The Right Way to Care for Betta Fish

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Introduction

If you have ever spent much time in the aquarium fish section of your local pet store, you’ve probably noticed small bowls or plastic containers full of bright, colorful fish. The fish in those bowls are most likely betta fish, one of the most popular species of freshwater tropical fish in the aquarium hobby. This species is incredibly popular among novice and experienced aquarium hobbyists alike, and not just for their bright coloration. In addition to being beautiful fish, bettas are also very easy to care for. These fish are quite hardy, able to adapt to a variety of tank conditions. This makes them a relatively low-maintenance species which is ideal for individuals just starting out in the aquarium hobby.

Though betta fish are very easy to care for, there are a variety of misconceptions and myths surrounding the care of this species. Many people assume that just because these fish are sold out of small containers that bettas can be kept in small tanks at home. While betta fish may be able to survive in a small tank, they are not likely to thrive and it may only be a matter of time before the fish succumbs to illness or stress as a result of living in such confined quarters. If you want to ensure that your betta fish lives a long, healthy life it is wise to perform a little research before you buy your fish so you can cultivate an understanding of your betta fish’s needs. This book will not only provide you with the basic information you need to get started with your betta tank, but it will also help you become familiar with some of the common mistakes owners of betta fish make so you can avoid making them yourself.
History of the Betta Fish

Betta fish are more commonly known as Siamese Fighting Fish, a nickname earned as far back as the 1700’s when these fish were bred by the Siamese for fighting. In their native home of Siam, now Thailand, betta fish were used by children as fighting fish. Children in Siam would collect these fish and then select their largest, strongest specimen to pit against the fish belonging to other children in the village. The owner of the winning fish would be named the village champion. For some time, fights between betta fish were short-lived, lasting only as long as it took for one of the fish to retreat. Over time, however, the Siamese began breeding these fish for size and stamina – the winner of the fight, after all, was the fish that continued to fight the longest.

It wasn’t until the 1800’s that the popularity of this species skyrocketed. When the King of Siam recognized betta fish and began his own collection, the species increased in popularity in Siam and abroad. The popularity of betta fish began to spread abroad in the 1840’s after a scientist named Dr. Theodore Cantor was given one of the King’s own fighting fish. Dr. Cantor then wrote a paper about the
species, introducing them to the Western world. It was at this time that the Siamese fighting fish began to be known as the betta fish, named after a legendary warrior tribe called “Bettah.” Over time, the popularity of this species continued to grow and hobbyists as well as scientists began to selectively breed these fish to bring out certain traits such as fin length and coloration. Now it is possible to find betta fish exhibiting virtually any color with a wide variety of fin types.
The Native Environment of Betta Fish

Betta fish are native to Thailand (formerly Siam) where they tend to inhabit slow-moving or still bodies of water. Though they were originally described from the Chao Phraya river in central Thailand, bettas have also been found in parts of Malaysia, Sumatra and Singapore. Several populations of betta fish have even been introduced into South American countries like Brazil and Colombia. One of the most common places to find betta fish is in rice paddies where they swim among the roots and stems of the rice plants in shallow pools of still water. These fish have also been known to inhabit swamps, streams and roadside ditches, all of which may be shaded by submerged vegetation and which contain very little oxygen. The water quality and chemistry may vary by location and they continue to change throughout the monsoon season as water levels rise quickly.

In their native habitat, betta fish prefer to live in still or slow-moving waters and a single betta fish will typically defend a territory measuring about 1 square meter. As natural sources of water dry up during the dry season, these fish can even be found living in small pools or puddles of water. As their habitat begins to dry up, betta fish may move their territory to a more desirable location by jumping out of their puddle in search of another body of water. Betta fish belong to the Anabantidae family of fishes, also called labyrinth fish, because they possess a specialized organ called a labyrinth. This organ helps
the betta fish to breathe oxygen from the surface of the water and it also allows them to survive out of the water for short periods of time – this ability comes in handy when the fish are moving from one puddle to another in search of new territory.
Basic Betta Facts

Betta Fish Facts

When you hear about betta fish you probably think of *Betta splendens*, the Siamese Fighting Fish - you may not realize that there are actually more than sixty different species of bettas in existence. Scientists have not come to an agreement as to how to categorize the species of betta fish. In some instances you may see them divided by spawning behavior – bubble nesters versus mouth brooders – or you may see them divided into groups called complexes. There are currently thirteen recognized complexes of betta fish species and each one bears the name of a particular species within the complex. The *Betta akarensis* group, for example, contains the *Betta akarensis* species as well as five others.

If you visit your local pet store in search of betta fish, however, you are unlikely to see them divided by species. Rather, you may find the betta fish grouped and labeled according to fin type. Breeders and hobbyists all over the world have been selectively breeding betta fish for the last 50 years.
or so in order to achieve particular fin shapes and body colors in their fish. While female betta fish may 
be somewhat drab in coloration, males of the species may exhibit colors ranging from bright blue to 
fiery red or even a combination of colors. In addition to the vast color range, betta fish may also exhibit 
a number of different fin types including veil tail, double tail, crowntail and more.

### Species of Betta Fish

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Betta raja  
Betta apollon  
Betta ferox

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Betta stiktos

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Male and Female Bettas
Because most of the betta fish you see for sale in pet stores are males, you may not even recognize a female betta fish if you were to see one. Female betta fish are often drab in coloration and have much shorter fins than male bettas – this is particularly true among ornamental strains that have been bred for presentation. When looking at a male betta fish, you should easily be able to determine what kind of offspring he would produce based on his appearance in regard to color and fin type. The same is often true for female bettas, but mainly in the area of coloration. Female betta fish do come in the same variety of colors as males of the species but the colors are more muted in female specimens.

Another difference between male and female betta fish is that males are notorious for being extremely aggressive and territorial. Male betta fish are so aggressive that, if placed in a tank with another male betta fish, they will typically antagonize one another until one of the two backs down. This often results in injury and, for the loser of the battle, it could also lead to stress and illness. Male betta fish need to have their own space in order to create their “territory” and they will not tolerate the intrusion of other fish, particularly other male betta fish, into their territory. In some cases, male betta fish can be kept successfully in community tanks but only with non-conspecifics. It is also best to avoid keeping fin-nipping species of fish like tetras that might nip at the long fins of a male betta fish in a community tank environment.

Female betta fish are not quite as extreme as males of the species, but they do still exhibit some aggressive tendencies. If multiple female betta fish are kept in one tank, they may quarrel over territory until one fish rises into a position of dominance. In order to facilitate the smooth development of such a hierarchy it is wise to keep female betters in odd-numbered groups. For example, a group of three or five bettas would be more likely to naturally develop a hierarchy within the tank while a group of two or four female betta fish may constantly be involved in struggles for territory. Regardless how many female betta fish are kept in a tank together, each fish will likely establish its own mini territory so it is best to provide plenty of hiding places and tank decorations for your fish to use as natural dividers.
Betta Tank Requirements

Though commercially raised betta fish are able to adapt to a variety of tank conditions, there are certain tank parameters what are ideal for raising betta fish. Because this species is so adaptable, beginners in the aquarium hobby have a little room for error – if you make a small mistake in regard to water temperature or pH, it is not likely to have an adverse effect on your betta fish. If your tank temperature constantly fluctuates, however, or if the water quality in your tank is not kept at a satisfactory level, your betta fish may not thrive. In order to ensure that your betta fish remains happy and healthy it is wise to familiarize yourself with the tank requirements for betta fish so you can cater your tank to the needs of your betta before you bring him home.

Tank Size

Though betta fish can survive in very small bodies of water, this is not their ideal environment. To ensure that your betta fish thrives, prepare a tank no smaller than five gallons in capacity. Five gallons is the absolute minimum tank size requirement for betta fish – ten gallons is preferable and larger tanks are great as well. The reason betta fish should not be kept in small bowls or tanks related to water chemistry – the lower the water capacity of the tank, the less water there will be do dilute wastes
and toxins. As water evaporates from the tank, those wastes and toxins will be left behind to accumulate in higher concentrations the longer you let the tank go between water changes. It is possible to keep a betta fish healthy in a small tank if you perform water changes on a daily or twice-daily basis, but few aquarium hobbyists are willing to do this.

The five-gallon minimum rule applies mainly to male betta fish since, in most cases, they will be kept alone in the tank. If you plan to add a betta fish to a community tank, however, you should dedicate at least 5 gallons of tank capacity to your betta. The rules for keeping multiple female betta fish in one tank are slightly different, though it is still important that you provide each betta with adequate space to create its own territory. To keep three bettas together you will need at least a ten gallon tank and five or seven bettas will require a twenty-gallon tank setup.

**Water Parameters**

While betta fish are a hardy species, able to tolerate a variety of tank parameters, there are certain conditions under which they are most likely to thrive. Because betta fish come from a tropical environment, a betta tank should be kept at a stable temperature ranging between 75° and 82°F. The preferred pH range may vary depending on the species of betta you plan to keep, but most betta fish prefer a neutral or slightly acidic pH between 5.5 and 7.0. Ornamental strains of betta fish – those that have been bred commercially – are unfussy when it comes to pH and may tolerate pH levels up to 8.0. The water temperature and pH are the two most important aspects of water chemistry as it pertains to betta fish, though you may also want to keep an eye on the water hardness in your tank. Betta fish can tolerate varying degrees of water hardness, but the ideal range is between 0 and 357 ppm.

**Heating and Filtration**

Heating and filtration are two of the most important aspects of maintaining a healthy freshwater tank, especially a betta tank. Betta fish come from a tropical environment where the water is naturally warm. Thus, in order for your betta to thrive, you must keep the tank temperature within a certain range. Betta fish prefer a tank temperature between 75° and 82°F. To maintain a stable water
temperature in your betta tank you will need to install a submersible aquarium heater. Aquarium heaters also come in a hang-on form but these heaters do not offer the same heat distribution as submersible heaters which can be placed directly in the tank. If possible, try to find a heater that allows you to control the temperature – some heaters are automatically programmed for a certain temperature.

When it comes time to select a filter for your betta tank you should keep in mind the fact that, in their native habitat, these fish are typically found in slow-moving waters. That being said you would be wise to select an aquarium filter that has a low flow setting so it doesn’t create too much of a current in your tank. If the current in your betta tank is too strong your betta could become stressed and may spend a great deal of time hiding rather than swimming around.

You have several options when it comes to the type of filter to purchase. Hang-on filters and power heads are two of the most basic options for betta tank filtration and they are also highly efficient. Both of these filters offer mechanical and chemical filtration – some models may even include an added feature to facilitate biological filtration. Canister filters are also a good choice but these filters are typically only made for tanks 20 gallons or larger. Do not use a sponge filter as the sole source of
filtration in your tank because these filters do not offer chemical filtration – they will help to remove solid wastes from your tank water but they will not do much to remove toxins and chemicals.

**Decorations**

When decorating your betta tank, don’t be afraid to use your creativity! Decorating a fish tank is just as much for your pleasure as it is for the benefit of your fish. Before you start decorating, think about whether you’d like to create a natural look for your betta tank or if you just want to go with something whimsical and fun. If you prefer to go the whimsical route, check the selection of novelty fish tank décor items at your local pet store. You will most likely find things like sunken pirate ships, treasure chests and even scuba divers. Pair these items with a few live or artificial plants and some colored glass stones on the bottom of the tank and you will have a unique and colorful betta tank.

The other option is to design your betta tank using a natural décor scheme – preferably one that mimics the native environment of your betta fish. In their natural habitat, betta fish are used to dark, soft substrate like sand or find gravel. Using this type of substrate along the bottom of your tank will not only give your tank a natural appearance but it will also encourage your betta fish to show their best
coloration. To further enhance the natural appearance of your tank, use plenty of live plants of various sizes. Layer the live plants in your tank according to size, placing the tallest plants near the back and the shorter plants up front. This will help to define the space in your tank while also leaving plenty of open water for swimming. If you want to add a few accent pieces, try adding some large water-worn rocks or a piece of driftwood. These are the types things that would be found in your betta’s native environment and they will add to the overall look of your tank.

**Recommended Tank Mates**

Betta fish are generally not recommended for a community tank setup though it certainly can be done. Males of the species are best kept alone or with very peaceful species of fish, provided they are given enough space and the other fish are given plenty of places to hide. Bigger and more robust species of fish such as gourami and cichlids are not compatible with betta fish because these species are likely to intimidate and outcompete the betta fish for food and tank space. There are also some smaller species that can cause problems as well, however. Fin-nipping species of fish like serape tetras and other tetras may nip at the long fins of betta fish, causing them to becomes stressed or to display aggression toward the other fish in the tank.
It is best to avoid keeping betta fish in the same tank with other long-finned species or fish that have a similar appearance. Brightly colored fish may be mistaken for rival males and may provoke your betta fish to attack. Bottom dwelling species like loaches and some algae eaters can be kept in a tank with betta fish but it may depend on the temperament of the individual fish as to whether or not they are able to get along. Another option is to keep one male betta fish with several females or to cultivate an all-female betta tank.
Selecting a Healthy Betta

Maintaining a healthy betta tank starts with purchasing healthy fish. If you simply walk into the pet store and buy the first betta you see right off the shelf there is a chance that the betta you selected is not in good health. It can be difficult to assess the health of betta fish in the pet store because they are typically kept in small containers without much room to move around. Because they have such limited space, betta fish in the pet store are not likely to be very active. Even if this is the case, however, there are still some signs you can look for to determine whether a betta fish is healthy enough to be worth the purchase.

Where to Find Betta Fish

There are several ways you can go about purchasing a betta fish but the easiest option is simply to walk into your local pet store to see what they have available. Most pet stores keep betta fish in stock because they are a very popular species of fish. Because they are so popular, betta fish often sell quickly which means that the betta fish you see in the store may have arrived to the store fairly recently. Because most pet stores keep betta fish in small bowls to sell them, it would be a good idea to find out
how long the betta fish the store has in stock have been there. The longer the betta fish are confined to those small bowls, the more stressed they are likely to be. Poor water quality and the build-up of waste inside the small containers could also affect the health of the betta fish over time. Your best bet may be the check out the small, locally owned pet stores in your area because these stores often have higher quality stock and they may also maintain their betta stock better than national chain stores.

Another great place to shop for betta fish is online. It has only been within the past few years that aquarium fish have become consistently available online and many aquarium hobbyists have yet to discover the convenience of this option. Betta fish can be purchased online directly from breeders, through auction websites and from aquarium fish suppliers. Shopping for betta fish online allows you to easily compare prices and some sites, especially auction sites, will provide pictures of each individual betta that is for sale. The downside of shopping for betta fish online is that you cannot assess the health of the betta fish yourself before making a purchase. However, most aquarium fish suppliers offer their customers a money-back guarantee if the fish do not arrive alive or in good health.

**What to Look For**

Although the fact that pet stores typically sell bettas out of small plastic containers can make it difficult to assess the activity level of the fish, it does make it easy to make comparisons among the different bettas the store has available. Before you begin assessing the health of the betta fish available, decide what type of betta you want – think about the color and fin type you prefer then start by looking at the fish meeting those requirements. Gather several of the betta fish you like and, if possible, line them up side by side. Examine the bodies of the betta fish, looking for physical deformities and signs of illness. The fins of the betta fish should be intact and flowing rather than clamped to the sides of the fish. The coloration of healthy betta fish should be bright and even - there should be no red splotches or patches of discoloration. Other symptoms of disease that you might keep an eye out for include cloudy eyes, visible growths and swollen gills. You should also examine the scales of the betta fish to be sure none are protruding or missing – protruding scales could be a sign of internal problems and missing scales could be a symptom of disease. Assess the activity level of the betta fish as much as possible. When you pick up the container, the betta fish should move around rather than lolling sluggishly along the bottom of
the container. A healthy betta fish will exhibit normal swimming behavior – it should not have difficulty swimming. You may also want to take a look at the condition of the container the betta fish are kept in. If there is a great deal of waste floating around the chances are good that the store doesn’t maintain their betta stock very well and the fish could be suffering from stress or illness. If the betta fish appear to be healthy, however, and the containers are kept clean then it should be safe for you to purchase a betta fish from that location.

**Introducing a New Betta**

To prevent accidentally introducing any harmful bacteria or viruses into your tank it is always a good idea to quarantine new fish for two weeks before you introduce them to the tank. This step is especially important if you are adding your betta fish to an established community tank. If you are simply introducing a single betta to a tank you have already prepared, however, the quarantine process may not be necessary. When it comes time to introduce your betta fish, transfer the fish into a plastic bag filled with the water from his original container. If you ended up keeping your betta in a quarantine tank for a while, use some of the water from the quarantine tank in the bag.
Once you have your betta in the bag, float it in the prepared aquarium for at least thirty minutes. This step is important because it will give your betta time to slowly adjust to any differences in water temperature between the two tanks. You could also scoop a little bit of water from the new tank into the bag so your betta fish can slowly acclimate to any differences in water chemistry as well. After about thirty minutes you may net your betta fish out of the bag and transfer him into the new tank. You shouldn’t just pour the bag containing your betta into the new tank because if the water chemistry between the two tanks is significantly different, the water from the bag could alter the chemistry in the new tank. After introducing your betta fish to his new tank it would be wise to monitor him over the next few hours to be sure he is adjusting properly. Look for signs of stress such as erratic behavior and, if your betta begins exhibiting these behaviors, remove him from the tank. At this point you may need to test your aquarium water to see if there is a problem with the water chemistry and, if there is, take steps to resolve the issue before adding your betta back into the tank.
Once you have your betta fish situated in the new tank there is little you will have to do to maintain a healthy environment. Aside from feeding your betta on a daily basis, the main task required of you will be weekly water changes. Water changes are incredibly important for maintaining high water quality in your tank – if you do not change the water often enough then solid waste will build up in your substrate which could increase the ammonia levels in your tank and affect the water chemistry. In addition to performing routine water changes, you may also want to test your betta tank water once a week to keep an eye on the pH and chemical levels in the tank.

Performing Water Changes

To keep the water quality in your betta tank high it is necessary to perform weekly water changes. Each water change should account for between 15% and 20% of the tank volume so, if you have a 10-gallon betta tank you would siphon out and replace between 1.5 and 2 gallons of water. When performing a water change it is best to siphon the dirty water from the bottom of your tank so, in the process of removing some of the tank water, you will also be removing a large portion of the solid waste.
waste build-up from the tank bottom. As your betta fish eats he will also produce waste and though some of it will be picked up by your filter, a lot of it will sink to the bottom of the tank where it will accumulate along with any uneaten fish food. Over time, these solid waste products will break down and a byproduct of this process is ammonia, a substance toxic to betta fish in high volumes. If you do not regularly change the water in your tank, the ammonia levels could rise to a toxic level and your betta could suffer from ammonia poisoning.

In order to perform a water change in your betta tank you will need to purchase a gravel vacuum or an aquarium siphon. Most aquarium hobbyists recommend gravel vacuums over traditional aquarium siphons because gravel vacuums come with a plastic vacuum head that makes it easier to siphon accumulated waste from the substrate in your betta tank. To use a gravel vacuum effectively, simply plunge the head of the vacuum directly into your tank substrate and move it around gently to pick up as much solid waste as possible. You may disturb some of your aquarium décor as you siphon the gravel, so be sure to put your tank back in order after you’ve replaced the water you removed. Before you add any water back into the tank, treat it with an aquarium water conditioner to remove chlorine and other chemicals with which the water may be treated. You would also be wise to try to match the temperature of the new water with the temperature in your betta tank so you don’t shock your betta with a sudden temperature change.

**Testing Your Tank Water**

By now you already understand the importance of maintaining high water quality in your betta tank. If you do not test your tank water on a regular basis, however, you will not know whether the water quality in your tank is high or not. Aquarium water test kits are very affordable and you can find them either online or at your local pet store. These kits may include paper strips that you simply dip into the tank water to test for pH and chemical values or they may involve taking small samples of tank water and adding a few drops of testing solution. Follow the instructions included with the test kit and record the results for each test in a journal. Recording your test results will help you get an idea what the “normal” levels are for your tank so, when you perform your weekly water test, you will be able to tell if there is a problem with your water chemistry based on the results of the test. Taking swift action
to remedy problems with water chemistry could be the difference between life and death for your betta fish, so aquarium water tests are not something to skip or take lightly.

**Other Maintenance Tasks**

In addition to performing routine water changes and testing your tank water there are a few other simple maintenance tasks you can do to keep your betta tank clean and healthy. Every three or four weeks you should replace the filter media in your tank filter to ensure that it is effectively removing waste from your tank water. At this time you may also want to rinse out the filter housing to remove any built-up algae or accumulated waste. When rinsing out your aquarium filter be sure not to use hot water and do not scrub the filter unless it is heavily caked with algae. Next to the substrate in your betta tank, the filter is one of the main places where beneficial bacteria grow. These beneficial bacteria are responsible for helping to maintain the nitrogen cycle in your tank and if you scrub your filter you could end up killing a large number of those bacteria.

Though you don’t need to do this every day, it is wise to keep an eye on your aquarium equipment. Consider purchasing an in-tank thermometer for your betta aquarium so you can keep an
eye on the tank temperature. If you have a thermometer in your tank you will not be relying completely on your heater to determine the proper temperature – having a thermometer in your tank will also help you realize sooner if your heater stops working. If you keep up with your routine water changes and don’t place your betta tank in direct sunlight you shouldn’t have a problem with excess algae. If you do find your tank walls sprouting algae growths, however, you may need to wipe them with an algae scrubber once in a while. If possible, avoid completely cleaning any large décor items in your tank because, like your filter, these items are likely to home to beneficial bacteria.
Feeding Betta Fish

Next to keeping your betta tank clean, feeding your betta fish properly is the most important factor in keeping your fish healthy. Many novice aquarium hobbyists make the mistake of feeding their betta fish regular tropical flakes and then wonder why their betta fish fails to thrive. Betta fish are a carnivorous species and their protein needs cannot be met by traditional flake foods. In order to ensure that your betta thrives you must first learn what his nutritional requirements are then you must figure out a way to meet those requirements.

Nutritional Requirements of Betta Fish

Because betta fish are a carnivorous species, they require more protein in their diets than many other tropical species of fish do. In general, a diet for betta fish should consist of between 40% and 75% protein. In their natural habitat, betta fish receive protein from small insects and crustaceans as well as other fish. Aside from protein, some other important parts of a betta fish diet include lipids, carbohydrates and fiber. Lipids, also called fats, should compose no more than 8% of your betta fish’s diet. If you feed your betta fish too much rich, fatty food he could develop intestinal problems such as
bloat. Should this ever happen to your betta fish, all you need to do is blanch a single pea then shred it and drop it into your betta tank. The fiber in the pea should help get your betta’s digestive system back on track.

Carbohydrates are an important source of energy for fish but betta fish, because they are carnivorous by nature, have a difficult time digesting carbohydrates. This being the case, a betta fish diet should contain limited carbohydrates. Fiber is also difficult for betta fish to digest so you should limit your betta’s fiber intake to no more than 4% of his daily diet. In addition to protein, carbohydrates, lipids and fiber, betta fish also require a number of vitamins and minerals to stay healthy. Some of the most important minerals to include in your betta’s diet are potassium, iron and sodium – a few of the most important vitamins are vitamins A, C, E, B1 and B2. If your betta doesn’t receive these vitamins and minerals from his daily diet you may want to look into a supplement.

Types of Food

When it comes to selecting food for your betta fish you have a wide variety of options to choose from. Before you select a type of betta food, however, you should think about how you want to construct your betta fish’s diet. To keep your betta healthy you should offer him a staple diet of high-quality betta pellets or granules that will provide him with most of the nutrients he needs. Then, you
may supplement this diet with small amounts of protein-rich live foods such as bloodworms, micro
worms and brine shrimp. Because live foods are very rich and some, like white worms, are high in fat, it
is best to only give your betta small amounts of these foods a few times a week.

Some of the top brands to consider when purchasing betta food are Hikari, Aqueon, San
Francisco Bay and New Life Spectrum. All of these brands offer a variety of betta foods including pellets
and granules as well as special formulas designed for baby betta fish. If you plan to supplement the
staple diet of your betta fish, try to use a mixture of live and frozen foods. Foods such as prawns, brine
shrimp, bloodworms and micro worms are all high in protein and are an excellent source of nutrition for
betta fish. Your betta fish may also enjoy some fresh vegetables on occasion – try blanching a piece of
romaine lettuce and drop it into your betta tank.

In addition to commercial pellets and live or frozen foods, you can also offer your betta fish
freeze-dried foods. Many of the same foods you would find live or frozen also come in freeze-dried form
which makes it very convenient to store and to use. The downside of freeze-dried foods is that up to half
the nutritional content of the food may be lost during processing. In a pinch, however, freeze-dried food
can be a good way to supplement your betta fish’s diet. If you plan to use freeze-dried foods just be sure
not to let them become the staple of your betta’s diet – you should only use them once or twice a week,
not every day.

**Tips for Feeding Bettas**

The most important thing to remember when feeding your betta fish is that you shouldn’t feed
your betta more than the amount recommended on the container. Many betta food containers actually
recommend a feeding amount that is too high so if you feed more than the recommended amount you
could end up feeding your betta twice as much as he needs. If you are using betta pellets as the staple
diet for your betta fish, you should be offering your betta a maximum of four pellets per day. If you feed
your betta twice a day, offer no more than two pellets at one time.
Another good tip to follow when feeding your betta is to get his attention before you drop the food so he eats it right away. If your betta fish doesn’t notice when you drop food into the tank it could end up sinking to the bottom where it will break down and add to the accumulation of waste in your substrate. Overfeeding your betta fish can have this same effect – all the food your betta doesn’t consume will sink and begin to decompose. Another problem with feeding your betta too much is that it could also result in the increased production of waste. The more your betta fish eats, the more waste his body will produce. If this waste is allowed to build up in your tank it could lead to a rise in ammonia levels and a drop in water quality.
No matter how hard you try, you cannot completely protect your betta fish from falling ill. There are, however, a number of simple things you can do to prevent your betta from coming into contact with disease-causing bacteria. The first step in keeping your betta fish healthy is to familiarize yourself with some of the diseases that commonly affect betta fish so you can keep an eye out for symptoms. If you notice your betta displaying some of these symptoms you will be able to quickly diagnose the illness and start a treatment plan before the disease progresses too far. In addition to cultivating a basic knowledge of common betta diseases and treatments, you should also be sure to keep up with your routine betta tank maintenance tasks to keep the water quality in your tank high so your betta is less likely to become stressed and thus more susceptible to disease.

Common Diseases and Treatments

Like all tropical freshwater fish, bettas are susceptible to a wide variety of diseases. There are certain diseases, however, that betta fish in particularly are more prone to developing. The following chart will help you to familiarize yourself with some of the most common illnesses and conditions
affecting betta fish and it will also help you diagnose them by symptom. Keep this chart handy so when you notice your betta fish displaying odd behavior you can refer to the symptoms listed on the chart to help you diagnose the disease from which your betta may be suffering. Once you have identified the disease you can then begin a treatment plan.

<table>
<thead>
<tr>
<th>Disease/Condition</th>
<th>Symptoms</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parasites</td>
<td>Erratic swimming behavior, difficulty breathing, rubbing self on tank objects, worms visible on or through the skin, weight loss</td>
<td>Quarantine infected betta fish if kept in a community tank. Treat with a saltwater bath to kill external parasites and administer medications such as Formalin, Methylene Blue or Malachite Green to remedy internal parasite infections.</td>
</tr>
<tr>
<td>Dropsy</td>
<td>Bloating in the body and eyes, difficulty swimming</td>
<td>No known cure – dropsy is often a symptom of a more complex condition and by the time dropsy develops, your betta fish may be in the final stages of the disease.</td>
</tr>
<tr>
<td>Constipation</td>
<td>Bloated abdominal area, refuses to eat</td>
<td>Overfeeding, intestinal blockage</td>
</tr>
<tr>
<td>Fin Rot</td>
<td>Torn or ragged fins and tail</td>
<td>A large water change may help to stop the progression of the disease. Antibiotic treatments such as tetracycline and ampicillin may help, though full recovery could take up to four weeks.</td>
</tr>
<tr>
<td>Ich</td>
<td>Small white dots on the body, gills and fins</td>
<td>Raising the temperature in the tank can help speed up the life cycle of the parasite and a salt bath may help kill external parasites. Medicating the tank with Methylene Blue or Malachite Green may be effective in treating the disease.</td>
</tr>
<tr>
<td>Pop Eye</td>
<td>Swollen, protruding eyes</td>
<td>Because pop eye often develops in conjunction with another disease or condition, the treatment may vary. Performing a water change to improve the water quality may help and broad spectrum</td>
</tr>
<tr>
<td>Disease</td>
<td>Symptoms</td>
<td>Treatment/Prognosis</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Swim Bladder Disease</td>
<td>Erratic swimming, difficulty staying submerged</td>
<td>There is no cure for this condition but if it results from constipation or an intestinal blockage, a salt bath may help. Feeding your betta a blanched pea may also help to relieve the blockage and restore normal swimming behavior.</td>
</tr>
<tr>
<td>Slime Disease</td>
<td>White or grayish slime on the body and fins, rubbing self on tank objects, lethargy, labored breathing</td>
<td>Treatment with Formalin, copper sulfate or potassium permanganate has been known to be effective. Salt water baths can also help to kill the parasites responsible for this disease.</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Dull coloration, clamped fins, lesions or red patches on skin, weight loss</td>
<td>There is no known cure and this disease can be transferred to humans. The most common treatment is euthanasia.</td>
</tr>
<tr>
<td>Velvet</td>
<td>Dusty, slimy appearance of the skin, clamped fins, loss of appetite, rubbing self on tank objects</td>
<td>Quarantine infected fish if kept in a community tank then raise the tank temperature to speed up the life cycle of the parasite. Treat with Maracide or BettaZing.</td>
</tr>
<tr>
<td>Fungus</td>
<td>Cotton-like growths on the mouth or body</td>
<td>Performing a water change to improve water quality will help stop the progression of the disease. Salt baths and antifungal medications like Methylene Blue and Malachite Green have also been effective.</td>
</tr>
<tr>
<td>Septicemia</td>
<td>Lethargy, loss of appetite, red streaks on fins and body</td>
<td>The most common treatment is medicated fish food – betta pellets can be soaked in Maracyn and fed to infected fish. Water soluble antibiotic treatments may also be effective.</td>
</tr>
</tbody>
</table>
Disease Prevention

The key to preventing your betta fish from falling ill is to keep the water quality in your betta tank high. Performing routine water changes and aquarium water tests are the easiest ways to accomplish this, though adding some live plants to boost the oxygen content in your tank water will help as well. It is also wise to maintain a stable temperature and pH in your betta tank because if either of these values fluctuates too much your fish could become stressed. While stress may not cause your betta fish to become ill, it will increase his susceptibility to disease. Betta fish that are already stressed or injured are much more likely to develop a disease than healthy betta fish.

Because you can’t completely prevent your betta fish from coming into contact with disease-causing bacteria and viruses, it is wise to be prepared for potential illness. Try to keep a few basic medications on hand in the event that your betta should need them – if you don’t have these medications ready, your betta’s treatment could be delayed and he may not make a full recovery as a result. Some good medications to have in stock are antibiotics like Maracyn and Kanacyn; parasite medications like copper sulfate and potassium permanganate; antiseptic treatments such as aquarium...
salt; and antifungal agents like Methylene Blue and Malachite Green. If you notice your betta fish exhibiting odd behavior or developing visible symptoms of disease, take action immediately to diagnose and treat the disease – swift action on your part could be the difference between your betta fish succumbing to the disease or making a full recovery.
Breeding Betta Fish

If you have ever thought about breeding aquarium fish, bettas are a great breed to start with. Not only are these fish easy to care for, but they are also relatively easy to breed. Breeding betta fish can be a wonderful experience, especially because these fish exhibit some interesting breeding behavior. Betta fish exhibit a sort of “embrace” characteristic to many species belonging to the Antabandiae family of fishes. In combination with their mouth brooding and bubble nesting behavior, this makes breeding betta fish an interesting and valuable experience.

Setting up a Breeding Tank

If you are already keeping your male betta fish alone in the tank, it may be unnecessary to prepare a separate betta tank. You will, however, need an additional tank to house the male betta when you remove him from the tank once the fry have hatched. Because betta fish fry are very small when they are first born you will not need a large breeding tank – a 10-gallon tank is sufficient. As your fry grow, however, you may want to have an extra tank on hand to use as a grow-out tank to give your betta fry more room to develop.
The most important aspect of setting up a breeding tank is to make sure the tank has a tight-fitting lid. Not only will this prevent your betta fish from jumping out of the tank but it will also keep the air inside the tank humid – moist air is imperative for the development of the labyrinth organ in young betta fry. You should also equip your betta tank with a source of gentle filtration such as a sponge filter. Sponge filters are ideal for fry tanks because they provide basic mechanical filtration without creating suction or water flow that is too strong for the delicate fry. An aquarium heater is another important piece of equipment for the fry tank because your betta fry may not thrive if the temperature drops too low. Try to maintain your betta fry tank within the same 75° to 82°F range you use for your adult bettas, but lean toward the higher end of the spectrum.

In order to facilitate easy cleaning, keep the bottom of your betta tank bare. You should also keep decorations to a minimum, though having a few plants or terra cotta pots in the tank will provide your female betta with places to hide from the male should he become too aggressive. Some aquarium hobbyists like to install a tank divider in their breeding tanks so they can introduce the male and female betta to each other slowly. After separately conditioning the betta fish you can install the divider and place the female betta in one half of the tank and the male in the other. Once the fish have gotten used to each other and the male begins to build a bubble nest you can remove the divider and integrate the two fish.

**Selecting and Conditioning a Breeding Pair**

When selecting a breeding pair of bettas there are two things you should consider: the health of the fish and their appearance. If you don’t particularly care what your betta fry look like you can simply select the healthiest male and female specimens you have available. If, on the other hand, you are interested in cultivating a certain type of betta you should select a breeding pair that exhibits the characteristics you desire in your betta fry. Both the male and female betta fish should be in good health and they should exhibit a healthy appetite and activity level.

Once you have selected your male and female bettas you can begin conditioning them for breeding. It is best to condition your betta fish separately because if you keep them together for too long the male could antagonize the female. If your betta fish have been properly conditioned, spawning will occur fairly quickly after introducing the two fish so it is not necessary to keep them together in the
tank for long. To condition your betta fish, offer them high-quality live and frozen foods. Foods like bloodworms, white worms and brine shrimp are excellent foods for conditioning betta fish for breeding. While conditioning your betta fish you should still continue to give them regular betta pellets, but cut back on the amount a bit to compensate for the addition of live and frozen foods.

As you condition your betta fish for breeding you should continue to perform your routine maintenance tasks. Keeping your betta tank water clean through regular water changes is an important part of conditioning your bettas for breeding – if the water quality in your betta tank is poor, your betta fish are unlikely to spawn. After a week or two of conditioning you should notice the female betta’s abdomen beginning to swell as it fills with eggs. At the same time, male bettas of mouth brooding species should begin to construct a bubble nest along the surface of the tank. After both of these events have occurred you can introduce your two betta fish to each other.

**Breeding Behavior**

Betta fish can be divided into two categories based on their spawning behavior. Some species, like *Betta splendens*, are bubble nesters – they build nests in which to keep their eggs on the surface of
the water by blowing tiny bubbles. Other species of betta, such as Betta pugnax, are mouth brooders. Mouth brooding species of betta fish actually take the fertilized eggs into their mouth to incubate and, several weeks later, release the fully formed fry. In most cases regarding mouth brooding species of betta it is the male of the species that broods the eggs rather than the female. In fact, male betta fish take most of the responsibility in caring for the eggs and fry.

When a male betta fish of a bubble nesting species is ready to mate he will prepare a bubble nest at the surface of the tank. If you watch closely you may be able to observe your betta blowing the bubbles and arranging them in one particular area of the tank. Once the nest is complete your betta fish may proceed to guard it against other fish. After you have conditioned your male and female betta fish in separate tanks, you can add them to the breeding tank where, if you are breeding a bubble nesting species of betta, your male betta will have prepared the nest. Upon the introduction of the female betta, your male betta may begin to display his fins to attract the attention of the female. In some cases, the male may even begin to chase the female around the tank in attempts to mate with her. If these advances become too aggressive, or if your female is not ready to mate, you may need to remove the female betta from the tank before the male injures her.
If both of your betta fish are ready to mate they will engage in a sort of courtship display. At the culmination of this courtship, the male betta will wrap himself around the body of the female and the eggs and sperm will be released at the same time. For bubble nesting species, the male will begin to gather the eggs in his mouth immediately after their release, ferrying them one at a time into the bubble nest he has prepared. The male betta fish will then guard the nest fiercely and, if any of the eggs should happen to fall out, he will retrieve them and put them back in the nest. For mouth brooding species of betta fish, the male may catch the fertilized eggs in his anal fins after the female releases them. The female may then pick up the eggs in her mouth and spit them out into the water for the male to catch. Once the male betta has gathered all the eggs he will proceed to incubate them for anywhere from one to three weeks.

Following spawning, there is no reason to leave the female betta in the breeding tank. In fact, the male betta may see the female as a threat and he could become stressed or aggressive. Young male bettas of mouth brooding species may swallow the eggs prematurely if they become stressed, so it is best to remove the female from the tank. Furthermore, the female betta may need time to rest and recover from the aggressive advances of the male betta as well as the spawning process. For mouth brooding species of betta, the fully formed fry will typically be released between one and three weeks after spawning. The eggs of bubble nesting species will remain in the bubble nest for 24 to 48 hours before hatching. After hatching, the fry may remain in the nest for an additional three to four days as they absorb the remainder of their yolk sac. Once the fry become free swimming it is possible to remove the male betta from the tank and to raise the fry separately.

**Caring for Betta Fry**

The first few days and weeks of life are the most important for the development of your betta fry. If you do not feed your betta fry enough protein-rich foods, their growth may be stunted and they may not fully develop. At first your betta fry will be too small to accept regular betta foods so, for the first few days, you should feed them infusoria. Infusoria is a type of liquid fry food and if you do not want to buy it, you can raise it yourself from cultures. After a few days the betta fry should be large enough to accept brine shrimp nauplii and micro worms.
To ensure that your betta fry grow quickly, feed them small amounts of food several times a day. For the best results, offer your betta fry different types of food at each daily feeding – use infusoria for one feeding, for example, then offer brine shrimp nauplii and micro worms for the other feedings. Though you should be feeding your betta fry fairly often it is important that you do not give them too much food at once. Betta fry are very small and can only consume small portions of food – if you overfeed your fry most of the extra food will end up sinking to the bottom of the tank where it will accumulate as organic waste and begin to decompose.

After a week or two you can begin to perform small water changes in your betta fry tank. Use a length of aquarium airline tubing to siphon the solid waste from the tank and replace the water you remove with dechlorinated tap water. Try to match the temperature of the new water to the temperature in the tank so you do not shock your betta fry with a sudden temperature change. Do not worry if you suck up a few of the betta fry when siphoning out dirty water – simply scoop the fry out of the bucket and return them to the tank.

Over the next few weeks following their hatching your betta fry will grow rapidly and will also begin to display some coloration. After 6 or 8 weeks the fry should be developed enough that you will be able to pick out the males from the females – male bettas will be more brightly colored and will have
longer fins than the females. Once the fry have reached ¾ of an inch in length you may want to think about separating the fry. At this point it is wise to remove the male bettas to separate containers but the female fry can be kept together. Allow your betta fry to grow a little more – at least a length of one inch – before you give them away or sell them.
Betta Fish FAQs

Q: Why can’t I keep my betta fish in a small bowl or vase?
A: Like all living creatures, betta fish require space to move and grow. Goldfish bowls and ornamental vases do not provide betta fish with adequate space to thrive and they also offer limited water capacity. The lower the water capacity in your betta tank, the less diluted the toxins resulting from the build-up of waste will be. In larger tanks, harmful toxins like ammonia are more diluted and are less likely to have a negative impact on your water quality and your betta.

Q: How much should I feed my betta fish?
A: Read the directions on your container of betta food as a guideline for feeding your betta. Keep in mind, however, that most manufacturers suggest a feeding amount that is too large – if you are using betta pellets, offer no more than 4 pellets per day. When feeding your betta fish live and frozen foods, offer only a small pinch of food at one time.

Q: Why can’t I keep my betta with other fish?
A: Male betta fish are notoriously aggressive and are likely to attack other fish. It is possible to keep a male betta in a tank with other fish, but only if those fish are peaceful species that your male betta will not regard as threats. Avoid keeping male betta fish with other long-finned or brightly colored species which could be mistaken for rival males.

Q: What do I do if my betta jumps out of his tank?
A: Betta fish are excellent jumpers and, in their native habitat, it is sometimes necessary for them to jump out of the water in search of new territory. If you find that your betta has jumped out of his tank, return him to the water as soon as possible. To prevent your betta from jumping out of the tank, use a tight-fitting lid on the tank.

Q: What do I do when my betta fish gets sick?
A: The first thing you should do when you notice your betta exhibiting abnormal behavior is to observe the symptoms he is exhibiting so you can diagnose the disease. Once you know what the disease is you can then begin to administer the appropriate treatment.
Q: Are betta fish recommended for beginners?

A: Yes. Betta fish are a very hardy species that are quite easy to maintain. These fish are adaptable to a variety of tank conditions which leaves beginning aquarium hobbyists with a little wiggle room to make mistakes. There are certain tank conditions under which betta fish are most likely to thrive, but they are able to survive in conditions that are less than ideal.

Q: Will my betta fish eat the eggs after spawning?

A: Betta fish typically do not eat their own eggs or fry. In certain species of betta fish you may see the male gathering the eggs into his mouth – do not panic, you may have a mouth brooding species of betta fish. These fish incubate the eggs in their mouths for between one and three weeks until the fry have fully developed.

Q: How many types of betta are there?

A: There are more than sixty different species of betta fish in existence but there are also countless ornamental strains that have been selectively bred for color and fin shape. Depending on the size of the pet store you go to, you may find only Betta splendens in a variety of colors and fin types – larger stores as well as online breeders and aquarium fish suppliers may have a wider selection of betta species.

Q: Why are bettas called Siamese Fighting Fish?

A: Betta fish are native to Siam (now Thailand) where they were originally captured and kept by village children to be used in fights. The children would each select the strongest specimen from their collection to engage in battle with the other fish and the owner of the winning fish would be named the village champion.

Q: Do betta tanks require much maintenance?

A: There are only a few maintenance tasks you must regularly perform to keep your betta tank clean and healthy. Weekly water changes and aquarium water tests are the most important maintenance tasks to keep up with and changing your filter media every three to four weeks is necessary as well. Aside from these tasks there is little you will need to do to maintain your betta tank.


“Septicemia (Infection),” NippyFish.net, <http://nippyfish.net/sick-betta/septicemia-infection/>