

# Goldfish

Jīnyú 金鱼

**Goldfish, or *jinyu* 金鱼, are ornamental aquarium and pond fish originally cultured in China that later were spread to East Asia and the world. Due to accidental genetic mutation at first and artificial selection later, goldfish have developed from carp into 500 different types of goldfish today. Goldfish are now a world-wide industry.**

**G**oldfish are ornamental aquarium and pond fish. They are of the *Carassius auratus* species that belongs to the carp or Cyprinidae family. Native to East Asia, they are found in many other parts of the world as well. Naturally greenish-brown or gray, domesticated species present various colors and shapes. The average size of a goldfish is 5–15 centimeters (2–6 inches) long, though some can grow to more than 30–40 centimeters (about 12–16 inches). The lifespan of a captive goldfish varies from a few to twenty years. The longest-living goldfish on record, however, was forty-three years old.

Goldfish prefer tanks of clean water, which must be well-aerated and kept at a temperature of 20–25° C (68–77° F). The best fish food is live daphnia, mosquito larvae, and small worms, but goldfish flakes, sticks, and sinking or floating pellets are a good choice when live insects are unavailable. Goldfish mature in one or two years and start to spawn in early or late spring in the temperate zone of the northern hemisphere. Their eggs, numbering from 300 to 10,000, will hatch a week following the spawning.

China has at least a 2,000-year history of fish breeding, a fact testified by the world's first book on such

activities written in the Han Dynasty (206 BCE–220 CE). Wild red carps, forerunners of goldfish, were first raised in a pond at a temple at the turn of the twelfth century.

**A crowd views the goldfish at San Frank Park in Hangzhou. PHOTO BY JOAN LEBOLD COHEN.**





**Goldfish at San Fran Park in Hangzhou.** PHOTO BY JOAN LEBOLD COHEN.

Emperor Gaozong of the Southern Song Dynasty (1127–1279) started a fad, which spread first among his followers and then the common people, to raise red carps in their family ponds. Separated from other species and fed with specific food like water fleas, the fish began to mutate genetically. Subconscious selection helped the process. By the mid-sixteenth century, red carps, known as *huoyu* (fire fish), were bred in *gang* (bowls or jars) as popular pets. Conscious selection happened two hundred years later, resulting in different colors of their scales and shapes of their body parts. At the start of the twentieth century, there had been more than twenty varieties of goldfish. This number increased to more than seventy in the mid 1930s and to about 160 today.

Goldfish found their way to Japan in the early 1500s, to Portugal in the early 1600s, to England at the end of the 1600s, and to France in the middle of the 1700s. About a century later, they came to the United States and from there spread to the other parts of the American continents.

Having learned the art of breeding goldfish, culturists of other countries, Japan in particular, produced some four hundred varieties in addition to the Chinese varieties.

According to *Goldfish Varieties and Genetics: A Handbook for Breeders* (Smartt 2001), goldfish are classified into the varieties of Common Goldfish, Comet, Shubunkin, Wakin, Jikin, Fantail, Ryukin, Tosakin, Veiltail, Telescope, Celestial, Bubble-Eye, Pompon, Pearl Scale, Oranda, and the Ranchu-Lionhead Group. Common Goldfish, Comets, and Shubunkins are relatively simple fish that have typical single tail fins. Common Goldfish are known for their colors ranging from white, black to yellow, orange, and red; Shubunkins are noted for their nacreous (mother-of-pearl-like) scales; and Comets are distinguished by their long and deeply forked tail fins. Jikins and Wakins have double tails, but with the body shaped like Comets. The others are known as “fancy fish.” Veiltails, as the name suggests, are known for their long flowing tails. Fantails are also recognized by

their medium sized double-split tail fins. Ryukins look like Fantails except for their characteristic hump in the shoulder region. Tosakins' bodies are shaped like those of Ryukins, but their undivided tail fins are open and spread like the tail of a peacock. The Pearl Scale goldfish are also noted for the pearl-like appearance of their scales. Among the fancy fish type are also Pompons that have soft and fluffy growths above the nose and Telescopes that feature enlarged and bulging eyes. Celestials with their eyes upturned and Bubble-Eyes that have a sack under each eye are cousins of Telescopes. Orandas and goldfish of the Ranchu-Lionhead Group share the trait of a head growth known as hood. Ranchus and Lionheads differ from Orandas in the lack of their dorsal fins.

The Chinese, however, categorize goldfish into four major breeds, a system not commonly adopted in the West. They are 1) *Caojin* (grass goldfish), a group that includes the Common Goldfish, Comet, Jikin, Shubunkin, and Wakin varieties; 2) *Wenjin* (colorful goldfish), a type that covers the Fantail, Tosakin, Pearl Scale, Ryukin, and Veiltail breeds; 3) *Longjin* (dragon-eyed goldfish), comprising the Celestial, Bubble Eye, and Telescope varieties; and 4) *Danjin* (egg-shaped goldfish), including the Oranda and the Ranchu-Lionhead Group

Chinese characters have an excessive number of homophones (words that sound alike but have different meanings), and for that reason the Chinese are fond of playing on words and symbols that reflect on the cultural significance of fish. Buddhist believers may see red carp, abnormal forms of the usual greenish-gray carp species, as sacred, and let their captives go as a show of mercifulness, but the average Chinese, taking a more secular approach, associate “fish” with “affluence” because the two words sound alike. Goldfish, pronounced as “jin yu” are homophonic to “gold” and “jade,” which are cultural symbols of girls and boys respectively. So the phrase “*jin yu man tang*” (a pond full of goldfish) is thus a pun for “a house full of children,” and having more children is the ultimate expectation of a Chinese patriarch. By calling the hood of a Lionhead goldfish



Traditional goldfish cut-paper pattern.

*shouxingqiu* (ball of the god of longevity), the Chinese impart to the fish a good wish for a long, healthy life.

Today goldfish are mass produced in coastal cities of China and sold domestically and abroad. Goldfish hatcheries in Beijing alone occupy a total of 1,000 hectares (about 2471 acres). In 2001, China sold about 400 million goldfish at home, and today exports about \$100 million worth of ornamental fish annually, mostly goldfish, to about 100 countries.

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## Further Reading

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