

# The role of botanical gardens in climate change

[Science](#), [Biology](#)



The role of Botanical gardens in climate change Introduction Botanical gardens, also called Botanic gardens, are gardens with a wide range of plants from different geographical conditions. Botanical gardens have specific and unique resources which aid in the study of Phenology. This is the study of influence and impact of climatic change as a result of plants' function (Richard B. Primack, 2009). The gardens have continued to provide positive feedback in climate change, education and research due to the wide range of plants from all over the world. In addition, the gardens have provided the opportunity to the research and distribution of specific plants that have a positive impact in the climate change.

The most important role of botanical gardens is the unique presence of perfect conditions for most plants from different geographical locations. As a result, it has been scientifically proven that some of the plants which are grown in botanic gardens have since been extinct where they initially existed. This is because the Botanical gardens provide the required environment for specific important plants. Global warming has made extinct such important plants which are recognized to positively affect climate change.

Secondly, the botanical gardens have various species of the same plant which are collected from various geographical positions in the world. The botanical gardens provide comparative studies on various species of the same plant. As a result, the gardens offer a taxonomically diverse flora; with a diverse representation from particular families (Richard B. Primack, 2009). The botanists study them to determine their reaction to the climate in the garden. If all species adapt to the climate in the botanical gardens, they are

kept together, but if some don't, the staff study the plants individually to determine their impact on climate change.

Botanical gardens also helped in creating Phenological gardens. These are gardens with the same collection of species grown in a large area. The species present in the Phenological gardens consists of plants with intense positive impact in climate change. As a result, they are grown in specific areas that require a positive climate change in order to improve the climate.

Another role of Botanical gardens is to create awareness of flowering or plants. Botanical gardens have long stored records. The extensive knowledge of the phenological events allows the staffs to create awareness to the visitors when certain species will flower. Some species like the daffodils, apple trees and cherry trees which are immensely popular and attract a significant number of visitors when they flower (Richard B. Primack, 2009).

The flowering records aids in the breeding of cultivars the flowers that develop before or after their leaves emerge or during specific times of the year. Such records have provided information which demonstrates that for many species, leafing out times and spring flowering times associated with temperature and now due to climate change they are appearing earlier.

Botanical gardens have also helped in the migration of specific plants that help them adjust to climate change. For example, some of the beautiful plants growing in several front door and towns were once grown in a botanical garden. If identified to positively influence the change in climate, they will be exported causing a diverse positive climate change in different places.

In conclusion, Botanical gardens provide valuable sources that explain how

various plants assist and respond to climate change. The unique combination of resources available in the botanical gardens has assisted in providing valuable answers to questions pertaining climatic change.

#### Reference

Richard B. Primack. (2009). The role of Botanical Gardens in Climate Change Research. *New Phytologist* , 303-312.