

Buffalograss Management Strategies

Keenan Amundsen
2015 Nebraska Turf Conference

Buffalograss breeding support



Water use

Turfgrass species and cultivar	ET rates		
	Aug. 1982	May 1984	Sept. 1984
	mm d ⁻¹		
Buffalograss, Texas Common	5.3a*	4.6ab	4.4a
Centipede grass, Georgia Common	5.5abc	4.7ab	4.9bc
Bermudagrass, Arizona Common	5.8bcd	4.2a	4.9bc
Bermudagrass, Tifgreen	5.4ab	4.6ab	5.2c
Bermudagrass, Tifway	5.9de	4.1a	4.9bc
Seashore paspalum, Adalayd			
Zoysiagrass, Meyer			
St. Augustine grass, Texas Common			
Zoysiagrass, Emerald			
Bluegrama, Common	6.7bcd		
Bahiagrass, Argentine	6.3f	--	--
Tall fescue, Kentucky 31	7.1g	5.1b	--
CV	7.3	11.8	12.8

Well watered turf
~5.6"/month
<5.5 considered low ET rate

609 released in 1991

Kim and Beard, 1988

Buffalograss is dioecious



Hermaphrodites



Buffalograss

- *Buchloë dactyloides* (Nutt.) Engelm.
syn. *Bouteloua dactyloides* (Nutt.) Columbus
- Warm season, polyploid, perennial species
- Fine textured
- Dark bluish-green color
- Native to the Great Plains
- Exceptional heat, drought,
and cold tolerance
- Stoloniferous
- Dioecious



Highly stoloniferous



Exceptional sod former



Seeded and vegetative types



Establishment recommendations

- Low maintenance after establishment
- Weed control is critical
- Existing turf?
- Don't overwater or over fertilize
- Don't neglect the turf either (water and fertilize)
- Use a starter fertilizer
- Mow frequently as soon as possible

Establishment demonstration





Weed control at seeding

Brand Name	Rate	Timing	Target
Tenacity	5 fl oz/A	post	Broadleaves, sedge, crabgrass, goosegrass
Dismiss	8 fl oz/A	pre + post	Broadleaves, sedge
Solitaire	16 oz/A	pre + post	Broadleaves, sedge
Drive XLR8	64 fl oz/A	post	Crabgrass, Broadleaves
SquareOne	12 oz/A	post	Crabgrass, Broadleaves

Herbicides Applied at or Shortly after Seeding Are Effective for Weed Control in Seeding Buffalograss

Luqi Li,* Matthew D. Sousek, and Zachary Reichert

Abstract

Herbicides applied shortly after seeding of buffalograss [*Echinochloa distachyoides* (Nutt.) Engelm.] can help reduce weed pressure and maximize establishment of buffalograss. This study evaluated 12 relatively recently developed herbicides for turf safety and weed control when applied at seeding or 0 or 2 weeks after emergence (WAE) of Bowler or Sundancer buffalograss. Primary weed species on the site were common purslane (*Portulaca oleracea* L.), redroot pigweed (*Amaranthus retrofractus* L.), and/or yellow foxtail [*Setaria lutescens* (Weigel ex Steud.) F.T. Hubb.]. Regardless of cultivar, untreated checks had <15% buffalograss cover and >53% weed cover by 6 WAE, whereas most of the herbicide treatments resulted in >80% buffalograss cover and <20% weed cover. Mesotrione, sulfentrazone, quinclorac, carfentrazone, alimazine, amicarbazone, sulfentrazone + quinclorac, carfentrazone + quinclorac, or sulfentrazone + proflinone applied either at seeding or 0 WAE are safe on Bowler or Sundancer buffalograss, effectively minimize weed pressure, and maximize buffalograss establishment. Herbicides applied at 2 WAE were less effective than earlier applications at minimizing weed pressure and resulted in lower buffalograss establishment.

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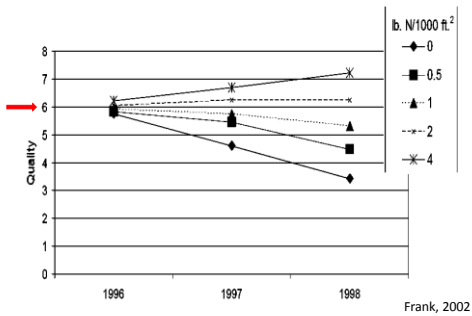
Abbreviations: AS, at seeding; WAE, weeks after emergence; WAT, weeks after treatment.

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Post-establishment management

- Low vs. no maintenance (lawn vs native prairie)

Fertilizer Recommendations



Irrigation requirements

- 1 inch per month from rain or supplemental irrigation

Weed control once established

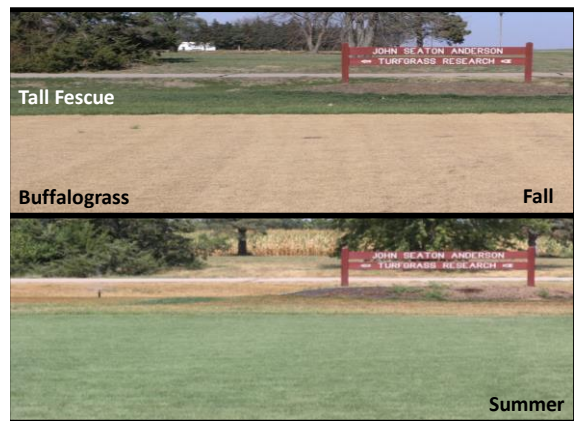
- Spring Preemergence (Essential application)
 - Proflaminate
 - Pendimethalin
 - Dithiopyr* (not in spring 1st year until well rooted)
- Dormant apps (late fall-early spring)
 - Round-up
 - Broadleaf weeds
 - Cool-season turfgrass
 - Make sure turf is fully dormant in fall
 - Applying too late in spring will delay green-up

Labeled Herbicides	a.i.	application	control
Tenacity	mesotrione	pre/post	BL, G, S
Quicksilver T&O	carfentrazone	post	BL
Dismiss	sulfentrazone	post	BL, G, S
Drive XLR8	quinclorac	post	BL, G
SquareOne	quinclorac+carfentrazone	post	BL, G
Solitare	sulfentrazone+quinclorac	post	BL, G, S
Onetime	quinclorac+mecoprop+dicamba	post	BL, G
Echelon	sulfentrazone+proflaminate	pre/post	BL, G, S
Confront	triclopyr+clogyralid	post	BL
Speedzone	carfentrazone+2,4-D+Mecoprop+Dicamba	post	BL
Speedzone Southern	carfentrazone+2,4-D+Mecoprop+Dicamba	post	BL
Barricade	Proflaminate	Pre	BL, G
Dimension* (no spring 1 st year)	dithiopyr	Pre/early post	BL, G
Pendulum Aquacap	Proflaminate	Pre	BL, G
Gallery	Isaxaben	Pre	BL

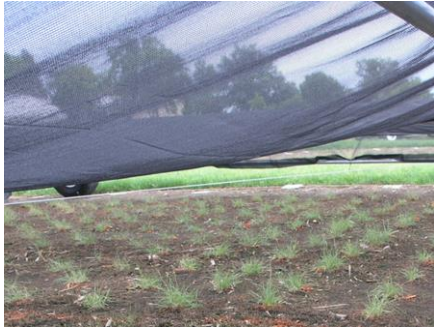
Labeled Herbicide	a.i.	application	control
Plateau	imazapic	pre/post	BL, G, CS
Specticle	indaziflam	pre	BL, G, S
Celsius	thiencarbazone-methyl+iodosulfuron-methyl+Dicamba	post	BL, G, S
Surge	sulfentrazone+2,4-D+Mecoprop+dicamba	post	BL
Katana	flazasulfuron	pre/post	BL, G, S, CS
Manor	metsulfuron methyl	post	BL, G, CS
Certainty	Sulfosulfuron	post	BL, G, S, CS
Surflan A.S.	oryzalin	Pre	BL, G
Ronstar G.	Quedprazone	pre	BL, G
Trimec Bentgrass Formula	Dimethylamine salt+ Dimethylamine salt of 2,4-D+Dimethylamine salt of dicamba	post	BL

- Make sure to read and follow label Recommendations!

What to expect?



Shade (in)tolerance



Traffic tolerance



Disease tolerance



Spring green up



Submersion tolerance (?)



Future buffalograss cultivars



Elite germplasm evaluation



Used as a border



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TURFGRASS SCIENCE

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