



ARAL SEA

ARAL SEA, Daryā(ča)-ye K̅vārazm, inland sea in western Turkestan, bounded since 1924 and 1936 by Karakalpaqistan (part of the Soviet Republic of Uzbekistan) in the south and Kazakhstan in the north. Known as *boḥayrat K̅vārazm* to the Arab geographers in the Middle Ages, it was later called the sea of Gorgān or of Jand (after the city near the mouth of the Syr Darya); the Kazakhs called it Aral Teñizi; the Russians, Khvalizskoe More (after K̅vārazm) in the Middle Ages, Sinee More (Blue Sea) in the 17th century, and since 1697, Aral'skoe More (Island Sea). The Aral Sea lies between 43° 27' and 46° 45' north latitude and between 76° and 79° 27' east longitude. Including its many islands, totaling 2,345 km², it encompasses 66,458 km² (1942), a surface area which is, however, subject to annual variations due to substantial changes in water level—e.g., a difference of 3.1 m between 1874 and 1931. The sea is approximately 20 m deep at the center, up to 68 m at its west shore; it lies about 53 m above sea level. Its greatest length is 428 km, its greatest width (at 45° north latitude), 284 km. Its water is slightly saline. The Üst Yurt plain separates it from the Caspian Sea, with which it was connected during Pleistocene times. Its shorelines are largely uninhabited and are generally unsuitable for the construction of harbors. Shipping is severely impeded by storms and shallow water. At the present time, the level of the sea is sinking in consequence of the extensive utilization of its tributaries, the Amu Darya and the Syr Darya, for irrigation. Soviet scholars fear that it will be completely dried up by the year 2000 unless the water of Siberian rivers (especially the Ob) is fed into it.



Whether or not the Aral Sea was known in antiquity is open to debate. The first Arab geographer to refer to it, in the early 4th/10th century, was Ebn Rosta (Leiden, 1967, p. 92). He and later geographers (until the 7th/13th century) give varying indications of the sea's area. The discrepancies may be the result of inexact estimates, but also of the changing water level. Between the 7th/13th century and the 10th/16th century there are no reports concerning the sea. In the 11th/17th century, Abu'l-Ġāzī Bahādor Khan (*Šajarat al-atrāk*, ed. Desmaisons, St. Petersburg, 1871-74, I, p. 338) was the first to name it after the island (*aral*) at the mouth of the Amu Darya. From 1819 on, the Russians sent out numerous expeditions for the exploration of the sea. In 1847 they erected Fort Raimskoe on the Syr Darya, close to its north shore. From 1853 to 1883 and from 1918 to 1921, there was an armed flotilla on the lower Syr Darya. In 1906 the railroad station Aral'sk was established near its northeast corner; beyond that, it is rather inaccessible to traffic. The lake itself is navigable for about seven months a year. For the surrounding population, and for the Soviet Union in general, it is important mainly because of its abundance of fish.

BIBLIOGRAPHY

*Bol'shaya Sovetskaya Entsiklopediya*²II, pp. 609-77.

Brockhaus-Efron, *Entsiklopedičeskii slovar'*, St. Petersburg, 1898-1904, II, pp. 12-14.

L. S. Berg, *Aral'skoe More*, St. Petersburg, 1908.

A. Woeikow, "Der Aralsee und sein Gebiet," *Petermanns Mitteilungen*, Gotha, 1909, pp. 82-86.

W. Barthold, *Nachrichten über den Aral-see*, Leipzig, 1910.

Idem, *Turkestan* (index).



Nauchnye rezul'taty Aral'skoï ekspeditsii (Scientific results of the Aral expedition) 1-14, Tashkent, 1902-1915 (*Izvestiya Turkestanskago otdela Imperatorskago Russkago Geograficheskago Obshchestva* III-V, VIII, XI, XII).

W. Leimback, *Die Sowjetunion*, Stuttgart, 1950, pp. 120-22 (with map).

T. Shabad, *Geography of the USSR*, New York, 1951, pp. 335ff.

V. I. Lymarev, *Aral'skoe More*, Moscow, 1959.

B. Spuler, in *Et*² I, pp. 606-08, s.v. P. Daffinà, "Aral, Caspio, Tanais," *RSO* 43, pt. 4, 1968, pp. 363-78.

A. Y. Asarin, "The Water-Balance Components of the Aral Sea and their Impact on Long-Term Level Fluctuations," *Soviet Geography* 15, no. 7, 1974, pp. 408-21.

Y. N. Minayeva and N. T. Kuznetsov, "Changes in the Structure of Evaporation in the Aral Sea Basin," *Soviet Geography* 18, no. 10, 1977, pp. 769-78.

N. T. Kuznetsov, "Geographical Aspects of the Future of the Aral Sea," *Soviet Geography* 18, no. 3, 1978, pp. 163-71.

Idem, "A Set of Principles for Predicting Environmental Changes Resulting from a Drop in the Aral Sea Level." *Soviet Geography* 19, no. 10, 1978, pp. 717-24.