

South Dakota State University  
**Open PRAIRIE: Open Public Research Access Institutional  
Repository and Information Exchange**

---

Economics Commentator

Economics

---


12-14-2005

## Insuring Major Spring Crops in South Dakota

Matthew A. Diersen

South Dakota State University, [Matthew.Diersen@SDSTATE.EDU](mailto:Matthew.Diersen@SDSTATE.EDU)

Follow this and additional works at: [http://openprairie.sdstate.edu/econ\\_comm](http://openprairie.sdstate.edu/econ_comm)

 Part of the [Agricultural and Resource Economics Commons](#), and the [Regional Economics Commons](#)

---

### Recommended Citation

Diersen, Matthew A., "Insuring Major Spring Crops in South Dakota" (2005). *Economics Commentator*. Paper 459.  
[http://openprairie.sdstate.edu/econ\\_comm/459](http://openprairie.sdstate.edu/econ_comm/459)

This Newsletter is brought to you for free and open access by the Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Economics Commentator by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact [michael.biondo@sdstate.edu](mailto:michael.biondo@sdstate.edu).

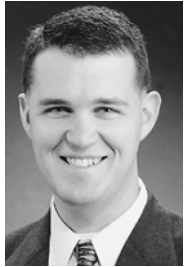


# ECONOMICS COMMENTATOR

South Dakota State University

No. 468

December 14, 2005



## Insuring Major Spring Crops in South Dakota

by

Matthew A. Diersen

Associate Professor/ Extension Specialist

Each year crop producers choose what type and level of crop insurance to purchase. The commodity market conditions change enough each year to make different insurance products attractive. Also, the products themselves are still emerging enough to warrant producers' attention. External conditions also change. For example, in 2005 there was a major effort to educate producers about Asian Soybean Rust<sup>1</sup>. Although rust never became a factor to handle in 2005, preparation was time well spent. The weather was such that some producers were prevented from planting some cropland, a condition covered under insurance provisions.

The purpose of this *Commentator* is to show recent trends in crop insurance for major spring crops in South Dakota. The types and levels of crop insurance purchased are quantified and the reasons behind the choices are explained when feasible. The management implications of prevented planting are also discussed. Group insurance products, seldom-used in South Dakota, are addressed as they have been expanded recently and are receiving some media attention.

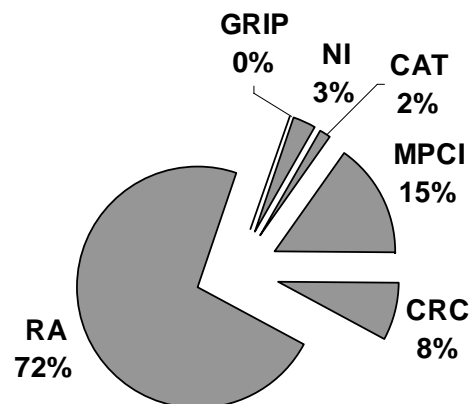
### Statewide Usage

As a whole, crop insurance is widely used in South Dakota. Statewide, NASS estimates there are 20 million acres of cropland. In 2005 producers insured 13.5 million acres, or 68 percent of cropland, under

federal crop programs. Federal programs are administered by the Risk Management Agency (RMA). Most of the principle crops are insured. The main exception is alfalfa, with about 1 million acres that went uninsured in 2005. Grass hay is also uninsurable under federal crop programs offered in South Dakota. Fallow land would be ineligible for insurance, but would count as cropland acres.

Among major crops, South Dakota producers covered 4.2 million acres of corn, 3.8 million acres of soybeans, and 3.0 million acres of wheat in 2005. As shown in figures 1-3, a small percentage of each crop was not insured (NI). Other crops with more than 100,000 acres covered in South Dakota included forage production, millet, oats, and sunflowers. Aggregate liability purchased was \$1.6 billion in coverage, representing roughly 65 percent of the value of crop production. Producers paid \$95.3 million in premiums for the coverage and through December 5, 2005 had collected \$78.0 million in indemnity payments.

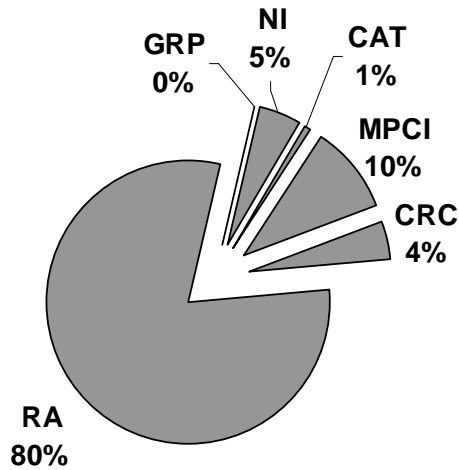
**Figure 1. 2005 South Dakota Corn Acres by Product Type**



Sources: RMA and NASS

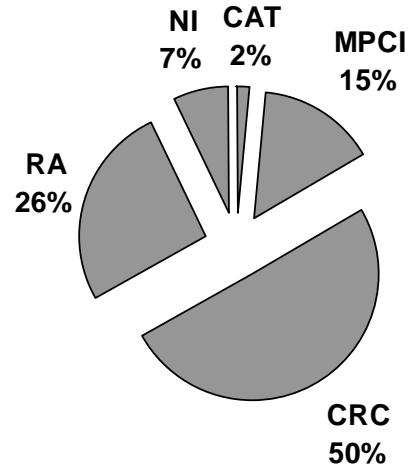
<sup>1</sup> For more details, see College of Agricultural and Biological Sciences. *Asian Soybean Rust: Learn, Plan, Scout, Respond*. ABS205. South Dakota State University. Brookings, SD, May 2005.

**Figure 2. 2005 South Dakota Soybean Acres by Product Type**



Sources: RMA and NASS

**Figure 3. 2005 South Dakota Wheat Acres by Product Type**



Sources: RMA and NASS

**Typical Coverage Choices**

Crop insurance is available in two broad categories: yield and revenue insurance<sup>2</sup>. The yield insurance products are Catastrophic Coverage (CAT) and Multiple Peril Crop Insurance (MPCl). The revenue insurance products are Revenue Assurance (RA), Crop Revenue Coverage (CRC), and Income Protection (IP). Group coverage products are discussed later.

The choice between product categories is driven in part by the price election level available, the desire of the producer to forward price the crop, and the cost of the coverage. In March of 2005, the price election levels slightly favored revenue insurance products for corn and soybeans (table 1). A cost advantage drove the vast majority of corn and soybean producers to purchase RA in 2005 (figures 1 and 2). The majority of acres were covered at the 70 percent yield level for both crops, followed by coverage at the 65 or 75 percent levels. The rates for CRC and RA on corn and soybeans were similar for coverage at lower yield

levels, leading to some use of CRC across South Dakota. There are also counties where the cost of revenue coverage swamps its potential benefit, leading to some use of yield insurance products. The product choice tends to change each year as price election levels and rates change.

**Table 1. 2005 Price Election Levels**

Spring Crop	Yield Insurance	Revenue Insurance
Per bushel		
Corn	\$2.20	\$2.32
Soybeans	\$5.00	\$5.53
Wheat	\$3.50	\$3.35

Note: The election level was \$3.21 for IP on wheat. Source: RMA

The yield insurance products had a higher price election level than the revenue products for wheat (table 1). However, producers primarily purchased revenue products. The difference was in the type of product chosen on the majority of acres. CRC use on wheat was more prevalent than RA use. The yield coverage levels tend to be lower on wheat compared to corn and soybeans. The dominant coverage was purchased at the 65 percent yield level, followed by coverage at the 70

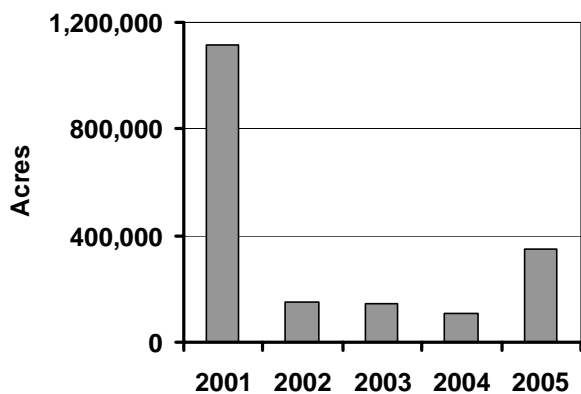
<sup>2</sup> For a good overview of the different products see National Crop Insurance Services. *Crop Insurance and Risk Management Primer*. L.M. Crane, ed. Overland Park, KS, February 2005.

percent level. The product choice also changes each year on wheat. For producers, the message is to watch and analyze the product choice annually to assure the most cost-effective and appropriate coverage decision is made. While IP was available for wheat, producers did not purchase any policies in 2005.

### Prevented Planting

Excess spring moisture resulted in substantial acres of prevented planting in 2005. In South Dakota, there were 351,311 acres of prevented planting, much higher than during the previous three years (figure 4). Prevented planting payments are important because producers may market the crop before planting. Then, if they are unable to plant a crop, the insurance policy pays a percentage of the full indemnity. Since the large prevented planting total in 2001, the provisions have changed limiting any haying or grazing of cover crops on acres where producers claimed prevented planting.

**Figure 4. Recent Prevented Planting Acres in South Dakota**



Source: USDA-RMA

The typical insurance policy comes with a standard prevented planting level of 60 percent of the normal guarantee. Producers can purchase an additional 5 or 10 percent of coverage for higher premiums. For example, the respective costs in Kingsbury County on 2006 soybeans will be 6 and 12 percent higher than the base premium. The prevented planting surcharges have increased in recent years, reducing the desirability of buying additional levels. In 2001, prevented planting could have been bought up in Kingsbury County soybeans for only an additional 2 and 4 percent of the base premium. The cost-

effectiveness of additional protection is a farm-specific issue, as are any implications for prudent hedging or forward-pricing.

### Group Coverage Products

In addition to farm-level coverage, producers in select South Dakota counties have had group policies available for corn, soybeans, and wheat. Group Risk Protection (**GRP**) is yield insurance that covers county-level yield declines. Group Risk Income Protection (**GRIP**) is revenue insurance that covers county-level revenue declines. The price election levels follow the respective yield and revenue products. GRIP has an optional harvest-price feature, making it similar to RA.

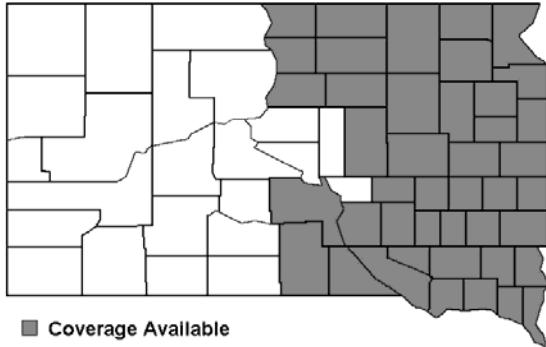
Historically, group products have received little use in South Dakota. A single GRIP policy for corn, a single GRP policy for soybeans, and no policies for wheat were recorded in 2005 (figures 1, 2, and 3). In contrast, at the national level corn producers covered 4.1 million acres under GRP and GRIP, with the heaviest use in Illinois and Indiana. Economic trade-offs explain part of the reluctance to adopt group products in South Dakota. Conventional wisdom says that GRP or GRIP coverage would work better when a farmer's yield history closely matches that of the county<sup>3</sup>. There is a delay or lag in receiving indemnity payments, as the county yield may not be determined (announced) until well after harvest. Coverage can be purchased for up to 150 percent of the expected county value. Conventional wisdom also says a producer may need a higher yield election level with group compared to farm-level products.

Several changes may result in increased use of group products in South Dakota. 2005 marked the first year corn and soybean producers in South Dakota could have purchased GRIP. However, group products were only available in eastern tier counties with extensive insurance use. Thus, it would not necessarily have been attractive to

<sup>3</sup> For background information see Edwards, W.M. and G.A. Barnaby. *Managing Risk Through Crop Insurance*. East Moline, IL: John Deere Publishing, 2000. Potential readers should note that many of the details in this resource are out of date.

many producers. For soybeans, group products are available in 21 counties. For 2006, the number of counties with corn group products expands from 26 to 43 counties (figure 5). Also in 2006, GRIP will be available for spring wheat counties that had GRP in the past.

**Figure 5. Counties with GRP and GRIP on Corn in 2006.**



Source: RMA

Many of the added counties for corn have higher relative yield variability and lower use of insurance. The existing situation is similar for many of the

western counties with group products for wheat. The potential also exists for farmer-feeders to use GRIP on corn if the cost is favorable compared to RA with the harvest price option. Thus, GRP and GRIP may be more viable insurance products in the added counties.

**Additional Information**

To keep up with all the changes, producers can find additional information on the RMA website, [www.rma.usda.gov](http://www.rma.usda.gov). A local crop insurance agent will also be a good contact as the group products are not universally available. Comprehensive planning and annual evaluation of the crop insurance decisions will help producers meet their operating objectives.

\*\*\*\*\*  
 Subscribe to the *COMMENTATOR* by sending a check for \$12, made payable to Dept. of Economics Acct# 316119, to Box 504, Brookings, SD 57006-0895.  
 Phone: 605-688-4141 Fax: 605-688-6386  
 Or for information E-Mail: Penny.Stover@sdstate.edu

Visit the Department Website at: [econ.sdstate.edu](http://econ.sdstate.edu)

300 copies of this newsletter were produced at a cost of less than \$100



SOUTH DAKOTA STATE UNIVERSITY  
 Department of Economics  
 Box 504  
 Brookings SD 57007-0895

**Change Service Requested**

Non- Profit Org. U.S. Postage <b>PAID</b> Brookings, S.D. Permit 24
---