

NATIVE TURF

A New Lawn Option



MORE SUITED FOR IOWA'S CLIMATE

The great American lawn features grasses native to Europe. The typical lawn has cool-season grasses that thrive in the cooler, moister weather regime of England. In Iowa, cool-season grasses thrive in the spring and fall but struggle during hot, dry, long summer days. Today, there is an alternative that could become the new status symbol. Native turf lawns feature short-growing, deep-rooted warm-season native grasses that create a more sustainable lawn.

Traditional cool season turf lawns require significant inputs of fertilizer and water to keep them looking the way people want them to – a thick and lush carpet of deep green grass.

Native turf can look similar to traditional lawns while providing a number of benefits, including significant cost savings, water quality protection, and reduced flood potential. Warm season, native turf won't green up as early in the spring but will stay green during hot, long, dry days of summer when cool season species either go dormant or require irrigation. The deep

roots of native turf find moisture in the soil that shallow rooted non-native grasses can't access. Once established, native turf rarely needs irrigation. The deep rooted native grasses also build soil quality over time so that lawns can absorb more rain and shed less runoff. This protects water quality and helps reduce potential flooding.

If lawns were a crop, they would be the fifth largest crop grown in the United States. There are about 40 million acres of lawns in the U.S. By comparison, there are about 30 million acres of farmland in Iowa. So, lawns can and should be green infrastructure to absorb more rain and shed less runoff in urban areas. Native turf will help lawns provide these benefits.

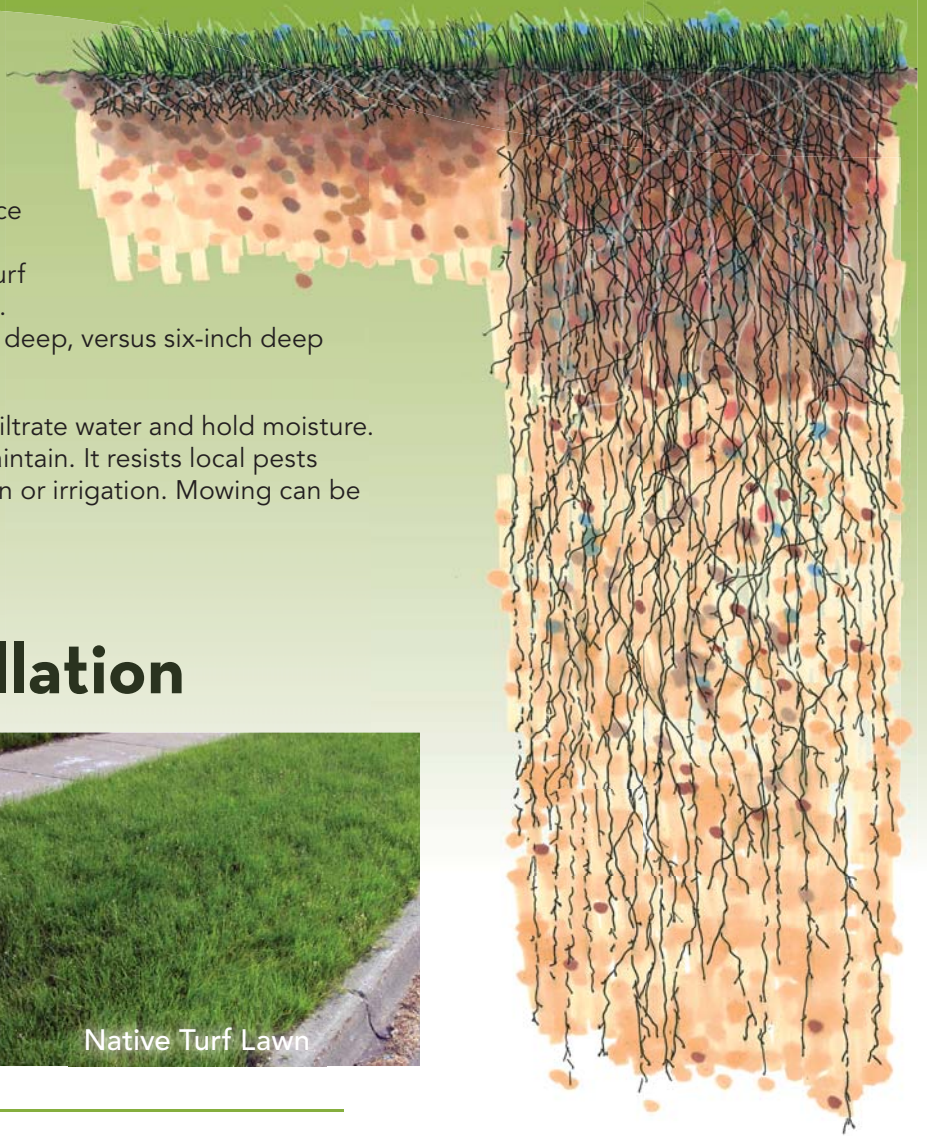


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Native Turf Root Systems

The illustration at right shows the difference between shallow-rooted grass, like Kentucky bluegrass and deep-rooted native turf grasses, like buffalo grass and blue grama. Native turf grass can extend up to six feet deep, versus six-inch deep roots on non-native turf.

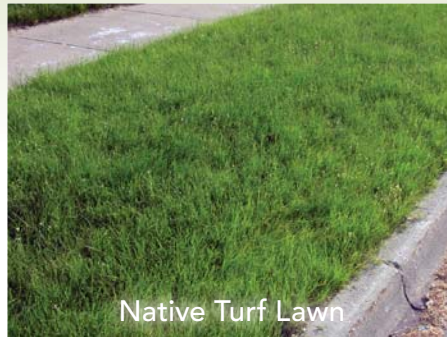
Native turf improves the soil's ability to infiltrate water and hold moisture. Once established, native turf is easy to maintain. It resists local pests and disease and does not need fertilization or irrigation. Mowing can be significantly reduced.



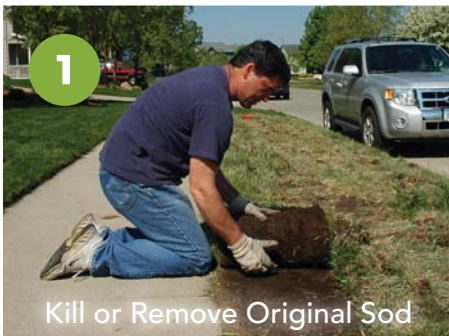
Native Turf Installation



Original Cool Season Lawn



Native Turf Lawn



1

Kill or Remove Original Sod



2

Till Soil



3

Spread Seed Mix



4

Native Turf Lawn

Native Turf Benefits

- » Less Mowing
- » Drought Tolerant
- » Stays Green in Summer
- » Less Watering Needed
- » Thrives in Dry Sites
- » Tolerates Clay & Compacted Soils
- » Little or No Fertilizer Needed

Native Turf Seeding

BEST WARM SEASON GRASSES FOR TURF

Blue Grama • Buffalo Grass • Sideoats Grama

Seeding Rates & Mixes

When seeding a native grass turf, the seeding rate is similar to the seeding rate for a traditional turfgrass sod. The grasses need to be very close together to produce a good sod.

Use Pure Live Seed (PLS) when seeding a native turf lawn. PLS is a measure of the percentage of seed that will germinate. For example, if you order 100 lbs. of seed with 85% PLS, only 85 lbs. will germinate.

Seeding Process

Generally, seed 1-2 lbs. PLS per 1,000 square feet or 44-88 lbs. PLS per acre (43,560 SF per acre).

For example, on a 40' x 75' (3,000 sq. ft.) backyard, convert to 1,000 sq. ft. to planting units:
3,000 sq. ft./1,000 sq. ft. = 3 planting units (PU)

Seed Mixes

1. Blue Grama-Buffero Grass-Sideoats Grama

Seeding Rate:

Blue Grama - 30% mix at 2 lbs. PLS/1,000 sq. ft.

Sideoats Grama - 30% mix at 1 lb. PLS/1,000 sq. ft.

Buffalo Grass - 40% mix at 1 lb. PLS/1,000 sq. ft.

Example: PLS needed for a 3,000 sq. ft. yard

- » Blue Grama - 2 lbs. PLS x 3 PU = 6 lbs. PLS x 30% mix = **1.8 lbs. PLS**
- » Sideoats Grama - 1 lb. PLS x 3 PU = 3 lbs. PLS x 30% mix = **0.9 lbs. PLS**
- » Buffalo Grass - 1 lb. PLS x 3 PU = 3 lbs. PLS x 40% mix = **1.2 lbs. PLS**

2. Blue Grama-Buffero Grass

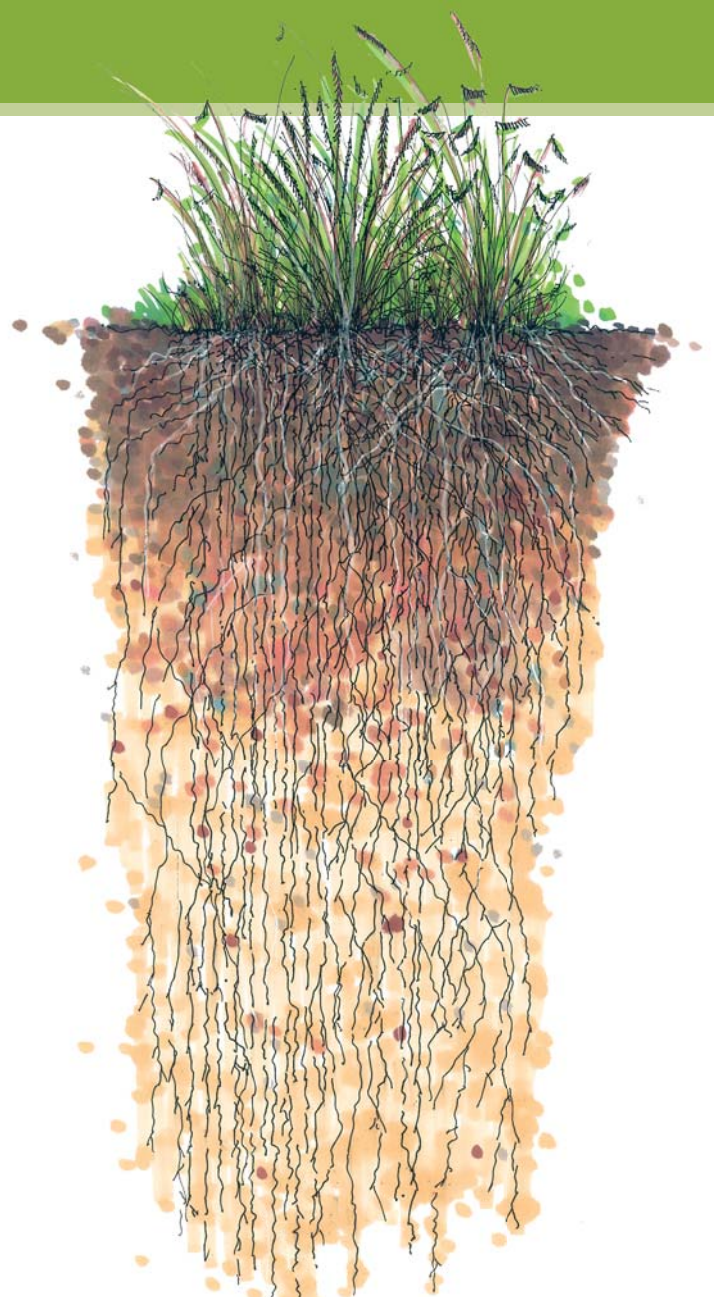
Seeding Rate:

Blue Grama - 50% mix at 2 lbs. PLS/1,000 sq. ft.

Buffalo Grass - 50% mix at 1 lb. PLS/1,000 sq. ft.

Example: PLS needed for 3,000 sq. ft. yard

- » Blue Grama - 2 lbs. PLS x 3 PU = 6 lbs. PLS x 50% mix = **3 lbs. PLS**
- » Buffalo Grass - 1 lb. PLS x 3 PU = 3 lbs. PLS x 50% mix = **1.5 lbs. PLS**



Keys to Establishment

- » Seed in late spring or early summer.
- » Soil test to determine if starter fertilizer is needed. Usually, fertilizer won't be needed. It's safer to not fertilize or under-fertilize than to over-fertilize.
- » De-compact and prepare a friable seedbed.
- » Broadcast seed, then pack the site for good seed to soil contact. Do not incorporate seed deeper than about ¼ inch.
- » Water as needed to enhance germination. Keep moist, but not saturated.
- » Water as needed in the first year to avoid drought stress, but don't overwater.
- » Mow to keep weed growth down the first year.
- » Native turf may be slower to establish than regular turf, so be patient.

Native Turf Iowa

Samples of Iowa Native Turf Lawns



- 1 This mowed native turf lawn looks good while reducing the need for inputs.
- 2 An Iowa bible camp grows blue grama and buffalo grass turf on a path through native flower gardens.
- 3 This neighborhood buffalo grass lawn only requires one mowing per month in the growing season.
- 4 Native turf is flourishing at the firestation in Altoona, Iowa.

Native Turf Management

A native turf management plan differs from a non-native turf plan.

- » Native grasses don't need fertilization or watering after the root systems are established.
- » Mowing of native turf could be eliminated, or done on a limited basis to keep the appearance more like traditional grass turf. Unmowed areas would stay in the 8 to 18-inch range.
- » A blend of blue grama, buffalo grass, and sideoats grama is recommended. Sideoats grama will grow to about 18 inches, so if you don't plan to mow and prefer to grow a shorter blend, use blue grama and buffalo grass.

Keys to Weed Control

- » Avoid fertilizing with nitrogen
- » Avoid frequent irrigation
- » Control crabgrass with pre-emergence chemicals
- » Do not use 2,4-D during the first year or when temperatures are above 80 degrees



Low-interest loans available for rainscaping

The State Revolving Fund provides low-interest loans for implementing sustainable storm water management strategies. Eligible practices include soil quality restoration, native landscaping, bioretention cells, rain gardens, pervious paving systems and more. Loans with an interest rate of three percent can be made to developers, municipalities, businesses and homeowners.



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