



CONOCOCHÉAGUE

INSTITUTE

NATIVE SPECIES GUIDE

A guide on native species and
conservation management
practices implemented at the
Conococheague Institute



WHY NATIVE SPECIES?

Native plants are indigenous species that naturally inhabit and evolve in a particular region and are well-adapted to the ecological conditions within that area such as soil, temperature and water intake.

They play a key role in maintaining the health and balance of an ecosystem by providing essential resources such as food and habitat for native wildlife. Native plants also support biodiversity by supporting ecosystem interactions across the food web.

Since Native plants are well adapted to the area, using native plants often requires fewer resources compared to non native species. Due to these factors, using native species is a sustainable choice for landscaping and conservation purposes.

By preserving and installing native species, we are protecting local ecosystems and preserving the environment for generations to come.



THE SHADE GARDEN

Located under a chestnut, oak and pine tree at the front walkway of our site, the shade garden represents the diversity of flora that can exist in a forest in nature. It has a less formal layout than other landscapes, as the plants grow where the shade suits them best.

All of the plants are native to the region.



SHADE GARDEN SPECIES GUIDE



Blue Wood Aster

Symphyotrichum cordifolium

A herbaceous, low-maintenance perennial with blue/purple daisy-like flowers and heart-shaped leaves. Native to eastern and central North America.



Seaside Goldenrod

Solidago sempervirens

A native perennial plant with golden flower clusters that bloom late summer and autumn. Native to North America and Mexico



Spiderwort

Tradescantia virginiana

An herbaceous perennial wildflower with typically 3 purple or blue petals. Native to North and South America.

SHADE GARDEN SPECIES GUIDE



Thin Leaf Sunflower

Helianthus decapetalus

A rhizomatous perennial wildflower in the aster family that is found in woodlands and forests. Exhibits yellow flowers that can reach 3 inches across.



Obedient Plant

Physostegia virginiana

A perennial and member of the mint family that creeps by rhizomes. The plant stays obedient in the direction its positioned. Can have pink, purple or white flowers.



Prairie Phlox

Phlox pilosa

An herbaceous perennial wildflower. Exhibits lance shaped leaves with flowers ranging in the colors pink, purple and white

SHADE GARDEN SPECIES GUIDE



Columbine

Aquilegia

A native perennial wildflower with red and yellow bell shaped flowers that are 1 to 2 inches, that bloom in late spring to early summer



Heart Leaf Foamflower

Tiarella cordifolia

A perennial wildflower that loves cool, moist, shady areas. It has heart shaped leaves and produces white flowers with a hairy foam like appearance.



Ragwort

Packera aura

A wildflower within the aster family with basal laves and clustered yellow daisy like flowers.

SHADE GARDEN SPECIES GUIDE



Wild ginger

Asarum canadense

A member of the birth wort family wild ginger is a perennial with heart shaped leaves and reddish brown bell shaped flowers. This plant forms low shade loving colonies.



Cherokee Sedge

Carex cherokeensis

A clumping evergreen sedge that grows pendulous grass-like flowers in spring season. Pairs well with flowers and is slow spreading.



Rosy Sedge

Carex rosea

A semi-evergreen flowering perennial sedge with star shaped flowers in the spring. The flowers are tipped with a rosy hue. The leaves are fine and vibrant green in color.

SHADE GARDEN SPECIES GUIDE



Bee Balm

Monarda fistulosa

A perennial wildflower in the mint family. Considered a medicinal plant used in teas for ailments like sore throat. The flower is a showy pink or crimson.



Jacobs Ladder

Polemonium caeruleum

A perennial and spring ephemeral with oval leaves that grow in the appearance of a ladder. The flowers are blue to bluish purple. Is found in clumps in shaded conditions.



Pepper Bush

Clethra alnifolia

A deciduous bush with oval serrated leaves and bottle brush like flowers in pink or white. The stems are woody. This garden contains 2 ruby spice and 1 Vanilla spice.

SHADE GARDEN SPECIES GUIDE



Coral Berry

Symphoricarpos orbiculatus

A woody flowering shrub in the honeysuckle family. It has showy red or pink berries that persist through winter and has small rounded serrated leaves.



Carolina Allspice

Calycanthus floridus

A deciduous shrub that grows oval leaves and maroon to reddish brown flowers. The bush exudes a sweet smell and grows seed pods in the fall.





Encouraging stewardship

HOW TO IMPLEMENT YOUR OWN NATIVE SHADE GARDEN

By creating your own shade garden at home you can help encourage native species and keep our ecosystems healthy!

Step 1

Assess the site

Examine your site for any shaded areas. Then determine the amount of shade in the area daily.

Step 2

Select the right Plants

Research what plants would be suitable for the conditions of the site. Consider light exposure, water intake, nutrient needs

Step 3

Plan the Layout

Create a map or layout of how you want to arrange the plants you've chosen in your gardens. You're the designer have fun with this part. Consider companion planting for a higher success rate.

Step 4



Find a source

Find a reputable and ethical source to obtain your plant list from. Here at CI we use Native Niche as our plant source.

Step 5

Install

Once you obtain your plant follow your crop plan and install them into the soil. You now have a Shade Garden!



LAWN TO PRAIRIE: WHY PRAIRIES MATTER

While many people take pride in perfectly green lawns, lawns are increasingly characterized by a desire for less -- fewer weeds, fewer insects, and fewer brown patches. As such there's less biodiversity to support birds and other native wildlife.

Wildlife has three basic survival needs: food, water, and shelter. Expanses of pure, short-turf grasses don't fit these criteria.

Without flowers, there's no nectar for a butterfly to drink. Without native plants, there's no food for hungry caterpillars. Without hollow stems, native female bees don't have anywhere to lay their eggs and reproduce. In these wide expanses of lawn there's nowhere for creatures to seek refuge from the hot summer sun or heavy downpour.

As a result, the abundant flat sea of green lawn around the human-built environment contributes to a noticeable absence of variety.

The Conococheague Institute is proud to restore 3000 square feet of our lawn to native prairie, creating a rich habitat and an example to others. The following are prairie plants can be found in our prairie restoration area.

All of the plants are native to the region.

C.I PRAIRIE GUIDE: GRASSES

Little Blue Stem

Schizachryum scoparium

A perennial grass native to North America. This grass has a blue green hue and grows in dense clumps making it resilient to snow an rain. It can grow to 3 feet with tufted seeds turning reddish brown in the autumn.



Sideoats Grama

Bouteloua curtipendula

A grass native to North and South America. Its a perennial that grows 1 to 3 feet tall and can produce up to 50 spirelets. It has a zig zagged stalk with small compressed spikes and is a larval host for butterflies and moths



Big Bluestem

Andropogon gerardii

A perennial grass native to the plains of eastern and western North America. It has a blue hue like Little Bluestem but grows 6 to 8 feet, earning it's name. It is tolerant of a variety of soil conditions.



C.I PRAIRIE GUIDE: GRASSES

Yellow Prairie Grass

Sorghastrum nutans

A Perennial Grass that is native to North America. It has a yellow green hue and can reach 3 to 8 feet tall. In autumn it gets coppery seed heads. It also serves as a larval host plant for insects such as butterflies' and moths however, its too aggressive for most Gardens



Switchgrass

Panicum virginianum

A native Perennial grass that is native to North America from the great plains to Mexico. Most native switchgrass grows up to 5 ft while certain strains can reach 10 ft. The leaves are a bright green that turns yellow in the fall. Developing red and purple seed heads.



Purple Lovegrass

Eragrostis spectabilis

A perennial grass that is native to North and South America. It grows in tufts up to 2 feet tall. It is well behaved and drought hardy, getting its name from its vibrant purple seed heads



C.I PRAIRIE GUIDE: GRASSES

Virginia Wildrye

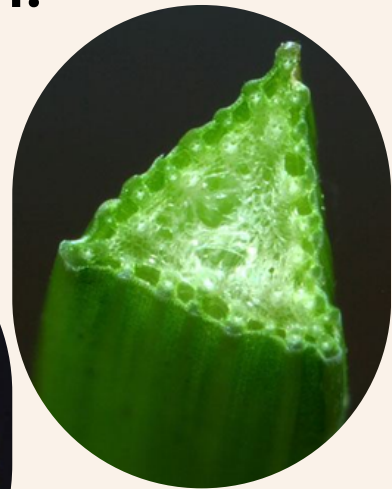
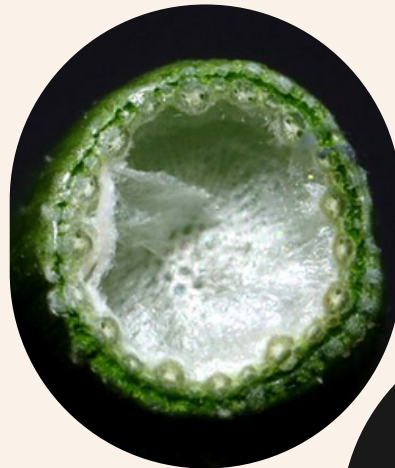
Sorghastrum nutans

A perennial bunchgrass native to eastern North America and parts of the mid west. It grows 2 - 4 feet tall and loves loamy and clay soils. The plant exhibits a gray green or blue green color and grows on clumps with seed heads 2 to 4 inches in length.



Can you tell the difference between, sedges, rushes and grass? Remember this helpful rhyme to aid in your identification!

“Sedges have edges, rushes are round, and grasses have nodes that bend to the ground!”



C.I PRAIRIE GUIDE: FLOWERING FORBES

Butterfly Milkweed

Asclepius tuberosus

A perennial species of milkweed native to eastern and southwestern North America. It grows to 2 ft tall and exhibits vibrant orange flowers. This plant is important to support pollinator populations, such as the currently endangered Monarch Butterfly



Scaley Blazingstar

Liatris squarrosa

A herbaceous perennial native to eastern and central North America. It can grow to 3 ft tall with linear green leaves. The flowers are magenta to pink in color and have tubular shaped petals. Each spike can have up to 40 flower heads.



Thinleaf Mountain Mint

Pycnanthemum tenuifolium

A perennial flowering plant within the mint family. It native to North America and can grow up to 4ft tall and exhibits white flowers, different varieties have been know to have purple and blue spots. It has thin narrow leaves and blooms all summer from June to September.



C.I PRAIRIE GUIDE: FLOWERING FORBES

Gray Goldenrod

Solidago nemoralis

A thin stemmed perennial plant with small course toothed leaves native to North America. This golden rod is on the shorter side usually not getting taller than 2 ft with leaning cluster of yellow flowers. The name is derived from its gray tinted stem.



Early Goldenrod

Solidago juncea

Another perennial species of a Golden rod native to north america. This golden rod has large toothed leaves and can grow to 4 ft in height. It displays yellow clusters of flowers and gets its name from being the earliest golden rod to bloom.



Slender Lespedeza

Lespedeza virginica

This perennial is in the pea family and is also known as bush clover. It can grow to 3ft tall and exudes pink pea like flowers. It has thin, narrow leaves. This flower is not to be confused with the invasive look alike *Sericea lespedeza*. The difference between the two visually are that slender lespedeza has pink flowers.



C.I PRAIRIE GUIDE: FLOWERING FORBES

Narrowleaf Sundrop

Oenothera fruticosa

An erect herbaceous perennial growing to 20–90 cm. The saucer shaped yellow flowers appear in late spring and summer. The fruit is a capsule that is strongly angled or winged and shaped like a club.



Aromatic Aster

Symphyotrichum oblongifolium

Aromatic Aster is one of the last Aster species to bloom in the fall. Completely covered in light purple flowers when blooming, the flowers will turn reddish purple as they mature. Despite the name, the flowers have no aroma, but the leaves do when crushed.



Smooth Aster

Symphyotrichum laeve

They are usually hairless, and the leaf edges are entire or bluntly or sharply toothed sometimes with smaller teeth.

The seeds have pappi, like the hairs on dandelion seeds, the pappi allow the seeds to be spread by the wind.



C.I PRAIRIE GUIDE: FLOWERING FORBES

Black-Eyed Susan

Rudbeckia hirta var. *hirta*

The specific epithet *hirta* is Latin for "hairy", and refers to the trichomes occurring on leaves and stems. The black-eyed Susan was designated as the state flower of Maryland in 1918



Ten petaled sunflower

Helianthus decapetalus

An attractive woodland sunflower with smooth green, reddish or purple stems. From mid-summer until autumn, golden 3" daisies grace the plant and entice bees, butterflies and other pollinators.



Foxglove Beardtongue

Penstemon digitalis

A semi-evergreen flowering perennial sedge with star shaped flowers in the spring. The flowers are tipped with a rosy hue. The leaves are fine and vibrant green in color.

The plant is not poisonous, unlike the foxglove plant (*Digitalis purpurea*), which is toxic to humans and animals



C.I PRAIRIE GUIDE: FLOWERING FORBES

Wild Bergamot

Monarda fistulosa

Monarda fistulosa, the wild bergamot or bee balm, is a wildflower in the mint family Lamiaceae, widespread and abundant as a native plant in much of North America.



Small's Ragwort

Packera anonyma

As one of the first native flowers to bloom in abundance, it is a favorite of the early-season butterflies and several bees and beetles. It is also a host plant to the Gem moth (*Orthonama obstipata*)



Golden Alexander

Zizia aurea

Golden Alexanders is covered with brilliant golden, three to four inch-wide umbels that bloom for several weeks in late spring. This is an excellent low-growing perennial for heavy clay soils in semi-shade to full sun.



C.I PRAIRIE GUIDE

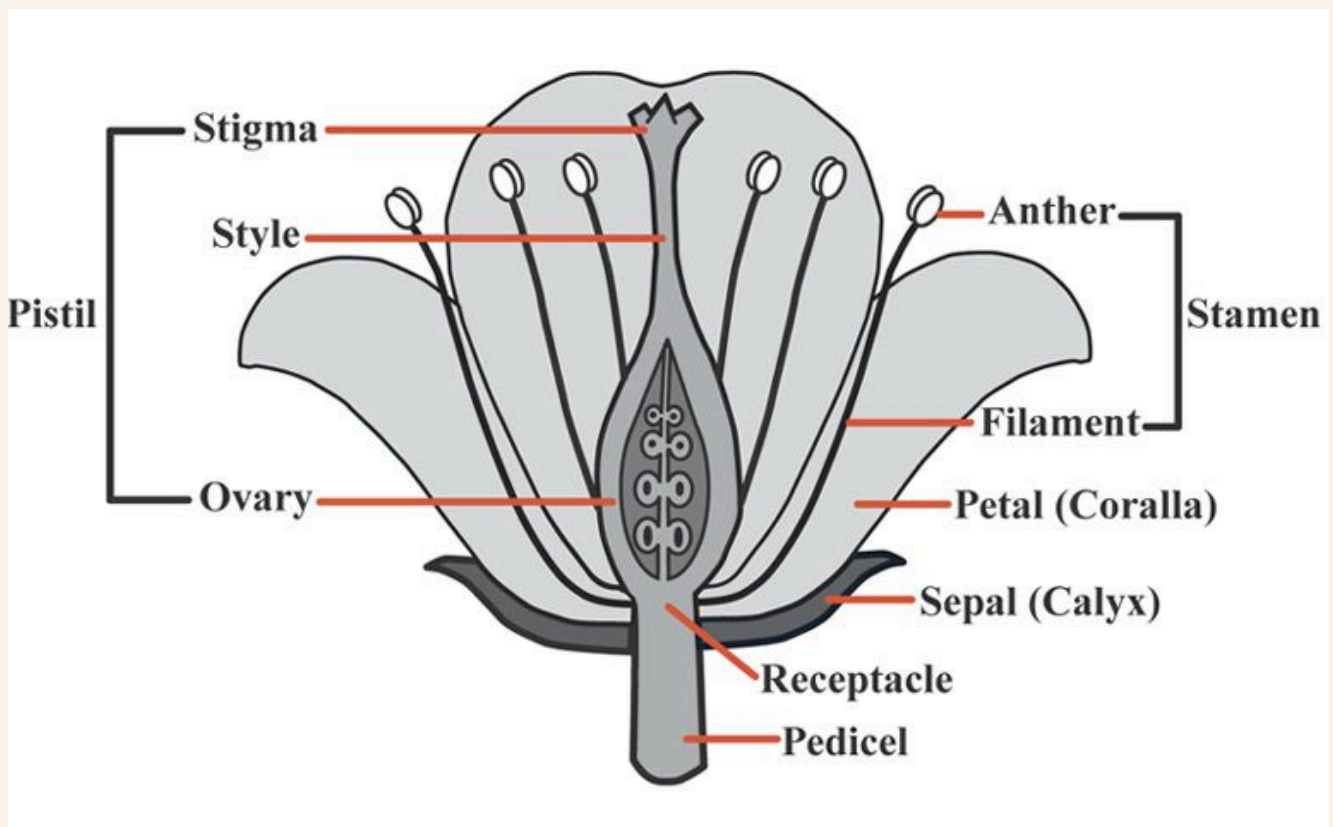
Red Columbine

Aquilegia canadensis

A native perennial wildflower with red and yellow bell shaped flowers that are 1 to 2 inches, that bloom in late spring to early summer. Numerous medicinal uses in American Indigenous communities



Knowing the different parts of a flower's structure can make identifying easier. Below is a diagram for flower identification.



HOW TO IMPLEMENT YOUR OWN LAWN TO PRAIRIE CONVERSION

Turning your lawn into a prairie will save you time and money mowing in the long run, while providing a beautiful natural habitat

Step 1

Kill the lawn

Renting a sodcutter (as we did) is physically demanding, but provides a quick solution. A simpler but slower method is to cover the lawn with cardboard then add a layer of compost. After 6–8 weeks, the grass should die and decompose.



Step 2

Plan the Matrix

We used 2000 plant plugs. Every 16 inches was a grass variety to form a square grid, and inside each square was a different flowering forb. Arrangements were made for height, color matches, and to display natural drifts



Step 3

Plant

Using a small hand trowel, make a hole the size of the plant plug. Gently massage the bottom of the plant to loosen the roots. Gently place the plug in the hole and tuck the soil around the roots. Pat the soil to remove air pockets. Water and wait!

LAWN TO PRAIRIE CONVERSION MADE POSSIBLE BY THE FOLLOWING CONTRIBUTORS



THE FOUNDATION FOR ENHANCING COMMUNITIES

Thomas G. & Nancy H. Burkey Fund

Thomas and Nancy had a deep love of CI's regional history and beautiful landscapes, and their family contributed \$5,600 to support our Lawn to Prairie conversion project in the memory. They hope that the conservation efforts at CI will encourage others in the community to emulate it in their own gardens. A

Additional donations were made by the Rotary Club of Hagerstown, Gaye McGovern, Richard Bell and by people like you. Thank you!

THE NATIVE NICHE

<https://www.thenativeniche.com/>

Becky Shubert of the Native Niche has long supported CI's projects, and her help has been invaluable.

They are a small family-owned business with a mission to help homeowners create beautiful easy-care and wildlife-friendly landscapes through the use of native plants.

Find out more by contacting: thenativeniche@gmail.com



WILSON COLLEGE

Karlee Lisinski - 2024 Environmental Intern

Booklets are printed materials with four or more pages, containing details about a business, event, product, promotion, etc. They are also known as catalogs or pamphlets, and are usually created to communicate a message to a wide variety of audiences.

MERCERSBURG ACADEMY

Community Engagement Students

Each week students from Mercersburg Academy volunteer at CI, and in the Fall of 2024 this included the majority of our native plantings. Thank you to the students who selflessly gave their time to undertake this work, no matter the weather conditions.

While working together as a team, they built experiences and bonds, while making a big impact on our environment.



and all the CI staff and volunteers who helped along the way...



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MAKE A DONATION

