Greetings Producers,

If there was one word to describe this past winter it would have to be … long. When I looked up the definition of “long” on my computer’s thesaurus, I found what I was really looking for… “Beyond what is wanted… extending in time or space beyond what is considered normal, reasonable, or desirable”. I doubt there are many of you who would argue this description doesn’t sum up the past almost six months to a tee. We have had hard winters before, but, the fact that we have broken so many records that have stood for three decades or more suggests this winter really didn’t leave any stones unturned… cold, snowy, icy, windy, … the list says it all. As a result, at meetings over the last several months it was evident that spring couldn’t get here soon enough. Well, first the groundhog let us down, and while the calendar says spring arrived about a week ago, someone forgot to tell the weather forecasters this. One item of note is that while we have had all of this documented deep frost over the last several months, there are several tile lines that are running, which suggests any frost that is left in the fields is only in the upper surface at this point, if at all. Unfortunately, the 90 day outlook (from the NOAA) suggests that temperatures are expected to be below normal, so the potential exists for some hurdles as we approach the planting season. As such, we cannot know the exact dates that we will begin the PEAQ/Alfalfa scissors clip project, but rest assured, we will do our best to provide producers with the information they need this spring to harvest high quality forage. In the meantime, there are a number of local and area professional development meetings coming up, so I invite you to take them in because when spring finally does arrive, we all know where many of you will be spending your days… in the field …let’s hope soon. (KJ)
FREE HEALTH SCREENINGS
provided by
Rural Health Initiative Staff
8:00 am—9:00 am
Health Risk Assessments will include screening for
Cholesterol, Blood Pressure and Blood Sugar.
To ensure accurate test results, please remember
to fast. This means:
• Do NOT eat food 8-10 hours prior to the visit.
• Do NOT drink coffee, tea, or soda.
• It is OK to drink plain water.
• It is OK to take any medication you currently
have a prescription for.

COMPLIMENTARY CONTINENTAL
BREAKFAST AFTER

The Rural Health Initiative is a non-profit
program designed to address growing
concerns regarding health and safety
issues facing today’s farm families. At
the center of this program is a Rural
Health Coordinator who makes “house”
calls to interested farm families to
provide health information, education,
referrals to area services and, most
importantly, lends a trusted ear to listen
and keep in confidence concerns and
issues these families face today.

April 8, 2014
9:00 am—3:00 pm
Crystal Falls
1500 Handschke Drive
New London, WI 54961

Special thanks to Greenstone Farm
Credit Service for their financial support.
Farm Family Health & Business Management Conference
A UW-Extension/Rural Health Initiative “Heart-of-the-Farm” program

Agenda
8:00 Free Health Screening by RHI staff
   (including free continental breakfast after)
9:00 Registration
9:30 Welcome & Introductions
10:30 Time to Talk Family and Farm -- Are We on the Same Page? by Karen Dickrell & Sandy Liang, UW-Extension Family Living Educators, Outagamie & Waupaca Co
11:00 Know Your Numbers -- Are You or Those You Love At Risk? by Rhonda Strebel, Executive Director, Rural Health Initiative
12:00 Lunch
12:45 Tax Planning Update & Outlook for Farm Family Businesses by Phil Harris, UW Extension Ag Law-Farm Tax Specialist
1:30 The Keys to Plan a Successful Farm Transfer by George Twohig, Attorney
2:15 Q & A

Registration
Name
Address
City/State/Zip
# Attending
Email

There is no charge for this conference; however, registration is required for an accurate count for the meal and materials. Please call in advance if you need any physical or dietary accommodations.

Pre-registration is required by March 31, 2014

Send registration form to:
Waupaca County—UW-Extension office
ATTN: Dana Nelson
811 Harding Street
Waupaca, WI 54981

For more information, call the Waupaca County UW-Extension office at 715-258-6231

University of Wisconsin, U.S. Department of Agriculture and Wisconsin counties cooperating. UW-Extension provides equal opportunities in employment and programming including Title IX and ADA.
You’re Invited to Attend the ….

Outagamie County Forage Council Spring Meeting
Wednesday, April 9th
12:00 p.m. lunch at Center Town Hall
N3990 State Road 47    Appleton, WI 54913

12:00 p.m. – Lunch/Refreshments (courtesy of the OFC)

12:20 p.m. – Maximum Return To Nitrogen (MRTN) – What did we learn from the plots in and around Outagamie County in 2013? – Kevin Jarek, Crops, Soils, and Hort. Agent – UWEX

1:20 p.m. – Fire Safety on the Farm – Are you prepared for the unexpected? – Dennis Laskowski, Chief, Seymour Fire Dept. and Arson Investigator/State Certified Inspector

2:00 p.m. – What’s New in Planting and Tillage for 2014????
Service Motor Company will have a representative from Kinze on hand to discuss their variable rate planting system, and Riesterer and Schnell will have a representative on hand to share info about the current John Deere planting units available. Info about the latest in tillage, including vertical tillage, will be discussed.

Everyone is welcome to attend. Due to the extended cold weather, (it is spring, right?!?) we have chosen to be indoors for a large part of the program. However, the implement dealers have been invited to bring row units and other items to illustrate the latest advances in their equipment. So, we may be outside for a portion of the program. Make sure you check the forecast for the day… (KJ)
**Alfalfa Scissors Clip**

Scissors cut information will be available on the Outagamie County UW-Extension Alfalfa Scissors Clip Hotline – 832-4769 or at [www.uwex.edu/ces/ag/scissorsclip](http://www.uwex.edu/ces/ag/scissorsclip) for the scissors results. This will begin in mid May 2014 and be taken each Monday and Thursday until first crop harvest. The results will be available on Tuesday and Friday. (KJ)

Special thanks to the following producers and consultants who are participating:

- **Birling’s Bovines Farm**
  - Black Creek area
  - collected by Tim Sassman

- **Seven Oaks Dairy/Jon Lamers Farm**
  - Kaukauna area
  - collected by Kevin Naze

- **Ben and Karen Muenster Farm**
  - Seymour area
  - collected by Polenske Agronomic

- **Larrand Dairy Farm**
  - Freedom area
  - collected by PolenskeAgronomic

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**Tractor and Machinery Safety Certification Training for Youth June 9-13**

Fox Valley Technical College and the University of Wisconsin Cooperative Extension will once again jointly offer Tractor and Machinery Safety Certification Training for interested youth. The course will be conducted June 9-12, with the final driving examination on Friday, June 13th. All trainings will be held at Fox Valley Technical College, Agriculture Center, 1825 North Blumound Drive, Appleton. Classes will begin at 9:00 a.m. and conclude at 3:00 p.m. Any youth, 12 years or older is eligible to enroll. Course materials are targeted for youth who are 12-15 years of age. Participating youth will be evaluated on their ability to safely demonstrate proper operation of tractors and agricultural equipment in a variety of settings. To register, contact Nancy at 920-735-5672. (KJ)

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**Economic Risk and Profitability of Soybean Seed Treatments at Reduced Seeding Rate**

Adam P. Gaspar, Shawn P. Conley, John Gaska – Department of Agronomy
Paul Mitchell, Department of Agriculture & Applied Economics
UW-Madison

Introduction

Earlier soybean planting coupled with increasing seed costs and higher commodity prices have led to a surge in the number of acres planted with seed treatments (Esker and Conley, 2012). Furthermore, the components and relative cost of various soybean seed treatments has broadened greatly. Recent studies have suggested that growers should consider lowering seeding rates to increase their return on vestment (DeBruin and Pedersen, 2008; Epler and Staggenborg, 2008). This recommendation is attributed to the soybean plant’s potential compensatory ability at lower plant populations. Ultimately, growers would like to know the value proposition of combining seed treatments with lowered seeding rates. Therefore, the objectives of this study were to:

- Quantify the effects of seed treatments and seeding rates on soybean yield.
- Assess the economic risk and profitability of seed treatments and seeding rates, including calculating economically optimal seeding rate (EOSR) for each seed treatment.

ApronMaxx RFC and CruiserMaxx (Syngenta Crop Protection) seed treatments were used to achieve these objectives because they differ in their components and relative cost per unit. This study was conducted in 2012 and 2013 at nine Wisconsin locations. All locations were planted in 15 inch rows within the first 3 weeks of May.

To read the full PDF article, go to:
THINK TWICE BEFORE REPLANTING SOYBEANS

Adam P. Gaspar, Shawn P. Conley, & John M. Gaska
Department of Agronomy, University of Wisconsin-Madison

Introduction
Soybean planting date trends have steadily shifted earlier within the Northern Corn Belt while inclement weather, insect pressure, and disease pressure associated with spring planting can require replanting some years (USDA-NASS, 2011). Furthermore, recent studies have reported similar yields among reduced plant stands due to the soybean plants compensatory ability (Carpenter and Board, 1997) and diminished yield potential of replanted or essentially later planted soybeans (Conley et al., 2012; De Bruin and Pedersen, 2008). Ultimately, producers would like to know the potential yield gain or loss from replanting sub-optimal plant stands to help determine if replanting is economical. Therefore the objectives of this study were to:

- determine the threshold for replanting soybean stands.
- evaluate replanting options.
- quantify the effect of seed treatments and planting date on replant decisions.

This study was conducted in 2012 and 2013 at the Arlington Agricultural Research Station, Arlington, WI. Twelve different replant scenarios were planted in 15 inch rows during early May, late May, and mid-June. The replanted portions of the plots were interseeded between the rows of the initial soybean stand. ApronMaxx RFC and Cruiser-Maxx (Syngenta Crop Protection) seed treatments were used to compare a fungicide only seed treatment with one that also contains an insecticide.
Determine the Initial Plant Stand

The first step in making an informed replant decision is determining the initial plant stand. Soybean stands can be deceiving to the eye sometimes, especially in narrow rows (<15 inch), where stands can be greatly underestimated. Therefore, using the hula hoop method or counting the number of plants in a row is needed to accurately determine the plant stand. If severe weather causes stand reduction and/or plant injury, stand counts should be performed 3-5 days after damage has occurred to give the plants time to recover. Only live plants that are expected to survive should be counted (Table 1).

<table>
<thead>
<tr>
<th>Plant Condition</th>
<th>Will the plant survive?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant cut off below the cotyledons</td>
<td>No</td>
</tr>
<tr>
<td>Plant missing only one cotyledon</td>
<td>Yes</td>
</tr>
<tr>
<td>Plant missing both cotyledons but growing point intact*</td>
<td>Yes</td>
</tr>
<tr>
<td>Plant cut off above unifoliolate leaves</td>
<td>Yes</td>
</tr>
<tr>
<td>Plant lightly bruised on the stem</td>
<td>Yes</td>
</tr>
<tr>
<td>Plant heavily bruised and folded over</td>
<td>No</td>
</tr>
</tbody>
</table>

Counting Plants in a Row

When determining the plant stand with this method, count the number of plants in a length of row based upon your row spacing (Table 2). Do this at least five times in different areas of the field and calculate the average, then multiply that number by 1,000 to get the number of plants per acre (plant stand).

<table>
<thead>
<tr>
<th>Row Width (inches)</th>
<th>Length of Row*</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>17.4 feet</td>
</tr>
<tr>
<td>20</td>
<td>26.2 feet</td>
</tr>
<tr>
<td>15</td>
<td>34.8 feet</td>
</tr>
<tr>
<td>10</td>
<td>52.3 feet</td>
</tr>
<tr>
<td>7.5</td>
<td>69.7 feet</td>
</tr>
</tbody>
</table>

*Length of Row = (43,560 ÷ row width(ft)) ÷ 1000

Hula Hoop Method

When determining the plant stand with this method, randomly toss any round hoop with a known diameter on the ground and count the number of plants within the hoop. Do this at least five times in different areas of the field and calculate the average, then multiply that number by the appropriate multiplier (Table 3) to get the number of plants per acre (plant stand).

<table>
<thead>
<tr>
<th>Hoop Diameter (inches)</th>
<th>Multiplier*</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>24,662</td>
</tr>
<tr>
<td>21</td>
<td>18,119</td>
</tr>
<tr>
<td>24</td>
<td>13,872</td>
</tr>
<tr>
<td>27</td>
<td>10,961</td>
</tr>
<tr>
<td>30</td>
<td>8,878</td>
</tr>
<tr>
<td>33</td>
<td>7,337</td>
</tr>
<tr>
<td>36</td>
<td>6,165</td>
</tr>
</tbody>
</table>

*Multiplier = 43,560 ÷ ((hoop radius² x 3.14) ÷ 144)
Replant Threshold

Our study showed that the highest yields were achieved with initial plant stands >100,000 plants/a (Figure 1). This is consistent with Lee et al. (2008), who stated soybeans in Kentucky require plant stands above 100,000 plants/a to achieve 95% of maximum yield. This is further demonstrated by the initial seeding rates of 40,000, 60,000, and 80,000 seeds/a with no replanting, which produced final plant stands well below 100,000 plants/a and yielded 10.5 and 4 bu/a less than the maximum yield, respectively (Figure 1). However, when these same plant stands were filled in and the final plant stands were subsequently increased above 100,000 plants/a, significant yield increases of 7, 2, and 2.5 bu/a were attained, respectively (Figure 1). Replanting initial soybean stands <100,000 plants/a significantly increased yield, but not to levels attained by initial plant stands >100,000 plants/a, where replant is not beneficial. Therefore, the threshold for soybean replanting is 100,000 plants/a.

Figure 1. Yield (bu/a) of twelve replant scenarios across all three planting dates. The number printed at the top of the bars represent the final plant stand (1000 plants/a) after replanting.

![Yield Graph](image)

Replanting Options

When below threshold soybean stands arise (<100,000 plants/a), producers are faced with the decision to fill in the initial stand or perform a tillage operation and completely replant the entire stand. Our study found that a tillage operation limited yield potential by essentially delaying planting and reducing cumulative light interception of the entire stand compared to only a portion of the stand when the fill in method was used (Gaspar and Conley, 2014). In Figure 1, we see that when the initial plant stand was reduced to zero (by tillage), replanting with up to 220,000 seeds/a only significantly increased yield over a final plant stand of 37,000 plants/a. However, when this plant stand was filled in with only 100,000 seeds/a, its yield was the same or higher than replanting the entire stand with 220,000, 180,000, and 140,000 seeds/a (Figure 1). Furthermore, final plant stands >59,000 plants/a produced similar or higher yields compared to using tillage and replanting with 220,000 seeds/a (Figure 1). Therefore, filling in soybean stands below the replant threshold (100,000 plants/a) is the best method of replanting and replant seeding rates should be high enough to increase the final plant stand over 100,000 plants/a. Figure 2 depicts a stand with 37,000 plants/a being filled in with 100,000 seeds/a.

Figure 2. An initial soybean stand of 37,000 plants/a that was not filled in (top) and filled in with 100,000 seeds/a (bottom).
Figure 3. Yield (bu/a) of soybean planted at three different dates across all replant scenarios and seed treatments.

Seed Treatment and Planting Date Effects on the Replant Decision

We observed no effect of seed treatment use on replant decisions and therefore should not be a factor considered. However, seed treatment use (especially insecticide/fungicide treatments) may help avoid replanting because it is an effective management practice for increasing initial plant stands stands by 20% on average (Gaspar et al., 2014).

Our study indicated a large yield decline as planting was delayed past the first week in May (Figure 3). This yield decline is most likely due to decreased light interception of later planted or replanted soybeans. The earliest planting date yielded 73 bu/a (Figure 3). We observed a 0.25 bu/a/day yield decline between the early May and late May planting dates, which then doubled to 0.5 bu/a/day between the late May and mid-June planting dates. The average yield decline through the whole planting season was 0.32 bu/a/ day. However, the replant decision was not affected by planting date and therefore the replant threshold (100,000 plants/a), method (fill-in), and seeding rates (>100,000 plants/a) are appropriate until June 20th in southern WI. Replanting past this date greatly increases the risk of fall frost damage (Conley and Gaska, 2013).

Conclusion & Recommendations

The first step in deciding if replanting is required is to determine the initial plant stand. Our study demonstrated that replanting soybean stands below the threshold (100,000 plants/a) by filling in the existing stand, increased yields regardless of the date (May-June 20th) and seed treatment use. Below threshold plant stands should be filled in with enough seed to bring the final stand above 100,000 plants/a. Using tillage and replanting the entire stand greatly limited yield potential, even at replant seeding rates of 220,000 seeds/a. This is due to the entire plant stand being replanted or essentially planted later, which reduces yields by 0.32 bu/a/day on average. These replant recommendations are applicable through June 20th in southern WI, where replanting after this date is not advised. Traditionally, the notion of adequate weed control has led producers to desire higher plant stands to quickly shade out competing weeds. However, pre-herbicide use and modern post herbicide technology has essentially eliminated this concern. This study only evaluated soybean replanting in terms of yield and did not take into account the economics of a replant decision, which include additional seed, fuel, labor, and machinery costs along with potential crop insurance replant payments. Producers should consult their crop insurance agent before making any replant decisions. Ultimately, the producer’s efforts should be placed on using this data in conjunction with their own finances to determine if replanting will increase economic return.
USDA’s Farm Service Agency (FSA) Offers Farm Bill Website and Online Overview of Farm Bill Programs

The Agricultural Act of 2014 (the Act), also known as the 2014 Farm Bill, was signed by President Obama on Feb. 7, 2014. The Act repeals certain programs, continues some programs with modifications, and authorizes several new programs administered by the Farm Service Agency (FSA). Most of these programs are authorized and funded through 2018.

For the latest on 2014 Farm Bill programs administered by FSA, please visit our Farm Bill website at [www.fsa.usda.gov/farmbill](http://www.fsa.usda.gov/farmbill) and for an FSA program overview please read, download and/or print our recently posted FSA Farm Bill Fact Sheet titled, What’s in the 2014 Farm Bill for Farm Service Agency Customers?

For more information on FSA, please contact your local USDA Service Center or visit us online at [www.fsa.usda.gov](http://www.fsa.usda.gov)

### 2013 AVERAGE CROP REVENUE ELECTION (ACRE) PROGRAM

Participation in 2013 ACRE requires production reports for planted acres that must be submitted for the covered commodities planted on the farm by July 15, 2014. Failure to report production for those covered commodities and planted on ACRE farms will result in contract termination. If the contract is terminated, all payments, including direct payments previously received plus interest will be required to be refunded.

### CHANGES TO FARM LOAN PROGRAMS

Changes to FSA regulations have removed Guaranteed Operating term limits. Previous and current guaranteed loan borrowers who were not eligible for further guaranteed loans due to the previous 15 year eligibility term limit may now be eligible for further guaranteed loans through their commercial lender.

Changes were made to the interest rate charged on loans where FSA provides 50 percent or less on jointly financed purchases of real estate also called Direct Farm Ownership Participation Loans. The interest rate will be the greater of 2.5 percent or the current interest rate for direct Farm Ownership loans minus 2 percent, as a fixed rate for the duration of the loan. At present, the March direct Farm Ownership rate is 4.25 percent. Because the 2.5 percent floor is greater than subtracting 2 percent from the direct farm ownership loan rate, the rate for Direct Farm Ownership Participation Loans in March is 2.5 percent.
NRCS accepting applications for Conservation Practices-- signup now!

Natural Resources Conservation Service (NRCS) and the Land Conservation Department (LCD) are accepting applications for on-farm conservation projects -- funding is available through the Environmental Quality Incentive Program (EQIP), and high priority is being given to areas within the Phosphorous Priority Watersheds (shown in green on the map below). Being part of the Lower Fox River Watershed, NRCS has placed extra emphasis in targeting water quality concerns in these watersheds.

EQIP is a program that provides financial assistance to agricultural producers that apply for funds and meet the eligibility criteria. Once approved, NRCS and LCD work together to plan and also fund proven conservation practices. These proven practices reduce the amount of sediment, nutrients, and/or chemical pollutants that can potentially reach and negatively impact the water quality of our rivers, streams and Great Lakes. Many of the management practices offered through EQIP can also help farmers improve crop production and profitability.

Since 2012, this GLRI EQIP funding has been available from the USDA-NRCS for producers located within the Lower Fox River watersheds, including portions of Outagamie, Brown, Calumet, Manitowoc and Winnebago Counties. In Outagamie County funding priority is provided to these watersheds (shaded in green on map):

- Upper Duck Creek
- Middle Duck Creek
- Apple Creek
- Garners Creek
- Kankapot Creek
- Plum Creek

Other Eligible Watersheds (but not Priority for funding)
- Mud, Ashwabenon, Trout and Oneida Creek

Practices include but are not limited to:
- Grassed Waterways
- Nutrient Management
- Waste Storage
- Cover Crops
- Prescribed Grazing and Planning
- Residue & Tillage Management
- Wetland & Wildlife Habitat
- Filter Strips “Buffers”
- Forest Management
- Access Roads

If your farm or part of your farm is within these watersheds and you are interested in these practices or have other conservation planning needs that you would like assistance with on your farm, please contact the Appleton NRCS office by calling (920) 733-1575 extension 3 or the LCD office at (920)832-5073.

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