

FAQ: GOOD (AND BAD) BEGINNER FISH

(contributed by Dean Hougen)

This article considers fish choices for the beginning aquarist, covering good choices for the complete novice ("Good First Fish"), good choices for the near novice who wishes to expand his or her options for new fish ("Good Second Fish"), and poor choices for beginning aquarists ("Bad First Fish").

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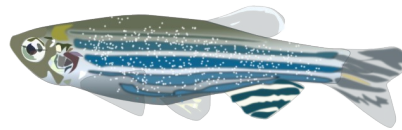
- * Good First Fish:
cymprinids, Corydorus catfish and rainbowfish.
- * Good Second Fish:
loaches, dwarf pl*cos, tetras, cichlids, anabantids and livebearers.
- * Bad First Fish:
goldfish, knife fishes, hatchet and pencil fishes, elephant noses and baby whales, Chinese algae eaters, bala sharks, iridescent sharks, glass cats, pl*cos, long-whiskered catfish, spiny eels, painted glassfish, brackish fish and saltwater fish.

Introduction

Since even a small amount of material can be difficult for a newcomer in any field to digest and retain, the novice aquarist may wish to read only the "Good First Fish" section to begin with. Then, while consulting a good beginner's book (the most essential item for any novice aquarist to own), she or he should choose a small number of possibilities for the fish with which to start her or his new tank. If someone familiar with the local fish stores is available, it is wise to get a recommendation for where to shop for fish. Otherwise the beginner should try looking for shops that specialize in fish, either exclusively or as a major part of their business. This is no guarantee, of course, but it does improve the odds of finding a good store. *[It is also worth talking to someone in the fish club - they will be able to advise you on the good stores in Canberra....editor]*

If, upon reaching the store, none of the selected fish can be found, the novice should refrain from purchasing any fish that he or she is unfamiliar with, even if recommended by the store's employees. (Some stores have very knowledgeable staffs but many, alas, do not. It will take some time before the new fishkeeper can discern a good store from a bad one, or good advice from poor.) At this point, another store could be sought out or further reading done to determine alternate choices for first fish.

Assuming that desirable choices for first fish can be found, the beginner should carefully inspect the specimens for sunken bellies, sunken eyes, clamped fins, labored breathing (often with gill covers quite extended), and any sort of external blemishes that might indicate parasites or disease. If the fish appear healthy, the novice should ask to purchase a very small number of fish, depending on the size of the tank and the fish. A twenty gallon tank is a good size for a beginner; it is large enough that the water conditions will be fairly stable, yet small enough that the beginner is not intimidated. For this size tank a single fish of one to two inches in length, or three or four smaller fish, is the most the novice should start with. (If more fish are put into the tank initially, poisonous ammonia will build up and kill the fish. If the tank population is built up gradually, however, this will not be a problem. To understand this gradual introduction of fish, known as 'cycling the tank', the novice should read about the nitrogen cycle in his or her aquarium book, or the NITROGEN CYCLE section of the BEGINNER FAQ.)



Good First Fish

If we define a good beginner's fish as one that is easy to feed and care for, hardy, able to live in a variety of water conditions, and attractive, then there are a number of widely available fish which fit the bill nicely. Many of these are regularly sold as beginner's fish. But watch out! Many of the fish sold as beginner's fish really are not well suited to that role. Many of the smaller schooling fish make ideal first fish. These include White Cloud Mountain Minnows, the several commonly available species of Danios and Rasboras, and most available species of Barbs. For those with a slightly larger tank, Rainbowfish make a great schooling fish. Corydoras Catfish are ever popular schooling catfish. While many beginners are tempted to get just one or two of each of several different schooling fish, this should be resisted. Schooling fish do better if there are several of their own species present for them to interact with. A minimum of six of each of the midwater schooling fish is recommended, while four is the bare minimum for Corys.

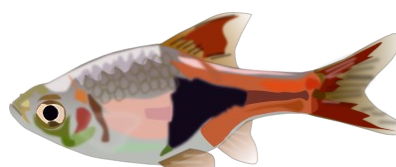
In the long run, a school of a dozen fish showing their natural behavior will be more pleasing than a mixed group of fishes unhappily forced to share the same tank. ("Mom, why is that one fish hiding behind the heater and that other one just hanging in the corner?") Of course, as mentioned in the introduction, the population needs to be built up slowly, two or three fish at a time. The aquarist might, for instance, build up a school of eight Rasboras of a certain species, then turn to building up a school of six of a species of Cory Cats.

Some Cyprinids

White Clouds, Danios, Rasboras, and Barbs are all Asian fish related to the Carp and the Minnow. All of these fish belong to the family Cyprinidae. White Clouds, Danios, Rasboras, and Barbs are small, active, hardy, and colorful.

"White Cloud Mountain Minnows" - *Tanichthys albonubes* are found in mountain streams in China, White Clouds can be kept in unheated tanks (down to 55F). Some people advise against putting these fish in tropical tanks but I have found that they do fine in heated aquaria as well, as long as the temperature is not kept above the mid 70s. *[F...Editor]* They can be fed any small food and they spawn often but fry will not be seen unless the parents are removed to another tank. White Clouds are brown with a red tail and a silvery white line down the side that shines in the light. They get to be 1 1/2" long.

Danios - Several species of Danios are often found in pet stores, including the Giant Danio - *Danio aequipinnatus*, the Zebra Danio - *Brachydanio rerio*, the Leopard Danio - *Brachydanio frankei*, and the Pearl Danio - *Brachydanio albolineatus*. These fish are fast



swimmers and are always in motion. Different patterns of blue markings allows one to tell these fish apart. Most Danios stay under 2 1/2" long, although Giant Danios can get up to 4".

Rasboras - The most popular Rasbora is the Harlequin Rasbora - *Rasbora heteromorpha*. A very similar looking species, *Rasbora espei*, is also available, as is the Clown Rasbora - *Rasbora kalochroma* and the Scissor-Tail Rasbora - *Rasbora trilineata*. Orange, brown, and red are usual colors for Rasboras, and their stop-and-start swimming makes them interesting to watch as a school.

Scissor-Tails can get up to 6" long and Clown Rasboras up to 4" while Harlequins stay under 2" long.

Barbs - By far the most commonly seen and commonly cursed Barb is the Tiger Barb - *Capoeta tetrazona*. It nips the fins of other fish if not kept in a large school of its own species and because it is over-bred it is susceptible to diseases. Several aquarium morphs are also available (such as the greenish "Mossy Barb" and an albino variety) but these are even more sickly and often deformed. Don't give up on the Barbs too fast though, as many are well suited as first fish, especially for those with moderate sized tanks. *Capoeta titteya*, the Cherry Barb, is a terrific little barb - up to 2" long and with a wonderful orange-red color. Mid-sized barbs (up to about 4 1/2" long) include Clown Barbs - *Barbodes everetti*, Rosy Barbs - *Puntius conchonius*, and Black Ruby Barbs - *Puntius nigrofasciatus*. The artificial morphs (long-finned, albino, etc.) of the Rosy Barb should be avoided though, as these tend to be sickly. Checker Barbs - *Capoeta oligolepis* and Spanner or T-Barbs - *Barbodes lateristriga* are large, peaceful barbs (Spanner Barbs up to 7" long). Unless you have a very large aquarium avoid Tinfoil Barbs - *Barbodes schwanefeldi*. They grow to be over a foot long! Note that many barbs don't school as "nicely" as do Danios or Rasboras, but most should be kept in schools nonetheless. Also note that many authors may put all of the above mentioned species in the genus *Barbus*.

Corydoras Catfish

Cory Cats are members of the family Callichthyidae, a family of armored catfish from South America. Corys are small (generally 2 1/2" long or less), schooling fish that are always searching the bottom of the tank for food. There are at least 140 species of catfish in the genus *Corydoras*. Some of these are quite delicate and die quickly even in the hands of experts. The fragile ones, however, are rarely seen in pet stores and are high priced when they can be found. The Corys you will see for reasonable prices are hardy and can even survive in a tank with low oxygen as they can swallow air from the surface and absorb it through their intestines. Some Corys you may encounter are the Bronze Cory - *C. aeneus*, the Spotted Cory - *C. ambiacus*, the Leopard Cory - *C. julii*, the Skunk Cory - *C. arcuatus*, the Bandit Cory - *C. metae*, and the Panda Cory - *C. panda*. Corys generally feed at the bottom of the tank and special sinking foods should be fed. These include sinking pellets like Tabi-Min and frozen blood-worms. Care should be taken to insure that all frozen foods are eaten quickly as they decay rapidly and can foul the tank. Don't overfeed!

Rainbowfish

Rainbows are extremely colorful fishes native to Australia, New Guinea, and Madagascar. Like the Cyprinids described above, Rainbows are schooling fish and should be kept in groups of six or more. Larger, somewhat more expensive, and harder to find than many of the schooling fishes already discussed, Rainbows are easily cared for, active, and make good first fish for those who want to try something a little less common. Look in your dealer's tanks for the Australian Rainbow - *Melanotaenia splendida*, Boeseman's Rainbowfish - *M. boesemani*, Turquoise Rainbows - *M. lacustris*, and the Celebes Rainbow - *Telmatherina ladigesii*. *[There are a couple of members that can help out with this one...editor]*

Good Second Fish

The previous section talked about good fish for the complete novice aquarist. This section will discuss good fish for beginning aquarists who have had some experience or who are willing to do more careful research and shopping before buying their fish. Many of the fish recommended here are every bit as hardy, adaptable, and easy to care for as those in the first section. However, in the first section I was able to recommend whole groups of fish or at least say to watch out for only a species or two in each group as bad choices. Here, however, the groups will be quite mixed with many good choices and many poor ones. Also, some of the fish in this section are hardy only if some special needs are cared for. If you wish to successfully keep fish from these groups you need to be sure you know which species you are getting and what their needs are. Why bother? If you are a complete novice, perhaps you shouldn't. The great choices from the "First Fish" list should allow you to get your feet wet (as it were) with minimum risk. However, as you gain experience you may decide to give some of these fish a try. Many are quite beautiful and/or have interesting behaviors and some aquarists become so taken with them that they join specialist clubs just to learn about and trade one group or another of these fish.

Loaches

[NOTE: weather loaches are not permitted in the ACT...Editor]

Loaches are long-bodied Asian fishes distantly related to the Cyprinids (Barbs, Danios, etc.) described above. Like Cory Cats, loaches have a down-turned mouth equipped with barbels - an adaptation for living and feeding at the bottom of ponds and streams. They will scavenge the tank bottom eating the food missed by other fishes, but you should take care to see that they get enough to eat. Special sinking foods are a must. Some loaches are sensitive to poor nitrogen cycle management, which is why they are included here, rather than in the Good First Fish section. Once the tank is established and the beginner seems to have gotten the hang of maintaining a tank, however, loaches make great additions to most community fish populations. The most commonly seen loaches are the Kuhli Loaches - *Acanthophtalmus* species. These are long, ribbon-like fishes which grow to be 4" long. Brown with yellow stripes and bands, Kuhli Loaches are shy and spend a lot of time buried in the gravel. Another popular group of loaches are the members of the genus *Botia*. Clown Loaches - *B. macracantha*, Yo-Yo Loaches - *B. lohachata*, Skunk Loaches - *B. horae*, Blue Loaches - *B. modesta*, and Striated Loaches - *B. striata* are all seen in the hobby. Some of these (notably Clown and Blue Loaches) can get big, but they grow extremely slowly and can live in a small aquarium for several years. Loaches will often be happier if kept with a few of their own species.

Dwarf Plecos

"Pleco" (a shortening of the now-unused genus name *Plecostomus*) is the common term used for suckermouth catfish of the family Loricariidae. As mentioned below in the Bad First Fish section, common



Plecos (*Hypostomus* species) are often sold to beginners as algae cleaners. Unfortunately, these fish get too large for the relatively small tanks of most beginners. Some species of suckermouth catfish, however, do stay small enough for most beginners to keep.

The Clown Plecos of the genus *Peckoltia* have alternating transverse bands of darker and lighter brown, tan, or yellow and generally stay under 4" long. The Bristlenose or Bushynose Plecos of the genus *Ancistrus* possess, as their common names imply, numerous projections from the area between their eyes and mouth. Within each species the bristles are larger on the male, especially near breeding. In fact, Bristlenose Plecos are among the few Loricariids to be successfully spawned in the home aquarium. Otocinclus Cats, often just called Otos, are the smallest Loricariids and will clean algae from live plants without hurting any but the most delicate of them. Otos sometimes die shortly after purchase for no apparent reason, but if they make it past this critical time they make very good community tank residents.

While the various suckermouth catfish will indeed help to keep the aquarium free from many common algae types, the beginner should not make the mistake of thinking of these fish as simply algae eaters or scavengers. They should be given foods intended just for them, such as zucchini which can be blanched or weighted down to sink it to the Pleco's level. Some fish food manufacturers have recently realized that there is a market for specialized Pleco foods and now sell products such as sinking algae wafers which fit this bill nicely. These foods should be fed in the evening when the light reaching the tank is low, as most Plecos are more active at this time and most other fish which might compete for the food are less active.

Pieces of (uncoated) driftwood in the tank are also important for many Pleco species, which rasp at the wood and ingest the scrapings. By the same token, Plecos should not be kept in wooden tanks, or even acrylic ones for that matter, as they may chew into the tank material damaging it and/or themselves (by ingesting toxins or undigestible matter). Pleco species can be quarrelsome amongst themselves and may be picked on by other fish due to their generally slow-moving nature. Provide a hiding cave for each Pleco and give them territories proportional to their size (e.g. 10 gallons for a 3" fish).

Tetras

Like many of the fish in the first section, Tetras are schooling fish and should be kept in groups of six or more of the same species. Tetras are native to Central and South America and Africa. In some regions of South America the water is quite soft (very little rock is dissolved in it) and acidic. (Another way of saying "acidic" is to say that it has a low pH - one below 7, which is considered "neutral". A strong acid has a very low pH. Liquids above pH 7 are said to be "basic".) Unless you know that your tank water is also soft and acidic, the Tetras that need that water should be avoided. Before you buy a Tetra that you are not sure about, look it up in your book. If it says that it needs a pH below 6.5 you should probably avoid it.

While many beginning aquarists are tempted to simply adjust the pH of their water by buying little containers of chemicals in the pet store, do not give in to this temptation! Water chemistry is very complex and you can easily kill all your fish by trying it. On the other hand, if your tap water is naturally soft and achieves a consistent acidic pH, there is no reason that you can't try your hand at some of these fish. Two very popular Tetras which need soft, acidic water are the Neon Tetra - *Paracheirodon innesi* and the Cardinal Tetra - *Cheirodon axelrodi*. These are quite attractive red and blue fish. The red line on the Cardinal runs from the head on back, while in the Neon it starts only in the belly region. But their attractiveness is their only advantage.

Besides its water requirements the Neon has the added drawback that almost all of them are bred in the Far East in huge numbers with no regard to quality. Further, the raising ponds for the young fish are filled with medicines. The medicines keep diseases in check but as soon as the fish are shipped they begin to get sick. They die in huge numbers in the stores and in buyer's home tanks. Probably less than 1 in 10 Neons lives for more than one month after being removed from the pond it was raised in. Further, those two or three tiny neons for a dollar at the local store can easily introduce a disease that kills all the fish in your tank. Cardinals will have a greater chance of not dying immediately after purchase but even they will probably not live long in your home tank. They are wild caught in Brazil as adults so they may have lived most of their naturally short life span before you buy them. Other Tetras which

need acidic water include the Blue Neon Tetra - *Hyphessobrycon simulans*, the Flag Tetra - *H. heterorhabdus*, *H. metae*, the Loreto Tetra - *H. loretoensis*, the Black Phantom Tetra - *Megalambodus megalopterus*, and the Red Phantom Tetra - *M. sweglesii*.

So what about those aquarists without acid water? There are plenty of hardy Tetras out there for beginners without special water. These include the distinctive Black or Black Skirt Tetra - *Gymnocorymbus ternetzi*, the brightly colored Glow Light Tetra - *Hemigrammus erythrozonus*, the radiant orange Jewel Tetra - *Hyphessobrycon callistus*, the Flame Tetra - *H. flammeus*, and the red-tailed Pristella - *Pristella maxillaris*, all of which grow to less than two inches long. Slightly larger Tetras include the Penguin Tetra - *Thayeria obliqua* and the closely related Hockey-stick Tetra - *Th. boehlkei*, both of which are easily recognized by the black lines originating in the lower half of their caudal (tail) fins and running forward, the shiny Diamond Tetra - *Moenkhausia pittieri*, and the beautiful, trident-tailed Emperor Tetra - *N. palmeri*. Finally, the only African Tetra frequently seen, the Congo Tetra - *Phenacogrammus interruptus* is a gorgeous fish which grows up to four inches long.

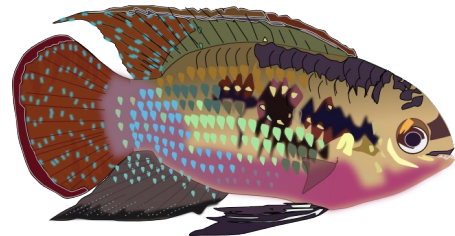
Cichlids

Cichlids, members of the family Cichlidae, come from Central and South America and Africa, with a few species found in Madagascar, the Middle East and into Asia. Cichlids are quite unlike any of the fish discussed so far. They are related to and resemble the Perch and Sunfish of US waters. For aquarists, cichlids pose four major problems:

- (1) Some need special water conditions,
- (2) some have specialized diets,
- (3) some get quite large (the largest up to 3 foot long), and
- (4) all are territorial.

Again, why bother? Because for those willing to take the challenge, the rewards can be great. If any fish can be said to be intelligent, Cichlids can. They display this in their everyday activities as well as in their specialized mating, breeding, and fry-raising activities. The fish mentioned in the previous sections all lay eggs and then ignore or even eat them! Cichlids, on the other hand, care for their eggs and young. It is said that one of the most rewarding sights an aquarist can see is parental Cichlids herding their fry around the tank and protecting them from all dangers. And, even if your Cichlids never breed, they will be more responsive to you than perhaps any other fish. Cichlids can be much more "pet-like" than you might think a fish could be.

If you do decide to take the Cichlid challenge, choosing your Cichlids can be difficult. Some can be added to your community tank and will do fine with the schooling fish talked about above. These include *Curviceps* - *Aequidens* (really *Laetacara*) *curviceps*, *Dorsigers* - *Aequidens* (again, really *Laetacara*) *dorsiger*, and the less frequently seen *Nannacara anomala*, all from South America, and Thomas' Dwarf Cichlid - *Anomalochromis thomasi* from western Africa. Unlike the monster Cichlids, these fish stay small (3 1/2" is a good sized adult) and are relatively peaceful. Two or three may be placed in a 10 gallon tank and they should still all find places to live if there are rocks and other decorations in the tank.



Other Dwarf Cichlids you may see are the Ram - *Papiliochromis* (some books use *Microgeophagus* or *Apistogramma*) *ramirezi*, Apistos - *Apistogramma* species, and the Checkerboard Cichlid - *Dicrossus filamentosus* (referred to as *Crenicara filamentosa* in the books). These fish vary in their difficulty for keeping as aquarium fish, but all of them should be avoided by beginners. Keyhole Cichlids - *Aequidens* (really *Cleithracara*) *maronii*, Festivums - *Cichlasoma* (really *Mesonauta*) *festivus*, and Angelfish - *Pterophyllum scalare* can be good fish for the relative novice, but only if healthy specimens can be found and this is often not easy. For this reason, small Keyholes and Festivums should not be purchased. Adults of these two species are generally better choices; still, one should look the fish over carefully and not buy them until they have been in the store tanks for at least a week.

Similarly, for the very popular Angelfish, one needs to be very careful when buying them. Before you buy, ask the salesperson to tell you where the store gets its Angels. If the salesperson doesn't know, won't tell you, or says that they come from "the wholesaler" (and who knows where before that?) don't buy them. If you are told that they come from a local breeder then you have at least a chance of getting healthy fish. Also, Angels should be kept in tanks both taller and longer than a 10 gallon aquarium. Keyholes, Festivums, and Angels are all shy fish and should be provided with cover -- preferably a planted tank. Discus, like Angels,



need tanks higher and longer than 10 gallon tanks. Their specialized needs do not stop there, however, and beginners should shy away from these difficult and demanding fish.

At the other end of the difficulty scale, a very good choice, especially for those with a 20 gallon or larger aquarium, is the "Jurupari" - *Satanoperca leucosticta* (formerly referred to in the hobby as *Geophagus jurupari*). It does get large (up to a foot), but it grows very slowly and may still be less than six inches long when several years old. It is a very peaceful Cichlid which will help to clean your tank by sifting through the gravel for uneaten food. A similar fish, *Geophagus surinamensis*, is also a good choice.

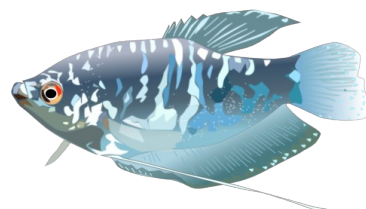
Kribs or "Kribensis" - *Pelvicachromis pulcher* are a widely seen West African Cichlid that will do well with the larger schooling fish and should be kept in a twenty gallon or larger tank. Male Kribs grow to be 4" long and females stay a bit smaller. Most of the remaining cichlids which are commonly available are too aggressive and/or grow too large for the beginning aquarist to effectively deal with. This includes the very popular Oscar - *Astronotus ocellatus* which grows rapidly to over a foot, is opportunistically piscivorous, and is a very messy species. If the aquarist is truly interested in keeping more cichlids than those recommended above, she or he should be prepared to set up special, separate (and probably larger) tanks for these fish and to read more extensively on cichlids before buying them.

Anabantids

Anabantids are another group of fishes that are quite different from those already discussed. Distantly related to Cichlids and Perch, Anabantids are found in Africa and Asia. Members of the families Anabantidae, Belontiidae, Helostomatidae, and Osphronemidae, Anabantids are also referred to as the "labyrinth fishes". This is due to a special breathing organ referred to as the labyrinth organ which is essentially a maze of tunnels near the fish's gills. Labyrinth fish gulp air at the surface of the water and absorb it through the labyrinth organ, allowing them to live in water with too little oxygen to support fish which only breath through their gills. Some Anabantids can survive out of water for several hours breathing only through their labyrinths, as long as they stay moist. *Anabas testudineus*, known as the Climbing Perch, is said to be able to climb trees and to live out of water for up to two days. As well as giving aquarists some additional choices for community-tank fish, Anabantids offer some unique options to fish keepers as well as presenting a few problems. Because some Anabantids are able to withstand cooler temperatures, and because of their ability to survive in water with very low oxygen, these fishes can be kept in tanks or bowls without heaters or filtration.

On the other hand, some Anabantids (particularly males of some species) are very territorial and some grow quite large. Breeding Anabantids can be quite rewarding. Some species build nests out of bubbles into which they place their eggs while others, like some Cichlids, are mouthbrooders. The most commonly seen Anabantid is probably the Betta or Siamese Fighting Fish (which is generally said to be *Betta splendens* but is probably a crossbreed). Artificial color varieties with red, blue, green, purple, and many other colors in various combinations are widely available. Males are bred to have very large fins and both sexes are seen with double tails. Siamese Fighting Fish generally make poor choices for the community tank for two reasons. First, as their name would imply, they are very territorial. The aggression is greatest between two males, but can be directed towards any fish that looks to the Betta too much like another Betta. Second, their long fins make easy targets for many fish such as Barbs. Siamese Fighting Fish can be kept alone in bowls (the larger the better) or tanks without filtration as long as frequent partial water changes are done. They do need warm temperatures, however, and are sensitive to temperature changes, so a constant heat supply is needed if the room is less than about 75F. Also, due to poor breeding, many Siamese Fighting Fish are not very healthy. A 3" male would be a large adult; females stay smaller.

A better choice for keeping alone in a bowl or small tank is the Paradise Fish - *Macropodus opercularis*. These are much hardier fish than the Fighters and can withstand temperatures down to 60F. They may jump, however, so the tank should be covered to be safe. Also, like Siamese Fighting Fish, male Paradise Fish can be extremely territorial towards one another. Paradise Fish may get up to 4" long. Another very commonly seen Anabantid is the Blue or Three-Spot Gourami - *Trichogaster trichopterus*. Gold, Silver, and Cosby Gouramies are also widely available and are simply artificial color varieties of the Blue Gourami. Blue Gouramies can get up to 6" long. They are not as



aggressive as Fighters or Paradise Fish, but more than one in a small tank may lead to constant (if not overly deadly) chasing. They will do well in a tank with larger schooling fishes. Similar, though slightly smaller species include the Banded or Giant Gourami - *Colisa fasciata* (which is only a giant compared to the similarly colored Dwarf Gourami described below), the Thick-lipped Gourami - *Colisa labiosa* and the somewhat less aggressive Pearl Gourami - *Trichogaster leeri* and Moonlight Gourami - *T. microlepis*. The Kissing Gourami - *Helostoma temminckii* grows larger (up to 12") but makes a good fish for beginners with larger tanks. It is peaceful, though males will contest with one another by pressing their lips together and pushing - the so-called "kissing" from which the common name derives. Most Kissing Gouramies seen will be of the Pink variety.

Small Gouramies, only growing to 2" or so in length, are also available. These include the Dwarf Gourami - *Colisa lalia*, the Honey Gourami - *C. chuna*, and the Sunset Dwarf Gourami (probably a cross between *C. lalia* and *C. chuna*). In theory, these would all be good fish for the community aquarium. In practice, these fish are often the victims of poor breeding practices in the Far East (like so many others described before) and many are even treated with hormones before they are shipped to make them appear brighter in the store tanks. A good rule of thumb is, "If it looks too good to be true, it probably is." Although harder to find, Anabantids which have had less human interference with their reproduction are generally better choices. Look for the Mouthbrooding Betta - *Betta pugnax*, the Licorice Gourami - *Parosphromenus deissneri*, the Spike-Tailed Paradise Fish - *Pseudosphromenus cupanus*, the Croaking Gourami - *Trichopsis vittatus*, and the Dwarf Croaking Gourami - *T. pumilus*, which range in size from 1" to 4". Do not buy Chocolate Gouramies - *Sphaerichthys osphromenoides* which are quite delicate, or the true Giant Gouramies - *Osphronemus spp.* which grow quickly to well over two feet long.

Livebearers

The family Poeciliidae contains Guppies, Mollies, Platies, and many other fishes. While these fish are often thought of as beginners' fish they have been intentionally left off the list until now in order to make a point. The reasons these fish are often sold to beginners are that they are cheap, brightly colored, and have a general reputation among non-aquarists as easy fish. Notably absent from this list is any real suitability for keeping by beginners. For one thing, many livebearers need high level of salt in their water to be healthy - making them incompatible with many other aquarium fish.

Many common livebearers also are overbred, resulting in fish not nearly as healthy as those kept by aquarists of previous generations (or by the authors of most books). Some are not even able to reproduce without human intervention. Finally, due to their low market price, they are generally not well cared for and may carry diseases. Poeciliids, as they are also called, come from the Americas, primarily Central America. They are called "livebearers" (as opposed to "egg-layers", as all the previously discussed fish have been) because the eggs are fertilized within the female and the fry do not appear until the eggs have hatched. There are also livebearers from other families in which the details of reproduction vary. The well-known Guppy can be found in a number of colors and with as many as 12 different artificial tail varieties. Also available is the closest thing that you may find to the wild Guppy - *Poecilia reticulata*: "feeder Guppies" which are not bred for color. The fancy strains tend to be fragile while common Guppies often carry diseases. Guppies should be kept in water with at least one teaspoon of salt per five gallons of water.



Common Mollies are the Black Molly (which was derived from the Marled Molly - *Poecilia sphenops*) and the Sail-Fin Molly - *Poecilia velifera* (of which there are also several color varieties available). Black Mollies need at least one teaspoon of salt per five gallons of water to keep them healthy and prevent the outbreak of "ich" (*Ichthyophthirius multifiliis*, a parasite commonly seen in aquaria) while Sail-Fin Mollies need at least three times this amount. Sail-Fins grow to 6" while Black Mollies stay less than 3". Closely related, Swordtails - *Xiphophorus helleri* and Platies - *Xiphophorus maculatus* are also popular fish. A number of color and finnage varieties are available of each with some of the Platies also referred to as "Moons". These fish need at least a teaspoon of salt per 5 gallons of water to be healthy. Some varieties are susceptible to various maladies (Tuxedo Swords often get tumors, for instance) and as with so many other fish the naturally colored fish are probably your best bets. "Green Swords" (which are really multi-colored) are naturally colored *X. helleri*, but unfortunately wild morphs of Platies are not often seen. The Variegated Platy - *Xiphophorus variatus* is sometimes seen, however, and fills this role nicely.

Bad First Fish

We have already discussed several poor choice for beginners' fish alongside their more desirable cousins. Here are more fishes that are seen in the stores that beginners should be warned about. Many of these fish make good fish for advanced hobbyists while others never make good aquarium fish. Some are even suitable for a well-informed beginner; you just need to know what you are getting yourself into before you buy the fishes on impulse and drop them into your community tank.

Goldfish

Goldfish are one of the most common fish sold to beginners, but are particularly poorly suited to this role. The common Goldfish sold as feeders are generally full of diseases and parasites which may kill them and other fish they are housed with. Fancy varieties, which have been selectively bred for centuries to achieve their unnatural appearances, are subject to a host of problems associated with their abnormalities. All Goldfish are cold water fish which do not do well in the lower oxygen levels found in tropical aquaria, and therefore should not be housed with tropical species.

Knife Fishes

There are several families of fish from South America, Africa, and Asia, referred to as Knife Fishes. Many species of Knives get large, some over 3' long although some of the less attractive species stay as small as 8". All of them are nocturnal predators, a fact that many a beginner could have used before all of his or her small fish "mysteriously" disappeared a few at a time.

Hatchet and Pencil Fishes

Somewhat related to Tetras, Hatchets (family Gasteropelecidae) and Pencils (genus *Nannostomus*) are Characins from South America. Many of them need soft and acid water and all of them are delicate. Hatchets have the added disadvantage that they tend to launch themselves out of the aquarium to an untimely death.



Elephant Nose and Baby Whale

More fragile fish include Elephant Noses - Gnathonemus petersi and Baby Whales - Petrocephalus bovei. African fishes from the family Mormyridae, these are night feeders and are hard to provide for in the aquarium.

Chinese Algae Eater

Chinese Algae Eaters - Gyrinocheilus aymonieri are often introduced into the aquarium to do what their common (sales) name implies - eat algae. They are usually seen at a small size and many die within a short time of purchase. If they live, however, they get big (up to a foot long) and tend to prefer to rasp at the sides of slow moving fish (making them susceptible to infections) to eating algae.

Bala Shark

Not a shark at all but a Cyprinid (related to the Carp), Bala Sharks - Balantiocheilus melanopterus quickly outgrow most home aquaria. They get to be over one foot long.

Iridescent Shark

Unrelated to the Bala Shark or to true sharks, the Iridescent Shark - Pangasius sutchi is a catfish. It grows to over 3 feet and tends to injure its nose against the aquarium glass.

Glass Catfish

Another catfish to avoid is the Glass Catfish - Kryptopterus bicirrhiss. While it stays small enough to be an aquarium fish (up to 6"), it is very delicate and should not be purchased by beginners.

"Plecós"

The suckermouth catfish of the genus Hypostomus are often sold in the stores as algae cleaners. Most of these species get in excess of 12". Some of the slender suckermouth catfish, such as the Whiptail - Dasylicaria filamentosa and the Farlowella - Farlowella gracilis, are quite delicate species.

Long-Whiskered Catfish

Catfish don't have long whiskers for looks. They are there to help them hunt for their food - other fish! In addition to eating all fish of less than half their size in the tank, many of the piscivorous (fish-eating) Cats will outgrow most tanks. One common species of long-whiskered catfish, the Pictus Cat - Pimelodus pictus grows to 10" while the Channel Cat (a pink form is often seen) grows over 2 feet long. Shovelnose Cats are usually only seen at six inches or greater, so the beginner does have some warning with these. Still, one might not expect them to get 2 or 3 feet long.

Spiny Eels

Spiny Eels (family Mastacembelidae) are aggressive fish, some of which grow quite large (over 3 feet). Some do stay small (less than 4" for one species), but all are likely to have internal parasites.

Painted Glassfish

Painted Glassfish are Glassfish - Chanda ranga which have been "painted" with chemical dyes. This procedure adds a temporary bit of unnatural color (which disappears with time) and stresses the fish, causing them to be prone to diseases and parasites. This fish needs at least 1 teaspoon of salt per gallon of aquarium water.

Brackish Water Fish

I have already mentioned some fish, such as Mollies and Glassfish, which come from brackish waters - I simply have not called it that before. Brackish water is intermediate between the fresh water of most rivers and lakes and the salt water of the Oceans. Brackish water is found in gulfs, deltas, and lagoons, as well as in some lakes and rivers. Because brackish water fish need so much salt in their water they are not compatible with most aquarium fish. Further, brackish water fish generally need more room per fish to stay healthy than freshwater fish. Some commonly seen

brackish water fish include Monos - Monodactylus species, Archers - Toxotes species, Scats - Scatophagus species, and many species of Puffers (family Tetraodontidae).

Salt Water Fish

If brackish water fish are to be avoided by beginners, then beginners should stay well away from salt water fish. Their bright colors are attractive, but they are generally much more difficult for beginners to keep alive than are fresh water fish.

Conclusion

There are thousands of species of aquarium-suitable fish from a host of families that are not covered above; this article is far from comprehensive. Killifish (fish of the family Cyprinodontidae) for example, are widely kept by many advanced hobbyists, but not often by beginners. This is *not* because they are all unsuitable as beginner's fish. In fact, some of them would make very good first or second fish. They are simply not widely available in pet stores. For choices of good beginners' fish beyond those listed here, and for expanding once one has moved beyond the beginner level, local aquarium clubs and friends who are aquarists can be very good sources of information. So can many of the available fishkeeping books and magazines. At every level of experience, the aquarist will find that good information is well worth the time and/or money it takes to get it.

