

Growing public engagement *impact*: opportunities and challenges for botanic gardens

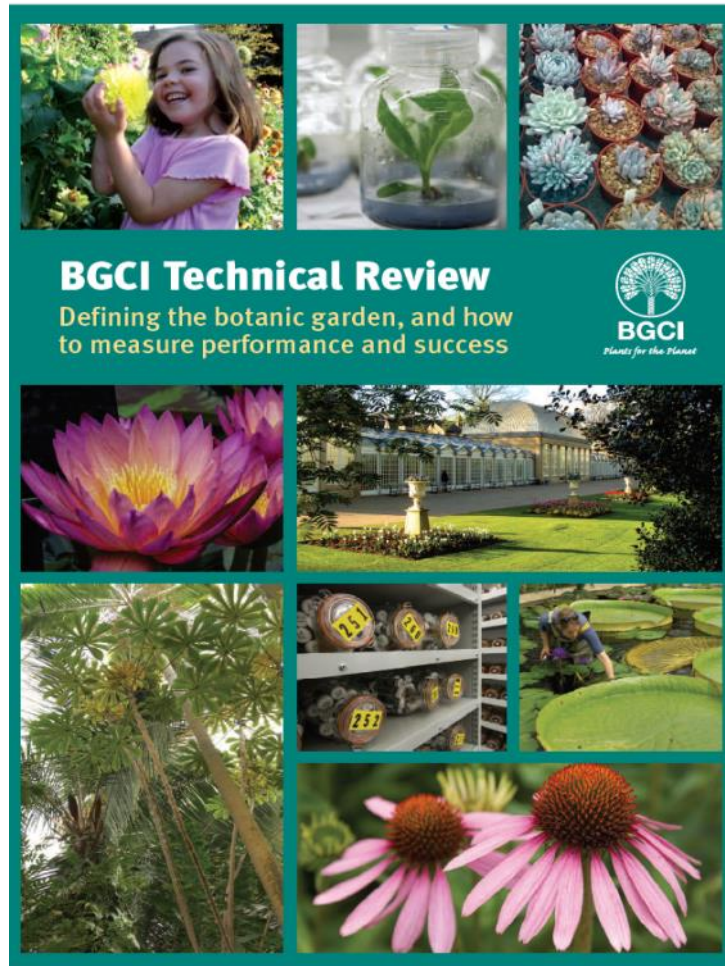
Dr Paul Smith, BGCI Secretary General,
BGCI Education Congress, Warsaw
2018

Defining the botanic garden



“an institution holding documented collections of living plants for the purposes of scientific research, conservation, display and education” (Wyse Jackson 1999)

Defining the botanic garden



Conservation, collections, research and education feature in most botanic garden mission statements and activities

80% of botanic gardens have Strategic Plans

65% of gardens have institutional measures of performance/success

49% of gardens don't measure change of behaviour or attitudes amongst their visitors (and most that do, only measure visitor satisfaction).

Plants for the Planet

[illegible]

Measuring success

Top 10 institutional measures in botanic gardens (n = 119)

Ranking	Measure	% of respondents using measure	Area of activity
1	Number of visitors	87%	Visitors & public education
2	Number of events held	80%	Visitors & public education
3	Income (public)	77%	Funding
4	Number of plant species conserved	75%	Conservation
5	Number of social media followers	68%	Visitors & public education
6	Attendance of events	67%	Visitors & public education
7	Number of volunteers	64%	Staff & volunteers
8	Income (philanthropic)	61%	Funding
9	Number of traditional media publications (including TV, radio and newspaper coverage)	59%	Visitors & public education
10	Use of collections by third parties for research, conservation etc.	59%	Science & collections

Measuring public engagement

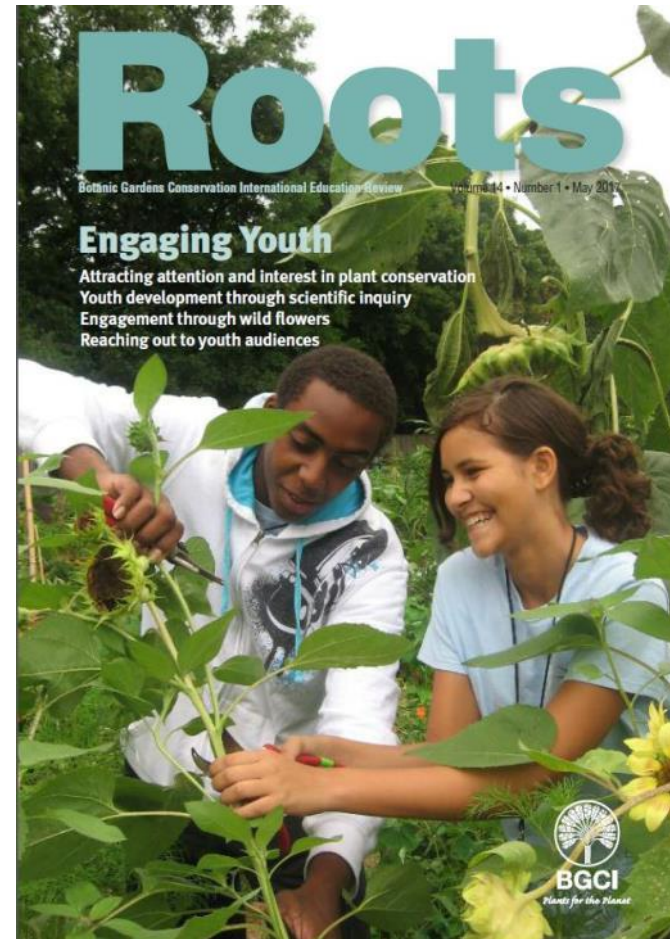


BGCI

Plants for the Planet

Key recommendation:

All gardens should measure visitor satisfaction, and ideally **visitor attitude or behavioural changes** should be measured too if gardens are to be effective communicators about the importance of plants and environment. Such surveys are useful management tools in striking the right balance between recreation and education. In addition, changes in attitude are a measure of impact, not just activity



Measuring impact



BGCI

Plants for the Planet

BGCI's Technical Review on the economic, social and environmental impacts of botanic gardens

28 case studies of gardens around the world achieving impact.

Public engagement and education programmes in botanic gardens lead to social, economic and environmental impacts.



Social benefits of botanic gardens

The world's botanic gardens attract **500 million visitors** each year.

The social benefits of botanic gardens are measured in a number of ways, including their:

- Positive benefits on **mental** and **physical health**
- **Educational** and **learning** benefits
- **Cultural** and **aesthetic** value



Social benefits: health & wellbeing

Visitor **motivation** for visiting Cambridge University Botanic Garden (The Audience Agency, 2016):

1. To enjoy the atmosphere
2. For peace and quiet
3. To spend time with friends and family



Social benefits: health & wellbeing

Visitors to [Leaning Pine Arboretum](#) in California cited one of the most important consequences of their visit was ‘[stress relief and relaxation](#)’ (Wassenberg *et al.* 2015)



Social benefits: education & learning

Outdoor learning 'boosts children's development'

By Mark Kinver
Environment reporter, BBC News

🕒 15 July 2016



Royal Botanic Gardens,
Sydney

Truong *et al.* (2016) demonstrate a number of benefits of the programme for disengaged students, particularly in **improving their self-esteem, self-efficacy and self-concept**. Growing fruits, herbs and vegetables increased awareness of healthy eating and enjoyment of eating fresh food.

Social benefits: cultural value

The total gross ‘non-use’ and ‘option’ value of Kew Gardens was **£44.3 million** in 2014/15 representing the value attributed to it by the public, even if they do not themselves visit the gardens (Oxford Economics, 2016)

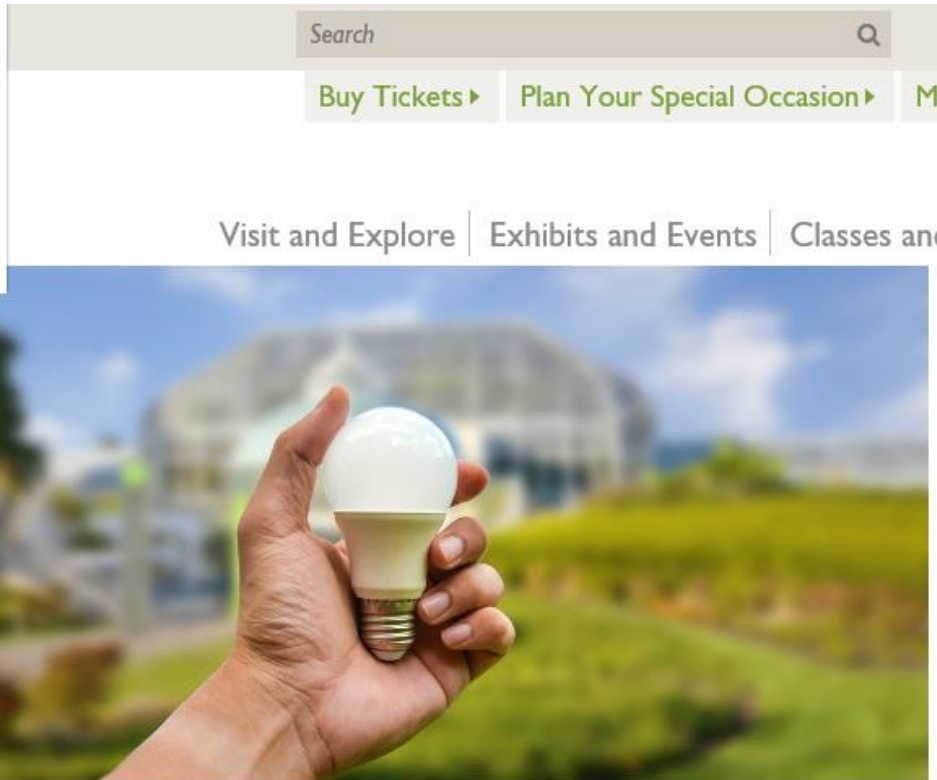


Economic benefits: training and education

Arcadis (2016) evaluated the economic impact of the Royal Botanic Garden, Edinburgh's education and training activities by calculating the net additional gross value added to the Scottish economy at **£21 million** over a 10 year period; **£29 million** over 15 years and; **£41 million** by year 25.



Environmental benefits: public engagement



Support clean energy, impact climate change and receive a free Phipps membership — all in a day's visit.

Nearly nine out of 10 Phipps guests surveyed in 2016 consider climate change a threat now or in the future. In 2017, it's up to every one of us to do our part to address this critical issue. Climate change is a

Phipps Conservatory (USA)

Free garden membership to families that switch to renewable energy provider

Since January 2017, more than **3,100 households** have switched, reducing CO₂ emissions by **24,800 tons**.

Environmental benefits: public engagement

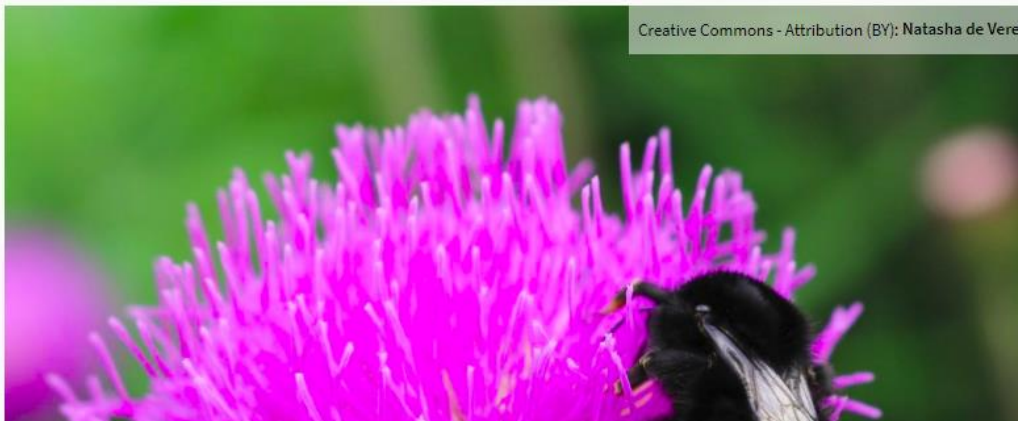


The National Botanic Garden of Wales leads research on pollinators, and produces information and training to encourage people to keep bees and cultivate bee-friendly plants.

Planting for pollinators

See more in Science

Find out what are the most important plant families for pollinating insects in Wales.



GARDEN AREA

ART AND EXHIBITIONS SCIENCE WILDLIFE

Bee Garden

Home to 250,000 honey bees, our Bee Garden is a abuzz with activity. Get up close to our bees and hives behind large viewing windows.

Explore

Environmental benefits: public engagement



Buy Native Plants

Buy Native Plants

- Pollinator Kits
- Plant Collections

Books from the Society

2018 Plant Availability
and Price Lists

Boxed Lunches



Our Garden Shops are open for the season!

2018 Hours at Our Garden Shops

Garden in the Woods: Open daily, 10-5, through October 14.

Nasami Farm: Open Saturdays and Sundays, 10-5, through October 7.

Did you know you can check out this season's plant offerings and prices online?

- Download the **2018 plant availability list in PDF or Excel format**
- Download the **2018 plant availability list with sizes and prices**, and use it to order in advance. Just enter the number of plants you want, and email the saved sheet to

New England Wildflower Society's Garden in the Woods (USA)

1,300 volunteers monitoring 3,300 rare and threatened wild flower populations in six states.

Native plants gardening programme encouraging people to plant native species in their gardens instead of exotic species. 35,000 pesticide-free native plants sold last year, and sales increasing by 15% each year.

Conclusions



“an institution holding documented collections of living plants for the purposes of scientific research, conservation, display and education” (Wyse Jackson 1999)

Conclusions



BGCI

Plants for the Planet

We need to **expand our public engagement activities** beyond the broad appeal extravaganzas to include our **specific areas of expertise** in science, conservation and sustainability that connect to the big environmental issues, such as food security, energy, health, loss of biodiversity and climate change.



Conclusions



- Climate change
- GMOs
- Biofuels
- Over-population
- Obesity/hunger
- Deforestation
- Species loss
- Pollution
- Social exclusion
- Poverty
- Segregation
- Gender inequality
- Religion
- Immigration, etc.

Conclusions



BGCI

Plants for the Planet



Our relationship with our visitors is usually **transactional** rather than **cause related**

We don't place enough emphasis on what makes us **unique**. Our expertise with all things related to plants. **We are different from zoos and museums!**

We deal with **living things** that people can take home with them, and that anyone who wants to can care for and nurture.

Work with new and existing audiences, and aim for impact.

Conclusions



Copyright Derek Doucet



BGCI

Plants for the Planet

Connecting People • Sharing Knowledge • Saving Plants

Our Mission is to mobilise botanic gardens and engage partners in securing plant diversity for the well-being of people and the planet

Descanso House, 199 Kew Road, Richmond, Surrey, TW9 3BW, UK

www.bgci.org

 [@bgci](https://twitter.com/bgci)