

NEW SPECIES OF WHALES (*ATROPATENOCETUS POSTEOCENICUS* GEN. ET SP. NOV.)  
FROM THE OLIGOCENE OF AZERBAIJAN

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This work is devoted to a description of a previously unknown member of the toothed whales, found in the Maykop deposits in the vicinity of Perekishkyul' (northwestern part of the Apsheron Peninsula). Information on the fauna of that locality has been given in previous publications [1, 2, 3, 4, 5, 6, 7, 8, 9]. The existence of forms diverse in systematic and ecological respects was reported. Members of the following groups of vertebrates have been recorded in the Perekishkyul' fauna: fish, reptiles, birds, and marine mammals. Remains of crustaceans and a number of mollusks are also found [5]. We have reported the dominance of whales in the Perekishkyul' fauna [1, 3]. At present the Perekishkyul' locality is considered a most important fossil whale locality [8, 10]. Whales are represented by bone remains belonging to three suborders. Whales belonging to the suborders Archaeoceti and Odontoceti are numerous and best studied. Information on members of the Mysticeti is very limited [7].

FAM. AGOROPHIIDAE, ABEL, 1913.

Genus *Atropatenocetus* Aslanova, gen. nov.\*

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\* Original citation: Aslanova, S. M. 1977. Noviy rod kitoobraznykh (*Atropatenocetus posteocenicus* gen. et sp. nov.) iz oligotsena Azerbaydzhana. *Doklady – Akademiya Nauk Azerbaydzhanskoy SSR* 33(7):60-64. Unknown translator. Transferred to electronic copy and edited by Mark Uhen and Michell Kwon, Smithsonian Institution, 2007.

Type species – *Atropatenocetus posteocenicus* sp. nov.

Diagnosis. A member of the odontocetes having a skull probably 34–35 cm in size. Maxillae rounded in outline at the proximal ends. They broadly covered the lateral parts of the frontal, not extending very much to the back, and did not reach the anterior edge of the temporal fossa. Rostrum wide at the base. Maxillary notch faintly expressed. Posterior edge of external nasal opening was at the level of the anterior edge of the nasal bones. Parietal region of skull markedly constricted. Proximal part of lower jaw relatively high and delicate.

Species composition: Type species.

Comparison. According to known data [13, 14, 16, 17] the paleobiological history of the Agorophiidae must have culminated in the Eocene. Individual forms of the family might have existed longer. Obvious evidence of this is the remains of an Oligocene *Agorophius* which we have described. The new genus differs rather distinctly from the known genera of the family; the difference between them is manifested mainly in the extent of “telescoping” of the bones of the facial and cranial sections of the skull. Known genera of the family differ from the genus described as follows: in *Agorophius* Cope the maxillae cover less of the lateral parts of the frontal bones. The proximal part of the former has an outline in the shape of a broken line. The intertemporal part is much wider than in the Oligocene *Agorophius*, i.e. the parietal bones project more onto the dorsal surface of the skull. The preorbital notch is less pronounced. In *Xenorophus* Kellogg the overriding

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\* Generic name from the old name for Azerbaydzhan (*Atropatena*) and *cetus* – whale.

of the maxillae is more pronounced in the aboral direction, and the same can be said of the intermaxillaries. The intertemporal region is wider. The preorbital notch is very pronounced. This form has the longest snout of the family. The Indian genus *Andrewsiphius* is represented by very little material, not equally complete, which makes comparison difficult. However, the difference in taxonomic position of the genera being compared is obvious.

*Atropatenocetus posteocenicus* Aslanova sp. nov. Fig. 1a, b, c

Holotype. The I. M. Gubkin Institute of Geology of the Academy of Sciences of the Azerbaijan S.S.R., #II-62/C 1-3; incomplete skull, fragment of lower jaw; northwestern part of the Apsheron Peninsula, vicinity of Perekishkyul' village; top of middle–bottom of Upper Oligocene, Riki horizon.

Description. Skull not high, length 34–35 cm. The length of the rostrum probably was equal to or somewhat greater than the length of the rest of the skull (around 17 cm). The base of the rostrum was quite wide. The mesorostral canal was open. The maxillae covered a large part of the frontal bones. Especially in the lateral parts they reached the edges of the superciliary arcs. The proximal boundaries of the maxillae, having rounded outlines, are traced on the dorsal surface of the skull. Their lateral edges are horizontal. In their rostral part the intermaxillaries are narrower than the maxillae and end at the anterior edge of the nasal bones. The nasal bones look like narrow little bones bounding a narrow external naris. The frontal bones are flat, extending mediolaterally. In the supraorbital region they widen somewhat and form a supraorbital process on each side, facing backward. Only the bases have been preserved. The longitudinal diameter of the frontal bones,

measured on the dorsal surface in the median part, is much larger than in the lateral. The temporal fossae are large, open. The frontal and parietal bones enter into the formation of the anterior and median walls of the temporal fossae. The parietal bones form the intertemporal region of the skull, which is distinguished by considerable constriction. The teeth are represented by molars of the upper and lower jaws. The last four molars on the left half and the root of the next-to-last molar on the right half of the maxillaries are almost completely preserved. The teeth are two-rooted, with a low triangular crown, compressed lingually-buccally. The crown is covered with a slightly sculptured enamel. On both surfaces the molars have small flange with finely serrated edges. It is more marked on the buccal side of the tooth. On the cutting edges of the teeth there are jagged denticles: on the anterior edge there are 5 of them, on the posterior 3, not counting the apex. The cheek teeth are deeply seated in the alveoli. They decrease in size toward the end of the alveolar row. The diastemata between the molars are 3–4 mm, diminishing aborally. Four teeth fit into seven centimeters of the upper jaw. The roots are no longer than the crown. The molars of the lower jaw are similar in shape to those of the maxillae, only with a somewhat high crown. The size of the diastemata is the same as in the upper jaws. The posterior half of the lower jaw having been preserved, it is possible to judge its relative height and delicacy.

Material. Large fragment of the skull of one individual (holotype coll. #II-62/C 1-3). The barely perceptible sutures on the skull and the slight wear of some of the molars indicates the fully grown state of the animal. The preservation of the skull is relative. The anterior part of the rostrum and the whole cranial part of the skull are missing. Fragments of the upper jaws with teeth and the proximal parts of the lower jaws have been preserved.

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