

# Lawn Conversion

Meadow or Woodland



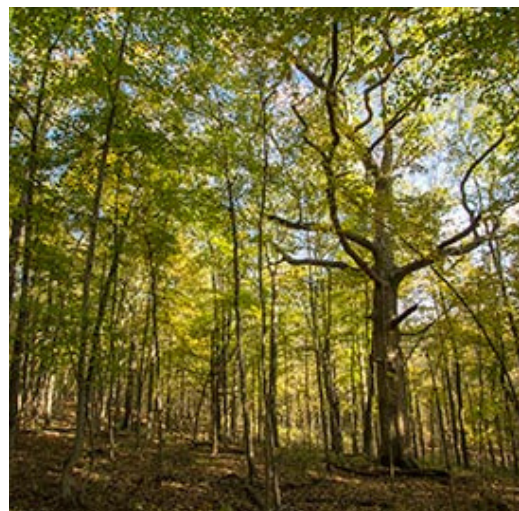
## A Meadow Instead

Meadows are communities of native grasses, flowering plants, insects, and wildlife that together perform valuable ecosystem services. Plant photosynthesis removes carbon from the air, storing it in stems, leaves, and roots while delivering carbon and other nutrients to the soils below. Above ground stems slow surface runoff while a healthy soil structure with penetrating roots, encourages water storage and infiltration in to groundwater.



## Seeing trees as Forest

Mature eastern deciduous forest offer substantial ecosystem services like timber, carbon storage, plant and animal biomass, soil fertility improvement, litter decomposition and cycling of water, nitrogen, and carbon locally and globally. Individual trees can moderate temperatures, intercept rainfall, and move water from soil back into the atmosphere.



## Another Shade of Green

An average homeowner pays \$80/week per acre for mowing services. Add the costs of aeration, fertilizer, pest control, and leaf removal, and the bottom line creeps higher. Finally, add the invisible cost of carbon emissions and other pollutants generated by the lawn care industry. After an initial investment in the installation of a natural system, costs drop significantly and with trees, can approach “free” while providing beneficial services.

## The Problem with Lawns

Manicured turfgrass lawns offer little ecological value or ecosystem service. Thatch buildup and relatively shallow roots promote surface runoff rather than infiltration to groundwater. Surface runoff delivers pollutants like loose soil, fertilizers, and pesticides to surface waters – degrading aquatic habitats. Valuable fresh water is lost to the ocean.

Pennsylvania’s native biodiversity cannot be supported by monoculture of non-native turf. Offering almost no food, shelter, or growing space for native plants, insects, or wildlife.



# Conversion How To:

To DIY or NOT



Kill Turf



Sow native seed



Manage invasives



Patience + late winter mowing

## Killing the Turf

Once established, turfgrass lawns are hardy and will spread into new spaces. Turf kill methods fall into two main categories:

- Smothering - physically blocking sunlight.
- Herbicide application - chemically blocking photosynthesis.

## Sowing Natives

Once the turf is killed, seed can be broadcast, drilled or slit seeded in fall or spring. Native seed is mixed with a carrier like annual oats, to evenly distribute seed and provide more cover in the first growing season.

## Manage invasives

Non-native, invasive species outcompete native plants. Monitoring, hand-pulling, and/or selective herbicide use is critical to establishing native meadows. Annual (late winter) mowing discourages invasive woody plants from taking hold.

## Patience: Sleep, Creep, Leap

Expect at least three years of growth until a colorful and dense meadow takes shape. Plants put energy first to root development, then to above ground growth, finally towards flowering and reproduction. The patterns and colors of the meadow will evolve with each growing season.

## Financial Assistance

Pennsylvania has a goal to convert 10,000 acres of turfgrass lawn to meadow or woodlands. This, to improve the Commonwealth's habitats, surface and groundwater quality. The Department of Conservation and Natural Resources have made public funds available to offset the costs of habitat restoration for public & private landowners.\*

Funds are distributed directly from DCNR, or through your local Conservation District and their partners.

NATIVE PLANTING

# IN PROGRESS

YEAR 1	YEAR 2	YEAR 3
<h2>Sleep</h2> <p>It may seem that the plants are "sleeping," but in fact they are investing in root growth.</p> <p><b>Weeds may thrive — when weeds are knee-high, mow the planting to 6 in.</b> several times over the growing season. This way more sunlight can reach seedlings.</p>	<h2>Creep</h2> <p>The native plants are taller, although some may still be in the seedling stage. A few natives may bloom.</p> <p>Still some <b>weeds</b>. Mow as high as possible in June or July.</p>	<h2>Leap</h2> <p>Most all native plants should be well established, with a number of species blooming.</p> <p>Scout and spot treat <b>invasives</b>. Burn a portion annually, if possible.</p>

GROWNative! Missouri Prairie Foundation

### Basic requirements include:

- Pressure from invasive species is manageable
- Sites <300' of surface water will be planted with trees, >300' - meadows or woodlands.
- Turfgrass is regularly maintained and mowed .
- A landowner commitment to maintain the site for 5 to 25 years depending on funding source.

\*A cash or in-kind (labor/equipment) match may be required. The match will not exceed 50% project cost.

Your Bucks

County Partners:



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PACD  
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CONSERVATION DISTRICTS, INC.