want to purchase test kits to balance hardness in fish water. Test kits include a measuring device, which expresses pH, alkinity, and hardness of water in PPM. (Parts per million) For instance, hard water is measured at 100, yet it can reach as high as 200 in hardness and alkalinity. Since, fish require a degree of hard water it is advised that you purchase a pH buffer, as well as a test

If you have mollies, the fish can get used to salt water. However, freshwater fish typically desire unadulterated water. Mollie fish are inexpensive fish as well. The fish then can live in higher or lower pH balanced waters. To adapt the fish to saltwater, you want to start out by keeping the fish bagged in water and slowly drenching the fish over an 8-hour period in saltwater. You want to remove water from the bags before it overflows. Once you adapt the mollies to saltwater, you can prepare them for tank water. However, it is recommended that you avoid mixing the mollies with aggressive fish, such as the 3-striped damsels, etc.

Akin to the damsels, is the clown fish. The clownfish are also resilient. However, these fish find it difficult to adapt to new environments. Since clownfish are very protective, yet the fish typically battle other clown fish. Like damsels and other saltwater fish, the fish prefer reef tanks. Reef tanks include underwater ridges, which houses rocks and coral within the body of water. The water top is right below or slightly above the surface.

How to care for shrimp?

Shrimp (NO I didn't call you a shrimp) fish include a variety of fish which each differ slightly in their need for care. The clean shrimps have a white strip on red down the center of their back. This fish is one of the fewer shrimps to have, since maintenance is relatively a low demand. You should keep the clean fish in a low capacity fish tank. That is, do not add more than 4 fish to a single tank. Sometimes make fish choices is not easy, especially since thousands are available.

Chapter6 - Aquarium and Fish Care Choices

How to Care for Dangerous Fish

Characidae belongs to the Ostariophysi species. The fish have small adipose or connective tissues or fins. The fish have jaws, which include teeth. Characidae also has Weberian small bony structure (Ossicles), which links to the bladder and inner area of the fish's ear. Characidae species tend to arrive from South and Central America; however, a small section of the world may also have these fish, such as Central Africa. You can purchase two types of these fish, i.e. the carnivores, or the omnivorous. Omnivorous will feed from vegetables and/or animals. The carnivores typically feast on meats. You will also find Characidae fish in the predominant herbivorous section. The herbivorous is probably the choice specie you want to avoid, since your aquarium will be destroyed when he finishes nibbling.

For the most part if you choose the Characidae, make sure that you do not include in your tank, smaller fish such as the Angelfish, Fighters, etc. The Characidae tend to use their teeth to gnaw at smaller objects, including other fish. Piranhas' fish are similar to the Characidae species. Piranhas come from South America and freshwater, which these fish also have sharp teeth. The piranhas also have strong jaws, which these jaws are dangerous, just as the jaws of the Characidae species. The fish are predatory species, which attack in large groups. The Characidae tend to attack on their own or sometimes in groups. Yet the jaws and teeth could easily rip apart terrestrial species in a relatively quick time. If you are a beginner, fish collector stay away from this specie, as well as the piranhas.

What they eat?

Characidae enjoy dining on meats, such as worms, etc.

What type of water they enjoy?

Characidae tend to enjoy soft swampy waters. The waters make it easy for breeding, which the fish will lay eggs that will stick to the bottom of the tank. Be aware that Characidae eat their own. Therefore, if the eggs are in the tank don't be surprise if the Characidae devours the youngsters. If you are thinking of Characidae to breed, make sure you learn skills before you purchase the fish.

Serrasalmus Rhombeus

The fish are commonly called Spotted Piranha and White Piranha. The piranhas derived from the Amazon Basins and South America. Piranhas grow up to 10 inches in size. The aquarium fish only grow six inches in size. Piranhas are not ideal for those starting aquariums or fish care. These fish should not habitat with passive fish as well. Piranhas have a deep pressed body. The body has silvery or olive green colors. The piranhas have strong teeth, which they use to devour, or tear apart other creatures, as well as tanks.

The fish rather resemble a bulldog, which they also have a lower jaw line that makes a person feel threatened when approaching the fish. Piranhas are aggressive fish. The fish will dine of large or small fish.

How to net

When using a net it is important that you take extreme precaution. The fish will gnaw at your hand.

Piranhas feed from lean meats and other fishes. The fish are carnivorous, which makes them a showpiece rather than a pet. The upside is piranhas are not picking with water conditions, and the fish will not breed in aquariums. Be aware that if you put two piranhas in the same aquarium, Mary will feast on George or

vise versa. In other words, they will eat each other as well. Piranhas include the Red-Breasted and Natterer Piranhas. The Red-Breasted and Natterer Piranhas feast in the same way as the Serrasalmus Rhombeus. Do you need more help?

Chapter7 - Help in Aquarium and Fish Care

Currently there is more than 20,000 fish, which to instruct you on care would be time consuming. Therefore, we will cover the basics in tank management to provide you a bit of help. Unlike furry critters on land, fish do not have coats that protect them. Therefore, water temperature is important. If the water temperature is too high, oxygen supply is minimized. On the other hand if the water temperature is too low, it can affect the health of your fish. Along with your aquarium purchase, you should have received a manual, or instruction brochure. It is important to read the material so that you know exactly what temperature and gravity is required to maintain healthy fish. If you have goldfish it is recommended to keep the temperature at 75 degrees Fahrenheit. If you have tropical fish the temperature should be set at 75 degrees Fahrenheit, or 80 to 85 degrees Fahrenheit.

With your aquarium you should supply a thermometer, and sometimes a heater depending on the type of fish you have. Goldfish for example can stand lower temperatures at times.

How is water measured?

Water is measured in pH, which depends on the sourness. Again, it depends on the type of fish you have. If you have saltwater fish, the water is measured at 7.8 up to 8.3. Freshwater fish measures at 6.8 up to 7.2. You want to monitor the pH measurements of water; since the higher the water is measured the more ammonia is produced. If the water temperature is too low it can become harmful to bacteria denitrifying growth, as well as to the gills of your fish. You can purchase buffers, and test kits to maintain pH balance in fish water. Furthermore, gravity is measured in water as well as oxygen, which will discuss shortly.

How much oxygen do fish need?

Oxygen for fish, land animals, and human beings is essential to survival. Without sufficient oxygen the brain will die, which in turn kills the body. Water as well as air, supplies oxygen to fish tanks: You can increase oxygen by using pumps or air supply, which will provide turbulence that creates oxygen. In addition, if you keep the water cool it will augment oxygen supply.

How is gravity measured?

Gravity is based on the amount of chemicals added to the water. If you supply your aquarium with unadulterated water it has a 1.0 gravity in ionic. If your fish come from saltwater you should have a gravity level no higher than 1.023, however you can reduce illnesses for saltwater fish by keeping the gravity level at 1.017. Non-marine or freshwater fish can benefit from a low volume of salt added to the water, especially to reduce stress. You can purchase refactometers and test kits to maintain gravity level.

How do I maintain saltwater fish aquariums?

This is a stressful question; since saltwater fish are marine creatures that habitat in environments where changes are consistent. As well, it depends on the type of aquarium you've purchased to keep the fish. If you've purchased a larger aquarium it is easy to maintain saltwater fish by keeping the environment stable. If you haven't already purchased saltwater fish take note that the Damsel's is an aggressive saltwater fish that does not mate well with other fish. However, this type of fish is easier to maintain than a wide array of other saltwater fish.

Tip: Damsels is a beginner's saltwater fish that demands little attention, yet you may want to learn about the hemigrammus.

Chapter8 - Aquarium and Fish Care Hemigrammus

How to care for Hemigrammus Species

Hemigrammus include the Erythrozonus, Rhodostomus, Flammeus, and so on. The Flammeus comes from the Hyphessobrycon group. The Hemigrammus Erythrozonus species are commonly known as the Glowlight Tetra. The fish at one time was wrongly characterized as the Hyphessobrycon Gracilis. Hemigrammus Erythrozonus comes from British Guiana, and grows 1 ¾ in size. The fish has a glow to its ruby red body. If the fish is kept in unfavorable waters however the colors was change. Hemigrammus Erythrozonus is a friendly fish that dwells well with other fish, excluding the aggressive fish. In addition, Hemigrammus Erythrozonus will eat most foods. The tetra fish are often small and bright colored, and are a member of the Characin family. The fish do well in tropical tanks.

Water conditions:

The tank temperature should remain at 78 degrees or 80 degrees Fahrenheit. The tank should have a dark background setting. In addition, you should enrich the tank with thick plants.

How to breed:

The fish may breed best in peaty waters, or acriflavine methods. To learn more about breeding this fish you will need to consult with the pet shop experts. They will have helpful brochures available. The fish lay up to 400 eggs, which the hatchlings are laid in one day.

Hemigrammus Rhodostomus fish are often called Rummy/Red Nosed Tetra. The fish come from the Amazons and grow to be 2 inches in size. The fish has a

brilliantly red colored snout, which this specie has a peaceful nature. The hardy fish will eat all sorts of foodstuff.

Water conditions

You should keep the water conditions at 78 degrees Fahrenheit. The water should be slightly acidy, or reasonably soft. This fish is one of the harder fish to breed, therefore if you are purchasing fish for breeding purposes and do not have skills, check out other fish breeds.

Hyphessobrycon Flammeus fish are commonly referred to as Flame Tetra, or Tetra Von Rio. The fish come from Rio de Janeiro's neighboring areas. The fish only reach 1 ½ inches in size and are shorter fish specimen than other fish species. The lower part of the fish has a shimmering red color.

This fish has a hardy behavior pattern, which makes a good aquarium fish. The fish has minimal expectations on water conditions, and breeds well. The fish will lay up to 200 eggs, which are hatched in one day.

Other species related to the Hemigrammus Erythrozonus is the Hyphessobrycon Pulchripinnis.

The Amazon fish is sometimes called Lemon Tetra. This is a smaller fish which grows around 1 ¾ inches in size. The fish has a distinctive pale lemony color, which includes a brilliant red patch at the upper region of the eye.

The Lemon Tetra is ideal for social tanks. The fish is peaceful in nature and feeds off most foods. The fish prefers softer water conditions, which the temperature should remain at 80 degrees. The fish will also accept living in slight acidy waters. Male Lemon fish have a better color choice. The fish do not breed easy; therefore, if you are attempting to breed this fish try peaty waters.

Paracheirodon innesi is a Neon Tetra Brazilian fish. The fish grows around 1 ¼ in size and is one of the most popular tank fishes sold on the market. The fish has a greenish-blue and deep red body combined. The hardy fish can care for himself amongst smaller and larger fish. The fish generally rests at the bottom of an aquarium, which he will eat all foods. This is another hard to breed fish.

Chapter9 - Aquarium and Fish Care How to Manual

The Catfish Solutions

Catfish are good eating critters; as well, some of these fish will gulp down other fish. Catfish is an all time favorite, yet few catfish are more difficult to maintain than other catfish are. Since many catfish are available, we will discuss a handful, or tank full to decide on the choice aquarium fish. Few of the choice catfish include the Black Spotted Corydoras. First, I want to say that aquarists purchase catfish, since these are the best fish for cleaning photosynthetic organisms (Algae) from tanks. Catfish will also cleanse the tank of debris, such as dead fish, etc. The spotted catfish comes from Venezuela and Guiana, which this particular specie grows to be 2 ½ inches in size. The silvery fish has diminutive black spots over his body. Black Spotted Catfish are noted by the nap of his neck, which is shaped like a wedge, which the mark contrasts the black stripes around the head and eyes. The Black Spotted catfish has a good behavior, in that he will not assault, mistreat, or interfere with the life of other fish. Like the Bronze Corydoras catfish, the Black Spotted fish takes delight in Tubifex and white worms. The fish will also dried foodstuffs.

The Peppered Corydoras listed in the Corydoras paleatus section comes from La Plata Basin and Brazil. This fish grows 2 ¾ in size and has an olive brown colored body. The fish also has shadowy black marks over his body, which is small in count. This fish is commonly found with the Corydoras aeneus group. In summary, the catfish enjoys the same delights, as well as water conditions and works to remove unwarranted debris and algae from tank water. This catfish is inbreeding of the albino strains.

The Peppered catfish frequently moves his eyes appearing to watch onlookers' stair at him. In addition, the Peppered catfish handles communal tank water well.

What he eats

Peppered Catfish feast on white worms, dried foods, and Tubifex.

Water conditions

Alkalinity water is one of the Peppered Catfish choices, as long as the water condition is neutral. Hard water in moderation maintains a happy Peppered Corydoras Catfish. NaC1 as well as saltwater is not preferred by most Corydoras Catfish.

Kin to the Peppered Catfish is the Leopard Corydoras. The Leopard fish received its name in the early 1900s, by Steindachner; and is found in the Corydoras julii group.

The fish comes from the Lower Amazons, specifically near the Tributary regions. This catfish grows to 2 ½ inches in size. Leopard Catfish has a silver-gray frame, which crosses and is set off dark spotted stripes.

The fish handles communal tank water just fine. His nature is peaceful. The fish prefers the same water conditions and feeding as that of the other Corydoras Catfish species.

Loricariidae

These particular species come from the northern and central parts of South America, which fit the category of armor catfish. The fish are family to the Callichthyidae family. On the side of this, fish are several bony plates. In fact, most of the catfish's body is protected by bony plates. The fish's mouth is located beneath his flat head, which is encircled by wide rounded lips. This species is also called the sucking fish. Loricariidae Catfish is one of the all-time favorites, since the fish will feast on algae. The fish will remove algae from rocks, glass, plants, etc. Aquarists should have one of these fish, since the species will cutback on your responsibilities to clean the tank. Still, you must clean the tank,

since the Loricariidae will not rid the tank of complete contaminants. He will however remove debris and algae too large degree.

Chapter 10 - Aquarium and Fish Care Needs

After you have purchased your aquarium, filters, heaters, gravel, floss, buffers, food, fish, and so on, you will need to learn how to clean and care for the fish. In fact, you should have researched the market before purchasing fish or aquariums to have an overall view of how to care for fish and maintain fish tanks. To help you learn more about fish care and aquariums however, we can consider a few helpful tips.

Heaters

Heaters are necessary to maintain tropical fish. Before your purchase your heater however, you should make sure that the filters and heater would fit into your aquarium without taking up unnecessary space. If you purchased a small tank, you will need to purchase filters and a heater than will accommodate the tank; otherwise, you may need to purchase a larger tank.

What to buy

When you purchase your tank, you will also want to buy a gravel, plants, ornaments, food, test kits, water treatment, etc. Gravel helps to maintain natural resources, while ornaments provide a lively décor to your fish tank. Plants make the fish feel at home, while food is necessary to prolong life. You will need a test kit to keep an eye on the water's health. Water treatment is ideal, since tap water is not pure in most areas.

Gravel Care:

The first thing you should do is grab a bucket and rinse your gravel to remove grime, dirt, and germs. After you purify the gravel, you will need to add water to the tank. At this time only, add half the water needed to deliver a full supply. Now, you can add your ornaments and plants to the aquarium. Once you have all your additives to the tank, you are ready to finish filling the tank with water. You should

have received a manual with your tank. Follow the outlines to fill the tank properly. Once the tank is filled, you can add your heater and filtration systems. You will receive instructions with the purchase of your heater and filters, which you should follow accordingly. The last thing you will add to the tank is the water treatment. Water treatment will remove copper, metal, and related harmful chemicals. You can use products that will enable you to add your fish to the tank; otherwise, it is recommended that you wait at least a couple of weeks before adding fish.

Water filled tanks have natural bacterial productions, which must filter to settle to a secure level for fish to swim safely. After the water has set, you can use your test kit to decide if the water temperature and chemicals are balanced. After the water is verified, i.e. pure you can start adding fish to the tank in small amounts. The recommended fish is the damsel; however, this is a saltwater fish. The aggressive fish will devour passive fish. Therefore, if you start with damsels, only add two of the same fish and gradually start adding other fish. If you choose, freshwater fish try to keep passive fish in the tank, rather than aggressive fish.

If you want a selection of saltwater fish and freshwater fish perhaps, you should purchase two aquariums. White Cloud Mountain Minnows, Danios, goldfish, etc are nice starter fish. Additional types of fish include the bristle nose, which is a passive fish that grows around 5.5 inches. The Otocinclus is also a passive fish that grows 2 inches and prefers to live in rocks and plant areas, just as the bristle nose. Plecostomas is a passive fish, which grows 24 inches, and lives around plants and rocks as well. Marble and Veitail are passive fish, which both grow around 6 inches and prefer to live around rocks and plants.

Chapter11 - Aquarium and Fish Care Support

How to maintain Goldfish?

Most of the accidents in aquarium fish tragedies occur from the ignorance on the owner's part to provide proper fish care. If you plan to have fish at your home, it is important that you learn the types of fish and how to, care for them. You will also need patients. Goldfish is a commonly sold fish, which require proper care and attention. If you have any doubts while caring for your goldfish or other fish call a local pet store and ask for help. Books are available at your local library, which the books will help you to care for your fish.

Goldfish habitat in aquariums, which it is important to maintain the tank, as well as providing sufficient room for your fish to swim: while you may have seen television programs where goldfish were kept in small containers or bowls, this is a bad idea. Goldfish need room to breathe. Goldfish demand oxygen just like any other living creature, which goldfish oxygen comes from the surface of an aquarium. Make sure that the aquarium offers sufficient space. The space is calculated by length, inches of fish, and depth of the tank. Per inch of goldfish, it is recommended that you have at least 30 square inches of surface space. Goldfish grow in size; therefore add a few extra squares to make sure the fish will have sufficient oxygen.

If you haven't purchased goldfish or an aquarium yet, ask the service reps at your pet store what type of tank would best benefit goldfish. You must know how many fish you intend to house in the tank. In addition, there is a variety of goldfish on the market, therefore having a basic ideal or what type of fish you want can help the service rep provide you aquarium information. If you haven't purchased an aquarium or goldfish and you have an idea what you want, it is recommended that you research. Fish are living creatures, which is an owner's responsibility to preserve his life. Research can help you become knowledgeable

as to what you will need to do, as well as what you will need in maintenance of aquarium and goldfish. If you plan to have plants or other types of fish in your aquarium you want to make sure, you have a basic knowledge of each plant and fish as well.

Fish demand high-quality water with the exception of a few. Tap water is OK to use, however tap water tends to build up pollutants. If you want to make sure, tap water is ok to use by asking your local pet store for advice. Pet shops have an all-around ideal whether tap water in the local area is suitable to maintain fish. It is recommended when using tap water to refresh fish water that you run the tap water at least five minutes before using the water to fill the tank. Running the water by minutes will remove, or dissipate chemicals from the water. You can also let the water set overnight after running it for five minutes to remove additional chemicals.

Water has chlorine, copper, metals, etc, which are all contaminating. Letting the water set overnight will minimize chlorine build up, as well as allow the water's temperature to match with the room temperature.

To maintain room temperature you can also use dehumidifiers, or humidifiers, keeping the equipment near the tank. At all times you must keep goldfish water pure and clear of chemicals. Filters, vacuums, gravel, floss, etc, are all available to help you maintain pure fish water. Since ammonia builds up in aquariums you want to make sure, you understand filtrations as well. Your main targets are chemical, biological, and mechanical filters.

Chapter12 - Aquarium and Fish Care

In all there are more than 20,000 types of fish. There is virtually no way possible anyone can outline how to care for fish and aquariums in a single group of articles. About the best that anyone can do is give you a few basic concepts, care instructions, etc, and allow you to go from there. Since aquariums, rather water and fish produce toxins you will want to learn about such toxins in aquarium and fish care.

Aquariums are containers which provide fish a habitat filled with water. Aquariums are often shaped like boxes, which fish and related aquatic animals, as well as plants are stored. The water supplies oxygen and/or air for fish to breathe, which means the water must be constantly maintained in order for the fish and plants to survive. Temperature is important as well, since unlike furry critters, fish cannot control their essence of temperature. Dehumidifiers and humidifiers can help you maintain a balanced temperature in the air, which will affect water. Ultimately, you have fish gauges, which help you to monitor the temperatures in water.

In addition, fish in tanks or aquariums are subject to bacteria and toxins. Since, bacteria and toxins are produced faster in aquariums for the reason that unlike land, fish in water do not have natural fighters against such contaminants. With this in mind, we see that fish require high eminence of water to survive. In addition, aquariums often tank salt water creatures, as well as fresh water fish. It is important that you understand the difference and how to maintain water supply for both species. Still, the two are similar in comparison as far as fish care.

How do I eliminate toxins?

First, you must understand toxins in order to eliminate them. Fish will produce a degree of toxins; as well, water supplies produce its volume of toxins, such as

copper, metals, chlorine, etc. Toxins spent by fish are wasted items coming from the fish life-sustaining chemicals, known as metabolism. Fish then produce pungent gases, which are colorless and highly water soluble.

Water supply often has CHLORAMINE or Chlorine combined, which are additives to fish tanks that work to purify the water. The chemicals combine to eliminate or minimize the growth of bacteria. Bacteria, develops in water pipes, drinking fountains, ground water, etc.

Now to answer your question, you will need a test kit to maintain toxic waste. You can use the kit to test the waters, thus making sure that the aquarium is not overly contaminated. You will also need filters, and pre-treatment water to balance your aquarium.

How do I find pre-treated water?

Water mixed with 1 milligram of sodium THIO-sulfate, includes ten gallons of fresh water combined with 1% sodium will remove toxins such as chlorine. In addition, you can purchase products, which include chemicals that will remove CHLORAMINE and Chlorine respectively. You have the option of removing toxins from aquariums by exposing the tank to air, which allows circulation of air to penetrate the aquarium. Furthermore, you can combine gas converting it to liquids, which charge, or activates carbons. The carbon dioxide will bubble, which removes toxins as well. (Learn more about Aerating before combing gas and liquids)

Using your test kit you will know if the tank has metals, or coppers in the water. If your water supply has copper and metal you will need to purchase spring water, or purified water to remove toxins. Ultimately you can purchase hepa products, which include water purifiers to connect to your tap water. The product will eliminate metal, copper, and other contaminates, thus purifying your water supply. Next chapter we are going to checkout the tropical fish.

<u>Chapter13</u> - Aquarium and Tropical Freshwater Fish Care

How to care for Three Spotted Angelfish and More

Angelfish include the freshwater Three-Spot. The fish lists under the Holacanthus Trimaculatus category and is a family to the Trimaculatus group. Angelfish are some of the prettiest tropical fish, which have dark blue lips that offset a golden-yellow body. The three-spot angelfish comes from the West Pacific oceans, as well as the Indian oceans. The fish is shaped similar to the butterfly fish, which its gills are covered by his spine. The throat of this fish is also dark blue, which sometimes the body colors are orange-yellow, gold, etc. The specie got its name from its two upper dark patches, and the colors at the edges of his gill-covered flaps. The colors at the top of the Angelfishes head is another reason the fish got his name.

The outer edges of the anal fin spotted on Angelfish are black, while the internal area is white. The fish grows up to 10 inches in size. The Three-Spot Angelfish prefers to live in water conditions compared to that of the butterfly fish. It feeds off plants, larvae, small creatures, and so on. Biologically this fish has a nature that will adapt to social gatherings, yet it is recommended that the angelfish reside in his own habit.

Sphaeramia nematoptera includes the Pajama Cardinal Fish. This fish is a family to the Apogonidae. Pajama Cardinal Fish originated from China Seas, as well as the Indo-Australian seas. Pajama Cardinal Fish prefers to live in shaded areas, which the water temperature should be set at 75 to 80 degrees Fahrenheit. The water should have pH8 balance. Pajama Cardinal Fish do not prefer brilliant lights, as well the fish prefer to live in furnished housing. Pajama Cardinal Fish enjoys hiding, so set up surpluses of concealment areas. The water density should range at 1.0 25. The Pajama Cardinal Fish prefers to feed on smaller fish, crustaceans, and large planktons. This is a highly predatorily fish. Pajama

Cardinal Fish has a variety of colors. The fish is described as short, yet it has a deep body shape. The dorsal fins are widely divided. The fish has distinctive thread like dorsal, which is offset by a large head. The fish has a big mouth and large eyes as well. Pajama Cardinal Fish have yellowish brown features, which various parts of his body have aiding colors, such as orange, or reddish brown.

Biologically this fish is natured to dwell in peaceable areas, and has the ability to learn. The fish prefers to dwell in compatible housing as well. You should house the Pajama Cardinal Fish with in school fish.

The Yellow-Tailed Anemone fish come from the Amphiprion Clarkii group, and is family to the Pomacentridae. The fish usually resides near the bottom of tanks, which the fish demands that you house them with compatible kin. His social life demand anemone:

Pajama Cardinal Fish will eat prepared and live foodstuffs. The fish comes from the Eastern areas of Africa and Sumatra. The Pajama Cardinal Fish is a good-looking yellow, white, dark brown, black colored fish. Pajama Cardinal Fish grows up to 5 inches in size.

Frogfish come from the Antennariuus Spp. Group and the family of Anennaridae. The fish resides in warm seawater. His behavior patterns are territorial, which the fish requires compatible company. It is recommended that you keep the fish with larger kin, who have peaceable natures. NOTE: The recommendation mentioned in this article should be considered closely, since this fish will capture and feast on fish, including fishes that are larger than his own size.

Chapter14 - Aquariums and Fish Care Details

How to relate to fish?

To handle Aquarium and Fish Care you must first relate to the type of fish. Fish include saltwater fish and freshwater fish, which freshwater includes tropical and coldwater fish. To help you get started in Aquarium and Fish Care we can consider a few types of fish.

Pantodontidae:

Pantodontidae only includes a couple of types, which the common names are the freshwater flying fish and the butterfly fish. The fish come from West Africa and grow 4 inches in size. The butterfly fish are flat-bodied fish, which are made up of small bold patterns. The tropical fish has a flat body shape, which tapers at the snout. The butterfly fish comes from the family of Chaetodontidae, which is the Latin name for Pantodontidae.

Pantodontidae fish are also shaped like boats, which their mouth may turn upward. The fish may have huge wing like chest commonly known as pectorals. Few fish have brown toned bodies, while others may have a greenish-gray color. In addition, the fish may have streaks, or dark spots.

Pandontidae fish are relatively passive fish. It is ideal that you keep these fish however with their own species or size rather.

How to feed:

Pandontidae fish do not feed from the bottom of the tank. The fish prefer to dine on smaller fish, such as minnows and insects. Since Pandontidae, fish are cannibals the fish can be trained to feast off meaty dishes or even worms. You will need a long stick to train the fish to eat worms, or related dishes.

Preferred water:

Pandontidae prefer temperate soft water. The temperature should remain around 80 degrees Fahrenheit. If you purchase the butterfly fish, keep the fish in a half filled tank. Butterfly fish also prefer waters, which include thicket plants. The plants should also fires above water.

Pandontidae fish are not easy to mate. If you are purchasing fish to mate, it is ideal to select other choice fish. However, if you do select Pandontidae make sure that the hatchlings have "minute insects" to feast on after their birth. The eggs usually produce fruits after three days.

Fish specie includes the Mormyridae. Mormyridae fish are captured from South and Central African Pools. Ironically, the Mormyridae fish have a body ratio weight and brain weight that compares to man.

These fish have a good sense of humor; as well, the fish are curious and easy to teach. If you decide to purchase the Mormyridae fish, make sure that the fish's diet is maintained; otherwise, they tend to decline food, since the myogenic organs are feeble. Thus, Mormyridae fish are listed under the electric fish category.

Marcusenius Schilthuisiae

This breed of fish is commonly known as the trunkfish, or elephant trunkfish. The fish comes from Central Congo, and grows about 4 inches in size. Marcusenius Schilthuisiae species have silvery-brownish bodies, which include dark bands and dull tubercle, which differs from the G. Petersi species. The G. species have a stretched out chin. The behavior of these fish is comparable to the G. Fish, which includes the water condition, breeding, feed, sexing, etc.

Gnathonemus Petersi

Gnathonemus Petersi is commonly called elephant nosed fish. The fish grow about 4 inches in size and come from Cameroon and Congo. When the fish are grown outside of tank water, the fish grow to be around 9 inches in size. Gnathonemus Petersi has elongated chins, which are sideways and are squeezed against the body. The species has an anal and dorsal fin. The fish is colored black or darker brown, which its body has two strips colored white. The fish's behavior is passive and is easily stored in commune aquariums. The fish eats freshwater fleas. The fish also enjoys Tubifex, which is a common fish worm.

Since the Gnathonemus Petersi likes to hide, you want to keep the water temperature at 80 degrees, and the tank filled with a surplus of plants. Do not add brilliant lights to the tank. Barbs might be a bit more appealing choices in fish.

Chapter15 - Barbs in Fish Care and Aquariums

Tiger barbs, Rosy barbs, Red Barbs, and Sumatra barbs are various types of freshwater fish that are easiest to breed and maintain. However, the larger barbs are best suited with fish of their own size. The larger barbs will steer up trouble in communal tanks, as well as uproot your fancy plants. It seems the larger barbs demand more attention than the smaller barbs; therefore, the barbs should be grouped and separated.

The Black Ruby and Purple Head Barbs come from Ceylon. The fish grow around 2 ½ inches in size and live well in communal tanks. The female barbs produce colorful environments with their yellow-gray figures that share dark stripes in vertical lines and in blotches. The male counterparts are brownish-black and/or black with frontals that present vermilion red. Unlike the boisterous Puntius Conchonius groups, this fish will live well in communal waters. The fish is not finicky; therefore, this breed will feast on all foodstuffs. In addition, the fish does not place high demand on water conditions, yet they will live well in neutral waters, which is moderately hard. Like the Puntius, this breed is one of the easier fish to breed. The barb lays around 300 eggs, and spawns like many other barbs.

The Tiger Barb and Sumatra are of the Capoeta Tetrazona species. This specie comes from Borneo and Sumatra, which they grow around 2 inches in size. The colorful fish set off communal tanks with its reddish-yellow figure that presents a wide array of black stripes. This fish has a changeable attitude, which makes this one of the most diverse fish on the market. The fish according to few will bully other fish and nip at their fins, while others claim that the fish has a calming nature.

The Tiger and Sumatra fish require the same water conditions as other barbs. The Tiger Barbs and Sumatra tend to inhabit well in practical or impartial alkalinity water. As well, the fish do well in judicious hard water. It is recommended that fish owners set the temperature at 78 degrees Fahrenheit. The Tiger and Sumatra fish have a hearty craving for provisions, in view of the fact that the fish will eat all foodstuffs. Breeders will benefit from the Barbs, since all barbs are healthy spawns.

Female Tiger and Sumatra fish are plump, which differ from the male counterparts slim and colorful figures. The female are plain Jane, which breed as that of other barbs. The fry however tend to endure bladder problems and their fins tend to rot. The water then should be in extreme spotless conditions. The tank should also be monitored during breeding, since mutants will gnaw at the spawn laid by Tiger and Sumatra fish.

Cherry Barbs or Capoeta Titteya fish originate in Ceylon, which the fish grow around 2 inches in size. The fish compose a figure of yellow-brown, or red-brown. The fish are distinguished by their dark top to bottom black stripes. The fish make great communal fish, and request the same feeding and water conditions as that of other barbs.

Capoeta Titteya male counterparts have darker colors and when bred the fish will change colors. The colors usually appear black and cherry red, which the stripes virtually evaporate.

The Cherry Barbs breed in the same fashion as other barbs, and will lay up to 200 eggs. The Cherry Barbs come in variety, which some barbs will feast on their barbs, while others will not.

In conclusion to this chapter, if you are just getting started in fish care and aquariums, check out the line of Harlequins. In addition to the Harlequin, there are some bizarre fish in the sea.

Chapter16 - Bizarre Aquarium and Fish Care

How to Care for Bizarre Fish

Sailfin Mollies belong to the family of Poeciliida. The fish has long dorsal fins, which are raised high. The Molly species tend to arrive from the river estuary and coastal zones of Yucatan. You can purchase a selection of these fish in pet stores. The fish has desirable colors, which include blue-green covers of metallically marks. The fins are orange-black, which the female is distinguished by her blue-gray fins.

Water Conditions

Sailfin Mollies prefer to dwell in warm climates. The water temperature should be set at 73 and no higher than 82 degrees Fahrenheit. In addition, the water density should be around the same as the Ph balance. You should add up to 3 teaspoons of salt with 10 liters of water and replace the water regularly with fresh water. The fish dwells well in substrate areas, comfortably furnished environments, good lights, and human and detritus at the bottom of the tank. Plants attract this fish as well.

Feed:

The fish will eat live bait, vegetable matters on occasion, and foods that relate to his omnivorous nature. The fish has schooling and lively nature that makes him feel comfortable in social surroundings. The male fish do not like to gather; therefore, you may want to separate the fellers. The fish require natural habitats where fish of their own kind reside.

African Lungfish are snake like critters, which come from the family of protopteridae. The fish are named under the Protopterus Dolloi. These fish are commonly found in the Zaire River Basin. The fish has joining anal, dorsal, and caudal fins, which form at the tail area. In addition, the fish has pelvic fins, as well

as pectorals that resemble threads. Most African Lungfish are darker brown, which changes slightly during maturity. The fish grows at 2 feet and up to 10 feet.

Water Conditions

Lungfish enjoy quiet environments. The fish adapt to dense creek areas, which include running waters. The fish also enjoy dry seasons at various times. The water temperature should be set at 72 degrees Fahrenheit and not above 84 degrees Fahrenheit. The fish should have fresh dry mud supplied at all times. The water desired is hardness, as well; the fish can dwell under radical conditions. This particular fish requires a lower volume of oxygen; therefore only house him with compatible creatures.

Feed:

This fish comes from the wild, therefore he will prey on fish that move in the waters slowly, snails, worms, mussels, and so on. You can feed him beef heart, or related lean meats to break him in, and stripped fish. You want to make sure the water is flowing at all times. This fish differs from many other fish, in that it will care for its young, as well as the spawns.

Serrasalmus Rhombeus

This fish group is commonly known as the Spotted Piranha and White Piranha. The piranhas were taken captive out of the Amazon Basins and South America waters. Piranhas grow up to 10 inches in size, yet in captivity, the largest piranhas grow six inches in size. If you're just starting in fish care and aquarium upkeep, avoid this fish. Piranhas should not be held in captive tanks where passive fish dwell. Piranhas typically have deep pressed body. The body has silvery or olive green colors. The piranhas have razor sharp teeth, which they will make good use of to devour, or tear prey, including human hands or flesh. Piranhas resemble bulldogs, yet the fish have a lower jaw lines will threaten all approaching parties. Piranhas are aggressive fish. The fish will dine on large or small fish without a problem. Brachydanio is another group of fish we can

consider. **Chapter17** - Brachydanio Fish Care and Aquariums Brachydanio Albolineatus, Rerio, Nigrofasciatus, etc, are common aquarium fishes, which the Brachydanio Albolineatus is commonly named the Gold Danio or Pearl Danio. Danio comes from Sumatra or India and grows 2 inches in size. This slim Jim fish has a reasonably pressed figure, which its shimmering body makes it the "Mother of Pearls," look-alike. Brachydanio Albolineatus come in a variety of colors, including blue, green, red, yellow, etc. The fish is calm and quiet in nature, and lives well in communal tanks. The Danio is one of the smarter fishes, which prefers to live in plant-y waters. The fish also prefers darker gravel, rather than lighter colored gravel. If you add lights to your aquarium, make sure the light is situated so that it targets the front of the fish. The fish feeds and expects water conditions similar to the Rerio breed. The males are distinguished by their slimmer and colorful body. The fish breed in the same way as the Brachydanio Rerio.

Brachydanio Rerio common referred to as Zebra Danio comes from the Eastern areas of India. The slim, small fish only grows around 1 ¾ inches in size. These fellers are noted for their cylinder shaped body and appealing golden stripes, silver, and bluish black stripes. Rerios are smart fish, which prefer a calm and peaceful atmosphere. The fish will feed on all foods and has no high expectations on water conditions. The female Rerio is thicker than the male counterpart is. If you are looking for breeding fish, then the Rerio is the choice of fish. You must protect the eggs however, since the Rerio will feast on its own fry.

How to breed

To breed Rerio fish, it is recommended that you apply a half-inch diameter or 1 inch coating of pebbles at the bottom of the tank. The waters depth should not succeed 3 inches. In addition, the longer tanks are ideal for the Rerio. Fry eat infusoria once they are born. In addition, the water temperature should remain at 80 degrees Fahrenheit. Various other methods are used in breeding the Rerio.

Brachydanio Nigrofasciatus is the Spotted Danio, which derives from India or Burma. The fish grows 1 ½ inches in size, and its shape is similar to the Brachydanio Rerio. This fish expects the same water conditions and food as that of the Brachydanio Rerio. As for breeding, you will use the same method, however spawning is a bit more dramatic.

Danio Aequipinnatus is the Giant Danio, which derived from the western coast of India around Malabar. The fish is also found in Ceylon. This fish grows 4 inches in size. The silver colored fish often has a yellow and blue top to bottom stripe, which when the fish is breed it will change its color to a rosy shade. This particular species are harder to net, therefore learn handling instructions to properly, net the fish.

In addition, this fish can hang with the big boys in communal tanks, yet the fish are a bit fidgety in nature. This fish group is of the greedy group, since it has an enormous appetite and is not fidgety when it comes to eat.

Danio Aequipinnatus is not place high demands on water conditions, yet the fish seem to attract well in neutral or reasonably hard water. The fish also attract well to reasonably alkalinity water. The fish also covets larger tanks. The water temperature should remain at 80 degrees Fahrenheit. This specimen produces semi-adhesive eggs, which generally fry in 3 days. Finally, the Aequipinnatus enjoy pebbles at the bottom of the tank when spawning as well. Check out the Callichthyidae group.

Chapter18 - Callichthyidae Fish Care and Aquariums

Catfish Armored with Barbels

Coming from Trinidad and South America are the Mail and Armored Catfish. These catfish are well respected even by larger fish. The catfish have partly covered bony plates, which double and its back and head has a covering. The mail and armor catfish have fatty moveable fins, which the adipose surround a hefty backbone. The dorsal fins are near the backbone. These catfish have two sets of barbel at the base of its mouth.

Another group of catfish includes the Genus Corydoras. This group of fish is relatives to the Callichthyidae. If you are searching for tank catfish, hit the shop and buy a couple of these good buddies. The hardy fish have a curious nature, as well as amusing features. These catfish are ideal as well, since they will clean up the neighborhood without problem, thus eliminating pollutant build up.

If you are purchasing the mail or armored catfish for breeding, you will need a tank solely for housing these fish.

How to dress the tank?

Armor and mail catfish tend to enjoy housing in murky colored waters where fine gravel rests at the bottom of the aquarium. Cryptocoryne is ideal to provide a hiding place for these fish, yet you should keep plant volume to a minimal. Stones are nice hiding spots for the mail and armored catfish, yet you must arrange them as arches, or related formations.

How do I decide on water temperature?

Catfish are not friendly to overheated waters. Therefore, the water temperature should be around 72 degrees Fahrenheit. You should also avoid over illuminating

the tank. The water should have moderate alkalinity, hardness, or neutral conditions. As the fish mature, you will need another aquarium to manage conditions and segregated arrangements. During spawning, you should fill another tank up to fifteen gallons of water. You will know when spawning time has arrived by the shifting colors. Look for light rosy tints.

How do they mate?

The fish will naturally mate in pairs. Sometimes however when the fish are placed in separate tanks, spawning will not occur. If this happens, you want to reduce the water temperature to around 62 degrees Fahrenheit. In addition, you will need to add clean water to the tank. The fish will lay eggs the size of 2 mm and up to 400 eggs. After the eggs are hatched, you want to add methylene blue to the tank, so that the fry can prepare peacefully for deliverance. Fry fish from mail or armored fish tend to rot, so the water should be tainted a bluish shade, which is the purpose of methylene. Once the fry come to the world, you want to feed them Micro worms, and later feed the fish saltwater shrimp.

Bronze Corydoras, otherwise known as Corydoras Aeneus come from Venezuela and Trinidad waters. The fish grow 2 ½ inches in size. This particular breed is not a favorite fish added to tank water. The greenish sides of the fish offset a pink colored frame. While the fish is one of the harder fish to adapt to tank water, it does make a good communal tank fish. Bronze Cory will not assault, mistreat, or interfere with the life of other fish.

Favorite dishes:

The Bronze enjoys Tubifex and white worms, yet he will eat dried dishes as well.

Water conditions

Alkalinity water is fine as long as the water condition is neutral. Hard water will suffice as long as you keep the volume in moderation. NaC1 or saltwater is not

the Bronze Cory's preferred choice and these fish will let you know quick, therefore stay clear of this water condition. Carps are interesting fish, yet the carps tend to vary as to what they demand in fish care.

Chapter19 - Carp Aquarium and Fish Care

Somewhere down in the drain ditches, ponds, and fast-moving streams are the little wonders of life, known as the Asiatic Tooth Carps. The Genera Aplochelilus and Oryzias carps reside in water conditions between 70 degrees Fahrenheit and 80 degrees Fahrenheit. The Tooth Carps tend to live off surface areas, which the fish detest hard alkalinity waters. Tooth Carbs inhabitant home enables them to feast on insects, such as mosquito larvae and related bugs. Tooth Carbs on occasion will enjoy dried foods, however while in captivity you should continue feeding the Tooth Carps their desired foods.

Tooth Carps prefer to live in smaller or medium aquariums, which have a maximum of 10 gallons of water. The fish adore moderate hard water, and reasonably, acid based where deposits of organic debris reside. The peaty waters should include fine leaf plants, gravel free of lime, and plants that float.

How they spawn

The Tooth Carps will produce a rapid growth of spawn. The fish mate well, and will produce a small number of eggs daily over the course of three weeks. Tooth Carps will not harm the spawn; however once they become fry, the Carps tend to feast on its own kind. If you want to save the fry, move mom and pops out of the tank before the eggs hatch. Aquarists also have the option of removing the eggs to another tank, which is loaded with plants. The first choice is the better option for aquarists, since the method takes less time to accomplish. In addition, when the eggs fry, you want to occasionally sort through the carp size to avoid cannibalism.

Kin to the Tooth Carps is the Dwarf of Green Panchax, which is sometimes called the Panchax Parvus. This breed comes from the Aplocheilus blocki group. Dwarf fish originated in the waters of Ceylon and India. The fish mature at 1 ¾ in size. The smaller fish are aquarium choice fish. Dwarf of Green Panchax has a greenyellow shaded body, which is set off by rows of yellow and red marks. Dwarf of Green Panchax can handle tank water, since the fish is naturally mild in temper. Dwarf of Green Panchax feasts on dried and live dishes.

Water conditions

During breeding the Dwarf of Green Panchax, prefer water conditions set at 78 degrees Fahrenheit. When spawns are produced, they generally fry in two weeks, sometimes earlier. You should mate the Dwarf of Green Panchax with two choice males and a selection of female fish.

Kin to the Dwarf of Green Panchax is the Oryzias latipes, which is popularly known as the Geisha Girl Medaka. The fish is commonly known as the Ricefish and Japanese Medaka as well. Obviously, the fish comes from Japan. Geisha Girl Medaka typically grows ½ inches in size. Geisha Girl Medaka has an amusing breeding pattern, which makes this an amusing fish. The fish has graygreen bodies, which the Strain kin has golden or red toned bodies. The fish are colorless.

Geisha Girl Medaka breeds will feast on all foodstuff, and adapt well in soft moderate waters. The fish also adapt to soft acidy waters. If you choose acidy waters, it is recommended that you add 1-leveled teaspoon of salt to 3 gallons of water. The fish dwell in water conditions, or temperatures set at 78 degrees Fahrenheit, which is the best option. The fish can also live in waters at 75 degrees Fahrenheit and up to 80 degrees Fahrenheit.

Finally, if you are breeding the Geisha Girl Medaka or members of this family you can spot the female by their rounded fins and plumper body. As well, the fish are shorter than their male counterpart. Once you gain skill you can move onto the famous catfish.

Chapter 20 - Catfish Aquarium and Fish Care How to manage Catfish? Catfish include the body of Siluridae, which is actually off springs of the Catfish. The European catfish, including the naked skinned fish is kin to the Asiatic group.

The translucent layers of skin makes the Siluridae group one of the less desired aquarium fish. Next to the Siluridae is the group of Glass Catfish, which are listed under the Kryptopterus Bicirrhis group. The fish derived from the Greater Sunda Islands, as well as from the lands of India. This group of catfish grow 3 ½ inches in size, and appear as powerfully pressed translucent fish with glass-like bodies. The anal fins have an extended baseline. The upper jaw line has a pair of whiskers, otherwise known as barbel.

The Glass Catfish are best suited with its own kin. The fish tends to stand off into the background, lurking the tank. Catfish will eat from top layers of the water, and will feast on living foods. This particular fish has not been bred while in captivity, and its breed does not have a particular or preferred water condition. Kin to the Glass Catfish is the Mockokidae. Mockokidae derive from African waters. The naked Mockokidae, as well as many other catfish are helpful fish, since these fish feed off biochemicals, which makes these fish scavengers.

The fish will eat other dead fish, as well as decomposed macrobiotic bodies. In addition, catfish are responsible for maintaining tank photosynthetic organisms, known as algae.

Catfish are composed of bones, rather than cartilages. As well, catfish have distinctive fins, which differ from that of the flesh-like fins that include bones. Catfish in summary are catfish do not have scales, yet the fish have whiskers. Catfish whiskers are sensitive to the touch, which includes smell and taste. Catfish is listed in the Siluriformes, Osteichthyidae, and the Acetinopterygii categories.

The upside down Catfish listed in the Synodontis Nigriventris category comes from the lands of Belgian Congo. This particular species grows to 2 inches in size. The body of this fish is shaped like that of the Corydoras group. The lower section of the body located at the front has a dark shade, which is offset or

reversed by lighter colors. This fish is a great choice of communal tank habitats. The catfish will help keep your tank clean as well, since he feeds off photosynthetic organisms, as well as live bait. The food is often extracted from leaves beneath the surface. Synodontis Nigriventris species did not have preferences in water condition. Malapteruridae is the kin to the Synodontis Nigriventris.

Electric Catfish come from the group of Malapterurus Electricus. The catfish grows 10 feet in natural waters, yet is only two feet in aquarium water. This catfish is found in various rivers and lakes around the Western and central areas of Africa. Electric Catfish has a body type shaped like a cylinder. The fish does not have dorsal fin, yet it makes up for the loss with hefty fatty adipose fin. Electric Catfish has electrical organs, which demands that this fish is placed in isolated interment.

Like the electric eel, this catfish will produce a disturbing shock to those coming close. The shock however is less severe than that of the electric eel, yet more powerful than the Mormyridae shock.

How does this fish feed?

The electric catfish will eat meats, worms, and other fish smaller than his size, since he is an insatiable nighttime diner.

What is the Electric Catfishes' preferred water condition?

The catfish could care less about water conditions, as long as he has water and plenty of food. Now we can view some more fancy fish.

Chapter21 - Fancy Fish and Aquarium Care

If you had the chance to explore all saltwater and freshwater fish, it would take you thousands of years. Therefore, if you are just starting in fish care and aquariums you want to learn minimal details on starter fish. Everyone has their

own notion as to which fish are best for starters, therefore my goal is to inform you, rather than instruct on starter fish. Still, I will provide you helpful information that you can use to sort through aggressive and passive fish. The passive, peaceful, and easy to maintain fish are in my opinion the best fish for starters. Now we start with the Symphysodon aequifasciata and s. discus fish, which is known as the Discus Fish. The name alone would make the common starter take a run for a name they could pronounce, yet the fish name is a scare, which denounces the fish's identity. This fancy fish is brilliantly colored in aqua green with a brownish tint that offsets his eyes, small mouth, and black marked body. The Discus is one of the tropical fish that lives in freshwater. Discuss prefers water temperatures set at 82 degrees and no higher than 88 degrees Fahrenheit. The pH level should set at 6.0 and not beyond 6.5. Density: 3 to 5 degrees:

The Discus is slow feeders that tend to reside by themselves. The fish will live in communal tank water, yet they will find their own corners to hang. Some of the recommended fish to share space with the Discus is the smaller and peaceful Corydoras catfish, cardinal tetras, and the Rasbora. Few of the Discus fish are decorated in bright cyan red and turquoise, which makes the fish appealing to tank water. Before you purchase discus breeds, take care to review the health of these fish. It is next to impossible to save an ill discus's life.

Discus has a shy nature. The peaceful fish enjoys slowness, and is finicky when dining. The foodstuff desired includes, live bait, frozen foods, beef heart shredded, Tubifex, etc. You want to avoid Tubifex although the fish enjoy the meal well, since these fish are prone to disease. You can feed the pet Tubifex, yet it is advised that you wash the foodstuff carefully.

If you want to feed a fancier fish, then checkout the Bettas, Gouramies and the Fighting Siamese Fish. The fish spread out in the waters of Asia and live well in aquariums. The fancy fish including the Siamese Fighting Fish, Fighting Cocks, and the Strains are popular fish that has been spotted on live sporting events.

The fish are commonly exploited in Thailand's' land. The fish enjoy battling. Most of the fish available have a variety of colors to select from, including the beautiful shimmering red fish, blue fish, bicolor fish, and so on. Albinos are available as well.

In all fish are summed up as saltwater (Marine) fish or freshwater (Non-Marine) fish. The Freshwater fish include tropical fish and the coldwater fish. The tropical is more desirable for starters in fish care and aquarium keep. At pet stores, online, etc, you will find a wide array of tropical, saltwater, and coldwater fish.

Keep in mind that Marine fish are more prone to saltwater, since the fish come from salty marine waters, such as the seas, oceans, etc. Freshwater fish tend to come from rivers, lakes, streams, ponds, and so on. Having an idea of what type of water the fish dwells in can give you a running start to figuring out what type of water is best suited for your fish. Still, most pet stores provide instructions, which you should read carefully in your fish care expedition. Don't forget the filtration systems.

Chapter22 - Filtration in Fish and Aquarium Care

Filtration systems are essential in aquarium and fish care. Filtration systems strain out chemicals, and pollutions, which the filtration process passes through, or puts the chemicals and contaminants in a filter. The filters are then cleaned or

replaced by human hands.

Mechanical filtration

Mechanical filtration physically works to trap particles of grime, which are suspended in matters throughout water. The particles are suspended and are incapable of passing through fibres or pores of a filtration medium. Mechanical filtration systems take care of the problem by removing the particles from the tank. At this point, the human hand must clean or replace the filters. Mechanical filtration includes the polyester fibers, which come in a variety of packages. The polyester mechanical filtration systems typically include pads, fluffs, woven, pressed fibers, and so on. The accessories enable the mechanical filtration to act as a cleanser and/or replacement by trapping larger dirt particles. Mechanical filtration also includes foam accessories. The foam sponges are blocking aids that infuse water, thus suspending the water into matters.

In addition to the mechanical filtration systems, you have the choice of chemical filtration. Chemical filtration relates to the science of molecules, in that the filters are logically organized into simpler counterparts. Activated charcoal is one of the most commonly used chemical filtration systems. The chemical filtration system will remove a large volume of pollutants. Absorbance through the activated charcoal process traps the smallest physically possible units of chemicals. In addition to the charcoal brands is the carbon filtration. Carbon filtration is one of the most liked filters used in homes, fish tanks, etc. The filters will remove a large volume of contaminants, as well as deliver clear waters. Most people purchased a carbon filtration combined with the mechanical filtrations. However, the modern mechanical filtration systems integrate the carbon filters into its device. It is recommended however that you do not rely on carbon filters to maintain your tank. You still must uphold your responsibility.

Biological filtration

Biological filtration is the single most important filtering system you will need to

maintain aquarium and fish care. Biological filtration, also called biofiltration will remove unnatural and natural particles from tank water that is left unnoticed by the human eye, carbon filtration, and mechanical filtration. The filtration system will replace removed particles when finished. Biofiltration is difficult to understand, since fish make up biological filtration, which remove and replace microscopic pores and contaminants in a bio-medium environment. Fish rely on biochemical filtration. The Biofiltration systems will remove unwarranted nitrates, ammonia, bacteria, nitrates, etc. Bacteria is removed, yet replaced with nitrites, i.e. a healthy volume of nitrites. NOTE: Fish produce naturally, both ammonia and nitrates, which is non-toxic to the fish, yet toxic to non-fish.

Mechanical, chemical, and biofiltration include the internal, external, and undergravel systems. You want to learn more about each system. The under-gravel system is one of the least desired, yet it works wonders with the internal and external filtration systems. The external filtration systems are the choice systems, since many today combine mechanical, chemical, and biological filtration systems respectively.

Filtration is essential in aquarium and fish care, since unfriendly waters produce bad fruits. For instance, if fish do not live in desired waters, it can affect their oxygen intake. In fact, chemical saturated waters can eliminate oxygen flow. The fish will die and your tank will stink. Therefore, learn more about filtration systems, how they work. As well, learn which systems are recommended. You can go online to view a variety of filtration systems, yet we recommend you consult with pet stores to make the right choice. You can find additional help online.

Chapter23 - Finding help in Aquarium and Fish Care

Currently there is more than 20,000 fish, which to instruct you on care would be time consuming. Therefore, we will cover the basics in tank management to

provide you a bit of help. Unlike furry critters on land, fish do not have coats that protect them. Therefore, water temperature is important. If the water temperature is too high, oxygen supply is minimized. On the other hand if the water temperature is too low, it can affect the health of your fish. Along with your aquarium purchase, you should have received a manual, or instruction brochure. It is important to read the material so that you know exactly what temperature and gravity is required to maintain healthy fish. If you have goldfish it is recommended to keep the temperature at 75 degrees Fahrenheit. If you have tropical fish the temperature should be set at 75 degrees Fahrenheit, or 80 to 85 degrees Fahrenheit.

With your aquarium you should supply a thermometer, and sometimes a heater depending on the type of fish you have. Goldfish for example can stand lower temperatures at times.

How is water measured?

Water is measured in pH, which depends on the sourness. Again, it depends on the type of fish you have. If you have saltwater fish, the water is measured at 7.8 up to 8.3. Freshwater fish measures at 6.8 up to 7.2. You want to monitor the pH measurements of water; since the higher the water is measured the more ammonia is produced. If the water temperature is too low it can become harmful to bacteria denitrifying growth, as well as to the gills of your fish. You can purchase buffers, and test kits to maintain pH balance in fish water. Furthermore, gravity is measured in water as well as oxygen, which will discuss shortly.

How much oxygen do fish need?

Oxygen for fish, land animals, and human beings is essential to survival. Without sufficient oxygen the brain will die, which in turn kills the body. Water as well as air, supplies oxygen to fish tanks: You can increase oxygen by using pumps or air

supply, which will provide turbulence that creates oxygen. In addition, if you keep the water cool it will augment oxygen supply.

How is gravity measured?

Gravity is based on the amount of chemicals added to the water. If you supply your aquarium with unadulterated water it has a 1.0 gravity in ionic. If your fish come from saltwater you should have a gravity level no higher than 1.023, however you can reduce illnesses for saltwater fish by keeping the gravity level at 1.017. Non-marine or freshwater fish can benefit from a low volume of salt added to the water, especially to reduce stress. You can purchase refactometers and test kits to maintain gravity level.

How do I maintain saltwater fish aquariums?

This is a stressful question; since saltwater fish are marine creatures that habitat in environments where changes are consistent. As well, it depends on the type of aquarium you've purchased to keep the fish. If you've purchased a larger aquarium it is easy to maintain saltwater fish by keeping the environment stable. If you haven't already purchased saltwater fish take note that the Damsel's is an aggressive saltwater fish that does not mate well with other fish. However, this type of fish is easier to maintain than a wide array of other saltwater fish.

In conclusion to this chapter, if you want to learn more about aquariums and fish care visit the internet where you will find a wide assortment of information available to you.

Tip: **Damsels** is a beginner's saltwater fish that demands little attention.

Chapter24 - Fish Care and Aquarium Information

Over the internet and at local pet shops, you will find a wide assortment of helpful information related to freshwater fish and saltwater fish. Freshwater fish include

the tropical and coldwater fish. Saltwater fish are also listed under Marine fish. Aquarium fish estimate at more than 22,000 species. The species include damsels, goldfish, reedfish, killifish, kingfish, catfish, loach, minnows, blind cavefish, long fin characin, and so on. Freshwater fish differ from the saltwater fish, in that the saltwater fish require different water conditions, feed, water temperatures, pH levels, and so on.

In addition to saltwater fish and freshwater fish are choice amphibians, and reptiles. Some people, especially expert aquarists tend to blend a selection of fish. In fact, experts might even add Cushion Stars or Wartlet Anemones to their tanks. The cushion star is classified as the Phylum Echinodermata. The fish is commonly found in the Adriatic areas and the Mediterranean. The starfish grows about one ½-inch, to 2 inches in size and has short star shaped arms. The fish's upper region is green, while the lower area is yellow. The resilient fish feels at home in coastal waters, since in the waters he has a surplus of stones to conceal itself. Cushion Star Fish tend to enjoy warm water, which the temperature must be set at 77 degrees Fahrenheit. Starfish tend to eat off organic matters.

Wartlets are classed in a selection of categories, including subcategories. The fish originated from the Mediterranean, yet it lives in various sea areas. The fish feeds living plankton and animal food. The fish tends to enjoy rocky areas where it can hide. Thus, the water temperature should remain at 71 degrees Fahrenheit. This fish grows around $2\frac{1}{2}$, to $2\frac{3}{4}$ inches in size.

Red-tailed Black Shark fish: The Thailand grown fish grows 4 ½ inches in size. Red-Tailed Black Shark Fish has a torpedo shaped figure and a dorsal that resembles a flag. The fish comes in velvety black, yet it has a red tinted tail. Red-Tailed Black Shark fish has a friendly nature, which makes him a good communal aquarium fish. The Black shark is called sucker by many, since his mouth forms

in the shape of a sucker. The fish enjoys glass, plants, and clean water.

Expert aquarists also choose the Helmet Shell fish. The fish are distributed from various seas, including the Mediterranean. The water temperature recommended is 71 degrees Fahrenheit, since this creature lives at the bottom of waters in mud and sand. The Helmet Shell is a carnivorous predator. He will take delight in mollusks, especially the smaller breeds. His nature is nocturnal, which means he arises during night hours.

The Cerianthus Membranaceus dwells in the Mediterranean areas, as well as surrounding seas. The creature has a double crown on brown or white narrowed tentacles. The fish has a worm shaped body. This creature grows up to 12 inches in size. Water temperature should be set at 60 degrees Fahrenheit, and/or 71 degrees Fahrenheit. Cerianthus Membranaceus choice foods are plankton.

The aquarium fish can also feast on dried animal foodstuff, yet it will not take kindly if you do not feed it plankton. This creature is nice to look at, yet he withdraws often into solitary confinement.

Sea squirts are one of the experts' favorites. Sea squirts are reddish-orange colored unusual creatures. The sea squirts dwell in dark cavities, and will tolerate water temperatures set between 68 degrees or 71 degrees Fahrenheit.

Some of the nice aquarium creatures include the tubeworms. These creatures produce a firework caption when erected. In conclusion, to learn more about fish care and aquariums visit your local library, or the Internet.

Chapter25 - Fish Care and Aquarium Support

Fish care depends on the type of fish, which include saltwater fish (Marine Fish) and freshwater fish. (Non-Marine Fish). The type of aquarium also depends on the type of fish you intend to raise. If you purchase saltwater fish, it is important

that you, daily check the status of your fish. If your fish seem healthy likely, you are doing something right. On the other hand, if your fish seem sickly then you need to take another course of action to maintain your fish's health. It is important that you become familiar with each fish in your tank to help you spot behavior patterns. Familiarizing yourself with the fish will help you to notice peculiar changes in behaviors.

In addition, you want to make sure that you feed your fish according to their demands. Some fish require food every three days, while other fish may not. To maintain the water you will need to use filters, etc, to evaporate the water and remove chlorine build up, which you will also add calcium to. If you own saltwater fish it is recommended that, you add iodine salt at least 2-times each week to the tank. In addition, you want to clear the tank of photosynthetic organisms (Algae) buildup regularly.

Each week you will need to remove at least 10 percent and no more than 15% of the aquarium water. Once you remove the water refill the tank with pure water. The process will help eliminate unwarranted chemicals. If you fill your tank with tap water, make sure you seek advice from your local pet shop, since these people know if the area water is sufficient to maintained fish health. Water builds up chlorine, ammonia, copper, metal, and so on. If you have chemical buildups in your water supply you will need to buy water purification systems, or else take measures to de-chemicalize your water. Chemical, biological, and mechanical filtration systems are available that most pet stores where fish are sold. Inquire with in.

When you change the fish water, make sure you remove rubbish from the gravel by drawing off your filters, vacuums, etc. You can purchase test kits and buffers at local pet shops where fish are sold as well. The tester kits are important to have, since you will need to test the fish aquarium at least every two weeks. After you test the water, it is recommended that you wait 24-hours before changing the

water. The test kits will help you spot nitrite, ammonia, chlorine, metal, copper, calcium build up, nitrate, etc, including pH water levels. Bear in mind that fish produce their own level of nitrites, which is non-toxic to fish. Nitrite is defined as nitrous acidy salts, which esters of nitrite is produced from acids. Nitrates are utilized to change organic compounds and turn them into nitrates. Nitrates help to breakdown ammonia, turning the ammonia into nitrites while nitrates will produce ammonia build up. In addition, monthly you should check for alkalinity build up. Alkalinity is the measurement of alkali, which is concentrated and measured in terms of water pH. Test kits typically are used to test alkalinity.

Fish tanks typically include filtration systems or filters, such as the chemical, biological, and mechanical filters. It is important that you replace these filters once spoiled. Check the filters every two weeks.

In addition, each month you should replace at least a quarter of the fish water to purify. It is recommended that you keep records on specific details of fish care and aquarium care. To learn more go online now.

Chapter26 - Fish Care and Aquarium Tips

How to care for Freshwater Fish

Advantages of choosing freshwater fish is that the fish will adapted nearly too any type of Aquarium. In addition, freshwater fish are easier to take care of than

saltwater fish. Accordingly, freshwater fish is ideal for beginners. Freshwater fish include the tropical and the Coldwater fish. Regardless of the type of fish you decide to raise however, you want to consider tanks first. Saltwater fish tend to do best in Reef Tanks. Reef tanks have underwater ridges, which is similar to oceanography ridges, in that the reef tanks include rock and coral. The tank is filled with water, which the top of the water is just above or below the surface.

Goldfish would not benefit from reef tanks, since these fish receive their oxygen intake from the surface of the aquarium.

Brief Goldfish History

Goldfish are diminutive ornamental fish, which are generally orange-red. The fish come from native eastern Asia waters, which these fish are commonly stored in tanks, aquariums, or ponds. Goldfish got its Latin name from Carassius Auratus.

When considering aquariums you want to make sure that you know what to avoid when spotting the tank. For instance, it is recommended that you do not store the aquarium near doors, windows, or heaters. In addition, you should store the aquarium in an area of your home were the room temperature remains constant. When you purchase your aquarium, make sure you consider medicines, equipment, food, electricity supply, filters, and so on. Gravel, floss, buffers, and filters should be on the list as well. The most important thing you will need outside of food is filters. The filters help to keep your aquarium free of algae and harmful chemicals. Online you will find a wide assortment of external, internal, and under-gravel filtration systems. In addition, if your tap water is unclean, you may need to purchase a water purification system. Otherwise, you can take certain actions to eliminate a great amount of chemical production from the water.

External filters are costly; more so than the under-gravel and internal filters, yet

the filters is one of the better choices. External filters are recommended if you have a large supply of plants and/or fish in your tank. Maintenance for the external filters is much easier than that of the internal and the under-gravel filtration systems. Internal filters is one of the popular sold in fish supplies, which the filter produce good results. The filters are cheaper than external filters, and include elements that draw liquids from grills, which filters the liquid into foam cartridges. The liquids are then discarded through top nozzles. You can purchase internal filters, which include indicators that will alert you when cleaning time starts. Valves make it easy to maintain oxygen. As well, filtered pads will help eliminate chemical build up. Under-gravel filters require additional maintenance and generate less power, therefore it is recommended that you combine internal, or external filters with the under-gravel filtration systems.

How to decide if you need a heater?

Now that you have an overview of filters, you need to consider aquarium heaters. Coldwater fish do not require heaters. Goldfish is a type of the Coldwater fish. Tropical fish tanks demand heaters. If the water temperature is too cold for tropical fish, it can cause them to die. On the other hand, it the water is too hot the fish may die as well, since the fish will not receive sufficient oxygen to maintain life. The primary focus is to make sure that you purchase a filter and heater system that matches your tank space. Freshwater fish tend to be the better choice fish for starters.

<u>Chapter27</u> - Freshwater Fish Care and Coldwater Aquarium

Coldwater fish are starter fish to consider, since coldwater fish are easier than other fish to keep. Coldwater fish are resilient and can adapt better than other

fish to waters. Still, cold water fish like any other breathing creature demands oxygen. If the water is dirty, the oxygen supply will diminish. Since, fish produce natural wastes, which include ammonia build up, the waters will pollute easy. The oxygen is reduced when ammonia build up occurs. With this in mind, you want to add filtration systems and plants to your take. Plants produce oxygen, and help to remove waste. Filters will perform the same actions, yet through synthetic methods. Therefore, you should add filters, gravel, and plants to your aquarium before adding your fish. Plants work as a nitrogen, which is a colorless gas made up of non-metallic chemicals and its elements produce odorless and colorless gases that are unmoving. In addition, you want to consider stands, lights, hood, and thermometers when purchasing aquariums. As well, the size of your tank is important.

How do I choose the right fish aquarium?

Aquarium size is based on measurements of volume, or units of volume that is equivalent to one cubic decimeter, 1.056 liquid one eighth of a peck. (Quart) The lowest liter capacity recommended is 45, while the best size is above 130 in liter measures. The recommended tanks are the long, wide, and large tanks. The tanks are easy to maintain, as well, you can add a variety of fish without overstepping your boundaries.

How do I choose a stand?

To choose a stand you will need to consider the weight of your aquarium. Will the stand support the aquariums weight, including the additive weight? Will the stand provide the tank a leveled foundation? Is to stand sturdy? Is the stand wide enough? Does the stand attach to walls, or solid surfaces to add additional

How do I choose lights?

First, realize that plants feed from light. The downside is that lights will produce higher levels of photosynthetic organisms (Algae), which require more attention from you. As well, brilliant lights will produce higher volumes of heat. Therefore, when deciding how to choose lights, think fish, plants, and algae. Some types of fish detest brilliant lights. Still, we need to think about plants, therefore when choosing lights check out the fluorescent light category. The lights will provide adequate volumes of intensity for plants, as well as a leveled amount of heat for fish.

What is a hood and why do I need one?

A hood is the covering that prevents fish from taking a leap onto your floor. As well, a hood will keep out dirt particles, annoying critters, curious critters, and so on. Hoods will also provide shelter for your lights. You should purchase a proper fitting hood for your aquarium to get the most protection.

How do I choose the right thermometer?

A thermometer is an instrument, which is used to measure temperature. Some thermometers have graduated glass tubes, and bulbs, which contain mercury and/or alcohol. The bulbs or tubes will start to rise when the temperature in a room begins to increase or decrease. The market has a wide selection of thermometers available; therefore, it is recommended that you ask your local pet shop for assistance. Most times, you can get away with the basic thermometer.

In addition to tanks, hoods, lights, plants, etc, you want to purchase gravel, filters, heaters, and so on. It depends on the type of fish you purchase, but you will need to purchase the proper food as well. Gasteropelecidae group has an interesting set of fish.

Chapter28 - Gasteropelecidae Fish Care and Aquariums Tank maintenance is based on the fish type. However, today's tanks have switches that enable you to change the water temperature. In addition, tanks today enable you to dim or intensify tank lights with switches. Water is purified via

a filtration system. The quality of water is controlled by electronic devices. Automated features enable you to distribute food, as well as fertilize dosage. The water resistant tanks today come in a variety of shapes in size, and use electrical advanced solutions to maintain safety. In addition, tanks today enable you to stock plants and fish of all species. The lights today can be adjusted to accommodate most fish types. Still, fish are different in many ways. To understand this, you must have an overall ideal of what the 22,000 species prefer. The fish types include the freshwater fish, which its counterparts are Coldwater fish and the tropical fish. Seawater or saltwater fish is a different species, i.e. the fish prefer dissimilar water conditions and meals. In addition, the dangerous species on the market must also be learnt before you attempt to purchase these breeds. The dangerous species include the Piranhas. In addition, we have fish that fly, which is our next subject.

The fish that fly

Gasteropelecidae include the Hatchetfishes. The fish are marked for its pressed exceptionally deepen figure. This fish primarily habitats in the northern South America. The fish is also called the flying fish, since he is proficient in flapping his chest fins skillfully. The gliders can escape tank water and land fifteen feet away from the aquarium. Therefore, it is wise to keep a hood on your tank to avoid loss.

Akin to the Hatchetfish is the Carnegiella Marthae. This popularly known Blackwing Hatchetfish originated in the Amazons, Orinoco, Peru, Rio Negro, and Venezuela. The Hatchetfish from this breed grow at 1 and ¼ inches in size. The Hatchetfish are small fishes, which have a black chest. The ridge like parts or keel is also black. The tank species relate better in peaceful waters, or fish of his breed. The fish is small, and has a quiet and calm nature. Hatchetfish of this breed will accept all foods, and prefers soft water condition, yet will relate to insignificant acidy waters. The fish breeds similar to the Hyphessobrycon. There is no available information as to how the fish breed however.

Gasteropelecus Levis or the Silver Hatchetfish comes from the lower regions of the Amazon. This fish grows around 2 ½ inches in size. The silver colors of this fish are setoff by blue-blackish thin parallel stripes. As long as tank conditions are good this fish can habitat in communal tanks. The vigorous fish feeds in the same way as other Hatchetfishes. The water conditions are expected to be the same as other Hatchetfishes as well. This fish in particular has no records of breeding in aquariums.

Outside of the Hatchetfish rests the Family of Cyprinidae. This family includes the Carp-like fish and the Carps. The fish come from a large body of bony families, which spread out through the lands of North America, Asia, Europe, and Africa. This classical fish have pharyngeal bones, which make up for teeth. A few types of Carp fish have a set of barbel fins, which make up for adipose fins. Carps grow up to 8 feet.

The Indian Mahseer Carp known as Barbus tor is the largest Carp breed. Carps are freshwater fish, which includes the family of minnows. The fish sometimes have round scales, which include soft fins. As well, the fish have toothless jaws. Minnows are freshwater baitfish akin to the carps. Harlequin fish presents some stress in some areas of fish care.

Chapter29 - Harlequin Fish Care and Aquariums

How to upkeep freshwater fish?

Harlequin fish or Rasbora Heteromorpha groups come from Thailand, Sumatra, and the Malayas. The fish are smaller breeds, which grow around 1 ¾ inches in size. Harlequin fish is one of the aquarium keeper's favorites, since the fish have colorful figures. The fish are shaped like wedges, which blue-black shades setoff its rosy pink and violet forms. Harlequin fish are easily trained; as well, the fish do well in communal tanks. The species however are beautiful formed and colored that residing in a sole tank could produce natural effects to your home area. The fish will dine on all foods, and prefers water conditions such as soft water, sensibly acid waters, and peaty waters. Harlequin fish are not much for breeding. The fish pair in well-conditioned waters, or peaty waters. The balance preferred is pH-6, pH-2, or hard water at 40-ppm. Harlequin fish mate while turned upside down at a leaf surface. The fish typically lay less than one hundred eggs, which are fry in one day. The Harlequin fish group is commonly referred to the Red Rasbora fish.

In addition to the Harlequin, is the Cobitidae family. This fish will help keep tanks clean by gnawing at algae. The scavengers are similar to Carps, in that the fish have teeth. This family of fish also has four barbel located in its upper jaw. The fish are akin to any European freshwater Cyprinids. Cyprinids are family to minnows and Carps, which the fish sometimes have round scales, softer fins, and toothless jaws. Spiny Loach is the family of Cobitidae. This fish composes bifid spines, which is located beneath the eyes. The bifid will erect from its folded, flat position if the fish is put to the test. Predatorily fish will not like the results produced by this fish in the event they decide to challenge the Spiny Loach. Spiny Loaches and Cobitidae fish tend to surface often to seek oxygen. The fish prefer to live in murky, mud-spattered waters. The murkiness and mud limits oxygen, which is why the fish surface often. Weather Fish is amongst the group of Spiny Loaches, which this fish will not adapt well to atmospheric situations, which cause stress.

The Loach fish include the group of Acanthophthalmus Semicinctus family. The

fish come from the east parts of India and grow up to 3 ½ inches in size. The fish is popularly called the Half Band Coolie. The Coolie fish have bodies shaped like a snake, which the body covers yellow and black marks. You can find the subspecies of the Coolie family in the Kuhlii family. Kuhlii fish tend to fall into the Salmon category, since the fish may have pink bellies, as well as yellow and black marks. Coolie fish are communal tank fish, which have a peaceful nature. The tanks should be limited to plants, since this fish will hide in closed spaces. You should at deposits of compact decomposed organic debris at the bottom of the tank. (Peat) These fish tend to eat Tubifex and algae, which makes the fish a good cleaning system. As well, the fish will eat all foodstuffs. Coolie fish do not place a high demand on water condition, yet they tend to do well in moderate or neutral waters. The water temperature should remain at 78 degrees Fahrenheit.

In addition to the Coolie fish is the Clown Loach, Tiger Botia, Siluridae, and so on. Over the Internet, you will find a wide assortment of information related to freshwater fish, which include tropical fish, Coldwater fish, sea, or saltwater fish.

<u>Chapter30</u> - How to Maintain Aquarium and Fish Care Info

Since fish aquariums have toxic buildup from natural and unnatural sources, it is important to have filters added to your aquarium to prolong your fish's life. In all there are a couple types of filters, which include the biological filters and the chemical/mechanical filters.

How biological filters work?

Biological filters work by supplying denitrifying system. In summary, biological filters remove nitrogen from water. Denitrifying converts nitrates into ammonia, nitrites, and nitrogen. Now, you may see that ammonia and nitrites are toxic, yet fish adapt well to nitrites since the toxic converts to non-toxic. Biological filters works by using soil-enriched bacterium, which is used to convert ammonia compounds, accordingly converting them into nitrates. The conversion makes nitrogen available for fish. Nitrogen is colorless and odorless gas, which non-metallically chemicalizes as elements to produce natural resources.

Mechanical filters remove solid waste or particles from fish water. To see a list of mechanical filters go online and look for foam filtration cartridges, gravel, and/or floss. In fact, you will need both floss and gravel with various filters.

Chemical filters activate carbons. The filtration system includes absorbents to remove ammonia, as well as water softeners. Since fish water comes from ground or tap water, it is important to purify your water supply to maintain healthy fish. You can also check out water purification systems, which can minimize chemical buildup.

Types of Filters:

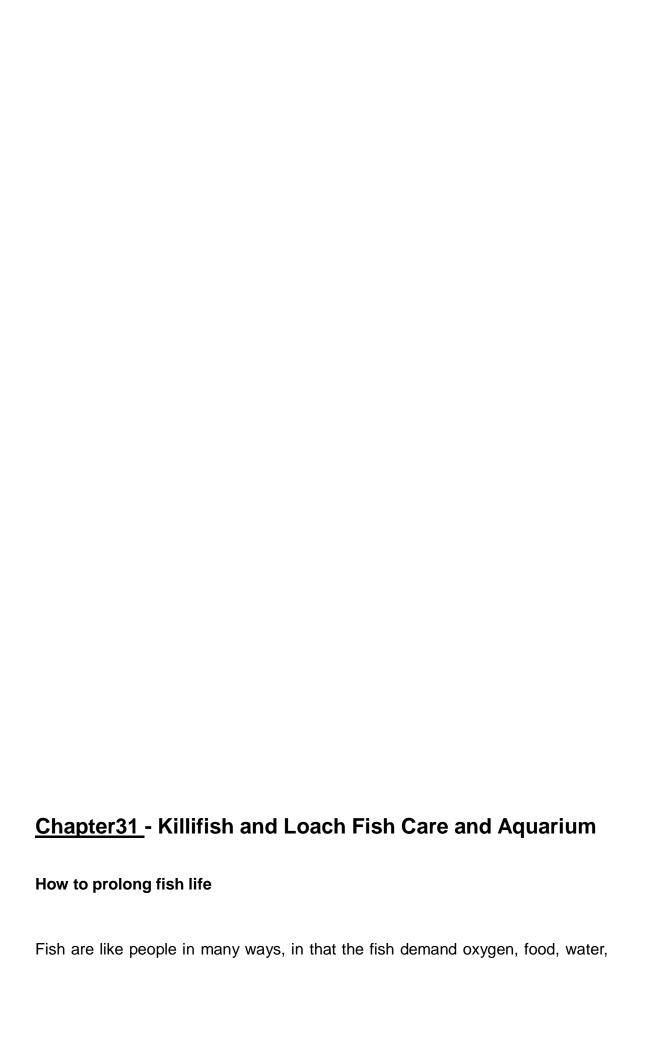
Aquarium filters include corner filtration, outside powered filters, under-gravel filtration, foam, canisters, and flow-through filtration.

How do the filters work?

It depends on which product you purchase, however corner filtration works by supplying air. The air creates an insignificant vacuum cleaner, which extracts the water into the corner filtration. You can combine Floss filtration to activate carbons, which will assist in filtering the tank water. Combining the filters will supply you a biochemical reaction, which slows the growth of bacteria. Corner filtration supplies ventilation. The filters however are limited in their ability to act, therefore you should use gravel combined with floss and corner filters to get the best result.

Electrical pumps, or outside powered filters assist by extracting huge amounts of water through filters, which passes over filtered floss and carbons that supply sufficient water supply. The pumps will provide ventilation, as well as support a larger array of fish, more so than other filters. All filters should be changed responsively, since dirt buildup decreases the filters ability to perform.

You want to add gravel to the bottom of your aquarium, since it will slow bacteria growth. Under-gravel filtration works as a vacuum to extract water from gravel. Use gravel since it will supply your fish with adequate biological and mechanical aids without using chemicals. This filter has its downsides, which includes the use of vacuums to remove debris. Unlike the pumps, this system will not support all your fish in the tank. Rather, the filters support a smaller amount. Foam filtration attaches to air supplies. The supply is then situated in the aquarium to supply ventilation and biochemical reactions that filter growth of bacteria. Foam filters are biological kin, which supply mechanical filters to trap rubble. Canisters are filters which combine mechanical, biological, and chemical filtrations by lining with a pump. The downside is this pump requires consistent attention, otherwise it will overload fairly easy. Flow-through provides continual drainage solutions and water supplies. The system supports a large body of fish, yet the water must be conditioned. Ironically, this system is not one of the most recommended. Killifish is another type of fish for aquariums, yet the killifish are hard to find.



cleanliness, tender loving care, associations, and so on. The primary source of fish survival however is water. Freshwater fish are like humans, in that the fish cannot digest large volumes of saltwater, yet some freshwater fish can tolerate a smudge of salt. Saltwater fish on the other hand, demand saltwater. The fish come from oceans, seas, and related waters all over the world. Freshwater fish come from ponds, streams, lakes, rivers, etc. Some of the fish available include the Killifish and Loach fish.

Loach fish come in a wide variety, including the family of Cobitidae. The prime fish are made up of nocturnal and are relate to catfish. The fish primarily live at the bottom of waters, which barbels help them to sift through gravel. The Kuli Loach is one of the Loach fish that has a long snake-like body. The fish is a favorite aquarium choice. Some people describe the Kuli as having a worm shape body. Kuli does not tolerate bright lights, and prefers hiding areas. The fish tends to habitat in the back corners and enjoys cave environments. The fish is shy in nature, unless you keep fish of its kind in the same tank. Kuli enjoys feasting on Tubifex. The fish has a thin, long body, which grows up to 3 inches in size. The fish has a peaceful nature, and lives will in communal tanks.

Loach fish come from the family of Cobitidae, Acanthophthalmus Semicinctus, and the Botia Macracantha group, which you can find these fish in most pet stores. One of the easiest to care for in the Loach category is the Botias. This fish enjoys moderate hard water, or alkalinity based water. It is recommended that you avoid acidity waters. In addition, the water temperature should remain at 70 degrees Fahrenheit and no higher than 75 degrees Fahrenheit. The Botia makes a welcoming communal tank neighbor. Botia also includes the Tiger and Clown Fish. To learn more about these fish check online or consult with your supplier.

Kuli Loach Preferred Water conditions

Kuli enjoys slight acidy waters, or neutral water, and does not have a pH

preference. Tank condition: This shy fish does not care for bright lights; therefore, you should give him a home in plant dense aquariums with plenty of areas to hide.

Feed:

Kuli takes delight in feasting off Tubifex, yet he will eat frozen foods, as well as a selection of dried foods.

Killifish come from the family of Cyprinodontidae. The fish is widely distributed and has the brightest colors of all freshwater and saltwater fishes. This fish is ideal for starters, since it will dwell in communal tanks without a problem. The fish habitat in African Sub-Saharan waters. The streams dry out during particular seasons, which this fish dies. Yet the offspring or spawns live well in dry climates, which resurrects the Killifish.

The fish will live in small tanks, and desire water conditions set at 70 degrees, or 85 degrees Fahrenheit. The fish live longer in 70-degree temperatures. Killifish grows to 2 or 4 inches in size.

Water conditions

Peat filtered waters is ideal, yet the fish will tolerate soft, hard, or slightly acidy waters.

Food

The fish will eat a wide assortment of frozen and dried foodstuff. The downside about the Killifish is that you will rarely find this bred in pet shops. The AKA (American Killifish Association) group can help you find areas where the fish are sold. Learn about Leopard Balistidae.

Chapter32 - Leopard Balistidae Fish Care and Aquarium The Leopard Filefish caught my interest. This bona fid ugly marine fish comes from the family of Balistidae. The fish is commonly found in the Amanses Sandwichiensis group. The fish dwells in the Pacific, Atlantic, and the Indian Oceans. The fish is also found in the Red Sea. Ironically, this fish has a friendly biological nature; and will dwell with other aquarium fish. The Gold Rim has its

ugly nature, yet a bit more attractive than the Leopard Filefish. The Filefish feeds on most foods, including omnivorous and sting sea anemones.

Environmental conditions

Filefish prefer to live in water temperatures set between 75 and 82 degrees Fahrenheit. The water density should be set at 1.023 and the pH balance around eight. Filefish must have substrate and good-lighted areas, as well as sandy-bottomed tanks. Filefish prefer to live in well-furnished houses, as well as sheltered structures in vertical nature.

Feeding:

The Leopard Filefish enjoy the same foods as the Gold Rim, i.e. omnivorous foods, sting sea anemones, and so on.

The fish is a sociable critter that has a horn-like structure on his forehead. His eyes are colorful blue with brownish-orange rims. Filefish also have erect large pelvic spines, which have flapped skin lose around the area. The Gold Rim fish comes from Indo-Pacific as well, and is not kin to the Leopard Filefish.

Frogfish is another group of ugly fish. The Frogfish kin to the Antennariidae family, and is listed in the Antennarius spp. Group. In fact, the Frogfish makes the bona fid ugly Leopard Filefish look good. This fish resembles a combination between a fish and frog. The fish is a member of the genus and is found in warm areas. The fishes are shaped like clumsy and squats combined really, and include a fishing rod. Frogfish has growths on its thick skin, which slopes perpendicularly up to its open mouth. The fish has no problem camouflaging amongst other fish. He grows around 5 to 8 inches in size and has no known sexual preference.

Environmental Conditions

You will need to seek advice from your supplier. This fish differs as to what type

of environment it prefers.

Frogfish lurk behind rocks; therefore, the aquarium should have a surplus of rocks so that fish will have a hiding space to hunt its food. Frogfish can overpower larger fish groups; therefore, you should seek advice as to what types of fish to house with this critter. In addition, the fish is finicky in tank eating; therefore consider feeding him strips of meat and/or fish.

This is territorial fish, which can keep with kin species of peaceful nature. The first experience, i.e. at the start the fish should have his own dwelling without social gathering.

Some of the interesting marine fish include the Boxfish or Trunkfish, and the Pufferfish. The Boxfish/Trunkfish derive from the Ostracion spp. This fish is of the genus that dwells in the tropical Indo Pacific Oceans. The Boxfish has a yellow frame that is sprinkled with block spots. In fact, his eyes are rimmed in darker yellow, yet the eyes are blackish. The environmental nature includes water temperatures at 75 degrees, 82, and/or 86 degrees Fahrenheit. The waters density should be set at 1.018 or no higher than 1.030. The fish expects good lighting, and the tank should have substrate, sandy bottom. Don't forget to supply sufficient hiding space. Boxfish on omnivorous goods, more so than other foodstuff: The fish are sociable, and have interesting eye behaviors. **NOTE:** Few of the Trunkfish, Loach or Boxfish have unsociable nature and are vicious.

Chapter33 - Loach Fish Care and Aquariums

How to Maintain Loach Fish

Loach fish come from the family of Cobitidae, Acanthophthalmus Semicinctus, and the Botia Macracantha group. Online you will find helpful information that will inform you about the different types of fish, which in this article we will cover, a small selection.

Acanthophthalmus Semicinctus

Acanthophthalmus Semicinctus includes the various Loach families. Loach fish such as the Acanthophthalmus Semicinctus breeds come from India. The fish mature to 3 ½ inches in size. Acanthophthalmus Semicinctus is commonly known as the Half Band Coolie fish, which the off breeds include the European group. Half Band Coolie Loaches has a body like a snake. The body resembles an Eastern Coral Snake, in that the yellow and black shades offset a pinkish colored belly. Acanthophthalmus Semicinctus includes the sub-species and distinct species. Acanthophthalmus Semicinctus are generally communal fish, which have a calming nature. The tanks however should have minimal plants, as well as deposits of debris. (Peat) These breeds of Half Band Coolies tend to hide. The fish enjoy feasting on photosynthetic organisms, as well as Tubifex. The fish will eat all sorts of food, yet they require a clean water system. Half Band Coolie fish often do not stress water condition, yet the fish are inclined to moderate or neutral waters. The water temperature should remain at 78 degrees Fahrenheit.

Botia Macracantha is commonly known as the Tiger Botia or the Clown Loach fish. The fish grow around 4 ½ inches and size and come from Borneo and Sumatra. The fish have similar colors compared to the Tiger Barbs. The body color is golden yellow, which is offset by 3-shadowy bluish black stripes. The Botia Macracantha of this breed makes a nice friendly communal tank resident. However, these fish are skirmish to light and demands a place to hide. If you are looking for a hunter, thus the Botia Macracantha Tiger of Clown fish is your choice.

Water conditions

Botias enjoy moderate hard water, or alkalinity based water. It is recommended that you avoid acidity waters. In addition, the water temperature should remain at 70 degrees Fahrenheit and no higher than 75 degrees Fahrenheit. This is not a breeding fish.

Siluridae comes from the family group of fish known as the Asiatic. The fish is also akin to the European catfish. These particular species is now one of the popular fish sold for aquarists' usage.

In fact, the Siluridae rests more along the family side of the naked skin European catfish. The fish family from Asia typically enjoy climatic conditions, including flora, and faunas.

Into the bargain are the algae gnawers. The gnawers include the family group of Loach fish known as the European freshwater Cyprinids off breeds, such as the Cobitidae. The fish hunters are comparable to the Carp group, in that the fish have teeth. Cyprinids sometimes have four barbels, which is located around its upper jaw. Cyprinids are also kin to the minnows. The Minnows, Carps and sometimes the Loach fish have rounded scales, soft fins, and toothless jaws. The Spiny Loach compiles bifid spines, which is positioned just under the eyes. Spiny Loach's bifid erects from a flat folded position when threatened. The Spiny Loaches request an area to surface, since the fish naturally live in murky, mudspattered waters. The murkiness and mucky waters sets boundaries for oxygen intake. Amongst the spiny loach is the weather fish. These fish, like other types of loach fish do not take kindly to stressful waters.

In addition to the Loach, fish is the body of Glass Catfish. This group of fish is listed under the family of Kryptopterus Bicirrhis. Knowing the difference between marine and freshwater fish can make a difference.

Chapter34 - Marine Fish Care and Aquarium

Marine fish include the Acanthurus leucosternon and Acanthurus lineadae. The first breed is the Powder Blue Surgeonfish. The Surgeonfish come from the family of Acanthuridae, which dwells in the tropical Indo-Pacific Oceans. This pressed oval shape fish has a small mouth and pectoral fins. The fins are long. In addition, the fish has low, shallow notches around his caudal fins. Powder Blue Surgeonfish have black masked face, sky blue body, and yellow stripes around the lower jaw and striped down the scalpel spine. White bars contrast the multicolors. Powder Blue Surgeonfish grow up to 11 ¾ inches in size.

Powder Blue Surgeonfish Environmental Preferences

Powder Blue Surgeonfish prefer water temperatures at 77 degrees to 84 degrees Fahrenheit. Powder Blue Surgeonfish prefer substrate environments, as well as a pH balance at 8.2 to 9.4. Water density should be around 1.020 at all times. The tank should have good lighting. As well, the tank should be large and have a sandy bottom. The Powder Blue Surgeonfish is a good tank fish, since it feeds of algae. The downside is the fish will eat smaller creatures. The fish will also eat the flesh of Enchytraea mussels. In addition, the fish will eat particular shrimps, such as the Mysis. Powder Blue Surgeonfish will also eat dried foodstuffs, as well as vegetables.

Powder Blue Surgeonfish has a biological nature. The fish is energized and always on the run. This fish prefers to roam on his own, therefore if you attempt to put this fish in a tank with other fish, beware.

Acanthurus lineatus

The Clown Surgeonfish come from the family of Acanthuridae. The fish habitats in various areas of the Pacific Indian Oceans: The Clown Surgeonfish is somewhat ugly, yet his ugliness is appealing if that makes sense. The fish has electric or powdered blue, violet, or gray-blue colors. The fish has yellow-brownish pinstripes as well. The fish grows up to 8 inches and has a narrow caudal fin. Clown Surgeonfish prefer water temperatures between 75 degrees and 82 degrees Fahrenheit. Water density is expected to be at 1.023 and the pH balance level over eight. The fish expects good light, and demands sufficient hiding corners, as well as luxury tank furnishings. The fish prefers to eat zooplanktons, and you should vary the foodstuff, since this fish does not adapt easily to aquarium foods. NOTE: Zooplanktons consist of microscopic animals, which include protozoan.

Clown Surgeonfish does not acclimatize well in aquarium environments. The fish

has a nervous nature, which includes an anti-social side. The fish should reside with his own kin. You should take care when handling the Clown Surgeonfish since its spiny tail will inflict painful wounds.

The Gold Rim Surgeonfish is a family to the Acanthuridae fish, and is found under Acanthurus Glaucopareius. The tropical Indo-Pacific Ocean fish has a violent and brown tinted shade that offsets blue/orange fins. The fins have white edging that offset wide white striped cheeks. The stripes also set off the mouth and eyes. This critter grows up to 13 ¾ inches in size. Gold Rim fish dwell in water temperatures set between 75 and 77 degrees Fahrenheit. The pH level should be set at eight and the density should be around 1.027. You want to arrange the bottom of the tank with sand and stones, as well provide these critter good lights. The fish also demands a surplus of furnishings, as well as substrate environments. The fish demands that you provide him a variety of foods, since he is finicky. In addition, the fish has a biological nature and is known for is activeness swimming. Check out the Molly and Guppy in the marine category.

Chapter35 - Mollies, Guppy Aquarium, and Fish Care

Mollies come from Poecilia spp. and the Poeciliidae family. The Mollies is one of the favorite tank fish, since the fish is similar to the swordtail fish. The swordtail comes from the Xiphophorus helleri group. The molly however does not have a swordtail, rather a larger fin, known as the dorsal. The fish has a variety of shapes, and is reaches up to 4 to 4 ¾ inches in size. The males only grow to 3 1/3 or 4 inches at most. Mollies male and female counterparts differ in color, size, and gonopodium. The fish can live in extreme wide-ranging environments, and will suit in estuaries habitats. The water temperature desired of the molly is 72

degrees, not succeeding 82 degrees Fahrenheit. Mollies also prefer hard water, which the pH level should be set at seven or eight. The fish will reside in hard waters, which salt is needed. Mollies enjoy house furnishing, lights, well-planted areas, thin layers of humus, and so on.

Feed:

Mollies will feed on vegetables, including spinach as well as algae. The fish are omnivorous in nature. Mollies have a biological lively nature, which the schooling fish desires constant water flow. The fish are livebearers and breed successfully providing plenty spawns. In addition, mollies are sociable, yet the fish should be kept in communal tanks where large schools exist.

Guppy fish listed under Poecilia reticulata is kin to the family of Poeciliidae. The fish comes from the waters in Guyana, Venezuela, Brazil, Trinidad, and Barbados. The environment desired is still, flowing waters. The fish prefer water temperatures at 68 degrees and no higher than 75 degrees Fahrenheit. The pH level should not succeed eight, nor go below seven. The water preferred is hard water, which the fish can live in extreme hard water conditions as well. Tank: The fish prefer illuminated tanks with plenty of furnishing. You should store the fish in a medium tank and provide them rich vegetation and plants. The fish will eat all sorts of foodstuff. Biological nature; The biological loose school natured fish will be on the constant go, therefore he does not have time for long-drawn out schooling arenas. The fish are good breeding fish, yet beware, since Guppy will eat their own youth. You should keep Guppy fish in tank aquariums where other live bearing fish reside.

Aquariums

Nowadays the aquariums are ecosystems include a wide assortment of technology advanced qualities. Air and water pollution has increased the need for aquarium life, which in accordance technology has advanced the tanks to meet the high demand of aquarists. Tanks today are constructed by technological

experts, which design real water aquarium environments. Most tanks sold today, include advanced electrical circuits, plugs, filters, air supply, etc. The market is saturated with tanks that will allow you to raise or lower the water temperatures. The light switches enable you to vary in intensity, thus lowering or increasing the light production.

In addition, you have a wide array of on and off switches, which utilize mechanical timers that permit aquarists to easily adjust water temperatures and light intensity.

One advantage of tanks today, is that most tanks are equipped to handle nearly all fish available on the market. The problem is all fish are different and require their own special attention. Therefore, you should never group fishes with fish that prefer to live with their own kind. In addition, seawater/saltwater and freshwater fish differ. The freshwater fish include the Tropical and Coldwater fish.

Chapter36 - Nannostomus Fish Care and Aquariums

How to care for Nannostomus species?

If you are considering tanks and fish, care is sure to learn more about the types of fish on the market. Having an overall ideal as to the type of fish can help you handle fish care and aquariums with less after. Keep in mind that aquariums today are equipped with electronic devices, switches, controls, etc, which enable you to use the components to maintain your aquarium. Still you will need a test kit, and a few other items to keep up your aquarium. In addition, fish are all different, yet some species are similar in comparison. Again knowing the species

can help you maintain your aquarium as well, since some fish prefer hard water, soft water, acidy water, alkalinity water, and so on. To help you relate to fish and to work toward maintaining your tank, we can review a few types of fish.

Nannostomus include the Eques, Marginatus, Unifasciatus, Trifasciatus, and the Beckfordi species. Nannostomus Eques originated from the Amazons. The fish are commonly referred to as Nannobrycon Eque, or Poecilobrycon. The Tube Mouth fish as he is commonly named grows at a size of 2 inches. The species are sometimes called the Brown-Tailed Pencilfish, or simply Pencilfish. This fish has a stretched out snout and swims in the tank at an angle. Nannostomus are peaceful fish, which tend to prefer the same water conditions. The water should be set between 78 degrees and 80 degrees Fahrenheit. The male fish tend to be slimmer than the Nannostomus female. In addition, the fish spawn on broadleaf plants. Check out the Ludwigia plants and the Hygrophila.

Nannostomus Marginatus is commonly known as the Dwarf Pencilfish. This fish comes from the western areas of Guiana. The fish is of the smaller breed in that they usually grow one, ¼ inches in size. Still, this stocky breed has some pretty colors that make him appear big. The fish has black stripes, which red colors sprinkle over his fins.

Nannostomus Margin is a peaceful fish, and a bit introverted. Due to his introverted nature and peaceful side, it is best to keep the Marginatus in tanks where smaller fish dwell. The Nannostomus Marginatus feed and expect water conditions in the same way that the Nannostomus Anomalus expect. Nannostomus Marginatus female fish tend to present a lighter color than that of her male counterpart. This fish is ideal for breeding.

Nannostomus Unifasciatus is commonly known as the Tail-eyed Pencilfish. As well, the Nannostomus Unifasciatus is sometimes called the One-Line Pencilfish. This specie comes from the Amazon and Guiana. Nannostomus Unifasciatus

grow around 2 inches in size. This specie in particular is one of the most colorful breeds on the market. The fish has a lower lobe, which is brilliantly decorated with colorful spots. The fins enlarge.

Nannostomus Unifasciatus has a friendly nature and is suitable for communal tanks. The fish feed and expect water conditions comparable to the Nannostomus specimens. To date this fish is not a choice of breeding angle, since studies are inconclusive. Yet, if you purchase the fish, you may monitor its behaviors on your own to learn more.

The Nannostomus Beckfordi is popularly known as the Beckford's Pencilfish, or the Golden Pencilfish. The fish matures at 1 ¾ inches in size and comes from Guiana and the Amazon Basin. This breed is peaceful in nature, which makes him subject to communal tanks. The hardy specie however has a fragile appearance. Still, he can hang his hat in communal waters without a problem.

Chapter37 - Pomacentridae Fish Care and Aquarium

Members of the Pomacentridae family include the Amphiprion Rubrocinctus and the Amphiprion Ocellaris. The Amphiprion Rubrocinctus is better known as the Clown Anemone Fish. The second fish is commonly referred to the Red-Gridled Anemone.

The Clown fish are biologically natured to dine off smaller fish. The Clowns come from the Australian, Japan, and Indo-Pacific waters. Clown fish tend to have rectangle bodies, which its colors are bright orange. The head area is often lighter orange. The fish have black edges, which are offset by white

perpendicular bars. The head and eyes is where most of the white bars produce its color. Clown fish grow up to 3 inches in size. The Clown fish in fact was characterized in "Finding Nemo." Nemo and his father are perfect examples of the Clown Anemone.

Clown fish tend to prefer water temperatures between 77 and 82 degrees Fahrenheit. In addition, the fish prefer a ph balance at eight and no higher than 8.5. The water density should be set at 1.0 23. The fish should be situated in a tank of fish that all enjoy strong lighting; as well, the fish prefers sandy areas. Do not forget to add a surplus of furnishings and substrate to the tank, since this is one of the high maintenance fish. Considering "Finding Nemo" again, since you will see the fish prefer luxury.

The Clown fish has next to zero sexual preferences. The fish's behavior is remarkably distinguished from other fish. Clown fish seem to closely associate with chemicals and mechanisms of two distinctive organisms. The fish demand a capable dwelling, i.e. you should keep fish of his kind in the same tank and avoid putting sea anemones, including the giant anemones. These fish pose risks to the Clown fish.

Red-Gridled Anemone comes from the Pomacentridae family. This particular specie derived from the Japan, Australian, and Indo-Pacific Oceans. In tanks, the Red-Gridled desires water temperatures between 75 degrees and 86 degrees Fahrenheit. Water density desired by the red-Gridled is around 1.0 20, or 1.0 23. The pH balance should rest at 8.3 and no higher than 8.6. This fish is similar to the Clown fish in that the Red-Girdled fish prefer luxury housing with plenty of furnishing, quality lighting, and so on. Stones are a plus. The Red-Gridled fish have a deep body, which its colors are similar to the Clown fish. The head is pale orange, while the body is brighter orange. The head and eyes differ slightly than that of the Clown fish, in that, the eyes are yellowish, while the head is has perpendicular white bars. To fish grows about 3 inches in size, and does not have

sexual preferences.

The Pomacentridae breeds also include the Orange Fin Anemone and the Black Back Anemone. It is a matter of opinions; however, the Black Back fish is prettier than the Orange Fin. The Orange fin has light yellowish-orange flavors with vertical white bars near the upper area of the eyes and lower section of the body. Black tints highlight the white bars. The Black Back fish has a white vertical bar in the same proximity as the Orange Fin.

In addition, the Black Back has glowing orange contrasted colors, which black patches highlight the orange body; as well, the fins have a yellowish tone. The downside is the fish lose its color during maturity, at least the head bars whitest color is lost.

The Orange Fin fish swim the tropical Indo Pacific Ocean, while the Black Back fish roam the Andaman Seas.

Chapter38 - Puntius Fish Care and Aquariums

How to care for Barbs and Puntius

If you intend to own fish it is important that you learn fish care and how to upkeep aquariums. Fish are living beings that require food, oxygen, water, attention, and a clean atmosphere. If you are not prepared to maintain fish health, water, and aquariums, you are probably better off collecting rocks. The advantage you have today is that most modern aquariums are self-sufficient. The tanks include switches and controls, which enable you to regulate lights, filters, food, dosage, and so on. In addition, today's tanks enable you to handle a large volume of plants and fish without stressing over water conditions, and purities. Test kits are

available that enable you to control the waters chemical intake. To get started we can consider a few types of fish to help you better select breeds.

Barbs are one of the largest groups of fish that offers variety in aquarium waters. The fish are typically happy-go-lucky creatures, which have colorful designs. The active fish are the easiest to feed; as well, the fish are not finicky when it comes to water conditions. Furthermore, if you are searching for breeder, this is the fish of choice. Barbs tend to grow 2 inches, 3 inches, or larger. The barbs should be separated, and grouped in communal tanks. In other words, group the smaller barbs, separating them from the larger barbs. The larger species are good-looking, yet these critters tend to rip apart aquarium goodies, such as plants. The fish have tendencies of steering up trouble in tanks; therefore, it is wise to read all available information related to the larger barbs. The fish will breed, which the fry must be fed infusoria at the start. The larger barbs can digest saltwater shrimp.

How they live

Barbs prefer to live in larger swimming areas, which are well oxygenated. If you group the barbs in smaller tanks, they will feel stressed and may cause a disturbance.

Eggs

Barbs generally lay eggs that will stick, therefore fish owners should place pebbles at the bottom of the tank, as well as a high volume of plants. Willow root and nylon are optional. Since these greedy fish will eat their own, after spawning is recommended that you remove the adult fish from the tank.

Puntius Conchonius is commonly referred to the Red Barb or Rosy Barb fish. The fish derived from India, and grow around 2 ½ inches in size. In good tank condition, the fish will light up an environment with their silver colored bodies, which produce covers of deep rosy red. At times the fish change colors to a pale

greenish shade. Black tints setoff the fishes fins. This energetic fish has a calm and quiet nature. Due to his boisterousness side, you want to house him with fish his own size.

Water conditions

The Puntius tends to dwell in reasonably, or neutral alkalinity waters, as well as moderate hard waters. The water temperature should be set at 78 degrees Fahrenheit. The fish have a vigorous demand for foodstuff, since he will eat all foods given to him. If you are breeding fish for the first time, this is the choice fish. The fish will spawn around 300 layers.

Akin to the Puntius Conchonius is the Puntius Nigrofasciatus group. These fish are commonly called the Purple Head Barbs or the Black Ruby. The fish group comes from Ceylon and grows around 2 ½ inches in size. The male counterparts differ in color. The female group tends to present dark stripes in a vertical line over a yellowish-gray figure. This fish is also easy to breed and will tolerate most water conditions, as well as foods. Need a Silver Dollar?

Chapter39 - Silver Dollar Aquarium and Fish Care

How to maintain fish

Silver Dollar is one of the Metynnis Lippincottianus fish species. Metynnis Lippincottianus or Silver Dollar fish comes from Amazon Basin and grows up to five inches in size. The Silver Dollar is one of the popularly sold fish on the market. The fish has a strong pressed oval shaped body. Silver Dollar fish are passive creatures, which like to live peacefully with other fish. In addition, the fish prefer to live in a large tank and reside with their own species. This fish has a nature side, which promotes him to destroy plants, which include Vallisneria plants. In a couple of days, you will be purchasing new plants. Therefore, it is

important that you feed this fish when he is hungry. The little fellers like lettuce, sprouts, spinach, as well as meaty dishes.

Metynnis Lippincottianus tend to enjoy moderate soft water conditions, as well as faintly acidy waters. Metynnis Lippincottianus fish will breed, as well as produce hundreds of eggs at a given time. The eggs usually hatch in a few days. Prepare for an army.

Shreitmueller or Metynnis Hypsauchen originates from Amazon Basin areas. The fish grow 6 inches in size a have strong pressed oval shaped bodies. The fish has behaviors similar to the Metynnis Lippincottianus; as well, their feeding patterns, habits, etc are similar. In addition, Metynnis Hypsauchen has similar water condition demands as that of the Metynnis Lippincottianus fish.

The only significant differ between the Metynnis Lippincottianus fish and the Hypsauchen is that these fish lay thousands of eggs in one hatching. This requires that you prepare for a larger army, which the hatchlings must have a water temperature at 82 degrees.

Gymnocorymbus Ternetzi

This fish group is commonly known as the Black Tetra. The fish is also known as the Petticoat and Blackamoor Fish. Gymnocorymbus Ternetzi come from Bolivia, Argentina, and Brazil and grows up to 2 inches in size.

The fan-like fins, anal, and dorsal is often black. The jet-black species have 2-vertical black coated bars that line the silver sides, or flanks. This is a good tank fish; however, the fish have instincts to nibble at other fish fins. The fish enjoy dry foods, as well as a variety of foodstuff. Gymnocorymbus Ternetzi does not place a high demand on the water conditions. The water temperature should remain at 68 degrees or 70 degrees Fahrenheit. You can breed these fish in moderately hard waters or neutral waters. The fish lay hundreds of eggs, which hatch in one

day. Hatchlings require infusoria foodstuff at the start.

Pristella Maxillaris otherwise known as X-ray fish, Pristella, or Goldfinch come from the Northern South American areas. The fish only grow around 1 and half inches in size. Pristella have transparent bodies. This fish is ideal for commune tanks, since the fish is passive in nature.

Pristella Maxillaris will feast on all foods, and require water conditions or temperature set between 72 degrees and 78 degrees Fahrenheit. This fish lays up to 500 eggs and is one of the easier to breed specimen. The hatchlings are usually delivered in one day.

In all you will find a wide array of fish at pet stores. Each specimen has its own needs, yet many are similar in nature. Additional fish include the Hemigrammus Erythrozonus species, Hyphessobrycon Flammeus breeds, and the Paracheirodon innesi. Hyphessobrycon Pulchripinnis is specie available. If you are just starting out avoid the Piranhas and the Characin species. The carnivores will eat other fish, as well as fleshy dishes. Piranhas are better left for fish experts to maintain.

Chapter 40 - Specimens in Fish Care and Aquariums

How to treat Tetra Species

Tetris fish come in a wide variety, which include the Paracheirodon Axelrodi. The fish has a common name known as Cardinal Tetra. This fish type grows 1 ¼ inches in size and comes from the Upper Rio Negro, Columbia, and Brazil. Similar to the Neon Tetra in color this fish differs in that it has a broader spectrum of colors. Unlike Neon fish, the Cardinals have red colors on the cover of their gill. The fish feed and expect water conditions same as the Neon fish. In addition, the fish sex, breed, etc, same as the Neon fish.

Opella Arnoldi

This breed is commonly known as Spraying Characin. The fish grows around 3 inches in size and comes from Guiana, Venezuela, and Brazil. Sprays have elongated fins, as well as a slim body. Spraying Characin feeds on all foods and prefers neutral or soft water conditions.

How do the fish breed?

Spraying Characin spawns on the surface of overhanging leaves. In addition, the fish may spawn at bottom surface area of the aquarium. Spraying Characin prefer to breed in thinly planted aquariums, whereas around 15 gallons of water is added. The level is usually 1 ½ inches below the glass cover. This fish only produces around 15 eggs, which the fish will fall back into the water once the eggs are deposited. In addition, the fish will repeat this procedure until around one hundred eggs are deposited.

How are the eggs maintained?

Once the fish spawn, remove the female fish from the tank. Contrary to mother natures arrangement the male handles egg care. The male will splash water over the eggs. If the eggs fall into the water however, the male fish will feast on the hatch. If you notice the male attempting to eat the eggs, remove him also from the tank.

Egg care

Once you remove the male from the tank, fix an aerator stone in the tank. The stones will promote spray to bubble, which will maintain the health of the eggs. Lastly, you want to remove the male fish again around the fourth day, since the fry will seep into the waters.

Copeina Guttata

Copeina Guttata is known as the Red-spotted Copeina, which this fish comes from Central Amazon and grows around 4 inches in size. Outside of aquariums, this fish grows around 5 inches in size. The fish combines orange-red colors with

yellow fins and bluish-silver body.

This fish is ideal to keep in larger tanks. The fish is peaceful, yet its size demands divert attention of communal tank residency. The fish requires the same feeding patterns and water condition as the C. Arnoldi fish.

How do they breed?

These fish pair, in that the colorful male mates with the female. The male is notable by his red dotted flank. Breeding takes place when the female layers her eggs in the gravel. Flat stone is optional as well. Once the female lays around 300 eggs, she should be removed from the tank. The male should be removed once the fry fish are prepared to swim on his own.

Anostomidae

The fish comes from Central and/or South America. These fish are some of the most colorful fish sold. The downside is the breed is huge, which is not ideal for communal tanks. Sometimes the fish are called Headstanders, since this fish tends to hang his head down while he drifts.

A variety of other market fish are available including the Anostomus Anostomus, Chilodus Punctatus, Lebiasinidae, Nannostomus Beckfordi, Nannostomus Eques, and so on. Typically, purchasers receive instructions with aquarium and fish purchase, read them.

Chapter41 - Starters in Aquarium and Fish Care

Available online you will find starter kits, as well as beginner fish. Fish tanks include nitrogen cycles, which is produced by ammonia, nitrates, and nitrates. Fish naturally produce such chemicals, yet the chemicals must be balanced so that the fish will not become ill or die.

Starter kits are available, which supply additives, such as ammonia. Since, fish tanks require a degree of ammonia, the starter kits are ideal for beginners. Starter fish are also available, which can produce adequate supply of ammonia. If you purchased a coldwater tank, goldfish is a great starter fish.

When you first purchase your aquarium and fish, you want to make sure the nitrogen cycles are sufficient to provide fish the correct amount of ammonia.

Tanks typically include plants, which plants will aid in purifying your tank by absorbing chemicals and providing oxygen. Plants also break down ammonia and water, which the plants will filter ammonia and bacterial in the water. Since, fish produce nitrates or ammonia, the plants will help you maintain a balance. If you ammonize your tank with starter fish, make sure you avoid overfeeding the fish. Use your test kits to check the level of ammonia in the water. Generally, it takes around five weeks or longer to ammonize your tank properly. You can purchase starter kits, or products that will help speed up the process so that you can add more fish.

Once you purchase your tank and prepare to set up the tank, make sure that you have a stand that will securely hold the tank. You want to avoid situating the stand/aquarium near windows, doors, or heaters. This will only increase algae build up, which will make your maintenance job tougher.

Once you tank is setup you can add gravel after boiling and rinsing. If you purchased pre-washed gravel you will not have to boil the gravel before putting it into the take, still you will need to rinse. Start adding the gravel toward the back of the tank for the best results. In addition, it depends on the filter you purchased as to the height of gravel placed at the front of the tank. For instance, undergravel filters require that you use lower levels of gravel near the front of the tank. It is recommended that you install the filters and heaters last after setting up your tank properly. On the other hand, if you purchased powered filters, you should install the filters before adding gravel.

After you add your gravel, you can add ornaments and plants. Make sure you purchase marine based plants. At the start, you should only fill your tank halfway, and then completely fill it after you have added your additives. You want to use pre-treated water, to fill the tank halfway. Once the tank is full, put your

thermometer in place. Next, prime the filters, which you will have available instructions with your purchase.

If you chose other than goldfish to ammonize the tank, then wait a few weeks before adding fish. On the other hand, if you chose goldfish, you can add the fish to the tank to start the ammonize process. You can prepare the fish for tank water by allowing them to float at the top of the aquarium while still bagged. In addition, you will need lights and a hood to fit over the top of your aquarium. In fact, most aquariums today come with hoods included. The hood is used to keep out critters and keep your fish in the tank. As well, the hood will help regulate the tank lights.

Chapter 42 - Surpluses of Fish Care and Aquarium Info

On the market, you will find a wide array of freshwater fish, including the tropical and coldwater fish. Saltwater or seawater fish are also available. Many people who write articles related to fish care and aquariums speak of the damsels (Saltwater fish) as being on of the top starter fish, however, what they do not tell you is that 22,000 species of tank fish are available, which some are more suitable for starters than the damsel. Saltwater fish require a different strategy in maintaining water conditions, as well as feeding. Therefore, we can learn more about the types of fish to decide which fish are more suitable for starters. This article will focus on freshwater fish, since the tropical and coldwater fish are more desirable for starters.

Labeo Bicolor is the Red-tailed Black Shark fish. This fish comes from Thailand

and grows 4 ½ inches in size. The fish is popular for its appearance, which includes a torpedo shaped figure. The fish augments its silvery colors with flag-like dorsal, like that of a shark. These velvety black fish have reddish toned tail, which makes it one of the better specimens. The fish also has a trait that indicates he is not suitable for tank water. For example, the caudal fins are yellow and orange. However, the fish has a friendly nature, which makes him suitable for communal aquariums.

Labeo Bicolor has a mouth similar to a sucker, which makes this fish suitable to maintain purity of tank glass and plants. Labeo Bicolor tend to function well in communal waters, yet he is a bully to the lesser family affiliates. Labeo is a forager. That is this breed will feed off algae, as well as any choice of foodstuff. The upside about the Labeo is that he will help keep your aquarium clean, as well as the fish does not place a high demand on water conditions. Still, if you are choosing this breed, it is wise to select other fish that will adapt to the same living arrangements. It depends on the fish, however some will adapt to soft acidy waters, while others will adapt to hard alkalinity waters. This fish will propagate, yet very little instructions are available, therefore read all details at the pet shop before purchasing this fish for breeding purposes.

White Cloud Mountain Minnows or Tanichthys Albonubes originated in White Cloud Mountain Rivers, China, and Canton. The fish grow 1 ¼ inches in size, and have olive/brown bodies, which brilliant gold top and bottom stripes. The stripes extend to the roots and snout of the caudal or tail peduncle. The White Cloud fish will feast on all foodstuff and have a peaceful nature, making this fish one of the better communal tank species. The fish prefers reasonably hard or neutral water conditions. The temperature should be set at 50 degrees Fahrenheit. Moreover, not to succeed a temperature above 70 degrees Fahrenheit: Many fish prefer temperatures at 80 degrees Fahrenheit. As you can see, the White Cloud Mountain Minnows are more along the Coldwater (Freshwater fish) lines. The females are slightly plumper than its male

counterpart is.

How to breed the White Cloud?

White Cloud fish breed in the same fashion as that of the Brachydanio. To breed Brachydanio, including the Rerio, it is suggested that you supply one half-inch in diameters of pebbles, which equals out to 1 inch coating of pebbles at the lower surface of the aquarium. The depth of water should not go beyond three inches. Furthermore, the fish prefer to breed in longer aquariums.

Chapter43 - Taking Care of Fish and Aquariums

If you own fish and aquariums, you should have already researched to know how to take care of your fish and aquarium. If you have not, then it is important that you research, asked questions, read materials, etc, which will help you provide proper care to your fish and tank.

If you plan to purchase non-marine and marine fish combined, you will need to consider a variety of details. The one thing you want to avoid is inserting aggressive and non-aggressive fish into the same tank. Unless you want to lose money, this is the best recommendation anyone can offer you. Damsels are aggressive fish, which the fish are typically starter fish. Fish owners tend to start with damsels, since the fish are inexpensive and require less maintenance and attention. It is recommended that you only put two of the same or similar fish in a

single aquarium.

In addition to fish, you will need to purchase with your aquarium test kits, buffers, filters, gravel, floss, and so on. It is important to keep fish water fresh. If you have, saltwater fish you will need to add salt every two weeks. In addition, you can purchase fish that will adapt well to saltwater, especially if you have primarily saltwater fish in your tank.

How to maintain freshwater fish?

Common freshwater fish will adapt to nearly any type of tank. Saltwater fish tend to do well in reef tanks. Since freshwater fish will adapt to a variety of tanks, it is easier to take care of the fish. In fact, freshwater fish is recommended for beginners. In the category of freshwater fish are the tropical fish and the Coldwater fish. To help you get started we can consider aquariums.

Considering aquariums

The first thing you want to consider is the area you will place the aquarium. You want to make sure you have sufficient space at your home to spot the tank. You should never put fish aquariums near open Windows, or windows in general. The sunlight will cause photosynthetic organisms (Algae) to grow quicker. You will need to avoid spotting the tank near heaters, or doorways. It is important that you maintain room temperature when caring for fish. You can purchase dehumidifiers and humidifiers, which can help you, maintain room temperature. In addition, when you purchase your aquarium, make sure that you consider filters, floss, gravel, medicines, food, water, etc. You want to make sure that your plug sockets can handle the level of electricity required of fish aquariums.

How to choose filters?

Filters are categorized as chemical, biological, and mechanical. You can purchase external, internal, and under-gravel filtration systems to support your fish aquarium. If you are just starting out in fish care and aquarium care, avoid the under-gravel filters since it will require excessive maintenance, as well as the filters do not produce quality power. However, you can use under-gravel filters in conjunction with mechanical, biological, or chemical filters. It is recommended to learn the actions performed by each filtering system before joining under-gravel filters with another filtration system.

One of the most popular filters utilized is the internal filters. The internal filters include foam cartridge(s) and a diminutive box. The filters work to draw liquid from grills. The liquids are then filtered by the foam cartridge, which exits through the nozzles found at the top of the filters. Beginners could benefit from using the internal filters, since indicators will alert you when to clean or replace the filters. Valves work to produce oxygen, which adds to the advantages of using internal filters. The internal filters also have filtering pads, which remove chemicals while using polyester and/or carbon pads. The strong synthetic fabrics produce low moisture, which absorbs the chemicals. The filters are hardwearing, which means you will not have to replace the filters as often. You will need proper filtration for all fishes, including Tetra.

Chapter44 - Tetra Fish Care and Aquariums

Tetra is popular tank freshwater fish. The fish are brightly colored, which the fish live in tropical regions. The freshwater fish comes from the family Characidae. Still, a variety of tetra families is available. Tetra includes the Anostomidae. The fish was captured from the lands of South and Central America and is sometimes called Headstanders. If you are searching for tank fish this fish is not ideal for communal tanking. If you already own this fish, he lives best in a non-communal tank.

Anostomus-Anostomus

Theses fellers are known as the Striped Anostomus, which come from South America and grow 6 inches in size. The breed has long pointed snouts, as well as a body shaped like a cylinder. The fish has straight lines, as well as circular ends, which are equivalent in size. The body transversely connects to gold and black stripes, which red dots that extend from top to bottom roots of the fish's caudal fins. The colors extend leaving the fish lobes neutral. Like the Anostomidae breeds, this fish also swims with his head suspended down. However when the fish darts forward, his head immediately erects. The Anostomus-Anostomus are ideal to resident with larger fish. Anostomus-Anostomus tend to enjoy lettuce, frozen foods, etc. The fish does not demand specific water conditions. However, the water temperature should be at 78 degrees Fahrenheit. This fish requires additional study, since experts are not clear how the fish breeds or sexes.

Chilodus Punctatus commonly known as Pearl Headstander, as well as the Spotted Headstander originates from North South America. The fish grows around 3 ½ inches in size. Chilodus Punctatus has a body that extends grayish and green colors over his body and sets off the colors with rows of brown specks. At a 45-degree horizontal angle, this fish tends to hang his head down. Chilodus Punctatus is a peaceful critter, which is conveniently stored in communal tanks. Chilodus Punctatus feeding habits include all foods, yet you must mix the meals with spinach, lettuce, or other green foods. Chilodus Punctatus prefer reasonably soft water conditions, as well as slight acidy water. The water temperature should be around 80 degrees Fahrenheit. The female specie tends to weigh more than the male counterpart does. The fish breeds similar to the Characins, yet the eggs are brownish in color. The fish will lay around 200 eggs, which the fry or offspring are hard to nurture.

Lebiasinidae

Lebiasinidae are similar to the Characins family. However, the fish has a lower jaw line, which does not include teeth. The South American fish has some of the prettiest relatives which habitat in tank water. The fish has an extended body. In addition, the Lebiasinidae is commonly known as the Pencilfishes, which methodically the fish has a classification to its kin as being one of the most

disordered fishes in tank water. This particular species is named in the Genus specimen, which the fish is said to change color patterns frequently.

The Nannostomus Beckfordi species are commonly referred to as the Golden Pencilfish, or Beckford's Pencilfish. The fish originated from British Guiana, and Amazon Basin. Nannostomus Beckfordi grows 1 ¾ in size and has an extended body, which golden brown tints navigate through a top to bottom black stripes of edgy gold or red patterns. The fish changes color during night hours. This peaceful specie is ideal for communal tanks, which its hardy nature prefers reasonably soft waters, and will tolerate reasonably hard water. Neutral to insignificant acidy waters are acceptable as well. The water temperature should remain at 80 degrees Fahrenheit.

<u>Chapter45</u> - Tools in How to Maintain Aquariums and Fish Care

The tools you will need to maintain your aquarium include; siphons, scraper, net, bucket, water treatments, and so on. You will also need filters, gravel, ornaments, air pump, plants, etc. The filters will help you to keep out unwarranted chemicals. In all you can purchase biological, chemical, or mechanical filters. The filters help to remove waste, such as debris and ammonia. The filters include under-gravel, internal, and external filters. The better choice filters is the external filters, yet these filters more costly than the internal and under-gravel filters. In addition, you are recommended to combine under-gravel filters with either the internal or the external filters.

How to choose gravel?

It is recommended that you purchase gravel from local pet stores, since the

people working at the pet store can give you the best direction. However, most people prefer the pre-washed products. If you purchase non-washed gravel, you will need to boil, cleanse, and prepare before using. Therefore, pet stores offer you the best products, since the wrong gravel could also affect the pH water levels in your tank. When pH is not balanced it will affect your fish. Still, if you purchase pre-washed gravel, make sure you rinse it before putting the gravel into the tank.

How do I choose ornaments?

Like gravel, you may have to boil particular ornaments before inserting them into the fish tank. Therefore, it is recommended that you seek advice from the pet store reps, or else read the labels.

How do I choose plants?

You want to choose plants that do not grow higher than your fish tank. The plants should also fit your fish tank needs. In other words, purchase marine water plants or fish plants if possible.

How do I choose an air pump?

Again, you should ask the professionals, since a variety of air pumps are available. The pumps work to circulate or move air through turbulence, which increase the rates of oxygen soaked up at the surface. You can go online and type in fish air pumps, which will lead you to links. The links will provide you helpful information as well as a wide assortment of air pumps. Read the details as provided to determine the choice pumps. In addition, make sure that the pumps will accommodate the size of your aquarium.

In addition, to pumps, tools, plants, filters, etc, you will need test kits. The kits are scientifically designed to test chemicals in water. Test kits will help you monitor the quality of water to avoid over consumption of nitrates, ammonia, nitrites, etc. You can test pH balance with test kits as well. Fish produce a certain amount of

ammonia through waste, which can be converted to nitrites, which fish feed off. To fish, nitrites are non-toxic since they too produce these chemicals.

You can also purchase water treatment to maintain water. Chlorine treatments are ideal, since tap water tends to include chloramines and chlorine. Fish do not take kindly to these two chemicals. Online, you will find in the fish section a wide array of chlorine and water treatments available. In addition, you can find such treatments where aquariums and fish are sold.

If you are, just purchasing fish and aquarium for the first time go online and learn about starter kits, as well as beginner fish. Some fish are easier to take care of than other types of fish. In the fish category, you want to look up information that will help you relate to saltwater fish and freshwater fish. Freshwater fish include the tropical and Coldwater fish. Tropical fish are fascinating. Learn more about it.

Chapter46 - Tropical Freshwater Aquarium Fish Care

How to care for Freshwater Aquarium Fish

Some freshwater fish are easier to keep than other species. Angelfish, Killifish, Clown Loach, Hatchetfish, etc, are few choice fish that you want to consider. However, you will need a bit of experience to handle few of the fish listed. Holacanthus Trimaculatus includes the family to the Trimaculatus group, which includes the Angelfish. These fish have some of the most attractive colors. The tropical fish have dark blue lips, which counterbalance the fish's golden-yellowish frame. Three-spot Angelfish is a selection of the many Angelfish. The fish come from the West Pacific oceans, as well as the Indian oceans. Three-Spotted Angels have a shape comparable to the butterfly fish. Three-Spotted Angelfish throat has a dark blue as well. The fish vary in color, which you can purchase orange-yellow, gold, etc. Few Angelfish have dark patches around the facial area, which the edges have fill flaps that are covered.

Angelfishes are one of my favorites, since this fish provides an attractive view. The outer edges of the Angelfishes fins are spotted, which sometimes the spots are black. White contrasts the black, which is located at the inner area of the fish. Angelfish grows up to 10 inches in size. In addition, Angelfish tend to feed from plants, larvae, small creatures, etc. Angelfish are recommended to live with their own kin, although the fish are peaceful.

If you are starting out, I will give you a direction to follow in fish care and aquariums. We can start with aquariums.

Aquariums:

Tank Preferred: You want to consider the fish type before considering the preferred tank. It makes no sense to purchase a tank and find out the fish type demand a different style.

Principles of balance: pH is the basic principle of balance, as well as temperature, water condition, etc. In addition to preferred tanks, and principles however you want to consider plant mediums, water, stonework, heaters, filtration, diseases, feed, lighting, fish choice, tank plants: (Floating plants, submerged plants) Furthermore, you will need to consider maintenance, quiddities, and so on. In food supplies, you will have the choice of live food, dried foods, vegetables, and so on.

Fish Group:

The fish groups include the: Polypteridae, Osteoglossidae, Doradidae, Pantodontidae, Notopteridae, Rhamphichthyidae, Mormyridae, Gymnotidae, Umbridae, Cyprinidae, Characidae, Anostomidae, Bagridae, Siluridae, and so on. Prepare to consider more than 20,000 aquarium fish.

Ugly fish:

If you like ugly fish, check out the fascinating Frogfish. Frogfish come from the Antennariuus Group and the family of Anennaridae.

Frogfish tend to rest in warm saltwater, or seawater. The frogfish has a territorial behavior pattern, which requires well-matched companionship.

Starters should consider another type of fish, yet the frogfish is ideal for those desiring the ugly and fascinating creatures. Frogfish are kin prefer to live in peaceable environments and in areas where their kind rest. Concluding Frogfish, I want to say that this fish is notorious for hunting, trapping, and feasting on all sized fish, including larger fish.

Continuing, one of the all-time favorite fish is the famous goldfish. The goldfish come from the Carassius Auratus group and is family to the Cyprinidae. Goldfish are little critters and come in or shapes, colors, and size. Goldfish can grow up to 1 inch, or six inches in size. Goldfish are found in most pet shops, and are one of the easier freshwater fish to maintain. Many goldfish are omnivorous, which means the fish will eat about anything you toss their way, such as dried foods, live bait, vegetable materials, and animal materials. Provide these fellers plenty of plants and the goldfish will be your friend for life.

Chapter47 - Water Aquariums, Tank & Fish Care

How to check aquarium water?

Today, aquariums have advanced to the point that the tanks are self-sufficient. Water conditions are important to check, since in each area of the world, water is different. In fact, some area waters are more contaminated than other areas. The types of fish factors into water, as well plants play a role too. Tetras is a type of fish, which naturally habitats in rainwater, or when in aquariums the fish enjoys soft waters. Therefore, when you test waters for these fish make sure that the waters are soft.

Cichlid is another species of fish that prefer harder water. The specimens came from the Rift Valleys of Africa, which contains dissolved salt. The salt was available from natural sources, such as lakes and rock lining.

How do I avoid hardening the water?

If you want hard waters, then do not add limestone. Limestone should be avoided, especially if you intend to use it as rocks or gravel.

How can I tell the condition of waters after testing pH?

After you test the waters, pH readings should give you a figure. If the number is

below seven, then the water is acidy. If the figure is higher than seven are then

the water is alkalinity or alkaline. The neutral pH figure is pH7. If the water

conditions are below or higher than this figure then your water is too alkalinity

and/or acidity. If you maintain a correct temperature and balance of water, your

fish and plants will live long and healthy.

Tip: Red Nosed Tetra prefers freedom to swim and density of plants.

If you have test water keep in mind that tap water has pH7 or pH8 reading

usually. If the gauge reads higher or else lower, it means that the water is too

alkalinity or acidy: Keep in mind that discus from the symphysodon aequifasciata

specimen enjoy acidy waters. If you have cichlids from Rift Valley, these fish

prefer alkaline.

How do I test water?

You will need to purchase a test kit. You can purchase test kits online or

preferably at your local pet store. Of course, you can purchase the kits online, but

if you are not familiar with the types, it is best to purchase at a pet store. The test

kits will provide you a read out of chemicals in the water as well, such as

chlorine. There should not be chlorine in the waters; however, tap water may

have such chemicals. Water conditioners are ideal. When you setup your tank

and each time you refill the tank you should use water conditioners.

Tip: If you have a heater in the tank, keep the volume low.

Living Room:

Typically, it is not recommended that you locate your aquarium in a living room.

Since most living rooms are too warm, the fish will feel agitated. However, if you

have tropical fish as well as plants you will have fewer problems. Plants and fish from the tropical regions tend to adapt well to higher water or room temperature. Using a heater in the tank can help you preserve your fish, yet you want to keep the heater on low volume. Maintaining a volume of heat will also prolong the life of your heater.

If you are heating your aquarium, take the easy way out. Some heaters include heaterstats, which will help you regulate heat. Heaterstats are thermostatically controlled devices, which fix to the corners of an aquarium. You can use suction cups to mount the heater. The heater has a small lamp, which will click on each time the heater is activated.

<u>Chapter48</u> - Water Treatments in Fish and Aquarium Care

How to condition water

Fish of all sorts expect a pH measurement of acid and/or base water. The common pH level is typically 6.5 and no higher than 7.5. Water types include saltwater, alkalinity, hardness, soft water, and so on. Alkalinity water is measured buffers, which its capacity is based on test results conducted from water. Alkalinity is a choice for many fish, since it will regulate pH balance, thus preventing the balance to drop. With this in mind, you can add buffers to regulate alkalinity as well.

Hard water is based on the amount of minerals, which is often unregulated. The reason is that soft water lacks the ability to produce dissolved minerals, while water softened by machines does not supply a variety of minerals. For this purpose, most aquarium and fish owners will purchase water treatments, while using ordinary tap water to fill the tank.

Water treatments

Water treatments include NH3, NO2, and NO3. The symbols represent chemical based formulas, which define ammonia. For instance, the second symbol represents nitrites, while the third symbol represents nitrates. The first symbol represents ammonia. If you are a starter, you should use test kits to test the waters prior to putting your fish into the tank. The kits provide you tools that will show results of ammonia, nitrites, nitrates, chlorine, and related chemical buildup. Keep in mind that fish naturally produce ammonia via waste, which turns to nitrites. Testing should be conducted during tank cycle. Since, tap water is laced with chlorine and chloramines you want to have water treatments on hand. Fish, unlike people cannot live as long while drinking chlorine/chloramines based waters. Water supplies often include hypochlorite, which is used to disinfect polluted waters and to provide fresh drinking water for humans only.

Myths:

Some people believe that salt should be added to all fish tanks.

Facts: salt is not beneficial in all instances, and nor is it necessary to add to all fish tanks. However, some tropical fish find it useful to relieve stress.

Back to water treatments

The types of water treatments include the decholorinator-based solutions. Decholorinator are ideal to purify water, cleansing it of chloramines, yet the treatment will discharge ammonias.

Therefore, before you purchase water treatments, the first thing you will need to do is know what is in your tap water. You can call your locate water company to find out what the water contains. Let the company know that you are housing aquarium fish, so that these people will take interest in your needs. Otherwise, the company may take offense, wondering who you are.

Tap water likely will include chloramines, copper, chlorine, metal, phosphates,

and sometimes will include TCE. (Trichloroethylene)

Tap water advice;

When filling your tank with Water you can let the water run from the tap five minutes to purify the water, as well you can let the water stand overnight to remove additional chemicals.

If your tap water only includes chlorinate you can use water treatments, such as the sodium based thiosulphate dechlorinators. However, if you have additional chemicals in your water you want to speak with your local pet store operators to find out which additives are best suited for removing all types of chemicals. It is wise to ask about the best water treatments as well for the local pet store.

Additional Tips & Conclusion

Additional tips for your aquarium and fish; you will need hose, bucket, nets, etc to clean your tank. You can take up inexpensive products online, or at local nature-based stores. In addition, to learn more about water treatments visit the Internet to search through a variety of products.

In conclusion, fish care and aquariums are big responsibilities. Now that you learnt more about filtration systems, tanks, freshwater and saltwater fish, and so on you have a good start at maintaining a healthy group of fish. As we discussed earlier, Freshwater fish have advantages, since the fish will adapt to most Aquarium types. Freshwater fish tend to be more relaxed and informal than saltwater fish. For that reason, freshwater fish is the choice for starters. Freshwater fish embrace the tropical and the Coldwater fishes.