



Greater Farmland Neighbor Talks - Lawns

A practical and environmental look at grass, lawns,
their upkeep and alternatives

Agenda

- ▶ What do we want from a lawn?
 - ▶ Attractiveness through seasons, traffic durability, low maintenance, performance in varied light conditions, drought tolerance
- ▶ What are the costs of our lawns?
 - ▶ Maintenance – mowing, pesticide, and fertilizer options
 - ▶ Loss of biodiversity
- ▶ Minimizing the costs:
 - ▶ Electric Mowers and Blowers, organic lawn care
 - ▶ Welcoming some of the weeds (clover, violets, sorrel, wild strawberry)
 - ▶ Steppable alternative plants
 - ▶ Groundcovers
 - ▶ Borders and Beds
- ▶ Resources- websites, vendors, and books
- ▶ These slides and the session recording are available at <https://greaterfarmland.org/neighbor-talks-environmentalism-at-home.html>

What is a lawn? What do we want from it?

- ▶ Currently, an expanse of grass plants, typically cut to a few inches, not permitted to grow to full height or flower.
- ▶ European import, in past centuries, only available to leisure class land-owning gentry. Wetter, colder climate with sheep available to keep it short.
- ▶ In commercial grass seed mixes or turf, several species of warm- and cool-season, mostly fescue species, often coated in fertilizer/fungicide. Pre-1950s seed mixes also included white clover, a nitrogen-fixer.

Modern grass lawns conform to community norms, provide play surface, set off gardens and home aesthetics, it's easy to find a lawn care company, and may add to the curb appeal and value of our properties.



BUT . . . Maintaining lawn is costly

- ▶ Mowing and Blowing

- ▶ EPA 2015 study showed that gas-powered lawn equipment emitted 20 million tons of carbon monoxide, which was 12% of all the CO emitted.

- ▶ Watering

- ▶ According to the EPA, residential outdoor water use across the United States accounts for nearly 8 billion gallons of water each day, mainly for landscape irrigation.

<https://www.epa.gov/watersense/outdoors#:~:text=Did%20you%20know%20that%20residential,showering%20and%20washing%20clothes%20combined>

- ▶ Using Pesticides and Fertilizers

- ▶ Montgomery County strictly regulates allowable lawn "treatments." Most weed and feed formulations cannot be used.

<https://www.montgomerycountymd.gov/lawns/Resources/Files/pesticide-law-compatible-products.pdf>

- ▶ See also Maryland's 2013 fertilizer law:

<https://mda.maryland.gov/Pages/fertilizer.aspx>

- ▶ Mosquito pesticide sprays, such as pyrethroids, are broad-spectrum, killing beneficial insects as well as the target biting insects.



- ▶ Loss of biodiversity and habitat.

- ▶ In the US, 40 million acres are turf grass (includes golf courses and athletic fields and lawns. By comparison, about 85 million acres of US land is national parks - with 55 million of that in Alaska.
- ▶ Lawn grass attracts a few insects (grubs, cutworms, and other “pests”) and provides some sheltering perches for insects such as lightning bugs, but otherwise has limited ecological value since it produces no flowers, no seeds, and usually grows on compacted soil.
- ▶ In our neighborhood, we have seen a decrease in the numbers of lightning bugs, songbirds, and toads over the past decade.
- ▶ Note: 96% of songbirds feed their young caterpillars and other insects exclusively. And 90% of these insects can only feed on native plants. (*A New Garden Ethic*, B. Vogt, 2017)
- ▶ **Our yards can increase food for birds and pollinators AND still have lawn.**


SO . . . Greening Lawn

- ▶ County promotion of “grass-cycling”
- ▶ Natural compost and peat alternatives:
 - ▶ Leafgro – Compost made from Montgomery County leaf collection. Sold at Seasons Nursery & Home Depot
 - ▶ PittMoss – alternative to peat, which releases carbon and is shipped from overseas, PittMoss is made from organic recycled paper pulp
 - ▶ Composted food waste – create from your own compost bin or receive from Compost Crew with subscription
- ▶ Explore alternatives to pesticide spraying
 - ▶ Blowing fans across your patio repels mosquitos, which can't fly in wind
 - ▶ "Dunks" in a bucket <https://ui.charlotte.edu/story/try-%E2%80%98bucket-doom%E2%80%99-eliminate-mosquitoes-without-harmful-pesticides>
 - ▶ Electronic zappers
 - ▶ Article about backyard mosquito spraying: <https://mygreenmontgomery.org/2022/an-interview-with-experts-are-backyard-mosquito-sprays-safe-and-effective/>



Garden tools and methods for the 21st century and BEYONDDDDDDDDddddd

- ▶ Mowers. There are powerful, relatively quiet, self propelled, rechargeable battery lawn mowers available for no more than the cost of a good quality gasoline mower. Since they have neither gasoline nor oil in them, can be stored virtually anywhere and are lightweight enough to collapse the handles and set on end in a small space. They are relatively maintenance free and cost nearly nothing to operate, and they hardly ever need repair.
- ▶ Extensible Multitool. A favorite tool is an extendable, rechargeable battery powered arm for interchangeable tools: branch pruner, hedge trimmer, lawn edger. Safely prune tree limbs 15 feet up while standing on the ground, or large swaths of hedge with a single pass, or weed whack and edge.
- ▶ Leaf Blowers. The County Council has been considering a ban on the sale of gas-powered leaf blowers. Often, fallen leaves are best left where they lay for winter soil and plant protection. By July, they will have morphed into mulch and compost. For the rest, there are rechargeable battery powered leaf vacuum mulchers. These can blow leaves at a flip of the switch or chop and bag them as mulch for redistribution around plants. Since the nozzle can easily reach between plants, leaf removal by vac mulcher is much easier than raking and easier on tender plants.



Explore “eco-lawn” grass seed mixes

“Eco” mixtures of grass seed may contain the same blends of rye grass and fescues as, say, Pennington mixes, plus clover. You can also increase health of lawn by increasing biodiversity: over-sow clover, and welcome violets, spring beauties, sorrel, wild strawberry, and a greater variety of grasses.

E.g, Pennington’s grass seed is enhanced with “proprietary technology, Penkoted”, which promotes healthier plants, protects against fungus. Scott’s grass seed is also treated with fungicide, fertilizer, and “water smart” water retention coating.

- ▶ White Flower Farm’s Eco-Lawn is comprised of SR5250 Creeping Red Fescue, SR5130 Chewings Fescue, SR3150 Hard Fescue, Shoreline Slender Creeping Red Fescue, Quatro Sheep Fescue, SR3210 Blue Fescue.
- ▶ PT 705 Xeriscape Lawn Alternative--Mow or Don't mix includes: Perennial Ryegrass, Hard Fescue, Quatro Sheep Fescue, White Yarrow, Dutch White Clover, Strawberry Clover, Sweet Alyssum
- ▶ PT 769 R&R Eco-Turf Mix with Microclover® : Quatro Sheep Fescue, Banfield Perennial Ryegrass, Eureka II Hard Fescue, Microclover®

Micro-Clover and Mini-Clover Lawns: Alternatives to Grass

- ▶ Evergreen – dormant, but still green, in winter, just like grass
- ▶ Grows up to 6" high, needs little to no mowing
- ▶ Adored by bees and butterflies
- ▶ Chokes out weeds
- ▶ Enriches soil naturally – makes its own fertilizer & adds nitrogen to soil
- ▶ Grows from seed, just like a grass lawn
- ▶ Can be planted as areas among grasses, and then will spread
- ▶ Pesticides and herbicides not needed



Early mini-clover,
freshly seeded

Steppable lawn and pathway alternatives:

Foot traffic tolerant for lawn areas and beside paths

Creeping Wire Vine (Muehlenbeckia)



- ▶ A dense evergreen. Steppable (resists occasional footsteps), tough, fast-spreading, low-maintenance. A versatile creeper, grows in sunny or partial shade, with any type of well-draining soil.

Dwarf Mondo Grass



- ▶ Dwarf mondo will create a dense cover. Spreading and mounding grasses, no mowing. Evergreen. Can be aggressive/invasive, so keep it where you want it. Drought tolerant. Part-shade/part-sun.

Creeping or moss phlox



- ▶ Sun to part-shade, tolerates light foot traffic, good along pathways.

Steppable lawn and pathway alternatives:

Foot traffic tolerant for lawn areas and beside paths

Creeping Thyme



- Many varieties, Woolly, Golden... will form a low, thick blanket, spreading slowly in shade but rapidly in enough sunlight. Will offer mats of purple or golden flowers. It is steppable.. All gardeners and other good people deserve creeping thyme.

Blue Star Creeper



- Hardy, steppable, and quickly forms a dense blanket. Can be used as a lawn.

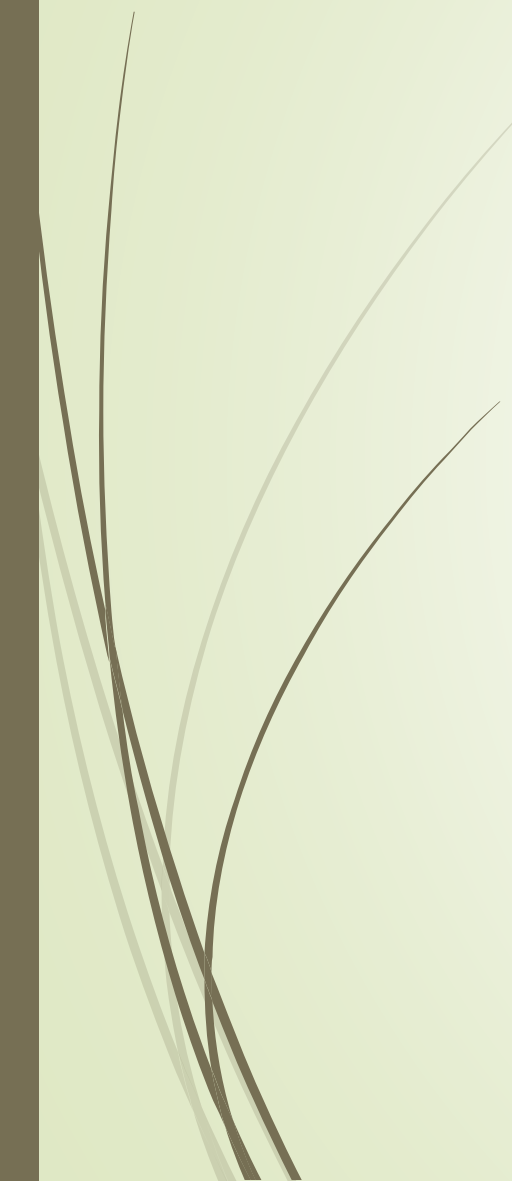
Corsican Mint



- A low-growing evergreen. Steppable, versatile, growing in sun or shade, in dry or moist areas. Dainty white blooms in the spring into summer, could be a green mulch between larger plants or between stepping stones. Can be used as a lawn plant



Beds and borders

- ▶ Not necessary or desirable to replace entire landscape, including lawn, or to try to do all of your alternative landscaping at once
 - ▶ Start by extending existing beds and borders, adding in a few new species as under-plantings, pops (or masses) of color, or a new shrub or other keystone species
 - ▶ For new areas, start small and try out some plants to see how they do
 - ▶ Work along pathways, around trees, or create bedding areas within the lawn area. You can expand these, as desired, over time
 - ▶ Allowing leaves to pile up under trees through the winter creates a new planting bed for springtime. Bedding plants that spread naturally reduces mulch use and cover bare spots where grass is difficult to grow and maintain in shade.
 - ▶ New plants can take 3 years to fill in and look good. Be patient. A happy plant will establish itself over time.
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How to start a new bed or border

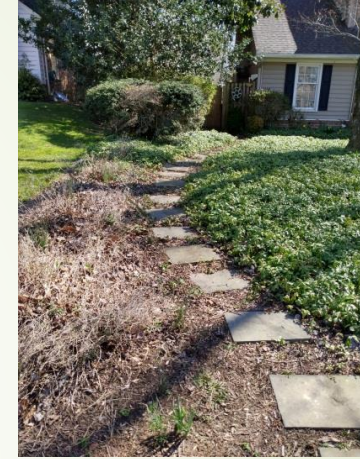
▶ No sod removal method

- ▶ Define your area and mow closely. Cut down or pull any other unwanted vegetation (can leave it in where it falls if no seed heads).
- ▶ Cover with cardboard or thick layer of newspaper, overlapping edges. Hose it down as you work.
- ▶ Put down a thick layer, 4-6", of organic mulch.
- ▶ If you do this in spring, it's ready for fall planting. If done in fall, it's ready for spring planting. Generally, it takes at least two months to kill the lawn.
- ▶ If you're anxious to get started with the new plantings, cut holes in the mulch/newspaper layer, plant, then pull any weeds as they come through.

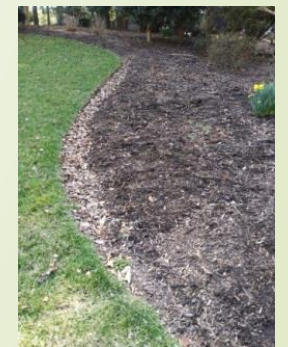
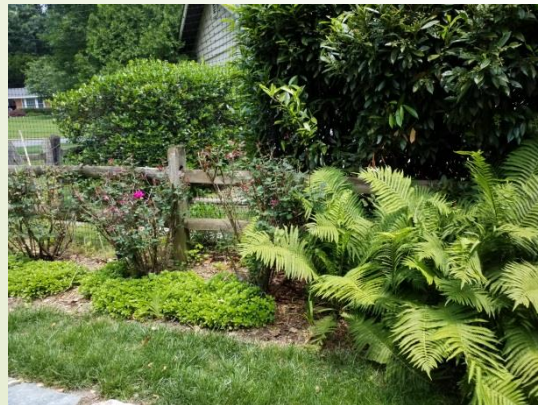
▶ Sod removal method

- ▶ Use spade to cut down 6 inches, cutting in straight lines. Cut squares about 1 foot wide and lift up and remove or just flip it over.
- ▶ Restore the soil by adding at least two inches of organic material, such as LeafGro (see Resources) mixed with top soil (optional).
- ▶ You can then plant, mulching around the plants. Weed as necessary.
- ▶ Alternatively. Hire a contractor to remove the sod and prepare the bed.

Less lawn = More plants, more pizzazz



Lawn as design element along borders and beds



Bedding plants:

Don't tolerate foot traffic or are too tall for lawn use

Golden Ragwort (Pakera Aura)



- ▶ NATIVE. Semi evergreen, ok with clay and occasional sogginess or dryness. Part to full shade. Deer resistant. Spreads nicely. Has dark green leaves close to the ground, then puts up foot-high stalks with lovely yellow flowers in spring. A good underplanting groundcover.

Hellebores



- ▶ 12" to 18". Blooms early and can spread in shade. Flower colors vary. Plant a strain that will present its blossoms above the leaf structure. Evergreen, but remove last year's leaves when new growth emerges.

Heuchera



- ▶ Sun to part-shade, tolerates light foot traffic, good along pathways.

Bedding plants:

Don't tolerate foot traffic or are too tall for lawn use

Plumbago

(*Ceratostigma plumbaginoides*)



- ▶ A seasonal spreading ground cover that has nice blue flowers, suffers shade poorly but worth a try someplace with a couple of hours of direct sun. Attracts butterflies. 12" partial to light shade, small blue flowers in fall, foliage turns red in fall.

St. Johns Wort



- ▶ Shrub-like ground cover, tough and spreads slowly to exclude all else. Green for about 9 months a year. Good for contrast. Deer won't eat it. Approx. 12" tall.

Sweet Box



- ▶ Narrow, shiny-leaved evergreen shrub that can range in height from 2 to 4 feet tall. It has tiny insignificant flowers in spring which are famous for their intense perfume. It spreads very very slowly but it is unstoppable. Deer will not eat it.

Bedding plants:

Don't tolerate foot traffic or are too tall for lawn use

Dwarf Crested Iris



- ▶ **NATIVE.** Spring flowers. Leaves die back in winter, but are lovely in beddings for color. Rabbit and deer do not usually bother this plant. Handles part sun to light shade and most soil and moisture types. Spreads slowly. It's hard to go wrong with this one!

Wild Ginger



- ▶ **NATIVE** Grows 6-8". Part shade, medium-wet to medium-dry soil. Roots are shallow, so it is easy to divide and transplant. Not evergreen, they put out maroon flowers, hidden beneath the leaves, in Spring.

Mountain Stonecrop



- ▶ **NATIVE** Up to 6". Part to full shade. Leaves are succulent, and plant roots very shallowly. White flowers in spring. Slow-spreading semi-evergreen groundcover.

Ferns!



- Not steppable and all die back in winter, but deer and bunnies won't eat ferns, and they come in innumerable colors, shapes, and sizes. Most ferns spread well in shade or part-shade, and are lovely under trees, around shrubs, next to fences,
- **Christmas fern (*Polystichum acrostichoides*)** 1-3'. Part to full shade. Evergreen.
- **Cinnamon fern (*Osmunda cinnamomea*)** 2-4'. Sun to full shade.
- **Hay-scented fern (*Dennstaedtia punctilobula*)** 1-3'. Light shade. Aggressive
- **Intermediate Wood fern (*Dryopteris intermedia*)** Up to 2.5'. Part to full shade. Evergreen.
- **Northern maidenhair fern. (*Adiantum pedatum*)** 1-2'. Part to full shade.
- **Marginal wood fern (*Dryopteris marginalis*)** 1-3'. Part shade. Evergreen.
- **New York fern (*Thelypteris noveboracensis*)** 1-2'. Part to full shade.
- **Ostrich fern (*Matteuccia struthiopteris*)** 1-3'. Part to full shade.
- **Fern Cohen (*Batya Kohain*)** NATIVE 5'8" Red hair. Looks good in full sun or shade,






Invasive plants to **AVOID**

THESE TAKE OVER, ARE NOT NATIVE, AND DAMAGE PARKS AND COMMON LANDS
THEY MAY BE AVAILABLE IN GARDEN STORES, SO BEWARE!

The links below have more extensive lists; the second link has descriptions and photos:

<https://mda.maryland.gov/plants-pests/Documents/Invasive-Plant-List-March-2020.pdf>

https://dnr.maryland.gov/wildlife/Documents/Invasive_plants_cards.pdf

	<u>Vinca - Periwinkle</u>	Indestructible and spreads aggressively, it can crowd out or overcome plants you like. Lovely flowers in many colors. Stepable and evergreen. Deer won't eat it. Toxic to dogs. Can be invasive; don't plant near any parks or natural areas. Outlawed in DE.
	<u>English Ivy</u>	This will grow everywhere and is hard to remove, once established. It climbs and kills trees and shrubs. If you allow it to grow on your house, the clinging roots will eat away at the surface of bricks, and it will grow into and behind siding and gutters. Forget the "ivy-covered" academic campuses, this plant destroys buildings.
	<u>Japanese Barbery</u>	Thorny shrub with spoon-shaped leaves and red berries.
	<u>Japanese Honeysuckle</u>	Common in parks. Will choke out native plants.
	<u>Garlic Mustard</u>	This is all over the place, found in our gardens and parks. Pull it out when you see it!



Resources

- ▶ Book- Groundcover Revolution by Kathy Jentz (available in paperback or Kindle)
- ▶ Landscaping contractors & plant source
 - ▶ Sust, a local yard maintenance company dedicated to environmental practices, including using electric tools - livesust.com
 - ▶ William Godoy. 240-246-6041 – recommended on listserv as a reliable, reasonably priced garden service for planting, etc.
 - ▶ Enviro Green Lawn & Ornamental Service, envirogreenlawn@hotmail.com
 - ▶ Seasons Nursery, 8135 Snouffer School Rd, Gaithersburg – helpful staff, large plant selections



Resources

- ▶ <https://extension.umd.edu/resource/groundcovers>
- ▶ <https://dnr.maryland.gov/wildlife/Pages/habitat/wagroundcovers.aspx>
- ▶ <https://www.montgomerycountymd.gov/lawns/homeowner/tips/>
- ▶ <https://choosenatives.org/articles/plant-native-ground-covers-make-america-green/>
- ▶ <https://mgnv.org/plants/native-plants/ground-cover/>
- ▶ <https://awaytogarden.com/slideshow-10-great-groundcovers-to-rely-upon/>
- ▶ https://www.epa.gov/sites/default/files/2014-04/documents/greenscaping_-_the_easy_way_to_a_greener_healthier_yard.pdf
- ▶ <https://19january2017snapshot.epa.gov/www3/watersense/pubs/outdoor.html>
- ▶ PittMoss.com

Resources

- ▶ County and State sites with fertilizer and pesticide rules:
 - ▶ <https://www.montgomerycountymd.gov/lawns/Resources/Files/pesticide-law-compatible-products.pdf>
 - ▶ <https://www.montgomerycountymd.gov/lawns/law/allowed-pesticides.html>
 - ▶ <https://www.montgomerycountymd.gov/lawns/law/law-purpose.html>
 - ▶ <https://mda.maryland.gov/SiteAssets/Pages/fertilizer/CertifiedLawnCarePros.pdf>
link found on <https://mda.maryland.gov/pages/fertilizer.aspx>
 - ▶ MD pamphlet for 2023 on fertilizer rules:
https://mda.maryland.gov/resource_conservation/Documents/fertilizerwebpage.pdf
- ▶ <https://www.montgomerycountymd.gov/sws/grasscycling/>
- ▶ <https://mygreenmontgomery.org/2022/an-interview-with-experts-are-backyard-mosquito-sprays-safe-and-effective/>
- ▶ <https://ui.charlotte.edu/story/try-%E2%80%98bucket-doom%E2%80%99-eliminate-mosquitoes-without-harmful-pesticides>



Definitions



- ▶ Groundcovers: Any plant that sufficiently covers the soil in a fairly dense manner.” Includes low growing perennials, even shrubs, and self-sowing annuals, sprawling vines, and grasses. Also called “green or living mulch” these days. (Kathy Jenz, *Groundcover Revolution*, 2023)
- ▶ Steppables : Plants you can walk on. These low-lying perennials can withstand heavy foot traffic, release pleasant odors when crushed, smother weeds, and cushion your step in the narrow spaces between bricks or flagstones.
- ▶ Native plants: Plants that have co-evolved into a community supporting specific local insects and wildlife.
- ▶ Invasive plants: species that are not native to the eco-region that displace the plants that are. The result is loss of plant diversity, which leads to loss of habitat.
- ▶ Aggressive plants: spread fast and may outcompete other species.

Add some native pops of color to beds and borders

