



WWIA News— Spring 2017

Planting Guidance for Native Grasses and Herbaceous Plants

Excerpt from Bureau of Forestry Planting and Seeding Guidelines

Adding native wildflowers and forbs to native warm-season grass-seed mixes increases the ecological value of restoration practices, attracting pollinators and other insects, which then builds a more diverse food web and provides additional food sources for wildlife. Plantings of native warm-season grasses allow for natural succession, which over time will limit the establishment of invasive plant species. When undertaking a seeding project, please consider the following:

Preplanning

- Anticipate ordering seed six months in advance to ensure seed availability. The best time to purchase native seed is in fall to be sure the supplier has enough in stock for spring plantings.
- When choosing species for a seed mix, attempt to use species representative of the area and consider the management objectives (wildlife opening, road corridor, log landing revegetation, recreational use) for the site.

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The History of Penn's Woods

By Bob McBride, retired Service Forester

About 15,000 years ago, the last *glacier* from the north came to a halt not far from what would someday be Pennsylvania's boundary with New York state. Out in front of this 500-foot wall of ice, growing conditions for plants were severe: vast areas supported only spruce or alder swamps, and little else. Over the next 5,000 years, as the glacier retreated, a diverse array of hardwood trees and shrubs migrated into these lands from the south, completely changing the landscape. Research tells us that about 10,000 years ago the first humans entered the region. Even as their numbers grew, Native Americans' use of the forest had little effect on it; they were mostly hunters and gatherers, clearing only small areas for crop planting.

Columbus's discovery of the new world, in 1492, did *not* lead to an immediate mass migration to the Americas. Over the next 250 years, pioneer use of Pennsylvania's 29-million-acre forest was concentrated along the seacoast and within larger valleys and waterways. That impact slowly grew westward. At first, most timber was used locally, for farm homes, barns, fences, and small gristmills, but after 1800, much of it was floated down creeks and rivers to expanding markets in the major cities. As late as 1850, half of our state was still covered by trees. In Pennsylvania, the Industrial Revolution was largely fueled by wood! Between 1850 and 1900 the U.S. population increased from 23 to 76 million people. Vast quantities of timber were needed to fire coke ovens and iron and steel furnaces, not to mention build homes and factories. Wood was used to produce mine props, railroad ties, paper pulp, wood alcohol, charcoal, and a wealth of other products. In the mid-1880s, logging railroads were built up most stream valleys, opening access to nearly every acre of Pennsylvania's forests. Between

the Civil War and World War II all but a few thousand acres of the Keystone state were repeatedly cut over, harvested to meet the needs of a growing nation. By the 1920s many of Pennsylvania's woodlands were little more than brush patches. As the Great Depression arrived, some 3 million acres of Pennsylvania farms had been abandoned; families were relocating to the rich, loam soils of the Midwest.

Today, 60 percent of our state (17 million acres) is again covered by forests. Both cut-over woodlands and former farms have *reverted to forest*—without planting! Native trees and shrubs recaptured open areas, just as they had following the glaciers. This is called *forest succession by natural regeneration*. Across Pennsylvania, many of our woodlands are even-aged. That is, most trees in a particular parcel (or stand of trees) are nearly the same age: they germinated and started growing about the same time. Though soil conditions and water are constant in an area, various species will *respond differently* to available sunlight. *Pioneer* trees such as aspen, birch, cherry, and yellow poplar soar upward, putting on tremendous height growth in the first five years. Their root systems are often shallow in the beginning. *Shade-tolerant* trees like maple, hickory, beech, hemlock, and some pine may remain smaller, as they work to develop strong, dense root systems. The pioneers easily overtop their shade-tolerant cousins. Which is to say, many smaller trees you see in the forest are just as old as their larger neighbors. Over time, those taller trees may also develop greater size and volume, but that's another story. ...

Much of this material was gathered from *A History of Pennsylvania's Forests* by Jim Nelson, former PA State Forester

“By the 1920s many of Pennsylvania’s woodlands were little more than brush patches. As the Great Depression arrived, some 3 million acres of Pennsylvania farms had been abandoned; families were relocating to the rich, loam soils of the Midwest.”

WWIA 2017 Calendar

*Please check westmorelandwoodlands.org,
for the most up-to-date information about program times and places.*

April 20, 6:30 p.m.

Tammy Colt, a wildlife biologist for the Pennsylvania Game Commission, will give a follow-up talk about pollinator/grassland habitats and the grassland birds and mammals that inhabit them. She will also cover PGC funding and case studies of properties where she has included pollinator habitat as part of the wildlife plan.

May 18, 6:00 p.m.

Adam Haritan, founder of LearnYourLand.com and an expert on wild-food foraging, is back by popular demand. He'll lead us again on a walk/talk around the WCD campus and the Ann Rudd Saxman Nature Reserve to show us how to forage for edible spring plants and safe medicinal plants and herbs. Please note the early start time of 6:00 p.m. to complete the walk in daylight. For this program, the social half hour will take place after the walk.

June 17, 9:00 a.m. to about 2:30 p.m.

Jessica Salter and David Planinsek, DCNR foresters working out of the Laughlintown office of the Bureau of Forestry, will lead our seventh annual Forbes State Forest field trip and skills day.

July, August, and September

The board is considering adding a field trip to a tree farm in Westmoreland County or an evening program at the Barn this summer.

October 19, 6:00 p.m.

The annual WWIA potluck dinner and business meeting will be followed by a presentation by Bob McBride, a retired DCNR Bureau of Forestry service forester and an associate director of WWIA. Bob's talk will include the video *A History of Pennsylvania's Forests*, which features Jim Nelson, who was born and raised in the Allegheny National Forest, received his forestry degree from Penn State, and was director of the Pennsylvania Bureau from 1989 to 1994.

Initiative to Reduce Mailing Expenses

In an effort to reduce our mailing expenses, we strongly encourage **all members who have e-mail** to provide your email address so we can send you notices about programming, newsletters, and such.

Emailing is almost cost-free! We will also be using the website to promote WWIA's activities and to disseminate information. So visit it too:

www.westmorelandwoodlands.org

Planting Guidance for Native Grasses and Herbaceous Plants (cont'd)

Excerpt from Bureau of Forestry Planting and Seeding Guidelines

Soil and Site Preparation

- In activities that cause excessive soil compaction, such as log landings or gas development, the topsoil and subsoil should be segregated and piled before disturbance and returned to original contour with as little compaction as possible before seeding. Ripping the soil sublayer prior to spreading topsoil is recommended to lessen compaction and increase infiltration.
- Lime and fertilizer are not generally recommended for native seed mixes. If lime and fertilizer are used, be sure to reduce the nitrogen content to avoid promoting weedy plants or invasives and potentially killing or inhibiting the germination of native seed.
- Seed may be lightly worked into the soil using a rake or bedsprings, but disking will likely bury the seeds too deep and may not be successful. Disking should be conducted only before seed is spread.
- If the site to be planted with native warm-season grasses is currently occupied by cool-season turf grasses, an herbicide application is recommended in the fall prior to spring planting. Disking should follow once the turf grass has been killed to allow the new seed contact with mineral soil.

Planting

- Use straw, not hay, to reduce the potential for introduction of weed seed. Invasive seed can also be introduced from contaminated fill material or seeders. Be sure seeding equipment is clean and free of any seed used previously.
- Temporary cover crops should be added to all mixes to improve soil stabilization and increase the chance of establishment. Cover crops can be applied before the desired mix if you are waiting

for the optimum time to plant native seed. When used in combination with another mix, they should be applied at a rate of 1 bushel (~30 lbs) per acre. If used alone on a site, they should be applied at 2 bushels (~60 lbs) per acre.

- Observations of warm-season grass plantings suggest April through mid-May is the optimum time for planting and establishing native species in the first growing season. Fall seeding may be successful (late October through late April), but make sure the seed will not lie wet in winter.
- For spring plantings, some native warm-season grasses and native wildflowers will germinate the first year, but most germinate the second year. For late fall/early winter plantings, native warm-season grasses and wildflowers can experience dormancy conditions, but many can germinate well the first full growing season after planting.
- Broadcast and hand spreading of native seed equally across the site is acceptable. However, also consider planting single species from the mix in strips across an herbaceous opening to establish varying vertical structure. Another option is to spread some of the warm-season grass seed in patches to create openings for wildlife between tufts of grass.



NATIVE PERENNIALS FOR A SUNNY POLLINATOR GARDEN

PLANT NAME	COMMON NAME	COLOR	SOIL DRAINAGE	Bloom Time
<i>Aquilegia canadensis</i>	Columbine	Red	Well drained	Late spring
<i>Asclepias tuberosa</i>	Butterfly Weed	Orange	Dry, Well drained,	Summer
<i>Asclepias verticillata</i>	Whorled Milkweed	White	Moist to dry	Summer
<i>Ceanothus americanus</i>	Jersey Tea	White	Dry, Well drained	Early summer
<i>Eupatorium fistulosum</i>	Joe Pye Weed	Mauve	Moist to wet	Late Summer
<i>Helianthus spp</i>	Sunflowers	Yellow	Moist to dry	Summer
<i>Helenium autumnale</i>	Sneezeweed	Yellow	Moist to wet	Late Summer to Fall
<i>Liatris spicata</i>	Marsh Blazing Star	Purple	Moist to wet	Summer
<i>Lobelia cardinalis</i>	Cardinal Flower	Red	Moist to wet	Late Summer
<i>Lobelia siphilitica</i>	Great Blue Lobelia	Blue	Moist to wet	Late Summer
<i>Monarda fistulosa</i>	Wild Bergamot	Lavender	Moist	Summer
<i>Monarda didyma</i>	Oswego Tea	Red	Moist	Summer
<i>Penstemon digitalis</i>	Foxglove Beardtongue	White	Moist	Spring
<i>Pycnanthemum muticum</i>	Broad-leaved Mountain Mint	Whitish green	Moist	Mid-Late Summer
<i>Rudbeckia fulgida var. fulgida</i>	Brown-eyed Susan	Yellow	Average to dry	Late Summer
<i>Solidago caesia</i>	Blue-Stemmed Goldenrod	Yellow	Moist to dry	Fall
<i>Symphotrichum laeve</i>	Smooth Aster	Purple	Moist to dry	Fall
<i>Veronicastrum virginicus</i>	Culver's Root	White	Moist	Mid-Late Summer
<i>Zizia aptera</i>	Heart-leaved Alexanders	Yellow	Moist to wet	Spring

NATIVE PERENNIALS FOR A SHADY POLLINATOR GARDEN

PLANT NAME	COMMON NAME	COLOR	SOIL DRAINAGE	BLOOM TIME
<i>Aquilegia canadensis</i>	Columbine	Red	Drained to dry	Late spring
<i>Arisaema triphyllum</i>	Jack-in-the Pulpit	Green/Brown	Moist	Spring
<i>Phlox divaricata</i>	Wild Blue Phlox	Lavender	Moist	Spring
<i>Phlox stolonifera</i>	Creeping Phlox	Lavender	Moist	Spring
<i>Spigelia marilandica</i>	Indian Pink	Red	Moist	Summer
<i>Eurybia divaricata</i>	White Wood Aster	White	Moist to dry	Fall
<i>Soldago caesia</i>	Blue-stemmed Goldenrod	Yellow	Moist to dry	Fall
<i>Viola canadensis</i>	Canada Violet	White	Moist	Spring - summer

From Pennsylvania Pollinator Series 3.1 Pollinator Food, PSU Extension

Westmoreland Woodlands Improvement Association Membership

Application and Renewal – Dues \$10 per year

Name: _____ Phone: _____

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Make check payable to

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Westmoreland Woodlands Improvement Association

c/o Westmoreland Conservation District
218 Donohoe Road, Greensburg, PA 15601

Attention: Tony Quadro

www.westmorelandwoodlands.org

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