

TECHNICAL NOTES

UNITED STATES DEPARTMENT OF AGRICULTURE
JULY 2008

NATURAL RESOURCES CONSERVATION SERVICE
ALEXANDRIA, LOUISIANA

GRAZING LANDS TECHNICAL NOTE NO. 2

CRITERIA FOR DETERMINING STAND ESTABLISHMENT: RANGE PLANTING

Evaluate plantings at the end of the first growing season. If stand is questionable, it will be necessary to re-evaluate during the first half of the second growing season. Make final determinations by June 1 of second year.

METHOD OF MAKING DETERMINATIONS

Transects should be located in representative areas of the field. The method for determining the adequacy of a grass stand is:

- Step a 50 foot line transect across the field.
- Count the established plants in a square foot at the end of your foot at points 0, 12.5 ft., 25 ft., 37.5 ft., and 50 ft. Record the number counted
- Add up the total number of plants counted and divide by the number of square feet that were checked. The resulting number indicates the number of plants/ft²

Example: You walked across a field and stopped 50 times to count the plants in a square foot. You counted a total of 20 plants. ($20/50=0.4$). This stand would be considered a failure.

Table 1. Plots - the following will be the minimum number of transects taken:

Field Size (acres)	Transects	Field Size (acres)	Transects
1-5	2 per acre	41-60	25
6-10	10	61-80	30
11-20	15	81-100	40
21-40	20	>100	.005 x field size (acres) x 100



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Table 2. Criteria for determining establishment - range planting:

Number of healthy plants/ft ²	Status	Recommended Action
Less than 0.5	Failure	Reapplication required
.5 – 2	Questionable	Continue to evaluate at the end of the first growing season. Consider: plant vigor, potential to increase, extent of competition. Reapply if no improvement by the middle of the 2nd growing season.
3 or more	Satisfactory	Implement grazing management

Johanna G. Pate
 Rangeland Management Specialist

Tally Sheet For Recording Herbaceous Establishment Data

Producers Name: _____ Date: _____

Tract Number: _____

Field Number: _____

Acres: _____

Species Planted: _____

Field Size (ac)	Transect Number	Plot 1 (0 ft)	Plot 2 (12.5ft)	Plot 3 (25ft)	Plot 4 (37.5ft)	Plot 5 (50 ft)	Total Plants on Transect
	1						
1.0	2						
1.5	3						
2.0	4						
2.5	5						
3.0	6						
3.5	7						
4.0	8						
4.5	9						
5-10	10						
	11						
	12						
	13						
	14						
11-20	15						
	16						
	17						
	18						
	19						
21-40	20						
	21						
	22						
	23						
	24						
41-60	25						
	26						
	27						
	28						
	29						
61-80	30						
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
81-100	40						
Fields Greater Than 100 Ac. (0.005 x acres x 100)	41						
	42						
	43						
	44						
	45						
	46						
	47						
	48						
	49						
	50						