

HOW TO BUY A GOLDFISH

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OK, this sounds like an idiotic topic. To buy a goldfish you just pick your fish and pay your money. Right? Well, sort of, but here are a few things to consider.

There are many goldfish varieties. Some say a dozen, some say two dozen, some say three hundred. It just depends on how you define "variety". Every goldfish keeper has different tastes. Some varieties are too ornate, too grotesque, too delicate, too big, too small, too plain or too ordinary for our personal taste. But we all have our favorites which lay somewhere between the extremes. What some may fail to realize is that different goldfish varieties were "designed" and bred to be displayed in a particular way.

CHOOSE A FISH APPROPRIATE FOR YOUR CONTAINER

There are all sorts of goldfish containers. The glass fish bowl first came into vogue in the mid-1700's but it has now become socially unacceptable because they are generally too small, do not have enough surface area for oxygen diffusion, and are not normally aerated or filtered. An unusual ordinance was passed in Italy which outlawed goldfish bowls because they do not offer an adequate quality of life. The ordinance also says something about the curved glass giving the goldfish a distorted view of their surroundings.

THE OTHER GOLDFISH BOWL

What the Asians call a goldfish bowl is a different beast entirely. It is usually an earthenware or ceramic bowl about twenty to forty inches in diameter and eight to twelve inches deep. They have been successfully used since the heyday of ceramics during the Ming Dynasty in China. Actually, the advent of the ceramic goldfish bowl which could be kept inside and given more attention and protection than an outdoor pond was a very important factor in fostering development of the fancy goldfish varieties. The wide, shallow ceramic bowl, managed only with routine water changes, made keeping goldfish in a relatively confined space possible prior to the availability of aeration and filtration. In my opinion, it is a great system which we in the Western World have never fully appreciated. While purpose-made ceramic goldfish bowls are nearly impossible to find in the US (except for Hawaii) there are reasonable substitutes available if you look for them. Plastic and faux-ceramic containers make the prices very reasonable too.

Of course, you will only see one side of a goldfish in a shallow ceramic bowl; the top. I wonder what impact this had on development of new varieties during the Ming Dynasty in China? Ironically, most of the present-day goldfish varieties which were "designed" to be viewed from above in small containers were refined in Japan, not China.

The most notable of these may be the Japanese ranchu, often called top-view ranchu or TVR. Top-view ranchu have very exacting standards, perhaps the most exacting standards of any goldfish

variety. These standards focus on the top-view outline and swimming ability while paying little heed to the side-view profile; albeit, swimming ability is strongly influenced by characteristics which, in turn, determine the side-view profile.

Azumanishiki are a strain of calico oranda which have been selected for viewing from above. Personally, I'm not a fan of top-view oranda because the caudal peduncle always appears thin and weak and there is an abrupt transition from the wide belly to the narrow peduncle.

Perhaps the epitome of top-view goldfish designed to be kept in shallow bowls is the tosakin. In fact, until tosakin arrived in the Western World they were almost never kept in anything except a tosakin bowl. Putting a tosakin in a glass aquarium where they can only be seen from the side is a complete waste. The elaborate tosakin tail is very flat so that in the side view you do not see much of anything.

A more recent addition to the quiver of top-view varieties designed to be kept in confined containers is the Chinese butterfly-tail moor. The name 'butterfly-tail moor' name may be a misnomer in several respects. "Moor" should be reserved for the solid black telescope-eye goldfish. The tail often has a shape which is strongly reminiscent of a butterfly when viewed from above. However, some breeders use the term 'butterfly-tail' for telescopes which have very attractive and well-spread tails that do not resemble a real live butterfly at all. I think more appropriate names would be top-view telescope, or top-view demekin, or top-view dragon-eye. Like tosakin, telescopes selected to be viewed from the top have very flat tails. Like tosakin, this flat tail makes them poor swimmers so they are best kept in confined conditions where they can be nurtured and doted over. Tosakin and top-view telescopes are like the lap dogs of the goldfish world.

There are other fancy top-view varieties. Like azumanishiki, ryukin, fantails and pearlscales can be bred and selected to look their best when viewed from above. There are also some lesser-known top-view varieties like nankin and shukin.

Note that most people consider fancy goldfish to be indoor varieties or varieties that require some protection from the elements during the winter. The Big Four fancy goldfish varieties, ranchu, telescopes, oranda and ryukin, tolerate cold temperatures better than the more delicate pearlscale and tosakin. It is not surprising when the Big Four do well left outdoors through the winter in coastal areas. However, this is risky business and even though they survive the winter there could be some health issues in the spring.

TUBS AND SMALL PONDS

Tubs and small ponds in the range of about forty to several hundred gallons are increasingly popular goldfish containers. They are relatively inexpensive to install and are easy to fit into the landscape. They look great during most of the year, but low temperatures do create some problems in the dead of winter. There are basically three approaches to dealing with winter. You can either mitigate the low temperature, let nature take its course, or only use cold-tolerant hardy varieties.

To mitigate the effect of extreme winter temperatures you will need to provide some heat. There is no magic threshold, but you would like to keep the temperature in the fifties. Some people choose to bring their fancy goldfish indoors for the winter season. This works fine, but what do you do with that indoor tank during the rest of the year? Others choose to add some insulation and covering and

then heat the tub or small pond. Electric heaters are not that expensive to buy but are very expensive to operate. Calculating and predicting electrical heating costs is tricky and outside the scope of this article but, trust me, the electric bill will dwarf the cost of the fish.

Thus, some just add a cover and let nature take its course. Sometimes it works fine and sometimes stuff happens. A cold winter could create a windfall for a goldfish peddler like myself, but it would be unconscionable to suggest folks should not take proper care of their pets.

The other option is to select hardy goldfish which can withstand whatever the winter throws at them. Hardy goldfish are the long-body varieties and include: the ancestral funa, common hibuna, comets, shubunkin, wakin and watonai. There are two exceptions to the rule. Jikin are a long-body variety but have very little cold tolerance. Tomasaba (sabao) are a type of single-tail ryukin with a short body but they can have excellent cold tolerance. Fantails (American fantails, not British fantails) are, in a sense, intermediate or transitional between the hardy varieties and the short-body fancy varieties and their cold tolerance is also intermediate between the two groups.

LARGER PONDS AND WATER GARDENS

In a larger pond there are all the same concerns about February and some aesthetic issues as well. The goldfish container frames the display of fish much like a painting is framed. Yes, goldfish are an art form too. In a larger pond you need larger fish. Small fish seem to get lost in the setting like so many swarming flies. Before you suggest using koi instead of goldfish, remember that koi need a fairly deep pond to reach their potential and wreck havoc in a planted water garden. Goldfish, on the other hand, develop better in shallow water. No, your plants are not completely safe from foraging goldfish but they are much less destructive than koi.

The largest goldfish on record was something like twenty-two inches but we know not to expect many records to come out of our back yard. However, it is easy to have ten to twelve inch goldfish if you choose the right varieties and provide them enough space. The varieties which grow the largest are the long-body hardy types which are again, funa, common hibuna, comets, shubunkin, wakin and watonai. When it comes to size and growth potential, the exception to the rule is oranda. While oranda are considered a fancy variety, metallic scale (as opposed to calico) oranda usually grow much larger than ryukin, ranchu, telescopes and the like. Twelve inch oranda are not uncommon when given enough space.

I should have refrained from mentioning funa, the single-tail goldfish with wild-type greenish bronze coloration. In a pond or a black tub a goldfish with the wild-type coloration will be very difficult to see which sort of defeats their purpose. To a lesser extent, the same holds true for metallic black, chocolate, copper, metallic blue and even some calico goldfish which have a lot of black markings. Nonetheless, some people enjoy having one or two of these dark-colored phantoms, if only because it is a momentous occasion when you do see them.

GLASS AQUARIA

I'm not sure when the glass aquarium was invented, but they did not become popular until the middle of the nineteenth century. The difficulty was not the mechanics of making the aquarium itself, but understanding the concepts of oxygenation and nutrient recycling. Prior to the availability of electricity and pumps, the aquarium had to be a balanced ecosystem or microcosm where oxygen

input had to equal oxygen consumption and nutrients had to be recycled. Plants were usually an integral part of maintaining this balance and snails breeding in the aquarium were used to recycle wastes while serving as a source of nutrition for goldfish. It's an elegant system, but requires a bit of finesse. While chemists and ichthyologists were working this stuff out in Europe, it was being done almost instinctively in Asia as an off-shoot of a millennium-or-so of fish farming. Things became much easier in the 1950's with the introduction of silicone sealer, under-gravel filters, inexpensive air pumps, flake food, etc. The under-gravel filter has now fallen out of favor but glass aquaria with supplemental aeration and filtration remain, by far, the most popular container for keeping goldfish.

The practice of keeping goldfish in aquaria and viewing them from the side has had a profound influence on the shape of the goldfish itself. The aquarium came along at a critical time when many of the popular varieties were being refined. If, for some reason, goldfish were only kept in bowls, tubs and ponds where they are viewed from the top the shape of the fish would be much different today. So, most of the fancy goldfish varieties have short, deep bodies and are designed to look their best from the side. The width of the back and peduncle is of less importance.

The aquarium keeper has numerous fancy goldfish varieties to choose from: ryukin, oranda, ranchu, lionhead, telescope, pearlscale, celestial, bubble-eye and others. Some folks prefer to keep hardy varieties in their aquarium. While the hardy varieties may not be as flamboyant as the fancy varieties, there is something to be said for simple elegance.

Some fancy varieties require special considerations. The tank should be made child-proof by removing sharp objects if you are going to keep bubble-eyes, celestials and, to a lesser extent, telescopes. Also, make sure there is a screen on pump intakes if bubble-eyes are kept. Celestials spend a lot of time on the bottom so when you buy a celestial you have to buy a commitment to keep the bottom fairly clean to avoid sores on the belly. Pearlscales are prone to having swim bladder issues, especially when they are fed pellets exclusively. When you buy a pearlscale, you need to buy a commitment to substitute fresh leafy vegetables for the pellets one day each week. This is actually a beneficial routine for all fancy goldfish.

Sometimes ryukin can be bullies. Oranda are less likely to pick a fight. Ranchu, lionhead and telescopes seldom show any aggressive tendencies. But, there is always a social order and social interactions which we are not privy to. Fish do not have to fight and nip fins in order to intimidate a cohort. It's like one of us meeting a gang of thugs in a dark alley, where we can be intimidated and stressed without being physically harmed. If a new fish goes to a corner and stays there, it may be due to intimidation rather than a health problem. However, if the stress of intimidation persists it will eventually lead to health problems. I do not know of any way to predict who will get along with whom. Luckily, goldfish as a group are fairly docile and usually get along fine.

Bubble-eyes, celestials and pearlscales are not very agile so you would want to make sure they get their fair share of the food when housed with other varieties. Mixing one of these highly bred varieties with something like a comet will create both logistical problems and aesthetic issues. The hyperactive comets will be swimming circles around the fancy varieties and gobbling up all the food. In my opinion, this mix of energetic varieties and lethargic varieties destroys the harmony of the tank. Either energetic or lethargic goldfish can create a harmonious display, but when they are mixed the effect becomes chaotic. In general, fancy varieties should be kept with other fancy varieties and hardy varieties should be kept with other hardy varieties.

Some goldfish keepers prefer to house a single variety in a tank. Others want to mix varieties. Both approaches can create an attractive display. Mixing varieties can make the display more interesting. By keeping several varieties together we can develop a deeper appreciation of their differences. But, keeping several individuals of a single variety tends to make the display more harmonious. If or when spawning occurs, you will have “pure-bred” offspring in case you decide to raise them. By keeping a single variety there is less likelihood of having some social issue develop.

BIG FISH, LITTLE FISH

There are two trains of thought when it comes to the choice of size in a new goldfish. Some look for the largest fish available while others like to buy them small. Here are a few things to consider.

There is no doubt that large goldfish make for a more striking display than small goldfish. But, most tanks have about the maximum number of fish the tank can handle. Under these conditions, growth will be slow. So, if you are going to keep a crowded tank and want big fish, then you will have to start with big fish.

A more mature goldfish will generally be more attractive. The body will be deep and strong, the fins will be longer in proportion to the body length, the head growth will be fully developed., and the colors will be more intense. Good goldfish do not happen by accident. They need a combination of good genetics and good grooming. If you buy a large, nice fish, you know for a fact that it has the genetic potential and most of the grooming will have already been done. The down side is that the fish may have already reached its peak and can only go downhill. Fancy goldfish do not have an especially long life span. If you buy a large fish it may already be middle-age and there will be fewer years of enjoyment ahead. Larger fish are generally more expensive too so the cost per year of enjoyment will be really high.

Small goldfish are generally less expensive. The breeder has less time, less food, less electricity, less space, etc. invested in them so the price does not need to be as high to make a profit. But, (and this is an important “but”) the large Asian goldfish farms try to sell off the lower quality goldfish when they are young in order to make more room for their better quality siblings. The better fish are kept until they are larger and can demand the highest price. So, a young goldfish with the genetic potential to grow into an outstanding adult may be difficult to find... unless you know where to shop (smile).

Buying a young high quality goldfish and grooming it to its fullest potential can be a very gratifying experience. Proper grooming requires, above all else, adequate space. It just won't happen in over-crowded conditions. Excellent water quality is also important. High quality food is needed. Many are surprised to find that the amount and frequency of feeding is of less importance than genetics, space, water quality and food quality.

SO.....

Before that next impulse buy, think about what you want the goldfish to do for you. Will it look its best in the container where you plan to display it? Will it enhance the harmony and interest of your existing display? Will it play well with others? Does it have the genetic potential to be groomed into a first-class goldfish? Oh, and how about that quarantine tank?