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"LISNYKY" RESERVE STOW: A LOCAL NATURE PROTECTED OBJECT IN INTERACTION WITH THE URBAN ENVIRONMENT

The "Holosiivskyi" National Nature Park (hereinafter - NNP "Holosiivskyi") is located on the right bank of Kyiv and is the largest nature conservation object of the city. The park consists of several separate parts located in the Holosiivskyi, Svyatoshynskyi and Obolonskyi districts of the capital. In accordance with the Decree of the President of Ukraine dated 27.08.2007 No. 794, the Park was created on an area of 4525.52 hectares within the Holosiivskyi district. Soon, by the Decree of the President of Ukraine dated 01.05.2014 No. 446/2014, the territory of the NNP was expanded to 6462.62 hectares at the expense of the lands of the KP "Svyatoshynske Forest Park Management" without taking away from the land user. The total area of the National Park is 10,988.14 hectares, including 1,888.18 hectares of land provided to the Park Administration for permanent use (Decision of the Kyiv City Council dated January 26, 2012 No. 69/7406), and 9,099.96 hectares of land included in the National Park without exclusion.

Territorially, the NNP consists of several separate massifs, the largest of which is "Lisnyky" with the area of 1110,2 hectares. This massif is located on the south of the Koncha-Zaspa microdistrict. From the east, it is limited by the Stolychne highway, the Kyiv-Ukrainka-Obukhiv highway. In the south and in the western part, the boundary of the place passes along the border of the city through the Mryhy village (not including it), in the north it borders on the lands of the former village of Chapaivka [1].

At the initiative of the Taras Shevchenko National University of Kyiv, the public and the Institutes of the National Academy of Sciences of Ukraine (the Institute of Botany, Zoology and Hydrobiology and the National Botanical Garden), by the Resolution of the Government of the Ukrainian SSR of 25.08.89 No. 223, the botanical reservation of national importance "Lisnyky" was created. The name of the reservation is associated with the nearby village of Lisnyky. Since 1990, research has been conducted on the territory of the reservation. 3 marked trails have been developed. Since 2007, the "Lisnyky" reservation has been the part of the NNP. The territory of the reservation is used by scientific teams of Kyiv for research, where scientific studies are carried out. The created ecological trails are used for excursions [2]. Later, the status of this nature reservation was changed to the "reserve stow".

Despite the fact that the reserve stow is located near the urban area and is subject to enormous anthropogenic load, the territory is characterized by significant landscape diversity.

The "Lisnyky" reserve stow contains the remains of old oak forests (over 350 years old). The eastern part of the reserve stow, located on the pine terrace of the right bank of the Dnipro, is characterized by a slightly undulating relief with soddy-sandy and light-sandy soils. The western part of the reserve stow is located in the basin of the small Vita River, where the relief gradually decreases, and the area becomes waterlogged. Podzolic-sod loamy soils, underlain by moraine, have formed on elevated areas, and peat-swamp and humus-swamp soils have formed on lower areas.

Along the Kyiv-Obukhiv highway, pine forests with *Calamagrostis epigejos* predominate, which on high, dry sandy drifts are replaced by pine forests with lichen and thyme. In the lower reliefs, richer and wetter ecotopes are formed, where, in addition to pine, oak grows, and among the grasses, fern *Pteridium aquilinum* dominates.

In the southwest, the relief decreases and levels out, oak-pine forests predominate. Further, the relief continues to decrease, and soil moisture increases, which creates optimal conditions for the growth of deciduous species. The grass cover of these forests is dominated by *Stellaria holostea* or the grass cover is sparse.

Then we can see a strip of oak forests begins, their derivatives of ash and maple-oak forests, alternating on the slopes with swampy forests of sticky alder with a dominance of nettle, blackberry, *Carex acuta* and open swamp with it. Significant spaces here are occupied by open reservoirs, the banks of which are covered with cattail, reed, and on the water surface grow sedge, dark green kushir, duckweed, etc.

In the western direction, the area of the water surface decreases, but instead the branching of the territory with small branches of the Vita River increases. Here, in humid and relatively rich conditions, oak forests with *Aegopodium podagraria* are formed, and their derivatives of maple and ash-oak forests with a similar grass cover. A significant area in these places is occupied by alder forests and grassy marshes of *Carex acuta*.

In place of the established forests, grassy groups are formed – meadows. The main dominants of these groups are: *Corynephorus canescens, Calamagrostis epigejos, Dactylis glomerata* on sod-podzolic fresh soils; *Carex acuta, Glyceria maxima* on moist meadow soils. The driest and poorest ecotopes are occupied by pine lichen forests, which also include pine forests with thyme, *Festuca ovina*, and heather. These plants are distributed in small fragments on the tops of sandy hills.

Slightly lower relief forms, sand dunes stretching along the Kyiv-Obukhiv highway, are occupied by pine forests with *Calamagrostis epigejos*, which in the depressions of the relief in richer conditions on sod-podzolic soils are replaced by oak-pine forests with *Pteridium aquilinum*. The herbaceous cover in such forests is usually quite dense (up to 80%) and rich in species. The most common cover is that of lily of the valley, single-eyed, but often occur *Agrimonia eupatoria*, *Betonica officinalis*, *Asparagus officinalis*, *Campanula persicifolia*, *Centaurea apiculata*, *Hypericum perforatum*, *Hierochloe odorata*, *Hieracium canadense*, *Melampyrum nemorosum*, *Euphorbia cyparissias*, raspberry, *Polygonatum officinale*, *Veronica officinalis*, and the rare species *Pulsatilla pratensis*. *Daphne cneorum* grow on lowlands.

Oak forests predominate in terms of area in the western, low-lying area of the Vita River floodplain. Rare species here include orchids – *Neottia nidus-avis*, *Platanthera bifolia*, *Epipactis helleborine*, and *Listera ovata*. Ash forests in the grass layer with stinging nettle and blackberry have formed as derived groups. In spring, dense thickets with wild onion, *Pulmonaria obscura*, *Viola mirabilis*, *Anemone ranunculoides*, *Gagea lutea*.

The most low-lying areas, branches, floodplains, and old growths are occupied by damp alder forests and alder swamps. Waterlogged areas along the Vita River bank are occupied by thickets of reed, broad-leaved and narrow-leaved cattail, and large buttercup. The lakes located near the Mryhy village are characterized by the presence of typical aquatic plants: pitchers, white water lilies, reeds, hornwort, floating salvinia, duckweed, etc. Typical meadow communities are represented by *Elymus repens, Poa pratensis*, and *Lolium pratense*. Wet meadows, the areas of which adjoin the reservoir, are represented by *Deschampsia cespitosa* and *Dactylis glomerata* [3].

Altogether among the plants of the reserve stow listed in the Red Book of Ukraine, it is worth noting *Dactylorhiza incarnate* and *Dactylorhiza fuchsii*, *Pulsatilla pratensis*, *Allium ursinum*, *Salvinia natans*, *Platanthera bifolia*, *Listera ovata*, *Stipa borysthenica*, *Anacamptis palustris*, *Daphne cneorum*, *Epipactis helleborine*. *Allium ursinum* is sometimes found in large populations on the territory of the reserve stow. *Iris sibirica*, *Pulsatilla patens*, *Botrychium virginianum*, *Prunus fruticose* are regional species that are protected on the territory of Kyiv.

The wildlife of the reserve stow is no less interesting. Near the marshes live species of birds listed in the Red Book of Ukraine: the pygmy eagle, the great spotted eagle, the white-tailed eagle. In total, more than 100 species of birds live on the territory. There are 33 species of mammals, including wild boar, forest marten, badger, ermine, European roe deer, beaver, otter and elk. Also, 14 species of reptiles and amphibians have been described in the reserve stow. Approximately 29 species of insects are represented, 11 of which are rare [4].

Thus, the "Lisnyky" reserve stow is a valuable natural centre that preserves unique biotopes and performs an important ecological function within the urban environment. Its environmental significance lies in maintaining biodiversity, preserving landscape and ecological balance, as well as in performing the role of a "green buffer" between urban development and surrounding natural areas. In the context of sustainable development, the tract serves not only as a center for the conservation of natural resources, but also as a space for environmental education, scientific research, and recreation, which is important for harmonizing the interaction between humans and nature.

Literature

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