Wellington SCIA Drill Clinic Field Day



Wellington County SCIA and C&M Seeds teamed up to bring Phil Needham (Needham Ag-Technologies, Kansas) to the Palmerston area to run a drill clinic of maximizing wheat yields.

After the field portion, the group headed under the tent for a discussion led by Tracey Baute, Gerard Pynenburg and Scott Ewert on the impacts of neonicotinoids on the honeybees. Peter Johnson gave a brief talk about wheat, and a question and answer period on the same subject.

Phil Needham explained that the key to successful no-till is uniform residue distribution. The residue from the present crop must be evenly spread across the field to ensure good plant establishment of the following crop. Residues directly influence soil temperature and the ability to plant cleanly into the soil.

Only a few combines will spread residue evenly across the entire header width. Most hit only 25 feet or so of the 30 or 40 feet they are to cover and tend to deliver more material to the left. If conditions are wet then the distribution favours the right side.

Checking the wear on the stationary knives on older combines is critical to achieving even distribution. Often there is no wear at all on one end of the chopper, and heavy wear on the other. Keep the chopper blades sharp. Dull blades make it harder to chop the residues, which makes a consistent distribution harder. It costs around \$400 to replace the blades, but that can easily be won back through increased fuel efficiency and increased harvest speed.

Consider adjusting the way the field is harvested depending on the conditions of that day. On a windy day, Phil suggested driving on the up-wind side to help with residue distribution. If at all possible avoid cutting into the wind.



It's also important to calibrate the planter or drill. With a box drill start with little or no seed to adjust the drill. "If it will go into the ground empty it will go into the ground full" (Phil). To see if the drill is working correctly drive over a thick rubber mat at field speed. Count the seeds and calculate how many seeds per acre are really being planted. When the unit starts lifting add some weights to the middle or back and the middle of the sides of the planter. This is not always where the weight brackets are mounted, but it is where the weight needs to be to compensate for the tilting. Weights mounted on the front of the wings only helps with road travel.

Phil does not like liquid fertilizer tanks mounted on the planter. When full, they are very heavy, and as they empty they really change the weight of the planter. If you must use a liquid fertilizer consider separating the tanks from the planter. Dry fertilizer bins are fine, but they do slow down the planting process as they decrease the amount of seed that can be carried.



Phil's take home message: make sure all your equipment is working right.

Project Contacts: Karen Jacobs, heartland.scia@gmail.com