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Release of 2015 Crop Insurance Decision Tool: Higher Premiums in 2015

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The 2015 Crop Insurance Decision Tool is available for download from the FAST section of *farmdoc* (click [here](#) for download). This January release will quote corn and soybean premiums for the COMBO and ARPI products, as well as provide quotes for the Supplemental Coverage Option (SCO). A YouTube video demonstrating the tool is available [here](#). The 2015 Tool is used to calculate premiums for comparison to 2014 premiums.

Premiums for Corn in 2014 and 2015

Table 1 shows a comparison for 2014 and projected 2015 Revenue Protection (RP) premiums in three Illinois Counties: DeKalb, McLean, and Washington Counties. DeKalb County is in northern Illinois, McLean County in central Illinois, and Washington County is in southern Illinois. These per acre premiums are for corn given that 100 acres are insured using an enterprise unit. The Actual Production History (APH) and Trend-Adjusted APH (yields) are set near the average for each county. Each county's APH and TA-APH yields are shown in Table 1. The 2015 projected price is set at \$4.62, the 2014 projected price. Similarly, the 2015 volatility is set at .19, the 2014 volatility. Setting these values at 2014 levels allow examination of how rate changes made by the Risk Management Agency (RMA) impacts premiums.

In most cases, 2015 projected premiums are higher than 2014 premiums. At an 80% coverage level, the 2014 premium in DeKalb County is \$7.14 per acre while the 2015 premium is \$7.64 per acre (see Table 1), a 7% increase over the 2014 premium. At an 80% coverage level, McLean County's 2015 premium is 5% higher than the 2014 premium. Washington County's 2015 premium is 16% higher than the 2014 premium.

Any number of factors could have caused the increase in premium. One factor is the inclusion of 2012 losses in the calculation of premiums. RMA uses a loss cost methodology in calculating premiums. Performance in 2012 entered into rate calculation for the first time in setting 2014 premium. Due to the drought, 2012 crop insurance losses were large, likely influencing rate determination.

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Table 1. Comparison of 2014 and Projected 2015 Crop Insurance Premiums for Three Illinois Counties, Revenue Protection, Enterprise Units, Corn^{1,2}.

Coverage Level	DeKalb County		McLean County		Washington Co	
	2014	2015	2015	2015	2014	2015
	\$/acre	\$/acre	\$/acre	\$/acre	\$/acre	\$/acre
50%	0.55	0.49	0.46	0.49	2.52	3.03
55%	0.74	0.77	0.64	0.67	3.32	3.99
60%	1.03	1.07	0.92	0.96	4.44	5.33
65%	1.41	1.47	1.34	1.40	5.78	6.89
70%	2.12	2.25	1.95	2.03	7.47	8.83
75%	3.59	3.84	3.40	3.52	11.10	12.99
80%	7.14	7.64	7.36	7.76	19.20	22.30
85%	15.14	16.03	15.09	15.91	34.56	39.93
	Bu./acre		Bu./acre		Bu./acre	
APH Yield	170		175		130	
TA-APH yield	179		185		138	

¹ Generated for an enterprise unit (100 acres) with 2014 the projected price (\$4.62) and 2014 volatility (.19) with Actual Production History (APH) and Trend-Adjusted APH (TA-APH) yields as shown for each county. Premiums are generated with the Crop Insurance Decision Tool available in the *FAST* section of *farmdoc*.

² Premiums in 2015 will vary from those shown because the 2015 projected price will not equal \$4.62 and the volatility will not equal .19.

The 2015 premiums will vary from those shown in Table 1 because the projected price and volatility will vary from 2014 values. A lower projected price, as now seems likely, will lower premium. A higher (lower) volatility will increase (decrease) premium.

SCO premiums

The 2015 Crop Insurance Decision Tool will provide premiums for Supplemental Coverage Option (SCO). SCO is a new crop insurance product that is available in certain situations (*farmdoc daily* [August 5, 2014](#)).

Figure 1 shows an example of SCO premiums. Note that three sets of premiums exist: one for when the underlying product is Revenue Protection (RP), one for RP with harvest price exclusion, and one for Yield Protection. For example, suppose a farmer purchases RP at an 80% coverage level and wishes to purchase SCO. One SCO product would be available providing coverage from 86% to 80%. This SCO product is indicated as "80% -- 85%" in the 2015 Crop Insurance Decision Tool and would have a cost of \$7.12 per acre. More discussion of the use of SCO will be provided here in the future.

Figure 1. SCO Premium from Crop Insurance Decision Tool.

Type: Grain			
Practice: Non -Irrigated			
Range	RP	RPwExl	YP
\$ per acre			
50% - 86%	21.12	13.41	14.78
55% - 86%	20.07	12.88	13.93
60% - 86%	18.86	12.17	12.98
65% - 70%	17.07	11.13	11.59
70% - 86%	14.48	9.65	9.56
75% - 86%	11.34	7.83	7.28
80% - 86%	7.12	5.08	4.43
85% - 86%	1.40	1.06	0.85

Summary

The 2015 Crop Insurance Decision Tool is now available for use. It provides premiums for corn and soybeans. A new feature is quotes for SCO. Final quotes can be made after February when 2015 projected prices and volatilities will be set.

Reference

Schnitkey, G., and N. Paulson. "[Supplemental Coverage Option \(SCO\) in Wheat.](#)" *farmdoc daily* (4): 145, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 5, 2014.