Tips and Tricks *for* **Successful Xeriscaping**

By Anne Clark & Sally Guthart May 2011

Our Goals:

Introduce you to some great plants for Colorado



Inspire you to spend time in your garden

Schools of Thought

Dryland gardening

Purist level – no additional water – little to no soil amendments – use only native and adapted plants for your local growing environment.

Water wise and adaptable gardening

Xeriscape principles for plant selection

- 1) Planning and design
- 2) Soil improvements
- 3) Efficient irrigation
- 4) Right Plant Right Place Hydrozone
- 5) Mulch
- 6) Limit Turf have room for more plants!
- 7) Appropriate Maintenance

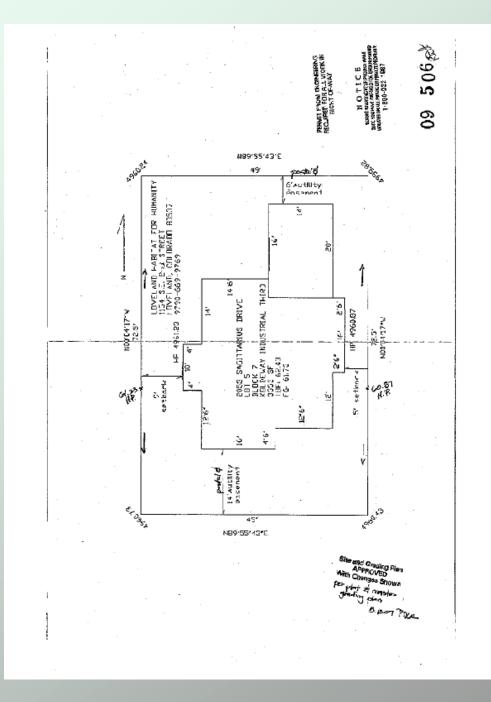






Xeriscape Principle # 1. Planning and Design

- Create a base map to scale drawing showing existing features on your site
- Identify goals for the site
- Develop a planting plan adaptable to the location



Function – Goals for the Site

- Family needs
- ✤ Maintenance
- Provide shade
- Create beauty

- Create focal points
- Frame views
- Screen views or wind
- Create enclosure

Environmental Conditions Location – Location - Location

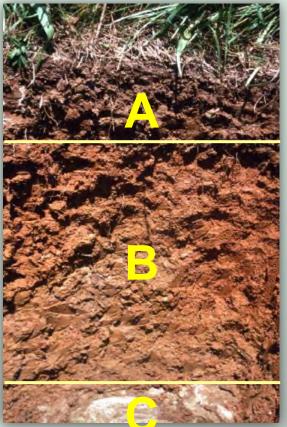
- Connect the site with surroundings (Think habitat)
- Identify Micro climates (protected sites)
- Topography (Terrain slopes)
- Soil composition
- Sun exposure
- ✤ Wind exposure
- ✤ Access to water

Xeriscape Principle # 2. Soil improvements

- Soil test or visual inspection
- Amend soil as necessary with organic matter and or squeegee
- Most important loosen compacted soil and improve drainage

Undisturbed

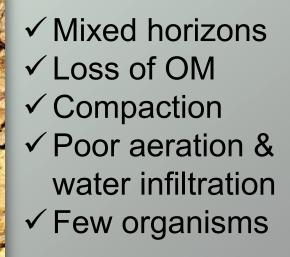
Native Soil



A living, self-sustaining system

Compacted, Unamended

Landscape soil



"Dead dirt", needs help to grow plants

Xeriscape Principle # 3. Efficient Irrigation

- Zone turf areas separately
- Use drip irrigation where possible for shrub beds
- Water deeply and infrequently to develop deep roots
- Water between 9pm and 9am best in early morning

4. Right Plant Right Place Hydrozoning of Plants

• Group like water need plants together

Tools of the Trade

WaterWise Landscaping with Trees, Shrubs and Vines Jim Knopf, Chamisa Books

• **H** - High Water need

Ex: Bluegrass turf – always wet on surface Uses 18-20 gals./s.f./season = 1.5 inches of water, once per week (in July)

• M - Moderate Water need

Ex: turf type Tall Fescue $-\frac{1}{2}$ the water of Bluegrass turf Uses 10 gal./S.F./season = $\frac{3}{4}$ inches of water, once per week

• L - Low Water need

Ex: Buffalo grass turf – needs rain and occasional watering Uses 0-3 gals./S.F./season = $\frac{1}{2}$ inch of water per 2 weeks, optional

• VL - Very Low Water need

Ex: too dry for any turf grass (drier than Denver) no irrigation required

Xeriscape Principle # 5 Mulches

- Keeps roots cool
- Minimizes evaporation
- Reduces weed growth
- Gives beds a finished look
- Weed barrier or not.....
- Bark vs rock

6 Turf Alternatives

- Minimize irrigated turf areas
- Make room for more interesting plants.....



Combination rock and bark



Shredded cedar mulch



Pea gravel

Xeriscape Principle # 7. *Appropriate maintenance*

All Landscapes need maintenance.....

- Watering
- Pruning
- Weeding
- Fertilizing
- Pest control



Example Garden Design

Our goals:

Build a wind and privacy screen

□ Create an attractive view from living room window

□ Extend outdoor entertaining space

□ Use native and low water plantings

□ Use local materials

□ Access from back yard to front yard

View of home

the and a state of the

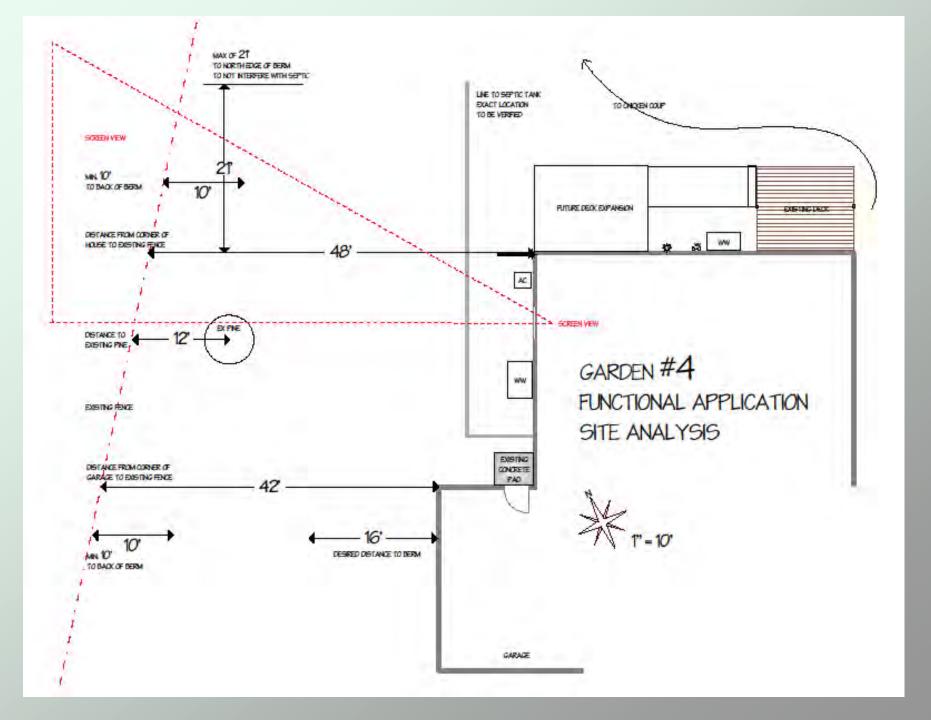
View out living room window

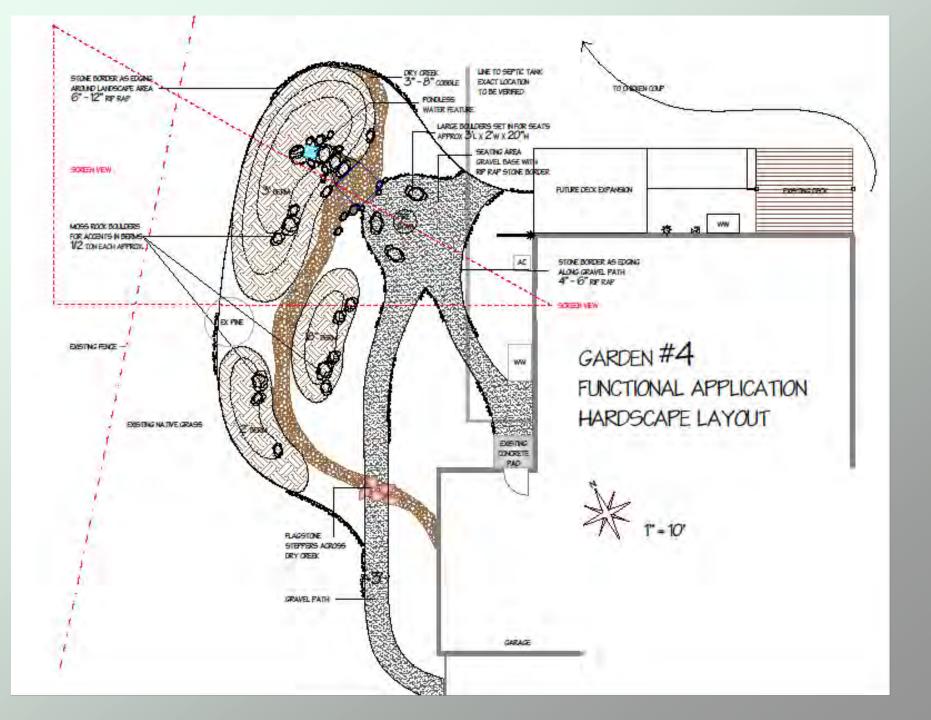


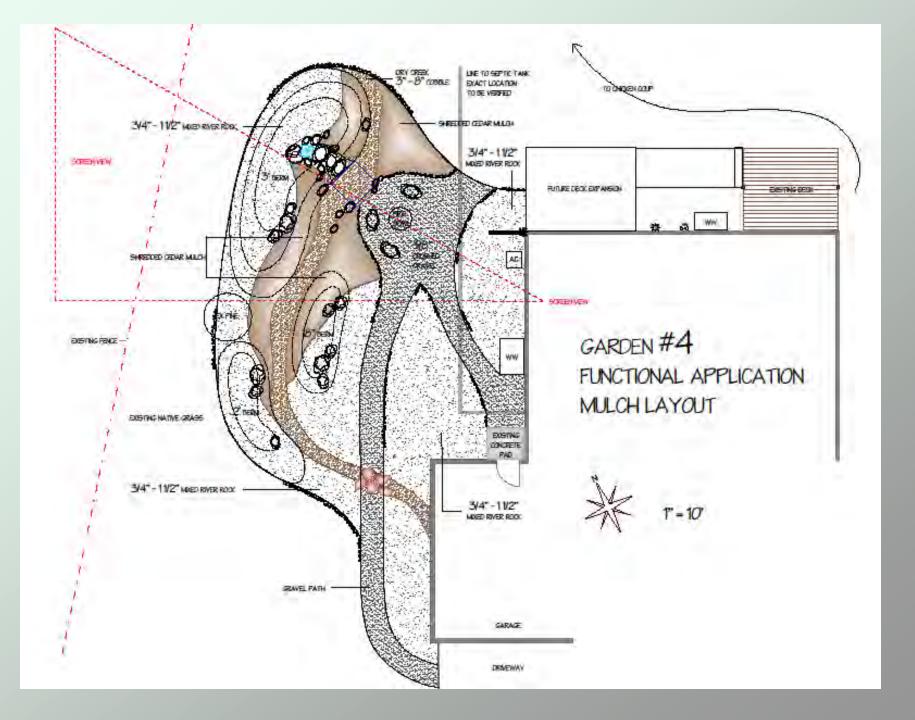
Area to screen for wind and privacy

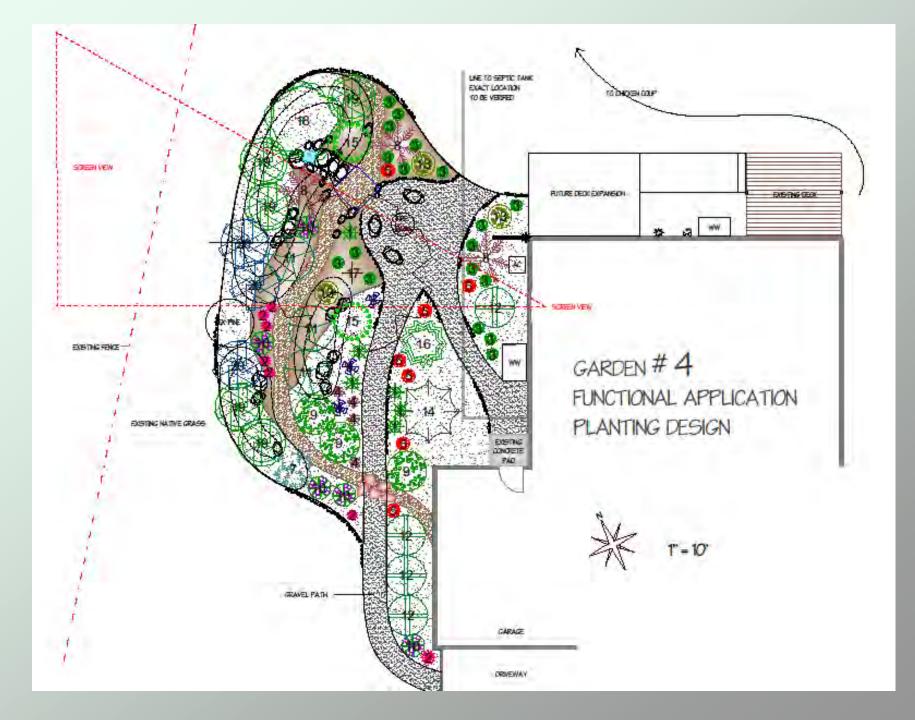
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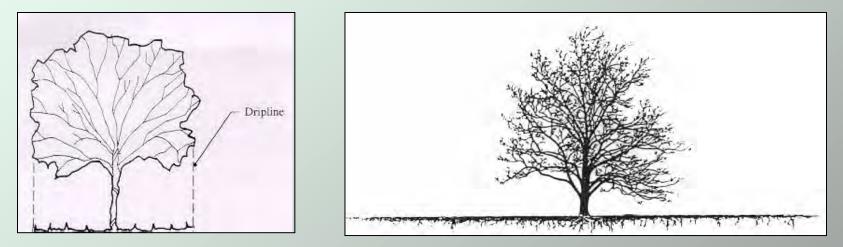
Xeriscape Plants For a Wind Screen and Seasonal Beauty





Watering for establishment

• Most tree roots are in the top 12" of the soil. Apply water within the drip line of the tree. Water deeply and slowly



- Newly planted trees will need to be watered 2 x per week for the first few weeks and you need to keep an eye on the tree and a finger in the soil to monitor the trees needs initially.
- Establishing shrubs, grasses and perennials is best done in spring or fall, and plants may require water daily for a few, then gradually reducing water to 1 to 2 times per week depending on the plant and the temperatures.

Xeriscape Plant Selection

Xeriscape embraces plants considered xeric or Drought tolerant plants

- Drought tolerance ability to withstand drought without dying
- Drought resistance An endure drought and still look good
- Drought is a subjective and <u>relative</u> term to the region you live in
- Definition a long period of no rain or absence of rain



Consider the features of plants to create visual interest

Form

- Size of the plant Balance and proportion Plan for growth
- Shape of plant
 Vary to create visual interest

Color and Texture

- Bark
- Foliage Evergreen or Deciduous
- Fruit and berries Persistent Edible
- Seeds
 Visual interest
 Maintenance
- Flowers Color





Foliage







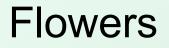


Seasonal Changes



















Xeric Plant Selection

Part 1 Woody Plants

Deciduous Trees

Bigtooth Maple Acer grandidentatum





Tatarian Maple Acer tataricum





Autumn Brilliance Serviceberry Amelanchier x grandiflora 'Autumn Brilliance'











Western Catalpa *Catalpa speciosa*





Russian Hawthorn *Crataegus ambigua*





Thornless Cockspur Hawthorn Crataegus crus-gali inermis

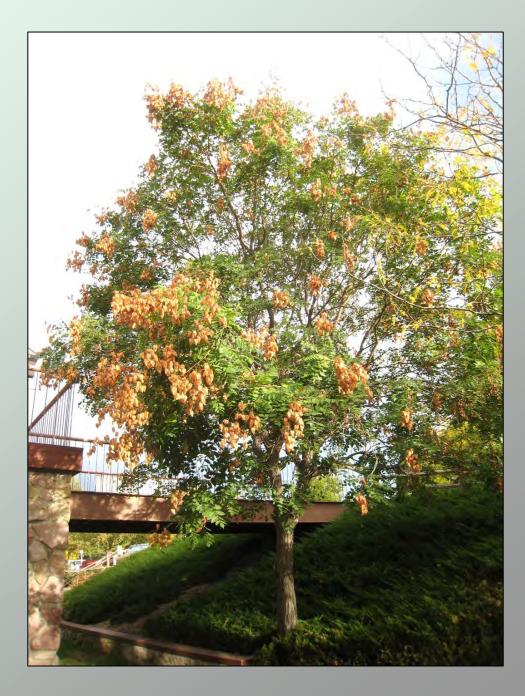




Goldenrain Tree *Koelreuteria paniculata*

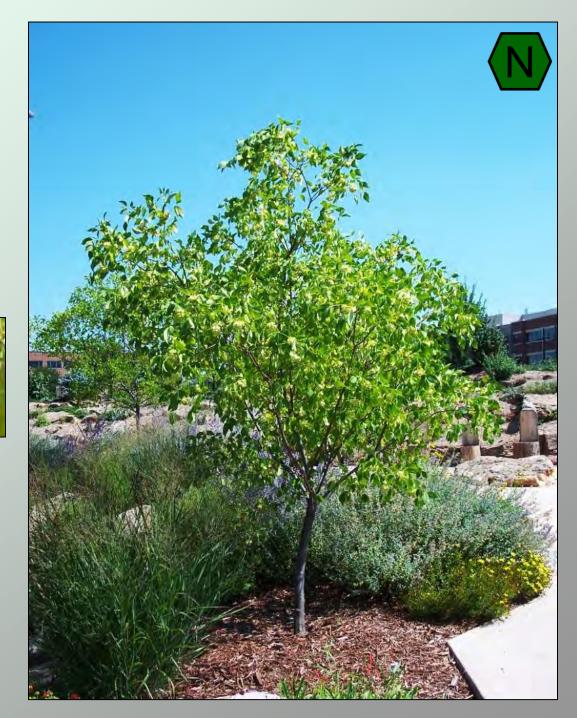






Wafer Ash *Ptelea trifoliata*







Gambel Oak *Quercus gambelii*

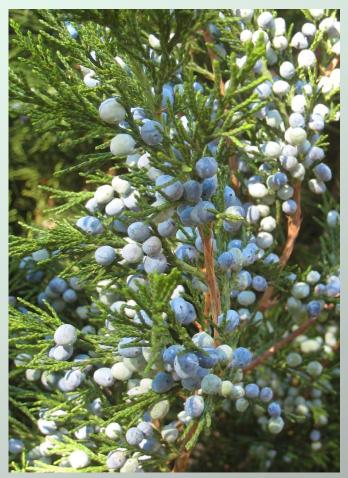






Evergreen Trees

Chinese Juniper Cultivars Juniperus chinensis



Spartan Juniper



Rocky Mountain Juniper Cultivars Juniperus scopulorum

Very drought tolerant





Wichita Blue Juniper



Woodward Columnar Juniper

Cologreen Juniper



Colorado Blue Spruce cultivars Picea pungens



'Montgomery'

Columnar Evergreen Trees



Columnar Blue Spruce



Hoops Blue Spruce

Columnar Evergreen Trees



Arnold Sentinal Austrian Pine



Black Hills Spruce (Requires a bit more moisture)



Iseli Fastigate Bosnian Pine



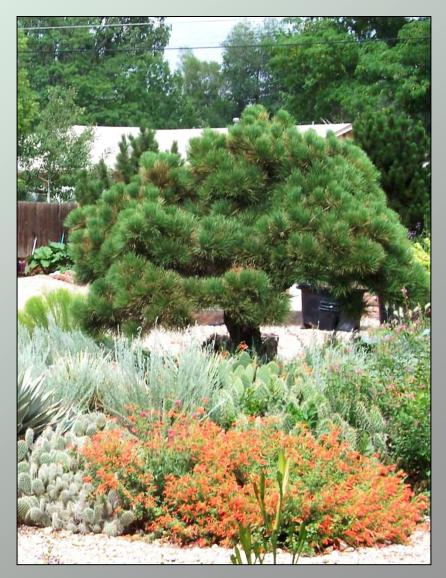
Columnar Norway Spruce (needs some protection from wind, N or NE side of home requires more moisture)



Ponderosa Pine Cultivars



'Mary Ann Heacock' Dwarf Ponderosa Pine

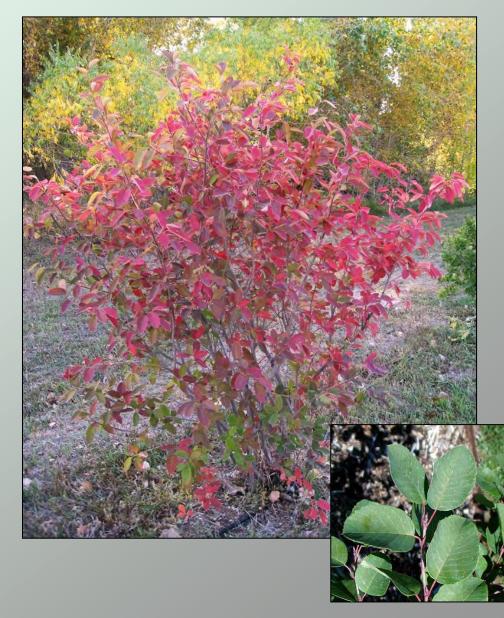


Deciduous Shrubs

Saskatoon Serviceberry Amelanchier alnifolia





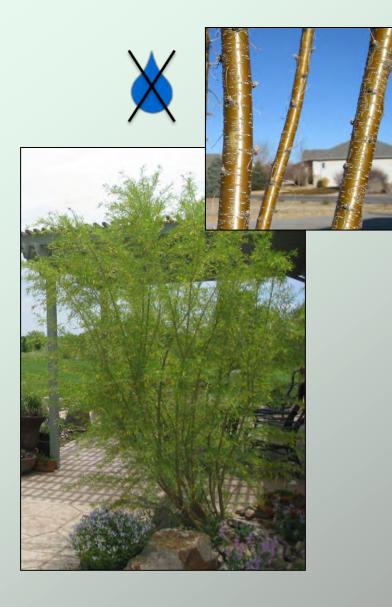


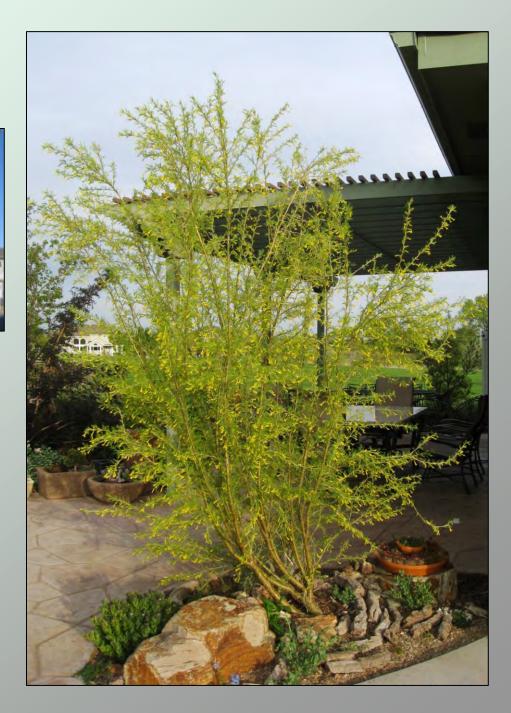
Dwarf Leadplant Amorpha nana





Tidy Peashrub *Caragana microphylla 'Tidy*'





Fernbush *Chamaebatiaria millifolium*





Carol Mackie Daphne Daphne x burkwoodi 'Carol Mackie'





Rock Spirea Holodiscus dumosus





Photo credit Sally Guthart Earthborn Landscape

Summer Wine Ninebark *Physocarpus opulifolius 'Seward'*



Pawnee Buttes Sandcherry Prunus besseyi 'Pawnee Buttes'



Fernleaf Buckthorn *Rhamnus frangula 'Asplenifolia'*

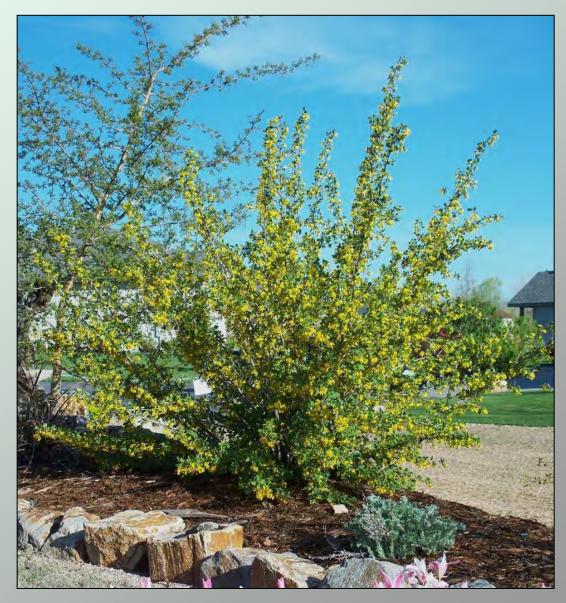




Golden Current *Ribes aureum*







Yellowhorn *Xanthocerus sorbifolium*





Evergreen Shrubs

'Panchito' Manzanita Arctostaphylos coloradoensis







Curl-Leaf Mountain Mahogany Cercocarpus ledifolius







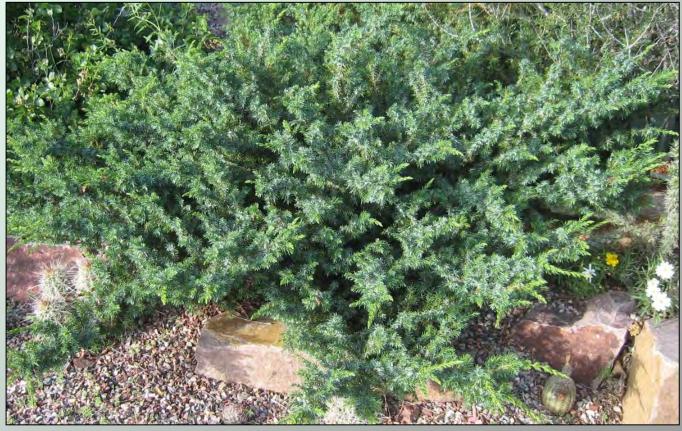
Bluestem Joint Fir *Ephedra equisetina*





Common Juniper Juniperus communis





'Blueberry delight'



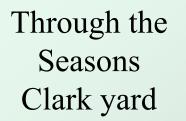
Yucca spp.



Banana Yucca



Red Yucca









Xeric Plants Part 2

Grasses and Perennials

HERBACEOUS PLANTS (GRASSES AND PERENNIALS)

Plants that do not produce woody tissue and generally die back at the end of each growing season. Herbaceous plants survive the winter season as dormant underground structures.

ORNAMENTAL GRASSES





Ornamental Grass - Basics

Clump-Forming vs Runners

Cool-Season vs Warm-Season

- Cool-Season grasses start to grow as soon as the temperatures rise above freezing in the spring. They begin flowering in the early summer.
- Warm-Season grasses grow in warm weather. They require warm soil temperatures for about 2 weeks before they start to grow.

Cutting Back Grasses

- Cool-Season grasses: cut back in the later winter
- Warm-Season grasses: cut back in early to mid spring

Spacing Plants

- Clump-Formers: use individually or plant in groups
- Runners: use for erosion control or as a ground cover

Big Bluestem Grass Andropogon gerardii





Summer Flowers and Foliage





Winter Foliage

Fall Foliage

Overdam Variegated Feather Reed Grass

Calamagrostis x acutiflora 'Overdam'



Summer Flowers



Early Fall Seed Heads

Korean Feather Reed Grass Calamagrostis brachytrica



Late Summer Flowers (PERC)

Northern Sea Oats Chasmanthium latifolium



Blue Avena Grass Helictotrichon sempervirens



Summer Foliage (with Autumn Joy Sedum)

Photo credit: Anne Clark



Mexican Feather Grass Nassella tenuissima





Summer

Late Summer





Prairie Fire - Winter Seedheads



Switch Grass - variety Panicum virgatum spp.





Dallas Blues - Summer Flowers and Foliage

Northwind – Summer Foliage

Dwarf Fountain Grass *Pennisetum alopecuroides 'Hameln'*



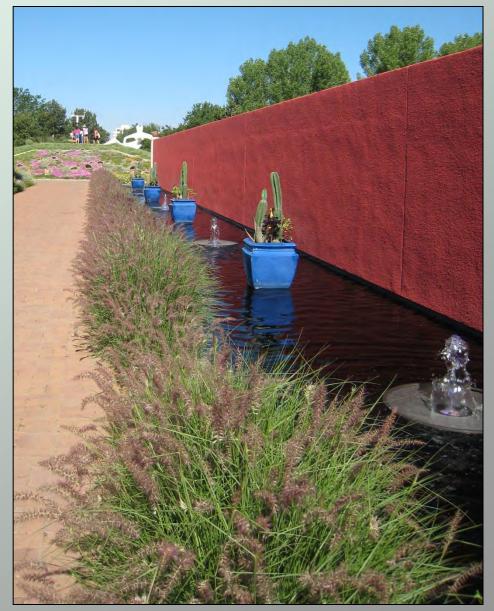
Karly Rose Grass Pennisetum orientale 'Karly Rose'



Late Winter Color and Form



Summer Flowers in the Early Morning Light



Summer Flowers – Denver Botanic Gardens

Blaze Little Bluestem Grass

Schizachyrium scoparium 'Blaze'





The Blues Little Bluestem

Schizachyrium scoparium 'The Blues'



Late Summer Color (shown with Black Jack Sedum)



What *NOT* to do...

Don't cut back ornamental grasses until late winter or early spring.

Prairie Dropseed Grass Sporobolus heterolepsis





PERENNIALS

Serbian Yarrow Achillea serbica





Spring Flowers and Foliage

Sunset Hyssop/Hummingbird Mint Agastache rupestris





Foliage and Form – Early Fall

Hyssops Attract Bees, Butterflies and Hummingbirds

Sonoran Sunset Hyssop Agastache cana 'Sonoran Sunset'





Orange Butterfly Weed Asclepias tuberosa





Summer Flowers and Foliage



Fall – Seed Pods



Winter Form



Hardy Plumbago/Leadwort Ceratostigma plumbaginoides



Late Summer Flowers and Foliage

Fall Flowers and Foliage

Ice Plant Delosperma ssp.





Lavender Ice



Purple



Hardy Yellow

Mesa Verde Iceplant Delosperma cooperi 'Kelaidis'





Purple Coneflower Echinacea purpurea





Winter Interest

Kannah Creek Buckwheat Eriogonum umbellatum 'Kannah Creek







Summer – Flowers Age to Orange



Winter – Evergreen Foliage Changes to Burgundy

Daylilies *Hemerocallis spp.*



Prairie Blue Eyes Daylily



Dwarf Red Spider Daylily



Happy Returns Daylily



Joan Senior Daylily

Easy Ned Daylily



Variegated Iris Iris pallida 'Aurea Variegata' (white/green)





Iris pallida 'Argentea Variegata' (gold/gre

Spotted Dead Nettle, variety

Lamium maculatum



White Nancy



Beacon Silver



Orchid Frost





Golden Anniversary

Pink Pewter

Desert Four-O'Clock Mirabilis multiflora





Penstemon Basics



 Soil and Drainage – Soil should drain freely and quickly to keep moisture away from the crown of the plant. Grow Penstemons in lean soil and go light on fertilizer.

 Mulch – Penstemons grow best in rock mulch. When using bark mulch pull it away from the crown of the plant.

• **Deadheading** – Let some of your Penstemons set seed by not cutting back the spent flowers. *The resulting seedlings will often live longer and be more durable than the parent plant.*

 Cutting Down – Do not cut down Penstemons in the fall - leave all growth intact until early or mid-spring. Old stems will help protect the plant's crown through the winter.

Firecracker Penstemon/Eaton's Penstemon



Penstemon eatonii



Pikes Peak Purple Penstemon Penstemon x mexicale 'Pikes Peak Purple'



Pikes Peak Purple Penstemon – Summer (with Carefree Sunshine Roses)



Yellow Pineleaf Penstemon



Electric Blue Penstmon

Penstemon – variety Penstemon spp.



Red Rocks Penstemon





Pasque Flower Pulsatilla spp.







Spring Foliage



Late Summer/Fall Flowers

Autumn Fire Sedum Sedum x 'Autumn Fire'



Winter Flowers and Form

Schubertii Ornamental Onion Allium 'Schubertii'



Late Spring Flowers (shown with Caradonna Salvia)



Early Spring Growth



Late Spring Flowers

Spring Tips:

- 1. Clean up all debris.
- 2. Fertilize all plantings including turf with a slow release fertilizer in late spring. A good organic fertilizer is the brand Alpha One.
- 3. Water well if winter has been dry and cold.
- 4. Apply weed preventative treatment to beds and turf to minimize new weeds establishing in your yard. A good organic option is Corn Gluten. Apply in late March to early April.
- 5. Plan a vegetable garden to eat healthier and get more exercise. Plant cool season veggies by first of April, ie. peas, lettuce, spinach, radishes, carrots, broccoli, cabbage and onions.
- 6. Prune all shrubs and trees of any dead, broken or unwanted branches.

Summer Tips:

- 1. Stay on top of weeds, prevent new weeds by not letting them go to seed.
- 2. Adjust water according to the temperatures and moisture received from mother nature.
- 3. Spend time outdoors with you family and friends, have a BBQ or 2.
- 4. Prune early-flowering shrubs that bloom on old wood such as Forsythia, Lilac, Vanhoutte Spirea, immediately after flowering.
- 5. Plant a salsa garden or other warm season vegetables such as beans, cucumbers, and squash.
- 6. Make sure garden is well mulched to protect plants during the heat.
- 7. Deadhead perennials to encourage more flowers.

Fall Tips:

- 1. Add bulbs to the garden now for early spring bloom. Loosen compacted soils and amend areas to be planted.
- 2. Fall is a great time for planting, and many nurseries discount their plants.
- 3. Divide perennials with spreading root systems such as Iris, Coral Bells, Daylilies, Cranesbill and Peonies.
- 4. Fertilize your lawn but not your trees and shrubs. This is the most important time to fertilize your lawn to help it overwinter.

Winter Tips:

- 1. Winter water is important!
- Water at least twice in late fall and again later in winter if season is dry. Water only when temperatures are above freezing and the soil is not frozen. Do it early in the day so the water has time to get to the roots before freezing at night.
- 3. Wrap the trunks of newly planted trees with tree wrap from the base to the first branch.
- 4. Mulch perennial beds with leaves, wood shavings or other materials to help retain soil moisture and insulate vulnerable roots.
- 5. Prune deciduous trees and shrubs in late fall or winter except early spring bloomers.

What to do with all this information....

- Visit display gardens that feature Xeriscape plants
- Read inspiring books by passionate local gardeners
- Participate in local gardening classes
- Consult with a local nursery professional or a landscape designer for advise and planning

Be brave – and just do it!