



ARMS Processing – Plate photos

Make sure that all the containers and tools used have been bleached and rinsed between ARMS processing. Wear gloves at all times; do not touch the water or the plates with bare skin.

Materials:

- Bleached photo tray (11"x14")
- 4 used nylon spacers glued to the photo tray to hold the plates
- 1 camera with 60 mm lens
- Camera tripod
- 2 external strobes on gorilla pods
- 18 plate tags labeled Site#-ARMS#-Plate#-T or -B for top or bottom
- 1 pair of gloves

Procedure:

- 1. Fill the photo tray with clean filtered seawater
- 2. Place Plate#1 in the center of the tray on top of 4 nylon spacers
- 3. Place the corresponding photo label on top of the plate and take a photo of the overall plate. Remove the label and take another photo.
- 4. Photograph closely each corner and center several times to get detailed images of the organisms (4 to 9 images per side of plate overlapping to make stitching possible). Make sure that the photos are taken on a horizontal plane, the use of a camera tripod helps with the consistency of photos
- 5. If higher-resolution photos are needed, a grid of either 3x5 or 4x6 works well with 15%-20% overlap to allow stitching.
- 6. Repeat steps 2 to 4 for the bottom side of the plate using the corresponding label.
- 7. Repeat for each plate. Change the water as needed when it gets dirty with sediment



Illustrations:





Plate photo set-up



Schematic of the grid used to standardize the photos. The photos can also be taken without this system but make sure they overlap and are taken on the same plane



Camera connected to the computer