

OSOKORKY Wetland Park



OSOKORKY

Wetland Park

Within the boundaries of a large metropolis a unique natural complex is preserved in the southern part of Kyiv's left bank.

It comprises 6 types of habitats: reservoirs, floodplains, swamps, shrub and forest complexes, and also some plots located to residential blocks, which have been heavily affected by human interference.

This area of Kyiv is now widely known as "Ecopark Osokorky".

The city residents consider it to be a remnant of a unique natural and historical heritage, which once stretched along the entire left bank of the Dnieper river from the mouth of the Desna river far to the south, beyond the boundaries of present-day Kyiv.

оз. Небреж

Міський парк

оз. Тягле

Територія з природоохоронним статусом

Overall view of the territory and its surroundings



Osokorky Wetland Park is a unique natural resource





Conservation status



Floodplains have a special conservation status - they are subject to priority protection under the EU Directives*, which are mandatory for Ukraine.



The unique landscapes have been formed in course of hundreds of years. They cannot be reproduced artificially.



Rich flora and fauna that is miraculously preserved near a big city.



The area needs to be demarcated with obtaining a special conservation status so that the scientists could recommend including it into the Emerald Network**



On 3 March, 2021, the European Integration Committee of the Verkhovna Rada of Ukraine unanimously supported Bill 4461 “On the Territories of the Emerald Network”

* Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, amended and supplemented by Council Directives 97/62/EC and 2006/105/EC and Regulation (EC) 1882/2003

**The purpose of the Emerald Network creation is to preserve natural fauna, flora and habitats. The Emerald Network is formed under similar fundamental principles as NATURA 2000, but operates outside the European Union, developing a pan-European approach to the protection of natural habitats' types.

The Osokorky Wetland Park area falls under the scope of several international conventions signed and ratified by Ukraine, namely:



ETS No.176 – The European Landscape Convention of the Council of Europe - Florence, 20/10/2000 - Entered into force 01/03/2004 (Amendment CETS No.219 Strasbourg, 15/06/2016)

ETS No.104 - Convention on the Conservation of European Wildlife and Natural Habitats - Bern, 19/09/1979 - Entered into force 01/06/1982 - Council of Europe

Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) - The Hague 16/06/1995 - Entered into force 01/11/1999 AEWA - under the auspices of the United Nations Environment Program's Convention on Migratory Species

Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat - Ramsar 02/02/1971 - Entered into force 21.12.1975

Agreement on the Conservation of Populations of European Bats, EUROBATS - London, 04/12/1991 – in force 16/01/1994

Convention on the Conservation of Migratory Species of Wild Animals (CMS)- Bonn, 23/06/1979 - Entered into force 01/11/1983

Wetlands are of global interest in terms of their essential role in the formation of bird migration routes.

According to the results of the habitat inventory, held in 2020 by scientists of the National Academy of Sciences of Ukraine, the following types of habitats can be designated within the area of Osokorky Wetland Park:

13 types of “Emerald habitats” from Annex 1 to Resolution 4 of the Bern Convention,

7 habitats from Annex 1 of the EU Habitats Directive.

Floodplains are a special type of ecosystem that have been formed over centuries and are characterized by unique biodiversity and rich flora and fauna.

One hectare of wetlands may provide ecosystem services amounting to \$ 2,673, or UAH 66,825 annually.

*In the photo: Floodplains of Osokorky

This area is home to dozens of plants, animals and birds included into red lists.

Listed in the Red Book of Ukraine: rare and endangered species of marsh plants, in particular flowers:

4 species, namely: the floating fern (*Salvinia natans*), the water cultrop (*Trapa natans*), the Siberian iris (*Iris sibirica*), the early marsh-orchid (*Dactylorhiza incarnata*).





Also, the following representatives of the animal kingdom are included in the Red Book of Ukraine:



1. The apple humble-bee (*Bombus (Thoracobombus) pomorum*).
2. The musk beetle (*Aromia moschata*).
3. The European medicinal leech (*Hirudo medicindlis*).
4. The emperor dragonfly (*Anax imperator*).
5. The golden digger wasp (*Sphex funerarius*).
6. The northern crested newt (*Triturus cristatus*).
7. The pea clam (*Sphaerium nucleus*).

The lists of protected species under the Bern Convention include: the sand lizard, the grass snake, the European fire-bellied toad, the European medicinal leech, the musk beetle, the European pond turtle, the European hare and the least weasel

Species under special protection within Kyiv city area: the European white water lily, the yellow iris, the marsh gentian, *Potentilla alba*, the yellow water-lily, etc.

Projected Osokorky Wetland Park is of special importance for overwintering of tens of thousands of migratory birds as it is located along the Dnieper ecological corridor.

Nearly 170 bird species can be seen in Osokorky floodplains



In the photo: The common kingfisher (*Alcedo atthis*), Osokorky, June 2006

15 of them are included in red lists and are protected by international and state acts on nature protection.

1 species is listed in the **Red List of the International Union for Conservation of Nature (IUCN)**: the corn crake (*Crex crex*)

3 species are listed in the **European Red List**: the greater scaup, the grey partridge, the northern lapwing.

4 species are listed in the **Red List of Kyiv**: the little bittern, the corn crake, the white-winged tern, the common kingfisher.

35 bird species are included in **Resolution 6 of the Bern Convention**

*The information was provided by the ornithologists conducting long-term observations in this territory, and also by scientists of the National Academy of Sciences of Ukraine, who studied the reservoirs and coastal areas of the wetland park in 2020.



The common goldeneye
(*Bucephala clangula*)



The common crane (*Grus grus*)



The white-tailed eagle
(*Haliaeetus albicilla*)

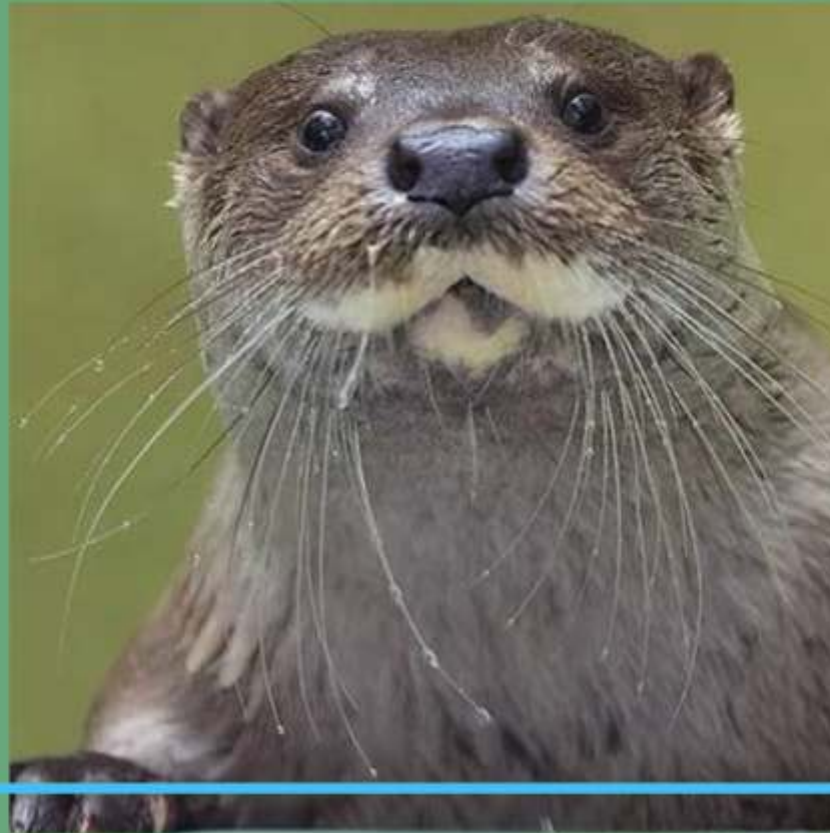


The short-toed snake eagle
(*Circaetus gallicus*)

21 bird species are listed in the **Red Book of Ukraine:** the great grey shrike (*Lanius excubitor*), the stock dove (*Columba oenas*), the little tern (*Sternula albifrons*), the black-tailed godwit (*Limosa limosa*), the Eurasian curlew (*Numenius arquata*), the great snipe (*Gallinago media*), the Eurasian oystercatcher (*Haematopus ostralegus*), the black-winged stilt (*Himantopus himantopus*), the common crane (*Grus grus*), the white-tailed eagle (*Haliaeetus albicilla*), the short-toed snake eagle (*Circaetus gallicus*), Montagu's harrier (*Circus pygargus*), the pale harrier (*Circus macrourus*), the hen harrier (*Circus cyaneus*), the black kite (*Milvus migrans*), the osprey western osprey (*Pandion haliaetus*), the red-breasted merganser (*Mergus serrator*), the common goldeneye (*Bucephala clangula*), the gadwall (*Anas strepera*), the black stork (*Ciconia nigra*), the red-necked grebe (*Podiceps grisegena*).



OSOKORKY
Wetland Park



Kyiv has an opportunity to obtain the Wetland City Accreditation of the Ramsar Convention if its urban wetlands are preserved, most of which are located in the Osokorky Wetland Park.

Osokorky Wetland Park: exceptional opportunities for eco-recreation

The unique combination of floodplains, lakes and swamps within the city area provides grounds for the creation of a large wetland park, which unparalleled in Ukraine.

Millions of city residents and Kyiv region dwellers will be able to visit the wetland park, located in a 20-minute walk from the nearest metro station.

New possibilities for the development of domestic and international eco-tourism: bird watching, kayaking, thematic excursions, various types of active recreation (hiking, jogging, swimming, etc.)

A great place for research and practice for students engaged in environmental sciences.





Bird-Watching Tourism



Floodplains, lakes and swamps are the places where many species of birds congregate.

This type of tourism brings multimillion-dollar revenues to budgets of various states and thereby, stimulates the development of many related industries.

Bird-watching as a form of active intellectual tourism is gaining great popularity in Ukraine as well.

Running trails, eco-trails and cycling routes

Unique eco-trails laid along lakes and swamps through the flowering floodplains (within 20 minutes from the city).

Numerous safe and varied routes of any length through the woods and meadows, alongside the lakes, for the whole family to enjoy a weekend hike.

A quiet place for horseback riding.

Mushroom forest.

Cross-country skiing in winter.

Bicycle routes of varying lengths through different types of landscapes.

Perfect place for launching aircraft models and kites.

Picturesque landscapes to contemplate and meditate.



Osokorky Wetland Park is a paradise for walking, cycling and other outdoor activities!



Kayaks and SUP-boards



Incredible long routes through the complex of lakes and straits connected with the Dnieper.

The absence of large waves, currents and motorboats make the routes safe.

Unique opportunities for water tourism with the routes from the Dnieper River through the canals to the lakes Nebrezh, Tiahle, Martyshiv, Sviatyshche.



Osokorky Wetland Park is an ideal place for active recreation on the water!



Beach rest and parties

Large clean lakes

Sandy beaches

Long coastline



Convenient access to water

Shadow from the trees

Proximity and accessibility

Health

Studies * prove that the availability of a green zone within a radius of 2 km reduces the spread of:

- cardiovascular diseases
- musculoskeletal disorders
- respiratory illnesses, anxiety disorders and depression

* <https://pubmed.ncbi.nlm.nih.gov/19833605/>



Osokorky Wetland Park = human health!

Local residents have been opposing the development of this area for a decade already.

In 2015, within the framework of the e-democracy program, the activists launched Petition №713 "Landscape Park instead of developing southern Osokorky area" which received the required number of votes (over 11,000). In 2016, the Petition was granted the status "for further implementation".

However, it neither changed the intention of the developers nor the attitude of the city authorities to this issue.

In 2017, to protect the interests of the community and to implement the requirements of Petition №713, the activists established the non-government organization "Ecopark Osokorky".

In 2018, within the framework of the Petition's road map, **we developed the Concept of the Osokorky Wetland Park** and submitted it for consideration to the relevant departments of the Kyiv City State Administration, the chairperson of the city council and also to the district council. It was also presented to the city residents.

In 2019, **at the initiative of the NGO "Ecopark Osokorky" and with the support of the Ministry of Environmental Protection and Natural Resources, the Kyiv City Council approved the decisions** to grant the status of a local nature reserve to the following parts of the Osokorky Wetland Park:

- № 522/7178 dated 11 April, 2019 “On announcing the natural area to become the local nature reserve “Osokorkivski Luky””, and
- № 40/7613 dated 12 November, 2019 “On announcing the natural area to become the local nature reserve “Lake Tiahle””.

In total 285 hectares of the territory obtained conservation status (140 hectares of which is the water surface of the Lake Tiahle and straits).

In 2020, at the initiative of the NGO "Ecopark Osokorki" and with the support of the International Renaissance Foundation:

- **Scientists of the National Academy of Sciences of Ukraine conducted research on the reservoirs of the wetland park.** Based on the results of the research, they provided "Expert assessment of the current state of biotic diversity (flora of vascular plants and fauna) of the projected Osoporky Wetland Park. Analysis of the ecological state of water bodies".
- **In cooperation with the architectural and landscape bureau,** guided by the advice of scientists, **we have developed the Concept and visualization of the city park** as part of the Osokorky Wetland Park (buffer zone between the city and nature reserve).
- In our opinion, quite a modern and innovative solution will be **the establishment of Ecocenter on the territory of the city park.** **In collaboration with scientists, architects and economists, we have developed the Concept of a building with zero environmental impact and have thought over its internal layout.**



The importance of wetlands and their conservation is nowadays an acute problem in all countries of Europe and Asia. States and cities have to spend billions to restore or artificially create wetland areas within metropolises given their significant role in providing cities with oxygen, air and water purification, air cooling, etc.



The concept of Sponge-City is fundamental in modern urban planning. Since 2015 more than 46 cities in China have been set up applying this concept by conserving or creating wetlands. Austria and Germany, for example, followed the same path.

Construction on river floodplains is prohibited in many highly developed countries.



International documents and development strategies of the world's leading cities focus on densification and functional transformation of existing buildings, rather than encroachment on natural areas.

Priority is given to revitalization of industrial zones, counteraction to urban "spread", conservation of areas with significant natural potential.

Urban development of these territories does not comply with the principles of sustainability, which take into account socio-economic and environmental factors of long-term sustained growth, and contradicts the ecologically and socially balanced development of Kyiv.

What endangers the Osokorky Wetland Park?

The General Development Plan of the city of Kyiv (General Plan-2025) declares the principle of "preservation and enrichment of natural landscapes and cultural heritage".

One of the key elements of the Kyiv-2025 Development Strategy is "minimization of the urban development impact on environment, preservation of greenery and Kyiv's unique ecosystem".

But in fact, the draft General Plan 2025 neglects the principles of sustainable development, causing destruction of urban green spaces.

Namely, according to the draft General Plan, it is suggested to develop 200 hectares of floodplains and swamplands in southern Osokorky that potentially exposes the city residents to serious environmental and social threats.

What are the long-term negative consequences for the city dwellers if such a draft General Plan is approved?

Irreversible destruction of the unique ecosystem of the left bank floodplains.

An ecological disaster threat caused by the high-density development, lack of park areas, critical condition of the city collector, negative side-effects from functioning of the incineration plant and the waste-water treatment plant, etc.

Lost potential and opportunities for improvements of the environmental situation in Darnytskyi district.

Neglect of legal norms due to violation of the basic principles of sustainable development which are declared in the General Plan concept.

Inevitable transport collapse on the Pivdennyi Bridge. Even today the flow of vehicles is two times higher than anticipated *

Additional traffic flow will increase daily traffic up to over 100 thousand vehicles, which is a critical limit for the capacity of the bridge**

More time spent waiting in traffic jams is another factor that negatively affects the environmental situation in the city.



* <http://bestbridge.net/Eu/yuzhnyi-most.phtml>

** The calculation is based on the average proportion of 300 cars per 1,000 inhabitants, which implies that potential population growth of 150,000 inhabitants will harm the environmental situation (http://genplan.kiev.ua/pres-reliz_star.htm)



An alternative way of the city development



Conservation of the existing wild natural areas by creating new landscape parks and ecological zones to preserve unique ecosystems and landscapes.

Development of areas, ecosystems of which are not rich in biodiversity and, therefore, do not have a special conservation status*

The city growth by means of development and redevelopment of former industrial zones, urban renewal of outdated residential buildings or construction of new comfortable housing instead of them.

* with the coming into effect of the Association Agreement with the European Union, the EU Environmental Directives are mandatory for Ukraine, according to them floodplains are particularly valuable ecosystems and are subject to priority protection.

What is our understanding
of a modern landscape park?

Zoning principles of the wetlands park territory

Active recreation area:



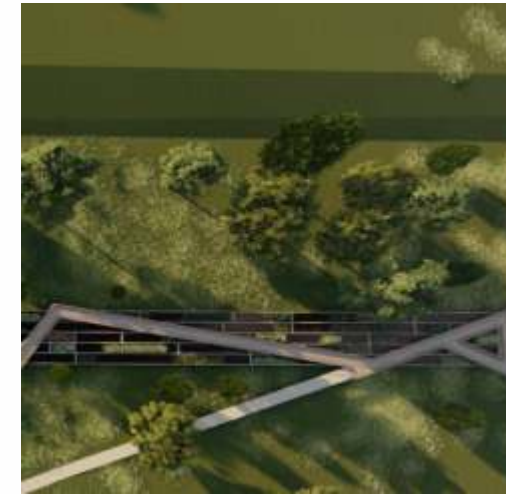
a classic city park with embankments and recreation areas along the northern and eastern shores of the lakes Nebrezh, Tiahle and Martyshiv, which have been already impacted by human activities;

Area of limited and organized recreation and excursions:



bird-watching stations, eco-trails, running and cycling trails, etc.;

Protected landscape area:



the most valuable, swampy, hard-to-reach areas with limited access to preserve and reproduce the ecosystem and protect rare plant and animal species.



An example of a lake shoreline beautification



An example of eco-trails setup



Kyiv still has an opportunity to avoid huge future expenditures by preserving the remaining wetlands in the Osokorky Wetlands Park area.

How can wild swamplands and meadows coexist with a big city?

Positive global experience



* In the photo: Hong Kong Wetland Park - a large wetland park bordering a multi-storey urban area.

The Implementation Roadmap of Petition №713:

announcing the natural area of approximately 120 hectares to become a local nature reserve;

preserving the status of public green area for the overall territory of 90 hectares, wherein which the lake Nebrezh is located;

establishing the "Mizhozernyi" Park on the territory of approximately 10 hectares, as the first stage of the Osokorky Wetland Park city park arrangement.





Next steps in the Osokorky Wetland Park establishment

The City Council must take decisions providing for:



Amendments to the General Plan, which prohibit any development southwards from Kolektorna Street.

Changing the purpose of the land plots allocated to urban development. Granting them the status of lands belonging to water and nature reserve fund, as well as the status of lands of nature protection, recreational and historical and cultural purposes.

Establishing a natural (regional) landscape park in this area, a part of which will be the first wetland park in Ukraine and one of the few urban wetland parks in Europe.

Establishing a full-fledged ecological city park on the territory with a total area of 90 hectares, wherein the lake Nebrezh is located.

Establishing an Ecocenter within the territory of the city park as a think tank hub, the center of administrative management and a source of financing and maintenance of the whole complex of the Osokorky Wetland Park.

We really have something to protect!



Territory with a picturesque natural landscape and great recreational potential.

Floodplain meadows and swamplands with distinctive and diverse flora.

Rich avifauna (almost 30% of overall species diversity of Ukraine).

eo.org.ua



facebook.com/ecoparkosokorky/



facebook.com/groups/OsokorkyWetlandPark/



instagram.com/ecopark_osokorky/



youtube.com/channel/UCG6zQK7bFvCUV3tgsT18ajg/

Sources of graphic materials:

photos of birds: Facebook-community “Birdwatching Ukraine” <https://www.facebook.com/groups/birdwatching.ua/> photoe of flowers and plants, panoramic photos of the park area: Igor Noga

Examples of a park area set-up: <http://www.archdaily.com/>

Other graphic materials: online open sources.

Photo of kayakers on the water: Mykola Stepanets