

Trees and landscapes of the Botanical Garden of Geneva

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While the conservation of plants is the most important mission of a botanic garden, the setting in which its living collections are housed always has a special character. Whether for heritage, research or leisure purposes, the garden tells a story, steeped in a culture that shapes a landscape. For this reason, every botanical garden is different. The aim of this work is to set out the guidelines for a long-term landscape vision for the Conservatory and botanical garden of Geneva. It is based on the current state of the garden and its transformation over the years. We will first provide a historical overview, illustrating how the botanical garden's landscape has evolved over the last two hundred years. We believe it is essential to know and understand the history of a place to better understand the present and plan the future. Our second focus will be on the trees in the botanic garden, as significant and structuring elements of the landscape. An assessment of the 700 isolated trees mapped in the garden reveals the physiological and mechanical state of health of this living heritage. In addition to individual observation, measuring the canopy gives an overall view of how each plant cover has changed over time. The history of the landscape and our expertise in today's tree heritage enable us to propose development elements for tomorrow's garden. Since today we are planting the trees for the next generations, it is essential that we do so in a considered and concerted manner, taking into account the landscape features to be conserved and the living collections strategy. A smart choice of tree species must also take into account the current soil and climate conditions and, above all, models forecasting global warming, using BGCI's climate assessment tool.