Albertov slopes – the support of biodiversity and ecosystem services

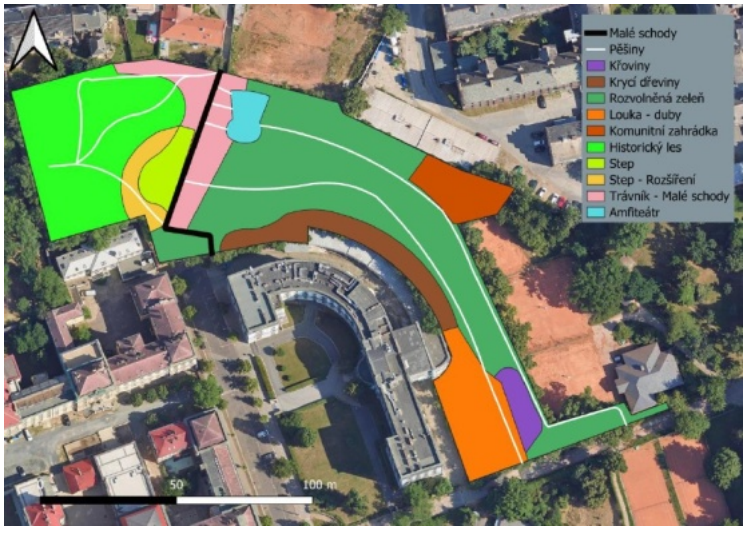
Albertov slopes is a unique green space in the very center of Prague, located on the premises of Charles University between the buildings of the Faculty of Science, the Faculty of Mathematics and Physics, and the First Faculty of Medicine. This approximately 1,2-hectare site has long served not only as a recreational area, but also has extraordinary ecological and educational potential. **Therefore, a revitalization project is underway here in 2025–2026, aimed at supporting biodiversity, strengthening ecosystem services, and creating a high-quality educational space.**

Historical appearance of the Albertov slopes

Project background and objectives

In recent decades, the Albertov slopes have been burdened by the gradual occupation of invasive tree species, which has led to significant shading of the area, loss of the herbaceous layer and an overall decrease in biodiversity. However, a field survey at the beginning of 2025 confirmed that despite this condition, the site has retained significant natural potential and forms an important part of the wider green belt in the Albertov area of ??Prague.

The main objective of the project, implemented by the project team and the Čmeláci PLUS z.s. Association in cooperation and with the support of the CU Sustainable Development Department, is the restoration and development of biologically valuable biotopes, support for the occurrence of endangered and indicator species of organisms, while at the same time preserving the recreational and social function of the area. The project is based on the belief that nature conservation in the urban environment does not conflict with its use by people, but on the contrary can significantly contribute to the quality of life of residents and environmental education.



Plan of the Albertov slopes after the revitalization

Implemented measures

The revitalization was based on the sensitive regulation of natural processes and the restoration of traditional forms of agricultural practices. It was not about creating an artificial park, but about supporting a colorful mosaic of the environment, which is the basis of high biodiversity.

In this location, selected non-native and invasive woody plants were removed, the vegetation was cleared, and meadow and steppe habitats were restored. A mosaic of open areas, shrubs, solitary trees, and light-filled forests was created. Shrub islands were left to serve as shelter and nesting grounds for birds and small mammals, and space was created for the development of herbaceous layers and light-loving plant species.

The measure also includes the restoration of traditional management methods, such as stump-cutting (removing a tree just above the ground, from which new shoots grow) and pollarding (regular shortening of tree crowns above a certain height), which contribute to greater structural diversity of the stands. Fruit trees were planted and conditions were created for saproxylic insects by leaving sun-exposed dead wood. Selected parts of the area were left without intervention to provide rest zones for animals.

An integral part of the project is biological monitoring, which takes place before, during and after the interventions. Special attention is paid to semi-parasitic plants, indicator insect species and vertebrates.

In 2025, a detailed pollinator survey was also carried out on the Albertov slopes, which confirmed the extraordinary biological value of the site. 70 species of wild bees were recorded here, including species included in the Red List. This result ranks Albertov slopes among the most important urban sites for wild pollinators in Prague and confirms their role as an important “stepping stone” in the urbanized landscape.

In addition to insects, other groups of organisms, including birds, small mammals and plants, are also monitored at the site. The monitoring results serve as a basis for further management planning and evaluation of the impacts of individual measures.

Project work

The final state after the revitalization of the hillsides

Long-term care and management

The revitalization project represents the first, key step in the long-term care of the Albertov slopes. Regular management based on mosaic cutting, targeted care for woody plants and continuous control of unwanted vegetation is necessary to maintain and further develop biodiversity. Emphasis is placed on temporally and spatially differentiated cutting, which supports the flowering of herbs and provides shelter and food for insects throughout the growing season. Care also includes the maintenance of biotope elements such as birdhouses, insect hotels, wood chip composters or exposed slopes for nesting solitary bees. Monitoring will be repeated in the coming years to evaluate long-term trends and adapt management to current conditions.

Benefit for the university and the public

Thanks to its location in close proximity to the Faculty of Science, the site has extraordinary educational potential. Albertov slopes serves as a living laboratory for teaching biology, ecology and environmental disciplines and at the same time as a clear demonstration of sustainable care for urban greenery. Students and representatives of the public were involved in the project, who participated in monitoring and practical care of the area.

The revitalization thus strengthened people's relationship with the place, increased awareness of the importance of urban biodiversity and showed that even a relatively small area can have fundamental ecological significance. **Albertov slopes is therefore becoming an example of good practice in the field of sustainable development of university campuses and urban landscapes.**

Implemented with the support of the Ministry of Education, Youth and Sports and the National Renewal Plan within the Green Skills at Charles University project (reg. no. NPO-UK-MSMT-2114/2024-4).