User's Guide to the TruaxTM Flex II No-Till Seed Drill

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The TruaxTM Flex II no-till drill is a common type of drill used in New Jersey by NRCS, USFW, and NJDFW. This document is not intended to endorse TruaxTM or any other no-till drill manufacturer. The techniques listed in this document will be similar to those used to calibrate other no-till drills from other manufacturers.

The NJ Division of Fish & Wildlife recommends planting NWSG from April 15th through June 15th when utilizing a no-till seed drill. Popular models of no-till drills such as



the TruaxTM Flex II have specially designed boxes with augers and spindles necessary to properly dispense light fluffy Native Warm Season Grass seed (NWSG). The USDA Natural Resource Conservation Service and other agencies/groups may have no-till drills available for rent.

Seed Boxes

The TruaxTM Flex II has three (3) seed boxes for dispensing various seed types:

- 1. A Small Seed Box, usually located at the front, is used for wildflower and switchgrass seed.
- 2. A **Fluffy Seed Box**, usually located in the center and containing a large auger-shaped spindle, is used for most NWSG (except switchgrass)
- 3. A **Grain/Cool Season Seed Box**, usually located at the back and having a long metal rod with smaller perpendicular rods to spin seed, is used for sorghum, oats or soybeans and tall fescues.

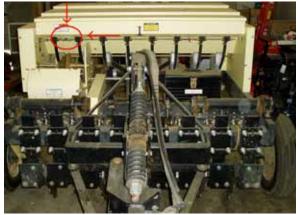


Separate tubes lead from each seed box entrance. These should only be removed for calibration and cleaning in the event of a clog.

Calibrating the Small Seed and Grain/Cool Season Seed Boxes

Flute adjusters, located on the back (below left) and front (below right), of the drill determine how much seed is allowed to flow into the ground. However, the flute adjuster settings do not determine the seed application rate (lbs./ac). To properly calibrate either the Small Seed Box or the Grain/Cool Season Seed





Box, follow Steps 1-5 and use the illustrations

provided for reference.

Step 1 – Place enough seed to cover **3** of the tube entrances in Grain/Cool Season Seed Box (l) or the Small Seed Box (r) as illustrated below.





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Remove the tubes below the box where you just put the seed into the Grain/Cool Season Seed Box (I) or Small Seed Box (r) as illustrated below and attach plastic bags with zip ties. Make sure the bags do not have any holes as you will need to measure the seed that comes out.





Step 2 – The drill's drive wheel has a wheel lock (below). Jack up this side of the drill until the drive wheel can spin freely. Engage the drive wheel lock to engage the sprockets and make the augers inside the boxes spin.



Step 3 – Spin the tire 30 times and weigh all seed collected from all 3 tubes for a given box.

Step 4 – Calculate the initial planting rate:

Total weight of seed (oz.) $\times 6.25 = lbs. / ac$

Step 5 – Use the flute adjuster to increase or decrease the amount of seed accordingly. Repeat Steps 1-5 until the recommended planting rate is attained. This may (or may not) require multiple calibration attempts depending on who operated the drill before you.

Calibrating the Fluffy Seed Box

Calibrate the Fluffy Seed Box in the drill's center by following Steps 1-4 and use the illustrations provided for reference.

Step 1 – Place enough seed to cover 3 tube entrances of the Fluffy Seed Box (below).



Remove the corresponding corrugated tubes (below) and attach plastic bags using zip ties. Make sure the bags do not have any holes as you will need to measure the seed that comes out.



Step 2 – Measure a distance of 500 feet and conduct one forward pass. **NEVER** run the drill backwards!

Step 3 – Collect all the seed and calculate the initial planting rate:

Total weight of seed (oz.) $\times 2.7 = lbs. / acre$

Step 4 – Adjust the sprocket chains to increase or decrease the amount of seed accordingly by opening the sprocket cover at the drill's front (below left). Increase the seed amount by moving the chain to a smaller front sprocket & larger rear sprocket. Decrease the seed amount by moving the chain to a larger front sprocket & smaller rear sprocket (below right). Repeat Steps 1-4 until the recommended planting rate is attained. This may require multiple calibration attempts depending on who used the drill before you.





Notes

- **NEVER** back up your tractor with the drill attached.
- Run the drill between 3.5-5.0 MPH
- Plant NWSG not more than ¹/₄" deep.
- Clean the drill at the end of each day with an air compressor. Seed left sitting in the tubes will collect moisture from morning dew thereby clogging the unit. If clogging does occur, simply remove the hose clamps and unclog the tubes.
- Total planting rate is calculated from all boxes combined. For example, 1.25 lbs./ac from the Small Seed Box + 2.75 lbs./acre from the Fluffy Seed Box + 1 lbs./ac from the Grain/Cool Season Seed Box = 5 lbs./acre.