

OPIHI Science Assistant Essentials

What to Wear

- Closed toed shoes (old sneaker, water shoes, etc.)
- Sunglasses/sunscreen/hat
- Shorts (you may be getting wet up to your knees)

What to Bring

- Towel and change of clothes (incase get a little too wet)
- Water
- Snack

**Field trips are rarely canceled. If the weather looks ominous, bring rain protection as well

How to Help

Read the OPIHI sampling protocols for science assistants. Knowing what to expect on the field trip will make you a much more qualified assistant.

The students have been practicing the sampling techniques and working to become familiar with intertidal organisms, but it is not unusual for them to forget or lose focus in the excitement of the field environment. You can help them to focus and remind them to use good scientific technique as their data will be used in real research studies.

Remember that even if you can quickly identify an organism, it's best to let the students work out identifications on their own. You can just make sure they arrive at the right conclusion 😊. If you and your group are unsure about the identity of something – ask other groups, science assistants, or the teacher!

Encourage them to look more closely underneath a transect or quadrat point (having them pick things up and look at them closely in their hands rather than through a look box helps) rather than just record something as “rock” or “algae”. Organisms can be placed into small containers to facilitate identification, but should be returned to the same area from where collected at the end of the trip unless the teacher says otherwise. Also, you can help remind the students that the samples need to be unbiased and accurate.

Look closely to see small snails and other organisms. Often the student's first impression on a field trip is “there isn't anything here!”. By turning over rocks (and turning them back!) and peering into holes (no fingers, please), and encouraging the students to do the same, you're guaranteed to find lots!

Be excited about the intertidal and the organisms you are studying! Your excitement is infectious!

Common sense suggestions, such as reminding students to be aware of incoming waves as they work, switching off which student is the recorder, and other organizational suggestions are helpful. For instance, suggest one student stand on sides of the quadrat to hold it firmly in place if water motion keeps moving it. Don't do any jobs yourself, though!

Handling Intertidal Organisms

With a few exceptions, most intertidal organisms are safe to handle. They can be held in your hand for a limited period of time (as intertidal organisms, they are used to being exposed to the air). It is important that the organisms stay wet and that you (and the students you are shadowing) handle them gently. This entails holding organisms in the palm of your hand and not pinching, squeezing, or dangling them. Remind the students to treat the creatures with respect.

The students may have containers to temporarily place organisms in for the duration of the field trip. In order to keep the organisms from overheating and to maintain high levels of oxygen in the container periodically have the students exchange the warmer container water for fresh ocean water.

When placing organisms back in the water, try to return them to their original location. Have the students return organisms to the same distance from shore as where they were captured (for instance, a crab found in knee-deep water should be returned to the same depth). Other organisms depend on the shade and protection given by rocks and should be returned to them if removed, e.g. brittle stars will appreciate being put back near, or under, a rock.

Discipline

You are not responsible for disciplining students. If a problem arises, tell the instructor.

We appreciate your assistance and hope you will enjoy working with us!