



Turf Alternatives

Restoring Ecological Function

Turf grass has its place. It is a hardy surface to play or lounge on and its dense network of shallow roots controls erosion. **But it also has its drawbacks.** Healthy turf grass requires **frequent mowing, chemicals** that don't stay where they're put, and **substantial irrigation** to stay green through the summer. It also does a poor job of infiltrating water into the ground where it can be cleaned and cooled naturally—**contributing to runoff that pollutes our lakes and rivers.** Lastly, **it offers nothing to the beneficial insects** we rely on to pollinate our gardens and control pests. **With so much of our urban and suburban environment covered by impermeable surfaces** (roofs, streets, parking lots, etc.), what we choose to plant in the remaining patches of soil **has drastic consequences for water and habitat quality.**

Types of Turf Alternatives

1.

Low Maintenance Turf

functions as a typical lawn but is composed of species that require less water and fewer inputs. This may be appealing if you want to keep the appearance of a traditional lawn and have heavily used areas.

2.

Pollinator Friendly Lawn

introduces low-growing flowers into a lawn as forage for pollinators and deeper roots that need less watering. If you are not concerned with having a pure green carpet of lawn, this may be the best option to help restore the ecological function of your yard.

3.

Perennial Ground Cover

is a matrix of tightly knit grasses and forbs. If you have low use areas and welcome a non-traditional look, this option offers the maximum ecological impact, though it requires investment of planning and money and has higher maintenance needs while establishing.

	Common Name	Scientific Name	Bloom	Height	Sun/ Shade	Soil	Native?
1	No Mow mixture	n/a	n/a	1-8"	both	dry	some
1, 2	Fine Fescues	<i>Festuca sp.</i>	n/a	1-8"	both	dry	some
2, 3	Self-heal	<i>Prunella vulgaris</i>	purple	2-12"	both	mesic	yes
2, 3	Creeping Thyme	<i>Thymus serpyllum</i>	purple	2-4"	sun	dry	no
2, 3	Dutch White Clover	<i>Trifolium repens</i>	white	6-12"	both	dry	no
2, 3	Sweet White Violet	<i>Viola blanda</i>	white	6"	shade	mesic	yes
2, 3	Common Blue Violet	<i>Viola sororia</i>	purple	4"	both	mesic	yes
2, 3	Ground Plum	<i>Astragalus crassicaarpus</i>	purple	12"	sun	dry to mesic	yes
3	Sideoats Grama	<i>Bouteloua curtipendula</i>	n/a	24"	sun	dry to mesic	yes
3	Blue Grama	<i>Bouteloua gracilis</i>	n/a	12"	sun	dry	yes
3	Ivory Sedge	<i>Carex eburnea</i>	n/a	6"	shade	dry to mesic	yes
3	Pennsylvania Sedge	<i>Carex pennsylvanica</i>	n/a	8"	both	dry to mesic	yes
3	Path Rush	<i>Juncus tenuis</i>	n/a	6-12"	sun	dry to mesic	yes
3	Prairie Junegrass	<i>Koeleria macrantha</i>	n/a	24"	sun	dry	yes
3	Calico Aster	<i>Symphotrichum lateriflorum</i>	white	24"	both	mesic	yes
3	Lanceleaf Coreopsis	<i>Coreopsis lanceolata</i>	yellow	12-24"	sun	dry	yes
3	Prairie Groundsel	<i>Packera plattensis</i>	yellow	12-16"	sun	dry	yes
3	Pussytoes	<i>Antennaria plantaginifolia</i>	white	12"	sun	dry	yes
3	Prairie Smoke	<i>Geum triflorum</i>	pink	8"	sun	dry to mesic	yes
3	Woodland Strawberry	<i>Fragaria vesca</i>	white	6-10"	shade	mesic	yes

Planting

- **It is possible to overseed a healthy Kentucky bluegrass or fine fescue lawn with Pollinator Friendly seeds:**
 1. Mow your lawn to a height of 1" or less. Rake or collect the clippings in order to expose as much soil as possible.
 2. If not too difficult, aerate lawn. These steps will improve the flow of nutrients within the soil to create favorable conditions for germination and healthy growth.
 3. Spread seed at recommended rates of lb/acre, according to seed source.
 4. Keep area moist as seeds sprout and take root.

If your lawn has much creeping charlie, tall fescue or perennial ryegrass present, this option will be less effective.

- **To establish Low Maintenance Turf or Perennial Ground Cover or a Pollinator Friendly Lawn where overseeding isn't desired or recommended:**
 1. Remove existing turf. This can be done with a sod kicker or sod cutter, by solarization, sheet mulching, or safe herbicides (20% acetic acid or Phydura is an ecologically responsible alternative to glyphosate).
 2. Amend soil with compost or compost tea. This introduces nutrients and organisms to help foster healthy growth.
 3. Smooth and level the planting area. If possible, shape it so that runoff is directed away from impermeable surfaces towards places where it can infiltrate.
 4. For Low Maintenance Turf: Seed at recommended rates of lb/acre, or some nurseries may offer or be willing to grow No Mow or fine fescue sod.
For Pollinator Friendly Lawn: Spread mixture of flower and fine fescue or Kentucky bluegrass seeds at recommended rates.
For Perennial Ground Cover: Seed at recommended rate, or plant plugs at recommended spacing. Planting of plugs is the fastest way to establish a perennial groundcover yard, but can be expensive when doing a large area. Options are to work in phases, or to choose a combination of plugs and seeding.
 5. If possible, cover seeded area with germination blanket to help keep moist.

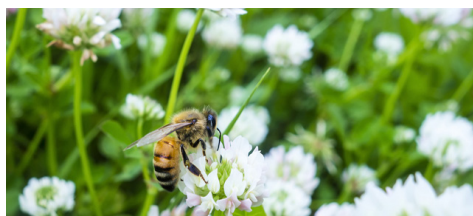
Establishment & Maintenance



Low Maintenance Turf

once established can be treated like turf that requires less mowing, watering, and fertilizer application.

Sometimes heavy thatching can occur in No Mow lawns, often as a result of too much nitrogen. Once lawn turns green in Spring, use a detaching machine to remove dead leaves without disturbing soil. Sow No Mow seeds into gaps.



Pollinator Friendly Lawn

can be treated like turf. If you do mow, keep it at least 3" tall. You can choose to refrain from mowing while flowers are blooming to increase the amount of forage available for pollinators.

If you've planted white clover, know that its roots host bacteria that convert atmospheric nitrogen into a form usable by plants—as a result, you are able to cut back on fertilizing your lawn.



Perennial Ground Cover

While plants spread, you will need to keep an eye out for weeds. This will take time. It may require a trained eye to spot the difference between a beneficial plant and a weed.

Once established, the ground cover should be thick enough to inhibit weed germination and hearty enough to compete with most intruding weeds.