

Typology of Natural-Recreational Complexes of Ukrainian Natural Regions

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Abstract: *The work represents general description of basic groups of natural-recreational complexes within Ukrainian natural regions, i.e., land-water-recreational, land-recreational-water, water-forest-recreational low productive, productive and highly productive groups of complexes are characterized.*

Key words: *NRP typology, NRP classification, NRP ecological-economic evaluation, natural-resource regions.*

Deepening of economic-geographic and social-geographic knowledge of natural resources potential and of natural-recreational potential of the territory (aquatory) in particular activates the scientific research on the problems of its (potential) typology. Baklanov, P. Ya., the academician, well-known professional in the field of natural resources geography, considers the typology of nature-resource regions, the evaluation of territorial nature-resource systems, the consideration of different inter-resource links and the natural resources dynamics to be an important result and an urgent priority for the development of fundamental science in general (Baklanov, P. Ya., 2007, p. 141, 143). Typology in the terms of philosophy is considered as a method for scientific cognition by way of object systems dismemberment and their further grouping with the help of a generalised ideal model or type and as a result, their typological description or definition (Ogurtsov, A. P., 1983, p. 685).

When summing up resource-knowledge developments in the typology of natural resources potential (NRP) and in particular, of natural-recreational potential of the territory (aquatory), we can clearly observe at least two peculiarities. The researchers, in the first place, put the proportion of different types of natural resources within a given territory (aquatory), i.e. the structure of the total or the integral NRP, in the center of their attention and secondly, accentuate upon the importance of definition of productivity (efficiency) of both separate natural resource types and their integrity. Thence, both NRP structure and its productivity (efficiency) can serve as a basis for the typology. The NRP dismemberment is reasonable to be presented in the form of an ordinary matrix, where one of its sides would characterise the NRP structure, while the other – its efficiency (Rudenko, V. P., 2007).

The NRP types are named after two or three most significant natural resources and the general level of their productivity which proceeds from average national indices of the total ecological-economic potential evaluation. The present stage of NRP knowledge allows for its productivity to be limited to three grades as well as for discerning between highly productive, productive and low productive types of natural resources potential.

Let us now briefly characterize typological peculiarities of the natural-recreational potential of Ukrainian natural regions. Geographical analysis of the country's natural-resource complexes (NRC), where natural-recreational potential is among the most important ones with respect to their further functioning and development, which can be seen from the type (and subtype) name of the natural regions' PRCs, allows for disclosure of the following regularities.

First. Natural-recreational resources represent a complex-forming factor for the development of 181 natural (physical-geographical) regions of Ukraine out of 351 regions of different taxonomic levels (from physical-geographical region, oblast', province (kray), sub-zone, zone to physic-geographical country). Thus, the perspectives of further balanced development are connected with improvements in economic assimilation of natural-recreational potential in 51,6 % of the country's natural regions.

Second. The proportion of major types of natural resources in natural-resource combinations within Ukraine allows for 21 types of natural-recreational complexes (with subtypes of different productivity levels, i.e., low productive, productive and highly productive natural resources).

Basic types of natural-recreational complexes of Ukrainian natural regions represent combinations that formed on the basis of land-water-recreation low productive, productive and highly productive natural resources (48,6 % of total Ukrainian region types). The next most frequent types (15,5 %) represent land-recreation-water low productive, productive and highly productive ones. Mineral-recreation-land type and its subtypes come third in descending list (6,1 %). All these are followed by land-recreation-mineral (5,5 %), and land-mineral-recreation (3,9 %) low productive, productive and

highly productive types of Ukrainian natural-recreational complexes. As it is obvious, these five most spread natural-recreational complex types predominate in almost 4/5 of the country's natural regions.

We can mention five less spread types of complexes (in descending order), which are mineral-land-recreation, water-land-recreation, land-recreation, recreation-land-mineral and water-recreation-forest low productive, productive and highly productive types of natural-recreational complexes.

On the whole, the first ten frequent types of natural-recreational complexes within natural regions comprise 9/10 of their diversity in Ukraine.

From the point of view of geography, it is also important and interesting to analyse territorial distribution of major types of natural-recreational complexes within separate natural regions of the country. Let us analyse peculiarities of allocation of the first five most-spread natural-recreational complex regional types on the level of physical-geographical provinces (kray), in the Ukrainian Carpathians and the Crimean Mountains (*Table 1*). It is worth in the first place noting that the above five types can be observed in 144 physical-geographical region of Ukraine (let us take them as 100 %).

Tab. 1. Distribution of basic natural-recreational complex types within physic-geographical regions of Ukraine

Physic-geographical (natural) province, country	Land-water-recreation low productive, productive and highly productive types	Land-recreation-water low productive, productive and highly productive types	Land-forest-recreation productive type	Land-recreation-mineral low productive, productive and highly productive types	Land-mineral-recreation low productive, productive and highly productive types
<i>Podilska</i>	9*	1			1
<i>West-Ukrainian forest-steppe</i>	15	3			
<i>Dnister-Dnieper forest-steppe</i>	13	4		1	
<i>Livoberezhna-Dnieper forest-steppe</i>	8	1			1
<i>Serednyo-Ruska forest-steppe</i>	5	5			
<i>Dnister-Dnieper north-steppe</i>	4	4			
<i>Livoberezhno-Dnieper-Pryazovska north-steppe</i>				3	2
<i>Donetsk north-steppe</i>					
<i>Zadonetska-Don north-steppe</i>	1			1	
<i>Prychornomorska mid-steppe</i>	6	3		1	1
<i>Prychornomorska-Pryazovska dry-steppe</i>	12	4			
<i>Crimean steppe</i>	11				1
<i>Crimean Mountains</i>		1		1	
<i>Ukrainian Carpathians</i>	4	3	12	1	1
Totally, Ukraine	88	29	12	8	7

Explanatory text. 9* - Quantity of Ukrainian physical-geographical regions that represent given type of natural-recreational complex

Land-water-recreation low productive, productive and highly productive types cover 88 physic-geographical regions (over 60 % of the regions where the first five types are available), in particular, 15 regions of the West-Ukrainian forest-steppe province, 13 regions of the Dnister-Dnieper forest-steppe, 12 – Prychornomorsko-Pryazovska dry-steppe, 11 – Crimean steppe, 9 – Polissa, 8 – Livoberezhno-Dnister forest-steppe, 6 – Prychornomorsko mid-steppe, and 5 – Serednyo-Ruska forest-steppe provinces.

Land-recreation-water low productive, productive and highly productive types are found within 29 Ukrainian physic-geographical regions (over 20 % out of 144 regions under research), in particular, in 5 regions of the Serednyo-Ruska forest-steppe province, in each of 4 regions of the Dnister-Dnieper forest-steppe, Dnister-Dnieper north-steppe and Prychornomorsko-Pryazovska dry-steppe provinces, in each of 3 regions of the West-Ukrainian forest-steppe, Prychornomorska mid-steppe provinces and in the Ukrainian Carpathians.

Water-forest-recreation productive type of natural-recreational complexes is exclusively characteristic for 12 natural regions of the Ukrainian Carpathians.

And, at last, land-recreation-mineral low productive, productive and highly productive complex types are found in 8 physic-geographical regions of Ukraine, namely, in the Livoberezhno-Dnister-Pryazovska north-steppe province (3 regions), Dnister-Dnieper forest-steppe, Zadonetska-Don north-

steppe, Prychornomorska mid-steppe provinces, in the Ukrainian Carpathians and the Crimean Mountains (1 region in each).

The fifth most-spread, namely, land-mineral-recreation low productive, productive and highly productive types are observed in 7 regions of the Poliska, Livoberezhno-Dnieper forest-steppe, Livoberezhno-Dnieper-Pryazovska north-steppe, Prychornomorska mid-steppe, Crimean steppe provinces and in the Ukrainian Carpathians.

It is worth mentioning that 144 Ukrainian physic-geographical regions which accumulate combinations of 5 most-spread types (with subtypes) of natural-recreational complexes of the country, are distinctive for dominance of low productive subtypes in 1/3 of them, productive – 1/2 and highly productive – 1/5 out of all natural regions of Ukraine.

Thus, as it is evident from geographical analysis results, the evaluation, and the definition of structure and productivity levels, i.e. the typology of natural-recreational complexes of primary (physical-geographical) regions would allow for:

- 1) disclosing perspective directions for rationalization of use, protection and reproduction of Ukrainian natural resources potential on both national and regional levels;
- 2) suggesting proposals with regard to improvement of branch and territorial structure of natural-economic geographical systems, if proceeded from the structure of and the mutual links between natural and natural-recreational complexes;
- 3) substantiating the ways for the development and optimization of nature use regional types, developing regional programmes for balanced recreational nature use.

References

- BAKLANOV, P. YA., 2007: Geographical Study of Dalniy Vostok (Far East): Basic Trends, Results, Perspectives // Geography and Natural Resources, 3, 139–144.
- OGURTSOV, A. P., 1983: Typology // Encyclopedic Dictionary in Philosophy, Moscow, 685–686.
- RUDENKO, V. P., 2007: Geographical Diversity of Natural Resources Potential within Natural Regions of Ukraine – Krasnoyarsk: KGTEI, 168 p.

Typológia prírodno-rekreačných komplexov prírodných regiónov na Ukrajine

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Summary: Prehľadovanie ekonomickogeografických a sociogeografických poznatkov zaoberajúcich sa potenciálom prírodných zdrojov (najmä prírodno-rekreačného potenciálu územia) vedie k typológii prírodno-rekreačných komplexov. V príspevku sú stručne charakterizované typologické špecifiká prírodno-rekreačného potenciálu prírodných regiónov na Ukrajine. Z výskumov geografickej analýzy je zrejmé, že hodnotenie, štruktúra a úroveň produktivity regiónov vyúsťujúcich do typológie prírodno-rekreačných komplexov primárnych (fyzickogeografických) regiónov obsahujú:

1. *perspektívne smery racionalizácie využitia, ochrany a reprodukcie potenciálu prírodných zdrojov v regiónoch Ukrajiny na národnej a regionálnej úrovni,*
2. *návrhy na zlepšenie teritoriálnej štruktúry prírodno-ekonomických geografických systémov,*
3. *zdôvodnenie spôsobov rozvoja a optimalizácie regionálnych typov využitia krajiny, tvorby regionálnych programov pre rovnovážne využitie krajiny pre rekreačné účely.*

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