

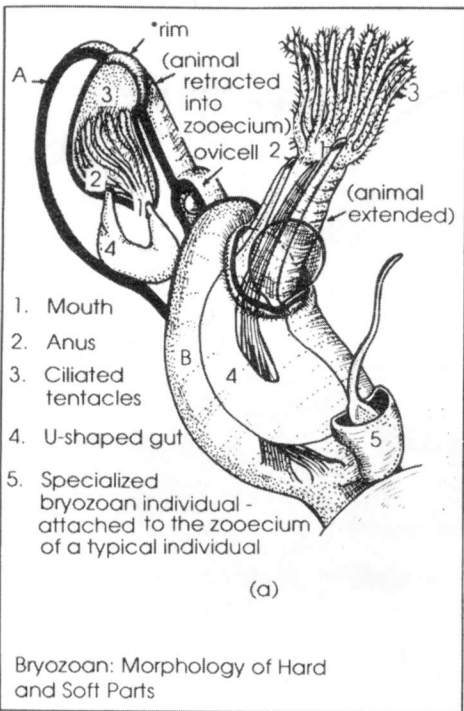
Phylum Bryozoa

Bryozoans (see Fig. 4.18) range from Ordovician to Recent and were prolific mid-Paleozoic reef-builders. Both freshwater and marine species occur today. Marine species secrete a calcite skeleton and are mostly colonial. Freshwater species do not secrete a calcareous skeleton.

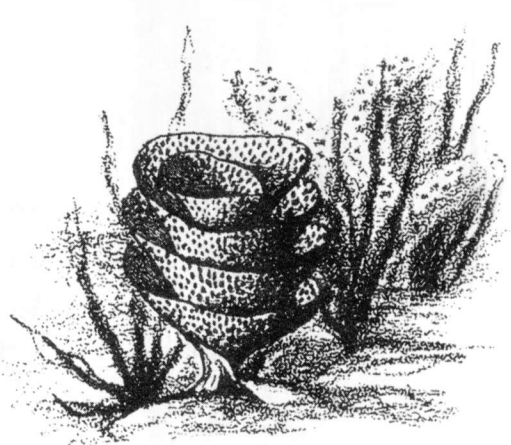
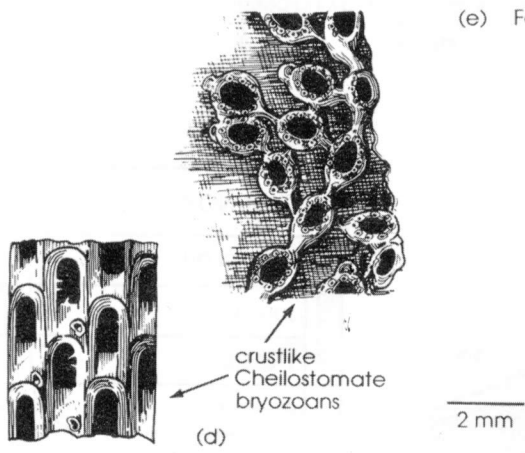
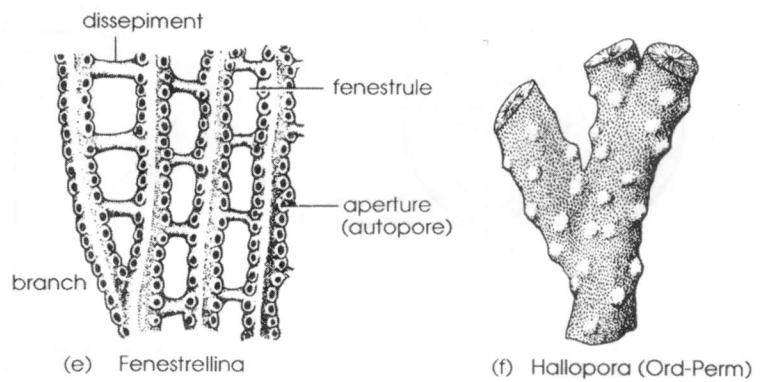
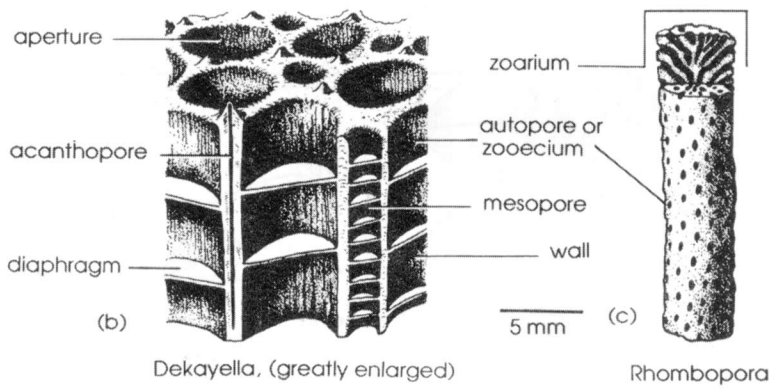
Individual bryozoans reside in a chamber called a zooecium. They are rather small, usually less than 1 millimeter in diameter. The initial member of a colony grows from larva, and the rest of the colony is budded from it. Bryozoa have a U-shaped digestive tract. Ciliated tentacles (lophophore) surround the mouth and filter seawater for food particles and oxygen. Retractor muscles pull the tentacles into the zooecium when the animal is disturbed, and water pressure forces the tentacles back out again. Some zooecia are modified to serve as a cleaning mechanism for the colony surface; others serve as brood pouches for fertilized embryos that are later released as larvae.

Paleozoic bryozoans. Trepostomes formed branching colonies or encrusting colonies. *Hallopora* is an example of a branching colony [see Fig. 4.18 (f)]. Fenestrate bryozoans had free-standing sheetlike colonies with pores through which water could circulate. *Archimedes* had perforated sheets wound around a solid center that twisted like a corkscrew. Often only the center is preserved [see Fig. 4.18 (g), (j)].

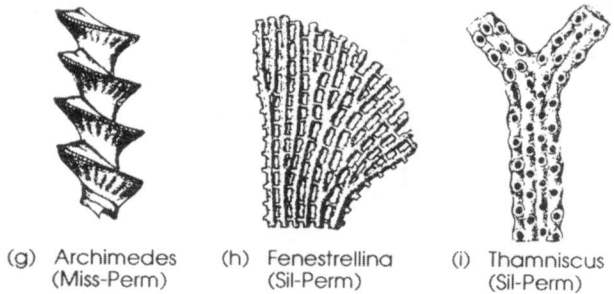
Mesozoic and Cenozoic bryozoans. Cheilostomate bryozoans have a trapdoor to cover the opening to the zooecium. Most form encrusting colonies that cover shells or reef crevices. These bryozoans are common but inconspicuous in their modern habitats [see Fig. 4.18 (d)].



Bryozoan: Morphology of Hard and Soft Parts



The broken fronds alone are often called Fenestrellina.



PHYLUM BRYOZOA

Figure 4.18 Phylum Bryozoa