



Sandy Vernon PKJ Design Group

Planting is Changing

Looking at Plant Communities to change the way we plant.

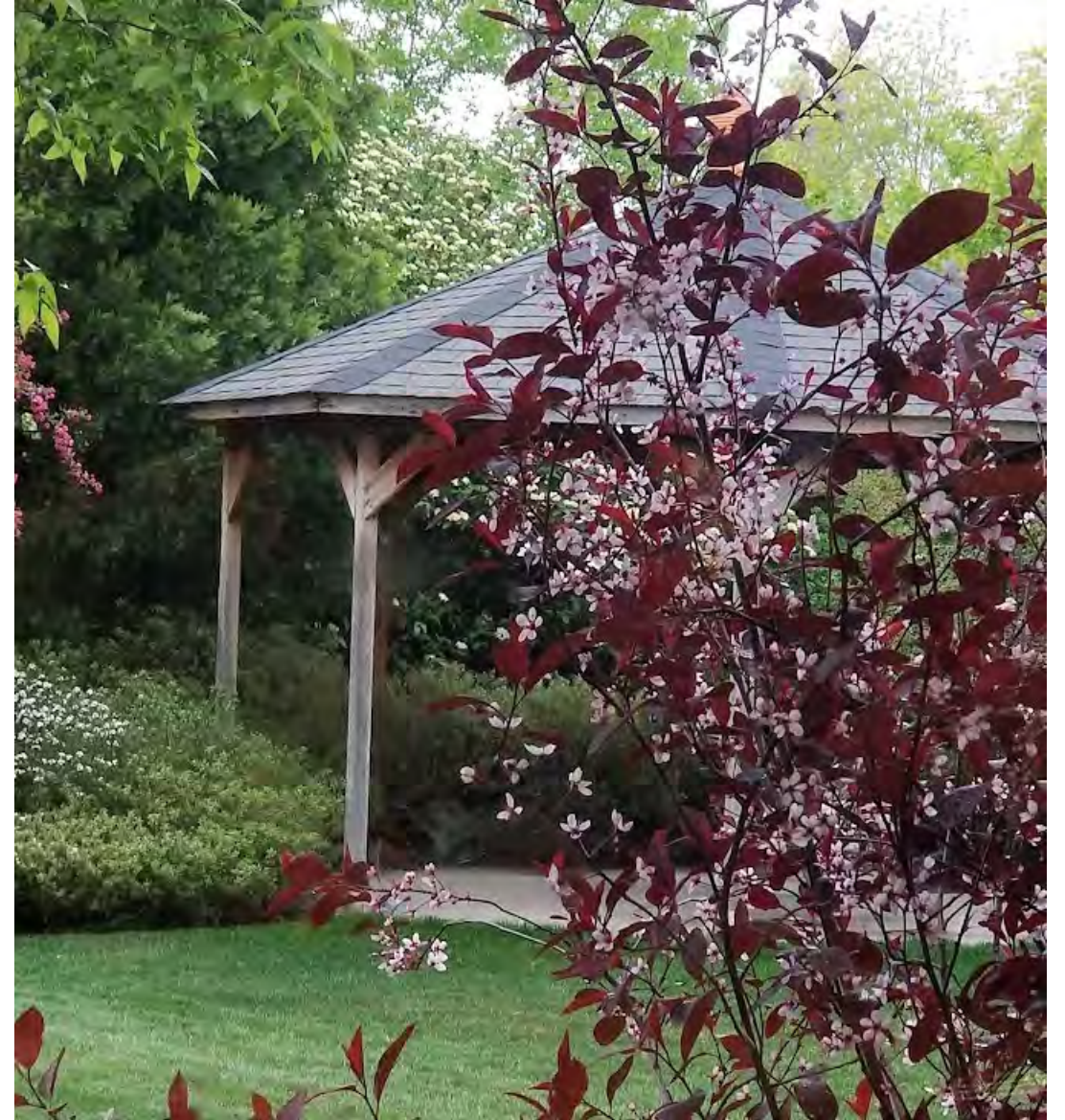




Adaptation in Crisis



Communities—plants and people





Time and Place

- **Time:** how long has this landscape been developing?
- **Place:** The spirit of a place, its atmosphere and quality of the environment as it relates to us







TRANSLATION

- Explore
- Observe
- Understand
- Translate











Why Change?

- Environmental
- Ecological
- Functional
- Aesthetics
- Emotional



WE ARE PREPARED

We Have

- Knowledge
- Understanding
- Purpose

- Desire
- Innovation
- Courage

A photograph of a house with a dark roof and red siding, partially obscured by tall, dry grass and trees. The scene is set in a rural or wilderness area with a mix of green and brown foliage.

“The front lines of the battle for nature are not in the Amazon rain forest or the Alaskan wilderness...
...the front lines are our backyards...”

Thomas Rainer and Claudia West
Planting in a Post Wild World



Plant Communities

NATURE

- Plant communities are made up of groups of overlapping populations that coexist and interact

DESIGN

- A designed plant community is an interpretation or translation of a wild plant community into a built landscape.

The background of the slide is a photograph of a field. It features tall, dry, golden-brown grasses that fill most of the frame. In the lower foreground, there are several green plants with dark, narrow leaves, possibly a species of willow or a similar shrub, which are slightly out of focus compared to the grass. The lighting appears to be natural, possibly from the side, creating some highlights on the grass.

Principle #1

RELATED POPULATIONS. NOT ISOLATED INDIVIDUALS



Principle #2

STRESS AS AN ASSET



Krummholz

- This unique environment found in the region around the treeline is referred to as a Krummholz region. It is a “Zone of Struggle.”
- Krummholz means “Crooked Wood”



Principle #3

COVER THE GROUND DENSELY BY VERTICALLY LAYERING PLANTS





Principle #4

MAKE IT ATTRACTIVE AND LEGIBLE







Principle #5

MANAGEMENT, NOT MAINTENANCE













Designing differently to meet the challenges
we now face



Let Nature Inspire You

Archetypes

Essence of Place



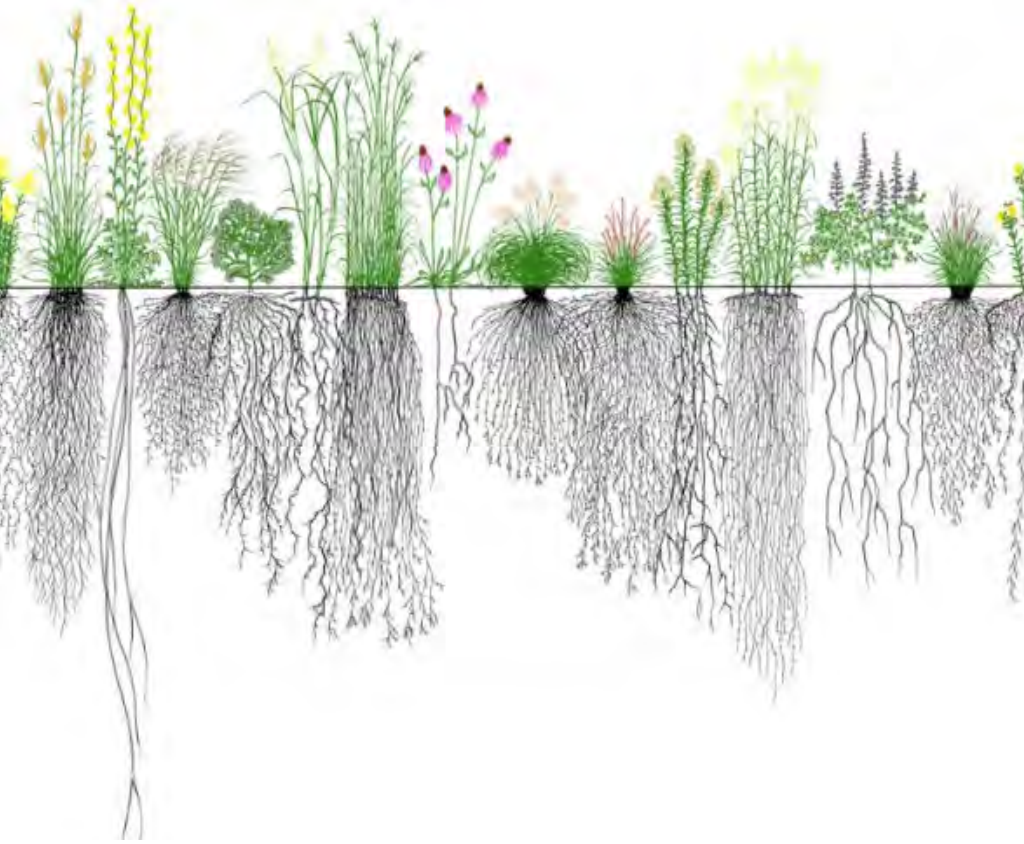
GRASSLANDS

SHRUBLANDS





GRASSLANDS



Dry Grasslands

- Shorter grasses
- Blues and silver-greys
- Strong horizontal line
- Many layers above and below ground



LAYERS

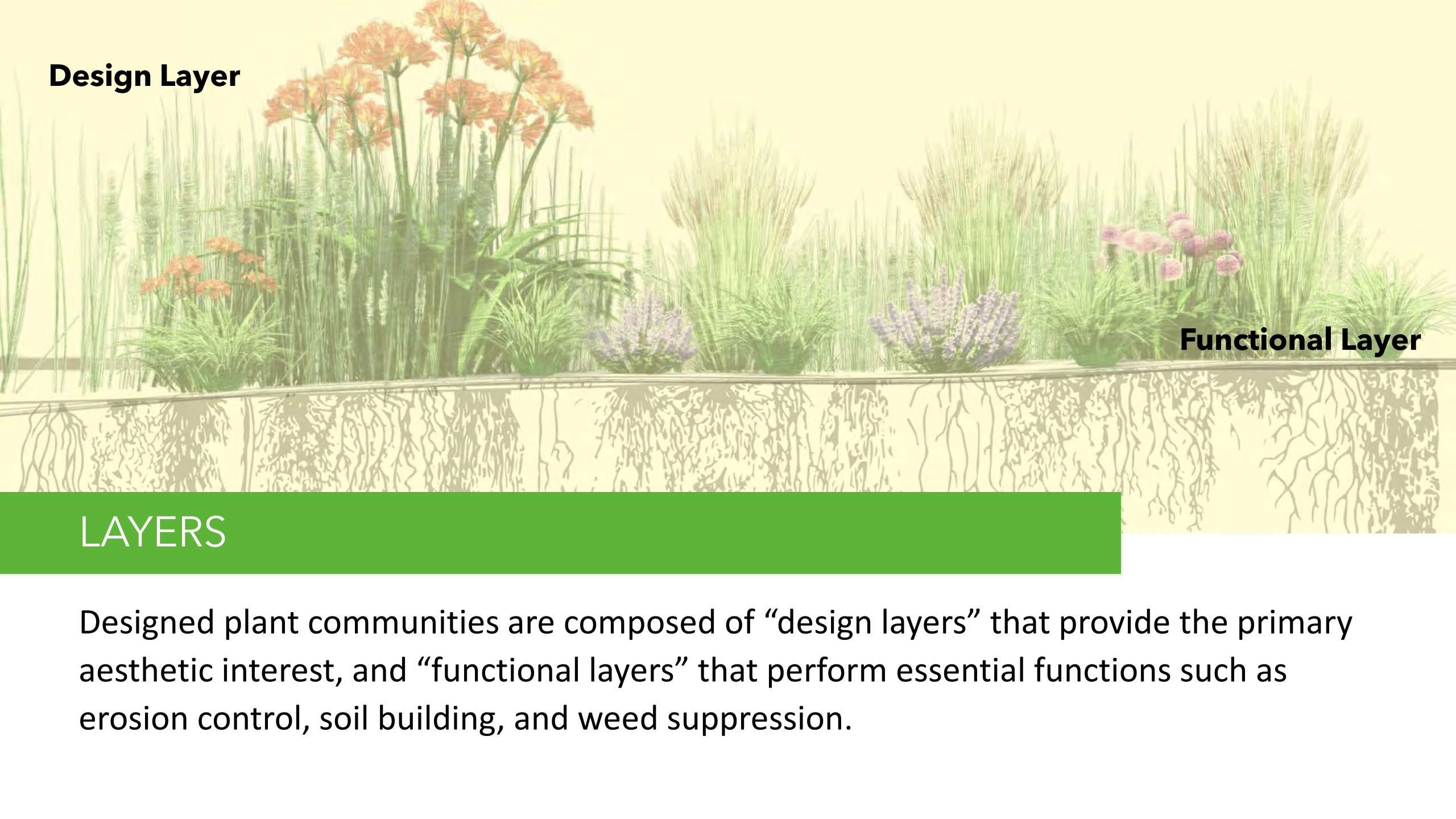
STRUCTURAL

Tall forbs and grasses
Persist through much of year
Strong enough stems for winter interest
Create the backbone of the plant community
Amidst seasonal changes they keep the design visible and stable

FUNCTIONAL

Seasonal
 Perennials in large quantities
Ground Cover
 Hug ground, prevent erosion, suppress weeds
Dynamic Filler
 Opportunistic, fill fast, good for early stages of planting
Time





Design Layer

Functional Layer

LAYERS

Designed plant communities are composed of “design layers” that provide the primary aesthetic interest, and “functional layers” that perform essential functions such as erosion control, soil building, and weed suppression.

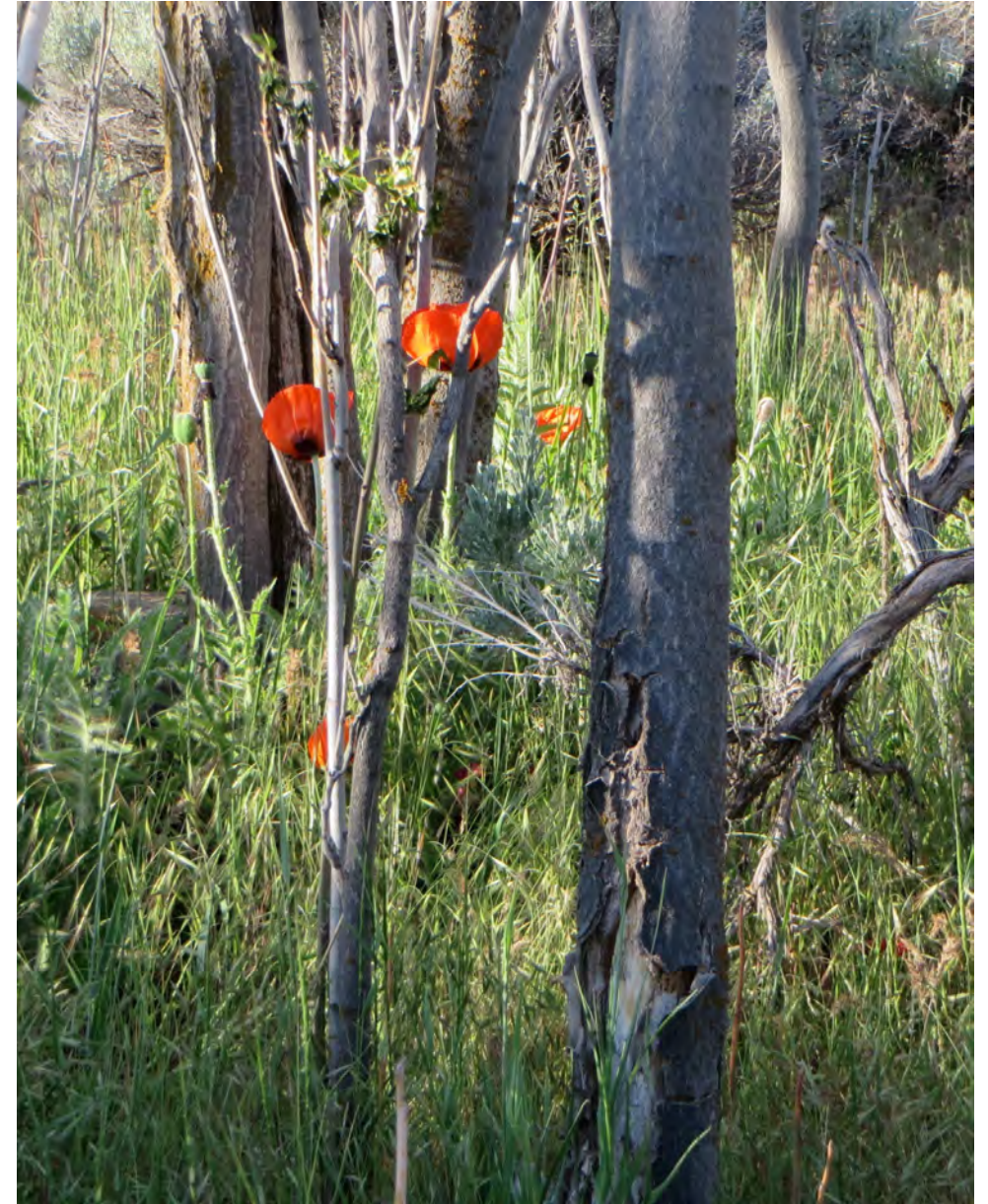


WOODLANDS AND SHRUBLANDS



WOODLANDS AND SHRUBLANDS

- Dry summers, moist winters
- Plants with small leaves, gray leaves, waxy coatings
- Ability to go dormant in heat of summer
- Works well for suburban landscapes



LAYERS

STRUCTURAL

CLUSTERED CANOPY

Clusters or groupings of trees

Minimal number of species

- Juniper
- Gambel Oak
- Pinyon Pine

Ability to grow into its true form without the shade forests create

FUNCTIONAL

GROUND LAYER

Woody Layer

Function as herbaceous ground covers

Adapted to dry, infertile soils

Herbaceous Layer

Tolerates wide range of sunlight

Can add to lower vertical structure



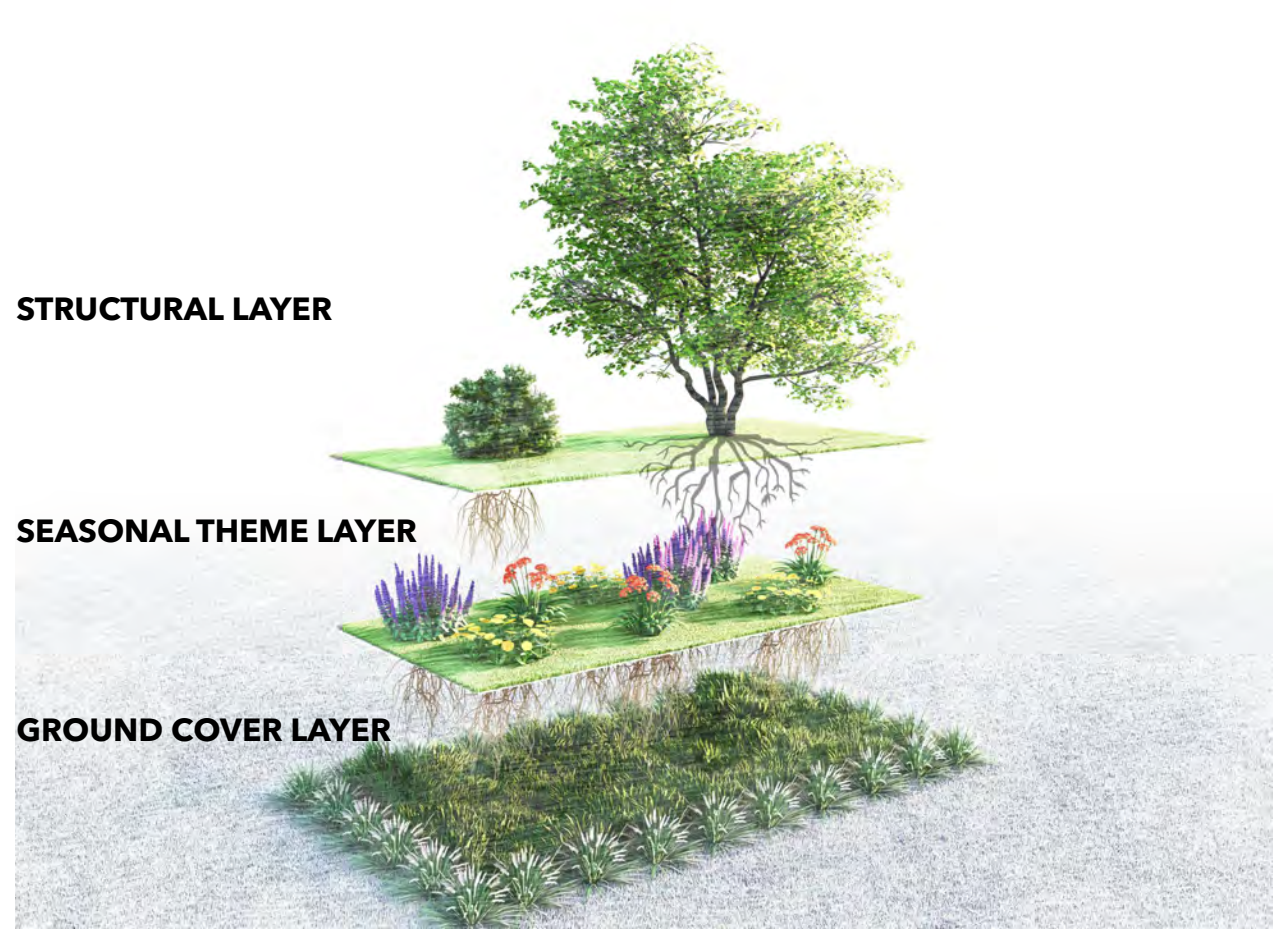




STRUCTURAL LAYER

SEASONAL THEME LAYER

GROUND COVER LAYER



LAYERS OF A DESIGNED PLANT COMMUNITY



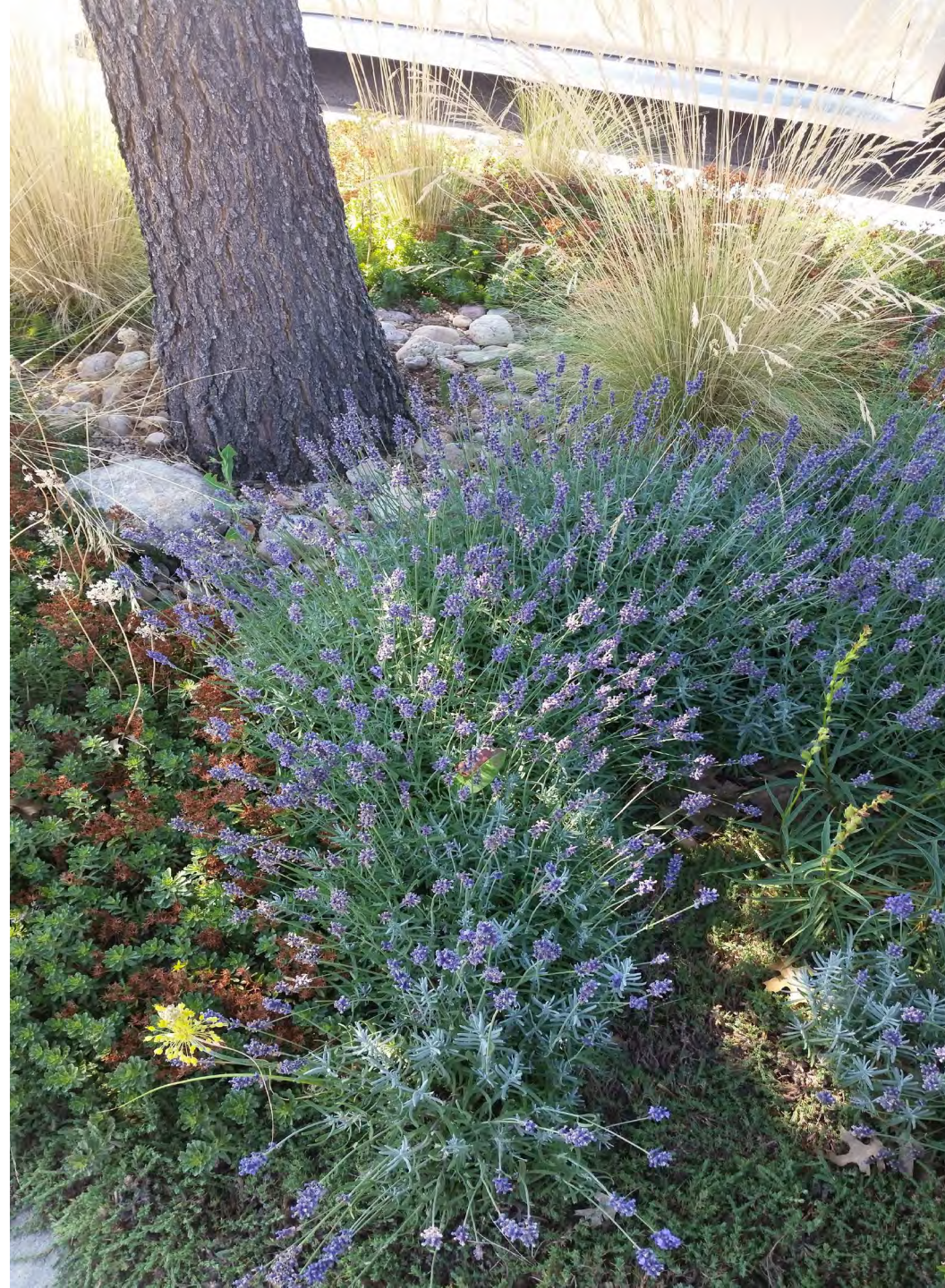


Site Preparation

SHORTCUTS

- There Aren't Any
- Remove weeds at root
- Remove weeds before going to seed
- Pre-emergent/Roundup?
- Water
- Time





NATURALISTIC PLANTING

ORNAMENTAL
HORTICULTURE

NATURALISTIC
PLANTING

ECOLOGICAL
RESTORATION

=====

High aesthetic value
Low ecological value
High maintenance
Low biodiversity

Moderate

low aesthetic value
High ecological benefits
Low maintenance
High biodiversity



Relationships

- Plants to Place
- Plants to People
- Plants to Other Plants

Where to Begin

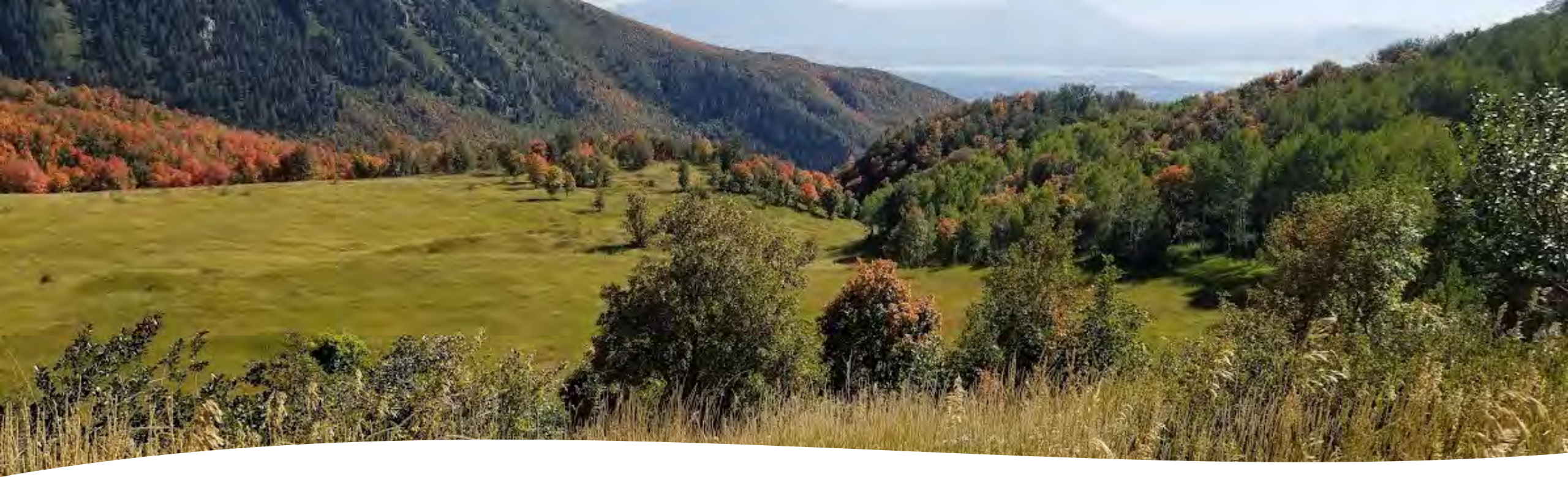
OBSERVE

1. Expand plant knowledge of plants from our area. Why are they growing where they are?
2. Notice patterns in plant communities: waves, drifts, where trees grow, where are grasslands found.
3. Examine how the layers work and weave together.

APPLY

1. How would this translate into a built environment?
2. Remember our designed landscapes
RESEMBLE something that occurs or exists in nature
3. Learn more/practice





Acts of Restorative Kindness to the Earth

“People travel the world over to visit untouched places of natural beauty, yet modern gardens pay little heed to the simplicity and beauty of these environments....

Those special places we all must preserve and protect, each in his own way, before they are lost forever.”

Mary Reynolds, Garden Designer
Chelsea Garden Show Application Nov. 2001

Learning More—Great Books to Read

- Planting in a Post Wild World

Thomas Rainer & Claudia West

- Naturalistic Planting

Nigel Dunnett

- The Dynamic Landscape

Nigel Dunnett, James Hitchmough

- Plant Driven Design

Lauran Springer Ogden

- Planting: A New Perspective

Piet Oudolf, Noel Kingsbury

- We Are the ARK

Mary Reynolds

- Steppes

Denver Botanic Garden

- The Crevice Garden

Kenton Seth, Paul Spriggs

Braiding Sweetgrass

Robin Wall Kimmerer