

## New finding of *Arctomelon stearnsi* (Dall, 1872) (Volutidae, Gastropoda) in western part of the Bering Sea

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**ABSTRACT.** One specimen of *Arctomelon stearnsi* (Dall, 1872) was found in a bottom trawl catch from Olutorsky Cape, Western Bering Sea. There are some differences in shell morphology between the specimen from the Western Bering Sea and typical representatives of this species from Aleutian Islands.

One fresh, although broken dead specimen of *Arctomelon stearnsi* (Dall, 1872) was found in the Western Bering Sea in a catch of commercial bottom trawl of Japanese trawler "Kaiyo-Maru № 28". The trawling was made on August 11<sup>th</sup>, 2001 on a flat shelf extension southward of Olutorsky Cape between points with coordinates 59°18.2'N, 170°18.7'E and 59°16.7'N, 170°15.1'E at depths from 240 m to 380 m on sandy bottom with gravel and rocks.

Dimensions of the shell are: total height is 89.5 mm (shell top is eroded, the real height was over 100 mm); body whorl height is 80.7 mm. It is impossible to measure width of a shell correctly due to hardly damaged outer lip (Fig. 1A).

*A. stearnsi* is one of two representatives (another one is *Tenebricola frigida* Harasewych et Kantor, 1991 from the Aleutian Islands) of the mainly warm-water family Volutidae in the high-boreal waters of the Northern Pacific. It was described from Shumagin Islands, Alaska Peninsula [Dall, 1872]. Most of subsequent findings of this species are from Aleutian Islands and Alaska Peninsula [Abbott, Dance, 1982; Oleinik, 1996; Poppe, Goto, 1992]. A subspecies or form *Arctomelon stearnsi ryosukei* Habe et Ito, 1965 was described from the Bering Sea, but unfortunately the exact locality was not mentioned in the original description [Habe, Ito, 1965]. Bogdanov and Sirenko [1993] included this species in the list of "Russian" shells without references to any findings of it species in Russian waters. There is a specimen of *A. stearnsi* in the private collection of K. N. Gaidenko (Moscow) labeled as "Commander Islands", but unfortunately without any additional data. K. N. Gaidenko told me that he heard about shells of *A. stearnsi* from Commander Islands (personal communication). So, Commander Islands probably should be included in the range of this species.

But I could not find any references about findings of *A. stearnsi* in the western Bering Sea northward of Commander Islands.

*A. stearnsi* was not found in fossil condition, but some fossil species of this genus were found along western coasts of the Bering Sea up to Koryak Coast northwards [Oleinik, 1996].

Now, after finding of this species near Olutorsky Cape, the range of this species is extended to Olutorsky Cape in the north, and it seems possible that *A. stearnsi* inhabits the entire Bering Sea including its northern part.

There are some differences in the shell shape between published images of *A. stearnsi* and the shell described herein. It seems that the shell from Olutorsky Cape has more slender shell with more convex whorls than typical representatives of *A. stearnsi* from Aleutian Islands [Kosuge, 1972; Oleinik, 1996; Poppe, Goto, 1992], and there is not so distinct but visible shoulder angulation on the body whorl in my specimen (Fig. 1A). It is difficult to describe shape of siphonal notch of my specimen because of damage of the outer lip, but it seems to be very small or absent. My specimen is more similar to fossil Miocene *Arctomelon* sp. from western Kamchatka [Oleinik, 1996]. The specimen from Commander Islands is closer to "Aleutian" shells (Fig. 1B). It is possible, that differences in the shell shape of *A. stearnsi* from different localities may be a result of geographical variability.

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### References

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