

## Goldfish Varieties – Telescope

By Peter J. Ponzio

In the original article for this series, we defined a number of characteristics common to all goldfish, and introduced the concept of goldfish varieties, or different types of goldfish. Each subsequent article would provide detailed guidelines to appreciate and understand the characteristics of each variety recognized by the Goldfish Society of America (GFSA). Line Art for the GFSA standards has been provided courtesy of Merlin Cunliffe.

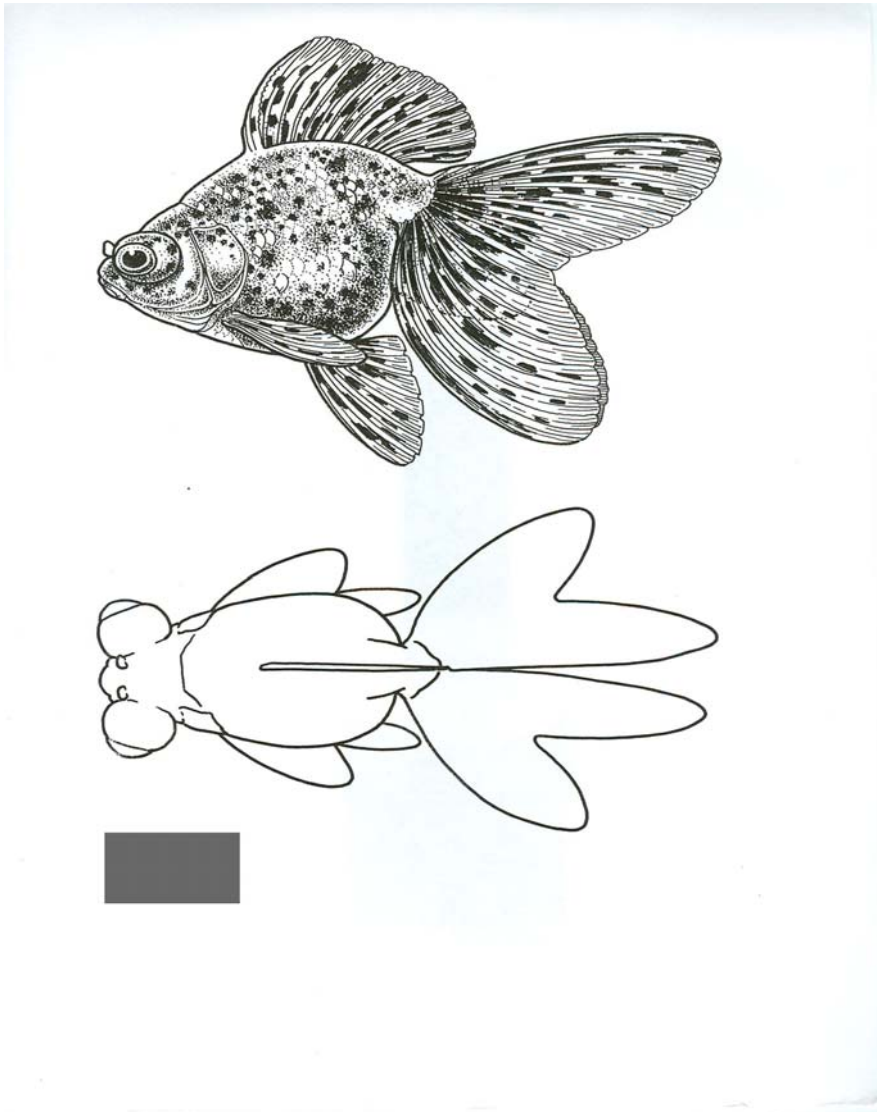
The Telescope is one of the oldest goldfish varieties in existence, and was developed from a natural mutation that occurred to produce the characteristic, protruding eyes of this fish. Matsui, in his famous book, *The Goldfish Guide*, has several pictures of single-tailed fish that were the result of a spawn of common goldfish that he produced. This led Matsui to believe that the protruding eye characteristic was a natural mutation, and most modern goldfish researchers agree with this finding.

The Chinese have a love of the dragon, which is a mythical creature believed to possess enough physical strength and recuperative powers. The Chinese dragon is not to be confused with the mythical medieval dragon of Western legend. Rather than being stocky, as in the case of the Western medieval dragon, the Chinese version is sinuous and long, and is arrayed in bright colors. The Chinese have attempted to produce dragon-like creatures over the years, and one of the results of this fascination is the telescope-eyed goldfish, which is known as a “Demekin” or dragon-eyed fish in China.

Dragon-eyes are very adaptable fish. Indeed, the dragon-eyed fish is often used in cross-breeding with other fish to improve a specific characteristic of that fish. As an example, many people believe that the famous Veiltail was produced by breeding a square-cut dragon eye with a Ryukin or fantail to add long finnage to the round body shape of the base fish. Similarly, several colors of goldfish have been derived from the telescope, and include blue, brown, blue-brown, calico and panda (black and white). Subsequent crosses are required to remove the characteristic dragon-eye feature.

Well, now that we know some of the background of the Telescope or Dragon-eye, what does the fish look like?

The GFSA breed guideline, prepared by Merlin Cunliffe, is presented below.



As you can see from the line art drawing, the Telescope eye is a fish with a round body, paired fins, and protuberant eyes. The body shape is closer to that of an Oranda than that of a Ryukin, in other words, it is a rounded, not a round shape. The finnage is paired and tends to be moderately long, although in some strains, the fins appear extremely long, especially the dorsal and caudal fin. In these longer-finned fish, the caudal fin shows little or no forking and appears square-cut. This "square-cut" tail is also known as a petticoat tail, and fish are sometimes sold with a fanciful name of "petticoat."

The eyes are the characteristic feature of this fish, and should be matched, as well as being protuberant. When we speak of matched eyes, we are actually talking about two aspects of the eyes. The first aspect is that of size; in other words, the eyes should be of the same size and type. An example of a

problem relating to eye size would be that of a fish with one eye that is significantly larger than the other. The second aspect of eye type is that of placement on the head of the fish. Both eyes should be placed symmetrically on the head. If one eye is placed significantly forward or backward of the other, or if one eye is placed upward or downwards on the head, when looked at in relation to the other eye, this is a problem.

There are actually several types of eye types which are permissible: a segmented type, where the eye appears to be composed of a series of concentric circles, which gradually get smaller; a conical type, where the eyes are cone-shaped looking almost like a volcano; and a rounded, protuberant type, which appear to form a small balloon attached to the cheek, and which is pictured on the line art drawing. Of these three eye types, the segmented and balloon-type are the most elegant, and are the preferred type. Please note that mixing of eye types on a single fish is undesirable: as an example, one eye should not be round and the other segmented (I have actually seen examples of fish where this occurs).

One of the frequent questions that get asked about Telescope fish is whether or not they can see properly. As far as we can tell, the appearance of the eye does not affect the vision of the fish. Having said this, the eyestalks protrude and can be damaged. It is best to avoid placing the fish in an environment where sharp or pointed objects might disturb the eyestalks.

The Telescope is not a very large goldfish, and is usually six to seven inches in size, excluding the tail. Larger individual fish are seen, but they do not occur with the regularity seen of Ryukins or Orandas. The Telescope comes in a variety of color and scalation types including metallic, matte and nacreous, and along with the Oranda is perhaps the most diverse of the goldfish. Despite the strange appearance of the eyes, the Telescope is a hardy fish, and can be kept in a mixed tank of goldfish, although it is probably best not to keep them with single tails, since they will have a difficult time competing for food. I would not advise over-wintering a fish in a pond, but they do quite well in a pond environment in the late spring and summer.



Panda Telescope, Portland Show, 2006



Black Moor, Portland Show, 2006



New color variety, Southwest koi & goldfish



MAKC Show, 2006, photo courtesy of Carolyn Weise

The Telescope is an unusual fish, and one which can be admired for its beauty and uniqueness. Own a few of these fish, and you can experience the thrill of owning a real Chinese dragon.