

Channel Islands National Park's Kelp Forest Monitoring Program

Protocol reference guide for

ARTIFICIAL RECRUITMENT MODULES



Abstract

Artificial recruitment modules (ARMs) are used to detect the recruitment of invertebrates. This protocol typically takes a team multiple full dives to complete but varies with the number of ARMs and the amount of animals present. Each ARM consists of a cage with five layers of four bricks each. Each brick is one half of a cinder block.

Find the ARMs and if needed, mark the location with a buoy.



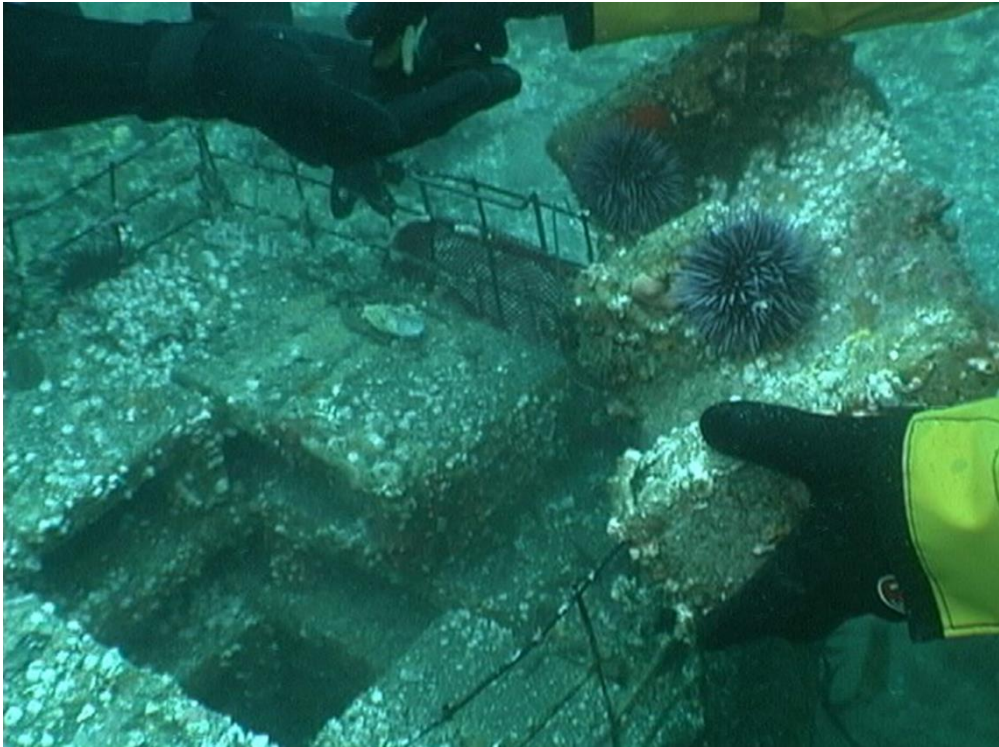
Find the tag on the top and Mark the number on the slate.



Open the ARM cage. Be careful not to overstress the lid's hinge.



Begin surveying the ARM. Place hardy species in the collection bag. Measure others in place.



Dave Witting

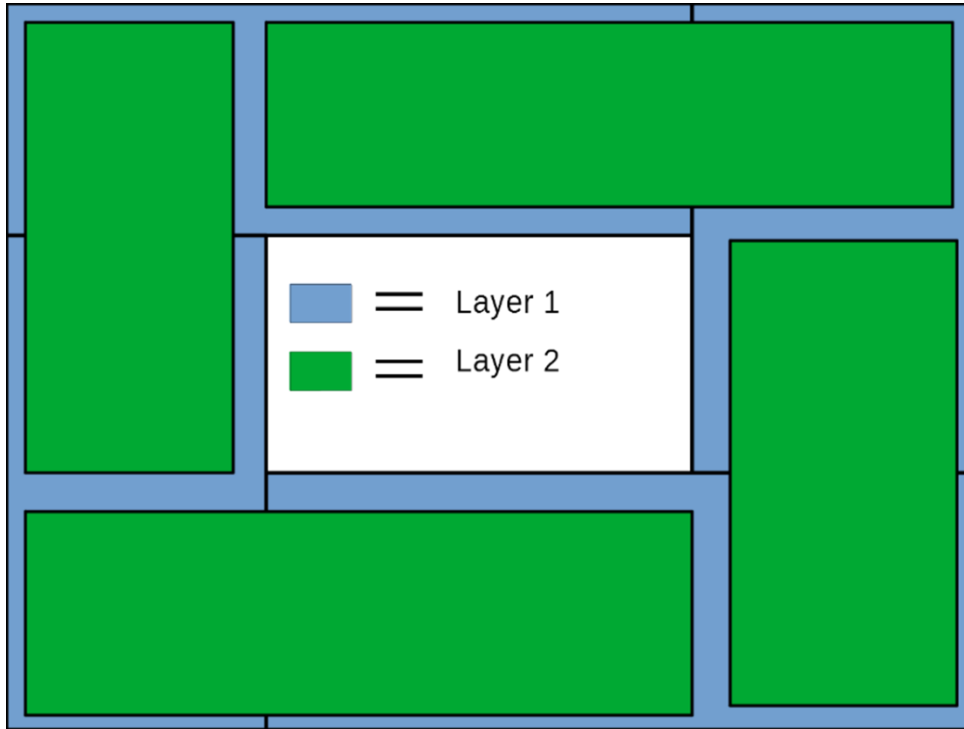
After checking the brick thoroughly, stack them neatly outside the cage.



Once finished, begin replacing the Bricks inside the cage.



Alternate the corners of the bricks to overlap. Repeat for each layer.



Once finished, leave the ARM cage open and either bring the collection bag up or measure on the bottom.



Shaun Wolfe

Hang bags from a line in the water to minimize time spent out of water. Place animals in a container and begin measuring.



Dave Witting

Measure and call out data to a designated recorder



**If bottom time and quantity of collected animals allow, measure underwater.
Two people is best.**



Dave Witting

Gently place the animals into the cage they were extracted from.



Shaun Wolfe

Replace the zip ties on the lid. One on each side and two on the front. Do not zip all the way tight, allow room for scissors to cut the ties next year. Make sure cages are repaired or replaced as needed.



Shaun Wolfe