



WYOMING PLANT MATERIALS TECH NOTE 10

PLANT MATERIALS NO. 10

August, 2003

SUBJECT: Determining Success of Seedings

Judging the level of success of new seedings can be difficult, especially during the first season. A careful evaluation must be made before deciding to reapply the practice.

Various methods may be used to evaluate plant stands. However, regardless of the evaluation method used, an adequate area must be examined to accurately determine the seeding success.

One simple method for assessing stand success is to transect a field perpendicular to the drill rows. Stop every tenth step and count the plants in the square foot in front of your foot. Repeat the procedure a minimum of 10 times. Add the total number of plants counted and divide by the stops.

Example: You step-transected a field, stopping 15 times and counting a total of 55 plants. 55 divided by 15 equals an average of 3.6 plants per square foot.

Once the average plant density is determined, guidelines for assessing stand adequacy are needed. The following table provides general guidelines for erosion control; for forage production goals, densities should be higher. The planner must know the landowner's objectives and consider site-specific factors influencing stand density when determining seeding success.

Grass Type	Moisture Condition	Average Plants per Square Foot			
		<1.0	1.0 – 2.9	3.0 – 5.0	>5.0
Bunchgrass	Irrigated	R	R	O	A
Sod Forming	Irrigated	R	O	A	A
Bunchgrass	Dry	R	A	A	A
Sod Forming	Dry	O	A	A	A

Key: R = Reseed O = Optional A = Adequate

The timing of stand evaluation is also a consideration. Recommendations are:

Dryland – A stand may be evaluated at the end of the first growing season, but unless you are certain that the grass has sprouted and subsequently died, the earliest time to make a determination of stand adequacy is at the end of the second growing season.

Irrigated – Evaluation can be made after 90 days except for dormant seedings. Fall and dormant seedings can be evaluated the following spring after approximately 6 weeks of growing season.