

Natural COMMUNITIES

#### of native plants are those related to their site and vary by region.

Using the resources at hand they evolved over thousands of years. They worked with the site's soils, sunlight, moisture, and wildlife. Together, they created functional ecosystems we call natural communities.

Something wonderful happens when we use the inspiration of natural plant communities. For example, a site with consistently moist soil can use wetland plants. Glade plants are at home in droughty sites with shallow soils. The **prairie's** expanses of grasses and perennials can inspire a no-mow meadow on an open site. Or, add trees and shrubs to mimic a forest or savanna.

Native plants of a natural community are resilient. They become landscape workhorses in settings with similar light and moisture needs. In fact, they embrace a site's challenges as desired features.

Together, native plants help us create a greener world.



# FOREST

natural community

Vital to life, forests **purify our air, filter our water, and prevent** erosion. They help store carbon, and act as a buffer against climate change.

Forests may be composed of large, canopy forming **trees.** Or it may have scattered trees with a patchwork of plant communities. The many layers of plants include understory trees, shrubs, ferns, and shade-loving perennials.

Combine trees and shrubs for **layers of seasonal interest on** large acreages.

| BOTANICAL NAME         | COMMON NAME       |
|------------------------|-------------------|
| Acer rubrum            | red maple         |
| Acer saccharum         | sugar maple       |
| Carpinus caroliniana   | american hornbeam |
| Carya cordiformis      | bitternut hickory |
| Carya ovata            | shagbark hickory  |
| Cladrastis kentukea    | yellowwood        |
| Cornus florida         | flowering dogwood |
| Hydrangea arborescens  | wild hydrangea    |
| Liriodendron tulipfera | tulip poplar      |
| Nyssa sylvatica        | black gum         |
| Quercus alba           | white oak         |
| Quercus bicolor        | swamp white oak   |
| Quercus macrocarpa     | bur oak           |
| Tilia americana        | american linden   |









ForrestKeeling.com







Matural

COMMUNITIES





ForrestKeeling.com





Natural || - S

#### help us rebuild ecological abundance.

Designing with **plant communities** helps create **resilient**, **emotionally** resonant outdoor environments. Rich and full of biodiversity, these partnership landscapes are sustainable. And they help us restore the earth's ecosystems.

Forest, wetland, prairie, savanna, glade. Each natural community offers **seasonal** beauty and supports wildlife. Places where we connect with nature and can celebrate that connection.

Beyond ecological support, high-performance natives can also match site goals. They can reduce maintenance, control erosion, and filter stormwater. They work well together and hold up under pressures of climate, pests, and diseases.



### GLADE natural community

Periodic fires and wildlife influence the glade's sparse and unique vegetation. Drought tolerant perennials and low- to mediumheight grasses combine in this resilient community. A few trees and shrubs also thrive in this environment.

Glades are open, sunny areas with shallow soils over bedrock at the edge of woodlands. You'll find glades in the Ozarks on steep south and west-facing slopes, or hilltops known as 'balds'. Its harsh environment **provides the only habitat to many native plants** and animals.

Lend the dramatic beauty of glades to sunny, dry, low maintenance areas. This unique ecosystem can inspire modern, urban landscapes

| BOTANICAL NAME                  | COMMON NAME            |
|---------------------------------|------------------------|
| Amorpha canescens               | leadplant              |
| Cercis canadensis               | eastern redbud         |
| Coreopsis lanceolata            | lanceleaf coreopsis    |
| Echinacea pallida               | pale purple coneflower |
| Liatris aspera                  | rough blazing star     |
| Oenothera macrocarpa            | missouri primrose      |
| Quercus marilandica             | blackjack oak          |
| Quercus stallata                | post oak               |
| Schizachryium scoparium         | little bluestem        |
| Sporobolus heterolepis          | prairie dropseed       |
| Symphyotrichum<br>oblongifolium | aromatic aster         |
| Rhus copallina                  | flameleaf sumac        |





Prairies evolved with North America's Midwest climate and wildlife over centuries. The extensive deep roots of native prairie plants channel water and nutrients deep into the soil. This can help reduce stormwater erosion and improve water quality. These plants provide **habitat** for many birds, pollinators, and other small wildlife.

moist, or wet.

#### BOTANIC

Aster novae-Baptisia austr Echinacea pa Echinacea pu Eryngium yud Liatris pycnos

Monarda fistu Ratibida pinn Rudbeckia hi Vernonia fasc



SAVANNA natural community

Savannas provide essential habitat for many plant and animal species. Managed grazing with up to 12 cattle per acre, for two to three days per month can reduce the shrub layer in oak savanna. It can also provide nutritional grazing and shade for cattle.

Midwest oak savannas form a transition between the Great Plains and eastern forests. The bur oak is the dominant species in northern oak savannas. In the south, there are more black oak or chinkapin oak.

This upland landscape offers wide spaced, open grown trees. Under the trees is an herbaceous, prairie-like understory. The understory can be a mix of grasses, perennials, and small trees or shrubs.

The savanna is an ideal inspiration for large, sunny urban and suburban landscapes.

| BOTANICAL NAME        | COMMON NAME        |
|-----------------------|--------------------|
| Amelanchier spp.      | serviceberry       |
| Carya ovata           | shagbark hickory   |
| Ceanothus americanus  | new jersey tea     |
| Cercis canadensis     | redbud             |
| Prunus serotina       | black cherry       |
| Quercus alba          | white oak          |
| Quercus macrocarpa    | bur oak            |
| Quercus muehlenbergii | chinkapin oak      |
| Quercus velutina      | black oak          |
| Quercus rubra         | red oak            |
| Quercus velutina      | black oak          |
| Viburnum dentatum     | arrowwood viburnum |



## PRAIRIE natural community

Full sun, low-height grasses and sedges, and long vistas characterize prairies. With less than 10% trees, the prairie landscape emphasizes **bold shapes.** Perennial wildflower drifts and woody shrubs masses can create **seasonal diversity.** Prairies can be **dry**,

A prairiescape can be a **cost-saving alternative** to **broad lawn** expanses and rights-of-way. Once established, prairies need little maintenance and are long lasting.

|           | COMMON NAME                   |
|-----------|-------------------------------|
| angliae   | new england aster             |
| alis      | blue false indigo             |
| llida     | pale purple coneflower        |
| irpurea   | purple coneflower             |
| ccifolium | rattlesnake master            |
| stachya   | blazing star<br>or gayfeather |
| ulosa     | wild bergamot                 |
| ata       | grey-headed coneflower        |
| rta       | black-eyed susan              |
| ticulata  | prairie ironweed              |
|           |                               |



### WETLAND natural community

These systems offer a rich system of plants and wildlife. Wetlands enhance water quality, control erosion, and mitigate the destruction of flood waters. They provide a home to at least one third of all threatened and endangered species.

Wetlands may be permanently of seasonally **flooded sites.** This saturation creates oxygen-deprived soils. A variety of native species thrive on wetland soils that can be both wet and dry. Because of this, wetland woody plants also perform well on compacted urban soils.

Native wetland plants can form the nucleus of a pond garden, bioswale or rain garden. Native plants have extensive root systems. When used in bioswales and rain gardens, those roots filter stormwater. This helps remove pollutants before entering our water table.

| BOTANICAL NAME            | COMMON NAME          |
|---------------------------|----------------------|
| Aronia melanocarpa        | black chokeberry     |
| Asclepias incarnata       | swamp milkweed       |
| Betula nigra              | river birch          |
| Carex stricta             | tussock sedge        |
| Cephalanthus occidentalis | buttonbush           |
| Cornus amomum             | silky dogwood        |
| Lobelia siphilitica       | blue cardinal flower |
| Nyssa sylvatica           | black gum            |
| Quercus bicolor           | swamp white oak      |
| Quercus lyrata            | overcup oak          |
| Quercus phellos           | willow oak           |
| Quercus texana            | nuttall oak          |
| Taxodium distichum        | bald cypress         |