MEADOWSCAPING

Mary Logalbo, Urban Conservationist
Overview

• Why
• The Partnership
• Designing
• Planting
• Maintaining
“We have to raise the bar on our landscapes. In the past, we have asked one thing of our gardens: that they be pretty. Now they have to support life, sequester carbon, feed pollinators and manage water.”

Douglas Talamy, Professor
University of Delaware, 2015
Why convert a lawn?

• Wildlife & Biodiversity
• Water & Air Quality
• Water Conservation
• Natural Heritage
• Lower Maintenance Options

Andrena (Mining Bee) on Goldfields (Lasthenia californica).
Photo Credit: Mace Vaughn, Xerces Society
Stormwater Management & Carbon Sequestration

Program Components

- Demonstration Sites
- Plant Materials
- Educational Program
- Educational Materials
- Signage
Portland Urban Meadowscape Pilot
Demonstration Sites

- Analyzing site parameters (i.e. soils, aspect, etc.)
- Site prep methods
- Seed & plug mixes
- Maintenance
- Turf alternative, annual or sustained meadow?
Habitat Connectivity

Photo Credit: Marissa Aurora Dorais
Portland Parks & Recreation
Willamette River Stewardship Coordinator | City Nature
Sourcing Plant Materials

- Questions to ask:
  - Native?
  - Sourcing?
  - Neonicotinoids?

- Wholesale orders
- Seed packet distribution
- Retail “outreach”

- Neonicotinoids:
# Table of Contents

1. Introduction ................................................................. 1

2. Planning Your Urban Meadow ........................................... 7

3. Designing and Selecting Plants for Your Urban Meadow .......... 13

4. Site Preparation .......................................................... 21

5. Installing Your Urban Meadow .......................................... 29

6. Maintaining Your Urban Meadow ....................................... 33

7. Appendix ........................................................................ 37
   A – Soil Testing ............................................................... 38
   B – Urban Meadow Planting Templates and Sketches .............. 40
   C – Illustrative Plant Guide and Comprehensive Plant Lists ... 56
   D – Wildflower Bloom Time Chart .................................... 68
   E – Seeding Information ................................................... 71
   F – Native Plant Nurseries and Seed Producers .................... 77
   G – Pollinators Found in Urban Portland Gardens .................. 81
   H – Pacific Northwest Prairie and Oak Resources ............... 82
   I – References ................................................................ 86

Photo credit: Bob Hansen
Site Planning

- **Project Goals**
  - Aesthetics
  - Lower Maintenance
  - Wildlife Habitat
  - Stormwater Treatment

- **Project Type**
  - Low Lying Groundcover
  - Native Grass Alternative
  - Meadowscape
Site Planning

- Resources & Constraints
  - Labor
  - Tools
  - Materials
  - Budget
- Inventory & Analyze Site
  - Slope
  - Shade
  - Weeds
  - Pressures
  - Human Needs
  - Soil Type & Moisture
Consider unused spaces...

Photo credit: Bob Hansen, Corvallis

*See Appendix B for more information on planting templates

Graphic Credit: GreenWorks
Project Design

• Choose appropriate & available plants [https://wmswcd.org/types/native-plants/](https://wmswcd.org/types/native-plants/)
• Consider 3 Bloom Times & 1 Bunchgrass
• Careful of bullies!

<table>
<thead>
<tr>
<th>Flower Species - common name (scientific name)</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
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</thead>
<tbody>
<tr>
<td>western buttercup (Ranunculus occidentalis)</td>
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<td>shooting star (Dodecatheon hendersonii)</td>
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<td>western trillium (Trillium ovatum)</td>
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<td>meadow checkerbloom (Sidalcea campestris)</td>
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<td>woodland strawberry (Fragaria vesca ssp. Brachetata)</td>
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<td>Oregon iris (Iris tenax)</td>
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<td>camas (Camassia leichtlinii or quamash)</td>
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<td>western columbine (Aquilegia formosa)</td>
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<td>fringedcup (Tellima grandiflora)</td>
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<td>varieleaf phacelia (Phacelia heterophylla)</td>
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<td>lance selfheal (Prunella vulgaris)</td>
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<td>slender cinquefoil (Potentilla gracilis)</td>
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<tr>
<td>harvest brodiae (Brodiaea elegans)</td>
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<tr>
<td>salebrosa goldenrod (Solidago canadensis var. salebrosa)</td>
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</table>

<table>
<thead>
<tr>
<th>Bunchgrass Species - common name (scientific name)</th>
<th>Height at maturity (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>blue wildrye (Elymus glaucus)</td>
<td>3</td>
</tr>
<tr>
<td>California brome (Bromus carinatus)</td>
<td>3</td>
</tr>
<tr>
<td>tufted hairgrass (Deschampsia caespitosa)</td>
<td>3</td>
</tr>
<tr>
<td>Roemer’s fescue (Festuca roemeri)</td>
<td>2</td>
</tr>
<tr>
<td>California fescue (Festuca californica)</td>
<td>3</td>
</tr>
</tbody>
</table>
Aesthetic Considerations

- Small palate for small place
- Strategically locate “anchor plants”
- Clump species
- Consider clear dividers of plant groupings
- Seasonal interest
A Dynamic Landscape

Danthonia californica
Ranunculus occidentalis & Camassia
Site Preparation

- Minimum: spring – fall prep
- Organic:
  - Sod cutter + hand weeding + top dressing of “native” soil
  - Sheet mulching + hand weeding + top dressing of “native” soil
  - Solarizing + hand weeding + top dressing of “native” soil
  - Scalping + hand weeding alone not enough
  - Flaming and/or Organic Herbicides won’t kill grass roots
- Spring spray + early fall spray + hand weeding
Meadow Establishment Strategies

• Start w/ plugs (perennial forbs & bunchgrasses) – strategically seed in annuals
• Clump like species (3-5)
• ~2 foot spacing
• Scratch in seed in fall
• Fencing
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Moisture Regime</th>
<th>Exposure</th>
<th>Height x Width</th>
<th>Width</th>
<th>Time of Bloom</th>
</tr>
</thead>
<tbody>
<tr>
<td>farewell-to-spring</td>
<td><em>Clarkia amoena</em></td>
<td>🍄</td>
<td>🌞</td>
<td>2.5’</td>
<td>2’</td>
<td>June - July</td>
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<tr>
<td>grand collomia</td>
<td><em>Collomia grandiflora</em></td>
<td>🍄</td>
<td>🌞</td>
<td>18”</td>
<td>18”</td>
<td>May - July</td>
</tr>
<tr>
<td>Columbia tickseed</td>
<td><em>Coreopsis tinctoria v.atkinsoniana</em></td>
<td>🍄</td>
<td>🌞</td>
<td>2’</td>
<td>12”</td>
<td>May - July</td>
</tr>
<tr>
<td>Oregon sunshine</td>
<td><em>Eriophyllum lanatum</em></td>
<td>🍄</td>
<td>🌞</td>
<td>2’</td>
<td>18”</td>
<td>June - August</td>
</tr>
<tr>
<td>western alpine</td>
<td>strawberry <em>Fragaria virginiana v. platypetala</em></td>
<td>🍄</td>
<td>🌞</td>
<td>6”</td>
<td>12”</td>
<td>April - July</td>
</tr>
</tbody>
</table>

Photo Credit (top to bottom): Mary Bushman, BES, Mary Bushman; Terry Glase; Mary Bushman; Thomas L Muller
Maintenance

- Watering
- Disturbance for meadows
- Plan to weed “bullies”
- Many annuals will self sow
- Bare spots love weeds
- Avoid disturbance during primary nesting season: April 15\textsuperscript{th} – August 1\textsuperscript{st}
Challenges & Resources

- Public perception
- Tall grass ordinance
- Maintenance
- Plant costs & availability
- Grass identification

Pollinator Habitat

This area has been planted with a range of flowering native plants to provide good quality habitat for native bees and other pollinators.

For information about creating habitat for pollinators, please visit:

www.xerces.org
www.wmswcd.org
Opportunities

- Further analyze
  - BMPs
  - Stormwater
  - Carbon sequestration
  - Hybrid options
  - Pollinators
- Community Engagement
Thank You!

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The Meadowscaping Handbook: