Flag Number: 25

Field dates: July-August 2006.


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Background: The images on the rocks of Kaikuul Bluff were discovered in 1965 during a field trip by a geologist, Nikolai Samorukov, who reported his find to the Academy of Science of USSR.

For two field seasons in 1967 and 1968 expeditions headed by Russian archaeologist Nikolay Dikov, had recorded, on Kaikuul Bluff, 103 compositions on eleven stone panels. They also investigated traces of two Late Neolithic encampments and a cave with images and archaeological material relating to an ancient Bering culture. In addition, 10 kilometres downstream along the River Pegtymel, they found a composition, which had been created on a solitary rock face at the top of which were recorded traces of a Late Palaeolithic campsite.

In 1986 Dikov again visited the Kaikuul Bluff and found several compositions not discovered during the earlier field trips and another surface with a drawing about 5 km below the main concentration of images, not far from the mouth of the Dvurogii stream. Dikov’s monograph “Rock enigmas of ancient Chukchi” summarising the research results appeared in 1971. It described and reproduced all 104 groups of petroglyphs and presented the archaeological material obtained during the expedition. The author examined a wide range of questions relating to the study of the petroglyphs, analysed their style and the techniques used to create them, proposed a method for classifying and dating them, and analysed various aspects of the interpretation and ethnic attribution of the images. Continuing interest in the Pegtymel petroglyphs led to the publication of an English language version of Dikov’s monograph in Anchorage in 1999.

Another expedition in 1999 discovered 24 compositions and individual drawings. The area occupied by the finds had now expanded.
New assessments regarding the date and ethnic attribution of the site were published, although support for the traditional semantic interpretation of the rock art images remained keen.

In August 2002 a group of specialists from St Petersburg with Mikhail Slobodzyan undertook a project to index all the documentation, conduct a survey of the sites and identify the location of all currently known images.

In 2003 Slobodzyan led an archaeological survey in the Pegtymel valley. The main purpose of this field trip was to conduct a focused search for all rock art sites in the upper and middle reaches of the Pegtymel, from the mouth of the Tyvegrynnet to Kaikuul Bluff. During this, the rocky outcrops visible on both sides of the river were investigated but no traces of ancient art were found. In the final stage of the survey the team members photographed all known petroglyphs on Kaikuul Bluff, using Dikov’s monograph and the 1999/2002 results as a guide. Combined, these produced a new total of 74 figures and groups.

Other sources also announced that there was known to be a large number of new petroglyphs (Stefania Zini, Aleksey Sokolov, 2005).

This significant increase in the number of known petroglyphs and the progress in the techniques used to document the objects highlighted the need for further study of the Kaikuul Bluff petroglyphs using state-of-the-art methods. The time had come for another expedition to the lower reaches of the Pegtymel.

**Images:** The reindeer is the central image of the rock art on Kaikuul Bluff. There are two main alternative designs: realistic and schematic. In the realistic, the body and head of the animal are treated comparatively naturalistically, in detail, sometimes even with eyes a-goggle, legs bent and sometimes tucked underneath. There are only a few of these images and they have been produced by fairly deep pecking a high degree of patinisation. In the absolute majority are the more schematic figures of reindeer, almost barren of detail, their bodies almost triangular in contour and their legs straight lines.

Many of the reindeer figures are associated with the image of a kayak-shaped boat: the person sitting in it and the animal are linked by the outline of a hurled spear or the line of a harpoon, depicting a scene of a ‘hunt afloat’. Sometimes the person in the boat and the muzzle of the reindeer are joined by a line and sometimes the boat with the person sitting in it and the figure of a bear are linked together.
Hunting scenes feature not just reindeer but marine animals too. These compositions contain another type of boat – a large silhouette of a craft resembling a barge or a longboat with several figures of people. The relative proximity of Kaikuul Bluff to the sea – the coast is around 50 km away – probably explains the reason for the sea hunt scenes on the cliff.

The hunt on foot for bear or elk with hunting-poles is portrayed less frequently but the known number of such scenes is growing, and figures of archers have been identified for the first time.

Another object with incomparable features contains the outline of persons with a mushroom-shaped silhouette above their heads: the number of examples of these is also increasing.
Other constantly recurring subjects we have noted in petroglyphs are tracks or footprints.

**Expedition – purposes and results:** A Russo-Italian project, *Rock Art of Chukotka*, coordinated by Stefania Zini and Ekaterina Devlet, was launched in 2005 and continued in 2006.

One of the purposes of the project was to newly classify the rock art objects being increased at that time to 267. All identified surfaces with images were photographed and indexed with a brief description and a note of the orientation.

A survey of the ancient monuments along the right bank of the Pegtymel, in the tract from Kaikuul Bluff to the river mouth and from the river mouth to Mys Shalaurova Izba, a headland on the East Siberian coastline was led and gave support to the theory that there were no other examples of rock art on outcrops in this sector. The 92 km search of the right bank included surfaces on the precipices above the right bank of the Pegtymel, ending below the mouth of the Kychakvaam river where the low boggy delta of the Pegtymel begins. Apart from surfaces with petroglyphs found in the area of the mouth of the Dvurogii and petroglyph no other images were found. Pinnacle rocks (stacks, or *kekurs*), in the area of Mys Shalaurova Izba were also examined. These *kekurs* are composed of coarse-grained rock of a texture on which would have been almost impossible to peck or fashion images.

Although this survey of a significant stretch along the Pegtymel did not find any more rock art sites, objects were found on Kaikuul Bluff itself, at different heights, from the highest terraces to the littoral line. The significant increase in the number of both new solitary images and groups was due to several different causes, but in the most part because the surfaces were
cleaned of crumbly, friable accumulations either deposited by the river or built up by surface flow processes. Several boulders had moved along the slope from their original positions, probably because of ice and snow. Two of these boulders were lying in water and one, with representations of deer, birds and different kinds of boats.

The most interesting objects are the images on two rocks. One is in the central part of the slope. It was almost completely obscured by slope detritus, bushes and undergrowth. Once these had been removed, images on two faces were revealed, and fragments of two broken-off antlers of a reindeer and some of its bones lying under them at a different depth were found.

The petroglyphs on this panel include figures of reindeer of different sizes, and one of the animals is shown upside down (?dead). There are also schematic anthropomorphic characters. Uniquely, this group contains an image of a structure in which there are two anthropomorphs: this could be interpreted as a dwelling.

The other panel is of an unusual shape, reminiscent of an hour-glass. It lies close to the river bank and is completely covered when the water level rises. A group of images on the front face, turned towards the north-east, was heaped over with sand from the river and covered with deep-rooted Chozenia bushes. The pecked composition includes images of reindeer – there is one unique individual with a symbol in the shape of a circle with a dot in its centre. So far, this is the only image of a ‘marked’ animal. The group contains meticulously executed figures alongside partially completed images.
Another important aim of the project was to identify and approve methods for preserving rock art monuments as part of the historical and cultural heritage. The conclusions of an overview of the published material on the Kaikuul Bluff petroglyphs and the discovery of a substantial number of new images highlight the need to make copies of all the groups of petroglyphs, given current conditions and new technologies. Approximately forty surfaces were copied. Depending on the condition of the rock surface and the techniques used to make the images, preference was given to copying onto transparent material (with the graphics done later) or to mica paper stamping.

The mica paper stamping method is well-known and has been widely used for copying petroglyphs in Siberia. The procedure is as follows. Affix a piece of mica-coated paper (a special fibrous material) onto the rock with the pecked images, then wet it with water and ‘tack’ it on to the surface with a polyurethane foam sponge. When wetted, the mica-coated paper penetrates all pores, fractures and cuttings in the rock, the material clings tightly to the surfaces tightly and, once dried out, it is fixed to the rock. The mica-coated paper is then rubbed with a pad containing a dye and the dye spreads over all the convex surfaces, emphasising the texture of the rock and the pecking and all the chippings, hollows and fractures remain white.

This ‘application’ or stamping (estampage) can be easily removed from the rock. The result is a thin, positive, black-and-white copy of the image. The mica paper can be attached later to a canvas support and toned to the colour of the cliff. These casts serve as documentation and a way of exhibiting the images.
In addition to these traditional copying methods, a new technique has been approved for making matrix copies of the most interesting surfaces with images using modern restoration technology. The creation of positive copies is a practical means of connecting with the site from a distance.

Another significant aspect of highly professional copying of the images is the opportunity it provides to form a conception of the original in case of its loss. The present condition of the bluff is cause for concern and the future preservation of many surfaces with interesting images will be problematic without intervention to conserve it. Fractures are forming on the cliff face, the surface layer of the rock is disintegrating in places as crust exfoliation occurs and some blocks with images are falling from the cliff, which is becoming heavily overgrown with lichen.

To make these negative moulds preference has been given to two German made silicone products with different properties: one is a thick paste, which harden quickly.

The second has the consistency of thick cream when worked and takes long time to harden.
The major problem encountered was the presence of silicon oils in the materials which leave visible traces on the rock surfaces and may cause visible damage to the object. To protect the rock a separating layer of water-soluble methylcellulose material had to be applied. Before copying, the rock surface with petroglyphs was photographed. Then, to remove atmospheric contamination the surface was dry-cleaned, trying anyway not to remove the frond of lichens. Onto the dry surface with images we applied five protective separating layers of water solution of methylcellulose. After the final layer had dried we applied the silicon material to the surface. After removing the silicone negative mould, the rock surface was washed thoroughly with water and brushes to remove the water soluble protective separating layer of methylcellulose.

In stationary conditions a positive copy can be cast from negative moulds using various materials such as plaster, plastic, cement, etc. The copy can be toned to match the colour of the original, comparing the colour with a photograph.

The projects undertaken in 2005-2006 proved the importance of both the future research value and the Pegymel petroglyphs themselves, and highlighted the need for further systematic study. All currently identified images have to be professionally copied and back-up copies made of all surfaces which are in a delicate condition.