## Grunion... The Fish Do What? Ranger Jim Serpa

Picture this, if you will...It's a warm summer's night. Josh and Tiffany are coming home from a late movie as they drive by Doheny State Beach. Just then Josh notices that the moon is full and a great idea pops into his mind. Josh asks Tiffany if she would like to stop by the beach and watch the grunion run. What's a girl to think? Is this something akin to snipe hunts or the ever popular submarine races? Hopefully not, because grunion do exist.



see, the grunion are thin, six-inch long fish that possess an urge to procreate on the beaches of Southern California. Now to you and me this non-fishy behavior may seem hard to believe, but there is another type of grunion that performs the same trick in the Sea of Cortez as well as a similar fish in the Mediterranean.

All this odd conduct is linked to the rise and fall of the tides. The grunion looks similar to a top smelt and prefers to live in the water just outside the surfline to a relatively shallow depth of 40 feet. They like to school in large numbers and don't stray much, usually living offshore from the beaches where they ground themselves. Grunion are not long-living fish, rarely surviving past the ripe old age of four.

The bizarre spawning rituals occur from March through August and usually happen on the 2nd, 3rd and forth nights after a new or full moon. These "runs" have the annoying habit of occurring late at night anywhere from one to three hours after the high tide. That's part of the fun of grunion hunting; you never know just where or when the grunions will materialize. At Doheny we have seen them running at the far south and far north end (and all areas in between). They occasionally run in small numbers, but at other times it seems the beach is silver with thousands of them.

The actual process goes something like this. At some point in the evening, all the grunion with nothing better to do will start amassing offshore from the beach they have decided, by grunion logic, to run at. It seems these

fish prefer beaches where there is a good supply of sand and as little commotion as possible; e.g. people, lights, etc. Somehow, there is a decision made that **now** is the exact time to run (this time is critical because if it is too early, the eggs could be washed out to sea before they have enough time to incubate in the sand).

Wave after wave brings the grunion onto the beach. The female grunion will wiggle just past the wave line and bury herself tail first just up to her pectoral fins (or, in human terms, up to her shoulders) and proceed to lay from 1,000 to 3,000 eggs. While performing this miraculous feat the males will encircle her and release their milt which will run down and fertilize the eggs. Then both males and female slip back toward the surf and eventually into the offshore waters.

During the next high tide cycle that coordinates with the full or new moon cycle, about two weeks, the eggs will be uncovered by the wave action and washed out to sea. When the eggs are agitated by the ocean, out pop tiny grunion that will continue this wonderful, albeit strange, conduct again next year.

Now, as mentioned, a grunion's life is not a long one, so each female tries to maximize her chance of passing on her genes by laying 1,000 to 3,000 eggs each time she beaches. She will spawn four to eight times a season. Using new math it's easy to see that if all mother grunion laid 24,000 eggs a year and all babies (fry) lived, we would soon be knee deep in grunion. This is where Mother Nature kicks in. The vast percentage of the fry don't survive due to predation by the millions of grunion connoisseurs that inhabit the briny deep.

If you would like to view these grunion doing their thing, just ask a Ranger when the next predicted runs will occur (or consult the Events section of this Web site where the dates will be posted as soon as available). Just remember, they don't always run when and where they are supposed to and if you're over 16 you must possess a valid California fishing license to actually catch them. Also, the only legal way to catch them is with your bare hands.

Most people deep-fry them in a batter, head and all. Maybe you have a more creative culinary technique. Let us know!