## Shore to Sea

## Objectives:

Students will translate data from a model to a cross section.

Students will pool data to form a hypothesis.

Students will relate their aerial view to a cross sectional view of a region from the shore to the back reef.

## Materials:

Box with internal model, probe marked in equal increments

## Procedure:

- 1. Each person in the group will choose a path to follow straight from one side of the box to the other. Insert the probe into the holes and record the depth to which the probe sinks.
- 2. Each person draws his/her measured contours on a separate sheet of graph paper.
- 3. Use all the measurements to draw a <sup>3</sup>/<sub>4</sub> aerial view of your contours

#### Results:

- 1. What does the changing depth of the probe represent?
- 2. What would happen to your aerial view if you had more than 4 sets of data from which to work?
- 3. How does this represent the view of the terrain from the shore to the reef?
- 4. What causes the change in the topography of the shoreline?
- 5. How might the animals be distributed along this contour?



# Shore to Sea Teacher's Instructions

Objectives:

Students will translate data from a model to a cross section.

Students will pool data to form a hypothesis.

Students will relate their aerial view to a view of a region from the shore to the back reef.

## Materials:

Box with internal model, probe marked in equal increments, ice pick, wire cutter, coat hangers, paper box

## Procedure:

- 1. Make a grid on the top of the box. Punch holes with the ice pick at each of the intersections.
- 2. Build a relief model of a seashore from beach to back reef using cardboard, or other materials to change the level of the box bottom.
- 3. Make the probe by straightening a coat hanger and marking it off in even increments.
- 4. Divide the class into groups of four.

