



PLANTING A LAWN WITH GRASS PLUGS

Instructions for starting a lawn with Legacy®, UC Verde™ and Prestige™ Buffalo Grass, 'Hachita' Blue Grama Grass and Bella™ Bluegrass Plugs

STEP 1. REMOVE THE OLD LAWN

You can do this in several ways.

- A. Strip off the old turf grass** with a sod cutter and kill off any remnants of lawn around the edges; or
- B. Kill the existing lawn**, by spraying it with a one-time application of systemic glyphosate 14 days or longer prior to planting. (While repeated, widespread use of glyphosate can be damaging to the environment, healthy soils are capable of breaking down any residual chemical from a one-time use. Keep kids and pets off the lawn until the herbicide has dried.) or
- C. Smother the lawn:** If you can wait 6 months or longer, the old lawn can be killed by covering it with alternating layers of corrugated cardboard and compost laid down about 6" deep; or
- D. Solarize the lawn** by killing it with heat from the sun. This can be done by covering the lawn turf with clear plastic for one to two months during the heat of summer. Be sure and bury the edges of the plastic sheeting and place heavy rocks across the middle to anchor it and hold it down when the wind blows.

Note: Letting the lawn go brown by withholding water will not kill Kentucky Bluegrass.

STEP 2. IMPROVE THE SOIL

Before planting grass plugs into bare soil, it is essential that the soil be enriched with compost and other organic or natural fertilizers to insure that the plugs grow vigorously and cover the area quickly. Proper soil preparation can be done any time before planting the plugs. However, preparing the soil well in advance of planting insures that the ingredients have begun to breakdown and the soil will have a finer texture. It also allows weeds to sprout and be pulled or rototilled prior to planting. This will greatly reduce the amount of weeding after planting the plugs.

To improve the soil for best results: use organic or natural soil amendments. Rototill the soil enriching ingredients into the soil to a depth of 4 to 6 inches.

DO NOT use manure unless you know it has been actively composted to break it down.

Old piles of manure (even if stored for many years) have not been composted adequately. Instead, it will begin to compost (break down) after you've tilled it into the soil. This causes burning of grass plug roots and induces a serious nitrogen deficiency that will stunt or kill newly planted plugs.

ONCE THE OLD LAWN IS GONE OR YOU ARE PLANTING INTO BARE SOIL, THERE ARE TWO WAYS TO PLANT THE PLUGS:

- A. You can plant into bare soil that has been enriched with compost and other natural or organic fertilizers.
- B. You can plant directly into dead turf that is thoroughly dead using the Drill and Fill Method (see below). **It is NOT recommended** that plugs be planted into a live lawn.

METHOD A: PLANTING INTO BARE SOIL:

- 1. Preparing the plugs for planting:** Before planting the plugs make sure they are well watered but not soggy. Make a few shallow slices into the sides and bottom of the plug's root ball to break the circling root growth and encourage lateral root growth into the surrounding soil. To speed the transplantation process the plugs should be removed from the plug tray, have their roots sliced and placed into a box or flat in the shade to await transplanting.
Organic Plant Magic: This all-purpose fertilizer is packed with every essential element required by plants to properly build and maintain themselves, including beneficial microorganisms and microbes. *For best success, we suggest using it as a root dip when planting grass plugs.*
- 2. Measure the grid:** Use a string line marked every 6" or 12" (with a Magic Marker), stretch it between two stakes to show you where to plant each plug.
- 3. Using a hand trowel make a shallow hole,** plant the plug and firm it into place. Mulch with clean wheat straw to shade the soil and keep the plugs moist. Water thoroughly after the plugs are planted.

METHOD B: PLANTING PLUGS INTO DEAD TURF AREAS

THE DRILL AND FILL METHOD: This can be a real labor saving method when replacing your existing lawn. Assuming that the lawn was planted into well prepared soil, planting into the dead grass is a proven, labor saving method. This method also greatly reduces the amount of weeds that sprout once the plugs are planted.

- 1. Make sure the old lawn is dead, both foliage and roots.** Choose from the method that works best for you (see section 1 above). Don't make the mistake of assuming a completely brown patch of Kentucky Blue Grass (or any other turf grass) is dead from lack of water. Many grasses survive drought by going dormant only to "wake up" when water is made available.
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transplantation process the plugs should be removed from the plug tray, have their roots sliced and placed into a box or flat in the shade to await transplanting.

- 3. Measure the grid:** Use a string line marked every 6" or 12" (with a Magic Marker), stretch it between two stakes to show you where to plant each plug.
- 4. Use a cordless drill to make the planting holes:** Using a cordless drill and a 1 1/4" diameter wood boring bit, drill 1 inch deep holes on a grid 6" or 12" apart, place the plug in the hole and step on it to firm it into the soil. Plant the row and move the stakes to the next row. When done planting the whole area, water thoroughly.

WATERING

Frequency: Water in newly planted plugs thoroughly so that the soil is wet to a depth of 4-6 inches. The frequency of subsequent irrigation will depend on how quickly the soil dries. Water enough to keep the soil damp but not muddy with standing puddles.

First week to 10 days: Water daily in the early evening.

Next couple of weeks: As the plugs begin to root-out into the soil and grow, watering can be reduced to every 2nd or 3rd day. Plugs that are taking hold and rooting-out will be noticeably greener and have longer, larger leaf blades than one's that haven't.

After the first month: If it's not too hot and dry, your growing plugs will need watering no more than one to two times per week, putting down an inch of water each time. Use several empty coffee cans placed around the newly planted area to measure the amount of water applied. Even xeric native grasses like Buffalo and Grama grass need regular irrigation that first growing season. Once established, the amount of water needed next growing season will be much less!

Watering sloped areas: If you've planted on a slope, be sure to mulch the plugs with clean, weed-free straw. Water the soil with a fine spray, just enough that the water is absorbed by the soil and doesn't run off. Repeat 3 or 4 times at 5 minute intervals until the soil is wet to a depth of several inches.

This is only a suggested watering schedule. Anytime the plugs are looking gray-green and the grass blades look thin and folded, they need water. The first couple of times you water, check the depth of the soil moisture after you water by digging into the soil to visually examine how deeply the water as penetrated. You'll soon learn how much and how often your soil will need watering to keep the plugs moist.

WEEDING

Weeds will sprout quickly in newly planted areas. Weed control is essential so they don't smother your new plugs. Pull weeds when they're small.

Hand Weeding: You'll need to pull weeds until the plugs have grown together for best establishment of your new lawn. When hand weeding, use a couple of wide wood board pieces to stand and

kneel on while you weed. This helps to avoid stomping and compressing the soil as you walk around pulling the weeds.

Herbicides: It may not be practical to hand weed large, newly planted lawns and the use of broad-leaf herbicides may be considered. We recommend using corn gluten meal, an organic, pre-emergent herbicide used to control weeds. Apply in late winter/early spring, just before weed seeds begin to germinate.

Herbicide Precautions: If you opt to use chemical herbicides instead, do not apply 2,4-D when daytime temperatures exceed 75° F. Do not use Trimec or other formulations that mix 2,4-D with other herbicides as these can stunt buffalo and blue grama grass plugs.

FERTILIZING:

The First Growing Season: It is beneficial to fertilize your plugs that first growing season to make sure they fill in quickly and cover the bare soil. To minimize soil compaction from walking on the young lawn, spray fish emulsion as a foliar feed in the early morning, one time each month with the last application in August.

MAINTENANCE AND EXTENDED CARE FOR ESTABLISHED, PLUG GROWN LAWNS:

Watering: Once established Buffalo and Blue Grama grass are very drought tolerant, but they may need extra water during the hottest part of the summer to keep them green and actively growing. Turn on the sprinklers to apply approximately an inch of water every two weeks.

Bella bluegrass will need more water each month than Buffalo or Grama in western climates. Water Bella when it gets a gray-green color and the grass blades are folded and thin.

If irrigation is not available and you must depend on natural rainfall, Buffalo and Blue Grama may go brown in extended heat and drought but will green-up when the rains return. These native grasses have deep roots that keep them alive through extended drought.

Fertilizing: Never use “weed-n-feed” chemical fertilizers as they are damaging to soil health.

Buffalo grass varieties: Legacy, UC Verde and Prestige need to be fertilized twice annually for best appearance. Apply an organic/natural fertilizer in late spring and again in early fall.

‘Hachita’ Blue Grama: needs only one application of an organic/natural fertilizer in early fall.

Bella’ Bluegrass: normally needs no supplemental fertilizer. In poor soils, apply an organic/natural fertilizer once annually in early fall.

Weed Control: Buffalo and Blue Grama grasses are warm-season growers, meaning they don’t green up until mid- to late spring (depending on elevation). Corn gluten meal application can prevent weeds from germinating. Weeds are best pulled, dug up with a dandelion fork or spot-sprayed with herbicide in early to mid-spring. At this time of the year, these native grasses are still dormant while the weeds are already green and growing. This makes them easy to find and pull. A thorough weeding in early spring is usually sufficient for the entire year.