

# Sustainability and Horticultural Education

## Introduction to Special Section: Sustainability and Horticultural Education

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Now more than ever, horticultural educators must make efforts to construct meaningful curricula in light of profound environmental concerns. This can be achieved by the sharing of professional practices, curriculum, and pedagogy, as well as by making accessible new research that pertains to the concepts of site sustainability in the horticultural topic areas of soils, hydrology, vegetation, resources, and human wellness. In the words of the Sustainable Sites Initiative (SSI), “sustainability is defined as design, construction, operations, and maintenance practices that meet the needs of the present without compromising the ability of future generations to meet their own needs” (SSI, 2009).

In this special topics section, six articles having a common theme of teaching and sustainability were selected in an effort to share best practices from faculty engaging diverse student populations in various facets of sustainability. Each article has broad applicability for the field, and collectively, they serve to address teaching, assessing, and challenging

students to think within a more sustainable context.

The focus of each article is unique, offering enlightened and innovative pedagogical perspectives. Several authors solve the need for more time on task by using a multise semester or independent study approach, whereas others make outstanding use of technology, as in the Online Knowledge Center for water, nutrient, and crop health management. Most of the articles introduce topics in which multi- and/or interdisciplinary collaboration is imperative, and several offer an outreach component to ensure that classroom efforts are shared with members of the community.

As lead author, J.D. Lea-Cox from the University of Maryland suggests that there is a “need for efficient management of resources to mitigate production impacts on the environment.” While specifically speaking about container nursery and greenhouse system production impacts, this concept is broadly applicable to all aspects of sustainable horticultural education and practices. For example, in their article, B. Lamba and G. Chapman of Temple University describe the challenges they experienced during construction of

a sustainable flower show exhibit. While endeavoring to mitigate production impacts from their exhibit at the Philadelphia Flower Show, members of two separate classes (landscape architecture and horticulture) were introduced to concepts regarding sustainability in production and material impacts. The article details the students’ creative solutions for handling these issues.

This special issue may serve as a catalyst for future research and practice, a forum to share new ideas, as well as a place to gain insights into methods used by horticultural educators to reach out to a broader audience. These articles represent unique curricula designed by caring faculty who clearly work to ensure that students graduate with a foundation that will allow them to be thought-leaders in their individual fields. Future teaching imperatives in the realm of sustainability might include life cycle analysis (International Organization for Standardization, 2006; U.S. Environmental Protection Agency, 2009) and agrosystem analysis because these subject areas give credence and information about true measurements of sustainability, and serve to underscore the importance of food security concerns, both nationally and internationally.

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### Literature cited

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