

CHAPTER XV.

GENERAL CONCLUSIONS REGARDING THE KARA-KOSCHUN.

Owing to our defective knowledge of the Kara-koschun, it is practically impossible to state its area and cubical capacity. At the present time there exist only two navigable waterways through the reeds in its westernmost parts. The whole of its eastern portion, amounting to probably three-fourths of its entire length, is absolutely inaccessible, — except by balloon. Add to this, that its eastern end has not been mapped. Still, taking the data so far as they exist, it is possible to make an approximate estimate. If with Prschevalskij and Pjevtsoff, we take the length of the marsh as being approximately 100 km., and the mean breadth as drawn from my own observations at 25 km., we obtain the area of 2,500,000,000 sq. m. According to my soundings of 1900, the mean depth is 2.366 m.; taking the northern waterway, the mean depth is 2.70 m., taking the southern 1.0 m.; the mean of these two means is 1.85 m. On the basis of this value for the mean depth, the volume works out at 4,625,000,000 cub.m. However it may safely be assumed, that the mean depth of the Kara-koschun is not so much as 1.85 m.; for it has to be remembered, that all the soundings were taken not only in the two open channels, which are of course the deepest, but in *their* deepest parts. Moreover the entire lake is overgrown with kamisch, which as a rule grows only in very shallow water, and at the same time collects and holds together the silt, dust, and drift-sand. Towards the east-north-east, the direction in which the surface rises, the depth grows *a priori* less and less; and it is precisely in that part of the lake, as I have mentioned above, that by far the greatest part of the drift-sand accumulates. In short, I do not think that at the present moment the lake's mean depth reaches one meter. Putting the mean depth however at one meter, then the cubical capacity of the marsh is 2,500,000,000 cub.m. — in the beginning of April. But as the volume of the river in the beginning of April is considerably greater than the mean volume for the entire year, the result at which we have arrived above is too large rather than too small to be accepted as the general mean for the lake. If the evaporation in this part of Asia is as great as in the Lake of Aral, which, according to the statements of Russian inquirers, loses a layer of about one meter in thickness every year,* simply through evaporation, then the Kara-koschun would dry up

* Mohn tells us that at Nukus in the month of June alone the evaporation amounts to 500 mm. See his *Meteorologi* (Christiania 1903), p. 152.