

GETTING INTO THE WEEDS: DESIGN, PLANTING AND MAINTENANCE OF GLENSTONE'S ECOLOGICAL LANDSCAPE

ASLA 2022



OVERVIEW

This session addresses the design process that began at Glenstone in 2003 and evolved into an ongoing collaboration between people and living systems. The panel will describe how landscape architects, native plant consultants and an organic-oriented in-house team achieved the ecologically diverse and vibrant landscape that continues to evolve today.

LEARNING OUTCOMES

1. Demonstrate what can be achieved because of collaboration between consultants and owners with diverse specialties.
2. Understand how design intent may change and be realized over a long period of time.
3. Gain insight into conceiving living systems and change as part of a landscape design focused on both performance and aesthetics.
4. Understand the difficulties and successes of an organic maintenance regime and how that relates to ideas of sustainability and "low maintenance."

SPEAKERS



ADAM GREENSPAN, ASLA
PWP LANDSCAPE ARCHITECTURE

Adam Greenspan has been the lead designer on a wide range of projects including public parks, campuses, mixed use developments, competitions and estates. Adam's background in art and sociology, combined with years of horticultural practice support an integrated approach to design and allow him to develop projects from many angles. Adam has collaborated extensively with architects, artists, community groups and owner groups, as well as sub-consultant experts, in the process of realizing exceptional built work. Adam's recent projects include: the Newport Beach Civic Center Park, Constitution Gardens on the National Mall, Salesforce Transit Center Park and Glenstone Museum.



LARRY WEANER, AFFIL. ASLA
LARRY WEANER LANDSCAPE ASSOCIATES

Since founding Larry Weaner Landscape Associates in 1982, Larry Weaner has been widely recognized as a leader in the field of ecology-based landscape practice. He also founded New Directions in the American Landscape in 1990, a conference series dedicated to incorporating ecological science and cultural landscape practice into the art of landscape design. He has lectured widely throughout the US and his book, "Garden Revolution: How Our Landscapes Can Be a Source of Environmental Change" won an American Horticulture Society Book Award. AHS also awarded him their annual "Landscape Design Award" in 2021.



MATTHEW PARTAIN
LANDSCAPE SUPERINTENDENT, GLENSTONE
FOUNDATION

Matthew Partain is the landscape superintendent at Glenstone, a contemporary art museum in Potomac, MD, near Washington, DC. He oversees a team of grounds specialists who maintain nearly 300 acres, with a focus on organic and developing native landscapes. Previous work experiences include Berea College, KY, The Greenbrier, WV, The Biltmore Company, NC and Walt Disney World, FL.

SESSION OUTLINE

I. Project Introduction

1. Quick history- a former residential property and adjacent site that was engineered to receive a subdivision was reimagined as an integrated ecological landscape through a design process that grew and evolved through the years.
2. Design goals for project
 - a. Seamless integration of art, architecture and landscape
 - b. Natural systems approach based on water flow, sustainability, living systems
 - c. Facilitating the movement and exposure for people within these natural systems
3. Planting concepts that focus on native combinations and the scale of the property
4. Engaging specialists and consultants to help deepen the design's connection to the land and to influence its methods for establishment
5. Ongoing relationships with people and the site are key to its evolution

II. Where am I ecologically speaking?

1. Existing vegetation inventory
 - a. Desirable and undesirable
2. Existing vegetation patterns
 - a. Quantities present
 - b. Scattered vs. patches
3. Environmental Conditions
 - a. Sunlight
 - b. Soil
 - c. Hydrology
 - d. Topography
4. Disturbance History
 - a. Cultivation
 - b. Grazing
 - c. Hay Harvesting
 - d. Grade Alterations

III. Overall design decisions: balancing ecological reality with client expectations

1. Level of nativity
2. Generalist vs. specialists species
 - a. Consult "Coefficients of Conservatism" scale
3. Competitive levels
 - a. Species diversity vs. weed suppression
4. Aesthetic Preferences of Client
 - a. Height, textural quality, level of wildness, inclusion, formal or repeating elements
5. Management capabilities of client/contractors

IV. Species selection: Plant community based design

1. Select species that naturally occur in similar environmental conditions to those that occur on site
2. Match plants to soils, not soils to plants- extremes are often desirable
3. Assemble compositions that reflect historic plant communities

V. Planting specifications: leave little room for error

1. Include:
 - a. Detailed verbiage, charts and photos
 - b. Appropriate planting windows allowing for implementation delays
 - c. Contractor 'qualifiers'
 - d. Suggested plant and seed sources
2. Require designer approval of all substitutions

VI. Management guidelines: balance detail and usability

1. Specify vegetative goals
2. Separate pre and post goal activities
3. Action calendar with detailed descriptions actions
4. Weed species addendum
 - a. Identification
 - b. Chemical control
 - c. Organic control
 - d. Level of perniciousness
5. Suggested equipment needs
6. Monitor post planting

VII. The resulting landscape: Aesthetics as a subset of experience.

VIII. Designing for management

1. Matching plants to the environmental conditions of their naturally occurring habitats
2. Creating highly competitive weed suppressive plant compositions
3. Selecting and combining plants to accommodate specific management techniques

IX. Designing with seed and live plants

1. Seed only
2. Live plants only

X. Accommodating client preferences

1. Specifying organic site preparation, planting and management protocols
2. Creating an attractive "grand opening" landscape without compromising long term establishment
3. Prioritizing ecological benefits without sacrificing aesthetic and experiential aspects

XI. Maintaining vs developing the design

1. Seed establishment
2. Problems and solutions
3. Invasive management
4. Turf to meadow conversion
5. Organic chemical cost comparison

XII. Changes and redirections

XIII. Keeping up with the collaborators

XIV. Q&A

PLANT LISTS*

Glenstone Meadow On Structure Plugs (planted 18")

Latin	Common
Schizachyrium scoparium	Little bluestem
Andropogon ternarius	Splitbeard bluestem
Muhlenbergia capillaris	Muhlygrass
Allium cernuum	Nodding onion
Amsonia hubrichtii	Threadleaf bluestar
Anemone canadensis	Canada anemone
Asclepias verticillata	Whorled milkweed
Baptisia alba	White wild indigo
Erigeron pulchellus	Robin's plaintain
Geranium maculatum	Wild geranium
Iris cristata 'Powder Blue Giant'	Dwarf crested iris
Liatris aspera	Rough blazingstar
Liatris pilosa	Shaggy blazingstar
Penstemon laevigatus	Eastern smooth beardtongue
Silene caroliniana	Wild pink
Solidago speciosa	Showy goldenrod

Glenstone Understory Seed Mix

Latin	Common
Carex brevior	Plains Oval Sedge
Carex vulpinoidea	Fox Sedge
Deschampsia caespitosa	Tufted Hairgrass
Festuca obtusa (subverticillata)	Nodding Fescue
Penstemon digitalis	White Beardtongue
Tradescantia virginiana	Virginia Spiderwort
Tradescantia ohimensis	Ohio Spiderwort
Zizia aurea	Golden Alexander

* These were designed specifically for the region, site, and specific goals of the Glenstone project. They may not be applicable to projects in other regions, with differing specific site environments or project parameters.

Glenstone Meadow Seed Mix

Latin	Common
<i>Schizachyrium scoparium</i>	Little Bluestem
<i>Tridens flavus</i>	Purpletop
<i>Aster laevis</i>	Smooth Blue Aster
<i>Coreopsis lanceolata</i>	Tickseed
<i>Eryngium yuccifolium</i>	Rattlesnake Master
<i>Euphorbia corollata</i>	Flowering Spurge
<i>Monarda punctata</i>	Morsemint
<i>Parthenium integrifolium</i>	Wild Quinine
<i>Penstemon digitalis</i>	White Beardtongue
<i>Pycnanthemum tenuifolium</i>	Slender Mountain Mint
<i>Rudbeckia hirta</i>	Black Eyed Susan
<i>Solidago nemoralis</i>	Gray Goldenrod

Glenstone Aggressive Sedges Understory Seex Mix

Latin	Common
<i>Carex vulpinoidea</i>	Fox sedge
<i>Carex scoparia</i>	Blunt broom sedge
<i>Carex lurida</i>	Lurid sedge
<i>Carex frankii</i>	Frank's sedge
<i>Aster pilosus</i>	Heath aster
<i>Deschampsia caespitosa</i>	Tufted hairgrass
<i>Elymus canadensis</i>	Canada wild rye
<i>Penstemon digitalis</i>	White Beardtongue
<i>Pycnanthemum tenuifolium</i>	Narrowleaf mountain mint
<i>Solidago caesia</i>	Blue stem goldenrod
<i>Tradescantia ohioensis</i>	Ohio spiderwort
<i>Zizia aurea</i>	Golden Alexanders

TOOLS + RESOURCES

Books

Garden Revolution: How Our Landscapes Can Be a Source of Environmental Change by Larry Weaner and Tom Christopher

Glenstone: The Pavilions, Foreword by Emily Wei Rales text by Paul Goldberger, Michelangelo Sabatino, Susana Ventura

Planting in a Post-Wild World by Thomas Rainer and Claudia West

Websites

www.glenstone.org/landscape/

www.pwpla.com

<https://lweanerassociates.com>

<https://mtcubacenter.org/>

<https://www.northcreeknurseries.com/>

