## FISH BEHAVIOUR

By ALLAN SEMEIT

Probably every aquarist is somewhat of a fish behavioral expert. Frequently, the results of mixing two or more species of fish can be predicted, but sometimes the outcome is not the expected. As you might guess, several combinations provided some surprising experiences.

The first occured after collecting a number of <u>Lucania parva</u> (the so-called "Rain-water Killie) and Three-spined Stickleback (G. aculeatus). Although collected in a moving creek close to San Francisco bay, I was surprised to find a salinity reading of almost marine conditions. Collecting the Sticklebacks was a surprise too, as I had collected there before but only caught <u>L. parva</u>.

Returning home, the fish were housed in a 15 gallon aquarium and gradually acclimated to less saline water. In most of aquarium literature, the Stickleback is described as being fairly aggressive and not exactly everyones candidate for a community fish. With this in mind, I kept expecting to see the L. parva develop shredded fins or other signs of abuse. It didn't happen. In fact, the Stickleback were continually harassed by the smaller L. parva. Since I wanted to keep the Stickleback, they were moved to an aquarium of their own.

Because of spacial shortage, a newly arrived pair of <u>Cyprinodon Macularias</u> were housed with their killie cousins, <u>L. parva</u>. As most native fish readers know, pupfish are pretty tough little fish and not usually recommended in the aquarium literature, as a community fish. The <u>L. parva</u> showed no mercy on the new arrivals and four or five at a time pursued the pupfish relentlessly.

Since the only tank with similiar water conditions housed the Sticklebacks, the pupfish were quickly transferred in with the Sticklebacks. Which one of these two aggressive species would prove dominate? Neither one, surprisingly, as they practically ignored one another.

After some time, the Sticklebacks were given their own tank again and the pupfish stayed behind. Problems developed as the male pupfish kept chasing the female. Having previously maintained pupfish, I knew such incessant pursuit would soon exhaust the female. To distract the male, I purchased a male and three female <u>Jordanella floridae</u>. Although there was the distinct possibility of conflict, the two species quickly accepted each other and after two months have shown no animosity. Also, the poor female pupfish is provided with plenty of rest since the Flagfish distract the male quite frequently.

Has anyone observed similiar results with these combinations? I'm thinking of setting up a large community tank of Flagfish, pupfish, and a few other "compatible" species. Any suggestions as to which other natives might fit in nicely?