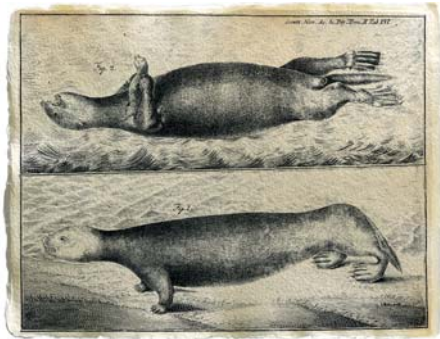




SCIENCE

First Hand



IN THIS ISSUE:

Georg W. Steller is the only scientist who saw a live sea cow, a sea mammal that used to live near the Commander Islands: "From above to the navel, they resemble a land animal; from it to the tail, a fish."

The history of the largest island of the South Kuril Chain began 20,000 years ago with a colossal explosive eruption, one of the most powerful events in this region over the past 2.5 million years

Through the glass floor of the lower tier of a building in Wangfujing – the main street of Beijing – we see the excavations of an Upper Paleolithic site with groups of fossil bones and ancient artifacts

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for Inquisitive People

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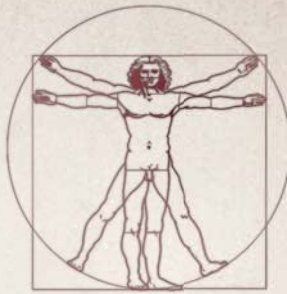
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*“The natural desire
of good men is knowledge”*

Leonardo da Vinci

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Dear friends!

In the new issue, we continue telling the story of the scientists who were part of the Academic Detachment of the Second Kamchatka Expedition, which set the stage for exploring the natural riches of Siberia, including its flora. This time the main character is one of the most mysterious and underestimated naturalists of the 18th century – an adjunct of the St. Petersburg Academy of Sciences, a German botanist and physician Georg Wilhelm Steller.

Steller is most often remembered as the discoverer of the now-extinct sea cow named after him; his vast scientific legacy was not fully appreciated until many years after his untimely death at the age of 37. Suffice it to say that, as a member of the legendary voyage of Vitus Bering's expedition to the shores of America, Steller became the first naturalist to explore the nature on the northwestern coast of the North American continent, and he left behind many scientific works that never saw the light of day during the author's lifetime.

Among the latter, we should highlight Steller's fundamental work Description of the Land of Kamchatka, dedicated to the lands where he managed to collect extremely interesting material about the geography, geology, climate, flora and fauna, population, and history of the region. In particular, he also visited the Northern Kuril Islands, which lie to the southeast of the Kamchatka Peninsula, and collected materials about people inhabiting these islands.

As is known, the Kuril Islands are part of the so-called Pacific Ring of Fire, an area of about 40,000 km along the perimeter of the Pacific Ocean, which encircles most of the active volcanoes and experiences many eruptions and earthquakes. These islands, primarily the South Kuril island of Iturup, host a lot of well-defined and virtually unexplored calderas, i.e., huge depressions that formed

as a result of subsidence of rocks that overlapped a huge magma chamber emptied by powerful explosive eruptions.

In populated areas, caldera eruptions turned into gigantic catastrophes, causing the death of tens, even hundreds, of thousands of people. The explosive eruption that formed the Iturup Island occurred 20,000 years ago. In 2015, an expedition of Novosibirsk geologists visited the island to collect samples of volcanic rocks. Based on these samples, scientists were able to determine the pattern of changes in the composition of magma in the ancient magma chamber and reconstruct in detail the scenario of the volcanic catastrophe that occurred during the Ice Age.

In our previous issues, we repeatedly wrote about the past and present of our great neighbor China. This time, Novosibirsk researchers make a “tour” of Wangfujing, the main street of Beijing. The story of this street began centuries ago, during the reign of the Ming Dynasty. For many years, Wangfujing was the main trade route of the capital – it changed its names and buildings in response to changes in the economic and political situation in the country, from the Boxer Rebellion at the beginning of the last century to the Cultural Revolution in the middle of it.

In the 2000s, Wangfujing became pedestrian and turned into one of the main “baits” for tourists as commercialization, multiplied by globalization, had reached here as well. But in spite of everything, the famous street has preserved that special, mysterious oriental flavor that has long attracted people from other civilizations. In the evenings, here, like in the old days, local people run competitions in calligraphy, drawing hieroglyphs on the street asphalt with water and a large brush. The ephemerality of the hieroglyphs, as well as the strength of the tradition itself, is a wonderful symbol of Wangfujing, both ancient and forever young

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