

The Caspian Sea

The Caspian Sea, largest enclosed water basin in the world is of great importance for Azerbaijani people. It has a unique physical and geographical properties, It should be noted that the flora and fauna of the Caspian Sea are rich in endemic species. For example, 90% of the total reserves of sturgeon, differing from other fishes by its antiquity, are found in this sea.

The specific geographical landscape created favorable recreational conditions. The sea stretches along a meridian in shape of latin letter "S" and it locates between latitude 47'17" north and longitude 36'33" east.

The sea across the meridian stretches to nearly 1200 km, its average breadth is 310 the maximal and minimal breadth id 435 and 195 accordingly. As the level of the Caspian Sea changes periodically, the volume of water and its boundaries are also changeable. At present the level of the sea is 26.75 meters below sea level. At this level the area of the sea is 392600 km² , the volume of water is 78648 km³. This volume makes up 44% of the total water reserves of all lakes in the world. Its maximum depth is 1025 meters and due to that the sea rivals the Black Sea, Baltic Sea and Yellow Sea and it is even deeper that the Adriatic Sea, Aegean Sea, Tiren Sea and Sulu Sea.

Caspian Azeri Sector occupies central and southern parts of the Sea. Caspian Sea water differs from that of the world ocean by its salinity. The salinity totals 5-6 ppm in the north and 12.6-13.5 ppm in south. 170 out of 300 mud volcanoes in Azerbaijan are located in the Caspian Azeri sector. The number of volcanoes is higher in the South Caspian Sea.

The uniqueness and colorness of natural conditions promoted the preservation of a number of rare flora and fauna species in the Caspian Sea up to present days.

The Caspian Azeri sector accounts for 171 species of phytoplankton, 40 species of animal plankton, 258 species of fitdentos, 91 species of macrozoodentos and 80 species and subspecies of fish belonging to 14 families. Carp-like fishes are the most numerous species-42 species, they are followed by gudgeons-31, herring-17, salmon fishes-2, sturgeon-5 species. The fish fauna of the Caspian Sea comprises 4 genuses, 31 species and 45 subspecies of endemic fishes. Most endemic fishes are registered in central part of the Caspian Sea.

Approximately 40 species and subspecies of fish play important role in fishing. Flock accouns for the biggest part of the total fish fauna (80%) the remainder part comprises herring, grey mullet, friar, argentine, and gudgeon.

The Red Book of the Azerbaijan Republic includes the following species of rare and endangered species: stone-eel, sig, Southern Caspian white-eye, chekhon, sea pike-perch. In the last few years, the number of all kinds of sturgeon (beluga, spine, long-nosed sturgeon), Caspian salmon, white salmon, khramulya, shamai fish, shibrit, garasol, is decreasing rapidly and these fishes are on the verge of extinction. The seal is the only mammal found in the Caspian Sea . It is the smallest kind of all existing seals. The number of Caspian seals decreased from 1.5 million in early 20th century down to 360-400 thousand in 1980th. The Caspian seal was included into the Red Book in 1993.

302 species of birds have been registered on the Caspian Sea and its coastal regions: these include 37 species of water birds, 109 species of birds populating areas around water basins and 156 terraneous birds.

Environmental challenges of the Caspian Sea

The Caspian Sea is currently facing some dramatic environmental challenges. There are numerous problems associated with its shelf areas, which are particularly aggravated by formation of several dead areas.

In some areas the permissible contamination norm is exceeded in 10-20 times. The Caspian Sea is polluted from several sources. All of them can be divided into the following groups: 1) pollutants brought into the sea by rivers; 2) industrial and civil wastes brought to the Sea from industrial facilities and coastal resident areas; 3) pollutants brought as a result of oil production and its transportation; 4) contamination from onshore sources invaded as a result of sea level rise. Dominant contamination occurs from pollutants brought into the Sea by rivers. For example, recently acquired data indicates that rivers annually bring 75 th tons of oil products of which 95% fall upon the Volga River run-off. In view of the fact that there is no multilateral agreement related to the Caspian Sea environmental protection between the near Caspian countries, poaching in the Caspian Sea is actually thriving. Both contamination and poaching increment, along with fish fry breeding facilities productivity deterioration made the chance of many fish species survival, particularly, sturgeon species, very problematic.