



Svitlana Sovhira (Ed.)

Natural Conditions and Structure of the Southern Buh Meridional Ecological Corridor

Monograph



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The monograph presents the results of complex studies of natural conditions (landscape complexes, biodiversity, natural preservation objects) and structures of the Southern Buh meridional ecological corridor. Its classification: the upper part (Upper Pobuzhzhia), the middle part (Middle Pobuzhzhia), the lower part (Lower Pobuzhzhia) is presented. The main features of ecocorridor functioning are presented. The current state and perspectives of functioning of the Southern-Buh latitudinal ecological corridor is showed.

For scientists, postgraduate students, students-ecologists, specialists in biodiversity conservation services, landowners, all who study ecological system of Ukraine.

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INTRODUCTION

Increasingly, anthropogenic pressure leads to negative changes in the natural environment. One of the effective tools for preservation of natural complexes is creation of conservation (protected) areas, which form nature reserve fund (NZF). To create effective territorial conservation systems, comprehensive work is required to assess the status of existing networks of conservation (protected) areas.

In our country, there has been an increase in the area of the territories and objects of nature reserve fund, but compared to the countries of Central and Western Europe, where this percentage reaches 10 % or more, it can be stated that the achieved level of the territory's conservation is not satisfactory. Therefore, one of the steps for further development of ecological network is to increase the territory and objects of nature reserve fund of Ukraine. Most parts of meadow and steppe vegetation are at different stages of degradation caused by excessive grazing of animals. There are almost no forests of older age groups in forest areas, and where such areas are left, they are extensively cut down. Numerous water reservoirs and ponds that have been created, have significantly changed hydrological regime of the Southern Buh, which limited the possibility of hydrobionts of the reophylic complex [229, p.21].

One of the elements of the national eco net, the Southern Buh ecocorridor is located under a powerful anthropogenic press. A serious obstacle to its further functioning is the lack of water protection bands, massive development of promising areas for eco network by elite cottage housing and suburban areas, fragmentation of vegetation cover, etc.

To ensure the integrity of the Southern Buh ecocorridor, it is necessary to form parallel ecocorridors in the water protection zones of the Southern Bug tributaries. Almost all small rivers, the tributaries of the Southern Buh, can more or less function as ecocorridors in the city ecosystem, linking the Southern Buh ecocorridor with the surrounding forest areas or intra-urban ecological centers, provided they are optimized, and sometimes by establishing a protection regime [88, p.16].

The Southern Buh ecocorridor is limited to the river valley of the Southern Buh and is characterized by considerable tessellation and heterogeneity of the environment and landscape complexes. A

considerable part of wetlands is concentrated within it, which are places of temporary stay of migratory bird species. The ecocorridor is continuous, it occupies the mainstream of the Southern Buh, the floodplains and above floodplain terraces of its river valley, partly sloping terrains. The Southern Buh submeridional ecocorridor combines elements of regional ecological networks of Vinnytsia region with elements of regional ecological networks of Khmelnytskyi and Kirovohrad regions. Within this ecocorridor, there are Buh-Desna national natural nucleus, as well as Sandratskyi, Pechero-Sokiletskyi, Gubnytsko-Mytkivskyi, Krushynivskyi, partly Voronovytskyi, Samchynetsko-Raihrodskyi, Vinnytsia, Khmelnytskyi, Bereznyanskyi, Ladyzhynskyi, Snyvodskyi, Zhmerynskyi, and Bratslav regional biodiversity centers.

To ensure integrity of the Southern Buh ecocorridor, matters of optimization of the elements of a promising local ecological net of the city needs further detailed studies.

The monograph contains material obtained during expeditionary researches from the source of the Southern Buh river to the city of Mykolaiv.

The first chapter describes the natural conditions of Southern Bug Meridional Ecological Corridor. Tessellation and heterogeneity of natural conditions and landscape complexes of the studied territory is shown in this chapter; biodiversity of Southern Buh ecocorridor is investigated; its natural conservation objects and territories are described (H. Honcharenko).

The second chapter reveals the structure of Southern Buh Meridional Ecological Corridor according to the division of the territory into the upper part (S. Sovhira), the middle (V. Artamonov, O. Mitriasova), the lower (S. Sovhira).

The fourth chapter describes the current state and prospects for the functioning of the Southern Buh Meridional Ecological Corridor (H. Honcharenko).