

Leveraging institutional strengths to grow efforts in Science: A case-study from Longwood Gardens

K. Santos

Longwood Gardens, Kennett Square, Pennsylvania, United States of America

Corresponding author email: ksantos@longwoodgardens.org

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Conserving plant diversity is essential for humanity's future. Plants are the basis of terrestrial ecosystems, a source of food, medicine and beauty, and vital for the mental and physical health of humans. In the wake of the current environmental crisis, from biodiversity loss to climate change, the importance of plants cannot be underscored. Botanic gardens can contribute to the conservation of plants and systems through the application of science disciplines in horticulture and ecology. Horticulture and ecology are essential for conservation: from saving species to saving habitats. Botanic gardens are in an exceptional position to support plant diversity through their expertise, their large audiences, and the vast network of other gardens – each which has their own specific facilities and specialisations. All gardens are inherently unique: from their mission, to their location, to their institutional strengths, to their legacy. When growing a science program, understanding the individual strengths of a garden, and how these assets and skills connect with other gardens, can provide an opportunity to ultimately amplify impact. Longwood Gardens created science initiatives that align with its mission, place, identity, as well as global need. Using its scientific resources, experts conserve plant biodiversity through research, living collections, tissue culture, seed banking and land stewardship. To fully address the plant biodiversity crisis, *ex situ* work needs to support *in situ* action. Through studying how to propagate, multiply, and reintroduce plants, especially rare species and systems, our program spans from species conservation to restoration of ecosystems. Supporting biodiversity on a global level requires that practices and research are aligned with collaborators around the world. In this talk, learn how Longwood Gardens is developing and integrating science throughout its organization and global network.