



The rugged landscape around Lake Issyk-Kul in Kyrgyzstan

Issyk-Kul

research center on the coast. The 'hotel' was actually a small construction trailer, or mobile home, equipped with all the amenities we needed right there on the lake shore. Around the lake were fairly high mountains that dropped off steeply, directly into the lake, and therefore the water depth increased quite rapidly. Despite the very hot weather (and this is in the mountains!), the water in the lake remained cool. However, this wasn't really a suitable place for a long swim.

We rented some equipment and decided to start our diving along the coast. The water was very clear and also auite cool, at about 14-16°C. Our 5mm wetsuits certainly came in very handy! At the bottom of the lake were crystalline formations, which at a first glance appeared to be coral boulders. However, these structures were not formed by living organisms, such as coral polyps, rather they were comprised of precipitated salt crystals. Admittedly an interesting sight, but rather monotonous after a while. There were also traces of commercial activity in the form of fragments of ancient ceramics.

Although the dive proved to be inter-

In Medieval times, when Lake Issyk-Kul in Kyrgyzstan was a stop-over on the Silk Route, which connected Europe and Asia, the lake level was some 8m lower than it is today. In areas along what used to be the coastline but have since become submerged, divers have discovered the remains of a 2,500-year-old advanced civilization. Vladimir Gudzev and his buddies went to the area to have a look.

The first account I heard of diving in Lake Issyk-Kul was an expedition many years ago headed by Academician Orbeli and comprised of a group of volunteers using ISA-M 48 oxygen rebreathers to explore the shallow waters along the coast. The story stuck in my mind—in case I ever got the opportunity to go there.

As matters eventually turned out, I did. A friend of mine, Valentin Bukin, happened to work in a small research center on the coast of Lake Issyk-Kul, near the village of Cholpon-Ata. So I decided to go visit and dive this mysterious lake, to see if there was something interesting and to reunite with an old friend.

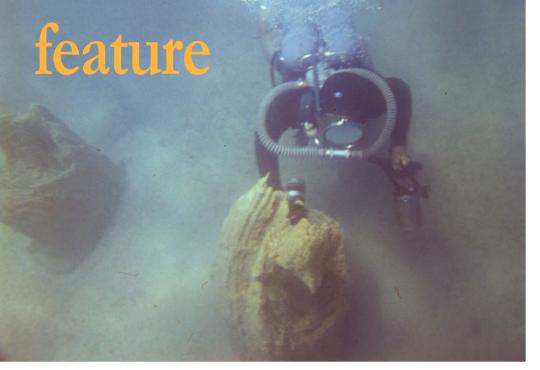
The lake is situated at an altitude of about 1,609m and can, in many ways, be compared to the more famous Lake

Baikal in Siberia. However, there is one significant difference: Lake Baikal is a freshwater lake whereas Lake Issyk-Kul is not. It contains a large amount of soluble mineral salts, thus giving it a slightly salty 'taste'.

Reaching Lake Issyk-Kul wasn't exactly easy. First, we had to fly to Alma-Ata, and then, we had to get on a domestic flight at the airport at Cholpon-Ata. The lake was so large that when the plane came in for a landing, it felt as if we had flown over the ocean. We were fortunate to get accommodation at the



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THIS PAGE: Scenes from Poplar Alley, where trees were planted in rows

esting and mysterious, we were hungry for more. After chatting with a local scientist, we learned about some interesting places further up the coast. Two of these sites were nearby and fairly easy to reach, and although they were located within the resort area where the public could freely access them, there were no visitors. Along the coast there were also some no-go areas—military installations where research and testing of military equipment for deep sea took place.

According to other sources, the Soviet Navy used to test submarine and torpedo technology in the eastern end of the lake.

Underwater garden

The first site that was recommend to us was the so-called "poplar alley". In ancient times, the water level of the lake was lower. A few thousand years ago along the old coastline, which later became submerged, were buildings and

gardens. Today their remains can be found at a depth of 1.5 to 2m. Underwater there are also lines of tree trunks sticking out of the bottom, running in straight lines. Above water nothing was preserved, having rotted away a long time ago. But on the lake bottom, the trees and their roots were nicely preserved.

Following the directions given to us by local residents, we soon found our designated point of entry and plunged into the water. Almost immediately we found the remains of trees, which stood in a straight line. After following the line out into the lake, the depth increased to three meters, after which, the line of trees turned a sharp right. After about 30 to 40m, the line of trees headed back to the shore as if it was tracing the perimeter of a yard. Inside this garden, there was a flat, sandy bottom. If we had done some digging, we would probably have found some relics. However, since we did not have a permit to dig up any artifacts

or do excavations, we were restricted to just filming the area.

Issyk-Kul

Diving a cemetery

The second location was a submerged cemetery, which was under 1.5 to 2m of water. The locals had agreed to take us there with a motor boat. Along the way, the skipper explained that the people who lived in these areas led simple lives and had to look for ways to make some additional income. Hence they looked at



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Issyk-Kul

THIS PAGE: Scenes from the ruins of an ancient cemetery at 2m depth. The bones were highly mineralized in the lake so they did not dissolve. Local craftsmen made vessels out of the skulls for wealthy collectors.

gyzstan and one of the 25 largest lakes in the world by area. It is the seventh deepest lake in the world, located in the northeastern part of Kyrgyzstan, between the ridges of the Northern Tien Shan Kung

Ala-Too and Terskey Ala-Too at an altitude of 1,609m above sea level.

Around 118 rivers and streams flow into the lake, the largest being the Djyrgalan and Tyup. It is also fed by springs, including many hot springs, as well as snow melt. The lake has no known current outlet, but it is hypothesized that deep underground, lake water filters into the Chu River. The water level of Lake Issyk-Kul changes cyclically, rising and falling; this cycle occurs over a few decades. The lake water salinity is approximately 0.6 percent, which makes it brackish. The bottom of the lake contains the mineral monohydrocalcite—one of the few known lacustrine deposits.

The volume of the water in the lake is equal to 1,738 cubic kilometers, and has an area of 6,236 square kilometers. The coastline is 688km long and the average depth is 278m, with a maximum depth of 702m. The length of Lake Issyk-Kul from east to west is 182km, and from north to south, it is 58km.

We spent hours swimming about taking photographs before we returned to the boat. Nearby we noticed a couple of boats with locals using hooks to collect remains. It was a rather sad sight, really. Even in the grave, the deceased were

with due respect and studied by scholars rather than exploited by grave robbers in search of Tamerlane's treasures. There should be a lot to be investigated in these areas

not allowed to rest. I can only

hope that a more civilized atti-

both the remains of ancestors

and the material artifacts from

ancient cultures will be treated

tude will eventually prevail where

investigated in these areas because the Silk Road went strait through the region, leaving plenty

of remains and artifacts to be found not only along Issyk-Kul but also in other high mountain lakes. It could be interesting to set up a proper expedition, with the right equipment and led by professional archaeologists and not amateur volunteers.

Geographical information Lake Issyk-Kul is the largest lake in Kyr-

this old cemetery as an opportunity to make use of their handicrafts, picking up bones and making drinking vessels out of skulls.

Over time, the water movements in the lake had gradually uncovered the graves in shallow water and those buried in the open cemetery. As the water was highly mineralised, the bones remained perfectly preserved, particularly if they were situated in a layer of soil that resembled clay. Contributing to the uncovering of the bones were the many

motor boats whose propellors' wash and wake also removed soil, laying bare well-preserved human skeletons. The drinking vessels the locals made out of the skulls were covertly sold on the black market. For them it was a way to connect eternity to present life.

Once we reached the sunken cemetery, we kitted up, grabbed our photo equipment and went in. Thanks to the strong sun at high altitude and the clarity of the water, we could enjoy some

splendid visibility. We could make out some small bumps and stripes on the bottom and swam closer to take a look. It was only then we realized it was a human skull protruding from the ground. Nearby were other skeletal parts, such as spine, ribs, etc. The bones that were in the ground were light colored, whereas the bones that had been laid bare were dark.



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