about every month from early spring to late summer. The youngs develop into reproducing adults in about one month depending on the temperature. The life span of the *Asellus aquaticus* is about one year. The Asellus population in ponds are active all through the year even under ice, but they seem to require a temperature about 60 degrees F. to start breeding.

They can be cultured indoors in 5 gallon or larger aquariums filled with aged tap water, and provide about 1" of mortar sand, and rooted or floating aquarium plants which will absorb the detrimental carbon dioxide as plant food. Floating Anacharis or Myriophyllum plants are used in cultures, because they don’t interfere with collecting the Asellus. And maintain a room temperature of about 70 degrees F., which seems to induce year around reproduction. They can tolerate a mild acidic condition, but they seem to prefer a neutral pH value of 7.0, which can be maintained with Sodium Bicarbonate when the pH value goes too acidic. And partially change the water every 2 weeks. They seem to like to forage in the loose bottom sediment which can be substituted with pulverized peatmoss.

Feed them daily with just enough food that they will consume in a couple of hours, using a variety of dietary products dropped on the substrate such as, Desiccated Liver tablets, Alfalfa or Spinach tablets, and supplement their diet with Scrambled Eggs. They seem to like feeding on golden brown Diatom Algae, such as the kind that clings to submerged small stones and plant debris, which can easily be supplied to vary their diet.

The Asellus can be collected from the culture by netting or siphonning them out with the sediment which is placed in a shallow dish with clear water, and the sediment removed with an eye dropper, or the sediment rinsed out through a coarse flat net or sieve.

Starting cultures of *Asellus aquaticus* are not available from commercial culturists in this country, and they may have to be imported from England or Germany where they are available from amateur culturists over there. But they have been found in North America in nursery ponds where water lilies and other aquatic plants are propagated, where they probably were introduced with imported aquatic plants.

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**The Bantam Sunfish**  
(Lepomis symmetricus)

by Mike Stegall

One weekend back in June of 1972, I visited my parents who live in a small town on the Mississippi River. On that Saturday
morning my father and I went seining for small sunfish to put in my tank back home in Jackson. We drove about 50 miles that day and seined a few Oxbow Lakes with meager results. On the way back as we drove on a levee we saw a bar (borrow) pit which is just about two miles from where I grew up. We decided to stop here since I felt that even if all I caught was a little food for my fish at home, the trip would not have been a complete waste.

I had not seen that particular bar pit in years. It appeared to be quite deep, but it had a good bed of moss (algae) growing along the shore. We walked up to the edge of the water and observed that the moss was working alive. There was about two feet of very shallow water between the shore and the moss. In this narrow strip there were many small saucer size nests, each protected by one or two small sunfish. The first seining netted about 30 of them. I had no idea what species they were. Obviously they were mature, but only about three inches in length. Coloration was observed to be predominantly olive with a brighter hue of green outlining each scale. The dark gill flaps were outlined in red and the eye had red surrounding the pupils. Previously I had not seen a picture or read a good description of this particular sunfish but I thought that I had netted and keyed out just about every species of sunfish indigenous to that area with perhaps the exception of one. So unless I had found *Lepomis stegall* (sic.) which was sorta doubtful, it had to be the bantam sunfish (*Lepomis symmetricus*). Once back home I placed three pair of these rascals into a twenty gallon high aquarium. Soon it became obvious to me that this was definitely one of the easiest sunfish to adapt to the home aquarium. Although other sunfish are more colorful, the bantam is still very attractive. It is a robust, hardy, active sunfish maturing at the size of approximately two inches. If the tank in which they are maintained has some hiding places they do not appear to be afraid of anything. After a couple of weeks they would beg for food when I entered the room. They are very aggressive bluffers; never saw one actually attack another in their size range. They eat anything from worms to flake food. This same three pair made nests and were in one stage or another of spawning all summer long. I did not bother to raise any of the fry since I visited my parents often and could obtain mature adults with little trouble. To show just how far my over-confidence had reached, in September I decided to put something else in this tank and returned the bantams to their bar pit. This was to be my permanent source and all I had to do would be to return with my trusty net and catch all I need. Little did I know at that time the spring of 1973 would bring the worst flood the Mississippi River has seen since 1927. All the bar pits were flooded until mid summer and when the water finally receded the moss was left high and dry on the side of the levee and
the bantam sunfish were gone. Each year since that time I returned to find no moss and no bantams.

In 1977 the moss began to form again and lo and behold I caught a few fry. This spring there was more moss and I finally caught bantams again. Because they are so difficult to find and particularly to identify in a net full of other species *Lepomis symmetricus* is rarely observed in private collections. And unless my aquarium floods next spring I don’t plan to be without them again.

**Astyanax fasciatus mexicanus**

_in the Aquaria and the Wild_

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INTRODUCTION

The characins or tetras have long been a favorite fish among aquarium hobbyists. Unfortunately, many hobbyists still overlook the less colorful and spectacular tetras. One group in particular, the genus *Astyanax*, has often been coined undesirable. Much to the contrary many species of *Astyanax* are excellent aquarium fish. Unlike most tetras, specimens of some *Astyanax* can be collected by the hobbyist without an expedition to the Amazon or Congo Rivers.

The genus *Astyanax* is very rich in species and subspecies. The distribution of *Astyanax* is strictly New World and can be found in suitable habitats from southern Arizona, New Mexico and Texas south to Patagonia (Argentinian) on the Atlantic coast. On the Pacific slope it can be found from Columbia to central Mexico. One species, *A. fasciatus*, ranges almost the entire range of the genus and is composed of many subspecies or geographical races. The northern race, *A. fasciatus mexicanus*, is to be the subject of this article.

DESCRIPTION

Body typical for the genus, moderately elongated and strongly compressed laterally; about equally convex in the upper and lower profiles (Fig. 1). Over all the color is a silvery-white to a pale brassy; ventrally, silvery to olive. The base of the caudal fin with a diamond-shaped black mark which extends forward, above the lateral line, to behind the eyes and posteriorly to the notch in the caudal fin as a black bar. Adipose fin present. Caudal fin deeply emarginate. The fins of the male are colorless except for the pectoral, anal and caudal fins. The pectorals are pinkish and the caudal fin is a warm yellow-gold with a black marginal band.