



Use of a Drill in Pasture and Hay Planting

EVALUATE THE DRILL:

- Tubes clear - very common for tubes to be plugged.
- Use a vacuum to clean out seed box if dirty before putting in new seed.
- Tubes connected, undamaged, and properly aligned.
- Check seed slot opening to be sure it is not plugged with soil or trash.
- Coulters running straight.
 - Bearings good.
 - Clear of caked-on soil or debris.
 - On level ground, adjust each coulter to the same depth.

CALIBRATION:

1. Set the drill as directed on charts.
2. Run a short distance to assure seed delivery.
3. Remove tubes.
4. Tape bags on each hole that lets seed fall. (A short cut is to catch seed; from five of the tubes divide by five, then multiply by the total number of tubes per seed box.)
5. Pull the drill over a marked distance of 100 feet.
6. Weigh the seed that was released over the 100-foot area.
7. Calculate delivered seeding rate using equation below.

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$$\text{Seeding rate (lbs./acre)} = \text{seed released (lbs.)} \times \frac{43,560 \text{ sq. ft./acre}}{100 \text{ ft.} \times \text{drill width (ft.)}}$$

(If seed is weighed in grams, divide grams by 454 grams per pound.)

PLANTING (best to plant cool season grass in the fall and legumes in late winter)

- Soil test a month or more prior to seeding. If lime is required, delay planting legumes for at least six months.
- Control competition with burn-down herbicide if less than 30 percent of the surface is visible. Follow label.
- If heavy residue or thatch is present, scarify ground lightly with disc to avoid getting residue pinned into seed slot and interfering with seedling germination and emergence. Graze close before planting if no-tilling into sod.
- Most common mistake is planting too deep. Small seed should not be planted deeper than 1/2 inch, 1/4 inch is better; some seed on top of the ground is good. Plant seed at a depth of 8 x the width of the seed.
- Another common mistake is traveling too fast (particularly a problem with fluffy seed).
- Check tubes after seeding one acre to make sure seed are flowing and not building up in tube.
- Traveling too fast can throw soil out of the planting slot.
- Seed should be firmed by rollers. A deep, open planting slot can silt in or erode out seed. In drier weather, an open slot may cause seed to germinate and then dry out and die in some spots causing uneven stands.
- Clean drill of all seed and caked-on soil before unhooking from tractor (germinating seed, insects and rodents seeking food contribute to problems).

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