

"MEDOBORY" NATURE RESERVE AS THE CENTRE OF LANDSCAPE AND BIOLOGICAL VARIETY PRESERVATION, HISTORICAL AND CULTURAL HERITAGE IN WESTERN PODILLIA

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Among nature protection establishments in Ukraine reserves are the only ones where planned long-term observations on dynamics of natural resources, rare species in their natural growing conditions and development of scientific basis for their preservation become possible. Such center and the main testing area for long-term monitoring investigations in Ternopil region is "Medobory" nature reserve that was founded in 1990 with the aim to preserve unique nature complexes of Podillia Tovtry, genofund of plant and animal world, their use for scientific purposes and nature-protecting work, and the most valuable lands of Kremenetski mountains in the north of the region were determined as the filial branch of the reserve.

Tovtry range is a unique monument of nature and geological past that is found nowhere else in Europe. Its formation took place 15-20 million years ago in the coastal waters of warm Sarmatian Sea. The main building material for reef formation served dead remains of organisms with calciferous skeletons: alga, mollusks, and other colonial organisms that developed on the elevated areas of the ocean floor and nowadays can be found preserved in limestone in their former lifetime look.

Orographically one can separate our main ridge in the Tovtry range, formed by a chain of hills, and the side ridge and groups of tovtry, edging it. The relative range height is 50-60m, and over the Zbruch valley - up to 100m. On the tops of the range there are many rocks, stone fields, made by numerous kinds of limestone with remains of various sea organisms. Mighty limestone favorably influenced the development of different karst terrain, including "Perlyna", "Khrystynka" caves.

Medobory play an important role in the formation of microclimate of the adjoining territories. Among soils there prevail gray forest clay soils on loess, loess clays and alluvium of limestone.

91 % of the reserve is covered by forest. Timber stand is of natural origin, generally, mixed, consisting of 2-3-4 species. The foliate species composition is the same. Oak-hornbeam, hornbeam-oak and oak-hornbeam-ash, oak-beech plantations are aboriginal for the reserve territory. They are preserved fragmentarily.

Favorable geomorphological, edaphic, micro- and macro-climatic conditions caused the development of variable and floristically rich vegetation, a number of valuable, endemic, relic and boundary-areal species. At present time the territory of the reserve amounts 44 species of alga, 359 - fungi, 123 - lichen, more than 9000 species of higher vascular plants. Totally, more than 130 species are considered rare in the region, 35 are registered in the Red book of Ukraine.

Galanthus nivalis L. and *Allium ursinum* L. are numerous in forest tracts of the reserve, their populations occupy big areas, *Lunaria rediviva* L., and *Scopolia carniolica* Jacq. are typical for the tops and slopes of forest tovtry. Rarer are *Astrantia major* L., *Lilium martagon* L., *Cypripedium calceolus* L., *Cephalanthera damasonium* (Mill.) Druce, *C. rtibra* (L.) Rich., *C. longifolia* (L.) Fritsch., *Platanthera bifolia* (L.) Rich., *P. chlorantha* (Cusl.) Reichenb., *Epipactis helleborine* (L.) Crantz, *E. purpurata* Smith, *E. palustris* (L.) Crantz, *Neottia nidus-avis* (L.) Rich., *Listera ovata* (L.) R. Br., *Dactylorhiza majalis* (Reichenb.) P.F.Hunt et Summerhayes, *Crocus heuffelianus* Herb., that can be found on the verge of the area. One can come across many rare in the region species such as: *Polystichum aculeatum* (L.) Roth, *P. braunii* (Spenn) Fee, *Phyllitis scolopendrium* (L.) Newm., *Cimicifuga europaea* Schipcz., *Symphytum besseri* Zaverucha, *Melittis sarmatica* Klokov, *Physalis alkekengi* L., *Veronica montana* L. and others.

A curiosity of nature presents the lands with steppe, meadow-steppe and rock-steppe vegetation with rare formations of *Carex humilis* Leys, *Stipa pennata* L., *S. capillata* L. Here, besides the characteristic steppe species, there grow many Volyn-Podillia endemic and boundary-areal ones: *Salvia cremenecensis* Besser, *Schivereckia podolica* Andr. ex DC, *Dracocephalum austriacum* L., *Aconitum eulophum* Reichenb., *A. lasiostomum* Reichenb., *Dictamnus albus* L., *Stipa pennata* L., *S. capillata* L., *Helictotrichon desertorum* (Less.) Nevski, *Clematis integrifolia* L., *Iris hungarica* Waldst. et Kit., *Allium podolicum* (Aschers. et Graebn.) Blocki ex Racib, *Euphorbia volhynica* Besser ex Szaf., Kulcz. et Pawl., *Chamaecytisus albus* (Hacq.) Rothm., *Ch. podolicus* (Blocki) Klaskova, *Ch. blockianus* (Pawl.) Klaskova, *Carlina cirsioides* Klok.

Faunistic complex of "Medobory" Reserve was formed under specific conditions of Tovtry ridge. Trees stand of various age, high amount of woodland on the slopes, alternation with steppe areas, covered by motley grass and islands of berry bushes, create favorable conditions for animal's settlement that form typical forest-steppe group. All the background species of Podillia-Prydnistrovya zoological district are presented in the reserve.

More than 1200 insect's species are found on the protected area, 15 of them are registered in the Red book of Ukraine: *Papilio machaon*, *Parnassius mnemosyne*, *Apatura iris*, *Osmoderma eremita*, *Lucanus cervus*, *Agria tau*, *Xylocopa valga*, *Aromia moschata*.

Other class species found in the reserve include 9 fish class species, 11 amphibians, and 6 species - of reptiles. Ornithofauna of the reserve amounts 182 species, 14 of them are registered in the Red book of Ukraine, and some of them are found only during nesting period: *Aquila pomarina*, *Circus cyaneus*, *Bubo bubo*, *Hieraaetus pennatus*. Sometimes *Lanius excubitor* flies for winter time.

The class of mammals of the reserve comprises 44 species, 6 of them are found in the Red book: Cheiroptera - *Rhinolophus hipposideros*, *Nyctalus leisleri*, *Myotis bechsteini*, *Myotis dasycneme*; Carnivora - *Meles meles* and *Mustela erminea*.

The reserve territory is rich in historical monuments. During investigations the archeologists found the XI-XIII century's pagan sanctuaries: Zvenyhorod, Bokhit, Hovda -that according to B.O. Tymoshchuk data present a united archeological complex "Zbrutskyi cult center". On Bohit, the highest mount of Medobory and round its foot there is a whole complex of eastern Slavonic monuments of X-XIII centuries with a site of ancient settlement and sanctuary on the top, where according to scientists assertions, in X-XIII (here was the world-known Zbruchanskyi Sviatovid - deity of eastern Slavs-pagans).