

Mālama Wai Ola Program

Fishing For a Living Grades 6-12

- Students will be given a pretest and the homework will be used as a posttest.
- No more than 20 students may participate
- Lesson's one and two are combined into one classroom visit
- NOTE: This lesson should follow a lesson on food webs and ecosystems. This will show an example of human impact and what we can do to keep an ecosystem and a natural resource available for the future.

Lesson One: Introduction to the *Mālama Wai Ola Program* and the instructors. An introduction to the concept of the 'tragedy of the commons.' Examples of this concept will be shared so that the students are able to gain an understanding of the consequences of mismanagement. A short power point will be shown about how our world's fisheries are being impacted by poor resource management.

Lesson Two: A fishing game will be played in small groups of four students. A set of rules will be given to each team and then they will be told to fish. Fishing is their way of economic survival and they must create fishing strategies so that they can survive. After the game, a short discussion will be conducted to see what happened. Who was successful in keeping a balanced ocean and sustainable fishery? Discuss some strategies that worked and didn't work. Ask what the students think about the present rules for our oceans, should we have rules?

Hualālai Site Visit

Based on the tides and the abilities of the class we will either lay out a fish belt transect line or an intertidal belt transect line. Before setting the lines there will be a short introduction to what a belt transect is and how it is used. During the introduction the students will separate into groups and decide what type of information they would like to collect, (i.e. if they would like to focus on a certain species or if they would like to collect general information on abundance in the area). The introduction will consist of a short talk and possibly an activity then we will set out our lines.

Homework: The students will take home the data they collect from the belt transects and create a graph, analyze the information and write a short paragraph about the information they collect. They will also write a paragraph on why it is important to monitor and manage our resources.