

Alternatives to the American Lawn: A Central Minnesota Homeowners Options

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Introduction

Lawns are one of the largest manmade landscapes in the United States, taking up about 25 million acres. The typical American lawn consists of monocultured turfgrass that has been recognized for having potential for environmental impacts, due to the excessive amount of water consumption, pesticide and herbicide use and equipment emissions. There is an increasing need to establish alternatives to the traditional turfgrass in Central Minnesota that reduce input of resources and labor, while positively benefiting the surrounding environment. So how can homeowners in central Minnesota move away from the typical American lawn to a more natural landscape that would promote the surrounding environment?

Methods

A literature review was done to research the current lawn and the best possible alternatives that would be possible for a central Minnesota homeowner to implement. Research was also conducted through landscape companies that have been working on creating alternative landscapes such as Prairie Restorations Inc. To be able to see the differences of laws and regulations of different areas in Minnesota a visual study was conducted. A case study was done on three different regions— Brooklyn Park, Minneapolis, and St. Joseph to compare differences in their lawn laws and how it is carried out by homeowners. All of the research conducted lead to three main alternative options that a central Minnesota homeowner could choose to implement in their lawn.

Results

Three main alternatives were found that best fit the landscape of a central Minnesota homeowner. The three alternatives include a low mow grass, prairie restorations and rain gardens (see figure 1). The low mow grass will provide homeowners with similar characteristics to their current turf, while prairie restoration and rain gardens will incorporate a higher diversity of plants (see pictures 1-5).

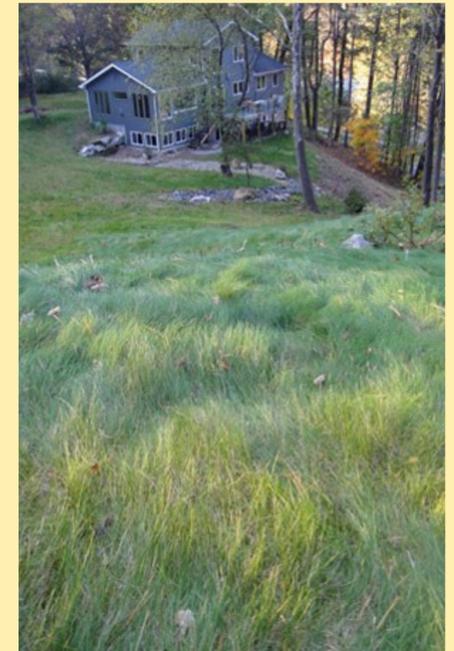
Pros and Cons of Alternative Methods for a Central Minnesota Homeowner Compared to Traditional Turf

| | Pros | Cons |
|--|--|--|
| Traditional Turf (Picture 1) | -Preferred look for lawns | -Grows quickly-2.5 inches in one week and up to 20 inch a season -Depends on heavy chemical applications-negatively impact human and environmental health -Heavy irrigation needed |
| Low Mow Grasses (Picture 2) | -Similar physical characteristics to traditional turf -Will only reach a height of 7 to 9 inches through entire season -Drought resistant -Requires no chemicals, pesticides -Mowing once a month will give cropped look -No fertilization required -Grow in full sun and shaded areas | -Not suitable for areas with high foot traffic -Will go dormant in summer drought (turn brown) |
| Prairie Restoration and Rain Gardens (Pictures 3, 4, 5) | -Erosion control -Ground water recharge -Less long-term maintenance -Rebuilds soil -Provides wildlife habitat -Little to no irrigation needed | -Landscaping with native plants can have a "weedy" look -Burning vegetation may not be allowed in all residential areas |

Figure one— table created by author



Picture 1— Traditional turfgrass for a homeowner in the United States



Picture 2— Low Mow Grass alternative

Conclusion

There is no one best alternative that would suit every central Minnesota homeowner. Physical factors of the lawn such as size and slope of lot as well as average rainfall needs to be taken into consideration. Political factors also affect which type of alternative landscape a homeowner can have. Codes and laws differ between regions and can restrict certain plants from being in the lawn. A homeowner would need to contact a city official or clerk for complete knowledge of their city's regulations. Finally, there are social factors that affect what type of alternative landscape is put in place. The type of landscape that is installed is very dependent on the homeowners' preferences. It is also dependent on neighbors preferences. Talking with neighbors and creating an understanding of the alternative method chosen to put in place is essential, then everyone can enjoy the beauty and sustainability of an alternative lawn.



Picture 3-Prairie Restoration in a rural residential area in Stearns County, MN. Plants pictured— big bluestem, common ox-eye and hoary vervain



Picture 4-Colorful prairie compared to a drought stressed turf lawn mid summer



Picture 5— Joe Pye weed, a prairie native are essential for pollinators



Picture 1: <http://www.aspenlandscaping.net/photos/General/general-L/Beautiful%20lawn%20and%20beds.jpg>

Picture 2: <http://www.prairienuresery.com/store/no-mow-lawn/no-mow-lawn-seed-mix#.U0sQ9K1dU10>

Picture 3,4,5- <http://www.prairieresto.com/prairie-project.shtml>