Staff Paper

LATE PLANTING DECISIONS WITH CROP INSURANCE: **DECISION GUIDELINES FOR MICHIGAN FARMERS IN SPRING 2011**

Roger Betz, David B. Schweikhardt, J. Roy Black, and James Hilker

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Department of Agricultural, Food and Resource Economics MICHIGAN STATE UNIVERSITY East Lansing, Michigan 48824

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Roger Betz, David B. Schweikhardt, J. Roy Black, and James Hilker Department of Agricultural, Food & Resource Economics Michigan State University

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LIST OF ACRONYMS

ACRE: Average Crop Revenue Election

APH: Actual Production History
CAT: Catastrophic Risk Coverage

GDD: Growing Degree Days

GRIP: Gross Risk Income Protection

GRP: Group Risk Plan
MNR: Marginal Net Revenue
PP: Prevented Planting

RMA: Risk Management Agency

SURE: Supplemental Revenue Assistance Program

USDA: U.S. Department of Agriculture

LATE PLANTING DECISIONS WITH CROP INSURANCE: DECISION GUIDELINES FOR MICHIGAN FARMERS IN SPRING 2011

June 3, 2011¹

Roger Betz, Extension Farm Management District Senior Educator David B. Schweikhardt, J. Roy Black, and James Hilker, Professors, Department of Agricultural, Food and Resource Economics

Michigan has had unusually wet planting conditions in 2011, leading to substantial acreage that has not been planted at this late date. Farmers who purchased crop insurance have many options available to them. This paper addresses the major crop insurance decisions that farmers will face during the next 30 days.

Basic Decisions

Once the final planting date has passed for the first crop on a farm (June 5 for corn in Michigan), then the three basic questions for Michigan farmers will become:

- 1). Should growers continue to plant corn and for how long should they do so?
- 2). Should growers switch to planting an alternative crop (e.g., soybeans)?
- 3). What will be the impact of these alternatives on a grower's crop insurance and SURE protection payments?

The decision to pursue any of these alternatives is subject to many factors that producers should understand. For example, the rules for planting a second crop on prevented planted acres are different than the rules for planting a second crop on failed acres (acres that were planted to a 2011 crop that failed, such as soybeans or corn planted as a second crop after a failed wheat crop). The prevented planting decisions are very complicated, especially if a "second crop" is planted. In Michigan, corn has a June 5 "final planting date," and soybeans, as the second crop, have a "final planting date" of June 15. After the "final planting date" farmers may continue to plant the insured crop, but the insurance coverage is reduced 1 percent for each day up to 25 days late. Thus, corn can be planted up to June 30 and soybeans until July 10 but both would have a reduced crop insurance coverage. After June 30 for corn and July 10 for soybeans, these crops can be planted with 35% of the "prevented planting" coverage level.

Understanding Your Options

Farmers with corn acres that are eligible for prevented planting have at least 4 major options:

1). Plant corn after the "final planting date" (June 5 for corn) with a 1% guarantee reduction for each late day (up to 25 days, or June 30). For example if a farmer has an 80% insurance coverage policy, then the insurance coverage

- would decrease by 0.8 percent per day (e.g., if a crop is planted 10 days after the crop's final planting day, then the coverage level would be 80% minus 10 days times 0.08 per day equals 72%).
- 2). Switch crops and plant soybeans on all acres prior to the final soybean planting date of June 15 (the last day for soybeans with a 25% reduction is July 10)
- 3). Elect to take the "Prevented Planting" payment that, in most cases, is equal to 60% of the insurance coverage for the crop and leave "black dirt" or idle acres (It should be noted that Prevented Planting corn will pay more than Prevented Planting soybeans)
- 4). After the last "late planting corn date" (June 30, or the "drop dead date" for corn), collect 35% of the prevented planting payment on corn and plant a crop with a "benefit" (for example, planting soybeans instead of corn). If soybeans are on the insurance policy, then they will be insured, but with a late planting reduction in guaranteed protection. For example if soybeans are planted on July 5, then the producer would collect the 35% Prevented Planting payment on corn and have the soybeans insured at a 20% insurance coverage reduction (20 days past June15)

The choice among these options will be affected by many factors, including:

- 1). What level of crop insurance protection was purchased? In general, a higher coverage level favors the use of the Prevented Planting option, while a lower level of coverage has more advantage to plant.
- 2). When can the grower plant a crop (i.e., what date will the grower's land be in a dry enough condition to plant a crop)?
- 3). What yield can the grower expect from a late-planted crop? These yields are a critical factor in determining the decision of what and whether to plant. The data in Figure 1 is used to estimate yield loss over time in the decision scenario examples in the next section. Note that these yield expectations are very site specific as numerous agronomic factors will affect a grower's particular situation. Proximity to the lakes and north to south across Michigan all affect the estimated Growing Degree Days (GDD).

	Corn	Soybean
Planting Date	Yield	<u>Yield</u>
16-Apr Note: update y	170.0	46.2
23-Apr	170.0	48.3
30-Apr	170.0	49.8
7-May	167.7	50.0
14-May	162.8	49.2
21-May	156.0	48.3
28-May	147.3	46.5
4-Jun	136.7	43.6
11-Jun	124.1	39.7
18-Jun	109.7	35.9
25-Jun	93.3	32.2
2-Jul	75.0	26.6
9-Jul	54.8	24.6

Figure 1

- 4). What are the additional variable costs and other comparisons for each option? It should be noted that the comparisons shown below include only the additional variable cost in each scenario. Thus, they show the marginal net revenue of planting each crop, not the expected net profit from planting
- 5). What are the commodity futures prices on the date the crop is planted? In general, a higher price for a specific crop on the date of planting would increase the profitability of planting that crop. Similarly, a lower futures price on that day would be less profitable.
- 6). What is the longer term effect of the 2011 planting decision on the Actual Production History (APH) Yields for the farm? A low yield in 2011 will be averaged with other years' yields to determine the farm's APH in the future. The effect on the APH will depend on how many years are used to calculate the APH and how far below the average the 2011 yield would be.
- 7). What is the effect of the 2011 planting decision on the farm's payments under the USDA's "whole farm" Supplemental Revenue Assistance Program (SURE)? The added revenue protection provided by SURE is significant and is not represented in the graphs shown below. SURE effectively adds a 10% insurance coverage in the event that yields and/or prices do not equal the assumed yields and prices used in the graphs shown below. SURE payments (a maximum of \$100,000 per operator) can easily reach \$50 per acre for corn and \$30 per acre for soybeans. This would be true even with the Prevented Planting coverage at 60% of the insurance coverage level. Using harvest futures prices of \$6.85 corn and \$13.65 for soybeans and late planting where yields are risky (75 bushel for corn and 25 bushel for soybeans) maximized the SURE payment that would be available for 2011. At lower yields, the crop Insurance was higher and at higher yields the cash crop sales were higher, thereby reducing the potential SURE payment.

8). What is the effect of the planting decision on the USDA's Average Crop Revenue Election (ACRE) and Direct and Countercyclical (DCP) programs? If an ACRE payment is available at the state level in 2011, only planted acres are eligible for ACRE payments. In addition, the 2011 actual yield could affect the future yield for ACRE calculations.

Decision Scenario Examples

This section presents some basic decision scenarios for the June 2011 period. These scenarios are intended to illustrate the factors that producers should consider when making planting decisions at this late date. In general, these scenario results are determined by (a) the assumed market prices of all crops at the time of planting, (b) the assumed crop yield losses that occur for each crop with the passage of time, (c) the assumed level of crop insurance protection coverage held by the producer for each crop, and (e) the assumed variable costs of planting for each crop As noted later, no decision rule can be a "one size fits all" for all farmers when the decision involves such a large number of idiosyncratic factors. Thus, this section will review some basic decision scenarios and the factors that determine the results of these scenarios. Then, some additional factors that should be considered in more complex scenarios will be identified.

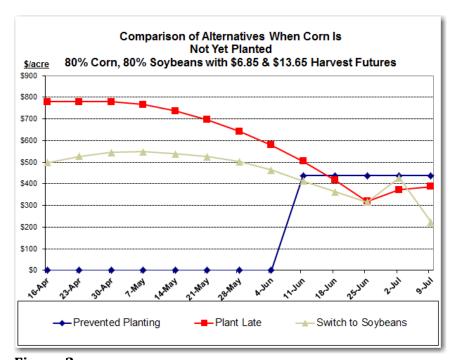


Figure 2

Figure 2 depicts the financial predictions for alternative planting scenarios. Figure 2 is based on these assumptions: Normal planting, seed, herbicide, spraying and harvest costs for corn and soybeans. Fertilizer is \$100 marginal cost for corn. Drying cost is increased from 25 cents to 45 cents per harvested bushel on corn and basis is assumed to be minus 40 cents on corn and minus 50 cents on soybeans. COMBO insurance was purchased at the 80% coverage level with the 60% prevented planting option; \$6.85 and \$13.65 harvest

futures prices for corn and soybeans; APH yields of 155 bushels for corn and 45 bushels for soybeans, with expected yields of 170 bushels for corn and 50 bushels for soybeans if planted on time; and yields of 124.1 for corn and 39.7 for soybeans if planted on June 11.

Under these assumptions, a June 11 planting date indicates that planting corn is the preferred choice. Corn has a marginal net revenue (MNR) of \$504 per acre and the Prevented Planting (PP) option has a MNR of \$438 per acre or \$66 per acre below the corn planting option. Soybeans have an MNR of \$413 per acre, also less than the corn planting option.

On June 18, the MNR on the planting corn option declines to \$417 per acre and the preferred option switches to Prevented Planting by \$11, with soybeans close behind at a MNR of \$363 per acre.

It is important to note that the "planting corn" option could have other benefits not shown here. In all scenarios shown in Figure 2, SURE coverage will be higher when the crop is planted within the late planting window. If actual revenue declines because of low yields and/or prices, then revenue protection provided by SURE will be higher. If a crop is planted, the harvest price option "attaches" and could be quite valuable if prices are high but the farmer's yield is low.

Finally, on July 2 both corn and soybeans have an increase in MNR. This is caused by the 35% prevented planting for the corn option that is available if the corn is not planted by June 30. At this date, soybeans become a better choice for a short period of time, but soybeans decline by July 4.

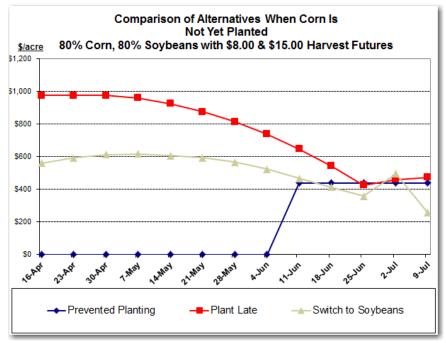


Figure 3

Figure 3 has the same assumptions as Figure 2 except harvest futures prices are higher at \$8.00 corn and \$15.00 soybeans. Notice that the planting window opens up as the high prices encourage planting even with the reduced yields. On June 11, the MNR for corn is for corn is \$647 and for soybeans is \$467 with PP at \$438. Planting corn shows an advantage of \$180 per acre over PP, while soybeans show a \$29 advantage over PP. The planted options for corn and soybeans both retain their advantage over the PP option because of the increased revenue protection resulting in higher insurance indemnities, even with lower yields. It is interesting to note that on July 2, just after the prevented planting 35% payment is available, that all three options have similar results in this high price scenario. Again, there is an additional advantage to planting that is not reflected in this analysis. This advantage occurs because, when planted, the producer's revenue guarantee is higher than in the prevented planting scenario. This is important to note in the event that events don't materialize as these assumed factors indicate.

Figure 4 has same assumptions as before *except for relatively low harvest futures prices*. The results of this scenario are as expected in that the MNR is less favorable to planting either corn or soybeans compared to the high price scenario in Figure 4. In the Figure 4 scenario, the Prevented Planting option compares very well with the plant corn or plant soybean options after approximately June 6.

Figure 5 has a *lower insurance level at 65%* versus the 80% assumed in Figures 2 to 4 (harvest futures prices are assumed to be \$6.85 for corn and \$13.65 for soybeans in both Figures 2 and 5). The decisions in this scenario are more difficult, with the PP, plant corn or plant soybeans options merging at approximately the June 25 date. Considering the revenue protection offered by planting, the options of planting corn or soybeans over the PP option would continue until approximately the July 2 date.

Figure 6 is the same as Figure 5, except for the *higher assumed harvest futures prices*. Once again, as the expected harvest futures prices increase, the advantage of planting corn or soybeans will increase over the PP option. Planting either corn or soybeans is the preferred option until approximately July 4 or 5.

The assumptions in Figure 7 are the same as in Figures 5 and 6, except for the *relatively lower harvest futures prices*. Once again, as the expected harvest futures prices decrease, the advantage for PP option holds up well when compared to planting corn or soybeans.

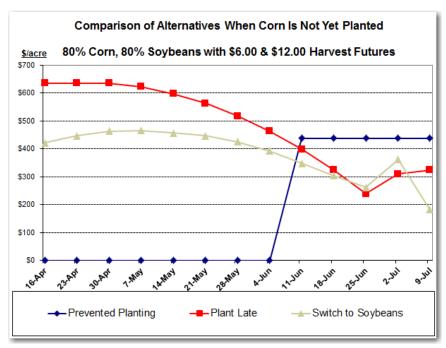


Figure 4

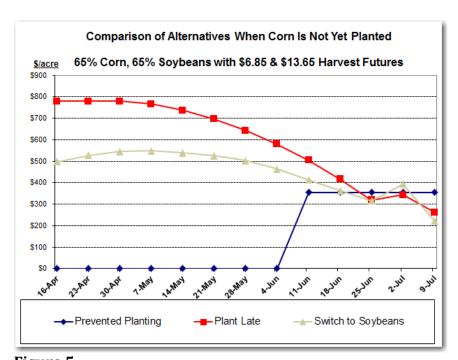


Figure 5

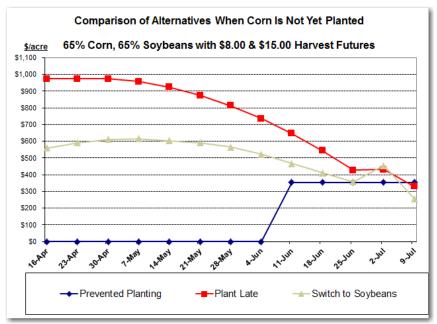


Figure 6

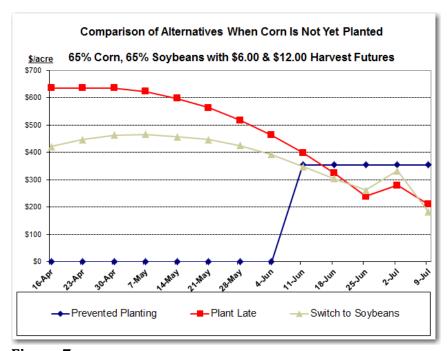


Figure 7

Additional Factors to Consider

In addition to the factors discussed above, there are several additional factors that should be considered in making a planting decision at this late date. Many of these factors will be unique to each individual producer. Thus, general rules of thumb are difficult to provide on these issues. Producers should consult their insurance agent to discuss many of these issues.

Scenario 1: Assume that corn cannot be planted by June 5 (the final planting date), and that a second crop is not planted (i.e., no "benefit" such as having, cash rent, planting soybeans, etc. can be obtained). As a result, the producer must leave the unplanted corn acres as "black dirt." Farmers meeting these conditions pay 100% of the premium and are paid 100% of their prevented planting claim (for most farmers that payment will be 60% times their guaranteed dollars of coverage). Farmers also might have purchased additional prevented planting coverage, thereby increasing coverage from 60% to 70% for an additional premium prior to the sales closing date (March 15 in Michigan). Under these conditions, the Actual Production History (APH) is not affected if the prevented planting acres are the total acres in the unit for the crop (corn in the example). That is not true if some of the acres are planted. Farmers must have 20 acres or 20% of the unit (the smaller of the two) prevented from planting to be eligible for a prevented planting claim. In addition, underwriting rules require farmers to plant if that is possible prior to the final planting date; note that this is not simply a voluntary action on the farmer's part. If it is later shown to be "clear" that it was possible to plant the crop, then the claim may become "difficult" to obtain.

Scenario 2: Most farmers with prevented planting will collect 60% of their spring guarantee for prevented planting. A farmer would have an expected revenue of a \$6.01 price for corn times 150 bushel APH equals \$901.50. Assuming that a grower purchased 80% coverage, then the Revenue Protection (RP) guarantee is \$721. A prevented planting claim would equal 60% times \$721, or \$433. The guarantee is higher, but the cost of planting must also be included. The marginal net revenue might not be significantly different. This result, of course, will depend on the producer's yield, future prices, and the differences in variable cost.

Scenario 3: In the above example, the SURE guarantee under prevented planting starts with \$433 rather than \$721, and significantly reduces the SURE guarantee.

Scenario 4: There is a 1% reduction in the insurance guarantee for each <u>late day</u> the crop is planted (e.g., from 80% to 79.2% for a crop planted one day late). In this case, one day later in planting would reduce the coverage from \$721 to \$714. However, the \$714 is a higher number for the SURE guarantee than the prevented planting coverage of \$433. If planting of corn takes place up to 10 days late, it may still pay to plant. In our example, if the farmer has 80% coverage, it would be reduced to 72% for planting 10 days late. A grower can plant later with a 1% reduction for each late day up to 25 days, but after 10 days, depending on the variables, many producers should consider either taking the prevented planting payment or switching their planting to soybeans.

Scenario 5: If a significant amount of the producer's corn is forward priced, then there could be greater economic incentive to plant the corn because it must be planted in order for the harvest price to "attach" to the insurance contract and the producer is subject to contract cancelation penalties (margin losses). The higher the corn price in harvest time futures price, the greater will be the incentive to plant corn even with the reduction in the guarantee. The payment trigger changes, but if harvest prices are 10% higher, then the grower has about the same dollar guarantee planting 10 days late. As this is written, corn prices are approximately 11% higher than the crop insurance spring price. In addition, some producers may have sold out-of-the-money puts against their insurance contract, but they only have 60% of the insurance coverage in most cases if they don't plant.

Scenario 6: If the farmer can plant at least 20 acres (or 20% of acreage, the smaller of the two) in two insurance units for a total of 40 acres (or 40% of the unit acreage), even with the reduction in coverage for late planting, famers will receive the enterprise unit discount; otherwise, the premium rate is higher and is deducted from the prevented planting claim. If a producer plants no acres, often the premium more than doubles and reduces the net prevented planting payment. In this case, producers will want to plant at least 40 acres of corn before the late planting date (June 30 for Michigan). On June 30, producers would have a 25% reduction in their guarantee but would reduce their premium by half or more on all of the acres. Planting 40 acres would have little effect on a farmer with 1,500 acres of prevented planting corn but the premium reduction would be large, thereby making the net prevented planting indemnity payment much larger.

Scenario 7: Prevented planted acres are based on the maximum number of planted acres for the crop in 1 of the prior 4 years. Total prevented planting acres (the combined soybeans and corn in our example) cannot exceed total crop acres. **A prevented planting loss must be reported to the insurance company's loss adjuster within 72 hours after the producer decides to not plant.** The claims adjustor must determine the eligible prevented planting acres. The insurance agent may not be involved in calculation of any potential loss, and agents are not permitted to receive cropland acreage or other information from FSA that permits a person to calculate eligible prevented planting acres. **If the producer does plant a crop at a later date, then the claim could be recalled.** Based on the corn guarantee dollar level, farmers might want to use the maximum available corn acres. This is limited to the producer's planting intentions at the time of sign up (March 15).

Scenario 8: Farmers can plant a "second or alternative" crop by switching from corn to soybeans prior to June 15 in Michigan. There is no reduction in soybean coverage for late planting by June 15 and farmers receive full soybean coverage that was purchased prior to the March 15 sales closing. The full soybean coverage is then carried over to the SURE guarantee. In this case, there is no impact on the corn APH because the acres were all planted to soybeans, a zero acreage report is filed on the corn, and no corn premium is due.

Scenario 9: Growers may plant soybeans on the prevented planted corn acres after the "late planting date" for corn (June 30, or "the drop dead date" of the final planting date

of June 5 plus 25 days). The grower would collect a 35% prevented planting claim for corn and pay 35% of the premium. **If for some reason the soybeans were not insured, then it would eliminate eligibility for SURE.** In most cases, however, soybeans will be listed on the policy but planted in the late planting period. In this case, the soybeans are planted 16 days or more late. The soybean insurance would have a guarantee reduction of at least 16 percent, but the farmer receives a benefit from any soybeans that are produced plus the 35% prevented planting corn payment.

<u>Scenario 10:</u> Farmers can plant their second crop and claim 35% of the prevented planting claim. Farmers who have purchased 80% or 85% coverage and elected the 70% buy up level of prevented planting coverage could gain a sizeable prevented planting payment. This is true even if one selects the 35% option. Corn, for example, at a price of \$6.01 times 150 bushel APH times 80% coverage times 70% additional prevented planting times 35% equals \$176.69 paid after the late planting date (final planting date plus 25 days in Michigan is June 30). Farmers would then pay 35% of the premium and could plant soybeans in the late period (July 1 to July 10) with a reduced soybean guarantee.

<u>Scenario 11:</u> If a producer can get at least 20 acres of corn planted in two units, even with the reduction in coverage for late planting, the producer will receive the enterprise unit discount. If they get nothing planted of the first crop (corn), then they will pay the basic unit rate without the premium discount.

<u>Scenario 12:</u> Producers who purchased lower coverage levels might decide not to file the prevented planting claim on the corn, especially if they can switch to soybeans and finish planting before the final soybean planting date of June 15. Farmers who have purchased 65% coverage and elected the standard prevented planting coverage of 60% will have a smaller payment. For example, for a corn price of \$6.01 times 150 bushel APH times 65% coverage times 60% prevented planting times 35% equals \$123.05. Some farmers might conclude that the payment is not large enough to accept the impact on their APH and the reduction in guarantee on the late planted soybeans.

<u>Scenario 13:</u> Producers with CAT coverage would be the least likely to file a 35% prevented planting claim and plant a second crop late. They would only be paid 60% times 35% times a very low CAT dollar of coverage and would still have their APH impacted with the yield. Those with CAT coverage will also find that SURE provides very little protection.

<u>Scenario14:</u> Producers are not eligible for SURE payments if they are uninsured, so they could have a large incentive to plant something rather than leaving the land idle.

Scenario 15: If a grower cannot plant either soybeans or corn before the late planting date (drop dead date for both crops, July 10), farmers can still plant, but their coverage is their prevented planting coverage and any production will be deducted from the prevented planting payment. In most cases growers should consider not planting, taking the prevented planting payment, and leaving the land idle as "black dirt."

There may be one exception in this scenario. If, on June 30 (the drop dead date for corn) the corn price is very high (approximately \$8 or above) relative to the \$6.01 spring price, then farmers might decide to plant because the harvest price will attach if their corn is planted, even if planted after the late planting date. Because of the likely low yield, there would be a reduction on the APH yield for next year. At harvest, if the harvest price is higher than the spring price, then the coverage would be greater than the prevented planting coverage and that would increase the SURE guarantee on the prevented panting acres.

Scenario 16: If there is added acreage (that is, if the 2011 acreage is above the prior year's plantings), then the rules become even more complex. This case was omitted and likely will depend on many individual factors. Growers should seek the advice of their insurance agent to obtain final answers.

Scenario 17: The prevented planted acres do not change the state ACRE yield calculation. Thus, there is no impact on the yield that might trigger ACRE payments.

Scenario 18: The harvest price does not attach unless the crop is planted (new this year). Thus, higher prices will not increase the prevented planting payment. If, however, the crop is planted after the late planting date (the drop dead date), then the harvest price does attach. This is the latest interpretation of the rule by the Risk Management Agency (RMA) and could be subject to change.

Scenario 19: Group Risk Income Protection (GRIP) and Group Risk Plan (GRP) have no prevented planting coverage. These farmers may still be able to collect from SURE, but the 150% factor is reduced to 100% before calculating the SURE guarantee. A few companies offer a private endorsement to GRIP for prevented planting, but few farmers purchased the private coverage, and that coverage will not appear in the RMA statistics.

Scenario 20: Prevented planting acres can trigger a county disaster designation. Thus, growers would be eligible to collect SURE payments.

Scenario 21: If the state level ACRE triggers and/or the SURE eligibility is triggered, then prevented planting acres are counted at the farm level as "considered planted."

Scenario 22: Farmers in some of the southern counties of Michigan have corn or soybeans planted but were flooded out later in the spring. These farmers have very different options, but the same peril (excessive moisture) caused the loss. Because of SURE, most will take 100% of the insurance claim (that is, 100% of the coverage, not 60% as is the case for prevented planting) and, if possible, plant a second crop at risk (uninsured). When planting a second crop on failed acres that were planted, SURE treats the second crop as a" ghost crop" (a ghost crop is not counted as potential revenue or counted as actual revenue), unless it is considered to be a double cropping issue.

A final note of caution: There are over 200 pages of regulations in the RMA manual on the topic of prevented planting. This paper cannot include every scenario that could

arise, and SURE adds an additional level of complexity to producers' decisions. Therefore, it is strongly advised that growers discuss their planting decisions with their crop insurance agent and their county FSA office before making any final decisions.

Summary and Conclusions

Though many of the decisions that must be made during the next 30 days can be very complex, there are some conclusions that can be drawn from the results presented in this paper. These include:

- 1). There is no solution that is a "one size that fits all" for all farmers or for all the farms of an individual producer in 2011. One would expect there will be cases when it pays not to plant and decision points will change over the next 30 days. Farmers should take a realistic look at all of their alternatives on a daily basis as the next 30 days unfold.
- 2). As a general rule, most producers will find it advantageous to plant corn up to 10 days late or switch to planting soybeans, assuming they can plant before the final planting date for soybeans. Producers would have full coverage on the soybeans in this scenario. If the producer cannot plant soybeans until after the late corn planting date, then the producer could plant soybeans late with the reduction in guarantee; that reduction in guarantee is partially offset by the 35% claim on the prevented planted corn if soybeans are planted the July 1 to July 10 window. The tradeoff between the impact on APH and collecting a 35% prevented planting payment on the "first crop" corn will likely depend on the level of insurance purchased. Those with higher coverage levels are more likely to claim the 35% prevented planting payment and plant the late soybeans with the reduced guarantee. While farmers are not required to plant a "second crop" of soybeans on the eligible prevented planted corn acres, they do have the option to take the prevented planting payment and leave "black dirt."
- 3). Higher market prices may cause some producers to plant late with reduced guarantees, when otherwise they would not plant.
- 4). There is the additional complexity that some farmers have forward priced a portion of their crop and, in some of the affected regions, the basis has gained strength (normally a positive trend for producers, but less so this year). Producers should be aware of their contractual obligations and should discuss the situation with any counterparty of the contract.
- 5). Producers who sold out-of-the-money puts against their insurance contracts may have an additional incentive to plant corn, even if a few days late. Late planting would permit the producer to capture the "harvest option" on the insurance.

Additional Resources

- Betz, Roger, Dennis Stein, Michael Staton, J. Roy Black, James Hilker, and John Link. "Webinar: Late and Prevented Planting in Michigan." Michigan State University Extension, June 3, 2011. Available at: http://breeze.msu.edu/p93282283/
- Stein, Dennis. "Prevented Planting Information Page." Michigan State University Extension. Available at: http://www.msu.edu/user/steind/
- Barnaby, G. A., Jr. "The Prevented Planting Decision is Really Complicated." Kansas State University. Available at: http://www.agmanager.info/crops/insurance/risk_mgt/rm_html11/AB_PreventedPlanting.asp
- Edwards, William. "Economic Impact of Delayed and Prevented Planting." Iowa State University. Available at: http://www.extension.iastate.edu/CropNews/2008/0610WilliamEdwards.htm
- University of Illinois. "Economics of Prevented Planting in Corn." Available at: http://www.farmdocdaily.illinois.edu/2011/05/economics_of_prevented_plantin.html
- University of Illinois. "Upside Potential Given Up by Taking Corn Prevented Planting Payments." Available at: http://www.farmdocdaily.illinois.edu/2011/06/upside_potential_given_up_by_t.html
- Purdue University. "Late Planting of Corn and Soybean Crops." Chat 'n Chew Café: Late Planting. Available at: http://www.agry.purdue.edu/ext/corn/cafe/lateplanting/index.html
- U.S. Department of Agriculture, Risk Management Agency. "Prevented Planting Insurance Provisions Flood." Available at: http://www.rma.usda.gov/pubs/rme/ppflood.pdf

¹ This document is considered accurate as of June 3, 2011. Users should watch for updates on the MSUE website as changes in RMA rulings or other factors occur during 2011. This information is provided for educational purposes and should not be used as the sole source of information in arriving at planting or management decisions. Users are strongly advised to consult their crop insurance agent and county FSA office to determine the consequences of their planting decisions. This information is adapted for Michigan from the work referenced above by G.A. (Art) Barnaby, Jr. (Kansas State University) and William Edwards (Iowa State University). Any remaining errors are the responsibility of the authors.