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

Economics Commentator

Economics

8-31-2010

Fall Crop Insurance Considerations

Matthew Diersen
South Dakota State University, Matthew.Diersen@SDSTATE.EDU

Follow this and additional works at: http://openprairie.sdstate.edu/econ_comm

Part of the Agricultural and Resource Economics Commons, and the Regional Economics

Commons

Recommended Citation

Diersen, Matthew, "Fall Crop Insurance Considerations" (2010). *Economics Commentator*. Paper 512. http://openprairie.sdstate.edu/econ_comm/512

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.



ECONOMICS COMMENTATOR

South Dakota State University

No. 521

August 31, 2010



FALL CROP INSURANCE CONSIDERATIONS

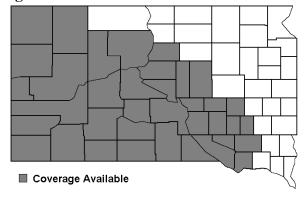
by Matthew Diersen* Professor / Extension Specialist

Crop insurance underwent major changes prior to the 2011 crop year. Most of the major crops that had multiple insurance products available were affected by "Combo" changes, so called because they combine existing products together. The first crop affected in South Dakota is winter wheat. Other crops with a fall insurance deadline (rye, forage production, and pasture, rangeland, and forage (PRF)) were not affected by the Combo changes, but are briefly undated here also. Of special note, PRF insurance was expanded statewide. The fall crops have a September 30 deadline for adding or making changes to coverage.

Winter Wheat

The changes to winter wheat coverage are outlined in the "Common Crop Insurance Policy", the "Small Grains Crop Provisions", and the "Commodity Exchange Price Provisions" or CEPP. Copies are available from crop insurance agents and on the Risk Management Agency (RMA) website (www.rma.usda.gov). The primary change is the combination of various revenue insurance products into coverage called *revenue protection*. As has been the case, standard coverage for winter wheat is only available in counties in the southwest two-thirds of South Dakota (figure 1). In other counties winter wheat may be covered by written agreements.

Figure 1. Winter Wheat Counties



Regardless of any Combo changes the main insurance questions still dominate. Is the coverage type correct? Is the coverage level optimal? Looking at the Combo changes in light of how it affects these two aspects will clarify the ultimate impacts on a producer's coverage.

Coverage Type Specifics

For perspective, revenue insurance products have dominated wheat coverage in recent years. Relatively high wheat prices have encouraged forward pricing and the complementary use of revenue insurance. In 2010 across spring and winter wheat, 91% of insured acres in South Dakota were covered by either Revenue Assurance (RA) or Crop Revenue Coverage (CRC) (figure 2). The remainder was covered by yield insurance, which is now called *yield protection*. With historically high wheat prices revenue protection will likely be the preferred product type for 2011.

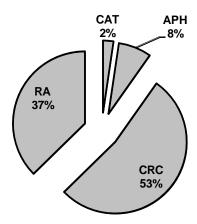
Winter wheat coverage in South Dakota continues to use Kansas City Board of Trade (KCBT) contract prices. Under the old policy, winter wheat

^{*}Contact the author at matthew.diersen@sdstate.edu or 605-688-4864.

producers had to consider the harvest price month when making revenue insurance choices. RA settled

to the July futures contract during early July. CRC settled to the September futures contract during mid-July to mid-August. Now there are common projected price discovery and harvest price discovery periods for the Combo policies.

Figure 2. 2010 Wheat Acres Insured by Product Type



For South Dakota winter wheat the price discovery periods are based on the KCBT September HRW Wheat contract. The projected price discovery period is August 15 to September 14 of 2010 for the 2011 crop year. The harvest price discovery period is July 1 to July 30 of 2011. The average of the futures closes during the discovery periods sets the respective prices. The price election level on revenue protection cannot be adjusted.

Yield protection uses the same projected price as revenue protection. Formerly, the RMA would set state-level prices for yield insurance based on general trends and in advance of the discovery period. At times there would be a large difference between the yield and revenue insurance price election levels. Basis is no longer factored into the projected price for yield protection. As such, the projected price will likely be larger than the expected local cash price. The premium for yield protection will likely be higher than what would otherwise be expected because of the higher price

level used in the coverage. However, the price election level can be adjusted for yield protection.

Thus, a producer could reduce the level and cost of yield protection if no forward pricing is likely. Slight premium changes for revenue protection are expected, but they are likely to be muted for winter wheat because of the common level of coverage historically chosen and the historical closeness of RA and CRC premiums. The changes will also be obscured by changes in the projected price and the volatility, both of which drive the premiums.

Standard revenue protection will function like CRC and RA with the Harvest Price Option. The protection will increase should the harvest price be higher than the projected price. A caveat remains with the new policy; the 200% limit on the price change by harvest remains in effect. As stated in the CEPP, "The harvest price will not be greater than the projected price multiplied by 2.00", rewording earlier endorsement limits. Thus, revenue protection is capped once the projected price doubles.

If a producer hedges aggressively, suffers a large yield loss, and the market price increases beyond 200% of the projected price, then hedge losses may exceed indemnity payments. Covered sales seem like the best way to mitigate this low probability event with a high severity of loss. Forward contract sales or short futures hedges are covered by buying call options on the same number of bushels at a strike price below 200% of projected price.

Producers with revenue protection can select the harvest price exclusion. This choice would closely match RA without the Harvest Price Option and match Income Protection (IP), the latter of which was never common in South Dakota. For most crops the harvest price exclusion is not expected to be attractive or common. The standard revenue protection is designed to cover price increases and is ideal when producers forward price or intend to feed a crop (e.g., corn).

Winter wheat is a possible exception. South Dakota winter wheat producers tend to purchase low levels of coverage. They have also stated that higher coverage levels are not cost-effective given the

overall profitability of the crop. Given the yield risk for much of South Dakota, there is also a general reluctance to aggressively forward price much winter wheat. Revenue protection with the harvest price exclusion may be appealing from the

standpoint that it provides downside revenue protection at a slightly higher cost than yield protection. It also costs less than standard revenue protection, which may not be necessary if little forward pricing is expected.

Specifics for 2011

If a producer does nothing by September 30, any coverage from last year will be rolled into a comparable type of coverage for 2011. We maintain a spreadsheet called the "Risk Calculator" that we use in Extension workshops to show the impact of insurance and marketing choices under different price and yield scenarios. Our preliminary look at the Combo features suggests that to minimize the insurance outlay (or substantially self-insure) a producer could purchase yield protection with a price election below 100%.

The relatively high price currently reflected in the futures price suggests intermediate coverage would be revenue protection with the harvest price exclusion. It is difficult to replicate the downside protection for the marginal cost difference over yield protection. For those forward pricing, standard revenue protection will likely be optimal. The upside protection of the adjustable harvest price is necessary to offset potential hedging losses when yield risk is possible.

Wheat producers with revenue insurance products used 60%, 65%, 70% coverage levels in similar proportions in 2010. CRC was commonly used at the 60% level, in part because RA was not offered at that level. The optimal level for 2011 will depend on a producer's willingness and ability to self-insure the deductible amount and the cost of different coverage levels. The elections range from 50% to 85% coverage across the Combo products. There may be levels that cover cash expenses, total expenses, and reasonable profit amounts. The optimal level is a farm-specific decision and would also be influenced by any forward pricing or protection strategies employed.

All producers will likely have to visit with their agent about the choice of product and the optimal coverage level. There are many other Combo changes that vary in importance to different producers. Depending on individual circumstances, producers may want to visit with their agent about:

- how units are treated
- exclusions for hail coverage
- substantial beneficial interest (for nonspouses and non-lenders)
- prevented planting rules
- written agreements
- any additional production records.

Producers may also want to visit with their commodity broker about:

- matching marketing to the product type
- limiting hedging based on the coverage level
- making covered sales
- using the September KCBT contract.

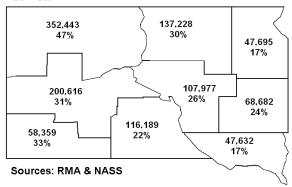
Rye

Insurance for rye continues to be available in the northeast counties in South Dakota. The coverage is Actual Production History (APH) or yield insurance only. In 2010 there were only 1,142 acres covered statewide. However the area with coverage had substantial moisture and planting issues this spring. As a fall-planted crop, rye may have a limited role in some areas affected by prevented planting.

Forage Production

Forage production insurance continues to be available and used across all South Dakota counties. In 2010 there were 1.1 million acres insured, ranking it 4th in acres and in policies earning premiums behind corn, soybeans, and wheat. Coverage is still most common in the northwest part of South Dakota (figure 3). Many producers still find maintaining production records burdensome and still find a difference between prices for higher-quality alfalfa and the insurance price election. Additional details can be found in Extension Extra 5044, "Crop Insurance Alternatives for Hay in South Dakota."

Figure 3. Forage Production Acres Insured in 2010 and Percent of 2009 All Hay Acres by District.

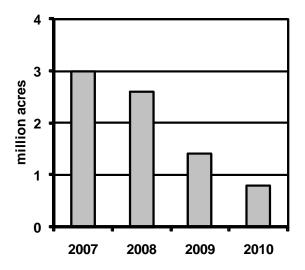


Pasture, Rangeland, Forage

A final product, PRF, has been available in western South Dakota counties for several years. Starting with 2011 the product has been expanded statewide. The usage fell below 1.0 million acres in 2010 (figure 4). There is no pattern to the choice of the coverage level from the statewide statistics. Both Harding and Mellette counties had more than 100,000 acres insured in 2010. Lyman and Mellette counties had 47 policies earning premiums in 2010. The deadline for PRF has been moved up to September 30. Additional details can be found in

Extension Extra 5059, "Pasture, Rangeland, and Forage Pilot Insurance Program in South Dakota."

Figure 4. PRF Coverage in South Dakota.



ECONOMICS COMMENTATOR

Department of Economics
South Dakota State University
Box 504 Scobey Hall
Box 504 Scobey Hall
Box 505 Formula Fax: 605-688-6386
Brookings, SD 57007-0895
F-Mail:Penny_Stover@ sdstate.edu
Formula Fax: 605-688-4141
Fax: 605-688-6386
F-Mail:Penny_Stover@ sdstate.edu
F-Brookings Fax: 605-688-4141
F-Brookings Fax: 605-688-6386
F-Brookings F

Change Service Requested

SOUTH DAKOTA STATE UNIVERSITY Box 504 Brookings, SD 57007-0895

