

# CELESTIAL PEARL DANIO, *Danio margaritatus*

By Chase Klinesteker



Female

Male Celestial Pearl Danio

## DESCRIPTION

The Celestial Pearl Danio, *Danio margaritatus*, is one of the prettiest small fish I have ever seen. It was first discovered in 2006 in a small region of Myanmar, SE Asia, east of Lake Inle. It became an immediate hit in the hobby, and some were concerned about depleting the native population by overcollecting. It was first given the common name of Galaxy, or Fireworks Rasbora until it was found to be a Danio. Its small size (adults  $\frac{3}{4}$  inch) and attractive colors and patterns make them ideal for a nano tank. Males are more colorful and have a brilliant red-orange pattern in the dorsal, anal, and caudal fins, as well as red and yellow in the belly area. The body is a dark steel blue with an irregular sprinkling of pearly white dots, reminding one of stars in the Heavens. Females have less color in the fins, not as dark a blue background, and a white or yellow belly area. In well cared for fish, the females will always be plump. It is a very peaceful fish, to the point of being shy, so it does best in a species tank. Active and peaceful surface dwelling fish would make good tankmates, as the Celestial Pearl Danio inhabits the mid and lower tank levels mostly. It comes from shallow area lakes with heavy plant growth, so plants and hiding places are important to have available. They seem to be more active and spawn in low light conditions. Its reported preference for water conditions ranges from acid to alkaline, indicating that it is fairly adaptable, but quick changes of water parameters are not recommended. Clean unpolluted water is the most important factor, and they will not do well in unsanitary aquariums, being somewhat susceptible to velvet. It comes from higher elevations and prefers temperatures from 65-75 degrees. It eats a variety of foods but has a small mouth and is reluctant to come to the surface to feed. Live baby brine shrimp, daphnia, and blackworms seem to be some of their favorite foods.

## BREEDING

Not a lot of detail is available on breeding this fish, although many articles claim that, because it is a danio, it is easy to breed. I hope to add my experience breeding and raising this fish and maybe help others to lessen the collecting pressure on the native stock. It probably will never become commonplace in fish shops because it is small in size, not prolific, and grows slowly, not good attributes for commercial breeders. Because their native habitat was near lake Inle (high elevation and hard alkaline water), I chose to place the 2  $\frac{1}{2}$  gallon breeding tank outside the fishroom where temperatures range between 65 degrees in winter to 75 degrees in summer. To harden the water, a small box filter with dolomite gravel as the filter medium was used on one end of the tank. On the other end, a cut mat of artificial grass was placed down with other plastic plants on top to give many places to lay the eggs and hide them from predation (they are avid egg-eaters!). These fish will

spawn regularly with live foods and water changes, but the eggs are large for this small a fish and a group of 4 pairs may only lay 10-20 eggs at a time. They appear to be daily spawners and only lay one egg at a time. The non-adhesive clear eggs are siphoned up after shaking them out of the plastic plants and placed in a gallon container with fresh water, methylene blue, and a bubbler for oxygen. In 4 days they will hatch, and they look like tiny glass slivers attached to the side of the container. They need 4 more days to become free swimming.

### **RAISING FRY**

The fry swim in short jerks, are long and skinny, and are not heavy eaters. This is when I have had the most difficulty raising them, because they require infusoria for several days before they will take baby brine shrimp, and overfeeding will kill them. Much attention needs to be paid to keeping the water clean as the fry are very susceptible to water pollution. Once they begin taking brine shrimp, raising them becomes easier, although they grow quite slowly. 4-6 months is needed for them to reach maturity, and they still may be only ½ inch long at that. Often they come to the shops so small that they are hard to appreciate, but in a couple more months will blossom into the true beauties they really are!