

Establishment and Management Guide to NaTurf^{brand} Buffalograss



from Native Turf Group
www.nativeturf.com

Establishing Your New NaTurf^{brand} Buffalograss Lawn

1 Preparation for Planting is the Key to Success

- ❖ **Sunlight:** Buffalograss does best in areas receiving at least 6 to 8 hours of direct sunlight per day. Morning sun is critical.
- ❖ **Soil Type:** Buffalograss will grow in most all soil types except for coarse textured sand based soils. Addition of organic matter (compost etc.) in coarse soils is beneficial.
- ❖ **Drainage:** Buffalograss does not tolerate standing water for extended periods of time. It is recommended to correct drainage problems prior to seeding.
- ❖ **Soil Fertility and pH:** A soil test will provide you with the information necessary to adjust your soil's fertility level for optimum establishment and growth for your buffalograss lawn. The pH of your soil is an important consideration. The optimum level for your lawn is between 6.0 and 7.5. It is necessary to correct the pH prior to planting since these type of amendments need to be incorporated into the soil to become effective. Your local cooperative extension office (in the blue pages of your phone book) provide you with access to soil testing, recommendations, and proper methods to apply these soil amendments. In general apply a "starter" fertilizer, available at most garden stores, at rates recommended for other lawn species, even if buffalograss is not listed on the label.
- ❖ **Lawn History:** One aspect that is frequently overlooked when planning a new yard is what herbicides have been applied to the area in the last 12 to 18 months. If pre-emergence herbicides have been frequently used in the past, you will need to check the residual effect on the label of the particular herbicide. These pre-emergence herbicides are designed to inhibit the germination of weeds but they may also inhibit the germination of your new grass. Your local cooperative extension office can provide assistance in making this determination.
- ❖ **Planting Date:** Buffalograss seed should be planted during the spring and summer months once the soil temperature has reached 50°F (16°C) and is on the rise. Spring plantings are generally best because the higher frequency of precipitation would reduce the irrigation requirements to maintain a moist soil. Planting too early in the Spring, however, may increase weed competition during establishment. If the site has access to irrigation, delay planting until crabgrass begins to germinate and appear in the soil, cultivate the crabgrass stand, and then plant. The "cutoff" date for late season planting depends upon your geographic location. A simple rule to follow is not to plant within 75 days of the average first frost date for your location. The newly established plants must have time to develop adequate rooting prior to the first frost.

2 Recommended Seeding Rates

Application	Recommended Planting Rate*	Approximate Number of Seeds	
		Square Foot	Square Meter
Residential Lawns	2 - 3 lbs/1000 sq. ft (1 – 1.5 kg/100 sq. m)	70 - 105	750 - 1100
Golf Courses	90 - 130 lbs./acre (100 – 150 kg/hect)	70 to 105	750 - 1100
Slope Stabilization	150 lbs./acre (170 kg/hect)	120	1,270
Industrial sites	45 - 90 lbs./ acre (50 – 100 kg/hect)	35 to 70	375 - 750

*Increasing the seeding rate will generally reduce establishment time.

3 Seedbed Preparation Choices

❖ Preparing a Tilled Seedbed

A properly prepared seedbed is the foundation to success when establishing buffalograss from seed. Soils, especially those high in clay content or which have been compacted, require tillage to a depth of 6 to 12 inches (15 to 30 cm) to promote healthy rooting as the buffalograss becomes established. Following deep tillage, the soil needs to be worked to a garden-like appearance. Rake and remove all large plant debris. Once the clods have been worked down to no larger than pea size, the soil needs to be firmed with a roller or rake to a point where the foot sinks to no more than ½ inch (1.2 cm). Prior to seeding, be sure all existing vegetation has been destroyed by tillage or a non-selective herbicide. If a herbicide is used follow the manufacturer's recommended rates provided on the label.

❖ Renovating Cool Season Grass Lawn

High maintenance cool-season grass lawns can be quickly and successfully converted to lower maintenance buffalograss without extensive tillage as described above. Renovation, rather than complete tillage, can reduce costs and time for establishment. The most effective method for removing the existing turf is 2 sequential applications of a nonselective herbicide such as Roundup Pro. Apply the first application, wait 14 days and reapply the same rate. The seedbed can be prepared 7 days following the last application of herbicide. Use a vertical mower or mechanical rake to remove the thatch. Two or three operations in different directions are most effective. Mow or rake off the debris after the de-thatching process. The old turf can then be spiked, cored, or vertically mowed. These operations can also be used to incorporate lime and fertilizer into the soil.

4 Putting the Seed into the Soil

- ❖ Once you have determined your seeding rate and prepared the seedbed correctly you are ready to begin planting. The size of your installation will determine what equipment you will need to carefully place the seed at the optimum depth. Small lawns are best planted by broadcasting the seed across the surface, followed by raking to incorporate the seed into the soil, and finally rolling the surface to get good seed-to-soil contact. On larger installations, various types of seeders and drills are available. Seeders that limit the depth of seed placement are best. **The most critical factor to remember in any buffalograss seeding is not to place the seed deeper than ½ inch (1.2 cm) from the soil surface.**

Best placement is between ¼ and ½ inch (0.6 to 1.2 cm) below the soil surface. Use the deeper planting depth when irrigation is not available during establishment. It is not unusual for a small number of seeds to remain on the soil surface after planting, however those seedlings will not establish as rapidly as those at the proper seeding depth. Note the non-germinated seed in *Figure 4* laying on the soil surface next to buffalograss seedlings.



Figure 4

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5 Watering is Essential for Good Germination

- ❖ The frequency and quantity of supplemental watering during establishment is critical. Frequent and excessive watering promotes rooting problems and excessive weed growth. The soil needs to be moist prior to seeding and this moisture needs to be maintained for germination. Once the seeding process is completed, water every day the first week, every other day the second week, and every third day the next week. Use of a weed free straw mulch or similar can help during establishment. Do not water to the point of runoff. Seedlings should start to germinate in 10 to 14 days. Begin reducing the frequency of watering but increase the amount per application as the seedlings develop into small plants and then to a mature sod.

6 Frequent Mowing is Beneficial to Quicker Establishment

- ❖ Mowing early and often during establishment encourages tiller and stolon development and reduces weed competition.

7 Controlling Weeds Quickens the Establishment Process

- ❖ Proper establishment practices will help to reduce weed competition, but weeds will most likely be the single most limiting factor in establishing a new stand of grass quickly. Weeds compete for moisture, nutrients, and space. If left unmanaged, weeds can severely inhibit a developing stand of buffalograss. Mowing during establishment will decrease the competitiveness of some taller growing weeds and increase density of the buffalograss. Mowing just above the planned mowing height of the buffalograss in the first 4 to 5 weeks will keep the grass exposed to sunlight and the increased mowing frequency will encourage tiller and stolon development (Figure 3) thus speeding up establishment.
- ❖ Limited information is available on herbicide safety and use in the establishment phase of buffalograss. Drive 75DF herbicide (available only to commercial applicators) has shown good flexibility for new buffalograss seedlings (Figure 2) as it is labeled to apply any time before or after seeding and germination. New products will continually be labeled for buffalograss as the popularity of the grass increases. Consult your local garden center or County Extension Office for updated herbicide recommendations. Always consult the label of any pesticide product prior to its use.

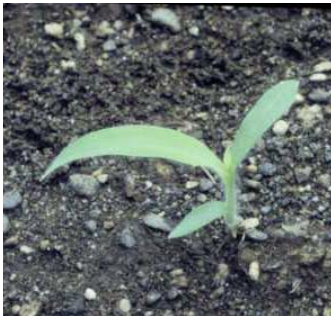


Figure 1, Crabgrass Seedling



Figure 2, Buffalograss Seedlings



Figure 3, Spreading buffalograss stolons

Managing Your New Buffalograss Lawn

1 NaTurf_{brand} Buffalograsses Offer Several Mowing Options

- ❖ The new buffalograss will reach a mature height of 4 to 6 inches (10 to 15 cm). The recommended mowing height varies from 1.5 to 4 inches (4 to 10 cm) depending on the intensity of management and the desired appearance. Buffalograss can be mowed from only once a year to once every two weeks depending on the appearance desired. Mowing frequency is directly related to the amount of water and fertilizer applied. The key to a great looking lawn is to avoid removing more than one-third of the turf height at any one mowing. A reduction in mowing height will increase the frequency of mowing and the intensity of the management, i.e. watering and fertilizer. A more manicured, traditional lawn appearance will require a higher mowing frequency.

2 NaTurf_{brand} Buffalograsses Require Less Fertilizer Than Other Grasses

- ❖ The recommended rate of annual nitrogen application is 2 to 3 lbs. of actual nitrogen per 1000 square feet (1 – 2 kg/100 sq m) split into two applications. Slow-release nitrogen fertilizers are the best source of nitrogen since they prevent rapid lush growth. The first application of nitrogen should be made approximately 3 weeks following 'greenup' and then 8 weeks later. Excessive nitrogen fertilization of buffalograss increases weed pressure and mowing thus defeating the purpose of a low-maintenance turfgrass. Many consumers will put a combination of pre-emergence herbicide and fertilizer prior to green-up because of product availability in retail outlets. Because this fertilizer also contains a herbicide the problems associated with weed competition are avoided. Phosphorous and potassium should be maintained at adequate levels to ensure root growth and overall improved turfgrass quality. Test the soil every three years to identify any nutrient problems and correct accordingly.

3 NaTurf_{brand} Buffalograsses Requires Less Water Than Other Grasses

- ❖ The water requirements for buffalograss are considerably less than other turfgrass species. Excessive irrigation creates weed pressure, increased mowing requirement and disease susceptibility. In most cases natural precipitation provides adequate moisture for growth, but timely supplemental irrigation will enhance turf quality. In periods of extended drought, deep soaking with no less than one inch of irrigation water once a month may become a necessity to prevent drought-induced dormancy. Soak soil before winter if soil is dry.

4 Weed Prevention for a Healthy Turf

- ❖ Proper turf management practices can prevent many of the common weeds. Avoid frequent watering, over fertilizing, and scalping as these practices promote weed growth and put your buffalograss at a competitive disadvantage. Unfortunately good management practices only reduce the weed competition and do not eliminate them. Hand weeding is always an option but is very time consuming and labor intensive. Herbicides are commonly used to aid the turf manager in promoting a healthy weed-free turf.
- ❖ Weedgrass competition is one of the most common factors limiting the rapid establishment and spreading of a new buffalograss stand. An application of Drive 75DF Herbicide, a selective post-emergence herbicide will do a good job of limiting weedgrass competition. This application should be made in the 3rd or 4th week after planting. As with any pesticide ALWAYS READ AND FOLLOW THE MANUFACTURER'S LABEL PRIOR TO USE.
- ❖ When used in accordance with the manufacturer's label these products are safe and very effective. If you are uncomfortable or inexperienced in the use of pesticides it is best to have the products applied by a licensed and reputable lawn care service. For those who want to do their own application the following is brief outline of the products available and their intended use.
- ❖ Pesticide availability and registrations are subject to change. An excellent internet source to aid in determining availability and appropriate use of herbicides for buffalograss is available at www.kellysolutions.com. Simply place the State abbreviation in the search line (i.e. NE for Nebraska etc.) Once at your location you can type in buffalograss in the site section and it will list all products registered for use on buffalograss in your State. Not all products will be available at all locations and many of these products are available only to commercial applicators or in quantities excessive for homeowners. The following table may be helpful in determining herbicides to use on your buffalograss. The information may also be helpful as you search for specific products on the above website. (www.kellysolutions.com)
- ❖ **Herbicides Currently Labeled for Use on Established Buffalograss**

Pre-emergence Herbicides Labeled for Buffalograss

Barricade 65WG	prodiamine	Syngenta	Apply to established turfgrass only
Pendulum 3.3 EC	pendimethalin	BASF	Apply to established turfgrass only
Dimension	dithiopyr	Dow AgroSciences	Pre-emerge and post-emerge use Apply to established turfgrass only but can Only be applied by commercial applicators

Post-emergence Herbicides Labeled for Buffalograss

Spotlight	fluoxypyr	Dow AgroSciences	Apply to established turfgrass only
MSMA products	MSMA	Various companies	Apply to established turfgrass only
Trimec* type products	2,4-D + Dicamba +MCPP	Various companies	Apply to established turfgrass only
Roundup Pro	glyphosate	Monsanto	Non-selective herbicide for dormant use
Drive 75DF	quinchlorac	BASF	Labeled for residential use but can be Applied only by Commercial Applicators

*2,4-D products should not be applied when the air temperature is above 80°F (24°C) and when wind speeds exceed 5 MPH (8 km/hr). Unacceptable Injury to the turf and to non-target plants may result.

ALWAYS READ AND FOLLOW THE MANUFACTURER'S LABEL PRIOR TO USE