COMBINATIONS FOR CONSERVATION

RECOMMENDED PLANT GROUPINGS FOR LOW-WATER LANDSCAPES

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SOME THINGS JUST LOOK GOOD TOGETHER AND ARE MARKETED TOGETHER.

Why don’t we do the same thing with plants?


http://housingstorm.com/living-room-color-schemes-for-modern-house.html/living-room-color-combinations
PURPOSE OF COMBINATIONS FOR CONSERVATION

- Support development of water conserving landscapes by promoting combinations of plants rather than individual plants
ECOLOGICALLY BASED COMBINATIONS

- Plants that are synergistic and matched to a given environment
AESTHETIC COMBINATIONS

- Plants that look good together and are striking in their beauty as a group rather than just a single plant.
Plants that work well together to accomplish a design goal such as screening
Plants that fit together in a specific microclimate and irrigation regime
FURTHER BENEFITS

- Easy maintenance
- That are user friendly marketing and design for the general public
- Can be used to promote selected plants
- Can aid the landscape industry in product choices
COMBO
RECOMMENDED PLANT GROUPINGS FOR LOW-WATER LANDSCAPES
CON
COMBINATIONS FOR CONSERVATION
PLANTING INSPIRATION FROM REAL LIFE PLANTINGS

- Gardens from around Utah, Colorado and Idaho
- Combinations found in nature
COMBINATIONS FOR CONSERVATION

RIGHT PLANT(S) RIGHT PLACE

- 3 Plants that work well together
- Design: how and why they go together
- Maintenance: How to plant and maintain the combination
- Bloom chart: how the combination looks throughout the year

**ROCKY MOUNTAIN PENSTEMON**

*Penstemon strictus*

Rocky Mountain penstemon is a long-blooming native perennial that is valued for its bright purple flowers that bloom early in the season. It is very tolerant of soil, drought, and should not need extra water. This easy-care plant needs full sun and well-drained soil. It has clump-forming growth habit. Size: 2' - 3' tall x 3' wide. Zones: 3 - 9

**BLUE GRAMA GRASS**

*Bouteloua gracilis*

Blue grama grass can be used as a turf grass or as an ornamental turfgrass interplanted with perennials. Either way, blue grama grass should be allowed to grow to seed to offer the unique gray to golden mixed winter grass. Blue grama is a warm season grass that grows well in full sun. It has a dark green color and a fine texture that adds a soft texture to ornamental landscapes. Size: 9' - 12' tall x 12' - 18' wide. Zones: 5 - 9

**SULPHUR BUCKWHEAT**

*Eriogonum umbellatum*

Sulphur buckwheat is a shrub that forms a mat of green. The bright yellow flowers often bloom in the spring and continue into the fall. They are drought tolerant and are often used in desert landscaping. Size: 1' - 2' tall x 1' - 2' wide. Zones: 4 - 9

This low water intermountain native plant combination includes sweeping curves of blue grama grass, the tall blue flowers of our rocky mountain penstemon, and the bright yellow flowers of sulphur buckwheat. All are native to Utah and require minimal supplemental water. The blue grama grass may left till or mowed down to appear more like a lawn.

Plant blue grama grass 12" apart to create a meadow-like effect. It may be left tall or mowed down to appear more like a lawn. Plant the perennials in groups for greater impact. The penstemon is a relatively short-lived perennial, but will need heavily to be prepared for plants to move around a bit. Once established, these plants are very drought tolerant and require minimal supplemental water. Cut back the penstemon to about 6" tall after flowering.
COMBINATIONS FOR CONSERVATION
INDIVIDUAL PLANT INFORMATION

- Individual plant descriptions
- Icons for quick reference

**3 JUPITER’S BEARD**
Centranthus ruber cocineus

Jupiter’s beard is a carefree plant with blue-green leaves and dark crimson flowers that bloom from late spring to late summer. Extremely drought tolerant, Jupiter’s beard will fill in difficult spots. ‘Alba’ is a cultivar with white flowers. Size: 12-36” tall x 12-36” wide. Zones: 5-9

For a colorful combination of tough spring blooming plants in a low-water sunny parkstrip, combine the tall dark pink flowers of Jupiter’s beard with the deep purple-blue gales of salvia, aromatic mounds of lavender-blue catmint, and the low growing yellow rockrose groundcover. Repeat each plant throughout the design a few times to help provide unity and cohesion.

Plant Jupiter’s beard, camas, and rock rose 2 feet apart. Deadhead the spent flowers of Jupiter’s beard to keep the flowers blooming all summer long. Cut it back to about 3” in late fall. Walker’s Low Catmint only asks for well-drained soil and good light. Shear spent flowers to promote another set of blooms. Blue meadow sage needs occasional dead-heading and then a final cut to about 3”
COMBINATIONS FOR CONSERVATION
EASY-TO-FIND PLANTS AND ALTERNATIVES

'Karl Foerster' grass
*Calamagrostis x acutiflora 'Karl Foerster'*

Silver spike grass
*Achnatherum calamagrostis*

Fountain Grass
*Pennisetum alopecuroides*

Mutton Grass
*Poa fendleriana*
COMBINATIONS FOR CONSERVATION
CUTTING EDGE NEWCOMERS WORTH SEEKING OUT

Purple mountain savory
*Satureja montana illyrica*

Sea Kale
*Crambe maritima*

Yellowhorn
*Xanthoceras sorbifolium*
TYPES OF PLANTING COMBINATIONS

1) LAWN IN THE LOW WATER LANDSCAPE
2) COLORFUL PLANTER STRIPS
3) BEAUTIFUL BACKDROPS: PLANTING WITH SHRUBS & EVERGREENS
4) TEXTURE, CONTRAST AND SPECIMEN PLANTS
5) PARTNERING PERENNIALS
6) CUES FROM NATURE
7) ORNAMENTAL GRASSES
8) FLOORS & CEILINGS: DECIDUOUS TREES
9) DIFFICULTS SPOTS
COMBINATIONS FOR CONSERVATION

1) LAWN IN THE LOW WATER LANDSCAPE

- Type turfgrasses and their water requirements
- Deciding on turfgrass type based on planned use

COLOR RANGE

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<thead>
<tr>
<th>Bright green to blue-green</th>
<th>Traffic Tolerance</th>
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<tr>
<td>Kentucky bluegrass</td>
<td>(Poa pratensis)</td>
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<td>Tall fescue</td>
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<tr>
<td>Tall fescue</td>
<td>(Festuca spp.)</td>
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<td>Bluegrass</td>
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COMBINATIONS FOR CONSERVATION

2) PLANTER STRIPS

- Appropriate plants
- Size
- Texture
- Scale
- Can withstand trampling
- Tips for irrigating plant strips
3) BEAUTIFUL BACKDROPS: PLANTING WITH SHRUBS AND EVERGREENS

- Existing trees or shrubs in a landscape and what to plant with them
- Layering plants and placing them based on season of interest
- Using fragrant shrubs

Flowering quince is kind of a one-hit wonder type of plant. It really shines in the spring, but the rest of the year it blends into the background. But when it blooms, it goes all out. Blooming before the leaves bud out, the whole shrub looks like a ball of cotton candy. As with many other wonderful, winter-flowering plants, timing is essential. Flowering quince will be the first thing to bloom in your garden in the spring and add some punch to the end of winter. Using the evergreen blue spruce as a background plant really brings out the color. Take its short bloom time into consideration when planting as it will just blend into the background the rest of the year. Use the blue spruce as the backdrop, the flowering quince as a specimen middle height plant, and stage the rest of the summer with some of blue spruce plant combinations on the following page.

This is an eye-catching combination of low-maintenance plants that are water wise and deer resistant. The striking blue needles of the blue spruce offer year-round interest and provide an attractive backdrop for the purple-leaved Diapractis rivulata. For additional summer and fall color, plant the fragrant licorice mint hyssop in front of the rivulata.

This is a very low-maintenance plant combination. The blue spruce can be used as a background tree, with spacing about 15’ apart when used in a group. Provide drier rivulata plenty of room, at least 10’ to those shrubs, as they’re sensitive. The licorice mint can be planted 3’ apart, and is the only plant in this group that will need to be cut back in late fall. Once-established, these plants are drought tolerant and deer resistant.
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4) TEXTURE, CONTRAST AND SPECIMEN PLANTS

(aka: I WANT THIS PLANT, WHAT DO I DO WITH IT)

- Planting architectural specimen plants
- Making them ‘pop’ in the landscape with contrasting textures
- Contrasting color and foliage to accentuate specimen plantings
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5) PARTNERING PERENNIALS

- Contrasting and complementary colors
- Overlapping bloom times and long season of interest
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6) CUES FROM NATURE

- Examples of some combinations found in nature
- Why these plants work together
- How that look can be achieved through plants available in the trade
Huge selection of ornamental grasses that vary in shape, height and visual permeability.
Ceilings: Deciduous trees
- Screening
- Shade / light shade
- Patio trees

Floors
- Plants that are good accents
9) DIFFICULT SPOTS

- Slopes
- Dry shade
- Retaining walls
- Hot, dry & exposed
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RECOMMENDED PLANT GROUPINGS FOR LOW-WATER LANDSCAPES

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CON
NOTHING TRUMPS QUALITY

- Orbiting the giant hairball
- Essence of designing low water landscapes and how that fits into the ecology and respect of the land
THEORY OF THREES

- Where can it come from?
- Design + installation + maintenance
THE RULE OF THREES: DESIGN
FLOORS + WALLS + CEILING

- Floors
  - Grasses
  - Groundcover
  - Perennials
THE RULE OF THREES: DESIGN
FLOORS + WALLS + CEILING

- Walls
  - Grasses
  - Hedges
  - Fences
- Actual vs. Implied
THE RULE OF THREES: DESIGN
FLOORS + WALLS + CEILING

- Ceilings
- Trees
- Pergolas
- Sky
THE RULE OF THREES: INSTALLATION

Size matters
- Small
  - Flats & quarts
- Medium
  - Gallons – 2 gallon
- Large
  - 7 gallons and up

Soil matters
- Sand
- Silt
- Clay
THE RULE OF THREES: MAINTENANCE

- Water demand: when to irrigate
  - No irrigation
  - Minimal irrigation
  - Once a week/every other week

- Pruning
  - Cutting
  - Thinning
  - Shaping
THANK YOU

- DAVE ANDERSON
- PAUL JOHNSON
- ROGER KJELGREN
- KELLY KOPP
- LINSEE PARKER
- LARRY RUPP
- ANNE SPRANGER
- BILL VARGA
- ADREA WHEATON
EFFICIENT IRRIGATION

- Know how much water your plants need.
- Know how much water your watering system applies.
- Match your watering system output to your plants’ needs.

Plant root development under various watering techniques, redrawn from The Dry Gardening Handbook by Olivier Filippi.
https://desertnw.wordpress.com/category/xeriscaping-drought-tolerance
WATER MOVEMENT IN SOILS

Sand: 2.5 – 5 feet

Silt: 5 – 9 feet spread

Clay: 9 – 14+ feet spread
**WATERING FREQUENCY**

- Frequently during establishment (~two weeks)
  - Every 1-2 days

- After establishment
  - Every 3-14 days depending on soil type and use of mulches

*some plants can handle less frequent or no irrigation*
WHEN TO WATER?

- Irrigate at or just before permanent wilting point (PWP)
- Avoid constant saturation
FREE MOISTURE METER

- Follow up survey
  - Did you use the moisture meter?
  - Did it help you save water?

- Name
- Email
- Phone #
- Zip

*Note – accuracy may vary depending on site conditions*
### Perennials

**Assumptions:**
- 75% distribution uniformity (DU)
- Clay loam soil (2 inches of water/foot)
- Irrigation at 50% depletion
- 12 inch rooting depth
- Frequency corresponds to number of waterings during summer months
- Table does not address precipitation events

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THANK YOU!

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