



PROJECT OCEANOLOGY



ColorMe Salt Marsh! Post-Shore Program Activity

Supplies

- Rulers with mm
- Meter sticks
- Black marker
- Pencils
- Crayons
- Long paper (butcher paper works great!)
 - One cut to ~ 4.5 to 6 meters long (butcher paper works great!)

Procedure

1. Before class, cut the paper $\frac{1}{2}$ meter longer than the meters measured by the transect divided by 10 (i.e. 60-meter transect = 6.5 meters of paper needed). Every transect line used in the marsh should get its own long piece of paper.
2. Mark a straight line the length of the paper about halfway up from the bottom edge of the paper with a black marker. *This line is where the elevation team will measure up from and the peat depth team will plot below.* Make sure there is enough room for the peat depth team to plot below.
3. Make a small dash mark on the straight line every 10cm to represent the conversion of 1-meter distance across the transect (1 meter on the transect = 10cm distance across the paper).
4. **Elevation Team:** Mark the elevation **above** the transect drawn on your paper. The elevation conversion is:

1cm elevation change = 1mm on paper

*** Use Column 5 (Cumulative Elevation Change) for plotting***

Once you have plotted the elevation, connect your dots either free-hand or with a ruler.

5. **Peat Depth Team:** Plot below the straight line with the same conversion as the elevation team (1cm = 1mm).

6. **Plant and Animal Teams:** Invent a key for the different data you collected. *If there was more than one transect team, collaborate with the other plant and sand members so the keys are the same for all of the transects.* **DO NOT START PLOTTING UNTIL THE ELEVATION TEAM IS DONE.** Be sure to put your key on the paper for quick reference. Some suggestions:

Plant Cover Suggestions: Use different symbols to represent the types of plants and different colors to represent the percentages of the plants. Plot this information on top of the elevation line **BEFORE** the Animal Survey Team.

Animal Survey Suggestions: Students can create a symbol for each animal collected and use multiple symbols in an area to represent abundance. Plot this information above the plant cover. Wait a moment for the Plant Cover Team to get started. Once they have plotted one or two transects, you can get going on your animal data.

7. **Water Chemistry Teams:** Develop a system for recording your information. This can be on the long paper or graphed separately.
8. Once you have finished, hang or place your transect above the others for comparison. Try to put them in order of how they were run on the beach (i.e. place the one closest to the marsh first (below) and the one furthest away last (on top)).

Suggested Discussion Points

- Elevation Change vs. Peat Depth
- How do all of the parameters change as you move along the transect line? What patterns do you see?
- Relationship between plant cover and animal abundance
- Review the importance of marshes and the ecosystem services that they provide.