

### Plant colonization of the desiccated sea floor of the Small Aral Sea

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The Aral Sea once was the fourth largest inland lake on the globe. Since 1960 huge irrigation areas in whole Central Asia used the waters from the two main tributaries Syrdarya and Amudarya to a high percentage, causing desiccation of the Aral Sea. Only 30% of the water surface area, 12% of the water volume is left (2006). The Aral Sea no longer exists, there are 3 remnant water bodies, the Large Aral Sea in the South with a western deep, and an eastern shallow basin, and the Small Aral Sea in the North, now separated from the southern parts by a dam, which came into action in 2005. A huge new desert area developed, the so-called Aralkum, a new desert. On this desiccated sea floor, the older parts are covered by various sandy deserts with new aeolian activity and sand dune formation, on the younger surfaces more or less saline and clay deserts have developed. This new terrestrial surface is an extraordinary area to study primary succession. Spontaneously about 315 vascular plant species have invaded the area since 1960, and are forming new vegetation associations, according to climate and soil variability. The sequence of succession is very dynamic and no stable species combinations have developed yet. The Chenopodiaceae comprise more than one quarter of species within the Aralkum, indicating a high proportion of halophytes and being the colonizers on most halophytic stands. This is true for other plant families to some extent, as well. The Aralkum vegetation is already a very diverse combination of many halophytes, and still is under rapid change, which needs further monitoring.