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Factors Affecting Crop Insurance Purchase

Decisions in Northern Illinois

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**Selected paper prepared for presentation at the American Agricultural Economics
Association Annual Meetings, Long Beach, California, July 23-26, 2006.**

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Factors Affecting Crop Insurance Purchase

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Matthew G. Ginder and Aslihan D. Spaulding¹

Abstract

When making crop insurance purchase decisions, farmers must consider multiple factors. This paper examines such factors through the use of a survey conducted in a 42 county region of Northern Illinois during 2005. Participants were asked who most influenced their crop insurance purchase decision and if the availability of a Premium Discount Plan (PDP) affected their decision. Respondents indicated that they generally made crop insurance purchase decisions independently, and that the availability of a PDP influenced about 25% of the decisions made. Questions about the importance of ten specific purchase factors were also asked in two distinct groups of five factors each. In one group of factors, price of the insurance was found to be more important than the probability of receiving a claim payment. The other group of factors revealed that government subsidization of premium and weather concerns were highly important to survey participants. Results have also been summarized according to the risk attitude of respondents. Crop insurance participation, plan and coverage level, and other demographic data were collected as well. Further analysis will be conducted to determine relationships between purchase decision factors and the characteristics of the respondents.

Keywords: crop insurance, Illinois, risk averse, risk taker

¹ Authors are graduate student and an Assistant Professor of Agribusiness at Illinois State University, respectively. This research is funded by the State of Illinois through the Illinois Council on Food and Agricultural Research (C-FAR) and by the 1st Farm Credit Services, Normal, IL.

Introduction

To be successful, farmers must manage several types of risk, including those inherent to production, marketing, financing, and human resources. A variety of risk management tools and practices have been developed to help farmers mitigate the wide range of risks they face. One specific tool, crop insurance, provides an effective means for managing production risk.

Since its inception, crop insurance has gained acceptance among farmers. The Risk Management Agency (RMA) of the United States Department of Agriculture (USDA) reported that, in Illinois, 72% of soybean acres and 71% of corn acres were insured during the 2005 growing season (2005 Illinois Crop Insurance Profile).

When selecting crop insurance coverage, farmers must consider multiple factors. The importance associated with relevant factors considered when making crop insurance decisions varies among individual farmers. The purpose of this project is to determine which factors are most influential to farmers' crop insurance purchasing decisions in northern Illinois.

Background

Federal crop insurance was authorized by congress in the 1930s, as agriculture in the United States was attempting to recover from the Great Depression. The Federal Crop Insurance Corporation (FCIC) was created in 1938 to implement and administer the program. From its inception to 1980, crop insurance was primarily geared towards protecting major crops in certain portions of the country where production was most heavily concentrated (A History of the Crop Insurance Program).

However, the Federal Crop Insurance Act of 1980 expanded the crop insurance program to include a wider variety of crops and additional regions of the country. The 1980 Act was aimed at reducing farmers' dependence on ad hoc government disaster payments and increasing

participation in the crop insurance program. In order to achieve a higher rate of participation, the 1980 Act provided for government subsidies of crop insurance premiums.

The enhancements to the crop insurance program enacted in 1980 did not result in the level of participation desired and a series of weather related crop losses in the late 1980s and early 1990s necessitated a series of ad hoc disaster payments. As a result, the Federal Crop Insurance Reform Act of 1994 was passed. The 1994 Act required farmers to carry crop insurance in order to be eligible for deficiency payments made under price support programs, certain loans, and other benefits. To facilitate the mandatory participation, catastrophic (CAT) coverage was created. CAT coverage was designed to protect farmers against losses greater than 50 percent of an average yield. Furthermore, CAT coverage premiums were heavily subsidized by the government, with participants paying only \$50 per crop per county in most instances. The 1994 Act also increased the subsidy levels associated with other insurance plans and coverage levels.

The mandatory participation requirement was repealed in 1996, however, farmers receiving disaster payments were still required to purchase crop insurance. 1996 also marked the creation of the RMA, which was charged with administering FCIC programs and other risk management and education programs designed to help support agriculture in the United States.

Congress passed legislation in 2000 which expanded the role of the private sector in delivering crop insurance programs to farmers. Private companies were allowed to participate in the research and development of new products and features and given the opportunity to submit unsolicited proposals for new crop insurance products. Also, the RMA was granted expanded authority to contract and partner with private entities. Furthermore, the legislation enacted in

2000 increased government subsidies on crop insurance premiums to encourage producers to purchase higher coverage levels and attract new participants to the program.

As crop insurance has evolved, producer acceptance has increased. While participation in the program is not 100 percent, crop insurance is a commonly used risk management tool. Since the 1994 Act, participation in the crop insurance program has increased significantly. For example, net acres insured in 1994 totaled 99.640 million as compared to 217.662 million in 2005. Total crop insurance premium has increased from \$949.395 million in 1994 to \$3.712 billion in 2005. Meanwhile, crop insurance contracts represented over \$13.068 billion of liability in 1993 versus \$37.188 billion in 2005 (National Summary of Business Report).

When considering crop insurance coverage, farmers currently have a variety of alternatives, ranging from CAT coverage on a county-by-county basis to revenue or yield protection on individual farm units. Additionally, multiple coverage levels exist within a majority of existing crop insurance plans. As available crop insurance options have increased, selecting the appropriate coverage has become a complicated process. The prevalence of crop insurance participation and the existence of multiple selection criteria also make understanding participant decisions more difficult. The following section reviews recent literature relevant to crop insurance purchasing behaviors.

Literature Review

In 1997, Knight and Coble prepared a survey of agricultural economic literature, summarizing research conducted on crop insurance from 1980 to 1997. In their paper, Knight and Coble examined econometric research conducted at the aggregate and farm levels.

At the aggregate level, Gardner and Kramer (1986) reported that the expected rate of return to insurance $[(\text{expected indemnity} - \text{premium}) / (\text{premium})]$ had a positive and

statistically significant effect on participation. Similarly, Cannon and Barnett (1995) found a negative estimated effect of change in net cost of insurance (premium per dollar of liability less expected indemnity per dollar of liability in 1987, minus corresponding value for 1982) on crop insurance participation. Goodwin (1993) evaluated the effect of farm size on crop insurance participation and found higher participation rates among larger farms. Meanwhile, Barnett, Skees, and Hourigan (1990) reported an inverse relationship between off-farm income and crop insurance participation.

At the farm level, Calvin (1992) and Coble et al. (1996) indicated a positive and statistically significant relationship between the expected rate of return to insurance and crop insurance participation. Goodwin and Kastens (1993) examined the effect of yield risk on farmers' crop insurance decisions. Their findings suggested that producers with a higher level of yield risk, measured in terms of yield variation, were more likely to purchase crop insurance. Calvin also reported that crop specialization had a positive effect on crop insurance participation, while diversifying the farm operation via livestock had a negative effect. Additionally, Just and Calvin (1993) obtained results which indicated that farmers who received disaster payments in the past were more likely to insure.

In summary, Knight and Coble (140) presented three propositions "supported by a preponderance of evidence" from the econometric studies on crop insurance participation which they reviewed:

- 1) as farm size increases, participation increases
- 2) diversification reduces participation
- 3) yield variability and income risk increase participation

Since Knight and Coble's survey of literature in 1997, additional studies about crop insurance purchase decisions have been conducted. The focus of these studies has varied in terms

of the factors or characteristics analyzed. For example, Makki and Somwaru (1999) wrote about a study conducted by the USDA's Economic Research Service (ERS) which examined the role of risk characteristics, farm income level, and the cost of insurance in farmers' crop insurance purchase decisions. The results of the study revealed a strong relationship between risk and choice of insurance contract. Additionally, the ERS study implied that high-income farmers were more likely to select revenue insurance than yield insurance. Meanwhile, the cost of insurance was also found to significantly affect farmers' crop insurance choices.

Makki and Somwaru (2001) analyzed data from producer decisions over a five-year period from 1995 to 1999 and identified factors that influenced crop insurance choices. Their findings indicate that risk level, price, federal subsidization, expected indemnity payoffs, availability of alternative insurance products, and the characteristics of the contract itself affect crop insurance decisions to varying degrees.

Changnon (2002) studied the effects of drought forecasts on crop insurance decisions in five Midwestern states. In March of 2000, the United States Departments of Commerce, Agriculture and Interior issued a joint drought forecast, based on observations by the National Oceanic and Atmospheric Administration (NOAA). Changnon surveyed 1,448 producers in Illinois, Indiana, Iowa, Nebraska and Ohio about their reactions to the drought forecast. Of the 1,017 respondents, 40% indicated that they made changes to their crop insurance coverage based upon the drought forecast.

Barry et al. (2002) studied producer preferences and product attributes relative to crop insurance in Illinois, Iowa and Indiana. A survey of 3,000 farmers yielded 926 responses. Among other findings, this study indicated that farmers selecting revenue insurance over yield insurance

generally had larger farms, higher debt-to-asset ratios, heavier utilization of leased farmland, and more years of education.

Serra, Goodwin, and Featherstone (2003) examined the demand for crop insurance in Kansas during the 1990's, using farm records obtained from the Kansas Farm Management Association. Results of their study suggest that the relationship between crop insurance purchase decisions and premium rates is inelastic. Accordingly, the authors contend that increasing participation in the federal crop insurance program through premium subsidies or premium discounts will be difficult.

Claassen, Lubowski and Roberts (2005) analyzed the effect of increased insurance subsidies on land use from 1992 to 1997. Their analysis revealed that, in certain areas of the country, more land was placed into production as crop insurance subsidies increased. In effect, producers tended to increase crop production in areas where the actuarial performance of the crop insurance favored them.

Babcock and Hart (2005) also focused on premium subsidies and the corresponding effect on crop insurance decisions. Specifically, they examined the effect that the subsidy changes associated with the 2000 Agriculture and Risk Protection Act (ARPA) had on purchase decisions. Babcock and Hart compared farmers' crop insurance coverage levels before and after ARPA and concluded that insurance purchases of coverage levels greater than 65 percent more than doubled.

Shaik, Coble, and Knight (2005) focused their efforts on the demand for revenue insurance in Mississippi, Texas, Indiana, and Nebraska. They studied farmers' decision to purchase crop insurance and their decision to purchase revenue or yield insurance. Among other findings, their results indicate that farmers are more price sensitive when deciding between yield

and revenue insurance than they are when deciding whether to purchase crop insurance. Furthermore, the authors concluded that farmers facing greater perceived yield risk and price risk are more likely to purchase revenue insurance.

As evidenced by Knight and Coble's survey of literature, much of the research performed on crop insurance has centered on participation. While such analysis provides insight about producers who purchase crop insurance, it does not reveal much about the choices producers make among crop insurance alternatives. More recently, however, efforts to analyze decisions among available crop insurance plans and coverage levels have been undertaken. This study continues such efforts by examining the factors which influenced choices among several crop insurance alternatives made by farmers in northern Illinois.

Research Methodology

This study focused on the crop insurance decisions made by farmers in northern Illinois. Specifically, farming operations in a 42 county region of Illinois were surveyed. A map depicting the forty-two counties included in this study has been included, immediately following the data tables.

The target population for this study included all farming operations in the 42 county region of Illinois mentioned above. For sampling purposes, a list of farmers was obtained from 1st Farm Credit Services, a member of the Farm Credit System which holds a federal charter to provide financing and financially related services to farmers in the 42 county territory covered by this study. The list included 1st Farm Credit Services' clients and prospects. It included farming operations which utilize crop insurance, as well as those which do not.

Systematic sampling was used to generate a list of 1,000 farm operations from within the 1st Farm Credit Services database. Next, a random number was selected and used as the interval for selecting specific farming operations from the list until 1,000 operations had been chosen.

A list of factors which could influence crop insurance purchase decisions made by farmers in the selected sample was developed based upon the review of relevant literature, the ideas of researchers associated with this project, and the experience of crop insurance industry professionals.

The questionnaire sent to the farming operations in the selected sample contained four sections. In the first section, participants were asked if they purchased crop insurance in 2005 for their corn acres, soybean acres, or other acres. In the next section, participants were asked to identify the specific products and coverage levels they had chosen relative to corn and soybeans. The third section included questions about factors which may or may not have influenced purchase decisions. The survey concluded with a section containing demographic questions. A variety of question formats was used, including fill-in-the-blank, open-ended, yes-no, box-checking and Likert scale.

The survey was mailed in early August, 2005. A response rate of 20% was targeted. The initial mailing was followed by a reminder postcard, and then a second mailing of the survey. A cover letter explaining the purpose of the study, ensuring confidentiality, and requesting participation was included with the initial mailing and the follow-up mailing. Incorrect addresses resulted in 35 members of the original sample being undelivered. Of the remaining 965 surveys, 408 responses were received. 319 of the 408 responses received were useable, yielding a useable response rate of 33%.

Responses were coded to maintain confidentiality, using participant numbers from the mail survey, and the resulting data was entered into a database. To encourage participation, a donation to St. Jude Children's Research Hospital was made on behalf of respondents.

Data Analysis

Tables 1 through 10 provide summary information about the data collected. The data includes general responses and responses sorted based upon participants' attitude towards risk, namely risk averse, risk neutral, and risk taker. Participants were asked about factors which influenced their crop insurance purchase decisions in four ways. Table 1 summarizes the responses given by participants when asked who most influenced their crop insurance purchase. Table 2 summarizes participant responses when asked if the availability of a Premium Discount Plan (PDP) affected their purchase decision. Participants were also asked to rank five purchase decision factors in order of importance. The factors included price, compatibility of insurance coverage with grain marketing plans, probability of receiving a claim payment, agent recommendations, and lenders' requirement to carry crop insurance. The results of the rank ordering are summarized in table 3. Lastly, participants were asked to characterize five additional purchase decision factors as being not important, somewhat important, or very important. The factors chosen for this question were government subsidization of premium, weather concerns, unit structure flexibility, crop yield in previous year, and the insurance company issuing the policy. Participants were also allowed to include a write-in factor labeled "other" when responding to this question. Table 4 shows the responses given relative to these factors.

Participants were also asked to indicate if they had purchased crop insurance in 2005. Tables 5 and 6 summarize overall participation and participation by crop, respectively. Responses were also obtained relative to the crop insurance plan chosen by those who purchased

federal crop insurance and are displayed in tables 7 and 8. Lastly, tables 9 and 10 display information relative to crop hail insurance purchases, by crop.

Statistical tests were performed on the data set. Specifically, F-test, t-test, Chi-Square test, and correlation procedures were used to analyze relationships between variables.

Descriptive analysis of the data reveals that, when viewed in the aggregate, respondents were not influenced by another party when making their crop insurance purchase decision. This was true of the risk taker group, as well. However, the risk averse group was as likely to be influenced by a crop insurance agent as it was to make the decision independently.

When ranked, price was the most important factor considered during a crop insurance purchase, regardless of their attitude towards risk. For respondents as a whole and the risk taker group, price was followed in ranking by compatibility of insurance coverage with grain marketing plans, probability of receiving a claim payment, agent recommendations, and lastly, requirements made by a lender. However, the risk averse group ranked agent recommendations higher than the probability of receiving a claim.

In the aggregate, and for the risk taker group, government subsidization of premiums was judged to be more important than weather concerns, unit structure flexibility, crop yield in previous year, and company writing the crop insurance policy. The risk averse group characterized weather concerns as more important than the other factors.

Roughly 25% of all respondents were influenced by the availability of a PDP when making their 2005 crop insurance purchase decisions.

Respondents identifying themselves as risk averse were more likely to purchase individual coverage (i.e., CRC, RA, IP, APH) than were their risk taker counterparts, who purchased group (i.e., GRP, GRIP) coverage at a greater frequency. 51% of the risk averse

respondents purchased crop hail insurance for their corn acres, as compared to 33% of those who consider themselves risk takers.

The F-test procedure suggested that a relationship exists between the party who most influenced the respondent's crop insurance purchase decision and the respondent's age. The importance of price when making a crop insurance purchase and the farming tenure of the respondent appear to be related, based upon F-test results. Additionally, the F-test suggested relationships between the importance of weather concerns when making a crop insurance purchase and each of the following variables: total corn acres farmed, corn acres owned, corn acres rented, and soybean acres owned.

The t-test procedure identified a relationship between the importance of a PDP and soybean acres farmed and soybean acres owned. The data suggested that the importance of a PDP increases as soybean acres farmed and soybean acres owned decreases. Meanwhile, Chi-square testing indicated that risk attitude and the propensity to purchase either CRC or GRIP were related to one another.

Preliminary Conclusions

Conclusions are preliminary. Data analysis efforts are incomplete and additional analysis will be performed. This paper is being submitted in conjunction with an ongoing thesis project, scheduled to be completed later this year.

Further statistical analysis of the data is warranted. Regression analysis will be performed to examine the relationships between the factors which affected crop insurance purchase decisions and the characteristics of the respondents. Also, participation in the federal crop insurance program and plan and coverage level choices will be analyzed based on the

characteristics of the participants. Results of this analysis should provide additional insight about crop insurance purchase decisions

References

- A History of the Crop Insurance Program.* (n.d.) Retrieved May 22, 2005, from Risk Management Agency Web site: <http://www.rma.usda.gov/aboutrma/history.html>.
- Babcock, B.A., and C. E. Hart. (2005) Influence of the Premium Subsidy on Farmers' Crop Insurance Coverage Decisions. *Working Paper 05-WP 393, Center for Agricultural and Rural Development, Iowa State University, Ames.*
- Barnett, B.J., J.R. Skees, and J.D. Hourigan. (1990) Examining Participation in Federal Crop Insurance. *Staff Paper 275, Department of Agricultural Economics, University of Kentucky, Lexington.*
- Barry, P.J., P.N. Ellinger, G.D. Schnitkey, B.J. Sherrick, and B.C. Wansink. (2002) The Crop Insurance Market: Producer Preferences and Product Attributes. *Study conducted under a cooperative agreement with the Economic Research Service of the U.S. Department of Agriculture.*
- Calvin, L. (1992) Participation in the U.S. Federal Crop Insurance Program. *Washington DC: U.S. Department of Agriculture, ERS Technical Bulletin No. 1800.*
- Cannon, D.L., and B.J. Barnett. (1995) Modeling Changes in the Federal Multiple Peril Crop Insurance Program Between 1982 and 1987. *Selected paper presented at the American Agricultural Economics Association annual meetings, Indianapolis.*
- Changnon, S.A. (2002) Impacts of the Midwestern Drought Forecasts of 2000. *Journal of Applied Meteorology*, 41,1042-1052.

- Claassen, R., Lubowski, R.N., and M.J. Roberts. (2005) Extent, Location, and Characteristics of Land Cropped Due to Insurance Subsidies. *Selected paper presented at the American Agricultural Economics Association annual meetings, Providence.*
- Coble, K.H., T.O. Knight, R.D. Poe, and J.R. Williams. (1997). An Expected Indemnity Approach to the Measurement of Moral Hazard in Crop Insurance. *American Journal of Agricultural Economics*, 79.
- Gardner, B.L., and R.A. Kramer. (1986) *Experience with Crop Insurance Programs in The United States: Crop Insurance for Agricultural Development: Issues and Experience.* Baltimore: Johns Hopkins University Press.
- Goodwin, B.K. (1993) An Empirical Analysis of the Demand for Crop Insurance. *American Journal of Agricultural Economics*, 75, 425-434.
- Goodwin, B.K. and T.L. Kastens. (1993) Adverse Selection, Disaster Relief, and the Demand for Multiple Peril Crop Insurance. *Contract report for the Federal Crop Insurance Corporation.*
- Just, R.E., and L. Calvin. (1993) Adverse Selection in U.S. Crop Insurance: The Relationship of Farm Characteristics to Premiums. *Unpublished manuscript, University of Maryland.*
- Knight, T.O., and K. H. Coble. (1997) Survey of U.S. Multiple Crop Insurance Literature Since 1980. *Review of Agricultural Economic*, 19, 128-156.
- Makki, S.S., and A. Somwaru. (1999) Demand for Yield and Revenue Insurance:

Factoring in Risk, Income and Cost. *Agricultural Outlook, Economic Research Service, U.S. Department of Agriculture*, 17-19.

Makki, S.S., and A. Somwaru. (2001). Farmers' Participation in Crop Insurance Markets: Creating the Right Incentives. *American Journal of Agricultural Economics*, 83, 662-667.

Serra, T., Goodwin, B.K., and A.M. Featherstone. (2003) Modeling Changes in the U.S. Demand for Crop Insurance During the 1990's. *Selected paper presented at the American Agricultural Economics Association annual meetings, Montreal.*

Shaik, S., Coble, K.H., and T.O. Knight. (2005) Revenue Crop Insurance Demand. *Selected paper presented at the American Agricultural Economics Association annual meetings, Providence.*

National Summary of Business Report. (n.d.) Retrieved May 22, 2005, from Risk Management Agency Web site: <http://www.rma.usda.gov/data/#sumbus>.

2005 Illinois Crop Insurance Profile. (n.d.) Retrieved May 22, 2005, from Risk Management Agency Web site:

<http://www.rma.usda.gov/pubs/2004/2003StateFactSheets/Illinois03.pdf>.

Table 1. Crop Insurance Purchase Decision Influencers

| Influencer | General Respondents | Risk Averse | Risk Taker |
|-----------------|---------------------|-------------|------------|
| No One | 37% | 35% | 41% |
| Insurance Agent | 33% | 35% | 32% |
| Other | 12% | 11% | 14% |
| Tenant | 6% | 5% | 6% |
| Landlord | 3% | 3% | 3% |
| Neighbor | 2% | 3% | 2% |
| Spouse | 1% | 0% | 1% |
| Farm Manager | 0% | 0% | 0% |
| Not Answered | 6% | 8% | 2% |
| Total | 100% | 100% | 100% |

Table 2. Affect of Premium Discount Plan (PDP) on Crop Insurance Purchase Decision

| Did availability of PDP affect purchase decision? | General Respondents | Risk Averse | Risk Taker |
|---|---------------------|-------------|------------|
| Yes | 25% | 27% | 23% |
| No | 67% | 62% | 73% |
| Not Answered | 8% | 11% | 4% |
| Total | 100% | 100% | 100% |

Table 3. Weighted Importance of Factors Affecting Crop Insurance Purchase Decision

| Factor | General Respondents | Risk Averse | Risk Taker |
|--|---------------------|-------------|------------|
| Price | 2.01 | 2.11 | 2.06 |
| Compatibility with Grain Marketing Plans | 2.65 | 2.74 | 2.67 |
| Probability of Receiving a Claim Payment | 2.80 | 2.82 | 2.76 |
| Agent Recommendations | 3.04 | 3.18 | 3.15 |
| Required by Lender to Carry Crop Insurance | 4.25 | 4.13 | 4.18 |

Note: The factors in table 3 were weighted using a 5 point Likert Scale, with 1 being most important and 5 being least important.

Table 4. Weighted Importance of Factors Affecting Crop Insurance Purchase Decision

| Factor | General Respondents | Risk Averse | Risk Taker |
|--------------------------------------|---------------------|-------------|------------|
| Other | 1.32 | 2.00 | 1.20 |
| Government Subsidization of Premiums | 1.38 | 1.40 | 1.42 |
| Weather Concerns | 1.40 | 1.29 | 1.47 |
| Unit Structure Flexibility | 1.76 | 1.65 | 1.77 |
| Crop Yield in Previous Year | 2.02 | 1.91 | 2.15 |
| Insurance Company Issuing the Policy | 2.09 | 2.03 | 2.15 |

Note: The factors in table 4 were weighted using a scale of 1 = very important, 2 = somewhat important, and 3 = not important.

Table 5. Crop Insurance Participation

| Participation | General Respondents | Risk Averse | Risk Taker |
|---------------|---------------------|-------------|------------|
| Yes | 90% | 92% | 87% |
| No | 6% | 5% | 8% |
| Not Answered | 4% | 3% | 5% |
| Total | 100% | 100% | 100% |

Table 6. Crop Insurance Participation by Crop

| Crop | General Respondents | Risk Averse | Risk Taker |
|-----------------|---------------------|-------------|------------|
| Corn Only | 8% | 8% | 8% |
| Soybeans Only | 5% | 3% | 8% |
| Corn & Soybeans | 77% | 84% | 71% |
| Other | 1% | 3% | 1% |
| Not Answered | 9% | 2% | 12% |
| Total | 100% | 100% | 100% |

Table 7. Crop Insurance Participation by Plan - Corn Acres

| Plan | General Respondents | Risk Averse | Risk Taker |
|---------------------------------|---------------------|-------------|------------|
| Crop Revenue Coverage (CRC) | 34% | 52% | 26% |
| Revenue Assurance (RA) | 27% | 36% | 30% |
| Income Protection (IP) | 3% | 3% | 2% |
| Actual Production History (APH) | 10% | 3% | 10% |
| Group Risk Plan (GRP) | 5% | 0% | 7% |
| Group Risk Income Plan (GRIP) | 13% | 3% | 14% |
| Catastrophic (CAT) | 8% | 3% | 11% |
| Total | 100% | 100% | 100% |

Table 8. Crop Insurance Participation by Plan - Soybean Acres

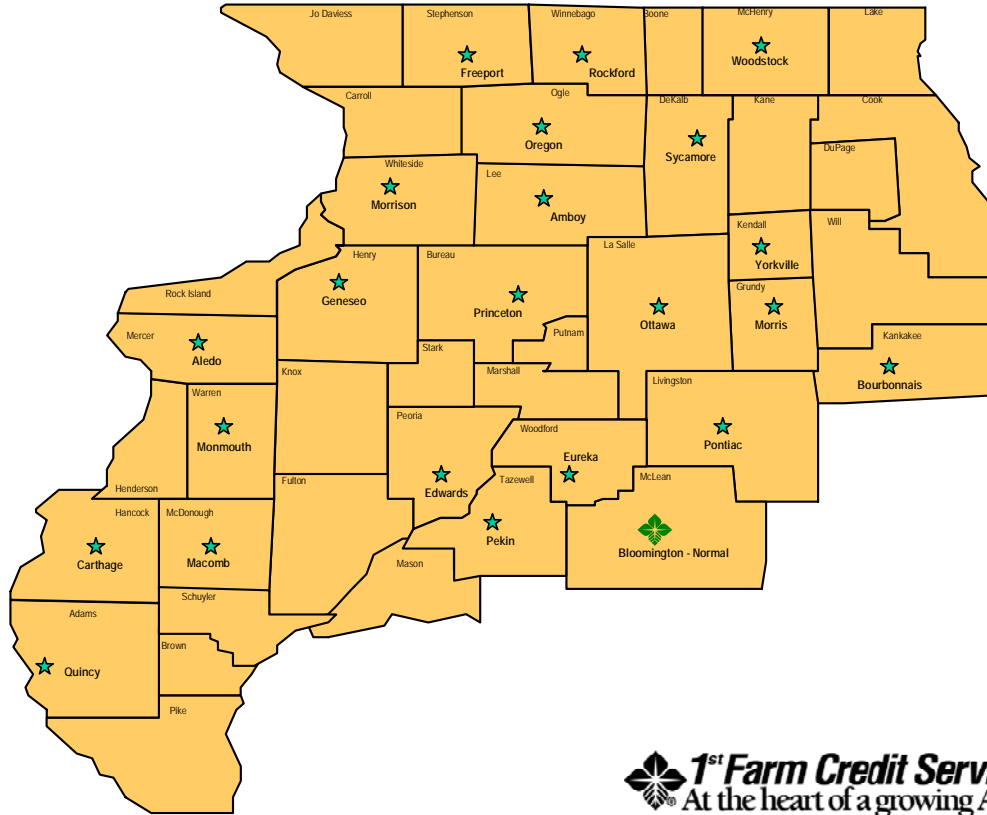
| Plan | General Respondents | Risk Averse | Risk Taker |
|---------------------------------|---------------------|-------------|------------|
| Crop Revenue Coverage (CRC) | 21% | 35% | 13% |
| Revenue Assurance (RA) | 28% | 42% | 24% |
| Income Protection (IP) | 3% | 4% | 3% |
| Actual Production History (APH) | 9% | 4% | 8% |
| Group Risk Plan (GRP) | 11% | 11% | 14% |
| Group Risk Income Plan (GRIP) | 20% | 4% | 27% |
| Catastrophic (CAT) | 8% | 0% | 11% |
| Total | 100% | 100% | 100% |

Table 9. Crop Hail Purchase Decision - Corn Acres

| Purchase Decision | General Respondents | Risk Averse | Risk Taker |
|-------------------|---------------------|-------------|------------|
| Yes | 35% | 51% | 33% |
| No | 61% | 49% | 67% |
| Not Answered | 4% | 0% | 0% |
| Total | 100% | 100% | 100% |

Table 10. Crop Hail Purchase Decision - Soybean Acres

| Purchase Decision | General Respondents | Risk Averse | Risk Taker |
|-------------------|---------------------|-------------|------------|
| Yes | 23% | 30% | 28% |
| No | 72% | 70% | 71% |
| Not Answered | 5% | 0% | 1% |
| Total | 100% | 100% | 100% |



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