

Post-field trip questions for students (high school salt marsh trip)

1. Jot down some initial thoughts about the field experience. What is something that surprised you? What is something you learned? Is there anything not covered in the field trip that you learned in your pre-trip research that you want to share?

2. Think about the part of the trip where we the climate-change-driven transition from marsh to mangrove dominance was discussed. What are your initial thoughts about this process? What are some of the ways mangroves and marshes might be the same? How do they differ? Share your thoughts below and discuss with your classmates, bringing in outside research as needed to support your thoughts and hypotheses.

3. Using the data provided in the spreadsheet “Marsh Fish Data.xlsx”, explore and answer the following questions:
 - a. Looking at minnow trap data: Which shoreline type had the **overall highest abundance** (most fish/invertebrates caught summed across all seasons)? Which had the lowest? Repeat this analysis for the fyke net data.

 - b. What differences do you notice between the minnow trap and fyke net data?

Answers for Question 3 (in red)

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For minnow traps: Natural marsh had the highest abundance; hardened shorelines and restored marsh had the lowest abundance.

For fyke nets: Restored marsh had the highest abundance; hardened shorelines had the lowest abundance.

- b. What differences do you notice between the minnow trap and fyke net data?

The fyke net captured many more different species of fish and invertebrates than the minnow traps.

The most abundant type of fish caught in the minnow traps was *Fundulus grandis*—only one of these fish was caught in a fyke net.