

Turfgrass Management

The choice of turfgrass species isn't discussed very often as a turf management practice, but choosing species that thrive naturally in your location with minimal inputs can help to moderate disease and insect pressures.

News/What to Watch For

At this time of year, turfgrass diseases and insects are relatively inactive, so the focus is on related educational information that will be useful as our temperatures warm into spring. The warm-season grass, buffalograss, is presented as well information about new USU Extension fact sheets that have been published recently.

Focus On: Buffalograss

Buffalograss (*Bouteloua dactyloides* or *Buchloë dactyloides*) is frequently mentioned in conversations on making landscapes more sustainable, both from an irrigation standpoint and other management practices. Plus, if having a native species is a priority, buffalograss is one of the few turfgrasses that is native to North America. This article will address some questions and misconceptions that people often have about this fascinating turfgrass species.

Buffalograss is a species native to the short grass prairie of the North American Great Plains—the area from the Canadian border south to Mexico and from Kansas to the eastern foothills of the Rockies. It's a warm-season grass species (a very important detail to be discussed later) that has a vigorous stoloniferous growth habit (grows laterally with runners). It has a rather unique blue-gray-green color, with soft, relatively fine leaves that pass the "barefoot test" during the summer.

Another unique feature of buffalograss is the separate male and female plants with distinctively different flowers. Male flowers grow above the leaf canopy while the female flowers are little burs hidden down within the leaves.



The main selling point for buffalograss is its water-wise application. Compared to cool-season grasses used in this region, buffalograss can provide actively growing and green turf with nearly half the irrigation—provided it can root deeply. So for a two week period last summer when most grasses needed approximately 2.5 inches of irrigation, buffalograss only needed 1.4 inches—and that could have been applied once in two weeks rather than once each week. In fact, too much irrigation will encourage weeds and cool-season grasses may out-compete the buffalograss over time.

But that irrigation savings comes at somewhat of a price, which is a relatively short growing season. Since buffalograss is a warm-season grass species, it needs warm temperatures to grow. Northern Utah is on the edge of buffalograss adaptation where it typically starts greening up in April and begins going dormant in September. When dormant, it is completely brown. In southern Utah, it will have a longer growing period, similar to bermudagrass. While it's growing, buffalograss can tolerate quite a bit of traffic, but when dormant, it can't recover, so excessive traffic will damage it. Buffalograss will survive without any supplemental irrigation, but the green growing period will be even shorter.



To establish buffalograss, it is best to start with a tilled and somewhat firm soil. It will be important to kill off any existing cool-season grasses like Kentucky bluegrass or tall fescue and then remove the sod. Simply killing the previous turf with glyphosate won't do it. The grass will come back and in our relatively cool environments will eventually out-compete buffalograss. So starting with a clean slate is important.

There are two ways you can establish a buffalograss turf—from seed or from plugs. Seeding will result in a turf with a mixture of male and female plants in the turf. If you want the male flowers extending above the turf and prefer this more naturalized look, seed is the way to start. If you are looking for a somewhat more formal turf, then starting from plugs will result in a female-only stand. The lack of male flowers presents a more uniform and somewhat thicker turf. The timing for both establishment methods is between the end of May and the middle to end of July. If seeded earlier, the grass won't start growing because soil temperatures are too cold. If seeded later than July 15th, it won't establish well enough before winter. Seed establishment is similar to other grasses where approximately 4 lbs of burs are sown per 1000 sq. ft., lightly raked in, and kept moist for germination. Typically 2-4 seeds are enclosed within the each bur. Since seeding occurs at the same time that many weedy grasses are germinating, you may need to tolerate a fair number of weeds that first year. But in the second year, apply a pre-emergent herbicide. This will help the buffalograss fill in completely. After that second year, if you fertilize a little, herbicide typically isn't needed.

Establishment through plugs is also relatively easy, but a bit more work. Plugs can be purchased from several sources online. Plugging simply requires transplanting them on 12-18" centers throughout the lawn area. The closer the plugs are spaced, the more quickly the area fills in. A pre-emergent herbicide is strongly recommended during this establishment period to keep the weeds from growing and to give the buffalograss more chance to fill in quickly.

Seeded Varieties	Vegetative Varieties
Cody	Legacy
Bowie	Prestige
Bison	
SWI-2000	Not Recommended in northern Utah (because of winter damage)
Topgun	609
Sharps Improved (somewhat lower quality)	UC-Verde
Texoka (somewhat lower quality)	Prairie



Drawing of female (top) and male (bottom) buffalograss plants showing differences in flowers. Image from the USDA-NRCS PLANTS Database / Hitchcock, A.S. (rev. A. Chase). 1950. *Manual of the grasses of the United States*. USDA Miscellaneous Publication No. 200. Washington, DC. (This image is not copyrighted.)



Buffalograss lawn in summer and mowed at 3 inches.

In terms of other management, buffalograss tends to be lower maintenance than other grasses. To better compete with weeds and provide a thick turf, some nitrogen fertilizer is beneficial, usually 0.5 to 1 lbs N/1000 sq. ft (one typical application) per year and 2 lbs N /1000 sq. ft./year if you want a thicker, more lush turf. Plan to put a fertilizer application on in May and again in July. Fertilizing more than that won't increase the quality and will only increase mowing requirements. Speaking of mowing, buffalograss is very adaptable to a range of mowing heights. It produces a very formal turf if mowed below 2 inches, even as low as $\frac{3}{4}$ inch, performs well at an average lawn height of 3-4 inches, or can be left unmowed and will grow to a height of 6-8 inches for more of a prairie look.

As mentioned before, herbicides are not often needed if the buffalograss turf is watered properly and given a moderate amount of fertilizer. Broadleaf weeds can be pulled out by hand or controlled with broadleaf herbicides. Annual weeds can be prevented by using pre-emergent herbicides in the areas where they commonly grow. But usually those annual weeds can be prevented by keeping the turf thick and healthy. Sometimes the worst weeds are cool-season grasses like Kentucky bluegrass and tall fescue. However, those can be controlled with an application of glyphosate in the fall after a few hard freezes. At that time of year, the buffalograss won't take up the herbicide and therefore won't be damaged, but the actively growing cool-season grasses will slowly be killed.

While buffalograss is a great turf for water-wise landscapes, it's not appropriate for all turfgrass applications, mainly because of its short growing period. But in those areas where dormant grass in spring and fall is acceptable, where minimizing water use is a priority, and where a "native look" to the landscape is preferred, buffalograss is an excellent species to grow and enjoy.

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New USU Extension Fact Sheets

Bermudagrass in Utah Lawns

Though bermudagrass makes a fine, high-quality turf for many residents of Washington County, it is still considered a noxious weed in other areas of the state because of ongoing concerns about the “common” bermudagrass, which can be rather invasive. The recent update of this fact sheet by USU Extension faculty Jerry Goodspeed, Rick Heflebower, Taun Beddes, and Kelly Kopp includes identification and prevention methods. Control methods for tree, shrub and perennial areas, along with lawn areas are also discussed.

Common bermudagrass.



Lawn Fertilizers for Cool-Season Turf

Cache County Extension faculty member Taun Beddes led the effort to produce this recent fact sheet along with Dr. Kelly Kopp. Detailed information on relevant soil conditions and understanding fertilizer information accompanies recommended a cool-season grass fertilization schedule and links to additional resources. Common sources and forms of nitrogenous fertilizers are also highlighted.

Upcoming Spring Management Practices

Spring is an ideal time to aerate lawns if the soil is compacted or there is a significant layer of thatch beneath the grass. If the thatch underneath the lawn is more than ½ inch thick, consider core aeration to stimulate the natural decomposition process. Likewise, if you have a very fine-textured soil, compaction may occur, particularly in high traffic areas. Core aeration will help to alleviate this compaction.

***Precautionary Statement:** All pesticides have benefits and risks, however, following the label instructions will minimize the risk and maximize the benefit. Pay attention to the directions for use and follow precautionary statements. Pesticide labels are considered legal documents containing instructions and limitations. Inconsistent use of the product or disregarding the label is a violation of both federal and state laws. The pesticide applicator is legally responsible for proper use.

Turfgrass IPM Advisory
is published seasonally by Utah State University Extension.

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