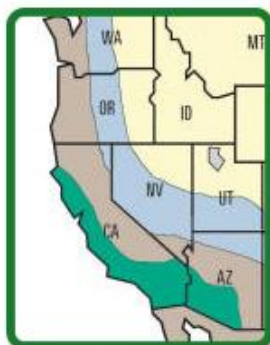


# ‘UC Verde’<sup>®</sup> Buffalograss Installation and Care Guidelines

## Introduction

Buffalograss had been around for millions of years in North America, ranging from eastern Arizona to northern Mexico and through the Great Plains States.

Because of its extreme drought tolerance, turf researchers turned to Buffalograss in the 1980’s. These 1<sup>st</sup> generation selections, provided as seed, were touted as “saviors of our environment,” but proved to be weak in both density and color. Plantings of these varieties performed even worse in California’s Mediterranean climate, with very poor germination, establishment and with dormancy periods of up to six months. Such experiences gave Buffalograss a bad rap in the landscape industry for a while, but these grasses were the forerunners of varieties that would be much better.



In late 2003, ‘UC Verde’<sup>®</sup> Buffalograss was introduced by the University of California, bred specifically for most of California and the low desert valleys, and for the Phoenix valley and Tucson in Arizona. This cultivar was the result of years of research at UC Davis and UC Riverside. ‘UC Verde’<sup>®</sup> has been shown to get by on 12” of water per year. It makes a beautiful, groomed turf at 2-3” tall, or can be grown as a short meadow grass at 6-8” in height, when mowed just once or twice a year.

The water savings is 65 to 75% versus tall fescue lawns, and 20 to 40% less than Bermuda, Zoysia and St. Augustine. The reduced mowing requirement of this grass (half that or less of fescue), disease and pest resistance, very low pollen count, and tolerance of inundation as a storm water retention/bioswale grass all make a very good argument for looking at this grass that was bred in California for California’s unique climate.

## When to Plant

Though it is possible to plant ‘UC Verde’<sup>®</sup> Buffalograss year around, being a warm season grass, the optimal time for planting is between April 1st and August 15th in order to take full advantage of the warmer night and day temperatures, and longer days experienced at this time of year for rapid establishment (‘UC Verde’ is very heat-loving):

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
*	*	OK	OK	OK	BEST	BEST	BEST	OK	OK	*	*

\*Can be planted at this time but growth will be slowed. Please inquire for special instructions for planting these months

## Product Description



'UC Verde'® Buffalograss is supplied in plug trays of 128 plugs per tray (plugs are 1 ¼" wide x 1 ¾" deep).

The boxes should be opened immediately and plug trays should be removed and placed in a half-sun area that is protected from wind. Trays should not be stacked on top of each other. **Leave the plugs in the trays until planting, and make sure that they are watered daily, if needed.**

Also make sure that plugs are well-watered before planting (see more details further below).

## Determining How Many Plugs

To calculate the number of plugs needed, measure the area to be installed with 'UC Verde'® and use the following formulas for appropriate plug spacing.

Spacing in Inches	Multiply sq. ft by
18	0.44
15	0.64
12	1.00
9	1.78
6	4.00

(ex: plugs placed at 15 inch centers in an area of 10,000 sq ft –  $10,000 \times 0.64 = 6,400$  plugs)

Note: for most of California, 12" on center (o.c.) is appropriate spacing for residential planting, unless fast fill-in is desired, in which case 9" is recommended. For large projects 15" o.c. is okay, though fill in time will be longer.

Rate of fill in is a direct function of the soil preparation, plug spacing, and time of planting. If planting during optimal growing time at recommended spacing you should have full coverage in 12-14 weeks in inland areas, and slightly longer in coastal regions.



## Site Preparation

**New Lawns:** All areas to be plugged should be free of construction debris, stones, living vegetation etc. If large weed population is expected, a pre-emergent herbicide may be surface applied after planting (DO NOT SOIL INCORPORATE). All grades shall be established and maintained in accordance with drawings and/or applicable specifications.

**Renovated Lawns:** For lawn conversions involving a healthy COOL SEASON grass like tall fescue, the old lawn may be removed with a sod cutter, or may be killed with a non-selective herbicide, following label instructions.

**NOTE: IF PRIOR LAWN HAD SPECIES BERMUDA, KIKUYU OR ANY OTHER RHIZOTOMOUS WEEDY GRASS, DO NOT PLANT PLUGS WITHOUT FIRST PROPERLY GETTING RID OF THESE VERY INVASIVE GRASSES!** A 'triple grow-kill cycle' will likely be required to get rid of these grasses, where an application of non-selective herbicide is followed by a period of watering the area in to promote new growth; and then repeated 2- 3 times to ensure eradication of the persistent rhizomes that otherwise may show up in the middle of your 'UC Verde' lawn, leaving few options for treatment at that time. This process may take long but will be worth it! If not familiar with these 2 invasive grasses, you can consult your local garden center and/or read about them online.

## Planting

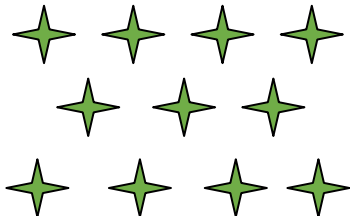
**Make sure that plugs are well-watered before planting.** If plugs are dry, hand water or soak the plug tray in a large container or sink; plug soil should be thoroughly wetted and should not be planted when dry!



A soil tilled or loosened to depth of 4" is easily planted by hand; harder soils may benefit from use of a soil auger to make holes for planting.

Start next to a sidewalk, building, etc. Dig or drill a 1 ¼" diameter hole about 1 ½" –inches deep. Place a plug into the hole, being sure the plug is to the bottom of the hole. ***Failure to place plug firmly to the bottom of hole will create an air pocket under the plug, which will reduce the chance for survival.***

Planting plugs ***too high*** (above soil level) may lead plugs to air wick dry which can also lead to plant loss. The top of the plug soil should be slightly below ground surface. Measure for the next plug, using the specified spacing. Repeat installation procedure. Continue in a straight line to the end of the planting area. Move the specified spacing for the second row and continue and continue planting. Plugs can be staggered as illustrated below:



## Irrigation

Once established, 'UC Verde'® has extremely low irrigation needs. New plantings will however require frequent light irrigations to prevent plugs from drying out. Depending on time of planting, soil type and weather, plugs may need to be watered daily and perhaps even twice a day in hot weather. It takes the plug roots about 3-4 weeks to break through the interface between the plug soil and the landscape soil, meaning that until this time the plugs will only be able to use the water that hits them directly. After this time the plug roots will begin to draw up water from the surrounding soil.

Water-in plugs thoroughly after planting and avoid extremes of letting the plugs go bone dry or keeping them boggy. After one month, slowly reduce the frequency of watering, monitoring the soil moisture. If hand watering note that you will want to start irrigating the soil surface between the plugs to encourage the stolons to run, root and fill in.

Morning irrigation is best, but if the stolons do not attach to the ground, the soil surface may be going too dry which case they will benefit from a 2<sup>nd</sup>, lighter watering session later in the day. About ¼" of a lawn topper can also be applied to help retain surface moisture. Once complete coverage is achieved, watering frequency may be reduced. It is difficult to recommend a set watering schedule, since watering frequency and amounts vary with soil type: for example, clay soils will require less water, and sandy soils will require more frequent watering during establishment.

Once the lawn has filled in, the watering schedule should be switched to infrequent but deep irrigations to drive the roots deeper and increase drought tolerance. In most geographic areas and for most soil types, an established\* 'UC Verde'® lawn can get by on one deep irrigation every 7-10 days. \*a lawn with full coverage that at least a year old

Note: If soil surface is drying out quickly between irrigations during lawn fill in period, the addition of a fine lawn topper (compost) will enhance surface moisture and allow for faster rooting and spread of stolons. Apply no more than ¼" of topper to the lawn surface; this may be repeated in 2 months if needed.

## Fertilization

Feeding the plugs following the first irrigation with a liquid feed fertilizer such as Miracle Gro 36-0-6 or a similar product can speed up the lawn fill in period. Make sure the plugs have been watered in well before applying fertilizer.

A second application can be made 4 weeks later if soil fertility is low or suspect at time of installation. Once the plugs have rooted in well (4-5 weeks after planting), a good quality lawn fertilizer should be applied (this may be an organic or synthetic fertilizer. Follow label recommendations for new lawns. Depending upon instructions, you may want to re-apply every 30 days during the growing season until the complete grass coverage is achieved. Be sure to water in well.

For established 'UC Verde'® lawns, apply 2-3 lbs of ACTUAL NITROGEN\* per 1000 square feet annually. This is best divided into 5 fertilizations during the growing season: late February, mid-April, late May, mid-July, early September.

\* NOTE: This rate recommendation is for ACTUAL NITROGEN, not what you pour out of the fertilizer bag. For a simple explanation of how to determine ACTUAL NITROGEN, see this link:

<http://plantscience.psu.edu/research/centers/turf/extension/factsheets/calculations-turfgrass-fertilization>

## Weed Control

After the initial watering, remove any weed seedlings by hand/hoes, before they flower and go to seed. An appropriate pre-emergent herbicide labeled for use of Buffalograss (Buchloe sp.) may be applied to control weeds during the grow-in period if desired; follow label instructions and after application, thoroughly water the area. If broadleaf weeds develop, remove by hand; Ready To Spray (RTS) products that attach to garden hose and require no mixing are easy to use; be sure to find a product that is labeled for use on Buffalograss (Buchloe sp.).

## Pests and Disease

Rabbits may be attracted to the fresh growth of the young UC Verde plants and can chew the plugs down to a nub, so best keep them away for the first 4-6 weeks with a low fencing. If this is not practical, note that the 'UC Verde'® can be planted slightly deeper, placing the crown of the plant one quarter to half an inch or so below soil level. By doing so, the rabbits may graze but will not harm the crown of plant. Sprinkling sand on the new plugs or applying a rabbit deterrent product may also reduce interest, but if there are no other plants around, they may take interest in the plugs. Once the 'UC Verde' lawn is established, they lawn will grow faster than what the are able to consume.

Crows may be attracted to the newly planted area and have fun pulling up recently planted plugs, which should be replanted as soon as possible. If noise does not deter them we have seen some success with motion activated sprinklers such as Scarecrow Motion Activated Sprinkler, Orbit Yard Enforcer, and Havahart Spray Away.

## Mowing

Initial mowing should be approximately 4 weeks after planting, once the plugs have rooted in. This will promote stolon growth and fill in time. Do not remove more than 1/3" of top growth to avoid scalping the lawn. For a groomed lawn, the subsequent mowing schedule should be about half that of a tall fescue lawn, or about every 2-3 weeks. For a short meadow look, mow just one to two times during the growing season (April-October). NOTE: If your mower or that of your gardener has been used on other lawns, especially lawns with species Bermuda or Kikuyu, make sure that the mower housing and blades are clean and free of these clippings; these grasses are invasive and the cut stems can become established in your new lawn!)



'UC Verde'® mowed, manicured look

'UC Verde'® un-mowed, meadow look



## Winter Dormancy

'UC Verde'<sup>®</sup> buffalograss is a warm season turfgrass, and will naturally slowdown in growth during winter: it does not go fully dormant, but semi-dormant. Depending upon location (coastal vs. inland), grass color will begin to change about December 1<sup>st</sup> from green to a straw-green color; the colder the nights the more straw coloring. Except for colder inland regions 'UC Verde' does not go blonde-dormant. The grass will come out of dormancy late Feb. to early March depending upon location; the beginning of new growth is influenced bot by day length and soil temperature.

*DO NOT WORRY* about semi-dormancy! While this is the natural rest cycle for this grass, you do have options that will even allow for a green lawn year-round (if need be), as follows:

1) Accept the fact that this is the normal cycle for a warm season grass; look upon this semi-dormancy as it is in much of the rest of the country: a natural a change of seasons (and a chance to take a break from lawn maintenance and save water!).

2) Reduce the semi-dormancy period by mowing to 1" height mid-November and a light feeding with a balanced, slow-release fertilizer. Follow up in early February, with an application of a high nitrogen lawn fertilizer. Always apply fertilizers to well-watered lawns and water-in thoroughly immediately after application. This practice will shorten semi-dormancy period by 4 weeks, typically.

3) Over-seed with annual rye-grass where summer weather gets hot (inland areas), a native grass (i.e. vulpia) for the cooler, coastal areas. This over-seeding should be done in November for quick winter color; these grasses will naturally die down in early spring, when 'UC Verde' overtakes it. NOTE: Ryegrass is not recommended for over-seeding unless in areas where summer temperatures regularly exceed 85 - 90F.

4) Over-seed with California native wild-flowers in November, for green foliage color in winter followed by beautiful wild-flowers in early spring throughout the 'UC Verde' lawn.

5) Apply a turf-colorant in mid to late November. The colorant adheres best if applied just before lawn starts goes into semi-dormancy. It will last about 3 months. There are some very good organic turf colorants on the market that are very close in color to 'UC Verde' when applied at proper dilutions.

For further specifics on turf colorant recommendations and over-seeding plant selections, contact our office.



'UC Verde'<sup>®</sup> Winter dormancy look



'UC Verde'<sup>®</sup> Winter dormancy look

## Seasonal Tips

### SPRING

- **MOW** 'UC Verde'® to 1-1 ½" in late Feb./first week of March to remove the old grass debris, warm the soil and encourage new stolon growth. You should do this even if you intend on having your 'UC Verde'® as a short meadow since this process invigorates the lawn.
- **WEED!** Hand weeding at this time of year is fairly easy as soil is moist and weeds are easy to spot. If your area is large, apply a pre-emergent with crabgrass and/or annual grassy weed control. (**READ AND FOLLOW PRODUCT LABEL!**) Weeding should be attended to BEFORE fertilizing as you do not want to also feed your weeds.
- **FERTILIZE!** 'UC Verde'® is a warm season grass, and will respond very well to fertilization as the night and day temperatures warm up. Make sure to use a lawn food with a high nitrogen analysis, such as 36-0-6 (N-P-K); this may be in liquid form (eg. MiracleGro Lawn formulation or something similar), or a granular fertilizer such as Turf Supreme by Best, or an organic fertilizer like Gro-Power Lawn Fertilizer, and there are many others brands. As compared with all other turfgrasses, 'UC Verde'® has a very low fertilizer requirement at just 2 to 3 lbs. of ACTUAL nitrogen per 1,000 square feet per year. This is just 1/5<sup>th</sup> the amount (or less) that the typical application rate for tall fescue lawns, like 'Marathon', so besides saving a lot of water, you are also using much less fertilizer with your 'UC Verde' lawn.

*Do not apply all of this fertilizer in one application!* It is best to take this annual total and divide it into 5 separate applications, for optimal color and lawn performance. Exact application dates are not important, but you should try to follow something similar to this schedule:

**Late February** - Apply ½ to ¾ lb. ACTUAL N per 1,000 square feet (\*see ACTUAL N calculation details in [Fertilizer](#) section above). Do not apply to a bone-dry lawn, but one that has some soil moisture. If a granular fertilizer, make sure that you broadcast evenly and water-in very well following application.

**Mid-April** – Repeat.

**Late-May** – Repeat.

**Mid-July** – Repeat.

**Early September** – Repeat.

### SUMMER

This is a great time to enjoy your 'UC Verde'® lawn when color and coverage are at their best in hot weather!

- **Fertilize** per above recommendations.
- If the **weeds** got away from you, any broad leaf weeds can be treated with a chemical application. (NOTE: DO NOT use any product that contains 2-4 D during hot temperatures, since this may stunt the grass).
- **Mow** to desired lawn height or relax and enjoy 'UC Verde' as an un-mowed meadow grass.
- **Irrigate** an established lawn deeply, once every 7-10 days. A young lawn may require more frequency, and deep watering is best. If you just planted your plugs, see IRRIGATION section above.

### FALL

- Fall maintenance should be minimal. Water as needed. Control weeds as needed.

### WINTER

- See Winter Semi- Dormancy above

Thank you for your interest, and for questions or to place an order, please contact us! Phone: 949-498-1131

