

Harlequin Tuskfish (*Choerodon fasciata*)

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By Terry Siegel

It was around 1970 that I saw my first harlequin tuskfish — then called *Lienardella fasciata*, now known as *Choerodon fasciata* — offered for sale in a local fish store. The fish's natural beauty, its vertical tiger-like stripes, and the menacing, protruding blue teeth stunned me. Given its appearance, I assumed that it would be a very poor community tank fish. In the case of this fish, one cannot judge its behavior by its appearance.

Over the years I have had three tuskfish, the first two in old-style fish-only tanks. I found these tuskfish to be relatively typical wrasses. I say relatively because both were unusually timid for members of the wrasse family. Though I was able to keep both specimens for several years, I lost both due to blindness. I assumed at that time that the blindness was the result of a dietary deficiency. I no longer think that is the reason.

The harlequin tusk that I now have in my reef tank is less shy, more intensely colored, growing rapidly and in general is far healthier than those I kept in the past. I don't know whether the reason is the far superior water quality of a reef tank or the lack of repeated exposure to copper or parasites. The answer is not dietary, because I feed essentially the same. This is, of course, anecdotal — one cannot generalize on the basis of three fish. However, I am familiar with a number of experienced marine aquarists whose experience with tuskfish is comparable with mine.

Labridae

Tuskfish belong to the family Labridae, which is extremely widespread throughout the oceans of the world. In fact, only the Gobiidae (gobies) family shows greater diversity among the world's coral reefs. Wrasses range in size from about 1 inch to 6 feet and are torpedo shaped and powerfully built. It is typical of wrasses to cruise around in search of food with only the use of their pectoral fins — the powerful tailfin is used when rapid acceleration is required. They have relatively small mouths but powerful jaws, and large protruding pointed teeth. It is clear that they are built to feed on tough-shelled crustaceans.

Tropical wrasses are protogynous hermaphrodites — most males develop from fully functional females. There are, however, two sexes. Males that are born males are called primary males, and are generally more intensely colored. This arrangement (protogynous hermaphrodites) clearly has survival value for the family Labridae — the possibility of running out of breeding males is unlikely. With wrasses, a single dominant male controls reproduction within a group of females, and if that male dies, the dominant female turns into a male and will continue breeding within that group.

As an aside, it occurred to me that an aspect of this might explain what I consider a myth among marine aquarists: that tuskfish from Australia are more intensely colored than those from the Philippines. Over the years, I have seen many tuskfish come into the holding facilities from these two collecting areas, and the variation in color intensity to my eye was the same for both locations. It is true that there was greater short and long term survival for those collected from Australia, but that had to do with superior collecting and shipping practices. For commercial reasons, aquarists were told that a brightly colored (primary) male came from Australia, and commanded a higher price. In other words, any intensely colored tuskfish had to come from Australia, something that I do not believe to be true.

Most members of the family Labridae undergo a significant color change from their initial (juvenile) to their terminal (adult) stage. In the case of the tuskfish, the change is not especially extreme. The tiger-like stripes are already present in the initial stage, but the dorsal fin displays two large black spots, and the anal fins display a similar spot. These spots (false eyes) disappear as the juvenile matures. Markings that give a fish the appearance of large false eyes has such effective survival value that they are sported by many reef fish.

Choerodon fasciatus

In the wild the tuskfish claims habitats throughout the West Pacific. It is usually found at depths of 15 to about 110 feet. It is most often found searching coral rubble and sand for edible crustaceans. Dominant males are quite territorial, protecting their harems from other males.

Though all wrasses have protruding front teeth, the blue fang-like teeth of the tuskfish — hence its name — are quite special. The curved fang-like teeth of the upper mandible fit perfectly into the comparable teeth protruding from the lower

mandible. An adult tuskfish can reach a length of about a foot. The tuskfish pictured here has reached a length of about 6 inches over the course of the last five years in my reef tanks. I purchased the fish as a juvenile. Interestingly, it has undergone a growth spurt since I relocated to my 10-foot reef tank.

In Captivity

My experience, which mirrors that of other reef keepers with a tuskfish in their reef tank, is that *Choerodon fasciatus* is an excellent reef tank fish under most circumstances. Like most wrasses it shows little or no interest in corals, clams, cucumbers, gorgonians, starfish and so on. However, it is quite interested in hermit crabs, shrimp and snails. Hermit crabs and snails are able to protect themselves from this particular wrasse, but I would not try to keep any shrimp other than nocturnal ones.

I have seen a snail fall and land with its operculum exposed, attracting the interest of my tuskfish, but this has never developed into more than the tuskfish pushing the snail around a little before losing interest in it as a potential meal. I have a mated pair of banded coral shrimp (*Stenopus hispidus*) in the same tank with the harlequin tuskfish. These shrimp only forage for food at night, but their hiding place is quite visible to me, and I'm sure to the tuskfish. I can only conclude that these shrimp are able to adequately defend themselves.

Unlike many wrasses, the harlequin tuskfish does not bury itself at night, so it is important for the reefkeeper to provide a rocky cave for this fish to call home at night. Rarely do I feed anything other than flake food, which it relishes. In order to satisfy my seven surgeonfish, I feed a diet very heavy in vegetable matter. The only exception is bi-weekly feedings of nori. My tuskfish has thrived on this diet, consuming large quantities of nori when offered. It is clearly a myth that one must feed all wrasses a diet of minced shrimp, clam and the like.

I recommend this particular wrasse to any reefkeeper with a reef tank of at least 100 gallons. As long as you're willing to forgo keeping many of the smaller shrimp, you'll have no problems.