

Crustacean Fascination

The craze started with red crystal shrimp.

By Oliver Lucanus

In recent years, aquarium keepers in Europe and Asia have had access to a new wave of freshwater invertebrate creatures. Never before have so many shrimp, crayfish, crabs, clams and snails from around the world been available to freshwater aquarists. Fishkeeping is evolving into the enjoyment of all freshwater aquatic life — a trend set by our fellow aquarists in the marine hobby.

Photo Credit: Oliver Lucanus

The entire craze started with one tiny invertebrate: the red crystal shrimp (presently, it is sold as *Caridinia* sp.). The red crystal shrimp is so small it is not well-suited for a community aquarium. Even so, I don't think any freshwater invertebrate has fascinated the hobby as much as the red crystal shrimp.

In many ways, the red crystal shrimp is the ideal animal for a desktop aquarium. Its colors are bright and bold. The red crystal shrimp is not shy if there is traffic around the aquarium, and it requires little maintenance.

Because shrimp molt (like crabs and crayfish), they have a soft phase after they shed their skin, during which time they are defenseless and will be eaten by just about anything. Even small fish, such as dwarf cichlid fish, can bite off sensitive antennae. So, crystal shrimp are really best kept alone in a species aquarium or with very tiny peaceful species such as the smallest tetras, lampeyes and rasboras.

Then again, red crystal shrimp are fascinating on their own, and it is only without fish in the aquarium that they will really exhibit all their behavior. Red crystal shrimp frequently hover midwater, and females carry bright green egg bundles. Left undisturbed and without predators, some of the tiny babies will grow to adulthood. Red crystal shrimp easily reproduce in captivity, and a small group can quickly turn into a bustling colony. Only a few simple guidelines need be followed to keep and breed these amazing shrimp.

Getting Started

A small aquarium of around 5 gallons is enough to start a small group of four to 10 red crystal shrimp. The aquarium should have a fine sand substrate and plenty of aquatic plants. Baby red crystal shrimp especially love to graze on the fine algae that grows on plants in the water.

Planted aquariums also allow the red crystal shrimp plenty of perches to sit on during the night — they do not like to be on the ground, unless there is food that has fallen to the bottom. All plants are suitable because red crystal shrimp are tiny (less than a half inch as adults), but they seem particularly fond of the strong leaves of *Anubias nana*.

Heavy metals can be harmful for invertebrates — and can prove fatal to these red crystal shrimp. Photo Credit: Oliver Lucanus The temperature should be about 75 degrees Fahrenheit, and the pH should be close to neutral. More important is a filtration system that is not too strong, such as a small sponge filter or box filter with a steady flow that will create a slight current in the aquarium without sucking in the tiny red crystal shrimp. Filtration should include a small amount of carbon or zeolite to remove any traces of heavy metals, which are very harmful to invertebrates and can quickly kill the red crystal shrimp. One-quarter water changes should be done weekly; de-chlorinate replacement water before adding it to the aquarium.

Feeding

Red crystal shrimp eat algae but will readily accept any food offered. They will chase down live brine shrimp and consume frozen mosquito larvae, flake foods and even frozen beef heart. Never overfeed them, because they are more sensitive to poor water conditions than most fish.

Baby red crystal shrimp seem to find enough small items to pick at in the aquarium, so they do not need to be fed extra. Increasing the amount of light in the aquarium will sometimes encourage algae growth — just enough to provide extra food for the tiny babies. They grow quickly and usually spread out along the aquarium glass, where they feed off

algae.

Coloration

Some red crystal shrimp in the colony revert to a less attractive, less intensely-red coloration than their parents started with. These less brightly colored shrimp should be removed from the aquarium to make sure that only bright red crystal shrimp are born and raised.

The growing popularity of red crystal shrimp has encouraged a number of expert breeders to work with them. The original form is not nearly as brightly colored as the ones on the market today. Breeders are developing animals with even bolder white markings on a red background, and even black and white striped animals are being sold in Japan.

The prices are still prohibitively high, but soon new color forms of this fascinating creature will be available in the United States. For aquarists who enjoy setting up micro-habitats, there could not be a more perfect aquarium inhabitant than the red crystal shrimp.