

Native Ground Covers of Western Pennsylvania for Lawn Alternatives

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Works Cited

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Why replace your lawn?

There are many benefits of replacing traditional turf lawns and landscaping with native plants, which is also known as naturescaping. Lawn maintenance is time consuming, energy intensive, expensive and can be toxic. Choosing the right plants can drastically reduce or eliminate the maintenance required on your property.

According to the EPA, one traditional gas powered lawn mower emits 88lbs of the greenhouse gas CO₂ per year. The same mower also emits high levels of carbon monoxide, volatile organic compounds and nitrogen oxides, producing up to 5% of the nation's air pollution. One lawn mower run for one hour emits the equivalent air pollution of eleven cars being driven at 55mph for one hour.

Lawns need to be mowed roughly once per week during the growing season to keep up with municipal standards. How much time do you spend in the spring and summer mowing your lawn to avoid a high grass notice? How often do you hear the loud hum of the lawn mower in your neighborhood? Do you spray your lawn with chemicals to keep it lush and green? Naturescaping means a reduction in carbon emissions, air and noise pollution and potentially toxic chemicals; it's a time, money and energy saver.

The possibilities of replacements for a lawn are endless. You could return the lawn to a meadow, grow food, or plant native wildflowers or trees to name a few. This pamphlet explores native to Western Pennsylvania, low-growing and low-maintenance groundcovers which act as a lawn alternative for the front of your property, where municipal requirements may prohibit returning to meadow or growing food. For other ideas, a simple internet search will provide more than enough resources.

How to remove your grass

Once you decide what to plant in place of your lawn, the grass needs to be suppressed. There are multiple methods for this:

Sheet Mulch it

This is also known as lasagna composting. Using recycled brown cardboard or newspaper, spread multiple layers down over the grass you wish to eliminate and water thoroughly. Mulch with 3" of compost, wood chips or manure and let sit for about two months until the cardboard has broken down and the soil is ready to be planted.



Shade it Out

Plant things that will shade out the grass. This can be done by planting viney, creeping vegetables such as zucchini, pumpkins or other squash. This technique is not as clean and precise as other methods, as the shade out will happen where the plants and trees decide to grow.



Hack it Up

You could always take a pulaski to it and just hack it up. This is time and energy intensive. You may also expose other weeds, which will need to be suppressed by mulching the exposed area or planting a cover crop.



Pennsylvania Sedge *Carex pensylvanica*

Type: Rush or Sedge
Family: Cyperaceae
Native Range: Canada, US
Zone: 3 to 8
Height: 0.50 to 1.00 feet
Spread: 0.50 to 1.00 feet
Bloom Time: May
Sun: Part shade to full shade
Water: Dry to medium
Maintenance: Low
Suggested Use: Ground Cover, Naturalize, Rain Garden
Tolerate: Heavy Shade, Wet Soil



Easily grown in average, dry to medium, well-drained soils in part shade to full shade. Prefers loose loams in dry soils in sun-dappled part shade. Plants spread by rhizomes and may self-seed in optimum growing conditions.

Pennsylvania Sedge typically grows in loose colonies with a creeping habit and is often found in areas with oak trees. It is semi-evergreen in moderately cold winter climates. Typical garden uses include groundcover for dry shade, underplanting for shade perennials, lawn substitute for dry soils in shady areas (forms a turf that never needs mowing or mow 2-3 times per year to 2" tall). It may be best to use purchased plants for covering large areas because this species often does not grow well from seed.

Partridge Berry *Mitchella repens*

Type: Evergreen perennial
Family: Rubiaceae
Native Range: Eastern Canada, US
Zone: 4 to 8
Height: Up to two inches
Spread: 6-12 inch spines
Bloom Time: Late Spring- Early Summer
Sun: Part shade to full shade
Water: Low to moderate watering- moist, but well-drained soil
Maintenance: Low
Suggested Use: Ground cover, shade garden, berries used as medicinal herb
Tolerate: Very cold winters, some drought



Partridge Berry is a beautiful addition to winter gardens. During the cold days of late winter Partridge Berry shows off its deep, dark-green leaves and occasional scarlet berries. In a garden setting this evergreen prefers shade, accepting the morning sun. The best way to introduce this native into your garden is through 1 year old cuttings or by division. In the garden situation they will form a thick, substantial ground cover. Once established they are relatively trouble free with the only required maintenance of keeping garden debris from covering the mats.

Nodding Onion

Allium cernuum

Type: Bulb
Family: Amaryllidaceae
Native Range: Canada to Mexico
Zone: 4 to 8
Height: 1.00 to 1.50 feet
Spread: 0.25 to 0.50 feet
Bloom Time: June - August
Bloom Description: Pink
Sun: Full sun to part shade
Water: Dry to medium
Maintenance: Low
Flower: Showy
Leaf: Fragrant
Attracts: Butterflies
Tolerate: Deer, Drought, Dry Soil, Shallow-Rocky Soil, Black Walnut



Blooms in summer. All parts of this plant have an oniony smell when cut or bruised. Although the bulbs and leaves of this plant were once used in cooking (stews) or eaten raw, nodding onion is not generally considered to be of culinary value today.

Nodding Onion is easily grown in average, dry to medium, well-drained soil in full sun to light shade. Plants will naturalize by self-seeding and bulb offsets in optimum growing conditions. Deadhead flowers before seed sets to help control unwanted spread. Foliage persists past flowering into late summer before dying back. Plants are easily grown from seed which should be planted in spring or from bulbs which should be planted in autumn.

Spiderwort

Tradescantia virginiana

Type: Herbaceous perennial
Family: Commelinaceae
Native Range: Eastern United States
Zone: 4 to 9
Height: 1.50 to 3.00 feet
Spread: 1.00 to 1.50 feet
Bloom Time: May to July
Bloom Description: Blue to violet-blue
Sun: Part shade to full shade
Water: Medium
Maintenance: Medium
Suggested Use: Naturalize
Flower: Showy
Tolerate: Clay Soil, Black Walnut

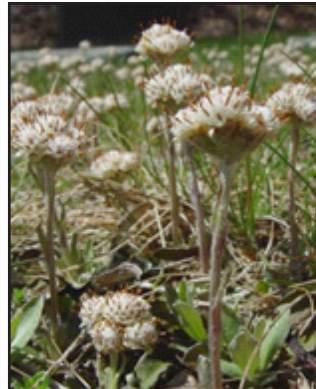


Grow in average, medium moisture, well-drained soil in part shade to full shade. Prefers moist, acidic soils. Tolerant of poor soils. Divide clumps when they become overcrowded. Foliage declines after flowering and should then be cut back almost to the ground to encourage new growth and a possible fall bloom. Can self-seed and spread in ideal growing conditions. An interesting and long-blooming perennial for native plant gardens, woodland or shade gardens, wild gardens or naturalized areas.

Field Pussytoes

Antennaria neglecta

Type: Perennial forb/herb
Family: Asteraceae
Height: 4 inches- 12 inches
Bloom Time: April- June
Bloom Description: White
Habitat: Mesic to dry black soil prairies, clay prairies, slopes of open woodlands, dry meadows in woodland areas, savannas, shale glades, eroded clay banks, pastures, abandoned fields, and roadsides and disturbed areas
Sun: Part shade, sun; dry fields, prairies, open woods- does not tolerate shade
Water: Dry to moderately moist
Maintenance: Low
Attracts: Butterflies
Tolerate: Deer, Drought, Dry Soil, Shallow-Rocky Soil, Black Walnut



Blue Mistflower

Conoclinium coelestinum

Type: Herbaceous perennial
Family: Asteraceae
Native Range: Central and Southeastern US, West Indies
Height: 1.50 to 3.00 feet
Bloom Time: July to October
Bloom Description: Blue
Sun: Full sun to part shade
Water: Medium, well drained
Maintenance: Medium
Suggested Use: Naturalize
Attracts: Bees and butterflies
Propagation: Divide every three years to control growth, cut back in summer to promote denser habitat

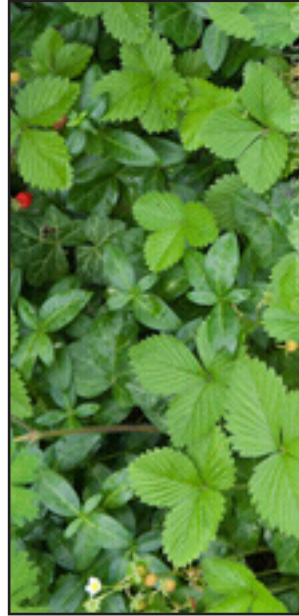


Easily grown in average, medium, well-drained soil in full sun to part shade. Prefers moist soils in full sun. Divide every three years to control growth. Cut back in summer to promote denser habit. Provides excellent late summer to frost bloom for the perennial border. Contrasts well with white and yellow chrysanthemums. Also effective in wild gardens, meadows, native plant gardens and naturalized areas.

Virginia Strawberry

Fragaria virginiana

Type: Wildflower Perennial
Family: Rosaceae
Native Range: US
Zones: 5-8
Height: 5 inches
Bloom Time: April-June
Bloom Description: White with red fruit
Sun: Full to partial
Water: Moist to dry, fertile soil
Maintenance: Low
Attracts: Bees, caterpillars, insects, vertebrates, livestock
Propagation: Best introduced into a situation using plants, as seed is not commercially available. Wild Strawberry is rhizomatous; it spreads by runners.



Lyre-Leaved Sage

Salvia lyrata

Type: Herbaceous perennial
Family: Lamiaceae
Native Range: Eastern and Central US
Zone: 5 to 8
Height: 1.00 to 2.00 feet
Spread: 0.75 to 1.00 feet
Bloom Time: April to June
Bloom Description: Purple
Sun: Full sun
Water: Medium to wet
Maintenance: Medium
Suggested Use: Rain Garden
Flower: Showy
Attracts: Butterflies
Tolerate: Deer, Clay Soil, Wet Soil, Shallow-Rocky Soil



Easily grown in average, medium to wet soils in full sun. Prefers moist, sandy or clay soils. Tolerates very light shade, but best in full sun. Also tolerates heat and humidity. Self-seeds and naturalizes in optimum growing conditions.

Wild Geranium

Geranium maculatum

Type: Herbaceous Perennial
Family: Geraniaceae
Native Range: Northeastern US
Zone: 3-8
Height: 1.5 to 2 feet
Bloom Time: April-May
Bloom Description: Pale pink, deep pink, lilac
Sun: Full to part shade
Water: Medium
Maintenance: Medium
Attracts: Butterflies
Tolerates: Rabbit, Deer, Drought, Dry Soil
Propagation: Root division or seed sowing in late fall or early spring



Easily grown in average, medium, well-drained soil in full sun to part shade. Prefers moist, humusy soils, but tolerates poor soils. Will naturalize in optimum growing conditions. Deadheading is unnecessary since plants usually do not repeat bloom. Foliage may yellow in hot summers if soil is allowed to dry out.

Three-Leaved Stonecrop

Sedum ternatum

Type: Herbaceous perennial
Family: Crassulaceae
Native Range: Eastern United States
Zone: 4 to 8
Height: 0.25 to 0.50 feet
Spread: 0.50 to 0.75 feet
Bloom Time: April to May
Bloom Description: White
Sun: Full sun to part shade
Water: Medium
Maintenance: Low
Suggested Use: Ground Cover, Naturalize
Flower: Showy
Attracts: Butterflies
Tolerate: Rabbit, Deer, Drought, Air Pollution



Easily grown in average, medium, well-drained soils in full sun to part shade. Tolerates part shade and moist soils better than most other sedums. Best in rock gardens, as a ground cover or in a native plant garden.

Coral Bells

Heuchera americana

Type: Herbaceous perennial
Family: Saxifragaceae
Native Range: North America
Height: 1 to 2 feet
Bloom Time: June to August
Bloom: Greenish white with red tinge
Sun: Full sun to part shade
Water: Medium
Maintenance: Low
Tolerate: Drought
Propagation: Root division in spring or fall, seed sowing in spring



Attractive foliage and airy flower panicles provide color and contrast to the rock garden, perennial border, native plant garden, open woodland garden or shade garden. Good edging plant. Mass to form an attractive ground cover.

Best grown in organically rich, humusy, medium moisture, well-drained soils in full sun to part shade. Does well in full sun in the northern part of its range. Remove stems of faded flower panicles to encourage continued bloom. In cold winter climates, a winter mulch applied after the ground freezes will help prevent root heaving. Divide clumps in spring every 3-4 years.

Creeping Phlox

Phlox stolonifera

Type: Herbaceous perennial
Family: Polemoniaceae
Native Range: Southeastern United States
Zone: 5 to 9
Height: 0.50 to 1.00 feet
Spread: 0.75 to 1.50 feet
Bloom Time: July to September
Bloom Description: Purple/violet
Sun: Full sun to part shade
Water: Medium
Maintenance: Low
Suggested Use: Ground Cover, Naturalize
Flower: Showy
Tolerate: Rabbit, Deer, Drought, Air Pollution



Best grown in humusy, medium moisture, well-drained soil in full sun to part shade. Self-seeds in optimum growing conditions. Best used as a ground cover for woodland gardens, shade gardens, native plant gardens or naturalized areas. Also an effective cover for early spring bulbs. Also appropriate for shaded areas of border fronts and rock gardens.

Beard Tongue

Penstemon digitalis



Type: Herbaceous perennial
Family: Plantaginaceae
Native Range: Eastern and southeastern United States
Height: 3 to 5 feet
Zone: 3-8
Bloom Time: April to June
Bloom Description: White
Sun: Full sun
Water: Dry to medium
Maintenance: Medium
Suggested Use: Naturalize, Rain Garden
Flower: Showy, Good Cut
Attracts: Birds, Butterflies
Tolerate: Deer, Drought, Clay Soil, Dry Soil

Grow in average, dry to medium moisture, well-drained soil in full sun. Avoid wet, poorly drained soils. Best use is to mass in sunny borders, wild gardens, native plant gardens or naturalized areas.

Blue-Eyed Grass

Sisyrinchium angustifolium

Type: Herbaceous perennial
Family: Iridaceae
Native Range: Southeastern US
Zone: 4 to 9
Height: 1.50 to 2.00 feet
Spread: 0.50 to 1.00 feet
Bloom Time: May to June
Bloom Description: Blue
Sun: Full sun
Water: Medium
Maintenance: Medium
Suggested Use: Ground Cover, Naturalize
Flower: Showy, Good Cut



Best naturalized in informal garden areas such as cottage gardens, woodland gardens, wild gardens or native plant areas. Also effective in border fronts and rock gardens. Also effective as an edger for paths or walkways.

Best grown in medium moisture, well-drained soil in full sun. Tolerates light shade. Will freely self-seed in optimum growing conditions. Plantings may be sheared back after bloom to avoid unwanted self-seeding. May need to be divided every 2-3 years to keep plantings vigorous.

Common Blue Violet

Viola sororia

Common Name: common blue violet
Type: Herbaceous perennial
Family: Violaceae
Native Range: Eastern North America
Zone: 3 to 7
Height: 0.50 to 0.75 feet
Spread: 0.50 to 0.75 feet
Bloom Time: April to August
Bloom Description: White, blue
Sun: Full sun to part shade
Water: Medium
Maintenance: Medium
Suggested Use: Ground Cover,
Naturalize



Flower: Showy
Attracts: Butterflies
Tolerate: Deer, Clay Soil, Black Walnut

Easily grown in average, medium, well-drained soil in full sun to part shade. Prefers humusy, moisture-retentive soils. Does not spread by runners, but freely self-seeds to the point of being weedy in optimum growing conditions. Best massed and left to spread undisturbed in open woodland gardens, wildflower gardens, native plant gardens or naturalized areas. Good small scale ground cover for areas along walkways or under shrubs.

Allegheny Spurge

Pachysandra procumbens

Common Name: Allegheny spurge
Type: Herbaceous perennial
Family: Buxaceae
Native Range: Southeastern US
Zone: 5 to 9
Height: 0.50 to 1.00 feet
Spread: 1.00 to 2.00 feet
Bloom Time: March to April
Bloom Description: White
Sun: Part shade to full shade
Water: Medium
Maintenance: Low
Suggested Use: Ground Cover, Naturalize
Flower: Showy, Fragrant
Tolerate: Drought, Heavy Shade
Tolerate: Clay Soil, Black Walnut



Best grown in acidic, organically rich, medium moisture, well-drained soils in part shade to full shade. For use as a ground cover, set starter plants 6-12" apart. This native woodland groundcover is slow to fill in, but gorgeous when it does, especially for its fall color. It's described variously as "semi-evergreen" or plain old "not evergreen" which seems to me it's evergreen in the warmer parts of its range. Farther north its leaves turn color and die in the fall.

Foam Flower

Tiarella cordifolia

Type: Herbaceous perennial
Family: Saxifragaceae
Native Range: Nova Scotia, Appalachian Mountains to Alabama West to Minnesota
Zone: 4 to 9
Height: 0.75 to 1.00 feet
Spread: 1.00 to 2.00 feet
Bloom Time: May
Bloom Description: White or pink
Sun: Part shade to full shade
Water: Medium
Maintenance: Low
Suggested Use: Ground Cover,
Naturalize
Flower: Showy
Leaf: Good Fall
Tolerate: Rabbit, Deer



Easily grown in average, medium, well-drained soil in part shade to full shade. Stoliferous. Prefer organically rich, moisture-retentive soils. Wet soils, particularly in winter, can be fatal, however. Soil should not be allowed to dry out. Use in shaded rock gardens, woodland gardens, border fronts, wild gardens, naturalistic plantings or moist areas along stream banks. Can be massed to form an attractive ground cover.

Bearberry

Arctostaphylos uva-ursi

Type: Herbaceous perennial
Family: Ericaceae
Zone: 2 to 6
Height: 0.50 to 1.00 feet
Spread: 3.00 to 6.00 feet
Bloom Time: April to May
Bloom Description: White with tinge of pink
Sun: Full sun to part shade
Water: Dry to medium
Maintenance: Low
Suggested Use: Ground Cover
Flower: Showy
Attracts: Birds
Fruit: Showy
Tolerate: Erosion



Grow in acidic, dry to medium, well-drained, sandy or gritty soils in full sun. Tolerates light shade. Usually grows well in poor infertile soils. This is a low growing evergreen shrub that makes a good ground cover in areas where it will perform well. It produces a leathery leaves that are in the shape of a spatula. The urn-shaped flowers are waxy-like and are produced in drooping clusters.

Turtlehead *Chelone glabra*

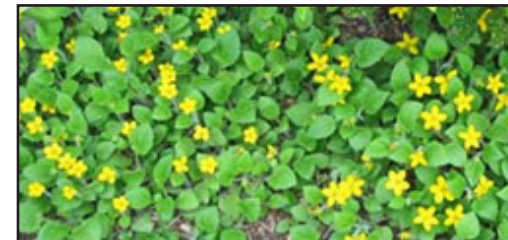
Type: Herbaceous perennial
Family: Plantaginaceae
Native Range: United States
Zone: 3 to 8
Height: 2.00 to 3.00 feet
Spread: 1.50 to 2.50 feet
Bloom Time: August to October
Bloom Description: White with pink tinge
Sun: Part shade
Water: Medium to wet
Maintenance: Low
Suggested Use: Naturalize, Rain Garden
Flower: Showy
Attracts: Butterflies
Tolerate: Erosion, Wet Soil



Best grown in moist to wet, rich, humusy soils in part shade. Appreciates a good composted leaf mulch, particularly in sunny areas. Consider pinching back the stem ends in spring to reduce mature plant height. Best used in shade or woodland gardens, bog gardens, pond or water garden peripheries, wildflower or native plant gardens. Borders as long as the soil moisture requirements can be met.

Green and Gold *Chrysogonum virginiana*

Type: Herbaceous perennial
Family: Asteraceae
Native Range: Eastern US
Zone: 5 to 9
Height: 0.50 to 1.00 feet
Spread: 0.75 to 1.50 feet
Bloom Time: May to October
Bloom Description: Yellow
Sun: Part shade to full shade
Water: Medium to wet
Maintenance: Low
Suggested Use: Naturalize, Rain Garden
Flower: Showy
Tolerate: Heavy Shade



Easily grown in average, medium moisture, well-drained soils in part shade to full shade. Prefers moist, acidic, organically rich soils in part shade. Tolerates full sun only if grown in consistently moist soils. Spreads by rhizomes to form an attractive ground cover, but is easily controlled. Remove spent flower stems for best ground cover appearance. Easily grown from seed and may self-seed in the garden.

Solomon's Seal *Polygonatum*

Type: Herbaceous perennial
Family: Asparagaceae
Native Range: Eastern United States, south-central Canada
Zone: 3 to 8
Height: 1.00 to 3.00 feet
Spread: 1.00 to 1.50 feet
Bloom Time: April to May
Bloom Description: Greenish white
Sun: Part shade to full shade
Water: Medium to wet
Maintenance: Low
Suggested Use: Naturalize, Rain Garden
Flower: Showy
Leaf: Good Fall
Tolerate: Erosion, Wet Soil



Easily grown in average, medium to wet, well-drained soil in part shade to full shade. Prefers moist, humusy soils. Slowly spreads by rhizomes to form colonies in optimum growing conditions. Best in woodland gardens, wild gardens, naturalized areas or native plant gardens. May be used in partially shaded borders or rock gardens. Good with astilbe and ferns.

Creeping Thyme *Thymus serpyllum*

Type: Herbaceous perennial
Family: Lamiaceae
Native Range: Northern Europe
Zone: 4 to 8
Height: 0.25 to 0.25 feet
Spread: 0.25 to 1.00 feet
Bloom Time: June to July
Bloom Description: Deep pink
Sun: Full sun
Water: Dry to medium
Maintenance: Low
Suggested Use: Ground Cover, Naturalize
Flower: Showy
Leaf: Fragrant
Attracts: Butterflies
Tolerate: Deer, Drought, Dry Soil, Shallow-Rocky Soil, Air Pollution
Attracts: Butterflies



Easily grown in average, dry to medium moisture, well-drained soils in full sun. Tolerates drought. Dislikes moist to wet soils where rot may develop. Plants are evergreen in mild winters. Cut back stems as necessary to maintain plant appearance and to control growth/spread. Divide plants that become densely woody. Species plants may be propagated by seed, but cultivars are best propagated by division or cuttings.

Threadleaf Coreopsis

Coreopsis verticillata

Type: Herbaceous perennial

Family: Asteraceae

Zone: 3 to 9

Height: 1.50 to 2.00 feet

Spread: 1.50 to 2.00 feet

Bloom Time: June to August

Bloom Description: Creamy yellow

Sun: Full sun

Water: Dry to medium

Maintenance: Low

Suggested Use: Naturalize

Flower: Showy

Attracts: Butterflies

Tolerate: Deer, Drought, Dry Soil, Shallow-Rocky Soil



Easily grown in dry to medium moisture, well-drained soil in full sun. Thrives in poor, sandy or rocky soils with good drainage. Tolerant of heat, humidity and drought. Deadheading encourages additional bloom. Plants may be sheared in mid to late summer to promote a fall rebloom and to remove any sprawling or unkempt foliage. Plants can spread somewhat aggressively in the garden by rhizomes. Good plant for areas with poor, dry soils.