DIY Lawn to Meadow Guide

A DIY meadow program with assistance and materials supplied by the Alliance for the Chesapeake Bay





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Introduction

The Alliance for the Chesapeake Bay is committed to improving water quality throughout the Chesapeake Bay Watershed. To accomplish this goal, we implement and facilitate tree plantings, lawn conversions, improved agricultural practices, green infrastructure projects, and outreach events. The Alliance has been operating since 1971 and now has offices located in Washington D.C., Pennsylvania, Maryland, and Virginia.

The Chesapeake Bay has become degraded as a result of human activity throughout the watershed, as have many of the stream systems which drain into the Chesapeake. Nutrient inputs that exceed natural levels have negatively impacted the plants and animals that call the Bay and its myriad tributaries home. As a result, we now recognize that action must be taken to restore the Bay by working with landowners like you to reduce the amount of pollutants entering our waterways. Whether you live along the Bay itself or hundreds of miles upstream, your actions and stewardship of the land directly affects your local community and everyone downstream. By working to restore native habitats, improving stormwater management, implementing sustainable agricultural practices, and increasing the amount of urban tree canopy, we are improving the condition of the Chesapeake Bay and its watershed, which is itself a tremendous resource that deserves stewardship.

Landowners like you are an important component of the Chesapeake Bay watershed restoration efforts. Most land within our watershed is privately owned, so we rely on the participation of private landowners to implement conservation practices that will benefit our landscape. One of the practices that can easily be

implemented on private land is a practice we call 'lawn conversion.' This involves the replacement of lawn cover with trees or native meadow and the eventual reduction in mowing. Mowed lawns are all too common throughout the Bay watershed, and do little to filter runoff, provide habitat for pollinators and other wildlife, or store carbon. By choosing to convert your lawn to native habitat, you can bring these environmental benefits of native habitat back to your own property, where you can also enjoy these wonderful species whenever you'd like. Through our *DIY Lawn to Meadow Program*, the Alliance for the Chesapeake Bay can help you establish a meadow that provides these benefits while saving you time and money in caring for the area which was formerly lawn.

This DIY Lawn to Meadow Guide provides detailed instructions on how you can convert your lawn to a beautiful sanctuary for wildlife while also protecting your local streams and eventually the Chesapeake Bay. Please take a look at the qualifications and follow the process below to get your meadow project started!

Why Convert Lawn to Meadow

Having some lawn is not a bad thing. Even the authors of this article have and enjoy some on their own properties! It's where we play catch with kids and fetch with dogs, where social gatherings can sprawl out, and where we temporarily store tree planting supplies (maybe that's just us). None of us think that *nobody* should have any lawn. But we all do think that there is often much more lawn on the average residential property than is actually needed, which matters given how much lawn cover we have in the mid-Atlantic, and how environmentally unfriendly lawn cover is.

Lawns are ubiquitous in America for a reason- they are comfortable, accessible outdoor spaces for recreation that are quick to establish. They have also become what most residents expect around the home and in other developed landscapes. Lawns are easy to maintain without much knowledge of plants by simply mowing, though of course over the span of a year mowing the lawn requires a significant amount of work, time, and money.

However, the lawn grass we are familiar with in our backyards is mostly non-native European species and are not native to this region. The goal of a lawn to meadow conversion is to completely kill this non-native vegetation and replace it with a diverse native meadow ecosystem. The process through which you kill the existing vegetation, the seed mix you choose, and your specific management plan can all vary depending on your site conditions and overall goals. Regardless of the methods you choose, the ultimate goal is to create more native meadow habitat that reduces

the amount of mowing you need to do and turns a relatively non-environmentally beneficial area into one that supports a variety of pollinators and wildlife.

What is a Meadow and How does it Form Naturally?

When deciding to take on a lawn to meadow conversion project, it is important to also think through the ecology and environmental conditions that create and maintain meadows naturally. Historically, within this region of the US, meadows were formed due to events that disturbed forests (often forest fires or flooding from beaver activity) and are the earliest successional habitat. Meadows are habitat types that are relatively void of trees and are composed of a wide diversity of herbaceous vegetation like native grasses and forbs. There are several species of birds that exclusively nest in

meadows as well as thousands of insects that utilize meadow habitat.

A meadow is a dynamic ecosystem; its species composition will vary over the years as one species does well while another dies off. They will want to slowly convert to forest cover; tree seedlings will naturally start to pop up within your meadow which, if left untouched,

PIONEER SPECIES INTERMEDIATE SPECIES CLIMAX COMMUNITY FIRE GRASSES AND PERENNIALS GRASSES, SHRUBS, PINES YOUNG OAK AND HICKORY FOREST O YEARS 1-2 YEARS 3-4 YEARS 5-150 YEARS

For a brief overview on habitat succession, check out this article on ecological succession: https://news.uchicago.edu/explainer/what-is-ecological-succession.

will transition away from meadow habitat into forest habitat.

When trying to keep an area as a meadow, you are effectively "pausing" the succession of this habitat into another. While forests are highly valuable habitat, if your goal is to keep the area as a meadow, there will be work involved to keep this area in the early successional stage. This will take some work but is worth it if you are committed to having meadow habitat on your property! Larger entities with sizable meadows, like state organizations, will often use controlled burns in order to maintain their meadows. In the instance of this guide, we recommend using scheduled and strategic mowing to complete this maintenance.

Program Qualifications

Site Location

- Within PA portion of the Chesapeake Bay watershed
- Currently lawn cover: mowed throughout the summer, soil is well-drained
- In an area with no tree canopy
- Not over septic infrastructure (sand mound, etc)
- Farther than 50 feet from a stream
 - o If you want to convert an area that is within 50 feet of a stream, we highly recommend planting it as a forest rather than a meadow, because forest cover is what the stream really needs. We do have a lawn to forest program that you are likely eligible for!

Site Size

- Minimum size= 150 square feet (roughly size of a parking space)
- Maximum size= 0.5 acres or 21780 square feet
- If your area is larger than this, please reach out! We may have a separate program for you that will provide additional support.
- Not sure how large your planting area is? In Google Maps, rightclick, then click "Measure distance." Click to mark the perimeter of the area, and click the first point to close the perimeter. A small box at the bottom center of the screen will tell you the size in square feet. As a reference point, 0.5 acres is 21,780 square feet.



The white box in this photo depicts an area that is about the size of a parking space which would be the smallest area that this program would work with. This is also the type of lawn cover that the program targets. Photo by Rebecca Lauver

Landowner participation

- Must own the property you are doing the lawn to meadow conversion on
- Must read through the DIY guide before signing up
- Agree to keep this area as a meadow for at least 5 years
- Stay in communication with the Alliance and send photos of site as requested

Program Process

- Read through this guide and sign up for program: https://forms.gle/CCjJUNWCzSwSpW3w6
- Email aerial screenshot and photo of planting area to lawnconversion@allianceforthebay.org or mail it to the Alliance's PA office at 841 Flory Mill Road, Floor 2, Lancaster, PA 17601.
 - To take a screenshot, locate the print screen (sometimes abbreviated PRTSC) button on your computer and then paste this image directly into the email.
- Alliance will verify eligibility within 2 weeks and will reach out to you to discuss the program further
 - o Cut-off date for each fall season: August 6th
- Alliance will mail this DIY Lawn to Meadow guide to the landowner.
- Landowner will procure herbicide and other prepping supplies and conduct site preparation as specified below.
- Landowner sends a photo of the site to lawnconversion@allianceforthebay.org once site prep is complete and the current lawn cover has died.
- Once the site prep is verified, Alliance will mail seed mix and a "Meadow in the Making" sign to the landowner.
- Landowner procures filler for seed mix: potting soil (recommended), sand, and rice hulls, are commonly used fillers.
- Landowner seeds area.
- Landowner sends a photo of the site:
 - Year 1: 1st of May, June, July, August (or as close to as available)
 - Each following year on Earth Day and July 4th (or as close to as available)
 - After Earth Day photo, Alliance mails "Welcome to Our Meadow" sign
 - Alliance will send guidance at the end of 2026 when the grant period for this program ends



A temporary "Meadow in the Making" sign helps to communicate to neighbors your yard's change in appearance as the meadow gradually establishes. Photo by Emily Broich

Program Process Chart

Task	Who	Timeline
Sign up for program	Landowner	Anytime, but by August 6 to receive seed for the upcoming fall
Mail DIY guide	Alliance	Within 2 weeks after successful signup
Site preparation	Landowner	Late August through mid October
Photo verification of successful site prep	Landowner	Early-mid October
Sending seed mix and "Meadow in the Making" sign	Alliance	Late October
Procuring and adding in filler for seed mix	Landowner	Late October-early November
Seeding	Landowner	Late October-early November
Sending follow up photos	Landowner	Year 1: 1st of May, June, July, August Year 2-5: Earth Day and July 4th
Mailing "Welcome to our Meadow sign"	Alliance	After Earth Day verification photo, year 2
Ongoing technical support	Alliance	Through the end of 2026
Grant ends and technical support diminishes	Alliance	December 31, 2026

If you feel that this DIY program is not a good fit for you and you'd like to just do a lawn to meadow project yourself without additional resource assistance, we'd still love to know about the work you do! Continuing to document the growing interest in lawn to meadow conversions is very important to show that there is still a need for funding for these projects and that the general public is interested in them. If you do a lawn to meadow conversion project using this guide but without the technical and resource support from the Alliance, please still fill out this Google form so we can have a record of this work! Thank you! https://forms.gle/A4jT3TFFii5Ntuic6

Site Selection

When choosing a site to convert into a meadow, the existing vegetation cover is crucial to take into consideration. While it is possible to convert other land types into meadow, this program and guide is focused on converting **lawn cover** to meadow and the guidance within should just be applied to this type of land cover. The provided seed mix will do best in areas that are **full sun** and seed retention and germination will be most successful on a **relatively flat** area. This meadow area should also be upland (300 feet or more away) from a stream as these areas should be forested instead. If your planting area is within an HOA or location with mowing/vegetation height ordinances, be aware of these and make sure your meadow project is allowable by them (or work to change the ordinances if it is not!).

Other factors to take into consideration are the potential for any pesticide/insecticide drift (like from farm fields- these sprays can be harmful to the insects that will want to utilize the meadow) and proximity to infrastructure (it can be ideal to keep a mowed path around the meadow for a more "tidy" look, especially is you live a more residential or urban area). And another final important thing to note is the presence of invasive plant species in the adjacent area. If you are trying to start a meadow in an area that is bordering a lot of invasive species, you will either need to address these invasives before seeding your meadow or be very diligent about removing invasives as they appear in the meadow. Invasive species like English ivy, Japanese knotweed, mile-a-minute, Japanese honeysuckle, Canada thistle, multiflora rose, and many others will spread very rapidly and so you will need to address them quickly via herbicide application or hand pulling.

Year 0: Site Preparation

Proper site preparation is critical for ensuring the success of your meadow. If the site is not properly prepped, the existing lawn cover will return in some proportion and when mixed in with the desired plants, it becomes extremely difficult to address. In some instances, it will be easier to just restart the meadow if the preparation was not completed properly.

While there are alternatives, in this guide we just focus on using herbicide to prepare a site for lawn to meadow conversion due to its overall simplicity and effectiveness. If you are interested in trying out alternative methods, check out the Xerces Society's Organic Site Preparation for Wildflower Establishment. https://xerces.org/publications/guidelines/organic-site-preparation-for-wildflower-establishment

Herbicide is *generally* the most effective and simplest method when preparing a lawn to meadow conversion. When using herbicide, always follow the guidance on

the label for safety precautions and proper chemical prep and mixing. Take special note of the indicated time that it takes for the herbicide to no longer be a concern for the seeds you will be sowing in the fall- make sure there is plenty of time between your last spray and this fall sowing. By seeding the meadow in the fall, you will have the entire summer to spray and monitor the planting area to ensure the existing vegetation is properly dead.



Here is a site that was properly sprayed with herbicide and has had sufficient kill-off of the grass. It is ready for a fall seeding. Photo by Ryan Davis

Most lawns are a mix of non-native cool-season turf grasses, clover, and weeds (dandelions, plantains, crabgrass, etc). All these plants can out-compete the newly seeded meadow plants during initial establishment. Your first step for site prep is to keep the area regularly mowed over the entire growing season. It may be tempting to let it go because you are planning on killing it, but this will introduce new seeds to the soil which will become a problem later. For this type of vegetation, a foliar herbicide, like glyphosate, will be a good herbicide to prepare the area. Glyphosate is recommended because it is a very effective non-selective herbicide and has relatively low toxicity for both humans and the environment. Of course, when using any herbicide or pesticide, caution should always be exercised. Read all label directions, wear protective clothing, and minimize contact of the herbicide with any non-target organisms.

Other herbicide options are available, but make sure the herbicide you use is both systemic (meaning it kills the plant rather than burns it down) and broad-spectrum (meaning it kills both grasses and broadleaf plants). Use the lowest concentration necessary to accomplish the job. More herbicide doesn't necessarily mean more effective. Too high of a concentration will simply burn the foliage without reaching the roots. Spraying should be done in the late summer (late August - September) and you should mow the area about a week prior to this spraying to ensure the grass is relatively short but has had time to regrow slightly. After the first round of

spraying, wait 2-4 weeks and respray the area if all of the grass has not turned brown and died, or spot spray areas of green-up. It is crucial that all the existing grass is dead before you seed the area!

The final site prep step before broadcast seeding is to rake away the dead vegetation on the day that you will seed. This is very important to allow for good soil-to-seed contact and successful germination! Be careful to minimize soil disturbance, as this could bring weed seeds to the surface. The idea is not to till the soil, but to simply expose the soil. Plastic rakes for leaves are ideal. For larger areas, buzzing the surface with a string trimmer (or inviting a few friends over) can help accomplish the task.



Side by side comparison of thatch that has not been adequately raked (on left) and soil surface that is ready for seeding (on right). Photo by Ryan Davis

Summary: Continue to mow over the entire growing season to reduce lawn seeds in the soil. Spray a broad-spectrum systemic herbicide (glyphosate is ideal) to kill the lawn vegetation in late August or early September. Monitor the site and spray any vegetation that bounced back 2-4 weeks later. Rake away the dead vegetation right before seeding to allow for good soil-to-seed contact.

Year 0: Site Seeding

In Pennsylvania, the fall seeding window begins in October after the first frost and once the daily temperature is below generally below 65 degrees, but the ground has not frozen yet. Ideal planting time is when the ground temperatures are 45°F and below but the ground hasn't frozen yet. You can check your local soil temperature on this website: https://www.greencastonline.com/tools/soil-temperature.

With the small scale of your project, hand seeding is probably the best approachthis way you don't need special equipment and you can keep a close eye on how much you are seeding. First, stir your seed mix to ensure the species are mixed somewhat evenly. Pour half (by weight is ideal but not absolutely necessary) into one

bucket or bin (18-gallon plastic storage tubs work well) and half into another. Then add an equivalent amount of a filling agent; we recommend potting soil (without fertilizer pellets) but sand, cracked corn, and rice hulls are also often used. Don't worry about adding in too much inert mix- it is better to have more to spread than to have the seed mix be too concentrated.

Take the seed mix to one corner of the planting and walk in rows while spreading 1 bucket of the mixture- make sure you spread it thinly enough that the whole area gets some seeds spread into it. A good way to spread seed is to throw it, one handful at a time, at the ground about 5 feet in front of you. Throwing horizontally will likely lead to some seed blowing away from the prepped area. Then, take the second bucket to the opposite corner and seed in rows perpendicular to the ones you just did. Once all the seed mix is spread, walk all over the planting area to help pack in the seeds; good soil-to-seed contact is very important for ensuring good germination.

Summary: Mix up the seed and split it into 2 equal parts. Add a filler (potting soil without fertilizer is ideal) of around equal weight to the seed. Spread the halves perpendicular to each other. Squish the seed into the soil with your feet to ensure germination.

Year 1: Establishment

Most of our native meadow plants are warm-season species, meaning they do a majority of their growing in the heat of the summer, and grow less during the cooler spring and fall seasons. They also evolved in highly disturbance-prone environments (remember the fires and floods mentioned earlier?), so most species focus their growth on root development first before putting energy into aboveground growth





The first spring of a meadow. Left: 5/14 - some of the green is "weeds" and some is seeded meadow plants. Right: 6/29 - the meadow is filling in well, mostly with seeded plants. Photos by Ryan Davis

and reproduction (the flowers we can't wait to see). Because of these two factors, you should expect the first year of your meadow to look a little underwhelming, with few wildflower blooms and somewhat sparse vegetation through much of the spring.

In late April or early May, you can expect to see the first greening up of the meadow, though it will be sparse and patchy; we call May in year one "the peach fuzz phase". This is a very important time for you to assess how successful your seeding was, and to perform any follow-up treatment of weeds, which will green up earlier and grow much faster than your meadow plants. There are four species which are included in most meadow mixes that germinate early: black-eyed Susan (Rudbeckia hirta), lance-leaved coreopsis (Coreopsis lanceolata), partridge pea (Chamaecrista fasciculata), and purple coneflower (Echinacea purpurea). We recommend learning how to identify them in the seedling stage so that you can verify early on that your seeding was successful. Another important plant to learn is the somewhat ubiquitous invasive plant Canada thistle (Cirsium arvense), which thrives in bare soil and often shows up in meadow sites. Killing the thistle early on by herbicide or repeated pulling (weekly for months) will be a good investment in ensuring that it doesn't take over the entire meadow later; it can be very hard to kill once established. If a substantial amount of lawn grasses green up in the spring, careful herbicide application during the "peach fuzz phase" when most meadow plants have yet to germinate can still be easily accomplished.

By June, the meadow should have filled in substantially, but most of the seeded plants will only be a few inches tall. You'll likely see scattered plants that are taller though, typically including ragweed (Ambrosia artemissifolia) and mare's tail (Conyza canadensis), two native annual plants. Annual plant presence in the meadow typically isn't an issue because the seeds should have trouble making good contact with soil, so very few will return in year 2. The presence of perennial plants (those which survive for more than two years, by sending new growth from the roots each spring) which were not seeded can be a problem though; if they are not controlled they will spread around



Year 1 of a meadow, 7/21. This is an important time to monitor for and remove problematic species like Canada thistle. This site did not need to be mowed in year 1, with the exception of one corner where tall weeds threatened to over-shade the seeded plants. Photo by Ryan Davis

the meadow and return every year. These perennials could include native weedy species like pokeweed (*Phytolacca americana*), Canada thistle, and turfgrasses which survived the prep sprays. It can be helpful to prevent these plants from going to seed by cutting them back repeatedly, and in the case of very aggressive species, carefully spraying them with herbicide.

Sometimes in year 1 you will have more vegetation than just a few scattered plants that weren't seeded. If this growth is very thick it could be helpful to mow it back, so that it doesn't shade out the seeded plants. In our experience, if site prep was successful the year 1 mowing isn't really necessary, and can cause more problems than solutions. Still, there are times when it can be helpful to reduce shading or seed sources for potentially problematic species. A rule of thumb is to consider mowing if the vegetation is 12 - 18 inches tall, and to mow it back to 8 - 10 inches tall. It is imperative that you do not mow lower than 8 inches off the ground during the growing season; doing so will kill many seeded plants. Most mowers cannot mow this high off the ground; brush hogs are typically used for large fields, and string trimmers for backyard sites. String trimming may seem daunting, but you'll likely only need to be spot-trimming where needed rather than the entire meadow. Be sure to clean any mowing equipment prior to using it in your meadow; we have seen many projects fail due to invasive plant seed introduction via mowers. When in doubt as to whether or not you should mow, feel free to email photos to lawnconversion@allianceforthebay.org to ask our opinions.

You may be tempted to mow the meadow down in fall to "clean it up" for winter. It is best to leave the vegetation intact until early spring to accommodate wildlife, including pollinators who are overwintering within the standing plant stems.

Summary: Assess for plants that survived the prep treatment. Remove perennial weeds, especially Canada thistle or other invasive plants. Assess for germination of seeded species. Assess for crowding of seeded species from plants that survived site prep or germinated from the seed bank, and trim down no lower than 8" off the ground in places where the meadow plants are at risk of being shaded out.

Year 2 and beyond: Maintenance & Troubleshooting

Most meadows are pretty well established at the end of the first growing season. Species composition will shift over time, but if you've been able to manage competition from plants that survived site prep, the seeded meadow species will have developed their roots in year 1 and are now ready to vigorously grow above ground. The flush of growth usually starts in late April, and in year 2 and beyond is thick and fast to grow vertically.

It is ideal to mow the meadow low to the ground (around 4 inches off the ground) early in the spring, before the meadow plants break dormancy. The last week of March and first week of April are ideal in south-central Pennsylvania; at this point the insects which were overwintering in the meadow have mostly left, but the native plants are still dormant and will not be harmed by mowing. This early spring mow removes thatch, making the new season's growth easier, sets back or kills any woody plants which have germinated, and makes it easier to inspect for invasive plants. Remember to clean any equipment before mowing! And just like with the establishment year, it is better to not mow than to mow and risk causing more issues. After mowing, inspect the meadow for invasive plants, which will likely be green and growing much earlier than the natives. Hand-pulling or herbicide control are effective ways to eliminate or keep them at bay.



Year 2 of a meadow, 7/13. Most species are well-established, growing vigorously above ground, and blooming in mid-summer. Photo by Ryan Davis.

Other than the early spring mow and invasive inspection, you will now have very little work to do in your meadow! Continued assessment for invasive plants is important to do throughout the growing season. You will begin to learn the plant species in your meadow, and can pay attention to changes. If a plant shows up that you have not seen before, try to identify it. If it spreads quickly, it may be invasive and

should be treated. If you want to keep the meadow herbaceous, you will need to continue to remove woody plants (maples, cherries, and black locust show up very quickly) as they arrive. If the meadow is in an area which can convert to a forest, ceasing mowing entirely will allow the trees to grow. The young forest habitat that you have created is tremendously valuable for many wildlife species, and allows you to enjoy the herbaceous species for many years until the trees ultimately shade them out.

As long as the meadow is desired, continue to mow once each spring and inspect for invasive plants. Over the years many species will peter out and you will likely be left with just a few which are most suited for the site and are most dominant. Many guides recommend tilling or burning to revitalize the initial community that was seeded, but this can introduce new problems and is often not feasible at the scale or on the landscapes where you are likely creating a meadow. We recommend letting the shift happen and enjoying your meadow as it changes over the years.

Summary: For as long as the meadow is desired, just mow once per year, in the last week of March or first week of April, down to 4 inches off the ground. Inspect for invasive plants afterwards and throughout the growing season. Otherwise, your work is done and you can just enjoy the wonderful habitat you have created!

Other Options to Reduce Lawn & Boost Biodiversity

You're reading this guide because you don't like one or more of the downsides to lawn. Perhaps after reading, you're not sure if you're ready to commit to a meadow. Meadows are fantastic, but keep in mind that there are other alternatives, which may be easier to implement or more palatable to your neighbors.

Those other management options include, in order of increasing boat-rocking:

- Eliminating fertilizer applications (excess nutrients end up in the Bay)
- Reducing mowing throughout growing season
- Planting a native tree or shrub
- Adding in native plant beds
- Planting a **community** of native trees and shrubs

While growing plants from seed is satisfying in its own right and economical for large spaces, it might feel like unfamiliar territory for the beginner. Maybe the thought of converting a large swath of lawn to meadow still seems daunting after reading through this guide. If you are just embarking on your native plant and lawn conversion journey, **it is ok to start small!**

You can tremendously enhance the habitat of your home landscape by just replacing a small footprint of turfgrass with a few native plants at a time. By starting small, you'll have the advantage of getting to know these plants more intimately before committing to a full lawn conversion meadow planting. You'll get to know how they grow and look throughout the seasons, and how well they do in your particular soil and site conditions. You'll be able to readily recognize one leaf from another if you install a meadow down the road.

For smaller spaces, a good rule of thumb is to limit your species selection to convey an intentional design aesthetic, and source at least 2-3 plants of each species to enhance pollinator value. Smaller-statured plants are likely to be more readily accepted by discerning neighbors. For the purpose of this DIY guide, we'll highlight a few adaptable species typical of a meadow community that thrive in full sun. Some good bets to get you started:

- Purple Coneflower (Echinacea purpurea)
- Black-eyed Susan (Rudbeckia hirta)
- Coreopsis (Coreopsis lanceolota)
- Mountain Mint (Pycnanthemum spp)
- Wild Bergamot (*Monarda fistulosa*)
- Butterfly Weed (Asclepias tuberosa)

Of course, these are just a few! To explore additional species typical of a pollinator meadow, a list is found at the end of this document and here. In a natural meadow, these plants grow in close competition with native grasses. When they are grown without competition in rich loamy soil, they may get overly tall and be prone to flopping. For this reason, don't worry about adding any extra compost or fertilizer to your soil. Mulch sparingly, and consider incorporating some native grasses among your flowering perennials to add winter structure and a micro-meadow touch.

Some native grasses are becoming more common in the nursery industry and easier to find at local garden centers and native plant nurseries by mail order. Little bluestem (*Schizachyrium scoparium*) is one of those native grasses, and with good reason! It is a warm-season bunchgrass



Little Bluestem in the home garden. Photo by Christa Shoreman

growing 2-4' that is a key species of many meadow restorations, but is also well-suited to more formal landscapes. Happiest in full sun and well-drained, lean soil, little bluestem is compact, clumping, and well-behaved enough for small spaces.

It can get expensive to plant a community of native plants solely from large containers. An alternate approach is to start from small plant starts known as "plugs" that typically come in trays of 32 to 50 individual plants. Plugs are typically about 2 inches wide, and 4-5 inches deep. Because of their small size, they are easy to plant and can make it economical to densely cover a small planting space rather quickly, in contrast to more expensive gallon-size pots. Plugs of warm-season plants are most successfully transplanted in the spring. Cool-season plants can typically be planted as plugs in early spring or early fall. Depending on the retailer, you can buy an entire tray or mix and match with fewer quantities.



A Black-eyed Susan (Rudbeckia hirta) plug. Photo by Wetland Plants Inc.

Meadows are just one tool in the conservation landscaping toolbox. How else can you reduce your mowing if meadow conversion isn't the right fit for your yard? You can also

simply plant a tree, or better yet, a community of native trees layered with shrubs and herbaceous natives. You can slowly replace the surrounding turfgrass over time as the canopy grows with a bed of shade-loving natives - think of forest understory plants for inspiration here.

We have a similar DIY Lawn to Forest program if you'd like to increase tree cover on your property that you can <u>check out here</u>.

Whatever landscaping practice you choose to reduce lawn and replace with native plants, you'll be building biodiversity from the comfort of home!



A Black-eyed Susan (Rudbeckia hirta) in bloom attracts a pollinator in a first-year meadow. Photo by Emily Broich

Appendix

Native seed sources

Ernst Conservation Seeds – Meadville, PA 800-873-3321 http://www.ernstseed.com/	Prairie Moon Nursery – Winona, MN 866-417-8156 https://www.prairiemoon.com/ho me.php
Roundstone Native Seed, LLC – Upton, KY 888-531-2353 http://www.roundstoneseed.co m	Prairie Nursery – Westfield, WI 1-800-476-9453 http://www.prairienursery.com/
Ohio Prairie Nursery – Hiram, OH (866) 569-3380 http://www.ohioprairienursery.com/	Pinelands Nursery Columbus, NJ 609-291-9486 www.pinelandsnursery.com
Vermont Wildflower Farm Hinesburg, VT 1-855-8GO-WILD https://www.vermontwildflowerf arm.com	

Retailers of Native Plant Plugs via Mail Order

Izel Plants https://www.izelplants.com/	The Pollen Nation https://www.thepollennation.com
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Native Plant Resources

- Native Plant Center: https://www.allianceforthebay.org/native-plant-center/
- Xerces Society: https://xerces.org/

Program Seed Mix Specifications



Ernst Conservation Seeds

8884 Mercer Pike Meadville, PA 16335 (800) 873-3321 Fax (814) 336-5191 www.ernstseed.com

Date: July 06, 2023

Mesic to Dry Native Pollinator Mix - ERNMX-105

	Botanical Name	Common Name	Price/Lb
29.40 %	Schizachyrium scoparium, Fort Indiantown Gap-PA Ecotype	Little Bluestem, Fort Indiantown Gap-PA Ecotype	14.91
18.50 %	Elymus virginicus, PA Ecotype	Virginia Wildrye, PA Ecotype	10.36
12.00 %	Sorghastrum nutans, PA Ecotype	Indiangrass, PA Ecotype	14.63
8.00 %	Echinacea purpurea	Purple Coneflower	43.20
5.00 %	Panicum clandestinum, Tioga	Deertongue, Tioga	22.15
3.00 %	Chamaecrista fasciculata, PA Ecotype	Partridge Pea, PA Ecotype	7.20
3.00 %	Coreopsis lanceolata	Lanceleaf Coreopsis	28.80
3.00 %	Rudbeckia hirta	Blackeyed Susan	31.20
2.50 %	Verbena hastata, PA Ecotype	Blue Vervain, PA Ecotype	38.40
2.00 %	Heliopsis helianthoides, PA Ecotype	Oxeye Sunflower, PA Ecotype	33.60
2.00 %	Zizia aurea, PA Ecotype	Golden Alexanders, PA Ecotype	72.00
1.50 %	Lespedeza capitata, RI Ecotype	Roundhead Lespedeza, RI Ecotype	115.20
1.50 %	Penstemon digitalis, PA Ecotype	Tall White Beardtongue, PA Ecotype	168.00
1.00 %	Asclepias tuberosa, PA Ecotype	Butterfly Milkweed, PA Ecotype	312.00
1.00 %	Pycnanthemum tenuifolium	Narrowleaf Mountainmint	168.00
1.00 %	Senna hebecarpa, VA & WV Ecotype	Wild Senna, VA & WV Ecotype	28.80
0.90 %	Aster pilosus, PA Ecotype	Heath Aster, PA Ecotype	264.00
0.80 %	Aster novae-angliae, PA Ecotype	New England Aster, PA Ecotype	336.00
0.70 %	Asclepias incarnata, PA Ecotype	Swamp Milkweed, PA Ecotype	177.60
0.50 %	Baptisia australis, Southern WV Ecotype	Blue False Indigo, Southern WV Ecotype	96.00
0.50 %	Geum canadense, PA Ecotype	White Avens, PA Ecotype	192.00
0.50 %	Rudbeckia triloba, WV Ecotype	Browneyed Susan, WV Ecotype	57.60
0.40 %	Monarda fistulosa, Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype	96.00
0.30 %	Asclepias syriaca, PA Ecotype	Common Milkweed, PA Ecotype	96.00
0.30 %	Solidago nemoralis, PA Ecotype	Gray Goldenrod, PA Ecotype	264.00
0.20 %	Aster prenanthoides, PA Ecotype	Zigzag Aster, PA Ecotype	432.00
0.20 %	Eupatorium perfoliatum, PA Ecotype	Boneset, PA Ecotype	192.00
0.20 %	Solidago bicolor, PA Ecotype	White Goldenrod, PA Ecotype	240.00
0.10 %	Solidago juncea, PA Ecotype	Early Goldenrod, PA Ecotype	336.00

100.00 % Mix Price/Lb Bulk: \$38.61

Seeding Rate: 20 lbs/acre with 30 lbs/acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31

Jul) or grain rye (1 Aug to 31 Dec).

Herbaceous Flowering Species - Herbaceous Perennial; Pollinator Favorites; Uplands & Meadows

The native wildflowers and grasses in this mix provide an attractive display of color from spring to fall. Designed for mesic to upland sites and full sun to lightly shaded areas. This mix will attract a variety of pollinators and songbirds. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.