

KAMPINOS NATIONAL PARK (PL)

GENERAL INFORMATION, SCIENTIFIC RESEARCH AND MONITORING

Anna Andrzejewska, Jan Danyłow

ul. Tetmajera 38, 05-080 Izabelin, Poland; dyrekcja@kampinoski-pn.gov.pl



GENERAL INFORMATION:

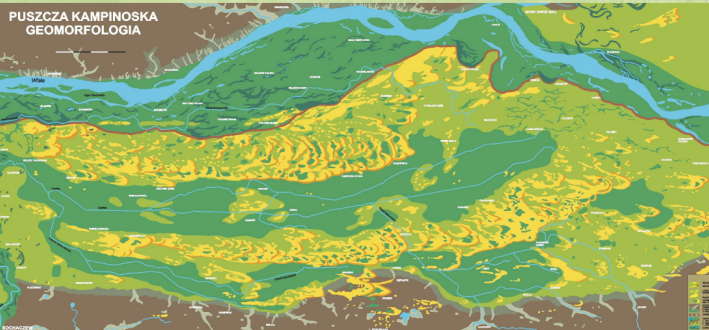
Park's area: 38 544 ha, out of which 32 810 belongs to the state and 72,40 ha, in the Łódź voivodship, to the European Bison Breeding Centre in Smardzewice.

Area of the buffer zone: 37 756 ha

Strict protection: 4636 ha (12%), out of which 4130 ha is forestland
Active protection: 30 704 ha (79,7%), out of which 23 546 ha is forestland
Landscape protection: 3 208 (8,3%), out of which 491 ha is forestland

Land cover:
Forestland: 28 167 ha (73,1% of the Park's area)
Agricultural land: 7854 ha (20,4%)
Water: 154 ha (0,4%)
Land of ecological use 1487: ha (3,8%)
Other: 593 ha (1,5%)

International rank:
1999 – Recognized by the European Parliament as a bird refuge of European importance
2000 – UNESCO MaB Biosphere Reserve „Puszcza Kampinowska”
2004 – Natura 2000 site „Puszcza Kampinowska” PLC 140001

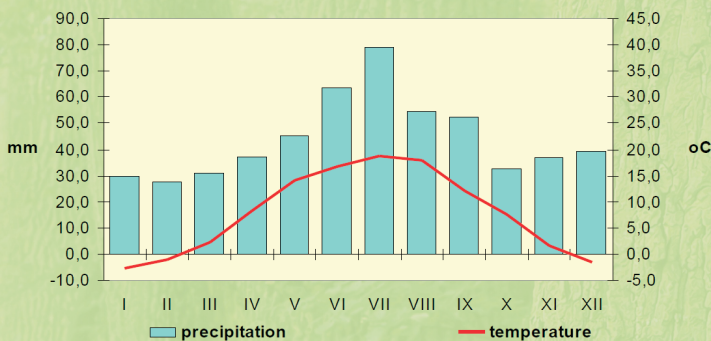


LOCATION AND CLIMATE:

Kampinos National Park is situated in Poland's Central Mazovian Lowland (52° 20' N, 20° 30' E), just by the north-west outskirts of Warsaw, in the Mazovian voivodship. The Park includes extensive areas of the Kampinos Forest, which are located within the proglacial valley of the Vistula River, in the western part of the Warsaw Basin.

The forest forms a distinct natural system located at the junction of ecological corridors (migration routes for plants and animals) of Europe-wide significance. The most important of them is the Vistula River, which connects the Baltic Sea with the south of the country and further down, through the Moravian Gate, with the south of Europe. A similar role is played by the Bug River valley, which connects Kampinos Forest with Ukraine, and the Narew River valley creating a connection with Lithuania and Belarus.

The Warsaw Basin is a part of the great lowland region with the lowest precipitation – the yearly sum is only 500-550 mm. The vegetation season lasts 185 days on average. The average temperature during the year is 7,7°C.



VEGETATION:

Kampinos National Park, for a lowland region, has a very rich vegetation cover. The many different land formations and high diversity of habitats – from very dry to boggy – cause that in the Park's and its buffer zone's area thrives a very interesting world of plants: more than 130 plant communities, out of which 12 is mentioned in appendix I of the Habitats Directive.

In Kampinos Forest, until today, the presence of about 1400 vascular plant species has been ascertained, in this group 1335 species of seed plants and 35 species of pteridophytes. Here also grow approximately 100 species which are under strict protection in Poland and 20 species under partial protection. 4 species are mentioned in appendix II of the Habitats Directive.



FAUNA:

Kampinos Forest is one of the largest wildlife refuges on the Polish lowlands. The transition character of the climate and high diversity of habitats cause that the animal world of this forest complex is very unique. It is estimated that half of the country's fauna (16,5 thousand species) can be found here. The degree of our knowledge concerning the fauna is still unsatisfactory. Until now the existence of only 3000 species, only 20% of the possible number, has been documented. They include 220 protected species, mentioned in the national list of wild living animals under strict and partial protection. 22 nesting bird species are listed in appendix I of the EU Birds Directive and a further 30 in article 4.2 of this law act. 10 species of invertebrates and 11 species of vertebrates are protected by the EU Habitats Directive.



SCIENCE AND MONITORING:

The Park's protection activities are supported by scientific research. Since 1968 a scientific study has functioned in the Park, which was later transformed into the Science and Nature Monitoring Department. One of the elements of this department is the Station of Integrated Monitoring of the Natural Environment "Pożary" in Granica.

The staff members of this department conduct their own research concerning the following themes:

- The dynamics of underground waters in the Lasica River catchment.
- The monitoring of successive ecosystem changes and populations of chosen plant species.
- Spreading of the black cherry (*Padus serotina*) and other invasive plant species.
- The numbers, distribution and ecology of birds of prey, the black stork and the corncrake with environmental transformations in the background.
- The functioning of metapopulations of small mammals in connection to the scent organization of their population.
- Rodent communities of forest areas damaged by winds

Additionally monitoring of the following biotic and abiotic elements is implemented:

- Hydrology (56 piezometers and 22 surface water level measurement points) and climate (2 automatic and 1 manual meteorological stations, 6 precipitation posts)
- Vegetation and soil (52 permanent sites)
- Chosen bird species (e.g. corncrake (*Crex crex*), crane (*Grus grus*), black stork (*Ciconia nigra*)), groups (e.g. birds of prey, woodpeckers) and habitats (e.g. open ecosystems)
- Mammals: large and medium (tracking on a 215 km long permanent network of transects), small (trapping on a 7 permanent sites), beavers (*Castor fiber*) (searching for all signs of presence)

