

Forage Factsheet – Smooth Bromegrass

Species Name: Smooth Brome – *Bromus inermis*

Origin: Germany, Hungary, and France.

Longevity: Long-lived.

Uses: Hay, pasture.

Optimal time of use: To maximize both yield and nutritional value, hay smooth bromegrass during flowering. Begin grazing at the four leaf stage. Smooth bromegrass does not stockpile well for fall grazing.

Recovery after use: Smooth bromegrass is slow to recover after defoliation, with limited probability of two defoliations per growing season.

Yield: Smooth bromegrass yields approximately 3110 lbs/acre (3534 kg/ha) in the Brown soil zone, 5340 lbs/acre (6068 kg/ha) in the Dark Brown soil zone, and 4420 lbs/acre (5022 kg/ha) in the Black and Grey soil zones. Recommended initial stocking rates for established fields are 0.5 AUM/acre (1.25 AUM/ha) in the Brown soil zone, 1.0 AUM/acre (2.5 AUM/ha) in the Dark Brown soil zone, and 1.2 AUM/acre (3.0 AUM/ha) in the Black and Grey soil zones.

Palatability/Nutritional Value: Smooth bromegrass is very palatable to livestock. Smooth bromegrass has an average digestibility of 67% and crude protein levels ranging from 11-14% at flowering.

Competitiveness: Smooth bromegrass is very competitive. Smooth bromegrass can become invasive, especially in rangelands and wetlands.

Winter Hardiness: Smooth bromegrass has good winter hardiness.

Drought Tolerance: Smooth bromegrass has good drought tolerance.

Erosion Control: Smooth bromegrass is excellent at controlling erosion due to formation of durable sod.

Ease of Establishment: Smooth bromegrass establishes easily.

Suggested Mixtures: Smooth bromegrass may be mixed with alfalfa and other forage species but often dominates the site over time due to its creeping growth habit.

Salinity Tolerance: Smooth bromegrass has moderate salinity tolerance. If included in a saline mix, smooth brome will establish on patches with lower salinity levels. As the saline levels in the field gradually decrease, smooth bromegrass can spread.

Flooding Tolerance: Smooth bromegrass withstands two to four weeks of spring flooding.

Soil Texture: Smooth bromegrass is suited to all soil textures but does especially well on loam soils.

Acidity Tolerance: Smooth bromegrass tolerates soil pH as low as 5.5.

Management Considerations: Smooth bromegrass becomes root bound as the stand ages. Spiking or coultering the stand releases nitrogen stored in the roots and promotes growth. Smooth bromegrass yields are often limited by available nitrogen. Apply nitrogen fertilizer based on soil test results.