The first part of the thesis describes culture-historical and natural features of the gardens at Petřín. The reader learns about the protected area in the upper part of the gardens and crucial influences of human activity in this area in the past and present. The second part deals with the results of a dendrological survey carried out in the Kinský Garden and Nebozízek and floristic research of the nature monument Petřínská skalka in the period between spring 2004 and autumn 2005. The results of the mapping have been recorded in table files that relate to attached documentary maps. In the discussion, I compare the findings of the thesis to the results of inventoried materials and suggest possible causes of the differences obtaining between the two lists. In the didactic part, I suggest a way of using this area for educational purposes. It contains two tracks - one focused on timber species and the second on complex cognition of nature. Worksheets were for both the tracks. The text also includes documentary photographs of some monitored timber species and plants.