

Planning for a Grass/Forb Planting

Preparing the Site

Weed Control Prior to Planting-Managing weeds prior to planting provides more options than managing after the seedlings have emerged. The weed seed bank will be less and competition for moisture, nutrients and light to young seedlings will be reduced.

Seedbed Preparation-Shallow planting is required for establishing most grasses and forbs. Good seed to soil contact is needed for germination. Residue and/or tillage needs to be managed to achieve a good seedbed.

Choosing Species

Suitable for the soils and site-Choose species adapted to the soils and moisture conditions at the planting site. Some species are very site specific. Another consideration is herbicide carryover that may inhibit growth of some species.

Planting Date-Spring is optimum for seeding most grasses and forbs. If dormant seeding, major components of the mixture should be cool-season species. Warm-season grasses do not consistently establish when dormant seeded in the Northern Great Plains.

Purpose of Planting-Grasses and forbs are planted for various purposes including livestock feed, conservation cover, wind barriers, pollinator and wildlife habitat, prairie restoration and others. Forage quality, pollinator preference, height and size, spreading ability, erosion control, and whether the species are native or exotic are some of the parameters to consider.

Equipment Available for Seeding-Shallow seeding is required. Some species are awned (fluffy) and do not readily flow. Seed size is variable; some are very small. Can the seeding equipment properly plant the species and seed amounts?

Cost-Some grasses and forbs have limited supply and high cost. Are the species cost effective in fulfilling the planting purpose?

Choosing Cultivars/Varieties

Adapted to Environment-Cultivar (variety) origin influences environmental adaptability, particularly for native warm-season species. For example, cultivars with parent material originating from Texas would not likely be adapted to the Northern Great Plains; or plants from high elevations may not be adapted to low elevations. In NRCS Technical Guides, the listing of acceptable cultivars, native harvested seed, and non-cultivar seed (VNS) are listed based on origin and proven performance.

Purpose-Each cultivar has unique traits and adaptability. A few traits to consider when selecting a cultivar include seed and/or forage production, forage quality, size, color, cold tolerance, days to maturity, and disease and insect resistance. The cultivar selected should best fit the purpose of the planting.

Availability-Seed production is minimal and supply is limited for some of the grasses and forbs. Planning and ordering well in advance of planting can be advantageous. Knowing what substitutions can be made when a chosen cultivar is not available is vital for success of the planting.



A properly prepared tilled seedbed (far left) is firm.



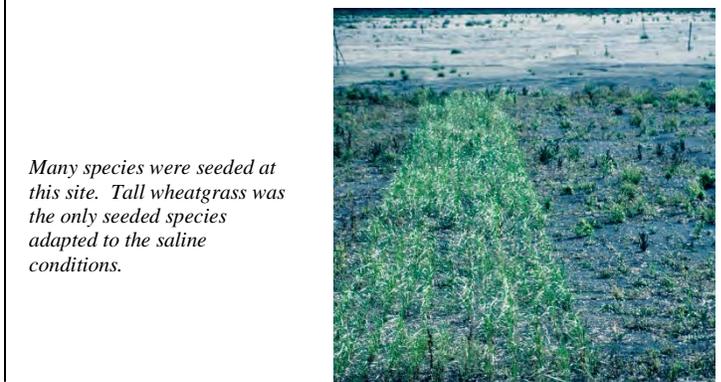
Standing stubble (left) can provide a good seedbed. Flat stubble (right) is poor.



Awned Indiangrass (left) does not flow unless debarbed (center). Some species have very small seed (right). What is your equipment capable of seeding?



Big bluestem is adapted to this central South Dakota site. Severe winter injury occurred when a cultivar (Kansas origins) that is not adapted or recommended was planted.



Many species were seeded at this site. Tall wheatgrass was the only seeded species adapted to the saline conditions.