What is Chthamalus?

these barnacles are found in the highest reaches of the intertidal. they are extremely tolerant of heat and dessication. hence, they are the easiest barnacles to collect. however, it is REALLY easy to get confused about which barnacles you are looking at. Most people who offer to collect barnacles for me end up grabbing a different family - the Balanidae, usually the genus Balanus. Here's how to tell them apart. First of all, you try to count the plates that make up the wall of the barnacle carapace. For the families I work on there should be 6. The middle of the barnacle, where the feeding structures come out, is the operculum. There are 4 plates. The longitudinal axis (longest line among those 4 plates) is where the operculum opens, and this axis points to the CARINA and ROSTRUM (2 of the 6 wall plates). The CARINA is closest to the horizontal axis of the operculum (the shorter line across the 4 opercular plates). It is actually the 'posterior' of the barnacle. This end is where the legs come out when it feeds. The other end is the ROSTRUM (incidentally the 2 opercular plates next to the rostrum are the scutum or scuta; the ones near the carina are the tergum/terga).

Here's the key to distinguishing Balanids from Chthamalids: the plates NEXT TO the rostrum overlap the rostrum as well as the other pair of plates they adjoin (in Chthamalus), and in the Balanids the rostrum overlaps these plates.





Still confusing right? There's a nice diagnostic field character you can use to 'see' these plate arrangements. The overlap of the "rostrolateral" in chthamalids makes a "T" junction, I've put small red circles around them in the drawing above and the photo to the left. If you don't see this, you are likely dealing with the very common balanid barnacles (which are also MUCH larger; chthamalids are often only 3-5mm in size!).

In any case, I appreciate your efforts to grab these guys for me. Getting to field sites on such a large geographic scale is expensive, and you're saving me time and money. I'll try to make it worth your while!

cheers! John Wares jpwares@uga.edu