

Ecological Restoration on a Global Scale: Harnessing the Power of the World's Botanic Gardens

The New York Declaration 2011

Terrestrial ecosystems are being degraded and used unsustainably worldwide and are at risk of further degradation or imminent loss. Forty percent of the world's forests have been completely destroyed and much of what is left is fragmented. In many of the more seriously affected places, remaining habitats are not adequate for biodiversity conservation nor can they provide key ecosystem goods and services that supply fundamental economic benefits and contribute to poverty alleviation. Efforts to mitigate such damage have often overlooked the need to use appropriate species in a given context and have neglected ecological function. Even with the best intentions, the lack of facilities, expertise and suitable native plant materials often limits the quality and extent of current initiatives.

In 2008, representatives from botanic gardens from around the world met at the Royal Botanic Gardens, Kew to assess their contributions to ecological restoration and how these activities could be expanded and further developed. As a follow up to this meeting, an informal steering committee was convened at the New York Botanical Garden in March 2011 to consider a global restoration initiative with ambitious long term goals. The steering committee called for botanic gardens to form a new alliance to restore ecosystems worldwide and requested Botanic Gardens Conservation International (BGCI) to communicate this exciting new initiative to all botanic gardens and to play a coordinating role in its development.

Botanic gardens are uniquely positioned to help address the issues relevant to recovering ecosystems. They provide knowledge and expertise in plant taxonomy, horticulture, biodiversity inventory, conservation biology, restoration ecology and ethnobotany – all key elements for achieving successful restoration. Botanic gardens also collectively serve as a global repository for documented plant material, with at least one-third of all flowering plants maintained in living collections or seed banks. Utilizing knowledge gained from these collections, related herbaria and libraries, and combined with landscape knowledge from field surveys and ecological research, botanic gardens bring the understanding necessary to ensure that restoration leads to adequate taxonomic diversity and incorporates appropriate genetic provenance. Botanic gardens can restore diverse and ecologically resilient places, avoiding the dangers and pitfalls associated with growing inappropriate plants in the wrong environment. Botanic gardens are uniquely placed to inspire, inform and educate different groups of society. They have a proven record of forming strong partnerships with other organizations that have complementary skills for the long-term restoration of ecosystems.

At all levels, from local to global, botanic gardens work collaboratively to deliver conservation outcomes in support of the Global Strategy for Plant Conservation (GSPC) of the Convention on Biological Diversity. A key focus has been on GSPC Target 8, which calls for “At least 75 percent of threatened plant species in *ex situ* collections, preferably in the country of origin, and at least 20 percent available for recovery and restoration programmes”. Actions toward achieving this GSPC target directly support Target 15 of the CBD's Strategic Plan, the target relating to ecological restoration.

The informal steering committee is now working with BGCI to develop a global alliance of botanic gardens for ecological restoration with ambitious long term goals. BGCI will regularly report on the development of this new initiative and invites all botanic gardens that are interested in working together on ecological restoration to contact Sara Oldfield at sara.oldfield@bgci.org