

## **Conservation**

It is important to make students aware of their impact on the intertidal. Just because a study site is under water doesn't mean there is no impact! The goal is for your class to minimize their environmental footprint.

Intertidal Etiquette:

- Avoid stepping on invertebrates and algae whenever possible
- When holding organisms out of the water, keep them from drying out
- Replace rocks to exactly the same position as you found them
- Return animals to where you found them
- Follow OPIHI's Collection Guidelines
- Limit the number of students you take on a field trip to approximately 30
- Do not leave any trash at the site

At the end of a field trip, it is important to have your students look back at the intertidal site and see their impact and the changes they have caused in the ecosystem. For instance, sand will now be compacted, rocks will have moved, and algae will have been compressed. Use this opportunity to tell your students to make this experience, and their inadvertent impacts to the intertidal, count.

## **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 your students to treat the creatures with respect.

If you have containers to temporarily place organisms in for the duration of the field trip, keep the organisms from overheating and the water from becoming anoxic by periodically having your 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 your 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.

## **Collection Guidelines**

- Permits are not required for classroom collections as long as you use only your hands or nets smaller than 3 feet.
- Collecting is not allowed in marine life preservation districts.
- Live coral should not be collected, nor should “live rock,” which is rock with any kind of growth on it.
- Keep your collections low-impact: turn back any rocks you’ve overturned, and return animals to the same location when you are finished with working with them.
- Don’t take many individuals of species that are already overcollected like opihi, cowries, and banded coral shrimp.
- Most intertidal animals will do fine in a bucket with seawater for a ride back to the classroom, but keep them in the shade (to keep the water from getting too hot) and splash your hands in their water to ensure they have enough oxygen. Give them an air bubbler as soon as you can.
- See also “Intertidal Animals in the Classroom”