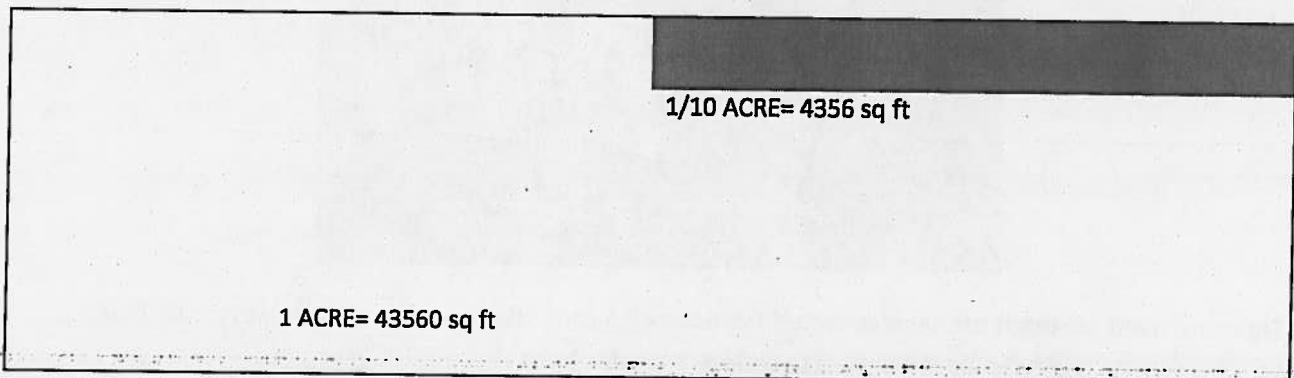


Understanding How To Calibrate the Drill or Planter That You Intend to Plant With.....

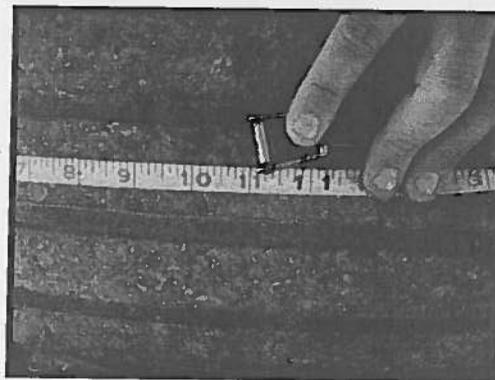
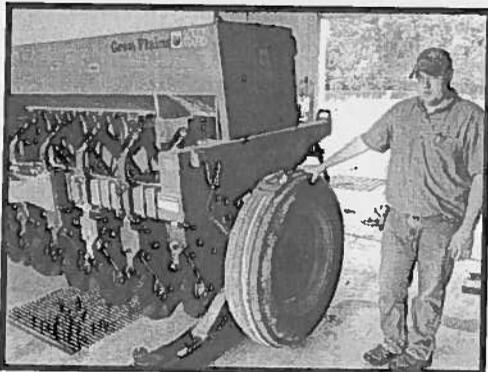
Today's exercise we will use what is considered a 10' Great Plains No-Till Drill. The coulters are spaced 7.5" apart and there are a total of 15. If you multiply 7.5 inches x 15, you get a total of 112.5 inches or 9.375 feet.

So....the 10' Great Plains drill is actually seeding 9.375'.

Knowing that 43,560 square feet are in an acre, we will use a portion of an acre to calibrate. My suggestion is using a 0.10 of an acre (or 10%). This means you will be catching 10% of the "per acre" bulk seeding rate as well.



So to figure out how far we need to travel with the Great Plains drill we would divide 4356 sq ft (or 10% of an acre) by the width of the drill, 9.375 ft., which gives us 464.64 ft. to accomplish 1/10 of an acre.



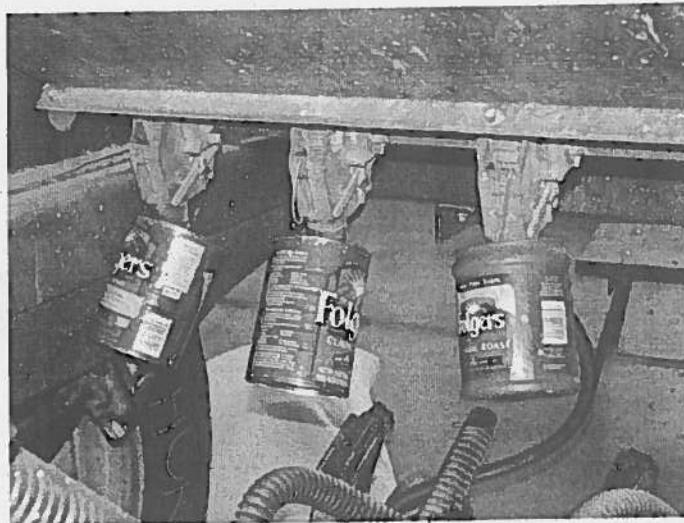
If you would like to calibrate the drill in a shop, you would need to "jack up" the drive wheel side of the drill and measure the circumference around the tire. On the Great Plains drill at the PMC, the circumference is 10 ft. 11 in. (or 10.92 ft). So if 10.92 ft equals one revolution, how many revolutions would you need to make to cover 1/10 acre? _____

Remember you need to travel 464.64 ft. for 1/10 acre.

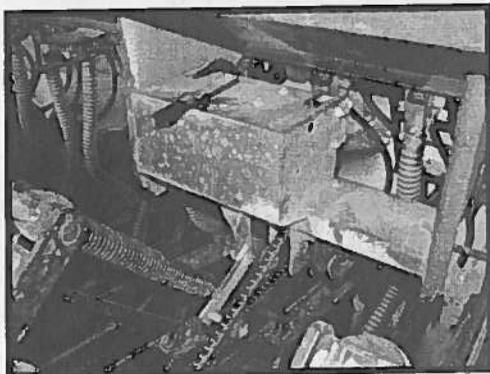
The next thing you need to think about is collecting seed as you calibrate the drill. There are 15 tubes that the seed will fall through, but trying to collect from all 15 would be very difficult. Typically, we collect from 3 tubes and calculate the amount of seed we collected.

For example, if you need 56# for an acre, you will need to catch 5.6# for 1/10 of an acre.

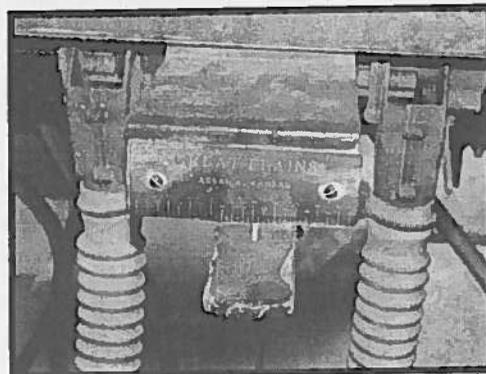
At this point, you will need to have something to catch the seed in (cans or buckets). Place the cans under 3 of the shoes. Spin the drive wheel to achieve the 464.64 ft.



Then you need to weigh the seed collected from the all 3 cans. If we are trying to achieve 5.6# bulk, how much total seed should we expect to collect from the 3 cans? _____



Adjustment for chain drive – Controls speed of drive shafts for BOTH seed boxes



Seed box adjustment – Controls the amount of seed that flows out for each individual seed box

Determine if the seed sample collected is too heavy or too light and make adjustments accordingly.

Calibrating a Seed Drill (for 1/10 acre)

- 1) Ensure drive wheel is engaged and lift off ground (jacking it up or using 3pt hitch)
- 2) Count the number of shoes and multiply by the space in between coulters to calculate the actual planting width of the drill (ex. 15 shoes x 7.5" = 112.5" (112.5" / 12=9.375'))
- 3) Using the area for 1/10 of an acre (4356 sq ft) divided by the width of the drill (9.375'), will give you the distance that you need to travel. (ex. 4356/9.375 = 464.64' or 465')
- 4) Measure circumference of drive wheel (PMC Truax is 10.92 ft) and divide into the distance you need to travel (ex. 465/10.92 = 42.5, or 42.5 revolutions equals 1/10 acre)
- 5) Fill seed box with enough seed to calibrate and spin drive wheel (ex. 42.5 times), collecting seed in cups
- 6) Weigh seed and adjust setting until you have correct amount of seed.

