

BUFFALOGRASS?

By Tom Salaiz

Yes, buffalograss! Well, O.K....maybe buffalograss. What am I talking about? I'm talking about the adaptation of buffalograss to southern Wisconsin. Maybe buffalograss will survive in Wisconsin's environment, maybe it won't.

Buffalograss (*Buchloe dactyloides*) is a low maintenance, warm season turfgrass species native to the North American great plains. A fine textured, sod forming grass, buffalograss spreads by seed and stolons (Figure 1). The numerous stolons take root at the nodes to produce new plants. Buffalograss is dioecious with the male and female flowers occurring on separate plants. Pollen producing male flowers occur at the end of stems which stand 3-8 inches above the leaves. A matter of taste, this characteristic is considered attractive by some. Female plants produce burr-like inflorescences partially hidden in the turfgrass canopy. Each burr may contain one or more seeds.

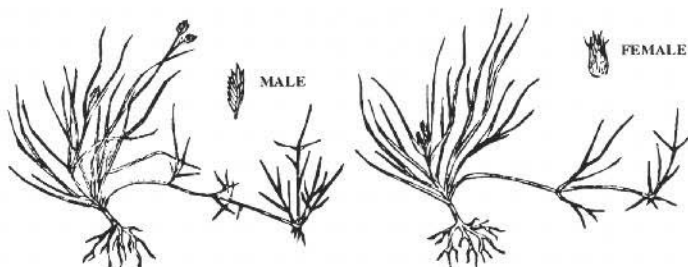


Figure 1. Male and female buffalograss plants spread by numerous stolons which take root and produce new plants at the nodes.

Source: deShazer, S.A., T.P. Riordan, F.P. Baxendale, and R.E. Gaussoin. 1992.

Buffalograss: A warm-season native grass for turf. Nebraska Cooperative Extension EC92-1285-C

Buffalograss may be established by seed, vegetative plugs (Figure 2), or sodding. Buffalograss seed is sold still in the burr, therefore, it is necessary to use pre-treated seed since the hydrophobic burr can prevent or delay germination. Establishment with vegetative plugs or sod may decrease the time required to obtain a full stand. Although it is a low maintenance grass, buffalograss still requires adequate irrigation during establishment.

One of the drawbacks of buffalograss is its relatively short growing season. Based on work at the University of Nebraska-Lincoln, buffalograss begins growth in mid to late May and begins dormancy with the first freeze. Buffalograss, however, is fairly tolerant of low temperatures in comparison to most warm season grasses. In fact, its range of adaptation in the U.S. stretches from southern Texas to North Dakota. When they are actively growing, buffalograss leaves are generally light green in color, how-

ever, great variation in color has been observed among genotypes. Other drawbacks include a lack of shade tolerance and a poor adaptation to sandy soils.

Because of its extremely high drought resistance and low maintenance requirements, buffalograss deserves a closer look here in Wisconsin, especially with today's environmental concerns. According to research work at Nebraska, one or more irrigations, depending on rainfall, will prevent summer dormancy in buffalograss while Kentucky bluegrass and tall fescue may require weekly watering. A meager 1 to 2 pounds on N/M/S is adequate to maintain a high quality buffalograss turf. In addition, buffalograss is relatively free of plant pathogens with a few isolated cases of diseases being reported.

Research efforts at Texas A & M University and Nebraska have focused on improving color, appearance, recuperative potential, and lengthening the growing season. Here at the Noer facility, we are evaluating six buffalograss varieties; three of which are commercially available. The six varieties will be evaluated under high and low maintenance regimes. The high maintenance study will include mowing at 1.5 inches and a fertilization rate of 2 lb N/M/S. Low maintenance inputs will include a 3" mowing height and 1 lb N/M/S fertilization. Percent cover, spring greenup, color and quality are data parameters we will be evaluating.

Maybe buffalograss will do well as an alternative grass species in Wisconsin. Its drought resistance, low clipping yield, and low fertility requirements certainly make buffalograss worthy of evaluation.



Figure 2. Vegetative plugs were used to establish buffalograss at the Noer facility.