

Biodiversity of the Landscape park Tivoli, Rožnik and Šiška hill (Ljubljana, Slovenia) and its connection to invasive alien species problem

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The Landscape park Tivoli, Rožnik and Šiška hill is located in the urban area of Ljubljana, the capital of Slovenia. It covers an area of 459 ha, out of which 70 % is forest cover, 8,2 % extensive grasslands and 8,7 % covers the city park Tivoli. This urban green area is of big importance for recreation, walking, jogging or just daily relaxation. Many users and visitors of park appreciate the possibility of connecting with nature, which is not possible in many other capitals. Furthermore, this nature protected area is rich in biodiversity. More than 2800 living species have been recorded by now. There are more than 1250 fungal species, more than 700 plant species, more than 500 moth and butterfly species, more than 100 beetle species, 102 bird species and many other groups of organisms. In addition, we anticipate to find more than hundred species of spiders and more than thousand species of fungi in the park area.

To raise awareness for protection of this precious space, it is important to continue the monitoring and inventory field work. Our main activity regarding invasive species problem is to raise awareness and to work on preventive measures. We communicate to different companies that work in the park, landowners and park users. We cooperate with LIFE ARTEMIS project team in field activities and work on action plan for management of invasive alien species (IAS) in the park. Together, we have eradicated removed IAS plants from a considerable forest area. Each year, we are organizing actions of invasive alien plant species eradication and cooperating with the City of Ljubljana, that has active policy on eradication and prevention of IAS.

About Landscape park Tivoli, Rožnik and Šiška hill

- First protection in 1984 (first Protection Decree)
- New Protection Decree in 2015
- Park management authority since 2017
- Park area - 459 ha:
 - city park Tivoli 40 ha
 - hilly area 290 ha
 - lowlands 129 ha
 - four small-scale protected areas 57,7 ha
- Land use:
 - Forest cover 321 ha (in 2018)
 - Extensive grasslands 38 ha
 - Intensive fields 5 ha

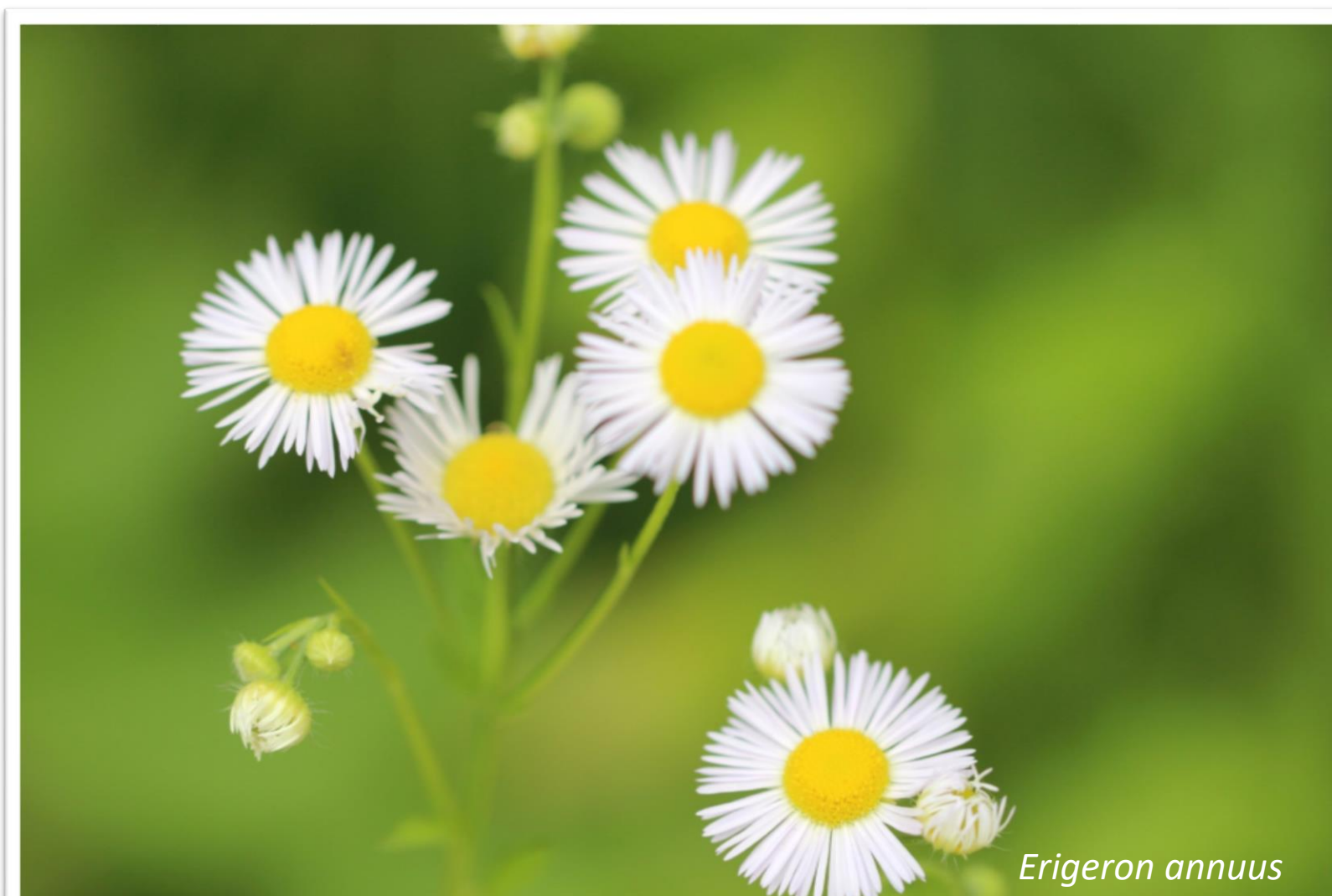


Biodiversity of the Landscape park Tivoli, Rožnik and Šiška hill - in number of all known species (data from 1970 until know)

- 712 plant
- 502 butterflies and moths
- 1250 fungi
- 112 beetles
- 102 birds
- 52 spiders
- 46 dragonflies
- 11 reptiles
- 10 amphibians
- 9 bats
- 2 crustaceans
- + other groups...
- => **2808 species**

Our activities (excluding invasive alien species activities)

- Nature protection activities, conservation of nature and activities for its improvement
- Raising awareness on protection of Landscape park Tivoli, Rožnik and Šiška hill
- Establishment of successful direct supervision within protected areas
- Cooperation with landowners in management
- Maintaining park infrastructure
- Preparing park management plan proposal
- Providing interpretation of nature
- Educating and informing visitors



Stakeholder involvement

Communication and cooperation with:

- Landowners
- Park users
- Biotechnical Faculty
- National institute for biology
- Slovenia Forest Service
- Slovenian Forestry Institute
- ZOO Ljubljana
- NGOs
- Društvo Zelenih nadzornikov Ljubljana
- Primary schools
- High schools

Key references

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- DAISIE (2019). Handbook of alien species in Europe. Springer Netherlands, 399 pages.

Landscape park Tivoli, Rožnik and Šiška hill:

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Photos:

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