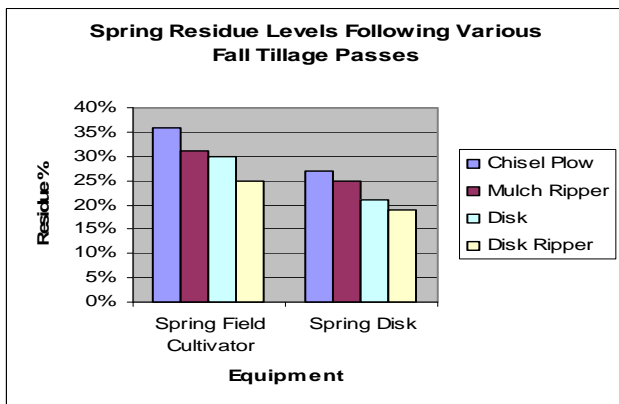




March 1, 2010

Welcome to the first issue of the Walking Your Fields® newsletter for 2010. Several challenges faced by corn and soybean growers last year have the potential to impact us again in 2010. We will address those management opportunities and others in this and subsequent issues of this newsletter throughout the growing season. Customers can also access this newsletter online at: [www.growingpoint.com](http://www.growingpoint.com).

Residue management in corn-on-corn rotations is especially important due to the volume of crop material being produced. A 200-Bu corn crop will produce roughly 12,000 to 16,000 lb of residue/acre. This is more than two times the amount of residue necessary to provide 100% soil cover. That residue acts as a thick mat, potentially keeping soils cool and wet in the spring. Research suggests that corn yields may be reduced when 5000 lb/acre of residue are within 2 inches of the seed furrow. Residue that was not incorporated last fall will remain largely intact this spring because the decomposition process is slowed considerably without soil contact. As a general rule, 5 to 10% more corn residue is decomposed by tilling in the fall compared to tilling in the spring. One way to speed decomposition if stalks were not buried last fall is to chop them with a shredder. Chopping stalks will reduce residue cover by the same 5 to 10% that was lost by not tilling in the fall. Even with stalk chopping it will be important to bury residue as early as possible in the spring.



Add 5 to 10% residue to this chart if tillage was not completed last fall.  
From: John Deere Company.

Following are tips to help manage crop residue this spring in fields where fall tillage was not possible:

- Use twisted shovels on chisel plows instead of straight points. Twisted shovels will move more soil, which in turn will bury more residue and fill in deeper harvest ruts.



- Experiment with speed and depth to get desired results. Faster speeds and deeper working depths will move more soil.
- Make sure tillage tools are level fore-to-aft and side-to-side across the entire width of the machine. This helps ensure a level soil profile when you are done.
- Minimize soil compaction by avoiding tillage in wet soils, using tracks or radial tires set to low inflation pressures (6 to 8 psi), and using tillage tools with points instead of discs whenever possible.

Planter tune-up is key to accurate seed placement. Corn planting could begin in less than 45 days in some areas. Is your corn planter ready? In addition to having your meters checked by your local MeterMax® System representative, there are a few critical parts to check to help ensure good seed spacing and even emergence.

- Drive system:** With the planter in field position, attach a wrench to the hex drive. You should be able to freely turn the planter mechanism. If not, check for rusty chains or frozen bearings. Keep chains lubricated with lightweight oil. The drive system must operate easily and smoothly to avoid jerking the row unit meters.
- Meters:** Replace brushes and seals. For seals, look for cracks in seams. For brushes, check for signs of wear. It doesn't take much wear to affect performance. If in doubt, replace them.
- Seed plates:** Look for wear. Make sure the disc is clean and straight. Any wobble in the disc will cause skips.
- Depth of no-till coulters** should be ¼ inch shallower than the disc opener. A good test is to set the planter disc openers on a board and make sure the coulters still spin freely.
- Row cleaner depth** should be set so they are only removing residue. If they are moving much soil, you might have them set too aggressively. This can cause poor seed placement and increase the potential for poor emergence.
- Check disc openers for wear.** Here is a simple way to check for wear. Fold a piece of paper in half and slide it between the discs from the top and then from the bottom, marking the points on the disc where contact stops the paper. There should be approximately 1.5 to 2.5 inches between the two marks on the disc. If this is not the case, your disc openers could be worn and could cause a "W" instead of a clean "V" trench for the seed to fall into. This may cause poor seed-to-soil contact leading to uneven emergence.





In summary, consider what the soil tests indicate, your management system, and what the old-crop residue situation is and build a plan for your field and your crop.

**Right Product. Right Acre.<sup>SM</sup>** Optimizing productivity and profitability on your farm means selecting the right corn hybrid or soybean variety for your fields and farming operation. This year, Pioneer will have over 100 Product Advancement and research trials in northern Indiana along with our new IMPACT plots to bring more localized testing to your area. Pioneer has made the investment in people, equipment, and technology to further understand how our products perform in your local environment. Our new IMPACT plots will allow us to test more hybrids and varieties with the latest technologies. These IMPACT plots will be planted, evaluated, and harvested by Pioneer employees, in the end allowing us to bring higher yielding products with better agronomics to your farm. Your local Pioneer sales representative has the tools such as the FIT<sup>®</sup> Mapping System and FIT<sup>®</sup> Field Planner to help you select the right product for your farm and fields.

**Grain storage tips for spring.** Grain harvested at high moistures last fall and stored through the winter needs to be monitored closely as springtime temperatures begin to rise. With the grain quality issues experienced last fall, keeping a close eye on the condition of stored grain is important. Damaged grain can go out of condition quickly.

John Gnadke, AGS, Inc., offers the following suggestions to help maintain stored grain on the farm:

- If grain was dried to 15% after harvest, continue to monitor for signs of heating by checking grain in storage regularly. As a minimum, grain should be observed bi-weekly. However, given the challenges observed in many bins this year, weekly checks are recommended. Follow the proper safety steps to check grain.
  1. Lock out power.
  2. Climb to the top of the bin. Check the appearance, feel and smell of the grain and check for crusting on the surface. If there is a noticeable odor or surface crusting, take action to stop further grain spoilage. Consider aeration or removing some of the grain from the bin if heating is suspected.
- It is still recommended to conduct weekly inspections even if automated controls are installed. This helps ensure that controls are functioning properly.
- If grain was stored at moisture levels above 15% and it will be held until spring, dry the grain for continued storage.
- If grain won't be delivered until July through September, downstream louvers should be installed on the fan to restrict flow or make covers for bin fans. They should be covered by now to keep grain cool. In April, grain temperatures should be about 40° F. Begin warming grain with every 5° F temperature differential until grain reaches 45° F to avoid condensation formation. Once moisture forms it can be difficult to control with aeration.

**Not all white grubs are the same.** Asiatic garden beetle (AGB) grub is a pest that continues to expand in northern Indiana. AGB grubs are more voracious feeders than Indiana's more common white grub species and cause significantly more crop damage. Growers with a known AGB problem should be planting corn treated with Poncho<sup>®</sup> 1250 insecticide. AGB grubs are smaller than other white grub species and will have a small white pouch (palps) next to their mouth.



AGB grub with enlarged palps      White grub with small palps  
Images from Purdue University.

**Soybean seed is larger than normal** this year due to an excellent growing season in 2009. When soybeans are larger than normal, growers often have two primary concerns—plantability of the larger seed and seed cost/acre as a result of fewer seeds/lb.

- To solve the seed cost issue, Pioneer has a graduated discount structure in place for soybeans that are larger than 2800 seeds/lb. Ask your Pioneer sales representative about the **Pioneer Seed Size Value Guarantee**.
- Regarding plantability, equipment companies offer suggestions and options for planting large-seeded soybeans. Growers that use vacuum planters may need to increase vacuum pressure and the amount of talc. Customers running a Kinze Brush Meter may need to move to the 48-cell dark

SOYBEAN	COLOR	CELLS	SEEDS/LB
 Soybean	BLACK	60	2200-4000
 Specialty Soybean	DK. BLUE	48	1400-2200

blue seed plate when soybeans are exceptionally large. Growers that plant with John Deere Radial bean meters may need to adjust the meter to position C for large seed. (See table below.) Any time seed size is nearing a cut-off for either meter position or plate color, adding additional graphite will usually improve seed singulation through the seed meter. If you are using a volumetric metering system like a drill uses, it will be important to calibrate to avoid under-population. The drill owner's manual will provide the steps to complete a proper calibration.

Position	Seeds/lb	Description
A	3700 to 4500	Small
B	2800 to 3700	Medium
C	2000 to 2800	Large

MeterMax<sup>®</sup> is a registered trademark of Precision Planting, Inc. Poncho<sup>®</sup> is a registered trademark of Bayer Crop Science. All products are trademarks of their manufacturers.



PIONEER HI-BRED INTERNATIONAL, INC.  
SALES AND MARKETING  
7100 NW 62<sup>nd</sup> Ave., P.O. Box 466  
Johnston, IA 50131

ADDRESS SERVICE REQUESTED

PRESORTED  
FIRST-CLASS MAIL  
U.S. POSTAGE PAID  
PHI CUSTOMER INFO.

WALKING YOUR FIELDS®

LN

Plan ahead for white mold management. White mold was a major problem in many soybean fields in 2009. The best management strategy for these fields is rotation to corn in 2010. No-till corn provides the added benefit of leaving sclerotia (the small dark overwintering structures produced by the white mold) on the soil surface where more of them can germinate. However, sclerotia can survive in the soil for up to a decade and these fields will require continued management of white mold in the future.

For fields with a history of white mold that were planted to corn in 2009 and will be planted to soybeans in 2010, growers should plan to:

- Plant a soybean variety with good white mold tolerance. Contact your Pioneer sales representative for variety recommendations.

- Consider planting in wider rows (15- or 30-inch) and keeping planting populations at the lower end of the optimum range to encourage air movement through the canopy and reduce the severity of the disease.
- Irrigate only when necessary when soybeans are blooming. White mold infection occurs through the senescing flowers and is made worse when humid conditions exist in the crop canopy.



When sclerotia eventually germinate, they release spores that can infect the soybean crop in the field. Image from University of Minnesota.

*The 2010 Corn Hybrid-Herbicide Management Guide* is included with this newsletter. This management guide has been developed through the efforts of several different teams within Pioneer. These guides have been compiled by using data collected from replicated trials from multiple locations across the United States over a period of years. Field observations by Pioneer agronomists are also factored into the rating of each hybrid. This information should be used in managing herbicides to minimize crop response from a given herbicide family and hybrid combination.

As you firm up your planting intentions, please take a few minutes to review your seed and herbicide choices to avoid potential herbicide injury.

*The information in this issue is brought to you by*

Paul Georgen  
Account Manager  
[paul.georgen@pioneer.com](mailto:paul.georgen@pioneer.com)