Albatross Bolus-Dissection Activity Sheet

| Name: _ | | | _ |
|---------|------|------|-------|
| Date: _ | | | |
| | | | |

The bolus used for this virtual dissection was expelled by a four-month-old Laysan albatross on Midway Atoll in Pacific Ocean in the summer of 2010.



A Laysan Albatross chick and parent nestle together in the sand on Laysan Island.

Photo Credit: Marcial Plazarte

Instructions

- 1. **Hypothesis:** A bolus contains materials the albatross eats that cannot be digested. What kinds of items would you expect to find in the bolus?
- 2. Look over the data sheet and the type of information you will need to record while viewing the virtual dissection. Pay close attention to the types, color, size, weight, and quantity of the items that are removed from the bolus specimen.
- 3. Record the following information while viewing the dissection of the bolus.

| Bolus measurements (before dissection) Weight (in grams) Length (in cm) | |
|---|--|
| List the materials extracted from the bolus | |
| Length of a squid beak (in cm) | |
| Weight of squid beaks (in grams) | |
| Weight of natural non-prey materials such as wood and stones (in grams) | |
| Weight of fishing line (in grams) | |
| Weight of all plastics (in grams) | |
| Weight of unidentified debris | |
| Length of the piece of a bottle | |
| List other plastic items collected near the bolus location | |

| 4. | Analysis: Respond to the following questions. | | | | | | |
|----|--|--|--|--|--|--|--|
| | a. | What colors did you find in the bolus? | | | | | |
| | b. | How many pieces of plastic were colored and/or shiny? | | | | | |
| | c. | What percentage of bolus was made of plastic? | | | | | |
| | d. | What percentage was made of prey items? | | | | | |
| | e. | What was the weight of all of the unnatural items combined? | | | | | |
| | f. | What percentage of the total weight of the bolus were the unnatural items? | | | | | |
| | g. | Do you think this bird ate more squid or more plastic? Why? | | | | | |
| 5. | 5. Conclusions: Do you think that the bird that expelled this bolus is well-nourished? Why? | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |