

Buffalograss roams beyond the plains

Continued development of buffalograss varieties is making the species at home in more regions.

■ Turf scientists continue to improve the appearance and low maintenance characteristics of buffalograss.

Jeff Klingenberg, Ph.D. of the University of Nebraska, says up to 10 new buffalograss varieties may be available over the next decade. Different varieties may be adaptable to the Northeast as far as New Jersey, and westward to California (see map).

Buffalograss—named apparently because it was the main food source for American bison—is a warm-season, fine-leaved, perennial, sod-forming grass. It grows to a height of six inches, and spreads by stolons and runners.

Klingenberg says three commercial seeded types are available: Sharps, Texoka and Bison. The 11 vegetative types include two commercial brands (609 Oasis and Prairie) and nine experimental varieties.

Bamert Seed Co. of Muleshoe, Texas, now markets what it says are the first proprietary turf-type buffalograss seed varieties, Plains and Topgun.

Adaptation—Buffalograss is naturally adapted throughout the Midwest and Southwest in areas of 12 to 35 inches of annual rainfall, sandy clay loam or heavier soils, pH 6.0 to 8.5, and up to 6,000 feet

elevation. Buffalograss is not shade tolerant, and is recommended for use in high-light areas.

Buffalograss gets high marks as a low-maintenance alternative to other turf varieties.

It's drought tolerant, has a deep root system and establishes quickly. It avoids drought and high heat stress by entering dormancy, but shows rapid recovery when water is again available.

According to Bamert Seed, studies have shown that buffalograss requires only 30



Potential for buffalograss expansion across the US.

to 60 percent of the water needed by improved bermudagrasses.

Klingenberg says that university research shows that it's possible to have "short winter" dormant species adapted to the southern regions. "Long winter" dormant types—those that come from the lower adapted areas of the U.S.—have a longer growing season compared to those



Klingenberg: seeding rate most critical success factor.

that adapted to the northern regions.

Seeding alternatives—Non-treated buffalograss seed will take two to three years to reach 80 to 90 percent germination. Treated seed—or seed that has been "fooled" into thinking it has gone through winter—achieves 75 to 80 percent germination in 10 to 14 days.

A third, time-consuming establishment method involves removing the seed from its nylon-like "burr" shell, says Klingenberg.

Non-treated burrs are less expensive, and have a longer shelf-life, but are slow to establish, and may require more irrigation and weed control. Treated burrs, which are most available and cost less than the naked caryopsis, have a 3- to 4-day germination if planting is well timed.

Three important considerations when attempting to seed buffalograss are:

● **Timing:** Late spring, when soil temperatures are no lower than 50° F. The best planting window is between May 15 and June 15. Don't plant any later than June 30. You may get good establishment, but you won't get good stolon performance you need in June to withstand a late October freeze.

● **Seed placement:** Klingenberg prefers drill planting, which results in the best soil/seed contact. Plant 1/2 inch apart, with 1- to 2-inch row spacing.

Broadcast planting requires a mechanical method of covering and good soil/seed contact. Rolling will aid establishment.

● **Rate:** This is where most mistakes occur. Consider the viability of the seed you're buying. "It's a different ball game compared to most of the other warm and cool season varieties," says Klingenberg. He also notes that pure live seed in the burr is going to be only 62 percent, so you should plant at least 1-1/2 lb. per 1000 sq. ft.

Also, avoid seeded buffalograss that's been in the bag more than 6 months.

—Terry McIver

Buffalograss checklist

ADVANTAGES

- ✓ reduced mowing, irrigation, fertilization
- ✓ available in seeded and vegetative types
- ✓ grows in dry, compacted soils
- ✓ tolerates temp extremes
- ✓ establishes quickly
- ✓ drought tolerant
- ✓ winter hardy

DISADVANTAGES

- ✓ does not grow in moderate shade
- ✓ sensitive to some herbicides
- ✓ male plants have seedheads
- ✓ possible disease problems
- ✓ turns brown after freeze
- ✓ not suited to sandy soils
- ✓ no dark green color
- ✓ seed is expensive
- ✓ winter dormancy

Source: Gayle Jacklin, Jacklin Seed Co.; Kevin Morris, USDA.