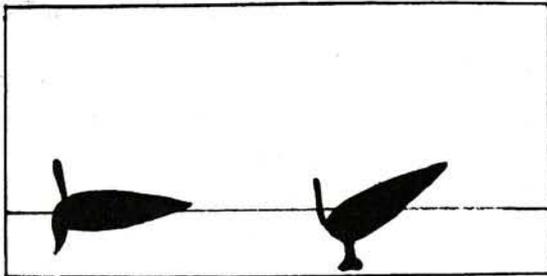
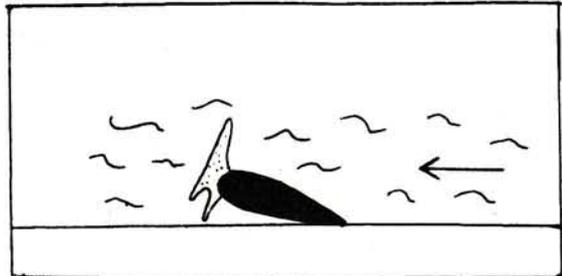


*Terebra salleana**, the Original Body Surfer

R. A. WHITNEY**



The usual method of burrowing in the sand (such as *Terebra dislocata*). The foot dilates terminally to form an anchor, the columellar muscle then contracts to pull the animal down. Note the siphon retains contact with the surface.



Terebra salleana Deshayes, has thrown the apex to one side, turned over on its back, and with the foot acting as a sail, is preparing to "body surf" back to the sea.

Drawings are by the author.

In relating the amazing "Body Surfing" means of locomotion of *Terebra salleana* Deshayes, a small 25 mm member of the Terebridae family; let me emphasize at the outset of this article, that this phenomena of body surfing is not a discovery of mine. An article entitled, "Observation on the Behavior of the Littoral Gastropod *Terebra salleana*" by Louis S. Kornicker of the Institute of Marine Sciences, Port Aransas, Texas appeared in January, 1961. It was this article that whetted my appetite in hopes of some day witnessing the strange phenomena described by Mr. Kornicker.

As so often happens, two years ago the Welker's of Decatur, Illinois, gave me a lot of *Terebra salleana* with the exact location in Florida where they were taken. I filed this information in my "Little Black Book" with the notation that the next time I went to Florida I would try to find, observe, compare and, if possible, elaborate on the original story by Mr. Kornicker.

In July, 1977, my wife and I went on a summer shelling vacation to Florida, and our first stop was Panama City, the locale of a colony of *Terebra salleana*, as related by the Welkers.

To collect this species you need little equipment other than knowledge of their habitat and their method of locomotion. The only real equipment needed is a plastic bag in which to deposit the collected specimens, and a swim suit. The latter merely for comfort.

We got in our car and proceeded to St. Andrew's Park, a state park located in Panama City Beach, Florida. This is a rather large park which has several camping areas and various shell collecting sites, including a public beach located on the shore of the Gulf of Mexico. This is a typical Florida sandy beach with numerous swimmers, sun bathers and small children frolicking. Certainly not where one would normally go shelling; but this is the habitat of *Terebra salleana*.

I must say there are some fringe benefits to collecting here as one merely walks out in their swim suit with an inconspicuous plastic bag in their hand and begins the collecting process. To collect you proceed out in the water to about knee deep and turn your back to the onrushing surf. This is not too far from the shoreline (perhaps 3 feet) as the surf is quite rough and about every third or fourth wave comes crashing into your backside. Another reason for going only three feet from shore is that one must stoop and constantly watch the shoreline where the water comes in and then recedes. This we had been alerted to do by the Welkers, who had collected here. We would watch a spot intensely for three or four minutes and then move down the shoreline to watch another spot.

Finally, after an unusually strong wave came in, we noticed two small objects appearing like inch-long sticks being carried back with the receding water. These we grabbed at, and my wife was fortunate enough to capture one before the next wave carried it back to sea. It was our elusive quarry, *Terebra salleana*.

We then spent the rest of the afternoon walking along the shoreline, with our backs to the pounding waves, picking up the elusive "sticks" that were in reality, *Terebra salleana*. However, for every *Terebra* we captured, perhaps three or four escaped our grasp.

There was a reason, and a little experimenting showed us the answer. We carried one of these *Terebra* up to the high water mark and placed it on the damp sand. It was out of the main wave action area, but still close enough to the water, that one of the occasional violent waves would reach it.

Now the normal procedure a *Terebra* out of water employs to re-enter the water is as follows:

The foot dilates terminally to form an anchor in the sand; the columellar muscle then con-

tracts, pulling the shell down, and by a series of these movements, one can watch the normal *Terebra* disappear into the subsurface.

Terebra salleana is not a normal *Terebra*, however, and it must have an unusual method to re-enter the water, to exist in the violent surf that it inhabits. We bent over to watch the *Terebra salleana* lying on the moist sand and noticed the foot of the *Terebra* had emerged from the two millimeter aperture of the shell and was rapidly expanding by dilation, the foot now measured perhaps 10 mm long by 8 mm wide. The foot had also aligned itself in a position dorsal to the shell, at a position of about 45 degrees to the longitudinal axis of the shell, thus forming a sort of umbrella or sail. The *Terebra* was preparing for reentry into the water. A large wave was coming in and, as we watched, the outgoing wash carried the *Terebra* back into the water; but the large expanded foot of the animal was helping in the process. Instead of the *Terebra* being tossed about willy-nilly by the waves and tumbled about, the *Terebra* was leisurely "body surfing" back to its habitat.

We deduced that a colony of *Terebra salleana* live under the sand and waves build up, scraping the sand off them, then an especially violent wave uproots them and carries them to shore. There is no need to worry, however, for a quick expansion of the foot, a bit of patience and *Terebra salleana* is "body surfing" back out to sea.

*There is a difference of opinion amongst authors as to the correct generic name. Some use *Terebra salleana*, others *Hastula salleana*. I tend to consider *Hastula* the correct generic name, but have used *Terebra* in order that the species can readily be associated with the Family Terebridae.

** Decatur, Illinois