Water-wise Landscape Horticulture for Western Landscapes

Annie M. R. Barrow
Manager of Horticulture Outreach Programs, Denver Botanic Gardens

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Horticulture Outreach Programs

**Services:**
Planting designs, Project consultation on installation, plant selection, maintenance

**Projects types:**
Streetscapes/Medians, Public spaces/parks, Commercial properties, Community Gardens, Flood planning/water gardens, Greenroofs
Horticulture Outreach Programs: Current Projects

**Lakewood, CO** 1 mile median along Colfax from Kipling to Simms

**Greenwood Village, CO** 3 mile median along Belleview from University to I-25
Xeriscape = “Zero”scape
Xeriscape = dull
Denver Botanic Gardens: Roads Water-smart Garden

Lush, textured & colorful landscapes that require little maintenance
Denver, CO

Denver’s front range is a steppe climate in the High Plains.
High Plains Steppe Climate

The Western portion of the Great Plains: Eastern SD, WY, Western NE, Eastern CO, Western KS, Northeastern NM, Western OK, Northwestern TX
Steppe Climate

**Steppe Climate Characteristics**

- Semi-Arid = low humidity, little precipitation (10-20 inches/year)
- High Elevation 1500 – 7800’ allows for warm winter temps and freezing spring temps
- Wide temperature swings
- Drought years
- Hail
- Frequent high, drying winds

*East of the Rocky Mountains: the mountains essentially prevent much of the rain from reaching the plains east of the range*

*Orographic effect - Rain Shadow*

High and Dry
Unique Approach

• Soil amendments critical - provide drainage, often little to no organic material needed
• Preventative approach to weed management
• Aim to shut off irrigation after plants are established
Barriers

- Lack knowledge of western plants
- Unaware of regional climate
- No plant palette specific for CO and western region
- Lack sources (wholesalers) for western plants
Use of Native Plants = Reduced Costs
- Minimize soil amendments
- Reduce water consumption
- Lower maintenance requirements

Use of Native Plants = Environmental Responsibility
- Once established, drought resistant
- Increase native bees & pollinator populations
- Provides texture, color and lush thriving garden
Use Native Cultivated Varieties
(Native to CO & Western US)

Native species

Cultivated variety or hybrid
Use Native Species (Native to CO & Western States)

Echinacea angustifolia

Liatris punctata
Recommended Trees: Native

Foresteria neomexicana New Mexican Privet
Recommended Trees: Non Native

*Acer tartaricum* ‘Hot Wings’
Recommended Shrubs

Amorpha canascens

Dwarf Rabbitbrush
Recommended Genus

Agastache

Penstemon
Recommended Grasses

Bouteloua ‘Blonde Ambition’

Sporobolus heterolepis

Schizachyrium
Use Plant Select® plants

✓ Easy way to select tough plants for our region
✓ Tested for several years to thrive in broad range of conditions
✓ Criteria for testing includes attractiveness as well as toughness
✓ Available at many local retailers & wholesalers in WY, TX, CO, ID, MT, NE, SD
✓ Over 130 plants including annuals, perennials, groundcovers, vines, trees and shrubs (evergreen and deciduous)
Plants from other Steppe climates

Visit Denver Botanic Gardens to see Steppe Gardens
Plants from other Steppe climates

*Kniphofia*

*Diascia ‘Coral Canyon’*
Plant Selection for Small Scale Plantings

- Soil is typically disturbed from site construction
- Smaller spaces mean smaller, tidier plants
- Highway traffic is 40 mph or less - visually things are seen in masses
- Traffic stops allow for closer inspection of landscape
- Well defined planting areas meaning formal and or intentional designs
- Irrigation and maintenance may be provided

Plant selection will be different for small and large scale sites
Plant Selection for Large Scale Plantings

- Native and naturalized aesthetic appropriate
- Visual impact best in masses
- Slope and drainage may vary, allowing for mixed plantings
- Minimal maintenance and irrigation

Plant selection will be different for small and large scale sites
Resources

Online - Plant Select.org, Local and County extension offices
Visit – Denver Botanic Gardens: Roads water-smart garden & Birds and Bees Garden, Kendrick Lake (Lakewood, CO), Aurora Xeriscape, CO Springs Utilities
Handout - Plant list

Questions: annie.barrow@botanicgardens.org