BEACH ECOLOGY COALITION

To enhance ecosystem conservation
and beach management
to balance natural resource
protection and recreational use.

Grunion Grooming Protocol At-A-Glance

Grunion season runs from March to August, usually peaking April through June. The grunion run shortly after the new and full moons. Closed season is April and May,"no take."

Grunion eggs remain buried in the sand above the water line for their entire incubation. It is very difficult to find eggs even when you look for them immediately after a run. Look for evidence on the sand the morning after.

"Grunion Greeters" will NOT be monitoring runs this year.

On sandy beaches where grunion run :
Set the high tide lines on the morning after the first run of the series.

The grunion run calendar is posted online by California Dept. of Fish and Wildlife.

In 2013, grunion run dates are:
Mar. 11-14, Mar. 27-30

CLOSED SEASON: NO TAKE
Apr 10-13, Apr. 25- 28;
May 9-12, May 24-27;

June 8-11, June 23-26;
July 8-11, July 22-25;
Aug 6-9; Aug. 20-23

Mark the line after the highest tide of a new or full moon with a grooming line or kelp. Groom only shoreward of this high tide mark. If your beach profile changes over time, set the grooming line every 2 weeks after each semilunar tide.

Eggs are found only in the intertidal zone. Do not groom seaward of that highest tide line, as long as grunion eggs are present in the sand. Eggs usually hatch two weeks after the last run.

Questions / Comments / Concerns about Grunion and Beaches:
Please contact Dr. Karen Martin, Pepperdine University
310-506-4808, kmartin@pepperdine.edu

For more information please see www.Grunion.Org

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Mission Beach, San Diego, showing grunion grooming protocol. Photo by K Martin.

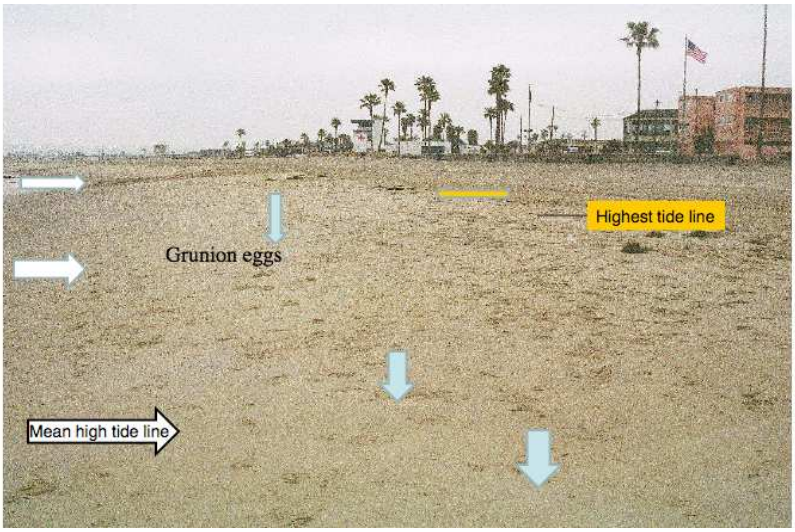

Photo: K. Martin

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Beach Maintenance Protocol During Grunion Season for the City of San Diego, by Dennis Simmons, Beach Manager

The "What" requires the training and direct involvement of the staff that provide services on the ocean front beaches. For the staff in San Diego this knowledge was gained by their participation with Dr. Martin and her assistants during the study in 2002 and following years, with literally hands-on training. Indicators of grunion eggs in the sand include presence of dead grunion, shorebirds feeding on the grunion, nest holes in the sand, the tracks on the sand surface from grunion activity, eggs on the sand surface, and birds foraging for eggs by digging in the sand. All staff assigned to the ocean front look for these signs on several mornings after the full and new moons throughout grunion season. All beaches are inspected for signs of grunion every time there is a predicted run, whether or not grunion ran there the previous predicted date. In addition, citizen volunteers monitor San Diego beaches during grunion runs and report their data to Dr. Martin, who independently verifies their information and then shares it with the beach manager immediately. Signs are present only briefly but the eggs remain hidden under the sand.

Once we establish that there are eggs on the beach "Where" they are in relation to the high tide line allows us to draw a maintenance line related to the contour of the beach, undulations in the sand, and the amount of surge. A shallow flat beach allows an easily detected straight line to be set where as a steep undulating beach presents more of a challenge. Another factor is the stability of the shoreline; in San Diego the amount of cut or build on a particular beach can be significant during the spring and early summer. The eggs may be right next to the tide line or 6 feet away, so identifying as many nesting sites as possible along the beach allows more accuracy in setting lines. Because the eggs are not visible while buried, we tend to err on the conservative side. We have found that even with the sometimes great difference in the heights of highest tides at the new and full moons, the grunion seem to place their eggs in a band on shore at about the same tidal height from one run to the next. After the maintenance line is set we groom above that mark, all equipment stays on the dry side of the mark and any material that needs to be removed is loaded from the upper side. Although each subsequent daily high tide is lower and the apparent tide line moves lower down the shoreline, we continue to use the lunar tide line as the mark for maintenance. We have found that even with crowded beaches the difference between the groomed sections and the lower ungroomed section is clearly visible throughout the two-week period between semilunar high tides.

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