

New information on geographical distribution of the sea cow,
Hydrodomalis stelleri, now extinct

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There is not much published information on the geographical distribution of the sea cow. Reports by members of the Second Kamchatka Expedition (G. Steller, S. Vaksel', S.F. Khitrovo) on sea cows at the Komandorskiye Islands are believed to be more reliable than others. That expedition was forced to land on Bering Island¹, then unknown and uninhabited, in 1741, on the "St. Peter's" return voyage from the northwestern shores of America it discovered. Also, there is no doubt at all (as to reliability) of P. Yakovlev's report, in 1754, on sea cows at the Mednyy (Copper) Island².

At both of these Komandorskiye islands, the animal, not yet seen by any European, which resembled whale by appearance and size, was "grazing" by the shores, in herds, devouring masses of sea cabbage.

But sea cows, defenseless and sluggish, were completely exterminated in about 30 years³ by commercial hunters in the Aleutians, in their pursuits of the valuable beasts. They were stocking the meat of sea cows, up to 3.5 tons from one adult animal. Information on the sea cow is to be found also in their reports, some of which are already published.

G. Steller's papers contain information on sea cows more valuable by far than any others here cited. He describes the appearance of the animal, its inner organs, and habit of life. In his view, the sea cows is the same as the manatee which lives much farther south by the shores of America and which is now assigned to a different genus of the order Sirenia (*Trichechus manatus*).

The account on the sea cow in S. P. Krashennikov's "Description of the Land of Kamchatka"⁴ and the report on its presence in the Blizhniye Near Islands, in the Aleutians, in P. Pallas' papers⁵ are included occasionally with testimonies by eyewitnesses.

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¹ G. Steller. De bestiis marinis. *Novi commentarii Academiae Scientiarum Imperialis Petropolitanae*, v. 2. Petropoli, 1751, pp. 296-300. Topographische und physikalische Beschreibung der Beringinsel...*Neue Nordische Beitrage*, Bd. 2. Petersburg und Leipzig, 1781, pp. 290-299; S. Vaksel'. *The Second Kamchatka Expedition of Vitus Bering*. Leningrad-Moscow., 1940, pp. 126-128. *Zap. AN*, v. XII, 1869, pp. 32-33.

² *Zap. AN*, v. X, ch. 2. St. PB, 1867, pp. 184-186. Sea cows were sighted for the first time at Mednyy Island by E. S. Basov, Trader, in 1745; see A. S. Polonskiy, List of voyages of Russian traders in the Eastern Ocean, 1743-1800. Archive VGO, razr. 60, op. 1, d. No 2, l. 5, obverse.

³ M. Sauer, who accompanied the D. Billings-G. A. Sarychev expedition (1735-1793) reports that the last sea cow was killed on Bering Island in 1768 and that none was seen afterwards by anyone (*An account of a geographical and astronomical expedition to the northern parts of Russia...* by Martin Sauer. London, 1802, p. 181). This remark, made in passing, while describing fauna of the Kad'yak Island, is accompanied by the untrustworthy assertion to the effect that sea cow was abundant at the shores of Kamchatka and of the Aleutians. It is possible therefore that Sauer's date is inexact. Nonetheless sea cow was indeed exterminated at about the time he says it was, for none of the reports by visitors of the Bering Island mention it after 1773, not even in listing the animals used as food.

⁴ P. A. Novikov. "S. P. Krashennikov, Member of the Academy, as the first investigator of animal kingdom in Kamchatka." *Trudy Instituta istorii estestvoznaniya*, v. 3, M.-L., 1949, p. 274.

However, Krashennikov's description was borrowed from Pallas, as proved by comparisons, and it refers to Bering Island and not to Kamchatka. As to Pallas' communication, in his paper of 1777, it states (plainly) that sea beavers are practically extinct at the islands of Bering, Mednyy, as well as 150-200 versts (100-133 miles) from Mednyy, at Attak, Shemiya, Semichi islands, but that other sea beasts, including "mantas", are still there, and in appreciable numbers. Inasmuch as Pallas does not mention specifically his sources of that information and (his statement) does not agree with the others, with regards to the sea cow, his statement is not to be taken as a reliable one.

Studies of the sites at which bones of the sea cow were found had shown that such discoveries are concentrated in the Komandorskiye Islands⁶.

Nonetheless, in the absence of any other fully reliable information, there is no reason to believe that the animals were no longer to be found anywhere by approximately the middle of the 18th century. We are dealing here (simply) with incomplete knowledge of the subject, more likely than not.

At about that time, the sea cow was dying out; some individuals could have survived only in places unfrequented (by man), under concentrations of favorable conditions; they vanished quickly on contact with man. Accessions of information on sea cow were complicated by the fact that areas north and east of Kamchatka, not far from where the cow was sighted first, were but rarely visited by Europeans and it was the natives who could have been exterminating the animal.

Indications of a broader spread of the sea cow, made by G. Steller, merit attention in view of his remarkable insight and his extensive travels in areas possibly inhabited by sea cows⁷. Of course, his sources were not his personal observations, for, having visited Kamchatka, the northwestern shores of America, and certain ones of the Aleutians, he declared that he saw no sea cows⁸ until he came to Bering Island. They (the indications) could be his own conjectures or rumors he believed.

As he says, sea cows are found only near America or at "the Channel" islands and it is only their corpses⁹ that the sea brings to the shores of Kamchatka. Also, he knew about sea cows in the north and mentioned the use of their skins in boat-building by the Chukchas¹⁰.

By "America" Steller may have meant the lands north of the "St. Peter's" sea route which were sighted by the ship on its return voyage. They were the Aleutians, as we know, and the islands next to Alaska. But Steller did not know what "land" the travelers were dealing with and his idea was (thought) that the ship was bumping into a gigantic salient of America, protruding westward, and separated from Kamchatka by a strait ("the Channel") 40-50 miles wide¹¹. This is the shape of America given by maps of the Second Kamchatka Expedition. The islands in "the Channel" could be only the Komandorskiye, judging by its width indicated by Steller. But Steller

⁵ P. Pallas. Erläuterungen über die in östlichen Ocean zwischen Sibirien und Amerika geschehenen Entdeckungen. *Neue Nordische Beiträge*. Erster Band. St. Petersburg und Leipzig, 1871, p. 296, in paper "On Russian discoveries on sea between Asia and America". (Mesyatseslov (Monthly Almanac) istoricheskii i geograficheskii na 1781 g.) Pallas mentions no sea cows in the Aleutians.

⁶ A. A. Birulya. Pelvic bone (*os pelvis*) of sea cow. *DAN SSSR*, 1929, p. 287.

⁷ G. Steller went not only to northwestern America but also to northern Kamchatka.

⁸ G. Steller. Tagebuch seiner Seereise aus dem Petropauls Hafen in Kamtschatka bis an die Westlichen Küsten von Amerika. *Neue Nordische Beiträge*, v. V, 1793, p. 230.

⁹ G. Steller. *Beschreibung von dem Lande Kamtschatka*. Frankfurt und Leipzig. 1774, p. 97.

¹⁰ G. Steller. *De bestiis marinis*, p. 328.

¹¹ G. Plieninger. *Joannis Gmelini reliquias quae supersunt epistolici commercii...Stuttgartiae*, 1861, p. 183.

said that “the Channel” has many islands and that they are teeming with sea beasts¹². In his error with regards to positions of certain ones of the western Aleutians, he was probably putting them too into that same “Channel.”

Pallas, who was well acquainted with Steller’s papers, wrote that “sea cow is the sea beast that is often found in the Eastern Ocean by the islands between Asia and America and by the American (but not Asiatic) shores. It differs profoundly from the manatee at the eastern shores of America---“¹³.

Steller’s words may have still another meaning, perhaps, if we remember that he regarded sea cows as manatees. By America he may have meant its southern latitudes where these animals were to be found. This is how Steller was understood by K. Baer¹⁴ somewhat later.

It would seem that disconnected (pieces of) information from the only scientist who studied sea cow *in vivo* should have been subjected to further inquiry and verification in the next few years, while the sea cow was still living. But there was none of that and no such objectives were posed for any one of the government expeditions to the North Pacific during the 18th century. As to the local administration and merchants, prospecting for the sea cow in faraway places had no practical interest. For these reasons, Steller’s remarks on sea cows in the north remained uninvestigated.

There is also much later information on the sea cow on the American shored, at Bering Island, and in the Bering Straits. These reports deserved no recognition, in the absence either of proofs or of verisimilitude¹⁵.

Poor knowledge of the areas inhabited by the sea cow left its mark on the mind of many investigators.

Certain scientists believe that the sea cow is indeed to be found wherever its presence was mentioned in the literature; in Kamchatka, in Bering Straits, near the shores of northwest America. This notion survives even now¹⁶. K. M. Baer’s approach to the problem was more rigorous, as early as in 1840. Upon consideration of the already large (body of) data on history of the exploration of shores and islands in the North Pacific by the Russians, Baer concluded that the sea cow was proved reliably to inhabit only Bering Island; its existence at the Mednyy Island is entirely probable (he had no access to P. Yakovlev’s memorandum); its existence in the Aleutians (west of the Lis’y [Fox] Islands) is doubtful. As to all of the other places, its existence is impossible to assume¹⁷.

The effect of K. M. Baer’s scholarly investigation is recognizable in his contemporaries¹⁸ and in scientists of our time¹⁹.

¹² G. Plieninger.

¹³ Pallas. *Zoographia rosso-asiatica*, v. 1. Petropoli, 1811, pp. 272-273.

¹⁴ K. E. v. Baer. *Untersuchungen...*, p. 63-64, 68.

¹⁵ The report by G. Tilesius, Naturalist, published in 1835, belongs to this category of information. He accompanied I. F. Krusenstern, on round-the-world voyage from 1803-1806. (The report) is to the effect that travelers returning from California, Sitkha, and Od’yak (Kad’yak?) spoke of the sea cows they saw (K. E. v. Baer. *Untersuchungen...*, p. 71); Nordenskjold reports a sea cow he sighted on Bering Island in 1854 (A. Nordenskjold. *Voyage de la Vega autour de l’Asie et de l’Europe*, v. 2. Paris, 1885, pp. 274-275); G. Sverdrup reports a sea cow seen in 1910 at Cape Chaplin (The “Mod” voyage...) *Materials of Yakutian Committee, AN*, vol. 30, 1930, p. 248.

¹⁶ *Traité de zoologie*, publié sous la direction de P. Grasse, v. XVII, I fascicule. Paris, 1952, p. 986.

¹⁷ K. E. v. Baer. *Untersuchungen...*, p. 77.

¹⁸ J. F. Brandt. *Sybolae Sirenologicae...Memoires de l’Academie Imperiale des sciences de St. Petersburg. VI serie. Sciences naturelles*, v. V., 1. r. St. Petersburg, 1846, p. 112.

¹⁹ L. S. Berg. *Discovery of Kamchatka and Bering’s expedition*. M.-L. 1946, p. 269; L. Stejneger, footnote in book by F. Golder. *Bering’s voyages*, v. II. N. Y., 1925, p. 139.

There is an important deficiency in that study, however, the fact that Baer made no attempt to broaden his available information on sea cow by including unpublished reports by the 18th century travelers. Instead of that, he resorts to interrogation of his contemporaries who visited the areas where sea cow could possibly be found, in his desire to verify this or that (part) of the (earlier) information. And yet it is the unpublished materials that would have led to important corrections in his views.

It is reasonable here to adduce certain ones of them; they support Steller's judgments, to a degree.

The existence of sea cow in the Blizhniye (Near) Islands is reported in "Communications collated from conversations about the so-called Oleutian Islands with Fedor Afanas'yevich Kul'kov, Trader of Vologda, in Sankt-Petersburg in 1764"²⁰. It is evident from the substance of these "communications" (albeit indirectly) that the talks were about the 1759-1762 voyage of the ship "Zakhariy I Elizaveta", of which F. Kul'kov was a part-owner, to the Blizhniye Islands²¹. This document reads: "whales are scarce over there and sea cow is ever scarcer, the kind which is called Komandorskaya by traders, because it lives near the Bering or the Komandorskiy Island". Consequently, by 1760, there was but a very small number²² of sea cows left at the Blizhniye Islands. This is not surprising, if we remember their fate at the Komandorskiye. There were more of them at the Blizhniye, perhaps, in G. Steller's time.

The report by N. P. Shalaurov²³, Merchant, is highly interesting, it appears. He sailed by ship, "Vera, Nadezhda, Lyubov" ("Faith, Hope and Charity"), from the mouth of the Kolyma River to Shalaginskiy Nos (Cape Shelaginskiy) in 1762. His account of September 23 of the same year, transmitted by F. Plenisner, Chief of Anadyrskiy Ostrog ("Fort Anadyr"), in his report to F. I. Soymonov, Governor of Siberia, dated October 31, 1763, states: "---sparse weak crumpled ice compacted suddenly and was bound (ice-bound?) until the 23rds (of August – V. Grekov) in which they sailed on then to Shelaginskiy Nos where sea cows were sighted by them and so was sea cabbage on the shores---"; "--- but on their return navigation from Shelaginskiy Nos to ust'-Kovyma (Kolyma- V. Grekov), the ices were scarce enough, so that there was nearly nothing at all available, but only the sea was visible everywhere, filled-up with whales and nerpas (seals), belugas (white whales) are sea cows rarely."²⁴ (Translator's note: The poor grammar, even by eighteenth century standards, of the Russian governor's report is translated literally).

N. P. Shalaurov could hardly mistake any other sea beast for sea cow. He wintered on Bering Island in 1748-49, after his ship "Perkun: Zanat" was wrecked at that island, (the ship) on which he sailed from Anadyr, Kamchatka, together with I. Bakhov and S. Novikov, merchants. During his winter on the island, N. P. Shalaurov could not but meet sea cows quite often, who were very numerous there, at that time, and whose flesh he undoubtedly ate²⁵.

²⁰ Archive of foreign policy of Russia, MID SSSR, f. Russian-American Company, op. 888, d. 17, 1. 2, obverse.

²¹ See table of voyages by the traders in R. V. Makarov's article, "Expeditions of Russian trader people in Pacific Ocean in the 18th Century." *Voprosy geografii*, vol. 17, 1950, p. 37.

²² Sea cow is not mentioned at the Blizhniye Islands, in the Stepan Cherepanov, Merchant of Totem, "tale" on the same "Zakhariya: Elizaveta" voyage in which he too participated (Russian discoveries in Pacific Ocean and in North America in the 18th century. A. I. Andreyev, Editor. Moskow, 1948, p. 37).

²³ For Shalaurov's voyage see M. I. Belov, "New data on campaigns of Nikita Shalaurov, Merchant of Ustyug". *Geograficheskiy sbornik*, v. III, *Izd. AN SSSR M.-L.* 1954; N. N. Obloblin. "Contribution to history of the Bakhov-Shalaurov Arctic expedition" *Zh MNP*, 1902, June.

²⁴ Archive of foreign policy of Russia, MID SSSR, f. Russian-American Company, d. No. 7, 1. 169, and obverse.

²⁵ According to S. Cherepanov, who wintered on Bering Island in 1759-1760, only sea cows are killed for food by Russian traders who land there (Russian discoveries..., p. 114).

There is no reason for us to assume that he lied deliberately. It is difficult to expect any errors also on the part of the “clerk” who accompanied the F. Vertlyugov expedition and who was commissioned by N. P. Shalaurov to write the report. We know that F. Vertlyugov was literate and was a qualified geodesist, well skilled in calculations of positions and in drafting of geographical maps. The enclosed unpublished long-hand map of the voyage of the expedition²⁶ is an example of his work.

Finally, we still have the possibility of confusion in the transmission of N. P. Shalaurov’s report by F. Plenisner. But one can hardly find another name of any sea beast which could be confused with the name “sea cow”.

N. P. Shalaurov’s information merits attention; it may be possible to relate to G. Steller’s remark about the use of sea cow hide for boat-building by Chukchas.

Further acquaintance with documents in the archives pertinent to navigation near shores of northeastern Asia in the 18th century may introduce an even greater clarity, we may hope, into the problem of the geographical distribution of the sea cow.

²⁶ “Mercator Map drafted for course of Nikita Shalaurov, Merchant of Ustyug, searcher for new route by Northern Sea, from ust’-Kovyma to Shalatskiy Nos, in year 1762.” Follows N. P. Shalaurov’s signature. Fine script below: “drafted by Filipp Vertlyugov, Clerk”. (AVPR MID SSSR, f. Russian-American Company, d. 8, 11. 170, obverse, and 171).