

MODERN NATURAL CONDITIONS OF THE NORTH-WESTERN PRYAZOVIA REGION AS A COASTAL MARINE AREA OF SOUTHERN UKRAINE

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Key words: geology, geomorphology, hydrological conditions, steppe zone, relief, spit, steppe vegetation, climate, soils, geocological problems.

The North-Western Pryazovia region as a geographical territory is limited: from the east by the watershed line of Berda river; from the west and north-west by the watershed line of the Dnieper and Milk river (including the Large Utyuk basin); in the north by the watershed line of the Pryazovia Upland between Berda river and tributary systems of Mokra and Sukha Konca, Haychur and Kamenka rivers. From the south, the area is limited by the coastline of Azov sea, with its bays and estuaries. The North-Western Pryazovia region is the extreme southern and south-eastern part of the Ukrainian crystalline shield, which goes into the Black Sea basin and bounded by faults. It extends from north to south for 148 km and from west to east for 200 km. The area is about 11173 km² [7,7-13].

The North-Western Pryazovia region is the part of the Azov-Kuban geomor-

phological province, which covers a variety of structural regions: the extreme western part of Donetsk folded structure, southern outskirts of the Ukrainian crystalline shield (Azov array), and adjacent the Black Sea basin. The flat nature of the North-West Azov defined by the persistent dip territory during the late Cenozoic, which contributed to the accumulation of powerful marine and continental sediments. Tectonic structure of the foundation is very complex and is determined by the development of various size, type, morphology of folded and discontinuous dislocations. The depth of crystalline rocks increases from Azov shield block, where they come to the surface in the direction of the west and south. The upper, Meso-Cenozoic, structural floor lies with a sharp angle and stratigraphic inconsistency (Paleozoic sediments in this area are not available) on much dissected sur-

face of the crystalline basement, forming the bumps of its relief. The cutting of a sedimentary rock is composed by Mesozoic rocks (Lower and Upper Cretaceous) and Cenozoic (Paleogene and Neogene sections). Orographic and geomorphological elements of the North-Western Pryazovia region are due to the structural plan of the territory. Weak shared marine, estuary and marine Pliocene-Pleistocene alluvial plains, which are extended along the coast of the Azov Sea correspond to the deep diving of crystalline basement. According to the geomorphological zoning scheme the North-Western Pryazovia region includes the Azov Upland and the Black Sea Lowland, which contain such geomorphological regions: Western Donetsk slope-highland region, Azov watershed structural denudated hills, Azov sloping dissected accumulative-denudated plain, Azov accumulative lowland plain, the Black Sea loess accumulative plain [7,75-79].

The climate features of the North-Western Pryazovia region (high temperatures in summer, the cold winters, the lack of rainfalls) greatly influence the development of erosion processes. High temperatures and relatively low humidity promote drying of the soil and thereby accelerate the wind erosion. The development of wind erosion is also affected by the eastern and north-eastern high speed winds. A small amount of rains and their falling character lead to the fact that the soil loses its ability to absorb large amounts of water during raining. The excess of water flows down the slopes, and there is a surface and linear erosion [7,13-16].

The North-Western Pryazovia region is located in the steppe zone, as it is mainly characterized by black soils. Among black soils in the area there are ordinary black and southern. Large areas are occupied by a chestnut soils and salts. The rate of erosion depends on the soil properties. Soils of the North-Western Pryazovia region are formed in loess rocks and so have light texture. They are easy to erode and deflate, have low erosion resistance [9,269-278].

The steppe vegetation is dominated throughout the North-Western Pryazovia region: xeromorphous cereals and certain grasses. The natural vegetation occupies only 3,4% of the total land area. Plowed about 80% of the soils, the absence of natural vegetation increases the destruction of soil due to water and wind erosion [1,234-235].

A common manifestation of numerous external geological processes, marine, ground and surface waters, causes the extensive development of modern geological processes in the coastal strip zone. The most common processes are: erosion, abrasion, denudation, alluvial, talus, eolian, accumulative and others. Depending on the distribution and intensity of a process, the North-Western Pryazovia region has the following types of the coast: sliding abrasion, sweeping abrasion, accumulative abrasion, aligned cumulative, ancient abrasion, deltoid, anthropogenic [2-5,8,10].

Coastal shore forms are suitable for recreation. There are a large number of bays – Obytichna, Berdyanska, Taganrozk; long sand spits – Fedotova, Peresyp, Obytichna, Berdyanska, Bilosaraiska,

Kryva. The resorts have identified a number of areas along the northwest Azov Sea coast: Kyrilivska, Pryazovska, Prymorska, Berdyanska, which are suitable for recreation [6,114-116].

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