

What Are Boluses?

Albatrosses feed their fast growing chicks by regurgitating lots of squid, flying fish eggs and fish larva into their chick's mouth.

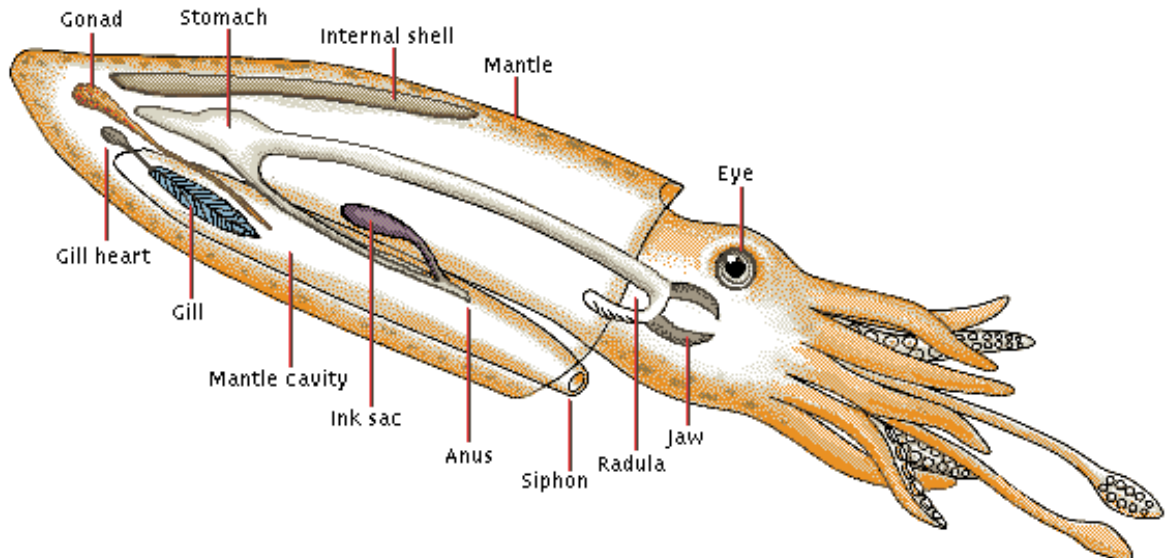


Much like an owl pellet, a bolus is all the indigestible material that is "thrown up" by the juvenile chick. Shaped like a fat cigar, one can dissect a bolus to assess the health of our ocean, the foraging ground for thousands of albatross trying to gather enough food to feed their hungry chick.



What's in the boluses?

... lots of squid beaks. A squid beak is a beak like jaw, made of chitin that does not digest.



With a name meaning "head-footed," the cephalopod's "foot," is divided into sucker-bearing arms, or tentacles, specialized for drawing food into the animals' beaklike jaws. Highly muscular, it forces water from the cavity through the tubular siphon to propel the animal quickly through the water.

You may also find small bits of pumice, wood and a soft string like substance that once kept the egg masses intact.



Unfortunately there is usually plenty of unnatural material in a bolus. Flying fish lay their egg masses on any floating structure in the open ocean whether manmade or natural. These floating structures maybe pieces of plastic that are swallowed up whole along with the fish eggs. The adult birds then fly back to their nest to regurgitate what they gathered into the mouth of their albatross chick.

The U.S. Fish and Wildlife Service employees find boluses laced with plastics by the hundreds in the Northwestern Hawaiian Islands. On a positive note, we are lucky that albatrosses can expel these indigestible materials. However, it is not uncommon to come upon an albatross chick carcass containing intact toothbrushes, plastic toys, bottle caps, cigarette lighters and fishing line.



Is it okay to handle the boluses?

Boluses provided to teachers have all been frozen for several days. It is still suggested you wash your hands with soap and water after handling and if you prefer surgical gloves work well. Please consider keeping the picked apart bolus around for a while. The U.S. Fish and Wildlife Service has a limited supply and can only send to your classroom a few boluses per year.

Resources

Would you like boluses for your classroom?

Call Ann Bell, U.S. Fish and Wildlife Service, 300 Ala Moana Blvd. Room 1-350, Honolulu, HI 96850 808-792-9532 , Ann_Bell@fws.gov.

Check It Out!

www.wfu.edu/albatross/ is filled with fascinating tidbits about albatross and provides flight distance maps showing results from a recent albatross tracking project conducted from French Frigate Shoals in the Northwestern Hawaiian Islands and Kilauea Point National Wildlife Refuge on Kauai.

