Indicator 4: Change in indigenous species composition, vascular plants

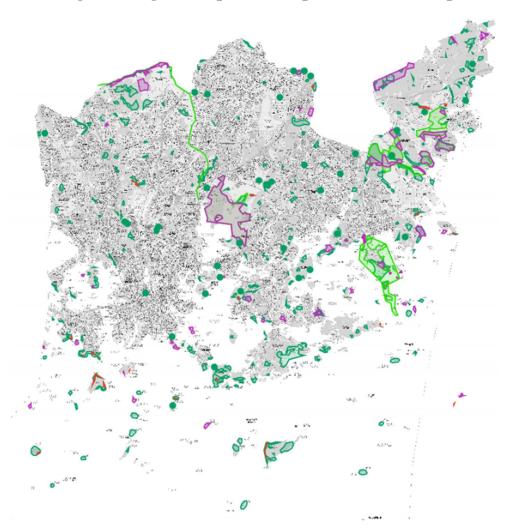


Figure: Valuable sites for plants in Helsinki. Sites that have been categorized as being valuable according to their plant assemblages are marked in dark green. Sites that belong to the Natura 2000 network are marked in pale green and protected areas are marked in purple. Protected habitats are marked in red. Many valuable sites for plants are located outside the protected areas. (Map: Nature Information System 2015)

Status:

A total of 1 108 vascular plants, of which 565 are classified as indigenous¹ were recorded from Helsinki in 2002. This total includes archaeophytes as well as indigenous species. Altogether these two categories comprised approximately 51 of Helsinki's plant species. Of these, 40% were indigenous and 11% archaeophytes. Archaeophytes refer to plant species of which their introduction to Helsinki is so long ago that literary documentation is not available. This generally means species that were introduced prior to the 1600s. The highest proportion of indigenous plants is in the outer archipelago, in which the flora of some small rocky islets comprise entirely indigenous species. There are also some sites in Helsinki in which the proportion of introduced species exceeds that of indigenous species. It should be noted, however, that not all recently introduced species are invasive exotic species.

¹ Kurtto, A., Hahkala, V. and Helynranta, L. 2002: Helsingin kasviston historialliset ainekset, uhanalaisuus ja elinympäristöt.(In English: The Historical Background, Threatenedness and Habitats of the Flora of Helsinki) Thematic maps. 246 maps with explanations + 37 Tables, Helsinki City Environment Centre, Helsinki.

In a species survey conducted in 1998, a total of 1072^2 vascular plants were recorded. At that time the number of indigenous and archeophytic species was ca. 557. Indigenous species constituted 40% of the total flora and archaeophytes 12%. Over four years, the number of species had increased by ca. eight species.

Score:

0 points: Number of species declines or remains the same
1 point: 1 additional species
2 points: 2 additional species
3 points: 3 additional species
4 points: 4 additional species

Monitoring:

This indicator is monitored by vegetation surveys. Rarer species are surveyed regularly, as it is to be assumed that possible changes will show in these species first. The whole flora is surveyed less frequently. Current data are already rather old, therefore a new survey will be organized as soon as possible. The data for this indicator does not include data from the annexed area of Östersundom, which will probably add to the total number of species. On the other hand, when counting the number of species in Östersundom it should be noted that there is extremely strong pressure to develop previously undeveloped areas. If we wish to retain the total number of species at its current level, then attention should be given to them during the planning stage. When revising the figures for this indicator, attention needs to be paid to the definition of indigenous species, which is always going to be, to a certain extent, subjective.

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² Kurtto, A., Helynranta, L. 1998: Helsingin kasvit. Kukkivilta kiviltä metsän syliin, Helsingin kaupungin ympäristökeskus ja Yliopistopaino Helsinki University Press. Helsinki.(sivu 354)