

Name: _____

What's that smell!?

The case of the sinking salt marsh...

What can we do to help restore our submerging marshes?

Write down two questions Kate might ask the harbor manager after checking out the photos and video above and seeing what is happening at their favorite salt marsh.

1. _____

2. _____

"If you were a coastal manager, what are some factors you would consider when using dredged material for salt marsh restoration?" With your group, brainstorm at least three factors you would consider when using dredged material for salt marsh restoration.

1. _____

2. _____

3. _____

"Can you help me sort these pictures out?" Write what year (1-3) after the sediment was added you think aligns with the mixed-up photo strips (A-B) in the table below and why.

Mixed up photo strip	Year after sediment added (1 yr, 2 yrs, or 3 yrs?)	Provide evidence describing what you see in the photos (in other words, justify your reason)
A		
B		
C		

Our group was most surprised that _____

a) measured

b) hypothesized

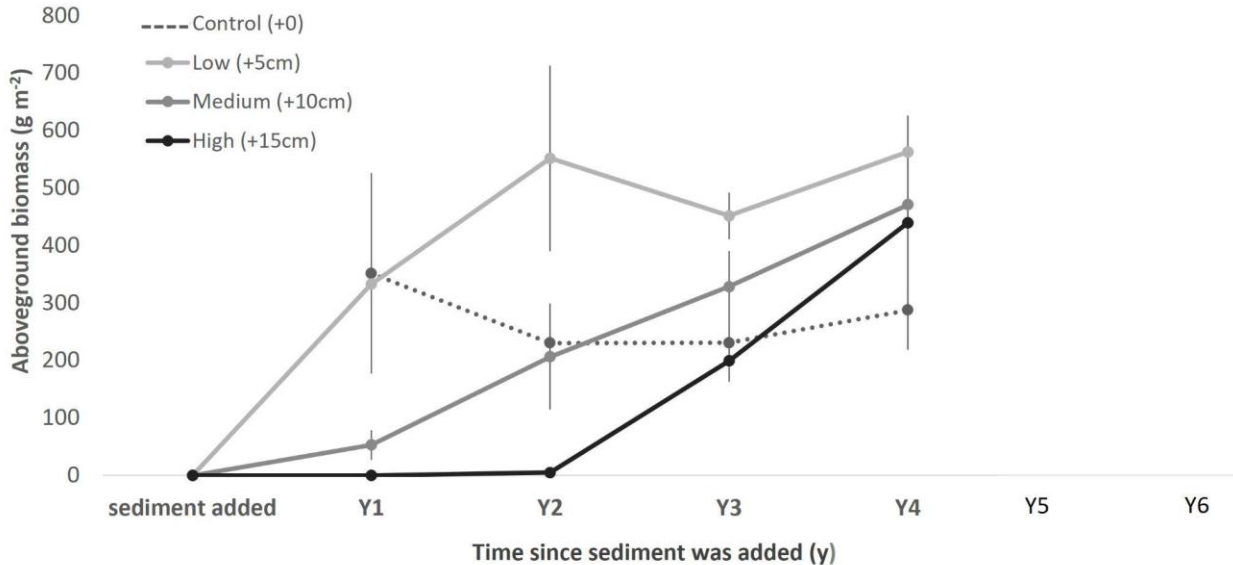


Figure 1. UConn scientists measured how different sediment depths (Control, Low, Medium, High) added to a submerging marsh in Guilford, Connecticut affected aboveground plant biomass over four years. Their experiment had six replicates per treatment. The points represent the average aboveground biomass and the vertical lines represent the variability among the six replicates (standard error).

Draw your hypothesized data points for Y5 and Y6 (disregard error bars) and then answer the following questions.

1) Does adding sediment increase aboveground biomass relative to the controls? _____

2) Which treatment depth seems to promote plant biomass most in Year 2? _____

3) What about in Year 4? _____

4) What do you think will happen in Years 5 and 6? _____

After watching the video, one question our group still has for the scientist is _____

Our group thinks that adding shells to vinegar will _____ the pH of the solution. If we place _____ in vinegar it will change the pH of the liquid the most. Write two reasons on your activity sheets as to why you've made this claim. We've made this claim based upon the following reasons:

1. _____

2. _____

Create a data table to record pH measurements throughout the week for your three beakers.

Write down your proposed actions and why you selected each:

Our proposed actions for Site A are to _____
because _____

_____.

Our proposed actions for Site B are to _____
because _____

_____.