

Celestial Pearl Danio Care Guide

Danio margaritatus

The Celestial Pearl Danio (*Danio margaritatus*) is a small, colorful freshwater fish known for its pearl-like spots, vivid red-orange fins, and peaceful nature. Native to shallow, heavily vegetated waters in Myanmar, these active nano fish thrive in planted aquariums and do best when kept in groups. Their striking appearance and manageable care requirements make them a popular choice for both beginner and experienced aquarists.

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Male Danio

Quick facts

diet: Omnivore / Micropredator

lifespan: 3 to 5 years

ph range: 6.0 and 8.0

adult size: 0.75 to 1 inch (2 to 2.5 cm)

care level: Moderate

temperament: Peaceful, gentle, and non-aggressive

scientific name: *Danio margaritatus*

minimum tank size: 10 gallons

temperature range: 68F to 78F (20C to 26C)

social requirements: At least 8 to 10 individuals

Overview

The Celestial Pearl Danio (*Danio margaritatus*) is a small, peaceful freshwater fish known for its dark blue body covered in pearl-like spots and bright red-orange fins. Sometimes called the Galaxy Rasbora, this species is especially well suited to planted and nano aquariums.

They are active, social fish that do best in groups with plenty of vegetation and hiding places. Males often display their colors and spar with one another, particularly when competing for females, but serious aggression is uncommon.

Natural habitat

Celestial Pearl Danios (*Danio margaritatus*) are native to the Shan Plateau of Myanmar, where they inhabit shallow, spring-fed ponds near the town of Hopong. These ponds occur at high elevations and are surrounded by grasslands and agricultural areas.

Their natural waters receive plenty of sunlight and support dense growths of aquatic vegetation, giving the fish abundant cover and areas to forage. The combination of clear water, vegetation, and relatively shallow conditions creates the sheltered environment this small species prefers.

Habitat Tip: Recreate their natural environment with dense live plants, gentle water movement, and areas of open swimming space. Floating plants can also provide additional cover and help create a more secure environment.

Adult size and lifespan

Celestial Pearl Danios are tiny fish, typically reaching only 0.75-1 inch (2-2.5 cm) when fully grown. Males and females are similar in size, although females generally have rounder bodies while males develop stronger coloration.

With proper care, Celestial Pearl Danios typically live for 3-5 years in a home aquarium.

Aquarium requirements

Celestial Pearl Danios do well in a 10-gallon tank or larger, although additional space is beneficial for larger groups. They prefer heavily planted aquariums with plenty of cover alongside open areas for swimming and displaying.

A mature, stable aquarium with gentle filtration and good water quality provides the best environment for this small species.

Setup Tip: Dense plants around the sides and back of the tank help shy fish feel secure while leaving the center open for swimming and social behavior.

Water parameters

Celestial Pearl Danios prefer cool, clean, and stable water. While they can tolerate warmer conditions, they generally thrive toward the cooler end of their range.

Temperature: 72-76F (22-24C), up to 78F (26C)

pH: 6.5-7.5

GH: 4-12 dGH

KH: 2-10 dKH

Ammonia: 0 ppm

Nitrite: 0 ppm

Nitrate: Below 20 ppm

Water Tip: Avoid keeping Celestial Pearl Danios unnecessarily warm. If your aquarium naturally stays around 72-76F, a heater may not be needed.

Filtration and flow

Celestial Pearl Danios prefer clean, well-oxygenated water with gentle flow. Sponge filters are an excellent choice, while low-flow hang-on-back or canister filters can also work well.

Avoid strong currents, as these small fish naturally inhabit relatively calm, heavily vegetated waters.

Flow Tip: Use plants and hardscape to create calm areas away from the filter output where the fish can rest and feel secure.

Heating requirements

Celestial Pearl Danios prefer cooler temperatures between 72-76F (22-24C), although they can tolerate temperatures up to 78F (26C).

A heater may not be necessary if your home naturally keeps the aquarium within their preferred range. If temperatures regularly drop below this range or fluctuate significantly, an adjustable heater can help maintain stability.

Heating Tip: Don't automatically add a heater. Check your aquarium's natural temperature first, as many homes can maintain a comfortable range for Celestial Pearl Danios without one.

Lighting

Celestial Pearl Danios do well with low to moderate aquarium lighting, especially in heavily planted tanks. They do not require specialized lighting, so lighting should primarily be chosen to support the aquarium's plants.

A consistent 8-10 hour light cycle works well, with vegetation providing shaded areas for the fish.

Substrate

Celestial Pearl Danios have no strict substrate requirements and can be kept over sand, fine gravel, or planted aquarium substrates. A natural-looking substrate works especially well in the heavily planted setups they prefer.

Plants and decor

Celestial Pearl Danios thrive in heavily planted aquariums that resemble their naturally vegetation-rich habitat. Dense plants provide cover and help these small, sometimes shy fish feel secure, while open areas should remain available for swimming and displaying.

Good choices include Java moss, Java fern, Anubias, Cryptocoryne, and floating plants. Rocks and driftwood can also provide additional structure and hiding areas.

Behavior and temperament

Celestial Pearl Danios are peaceful, active, and somewhat shy fish. Once comfortable, they spend much of their time exploring the lower and middle areas of the aquarium. Males frequently display their bright colors and may briefly chase or spar with one another, but serious aggression is uncommon.

They can be cautious around their keepers at first, but often become more confident and visible over time, especially when kept in a larger group with plenty of plant cover.

Behavior Tip: If your Celestial Pearl Danios constantly hide, adding more plants and increasing the group size can help them feel secure enough to spend more time in the open.

Social and Shoaling requirements

Celestial Pearl Danios are social fish that should be kept in groups. A minimum of 8 individuals is recommended, although groups of 10 or more can help them feel more secure and encourage natural social behavior.

Males may display and briefly spar with each other, so larger groups and plenty of plant cover help spread out this behavior.

Social Tip: Larger groups often make Celestial Pearl Danios more confident and visible, rather than causing them to hide more.

Tank mates

Celestial Pearl Danios do best with small, peaceful species that are comfortable in similar cooler water conditions. Avoid overly active tank mates that may intimidate them or outcompete them for food.

Good tank mates include Pygmy Corydoras, Chili Rasboras, Ember Tetras, Otocinclus, small peaceful loaches, and freshwater shrimp or snails.

Tank Mate Tip: Choose calm, similarly sized species. Celestial Pearl Danios can become shy and spend more time hiding when housed with large or highly active fish.

Species to avoid

Avoid keeping Celestial Pearl Danios with large, aggressive, highly active, or predatory fish. Their small size and shy nature can make them vulnerable to bullying, predation, and competition for food.

Species to avoid include large cichlids, aggressive Bettas, Tiger Barbs, large Gouramis, large Loaches, and predatory Catfish.

Compatibility Tip: Not sure whether a species will work with Celestial Pearl Danios? Use the [GuideMyTank Compatibility Checker](#) to compare species before adding new tank mates.

Diet and feeding

Celestial Pearl Danios are omnivorous micropredators that need small foods that fit easily into their mouths. In the aquarium, feed a quality nano fish flake, micro pellets, or crushed tropical flakes as their regular diet.

Supplement prepared foods with baby brine shrimp, daphnia, cyclops, and small frozen or live foods. Most aquarium and pet stores carry suitable nano pellets, flakes, and frozen foods.

Feed small portions 1-2 times per day, making sure food reaches shy individuals.

Common health concerns

Celestial Pearl Danios are generally hardy but can develop ich, fin rot, fungal infections, and internal or external parasites. Poor water quality, unstable temperatures, overcrowding, and stress can increase their risk of illness.

Watch for faded coloration, clamped fins, white spots, loss of appetite, unusual swimming, or prolonged hiding.

Breeding

Celestial Pearl Danios are egg layers that can breed readily in a well-maintained aquarium. They prefer to scatter their eggs among dense vegetation, so plants such as Java moss or a spawning mop provide excellent spawning areas.

Adults may eat their own eggs, so moving the spawning material to a separate breeding tank can improve survival. The eggs typically hatch within about a week, depending on temperature.

Newly hatched fry are extremely small and initially require tiny foods such as infusoria or other microscopic fry foods. As they grow, they can transition to baby brine shrimp and other appropriately sized foods.

Breeding Tip: For the best results, condition the adults with a varied diet and provide plenty of dense moss. Check the plants regularly for eggs and move them to a separate tank before the adults find them.

Beginner guidance

Celestial Pearl Danios are a good choice for beginners, especially for aquarists interested in smaller planted tanks. They are peaceful and relatively hardy but do best in a fully cycled, stable aquarium with plenty of plants and a proper-sized group.

Their small size means extra attention should be given to choosing appropriately sized foods and peaceful tank mates.

Frequently asked questions

How many Celestial Pearl Danios should be kept together?

Keep at least 8 individuals, although a group of 10 or more can help them feel more secure and encourage natural social behavior.

Do Celestial Pearl Danios need a heater?

Not always. They prefer 72-76F (22-24C), so a heater may not be necessary if your aquarium naturally remains within this range.

Can Celestial Pearl Danios live with shrimp?

Yes. They generally coexist well with adult peaceful shrimp, although they may eat newly hatched shrimplets if they can catch them.

Why are my Celestial Pearl Danios hiding?

Hiding is often caused by small group size, insufficient plant cover, overly active tank mates, or stress. Keeping a larger group in a densely planted aquarium usually helps them become more confident.

Sources and references

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2. The Celestial Pearl Danio: A Cautionary Tale - Mike Hellweg, Tropical Fish Magazine

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