BREEDING BEHAVIOR OF THE FLAGFISH (Jordanella floridae) by David Arbour, DeQueen, Arkansas

I came in from work one day and checked my aquarium, to find my wild-caught male Flagfish (<u>Jordanella floridae</u>) fanning and fiercely guarding a clump of filamentous, moss-like algae that I had been allowing to grow. Closer examination revealed transparent, pinhead-sized eggs scattered throughout the algae.

The tank was a well-lit, heavily-planted, 20-gallon-long community tank. At the time of spawning the pH was 7.4 and the temperature was 80°F. Other fishes in the tank included two female Flagfish, Bluefin Killifish, Sailfin Shiners, Fat Sleepers, Naked Gobies, Swamp Darters, and a juvenile Sheepshead. The fish were fed a diet of basic flakes, frozen bloodworms, and tablet food.

At first I was sorry that I had missed seeing the spawning act, but as I watched, a female Flagfish approached the territory defended by the male. Initially he reacted to her aggressively. She turned her body to a 90° angle to his with her tail pointing toward his side. Keeping this position relative to him, even though he started trying to circle her, she slowly backed toward his side until her tail touched him. Then she slid her body alongside and slightly under his body. The two of them dropped together into the algae clump and spawned. During spawning, the female had her side almost flat against the bottom, with the male's side flat against her top side. The spawning act only lasted about five seconds, but was repeated approximately every five to ten minutes. Once, though, they spawned three times in a thirty-second period. Each time, toward the end of the spawning act, the female would eat a few of the previously laid eggs. This would cause the male to break away from her and chase her off viciously with a few hard pecks.

Although I couldn't see how many eggs the female would lay at each spawning, I suspected that she only laid three or four at a time, since I could only see small numbers of eggs in the algae clump. One time when their bodies came together and they dropped to the bottom to spawn, they missed the algae clump and laid their eggs on the gravel bottom next to it.

I know I'm not the first to breed this species, but I hope I have shed some new light on their behavior during spawning, and provided general information on conditions for breeding them.