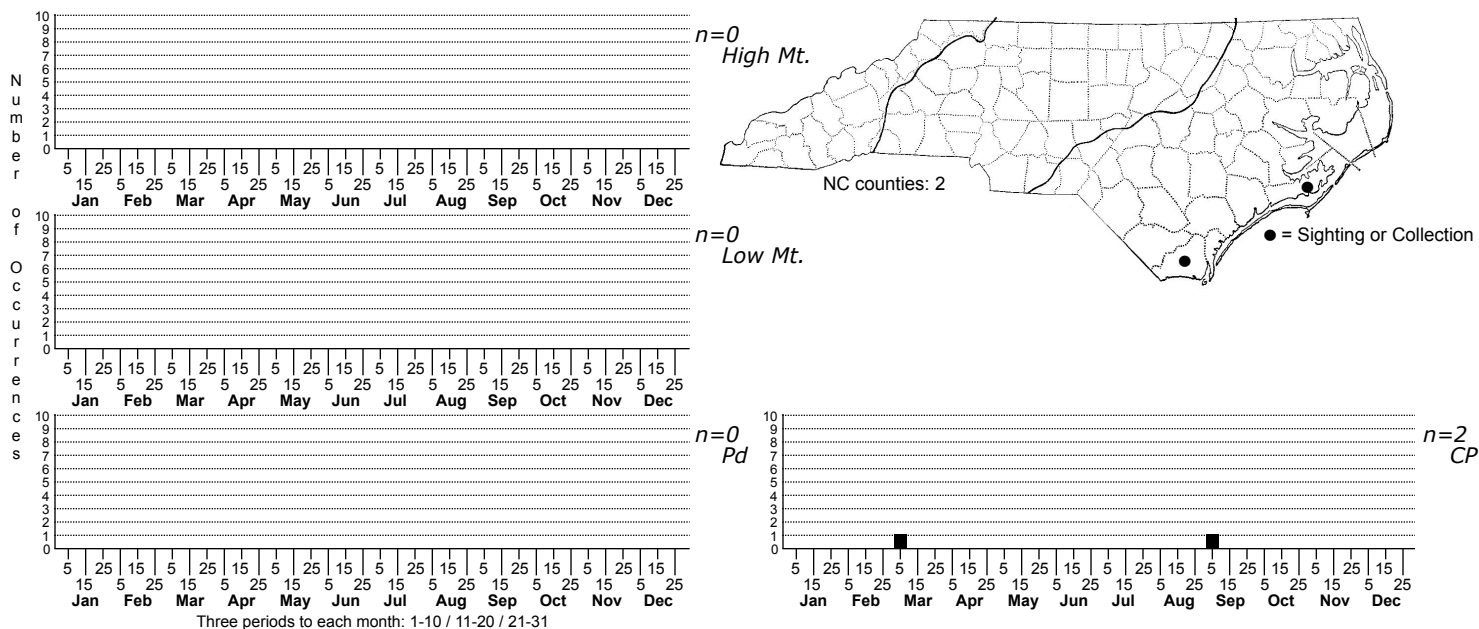


## *Batillipes caudatus*



FAMILY: Batillipedidae

**TAXONOMIC COMMENTS:** This is a case of taxonomic intrigue. In 1917, W.P. Hay, a high school biology teacher from Washington, D.C. described the new species *Batillipes caudatus* from *Dictyota* on a jetty at Shackleford Bank. Subsequently, Marcus (1929) synonymized *B. caudatus* with *B. mirus*. My colleague Paulo Fontoura and I have examined new specimens from North Carolina and original type material, and we believe that *Batillipes caudatus* and *B. mirus* are distinct species. Thus, although the current Checklist (Degma & Guidetti 2023) does not officially recognize *B. caudatus* we include it here to open the case for future investigation. Santos et al. (2018) included *B. caudatus* in their key to the genus.

**SPECIES COMMENTS:** Marine. This is the first record of a tardigrade from North Carolina. Records of *B. mirus* from NC and other eastern US locations should be re-evaluated, likely to be *B. caudatus*.

**ID COMMENTS:** Body stout, plump and covered with a finely-granulate almost transparent skin. Head broad, flattened, and bearing seven cirri, one of which is situated on the median line of the top of the head some distance in front of the eyes; another (paired) is on the frontal border a little to one side of the middle line; another (paired) is on the lateral border about on a line with the eyes; all the cirri, with the possible exception of the pair near the mouth, spring from papillae and the last one bears at its base an elongate, thin, somewhat triangular flap. The eyes are small and almost colorless. The margins of the body project beyond and somewhat overhang the bases of the legs. On each side near the posterior end there is a slender cirrus and the body terminates in a small, acuminate tail-like process. The legs consist of a stumpy basal portion onto which the much smaller foot may be partially telescoped. Each leg of the last pair has a stout spine on its posterior surface. The foot consists of a small, knob-like piece to which are attached five, occasionally six, slender toes which are abruptly expanded at their distal ends into thin shovel-like portions. The mouth is situated on the ventral surface of the head and opens into a slender esophagus on each side of which is a very small and slender tooth. The teeth do not appear to be forked at their upper ends nor have bearers been detected. The pharynx is small, nearly spherical and does not appear to contain chitinous thickenings. The pharynx opens directly into the large, irregularly lobate stomach. The reproductive organ lies above the stomach. It is a large, fusiform structure which begins a little in front of the middle of the body and extends back nearly to the hind legs where it turns abruptly downward to join the posterior end of the stomach. The anal opening has the appearance of a small, round papilla on the ventral surface immediately in front of the last pair of legs. The muscle bands underlying the epidermis of the body and those extending into the legs are quite conspicuous. In all the specimens examined the stomach is filled with a yellowish or greenish-brown mass evidently of vegetable origin.

-Hay 1917

**DISTRIBUTION:** Please refer to the dot map.

**HABITAT:** *Dictyota* on jetty and intertidal beach sand.

**OBSERVATION METHODS:** PC, DIC microscopy