

## Some issues of Belemnitids ecology

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The study of the ecology of the belemnitids has a long history. They are completely extinct organisms of cephalopoda. Therefore, when determining the rostrum of functional significance, its biology and belemnitids other issues of the field of paleoecology, we analysis the characteristics of the rostrum and phragmocone structures, analysis of the conditions of the formation, indirect data of death and post-death injuries.

Various researchers have a different function to the raster: 1. Balance or participation in the balance of the organism; 2. Protection from hitting and damping; 3. A weapon that helped in cutting water waves; 4. Compensation of the compulsive force in phragmocone to give the animal a horizontal position when swimming; 5. Attach the slug to the bottom; 6. weapon of attack; 7. The estimated collision time damage phragmocone protection; 8. Pillars and fins of the attachment place; 9. Ground digging. Our by studied stockholder lesions varied fractures testified that the rostrum of was solid.

In our opinion, rostrum is one of the feature was not completely phragmocone, but only its vertices of the side guard damage. Because a significant portion of phragmocone undergoing alveolar limits. This is confirmed by North Caucasus of lower Cretaceous sediments our collection of existing an instance of the rostrum belemnite.

In determining the function of the rostrum, special attention must be attributed to its form. Taken from the rostrum to some extent match the soft body of the animal, whose base is being possible to talk about the vital functions of belemnites. We believe that the belemnites who had subconscious, sub-cyclic rostrum, and other degradation pages were active and stretched, were active sailors, and the belemnites who had a rounded blunt rear could not be free to swim water and represented less moving motions. We believe that those belemnites whose rostrum was subtapered, subcylindrical, and also of varying degrees from the sides, flattened and elongated, were actively floating, and those belemnites, whose back part was rounded, blunt, could not cut water freely during swimming and were considered less active. When restoring the life cycle of belemnites, plays an important role in determining the direction of movement of belemnites, which can be studied on the basis of life`s defeats. Belemnites is likely to sails by with his head in front, but moves in a predominant direction was rostrum back.

Belemnites counterparts ecentricity calamary, free-floating, strong and fast moving predators [1]. A confirmation of this statement can be considered a torpedo-like extended body, a hand-held apparatus with tentacles and the existence of an ink bag.

### References:

[1] Ch. Clug, G. Schweigert, D. Fuchs, I. Kruta, H. Tischlinger. Adaptations to squid-style high-speed swimming in Jurassic belemnitids. *BiolLett*, 12 (2016)