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BIOLOGICAL DIVERSITY IN THE HYDROSPHERE SHELL AND ITS SIGNIFICANCE IN NATURE

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ABSTRACT

This article discusses the hydrosphere, one of the earth's crusts, and its importance on the earth's surface, the level of biodiversity, the role of water resources in the development of organisms, and concepts related to natural sciences, ecology, in particular, biodiversity. In addition, information about the world's oceans and seas, the diversity of various organisms adapted to different conditions, the relationship between biomasses, the higher biomass of aquatic organisms than terrestrial organisms, the beauties of nature, the importance of the hydrosphere in educating young people to love nature and protect natural resources, are also discussed.

Keywords: ocean, sea, plant, animal, biodiversity, algae.

The water shell of our planet is called the hydrosphere. All the water on our planet is found in the hydrosphere - oceans, seas, rivers, lakes, ice and other forms. Of this, 750 thousand km. cubic meters correspond to lakes, 75 thousand km. cubic meters to groundwater. The amount of water in the hydrosphere is 1 billion 454.5 million km. cubic meters, of which 1 billion 370 million km. cubic meters to oceans and seas, 60.0 million km. cubic meters to groundwater, 24 million km. cubic meters to ice and snow, 750 thousand km. cubic meters to lakes, 75 thousand km. cubic meters to groundwater, 1.2 thousand km. cubic meters to river water, and the rest is water in the atmosphere and living organisms.



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97.2% of the water in the hydrosphere is salt water, only 2.8% is fresh water. The main part of fresh water is glacier water, a small part of rivers, lakes and groundwater is water in the atmosphere. Water in the hydrosphere is constantly moving from one state to another. Water in the hydrosphere acts as a kind of accumulator that accumulates heat coming from the sun. Water conducts heat 25-30 times faster than land.

World Ocean. 71% of the Earth's surface is covered with water, forming the World Ocean. The area of the World Ocean is 361 thousand km, the volume of water is 1 billion. 370 million. km, the average depth is 3.7 km, the deepest point is 11022 m. The continents divide the World Ocean into very large parts - oceans. Therefore, a very large part of the World Ocean located between the continents is called the ocean.

The World Ocean is divided into four: the Pacific, Atlantic, Indian and Arctic Oceans.

Salinity of ocean water and gases in it. 96.5% of the mass of the world's oceans is water, and the rest is dissolved in various salts, gases and small particles. All known chemical elements are dissolved in ocean water, most of which are salts. The most abundant salts are sodium chloride (NaCl-77.9%), magnesium chloride (MgCl-10.9%). Ocean water also contains substances such as gold, silver, copper, phosphorus, iodine.

The amount of mineral substances in the oceans is 5.10 tons, which is 3.5% of the mass of the entire ocean water. The most abundant minerals dissolved in ocean water are salts. If these salts were deposited on the surface of the earth, a salt layer 45 m thick would form.

Nevertheless, we can see in the works of a number of scientists that the oceans constitute a large biomass of organisms. The world ocean is also very rich in plants and animals that provide food for humans. There are 10 thousand plant



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species in the world's oceans, which are 4-5 times richer in organic matter than terrestrial plants. Sometimes algae contain more protein than terrestrial plants (50%). However, beef contains only 21% protein.

Of the 63 animal classes in the world, 51 are found in the oceans and seas, and there are 150 thousand species of them. Their total weight reaches 16 - 20 billion tons. Therefore, from each hectare of seawater, 2 times more products can be obtained than from the best 1 hectare of pasture on land.

Thus, the world ocean is a huge source of food resources. The amount of organic matter in the world's oceans is 30 billion tons. But now only 1% of the food resources of the world's oceans (fish, whales, belugas, sea cats, seals, sea hares, walrus, crabs, mollusks, oysters and other vertebrates and invertebrates and aquatic plants) are used by humans.

Among ocean animals, the whale is the largest producer of oil and meat. It is the largest animal on Earth, reaching 35 m in length and weighing 125 tons. Of this, 50 tons are oil. Canned goods, animal feed, flour, fertilizer, as well as high-quality leather are obtained from whales. 550 million tons of various fish are currently caught from the world's oceans every year.

In conclusion, the hydrosphere occupies a large part of the Earth, and the role of many organisms in the formation of the climate and the conduct of large metabolic processes indicate how important the importance of water resources is. It is important to convey such concepts and views to the younger generation and shape their worldviews towards water resources, nature, and biodiversity.

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