

west, north, and N. 10° E. was an ocean of reeds, interrupted at intervals by patches of open water. Our Ilek is separated from the lake by a long, narrow ridge of sand, with living and dead tamarisks, as well as lusty poplars. These last also accompany the left bank of the river throughout, whereas the right bank is lined with nothing but kamisch and perplexing marginal lagoons, which rendered it impossible to measure the river. Far away in the west the extensive marshes appeared to be likewise bordered by sand-ridges with tamarisks. One would be tempted to set down the entire expanse as a single gigantic marsh, were it not that the eastern waterway of the Avullu-köl and Arka-köl forms an independent system, distinctly separated from our Ilek by the long, narrow ridges of sand. This arrangement is however peculiar, in so far as the Ilek lies only one kilometer west of the lacustrine chain, and yet these cannot be regarded as being its marginal lakes. One thing is at any rate certain, that it is anything but easy to map a marsh, a labyrinth of river-arms and lakes, amongst which the hydrographical distribution is subject to such incessant and such sudden changes. The only thing that can be done is to proceed as I did, namely trace out one of the main arteries, and ascertain how the other waterways and basins are arranged on each side of it.

At this point, then, 710 meters from the west shore of the Tajek-köl, we encamped; and as we had done at the Arka-köl, we carried a canoe over-land and launched it on the lake. This lake is evidently bigger than the Arka-köl; the poplars beside the upper part of the Arka-köl were visible S. 70° E. The natives describe the Arka-köl as being *jilgha*, that is »long and narrow», but the Tajek-köl as being *jumalak*, or »round» in shape. The shores of this latter, again, are almost everywhere smothered in reeds, so that a couple of transverse intersecting lines across the lake are not sufficient to afford an idea of its outline. At first it was not easy to get out of the thick belt of reeds which border the western shore, and reach the foot of the separating ridge of sand; but we did succeed at last, and then found ourselves on the edge of a wide expanse of open water, with a little island, consisting of a single large tamarisk-mound, on our right. Out in the middle of the lake the current setting towards the Arka-köl, although sluggish, was nevertheless distinguishable. Generally the lake is so deep that its bottom is seldom visible. The natives know very well where the deepest parts are, and these we now sounded, obtaining depths of 5.70, 9.52, 6.90, 4.03, 4.90, 6.72, and 7.90 m. Unfortunately we were unable to force our way through the tangled reed-brakes on the east side of the lake to the dunes and tamarisk-mounds lying only a few hundred meters beyond. Accordingly we turned north, and paddled with the current, though it was so gentle that we seldom noticed it. On the left we had Karaune-tokkan-toghrak, or the Poplar in which the Karaune-bird lays its Eggs. At a spot close beside this, where the current was plainly perceptible, it is called Karaune-tokkan-ilek. Both the *karaune*, a big black swimming bird, and wild-duck are very plentiful here. We saw two or three fishermen from Tosghak-tschantschdi busy plundering the nests of the latter. The next place where the current was distinguishable is called Mandschar-baskan-ilek. Then we travelled south, crossing two tongues of land and a pool. The next name is Taschtane-köli. Here too the lakes and their several parts are named after the men who began fishing in them, and claimed the sole rights to fish there. Two such