

Conservation in Botanic Gardens

Available March to November

This 1 ½ hour session is designed for students studying bio-diversity and conservation. The presentation, guided walk and propagation tour provide opportunities to explore and discuss the importance of conservation for bio-diversity, the tree collection and landscape, and the role of botanic gardens in *ex-situ* and *in-situ* conservation.

Learning Outcomes

By the end of the session, students should be able to:

- Consider bio-diversity at different levels – globally, habitat, species and genetic
- Discuss the consequences of global climate change on the bio-diversity of plants, with reference to the spread of pests and diseases
- Describe the role of botanic gardens in both *ex-situ* and *in-situ* conservation and discuss the importance of international co-operation in species conservation
- Discuss the role of seed banks in bio-diversity conservation
- Understand the importance of database records of provenance, plant growth and health in conservation

Session plan

Introduction

PowerPoint presentation that explores the following themes: the arboretum past and present; Forestry Commission strategic documents, international legislation and policy (CITES, CBD, Nagoya Protocol); recent/current *ex-situ* and *in-situ* conservation projects; conservation and management of bio-diversity, individual specimens and of the Grade 1 registered landscape; and considerations for the future.

Guided walk

Looking at a range of species that provide the following discussion points: IUCN Red list for endangered species; the role of botanic gardens in conservation of genetic diversity; the importance of database records (detailing provenance, plant growth and health) for conservation; the impact of climate change on our trees, bio-security and pests and diseases; and the importance of international co-operation in species conservation.

Propagation tour

Detailing the journey of plants through the propagation unit from seed collection and taking cutting to acclimatising trees ready for planting, with discussions about millennium seed bank at Wakehurst Place, bio-security quarantining requirements, collaboration between botanic gardens and host countries for seed gathering trips; and the significance of sharing of propagation, growth and tree health knowledge in *ex-situ* conservation.

Green careers

An opportunity to watch a selection of 2-3 min films showing a range of staff discussing their role and career route.