

NATURAL LANDSCAPING AND TREES

In Pennsylvania, climate change impacts have already arrived. Warming temperatures and more large storms are just two examples. These changes result in the movement of wildlife north and to higher elevations. Plant and tree species ranges have started to shift.

Natural landscapes provide vital homes and climate-resilient spaces for plants and animals. Native plants adapted to local climate conditions should be incorporated into projects to help mitigate local effects of climate change.

Site assessments should be done to determine what plant and tree species might do best in site-specific conditions. In the Ridge and Valley Region, for example, blackgum and bitternut hickory are expected to adapt and likely increase. You can find more information on tree species movement using the [Climate Change Tree Atlas](#).

The Bureau of Recreation and Conservation provides [guidance on green, climate-resilient practices](#). The guidance is broken out by project type and will be helpful in project planning.

WHY USE NATIVE PLANTS?

Pennsylvania’s native plants are those that grew in Pennsylvania before European arrival. The state has over 2,100 species of native plants.

Benefits of Native Plants Include:
● Adapted to local soils and climate
● Offer food and shelter for many wildlife species year-round
● Naturally more resistant to pests and diseases
● Protect waterways by filtering out pollutants, reducing erosion, and cooling water temperatures
● Reduce carbon dioxide levels, increase oxygen production, and store carbon.

LAWN TO MEADOW

Meadows with native grasses and wildflowers benefit wildlife and save on lawn maintenance costs. Converting lawn to meadow is one way to make parks and local landscapes greener and more climate resilient. Meadows enhance water quality, attract pollinators, and absorb significantly more stormwater.

Common native meadow wildflowers include black-eyed Susan, sunflower, aster, and coneflower. A few common warm season grasses include bluestem, Indianstem, and switchgrass. Meadows are prime habitat for grassland and ground-nesting birds. Bobolink, eastern meadowlark, and grasshopper sparrow all require at least 25 acres of grassland for survival. Even small meadows have habitat value. Goldfinch, field sparrow, eastern bluebird, eastern phoebe, and eastern kingbird use smaller grasslands.

Strategies for Transitioning from Lawn to Meadow:
● Reduce or eliminate pesticides by practicing Integrated Pest Management .
● Use DCNR’s Mowing Calculator to improve your lawn management. Save money and improve aesthetics with its environmentally friendly approach.
● Learn to tolerate weeds such as violets, dandelions, clover, and ground-ivy. These plants provide food for pollinators in early spring and late fall.
● Consider converting a portion of property to a native meadow or pollinator garden.



INVASIVE PLANT MANAGEMENT

Invasive non-native plants are not natural to the ecosystem and cause harm to the environment.

Most invasive plants are introduced from other continents. In their native regions there are natural controls like pests, diseases, and predators that keep them in check. Without these natural controls, invasive plants reproduce quickly. They form monocultures that exclude nearly all other plants while damaging natural areas and displace native plants in the process. Invasive plants like kudzu and Japanese knotweed degrade habitat for native wildlife. They also endanger rare and threatened species by displacing a site's structural and food resources.

Natural Lands, a southeast Pennsylvania land conservancy, has created an [invasive plant management guide](#). The guide includes techniques that reduce the need for pesticides and provide measurable results.



Native plant meadows benefit pollinators and can be aesthetically pleasing for users. Shown above: Kings Gap State Park, Pennsylvania



Open fields of clover offer food for pollinators and woodland animals. Shown above: Forbes State Forest, Pennsylvania

MORE RESOURCES:

1. Bureau of Recreation and Conservation Website
[Department of Conservation and Natural Resources. Green Community Parks. Green and Sustainable Community Parks.](#)
2. Water Smart Landscape. [U.S. Environmental Protection Agency. WaterSense.](#)
3. USDA Healthy Soils. [Soil Health – USDA Natural Resources Conservation Service](#)
4. Lawn to Meadows Guide. [Lawn to Meadow - WeConservePA](#)
5. Natural Lands How to Guide on Meadows
[Natural Lands Trust. How to Guides: Meadows](#)
6. Benefits of Floodplains. [Benefits of Natural Floodplains – FEMA](#)
7. Climate Change Tree Atlas for PA Regions. [Climate Change Tree Atlas Results for Regions in Pennsylvania](#)
8. The Value of Trees. [Arbor Day Foundation. The Value of Trees to a Community](#)
9. Create a Certified Wildlife Habitat
[National Wildlife Federation. Create a Certified Wildlife Habitat](#)
10. How to Guide on Managing Invasive Species. [Conservation Tools - Invasive Species Management](#)
11. Native Plants in the Landscape
[Pennsylvania Department of Conservation and Natural Resources. Landscaping with Native Plants in Pennsylvania.](#)

12. Pennsylvania Native Plant Society
[Pennsylvania Native Plant Society](#)