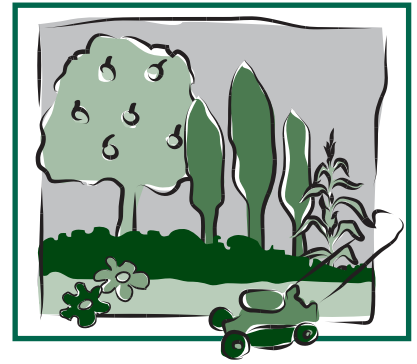


Buffalograss Lawns

Fact Sheet No. 7.224

Gardening Series | Yard



T. Koski and R. Cox*

Buffalograss (*Buchloë dactyloides*) is a perennial, warm season grass species. It is sod-forming, spreading by stolons (aboveground stems) which root where they touch the ground, forming new plants. Native to Colorado and much of the North American Great Plains, it displays a wide range of adaptability. Buffalograss, a “warm-season grass”, grows most actively from late May through early September; it breaks dormancy in mid- to late spring, well after bluegrass and fescue lawns become green; it turns brown and dormant with the first hard frost in the fall. Its long dormant period and reputation of being expensive and difficult-to-establish has made buffalograss a less-popular lawn option for many homeowners. However, the development of attractive turf-type cultivars and greater availability of seed, sod and plugs has generated new interest in this grass for home lawns. These new turf-type varieties are darker green, form a dense, short-growing turf, and are more resistant to weed invasion than previously-used varieties. Those who choose to plant newer buffalograss varieties find that their lawn can remain green and attractive on 50-75 percent less irrigation than Kentucky bluegrass, requires less frequent mowing, and thrives when fertilized only once or twice yearly.

Buffalograss Varieties

Seeded cultivars (varieties) of buffalograss that can produce a good quality lawn include: Bison, Bowie, Cody, Plains, and Topgun. It should be noted that the Texoka and Sharp's Improved varieties are used for mainly pasture and rangeland revegetation, producing a less attractive lawn. Certain varieties of buffalograss are available only in vegetative form (sod or plugs). These vegetative varieties will provide the best

quality buffalograss lawn, but may be more expensive to use for lawn establishment than the seeded varieties. Commercially available vegetative types include: Prairie, 609, Legacy, Prestige, and Turffalo. Prairie and 609 are likely to suffer moderate to significant winterkill during most winters along the Colorado Front Range, and are not recommended except in southern and southeastern Colorado and the Grand Junction area. Legacy, Prestige, and Turffalo have proven to be quite winter-hardy and will produce a high quality buffalograss lawn anywhere in Colorado when planted at elevations below 6500 feet.

Buffalograss Establishment and Management

Success and satisfaction with buffalograss is critically dependent on the use of proper establishment and management practices. While it can be considered a low-maintenance grass once it is established, the production of a buffalograss lawn from seed can be a labor intensive and somewhat frustrating process. The use of sod improves results for the average home gardener, but it will be more expensive than if seed or plugs are used for establishment. It is essential to understand that, although buffalograss is a highly drought-resistant native plant, supplemental water **MUST** be used liberally in order to establish a lawn. **The amount of water required to establish a buffalograss lawn from seed, sod, or plugs will be equal to (and occasionally greater than) that amount required to establish a bluegrass or tall fescue lawn.**

Seeding a buffalograss lawn

Proper seedbed preparation is vital for successful seeding and obtaining a uniform lawn. The soil should be rock- and debris-free, level, and firm enough to walk on without sinking in more than one inch when

Quick Facts

- Buffalograss is a perennial, warm season grass species. It is sod-forming, spreading by stolons (aboveground stems) which root where they touch the ground, forming new plants.
- Success and satisfaction with buffalograss is dependent on the use of proper establishment and management practices. While it can be considered a low-maintenance grass once it is established, the production of a buffalograss lawn from seed can be a labor intensive and somewhat frustrating process.
- Once established, buffalograss can survive without irrigation. However, non-irrigated buffalograss becomes dormant during most summers, and is prone to weed invasion while dormant.

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dry (soil that is loose and fluffy should be firmed by rolling prior to seeding). Use a seeding rate of three-five lbs. seed/1000 square feet. Seed should be planted to ½ inch depth, using a seed drill if available. If the seed is spread on the soil with a spreader, it should be covered with ¼ to ½ inch of soil by light raking. Buffalograss seed can be planted anytime in the spring and until late July; seed planted in early spring will not germinate until soil warms to above 55 degrees F in late spring. Seed planted too late in the season (between August 1 and October 1) may germinate, but the young seedlings are quite susceptible to being killed during the winter. Buffalograss seeded during October-December (dormant seeding) will not germinate until the following spring with warming soil temperatures; dormant-planted seed will not rot or otherwise degrade over the winter. With warm soil and consistent irrigation, seedlings will appear in seven to 21 days. Pre-emergent herbicides (“crabgrass preventer”) for weed prevention should NOT be used at the time of seeding. Apply turf fertilizer (do NOT use a “weed and feed” product) according to label instructions two to three weeks after the seedlings begin to appear; repeat about six weeks later. Irrigate to prevent excessive drying and to maintain active grass growth. When it appears that most of the seed has germinated, the new lawn should be irrigated less frequently. Occasional mowing (stop irrigation one-two days prior to mowing to dry out the soil) will encourage the buffalograss to spread and fill in open areas, and may help to control any weeds that have begun growing. Extra seed can be scratched into open or thin spots in the new lawn.

Plugging a buffalograss lawn

The use of pre-rooted plugs (sold via the internet, by some sod farms, and at a few nurseries and garden centers, in trays similar to those in which annual flowers are sold) can provide complete cover six to 12 weeks after planting (depending on plug spacing and weather conditions). As with seeding, proper soil preparation (see above) is essential for success when using plugs. Plant plugs on 12 to 18 inch centers following the last spring frost and at least 6 weeks prior to the first expected fall frost. Apply a starter-type fertilizer according to label instructions at planting, and again about 6-7 weeks after planting. Irrigate

to maintain a moist surface for seven-10 days (three-five short irrigation cycles daily, every two-four hours beginning at 8:00 or 9:00 a.m.), and to maintain active grass growth thereafter. The pre-emergent herbicide pendimethalin (sold as Pre-M® or Scotts Halts/Crabgrass Preventer®) can be used to prevent weed invasion and is safe to use at the time of planting plugs. Buffalograss plugs will often turn brown after planting, even with adequate irrigation. This is quite normal; if they have been receiving consistent moisture, they have not died. The grass will come out of dormancy after the plugs have formed a healthy root system. *It is important that the plugs and soil be kept moist after planting, even though the plugs may turn brown and appear to be dead or dormant.*



Sodding a buffalograss lawn

Buffalograss can be sodded like many other grass species to produce an instant lawn. Buffalograss sod is significantly more expensive than bluegrass sod and availability is much more limited. However, it is the quickest, easiest, and least frustrating way of getting a buffalograss lawn. Adequate soil preparation (see above, under ‘Seeding’) and careful post-plant care will aid in sod establishment. Transplanted buffalograss sod should be irrigated like any other transplanted sod: that is, it should be given enough water to maintain a moist, but not saturated, root zone under the sod. It is very common for buffalograss sod to quickly turn brown following transplanting, even though it is being irrigated. It may remain dormant-brown for one to two weeks while new roots are being formed. New, white root growth can be seen on the bottom of the sod after a few days of watering, even though the grass may

be entirely brown in color. After enough rooting has occurred, the buffalograss will begin to form new leaves and green up. *Proper irrigation is crucial during this root formation period.*

Fertilization

Color and growth of an established buffalograss lawn will improve with fertilization, but little improvement occurs when more than two pounds of total N per 1000 square feet per growing season is applied. A suggested application schedule is one pound of N per 1000 square feet in late May to mid June, and again in late July. Excessive fertilization, especially in combination with too much water, can result in rapid weed invasion in the buffalograss lawn. Buffalograss is sometimes prone to iron chlorosis (yellowing) on high pH soils; supplemental iron applications will help to prevent or remedy this problem.

Irrigation

Once established, buffalograss can survive without irrigation. However, non-irrigated buffalograss becomes dormant during most summers, and is prone to weed invasion while dormant. Buffalograss lawns require a minimum of one-two inches of rainfall or irrigation every two-four weeks during the summer to maintain active growth and to look acceptably green. Deeper, infrequent irrigation (for example, one inch every two-four weeks, depending on rainfall) produces a good-quality buffalograss lawn and discourages weed invasion. Irrigation can begin in mid- to late-May if the spring is dry; irrigation earlier in the season does not speed spring green-up and encourages weed growth.

Weed Management

Weed invasion is the most common and frustrating pest problem in the buffalograss home lawn. Pre-emergent herbicides (“crabgrass preventers”) are safe to use in the spring on well-established, mature buffalograss lawns to prevent annual grassy weeds like crabgrass and foxtail. Yet, the control of existing weeds – both grassy and broadleaf – presents a more difficult problem for the manager of a buffalograss lawn. Buffalograss can be easily injured, and therefore discolored, by many of the off-the-shelf herbicides (especially those containing 2,4-D) sold in garden

centers and nurseries for the control of dandelions and other broadleaf weeds in Kentucky bluegrass and tall fescue lawns. These products can be safely used on fully dormant buffalograss in spring or fall (spot treat only; do not broadcast apply). However, they may cause slight to severe discoloration (yellowing or browning) of green, actively growing buffalograss during the spring and summer. These products should be used carefully. All label directions should be followed and products should be used sparingly. They can be used as a spot treatment (spraying individual weeds, and not the entire lawn). For a severe weed problem, the use of a professional lawn care company should be considered. Professional applicators are able to use herbicides which are both very effective and safe for use on buffalograss (these herbicides are often very expensive and generally not for sale to the home gardener). One effective—but somewhat risky—method of controlling winter/early spring weeds in buffalograss is to apply glyphosate (Round-up®, Kleen-up® and other trade names) when the buffalograss is **TOTALLY** brown and dormant, but while the weeds are green, and not stressed by drought. This should be applied on a warm day in March to early April. When applied to dormant buffalograss, the glyphosate product should be applied to the individual weeds as a very light mist (use the pre-mixed, hand-pump products). Glyphosate applied too heavily will tend to drip off of the dormant brown buffalograss leaves onto green runners and other plant parts near the soil surface, causing dead spots to show up in the lawn as it begins to green up in late spring. **DO NOT APPLY GLYPHOSATE ONCE GREEN LEAVES BEGIN TO APPEAR IN THE BUFFALOGRASS (late April to mid-May).**

Disease Management

No serious diseases cause problems on buffalograss lawns in Colorado.

Insect Management

Mealybugs (*Tridiscus sporoboli* and *Trionymus* sp.) and a short-winged species of chinch bug (*Blissus* sp.) have been found in Nebraska buffalograss lawns, but have not yet caused problems in Colorado. Leafhoppers and grasshoppers are common nuisance pests, but do not generally damage healthy buffalograss lawns.

Where buffalograss is NOT a good lawn choice

- Moderate to very shady locations (more than ½ day of heavy shade).
- Saline soils (greater than 6-8 mmhos/cm salinity).
- Above approximately 6500 feet elevation. A protected, sunny, south- or west-facing exposure may allow buffalograss to be used successfully at 6500-7000 feet, but the growing season (period during which the grass is green) will be short.
- Very droughty, sandy soils - unless supplemental irrigation is provided.
- Small, heavily used home lawns, athletic fields, or other situations where foot or vehicular traffic is BOTH concentrated and constant. Sporadic heavy use is not a problem for buffalograss, nor is light, constant use.

Inclusion of chemical or trade names does not imply any product endorsement, nor does exclusion imply criticism, by the author or Colorado State University. Follow all label instructions when using any pesticide.