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SEEDER CALIBRATION (COLLECTION METHOD)

Prior to pasture or range planting the equipment should be calibrated to allow the best chance of a successful planting. Calibration is especially important when seeding small seeded grasses, which usually require only small amounts of seed to be planted per acre. This method can be used for either broadcast or drill type equipment. The initial settings of the seeder or drill should be based on manufacturer specifications if available.

FORMULAS AND CONVERSIONS: Seeding rate (SR)= S (amount of seed)/ A (area covered in acres); A= (area covered in square feet) / 43560 (square feet in one acre)

1 pound= 16 oz = 454 grams

PROCEDURES

To determine the area covered:

1. Measure the seeding width of the machine used.
2. a) Measure the distance around the drive wheel or sprocket and turn it a given number of times to simulate the desired ground distance.
b) Pull the machine at planting speed for some measured distance.

To determine the amount of seed used:

Place some type of collection device or container at the seed outlet(s), and collect and weigh the seed.

EXAMPLES

1. A 7 foot drill is pulled 100 feet, and 0.25 lbs. of seed are dispensed. What is the seeding rate?

$$A = (7 \times 100) / 43560 = 0.016 \text{ acres}$$

$$SR = 0.25 \text{ lbs} / 0.016 \text{ acres} = 15.6 \text{ lbs/acre}$$

2. A cyclone seeder with a 12 foot seeding width dispenses 0.12 lbs. of seed n 100 feet. What is the seeding rate?

$$A = (12 \times 100) / 43560 = 0.028 \text{ acres}$$

$$SR = 0.12 \text{ lbs} / 0.028 \text{ acres} = 4.3 \text{ lbs/acre}$$

3. Three pounds of seed were placed in a spinner (cyclone) seeder with a 12 foot seeding width. Seed was sufficient to cover a distance of 1000 feet. What is the seeding rate per acre?

$$A = (12 \times 1000) / 43560 = 0.28 \text{ acres}$$

$$SR = 3 / .28 = 10.7 \text{ lbs/acre}$$

Source: *Southern Forages*

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