

Fish Compatibility Check

Fall in love with your fishes, but be sure they'll love one another.

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Discus are cichlids that can be kept in most freshwater community environments, provided that their tankmates aren't nippers or slime suckers.

Some Lake Malawi cichlids are quite aggressive and territorial. Know which are which before you buy. A number of commentators have called for more freshwater content in our blogs, so I thought I'd cover a topic related to freshwater fishes.

Sure, compatibility is a huge issue in marine and reef aquaria, but there are a number of other issues that accompany that discussion. In this blog, I'll focus mostly on accounting for freshwater species compatibility.

Know Before You Buy

The biggest issue in preventing problems associated with incompatible species appearing in the same tank is to avoid impulse fish purchases.

Because freshwater systems are easier to keep in general and freshwater fishes are far more available in the hobby, it is very easy for freshwater aquarists to be lured into unwise purchases of livestock.

We can't blame fish stores for wanting to sell us fishes. That's their business. If they didn't offer a wide variety of fishes, we wouldn't have the opportunity to keep such interesting species in our tanks. As long as our local fish store representatives are honest with us about what fishes we are buying, the responsibility for our fish purchases falls squarely on us. Responsible Fishkeeping Initiative>>

Also, we have to keep in mind that not all fish store personnel are well versed in the husbandry of fishes. They might be misinformed, or they may offer advice that is dependent on their own skills or equipment we don't have access to.

In any case, freshwater fish compatibility is the aquarist's responsibility. Avoid impulse purchases, and you'll avoid most of the problems with incompatible species.

Aggression and Territoriality

After we've stemmed the tide of impulse purchases, the next task for us as aquarists is to make sure the freshwater species we are interested in are actually compatible. This means that, beyond just avoiding impulse purchases, we have to make informed purchases about what we can keep in our aquaria.

Because most tropical freshwater fishes come from relatively similar habitats (there are many exceptions to this rule, of course, but for many fishes we see in local shops, a general range of environmental conditions will suffice) environmental compatibility isn't generally a big issue. The main problem freshwater fishes encounter in aquaria when it comes to compatibility is territorial aggression.

There are a number of different metrics you can use to gauge how well different species will do together.

How big will the species you are interested in grow to in adulthood? Where there are large discrepancies in fish sizes, there is more room for predatory aggression. Many fishes eat other fishes, and this is just as true in freshwater environments as it is in marine or brackish environments.

How territorial are the species you find interesting? One territorial species may do well in an aquarium, but with multiple territorial species in a single tank, you're just asking for trouble. Territoriality can take a number of forms. Some fishes stake out territories and only harass fishes that enter these territories. Others seem to consider the whole tank their territory and cannot be safely kept with any other species. Breeding can also trigger interspecies aggression. Spawning events that are unknown to the aquarist can cause havoc.

Also, some species are just naturally aggressive. When combined with docile species, problems are bound to occur.

Watch for bullying and fin nipping, and if problems develop, separate the offending species from the rest of the tank.

There are many examples of freshwater fishes that are simply too aggressive to include in traditional freshwater community aquaria. Many cichlids fit this description, though there are several cichlids that can be kept in community tanks. Other species often pose problems, too. Specific combinations can prove detrimental. For example, some catfish species will feed off of discus' slime coating, causing stress and damage to these beautiful cichlids.

When it comes to territoriality and fish aggression, the onus falls on the aquarist to make sure that all their aquatic pets get along. Always research the species you intend to keep, and make sure you know the general behavior of your fishes.

If a problem develops, aquarists should either move one of the problem species out of the tank to another aquarium, or possibly consider returning the species to the local fish store from whence it came.

Environmental Compatibility

Though aggression is a larger issue in freshwater aquaria, environmental considerations play a role in compatibility, too. There are many freshwater fishes sold in the hobby today – such as the White Cloud Mountain minnow or the galaxy rasbora – that are actually more “coldwater” fishes than tropical fishes. Some species sold in the hobby are actually brackish. Some of the “freshwater” puffers sold in aquarium shops fit this description.

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Species such as the Jack Dempsey cichlid (named after the famous pugilist) or this green terror cichlid didn't get their ominous-sounding names for no reason. Both are known to bully and beat up most tankmates.

Special breeding setups often fix problems with spawning-related territoriality.

Some fishes just won't work together. If you're missing a prized specimen, you might have unwittingly fed your other fishes. Again, the responsibility to verify compatibility falls squarely on the aquarist making the purchase. Know your system's parameters, and the parameters of the species you would like to keep, before you purchase any fishes or other aquatic pets.

If your system doesn't fit a species' needs, either change your system's parameters or keep another species. Various water parameters, temperature and other factors can all preclude keeping certain species together.

Avoid falling in love with a species whose care requirements you are unable to provide for, or a combination of species that just aren't compatible. You might like to see certain fishes together, but in some cases, you're fighting biology, nature and your own abilities just to fit a preconceived idea you have about your setup.

Husbandry Challenges

Another problem freshwater fishkeepers face involves husbandry. Some species require specific feeding regimens that may take special consideration.

For example, if you have a bottom-dwelling species that requires food available on your substrate, you have to be sure other species in the tank aren't eating the food before it reaches the bottom. Fishes that are otherwise compatible may be competing for food unbeknownst to you. In this case, it is often possible to fix the problem without having to redesign your setup or remove certain species. Targeted feeding or specially timed feeding can do the trick.

Breeding may also represent a husbandry compatibility challenge. Beyond simple aggression and territoriality, you may have compatibility problems if your goal is to breed a species in a community aquarium.

Fishes may not be able to spawn in certain high-stress environments, or they may be unable to successfully raise their fry in the presence of other predatory fishes. In this case, the best solution is often to set up a special breeding tank. Other options exist, however. Some aquarists use a divider to keep species or individuals separate from delicate fry.

There are many other examples of husbandry issues causing compatibility problems. In every case, however, the problems can be prevented or remedied through proper research and planning.

Hit the Fish Books

Aquarists of today are very lucky. There are numerous resources available to help us sort out all of these issues.

FishChannel.com offers a “Tankmate Tips” section and species profiles for a number of freshwater species. Also, check FAMA, AFI and our other aquarium publications for species information and care tips on various species.

Many books are available, as well. The wealth of aquarium information available in print form is extensive, and you should be able to find what you need to know to be successful.

Keep in mind, however, that no set of compatibility guidelines is going to be comprehensive or totally accurate in every circumstance. There are many compatibility guides available online, but as with all information you find online, take it with a grain of salt. Research, cross-reference and check your sources. If you find a certain compatibility or husbandry recommendation doesn't jive with what you've read elsewhere, find corroboration or ask someone who has kept the species you are interested in.

Don't just settle for a single source. If you find one source online that tells you what you want to hear but that contradicts what you've read or heard elsewhere, you would do well to check the source out and verify the claims made.

It takes more effort to research your setup, but you'll be much happier with the results. An informed aquarist is generally a happier aquarist and is also much more likely to be a lifelong aquarist.

I want you to be informed, so I'll keep working on getting you the information you need to be successful. If you have questions, our forums are a great place to start.

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