Lawn Grass Alternatives: Green Your Space Sustainably

THE HISTORY OF LAWNS IN AMERICA

When early settlers migrated westward to establish themselves in North America, they introduced various elements to the world around them. The origins of American lawns can be attributed to landscape designers from England and France. The first lawns in Europe were grassy fields surrounding castles that gave guards a clear view of their surroundings. Our country's founding fathers were no exception. As wealthy landowners, Thomas Jefferson and George Washington established lawns on their estates to imitate those European country estates. Since then, the obsession with well-manicured lawns in the United States has been the status quo and the symbol of pride for homeownership.

LAWN GRASS ALTERNATIVES OVERVIEW

Turfgrass lawns provide areas for unobstructed views and recreation activities such as playing ball, picnicking and lounging. With enough space, you can even enjoy the all-important sports that Americans hold dear, such as golf, football and soccer. Lawns have a place in our landscapes and our hearts. In addition, they provide many important benefits to Louisiana landscapes, like reducing stormwater runoff, filtering atmospheric pollutants and controlling erosion.

Although traditional grass lawns are a common sight in today's landscapes, they're not always the best or most sustainable option for ground cover. Various factors, including climate, maintenance and sunlight requirements, environmental impact and different aesthetic preferences, have resulted in the exploration and adoption of lawn or turfgrass alternative ground covers. Lawns can require scheduled upkeep such as mowing, weeding, dethatching and aerating in addition to being one of the most irrigated plants in the landscape. According to the U.S. Environmental Protection Agency, landscape irrigation is estimated to account for nearly one-third of all residential water use, with lawns accounting for much of the use of water due to their shallow root systems.

Furthermore, we must consider the chemicals commonly applied to our lawns, such as fertilizers and pesticides (including herbicides and insecticides), which can leach into our water supply during heavy rainfall. Lawns offer limited habitat possibilities, and many of the grasses commonly used in typical home lawns are non-native to the United States. By writing about lawns and their alternatives, we aim to inspire homeowners to reconsider their concept of the American lawn. The good news is you don't have to eliminate your lawn. You can start by downsizing and considering alternatives to what plants we utilize to create our lawns.

WHAT IS AN ALTERNATIVE LAWN?

A lawn alternative refers to a type of ground cover plant, often low-growing or creeping, that serves as a substitute for traditional grass. Alternative lawns are becoming increasingly popular as eco-friendly and low-maintenance landscaping options. They often consist of plants other than traditional grasses and can include a variety of ground covers and low-growing plants. Typically, these alternatives demand minimal to no watering, lesser weed control efforts and eliminate the need for pesticides or fertilizers when compared to traditional turfgrass lawns. They can offer a more manageable and environmentally friendly option compared to conventional turfgrass. This does not mean that they are maintenance free as some level of weeding, mowing and monitoring will be necessary.

Ground covers can be a good solution because many naturally spread and often don't grow tall enough to require mowing regularly. Native ground covers are an excellent choice in addition to several non-native plants that tend to be more readily available at retail garden centers. Some examples of ground covers that can be used as turfgrass alternatives are creeping herbs such as thyme and oregano, creeping phlox, liriope, mondo grass, creeping Jenny, yarrow and clovers to name a few.

Other common lawn replacements include ground covers that tolerate more shade, such as liriope, creeping lily turf, monkey grass, Asiatic jasmine, and both Algerian and English ivy. For part to full

sun areas in the landscape, you can utilize a host of sedums, low-growing junipers, dwarf gardenias, dwarf lantanas and perennial verbenas. Additionally, you can replace traditional lawns with wildflower meadows. Wildflowers add some height and color and, of course, attract pollinators. This can add a great deal of diversity to your landscape. There are many more plants that can be considered as alternatives. You could replace large areas of turfgrasses with more landscape plants such as annuals, perennials, vines, shrubs and trees. When selecting plants for an alternative lawn, it is important to consider factors like your climate, soil type, sun exposure and the intended use of the space. Some plants are better suited to specific conditions, so it is essential to choose the right ground cover for your landscape. Additionally, combining various ground covers can create a more diverse and visually appealing alternative lawn.

BENEFITS OF GRASS ALTERNATIVES

Alternatives to traditional grass lawns offer various environmental and practical benefits. Here are some of the key advantages:

Water conservation: Many grass alternatives require significantly less water than traditional lawns. This is especially beneficial in regions prone to drought or where water conservation is a priority. Irrigation is seldom needed.

Reduced maintenance: Alternatives like ground covers, clover, moss or artificial turf often require less routine mowing, fertilizing and pest control than traditional grasses. This not only saves time and effort but also reduces the need for chemicals and emissions from lawn maintenance equipment. Periodic weeding and mowing to reduce height can be necessary.

Environmental benefits: By choosing plants that are native to the area or adapted to the local climate, you can provide a habitat for local wildlife, including pollinators like bees and butterflies. Native plants are generally more resistant to pests and diseases, reducing the need for chemical treatments.

Erosion control: Some alternatives, especially those with deep root systems, can help prevent soil erosion better than traditional lawns. One advantage of using native lawn alternatives is their ability to mitigate flooding. Many native species are particularly effective at increasing water uptake, which can reduce surface runoff and erosion. This characteristic makes them an ideal choice for storm-resilient lawns, especially in areas prone to flooding. There is currently a growing interest in the community for strategies that enhance flood resilience in small yards. Homeowners with limited space and resources often cannot install extensive drainage systems or water retention gardens, making native lawn alternatives a practical and beneficial solution for managing stormwater and reducing flood risks.

Aesthetic diversity: Alternatives to grass can offer a wider range of textures, colors and blooming seasons, enhancing the visual appeal of the landscape.

Liriope grows well in heavily shaded areas. Photo by Heather Kirk-Ballard

Mondo grass is an evergreen perennial characterized by its dense, tufted clumps of narrow, dark green leaves that resemble grass. Photo by Heather Kirk-Ballard

Reduced lawn problems: Many lawn alternatives are more resistant to common lawn problems such as fungal diseases and pest infestations.

Cost savings: Over time, the reduced need for water, fertilizers, pesticides and maintenance can lead to significant cost savings.

Improved soil health: Some alternatives, like clover, can improve soil health by fixing nitrogen, thus reducing the need for synthetic fertilizers.

Versatility: Grass alternatives can be more versatile in landscaping, allowing for design options that traditional lawns cannot accommodate, such as steep slopes that are difficult to mow, shaded areas or hard-to-water spots.

Sustainability: By reducing the demand for water, chemical treatments and fossil fuel consumption for maintenance, alternatives to grass contribute to more sustainable landscaping practices.

It is important to choose alternatives that are well-suited to your local climate, soil conditions and the specific uses of your outdoor space.

areas, selecting a proper alternative to traditional turfgrasses can result in a lower-maintenance, more sustainable landscape. Remember to always consider your climate, soil conditions and intended use for the area to help increase your chances of successfully establishing an alternative ground cover.

WHY TURF ISN'T ALWAYS THE BEST CHOICE

Shade: Louisiana's climate is best suited for warm-season turfgrasses. Warm-season turfgrasses require plenty of sunlight for photosynthesis. In areas with heavy shade from trees and buildings, warm-season grasses may not be exposed to adequate sunlight for sustaining healthy, vigorous growth. If the plant is expending carbohydrates faster than it can create them through photosynthesis, the result is a gradual decline in the health of the turf. Selecting a shade-tolerant ground cover would be a better choice than turfgrass in this situation.

Maintenance: Although there are some good options for low-input, warm-season turfgrass lawns (e.g., bahiagrass and centipedegrass), some turfgrasses can require a high level of maintenance to look and perform their best. Compared to turfgrass, certain ground covers can go a long way in reducing the amount of mowing, fertilizer and irrigation necessary for healthy plant growth.

Traffic: Even though the ability to tolerate frequent traffic makes up a portion of what defines a turfgrass, all plants have a limit to what they can tolerate. Frequent foot traffic can result in soil compaction that restricts root growth resulting in thin, weak stands of turf. Consider mulches or paver stones for a functional, aesthetically pleasing walkway.

Hard-to-maintain areas: In areas that lawnmowers may have trouble accessing, low-growing ground covers and mulches are viable alternatives. Areas like parkways and road verges are commonly planted with trees that can make mowing difficult and time-consuming. Additionally, the areas may be too narrow for mowing equipment. Turfgrass is not meant to be grown everywhere, and if it is too difficult to mow using standard equipment, think about low-growing ground covers instead.

Dwarf mondo is a fantastic option for gardeners seeking a low-maintenance, compact and visually appealing groundcover that adds texture and interest to their landscape. Photo by Dan Gill

SELECTING A GROUND COVER

It is important to consider the growing conditions where you will be planting. This includes sunlight exposure, soil type (e.g., sandy, clay) and the site's drainage capability. Some ground covers require plenty of sun, and others thrive in shadier environments. Similarly, with soil, some ground covers thrive in drier, well-drained soil, and others are better suited for more poorly drained locations. Selecting a plant that not only tolerates but thrives in the environment in which it will be planted is the foundation for growing healthy plants.

It is also necessary to consider the size of the area you will be planting. Some ground covers are better suited for covering larger areas than others.

Consider what characteristics you would like to see in your ground cover. Things like growing height, color, flowers, texture and maintenance level will help narrow down your choices.

Asian jasmine can be used to replace areas of turf in the yard or to prevent weed growth for more sustainable lawns. Photo by Heather Kirk-Ballard

PREPARING THE PLANTING AREA

Remove existing vegetation: This can be done by nonchemical methods such as hand removal or solarization, a method that involves covering the area with a plastic tarp during the hot summer months. The heat trapped under the plastic will effectively kill turfgrass and other weeds. Chemical methods include using a nonselective herbicide like glyphosate. This is the best chance to start with a clean slate since weed control will be much more difficult after planting.

Prepare the soil: Till to a depth of at least 6 inches. Alternatively, you can skip the tilling and lay down five to 10 sheets of newspaper to kill grass and weeds. Weigh it down with compost, decomposed wood chips or water. Add a layer of compost, leaf litter or aged manure and water in thoroughly.

Amend soil: Now is the best time to add fertilizer and amendments. Once planted, correcting soil issues will be a major challenge. Get a soil test and amend the soil accordingly. Working in compost or manure will help heavy soils. Sprinkling a slow-release granular fertilizer and incorporating it into the soil before planting helps ensure your plants have a steady supply of nutrients. Remember to incorporate your amendments and fertilizer rather than sprinkling it on top.

Smooth it out: Rake the area to smooth the surface before planting.

PLANTING YOUR GROUND COVER

Fall is the ideal time for planting most ground covers. However, successful establishment can be achieved at any time of year. If planting in the heat of the summer, it is important to make sure that plants will receive irrigation as they are establishing. Make sure to keep your plants well irrigated throughout the first year of establishment, after which irrigation can be reduced to supplement rainfall.

Proper spacing is also important when planting. Spacing depends on the specific ground cover chosen. Consult the nursery staff where plants are purchased for proper spacing guidelines. Planting too close will result in overcrowding, and planting too far apart will result in bare areas that will take an extended period to fill in. Your budget will ultimately determine how many plants you can purchase for the area. Space them evenly throughout.

After planting, select mulch to apply over the bare areas. A 2-inch layer of mulch will help reduce the number of weeds popping up in your plantings and help your soil retain some moisture. Pine bark, wood chips and pine straw all make great mulches. Continue to weed bare areas by hand until the ground covers have filled in.

Native Selections:

Carpetgrass (*Axonopus fissifolius*). Full sun to partial shade, average to moist soils.

Cutleaf evening primrose (*Oenothera lacinata*). Full sun, dry soils.

Frogfruit (*Phyla nodiflora*). Full sun to full shade, evenly moist to average soils.

Green-and-Gold (*Chrysogonum virginianum*). Partial to full shade, moist soils.

Lawn sedge (*Carex leavenworthii*). Partial sun to shade, tolerant of full sun, dry to average soils.

Lyre-leaf sage (*Salvia lyrata*). Full sun to full shade, dry to moist soils.

Mimosa (*Mimosa strigillosa*). Full to partial sun, well-draining soils.

Path rush (*Juncus tenuis*). Full to partial shade, average to moist soils.

Pink evening primrose (*Oenothera speciosa*). Full sun, average to moist soils.

Saltmarsh aster (*Symphyotrichum subulatum*). Full sun to partial shade, dry to moist soil conditions.

Yarrow (*Achillea millefolium*). Full to partial sun, well-drained soil.

Many of these ground cover species work very well together in what is called a polyculture. This means interplanting several species together in the same area. Certain species perform better in particular seasons or growing conditions. The presence of multiple species means that there is a greater chance of one or more plants in the polyculture thriving at any given time. A good example of this is a polyculture containing white clover for winter cover, interplanted with mimosa for summer cover. Frogfruit, mimosa, evening and cutleaf primrose, and salt marsh asters all interact well in a polyculture together, ensuring a good thick cover of vegetation year-round in southern areas of the state. It may take some tweaking and experimentation to home in on the best polyculture mix for your specific site.

If your lawn continually struggles in certain areas, selecting a proper alternative to traditional turfgrasses can result in a lower-maintenance, more sustainable landscape. Remember to always consider your climate, soil conditions and intended use for the area to help increase your chances of successfully establishing an alternative ground cover.

Non-Native Selections:

Asian jasmine (*Trachelospermum asiaticum*). Full sun to partial shade, moist to well-drained soils.

Bugleweed (*Ajuga reptans*). Full sun to partial shade, prefers moist soils.

Cast iron plant (*Aspidistra elatior*). Full to partial shade, prefers dry to moist soils.

Creeping lily turf (*Liriope spicata*). Full to partial sun, prefers sandy, well-drained soils.

Creeping jenny (*Lysimachia nummularia*). Sun to partial shade, well-drained soils.

Creeping thyme (*Thymus serpyllum*). Full sun, well-drained to dry soils.

Flax lily (*Dianella tasmanica 'Variegata'*). Partial to heavy shade, prefers average to moist soils.

Liriope (*Liriope muscari*). Full sun to full shade, prefers moist, well-drained soils.

Mondo grass, monkey grass (*Ophiopogon japonicus*). Partial sun to full shade, prefers moist, well-drained soils.

Oregano (*Origanum vulgare*), naturalized. Full sun, well-drained to dry soils.

Pachysandra (*Pachysandra terminalis*). Full to partial shade, moist soils.

Perennial peanut (*Arachis glabrata*). Full sun, well-drained to dry soils.

White clover (*Trifolium repens)*. Full to partial sun, dry to average soils.

AUTHORS

Heather Kirk-Ballard, Assistant Professor,
School of Plant, Environmental and Soil Sciences

Eric DeBoer, Assistant Professor, School of Plant,
Environmental and Soil Sciences

Anna Timmerman, Assistant Extension Agent,
St. Bernard Parish

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