Marine Nebalia Bipes As Live Fish-Food

By Joseph Boucher

The marine *Nebalia bipes* is a small shrimp-like bottom dwelling crustacean that makes an excellent live food for aquarium fishes. They are easy to culture on account of their natural shallow water habitats that are easy to duplicate, and their feeding habit which consist exclusively of plant and animal detritus which can be substituted with powdered baby fish-foods and dietary food products. I once knew an amateur culturist who raised them profitably for tropical fish stores as a variety of live food for aquarium fishes, like the Brine Shrimps *Artemia salina* are used.

Nebalia bipes grows to 10 to 12 millimeters in body length. They have a semi transparent carapace through which their 8 pairs of leaf-like breathing appendages and 4 pairs of abdominal swimming limbs are visible. They have a hinged trap door like rostrum that can cover the head and their compound stalked pair of eyes. The first pair of antennae are somewhat branched and the second pair are not. And their carapace can be closed over there drawn in appendages when they are resting in the bottom sediment, which could also serve as an hibernating shell during the cold months if needed.

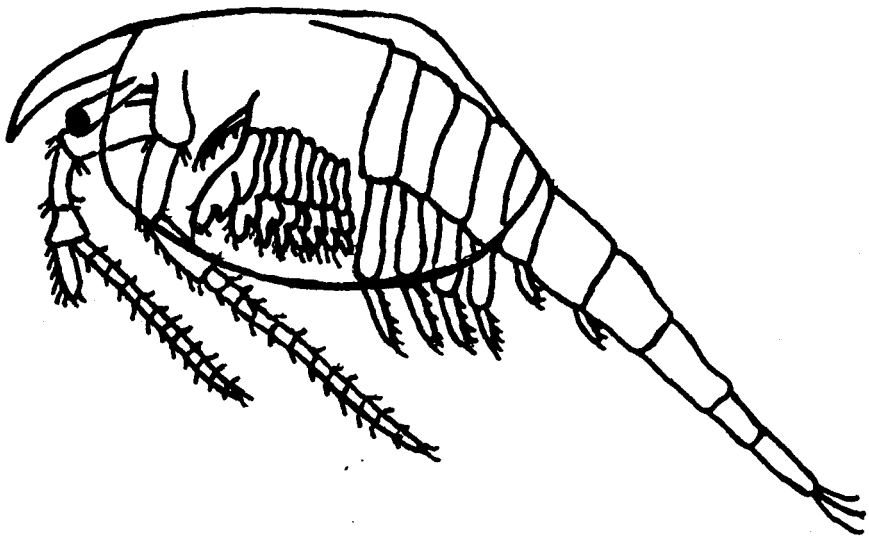
It is said that they are common along the east coast of temperate North America in shallow water and tide pools among vegetation-where they feed on plant and animal detritus. They are filter feeders, and they agitate the loose bottom sediment with their antennae to suspend their natural food from it. Starting cultures of them are easy to collect by scooping up the loose bottom sediment with a hand net, especially during the summer months when the females are carrying their brood of eggs or newly hatched youngs which clings to the mother's thoracic appendages for a while.

Not much is known about their breeding habits and life history except for what has been observed by a few culturist. It is only known that the females produce summer eggs that hatch in their ventrally located brood space, and when the newly hatched youngs are released they are self sufficient and resemble their parents except for their size. The time required for the young to develop into reproducing adults and their life span is not known at this time. However, in properly controlled cultures they reproduce abundantly the year around regardless of how much we know about their breeding habits and life history.

They have been cultured successfully by amateur culturists in 5 to 10 gallon all glass aquariums filled with artificial seawater adjusted and maintained to the specific gravity of normal seawater of 1.022. Provide constant mild bottom aeration, about 12 hours daily of moderate illumination, and room temperature of about 70 degrees F., and partially replace the water weekly, and use about ½

inch of pulverized peatmoss on the bottom for them to hide in. And feed them sparingly and according to the population in the culture, with a variety of powdered baby fish-foods, alternated with dietary products such as powdered Brewers Yeast, pulverized Desiccated Liver tablets, pulverised Kelp tablets, powdered Pablum Soybee, Powdered Milk, and Casilan (Calcium Caseinate) which contains 90% protein and 3.8% essential calcium in an assimilable form. The dietary products may be fed separately or in mixtures of two or more ingredients of plant and animal matters.

There are many other different forms and species of marine organisms suitable as live food for baby and larger aquarium fishes which would make an interesting and profitable enterprise for adventurous aquarists, amateur culturists, and biology students. And when we've learned all there is to know about one specie and lost interest in it, there are hundreds of others that we don't know anything about to recapture our interest. The small species of our shallow water Eel-grass Shrimps such as our east coast orange striped *Spirontocaris zebra* also makes an excellent live food for aquarium fishes, which are mostly collected and sold as small fishing bait. Their culture in artificial seawater and on a diet of substituted dietary products needs to be investigated.



Nebalia bipes
Re-drawn from Calman's drawing.