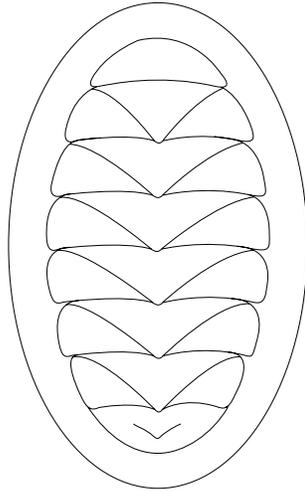


Chitons

by Peggy Williams

Chitons are a class of molluscs, like gastropods (one-shelled) and bivalves (two-shelled). Chitons, however, have eight **plates** (pieces of shell) which are held together by a fleshy **girdle** surrounding them. The girdle may even cover the plates. There is a **head plate** and a **tail plate** with six in between. The plates can each move separately so the animal can curl up like a pillbug when dislodged (and does!)



Chitons can be found at all depths and in most climates. One of the best areas to collect them is the Pacific northwest (Washington State), where there are some very colorful species, including one thought to have inspired some of the native totem poles and another, the “Gumboot Chiton” which is the largest in the world — 12-14 inches in length.

Most chitons eat algae by scraping it off rocks on which they live (they have to live on rocks to protect their soft parts under the plates). However, they will eat anything they come across and some actively hunt. The head end of the girdle is elongated in this group and the animal waits with the girdle elevated for a small crustacean to crawl under it, whereupon it catches the prey and eats it.

Because chitons can curl, there is an art to collecting them. You must collect them alive, since the girdle disintegrates when they die and the plates fall apart; however, you want the animal flat for your collection. The best way I have found to collect them is with a metal nail file or thin-bladed knife. Be careful not to damage the girdle or you won't have a good specimen. Also, if you damage the animal it will curl and never uncurl (and believe me, you can't make it flatten!) Pop the ani-

mal into a jar or bucket that has straight sides, hoping it will cling to the side and you can easily pull it out while still flat. If it curls, you will need to put it on a plate with a little salt water and hope it flattens on its own.

When it's flat, you need to slide it onto a flat surface that you can easily pick up, like a tongue depressor, glass slide, or wood or masonite cut for the purpose (I have various sizes). Then you need to tie it down to keep it flat when you kill it. People say to do this

with thread, but I find that thread makes grooves in the girdle, and I take Bill Lyons' advice and use pieces of cut-up panty hose. Pop it into alcohol to kill it, then soak it in a mixture of alcohol and glycerin (half and half) to soften the girdle for a nice, flat specimen.



Ceratozona squalida has crawled away from its “home” to search for food. West Palm Beach, FL.