**NaGISA Sampling Protocol**

***for sandy beach coastal areas - dive***

**Dive**

1. Cautiously approach your designated site.

*Take care not make any disturbances in the areas where you will be placing your quadrats and taking samples.*

1. Place the 1x1 meter quadrat (grid) on any random point along the main transect line. Be sure to place the bottom edge of the quadrat along the transect line. *See diagram.*

*There are two flagged poles on opposite ends of the beach. This line is your main transect line, it stretches 30 meters.*

1. Next, take your labeled card and place it in the lower right hand corner of your 1x1 meter quadrat grid.

1. Get the dive photographer. The photographer will take a picture of the entire frame of the 1x1meter quadrat (grid). Make sure the photographer takes the photograph from directly above the quadrat grid. The grid’s square shape must not be distorted in order to be able to determine the relative size of objects.

*Note: You will not be taking samples or organisms from the 1x1meter quadrat (grid).You will only photograph it.*

1. Place the 50x50cm quadrat adjacent to the upper left corner of the 1x1meter quadrat (grid). *See diagram.*

1. Remove any visible organisms on the surface and place them in the plastic bag labeled accordingly.
2. Next, gently sift through the ocean floor with your hands and look for any additional organisms that may be *just below* the surface of the sand. Remove these organisms and place them in the plastic bag as well.

*You do not need to “dig” into the sand. Simply glide your hands through the surface to uncover any living organisms that may be hidden in the sand. You should not dig, only sift.*

1. Place the 15cm Cylinder next to the upper left corner of the 50x50cm quadrat.
2. Next, you need the 2cm Core. Take the 2cm Core and place it next to the upper left of the 15cm Cylinder. *See diagram for details.*

1. Press the 2cm Core down into the sanduntil the sand reaches the black line that is marked on the side.
2. Pull the 2cm Core straight out of the sand.

*Scoop sideways to help keep the contents from falling out of the 2cm Core. If the contents of the core fall out, try to take another sample in an undisturbed area near your first attempt.*

1. Place the 2cm Core and its contents in the appropriately labeled plastic bag.

1. Now, go back to the 15cm Cylinder that you previously placed. Kneel down next to the Cylinder and press it down in the sand. It is easiest to use a combination of pushing down with a twisting-motion.

\*\**Be sure to push the 15cm Cylinder until the sand reaches the black line that is marked on the side of the cylinder. This line marks a depth of 10cm\*\**

1. Next, use the digging tools and your hands to dig away the areas around the 15cm Cylinder. Slide the board or plate underneath the 15cm Cylinder and carefully lift.
2. The photographer will take a picture of the entire 15cm Cylinder and its contents while you are holding it in the water.
3. Once your cylinder has been photographed, place the entire sample into the appropriately labeled plastic bag.