

Integrating ACRE, SURE, and Crop Insurance: Producer Strategies for 2010

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Overview of Talk

- Overview Farm Bill's new programs
 - ACRE: Average Crop Revenue Election
 - SURE: Supplemental Revenue Assistance Payments
- Thoughts on how to integrate these new programs with crop insurance

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ACRE is Like GRIP Crop Insurance

- Give up certain premium for uncertain payback
 - Premium = 20% DP + CCP & 30% lower loan rate
- Basis Risk
 - State level yields and USDA Marketing Year Avg price
 - Basis risk like GRIP, just larger/different basis
- No guarantee that get back your premium
- Farm must establish historical yields, keep records, follow lots of rules, just as for traditional crop insurance

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ACRE is Like GRIP Crop Insurance: Not Quite

- At 2009 ACRE signup, did not know state or farm ACRE guarantee for 2009
 - 2009 MYA price finalized in Oct. 2010
 - Know how calculated, but not actual levels
- Will not know if ACRE payments due until 2009 state yields (3/15/2010) and 2009 MYA price (10/15/2010) are determined
- ACRE payments not come until well after crop season, no advance payments made
- Expect late October of 2011 for 2010 ACRE payments, like counter-cyclicals

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ACRE is a Complicated Program

- More rules, terms, acronyms to figure out
 - Benchmark State Yield, Olympic Average, Farm Level Trigger, National MYA Prices, State ACRE Guarantee
- Remember 1st time you bought crop insurance or revenue insurance?
 - Very popular now, but slow adoption at start because new and seemed more complicated
- ACRE will be clearer after a little work

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ACRE is a “no brainer”—sign up!

- ACRE benefits will differ for each farm & farmer
 - Your benchmark farm yields, probability your yield below farm benchmark, your farm:state yield ratio
 - Number of base acres, base acre crops, and actual acres of each planted crops
 - Other programs: SURE, CRP, EQIP, etc.
 - Landlord personalities and relationships
- “Every producer will have a totally different situation and the ACRE rules will work differently for each of them.” (Greg Biba, WI FSA)

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ACRE Overview

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ACRE Payment Triggers

- ACRE payments have two triggers
 - Actual State Revenue must be less than State ACRE Guarantee
 - Actual Farm Revenue must be less than Farm ACRE Guarantee
- Purpose: tie payments to local conditions and pay farmers only when have losses

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State ACRE Guarantee

- 5-Year Olympic average of state yield per planted acre x 2-Year national price for marketing year x 90%
 - USDA-NASS Yield per planted acre
 - Olympic average: drop highest & lowest
 - Marketing year price: Sept 1 to Aug 31
 - Finish 2009 marketing year Sept 2010

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ACRE State Yields

- NASS yield/planted acre fine for most crops
- Corn the exception, NASS counts silage as planted acres, but does not yield any grain
 - 20%-30% WI planted acres are silage
 - NASS corn yield per planted acre low in WI = 108 bu for 2004-2008
- FSA adjusted NASS data for silage, so more reasonable, 138 bu/ac for 2004-2008

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WI ACRE State Yields

Year	Corn	Soybeans	Wheat	Oats
2004	135	33.5	55.4	65
2005	148	43.0	52.2	64
2006	142	43.5	76.1	63
2007	135	40.0	66.8	67
2008	136	34.5	63.4	62
ACRE	138	39.0	61.9	64

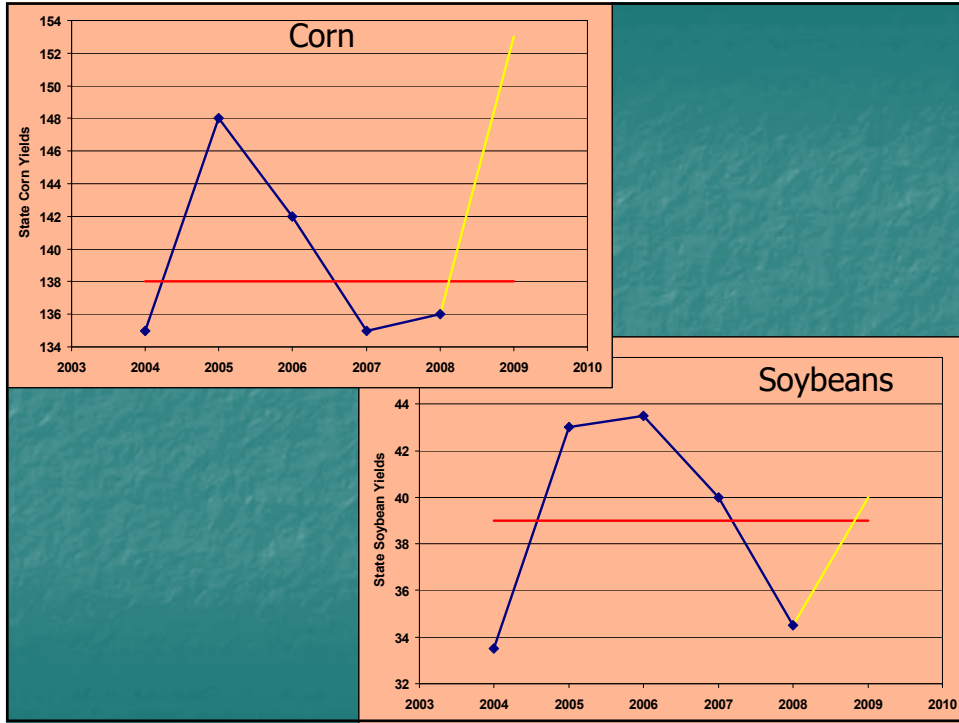
2 or 3 times out of the last 5 years, actual state yield below ACRE benchmark yield

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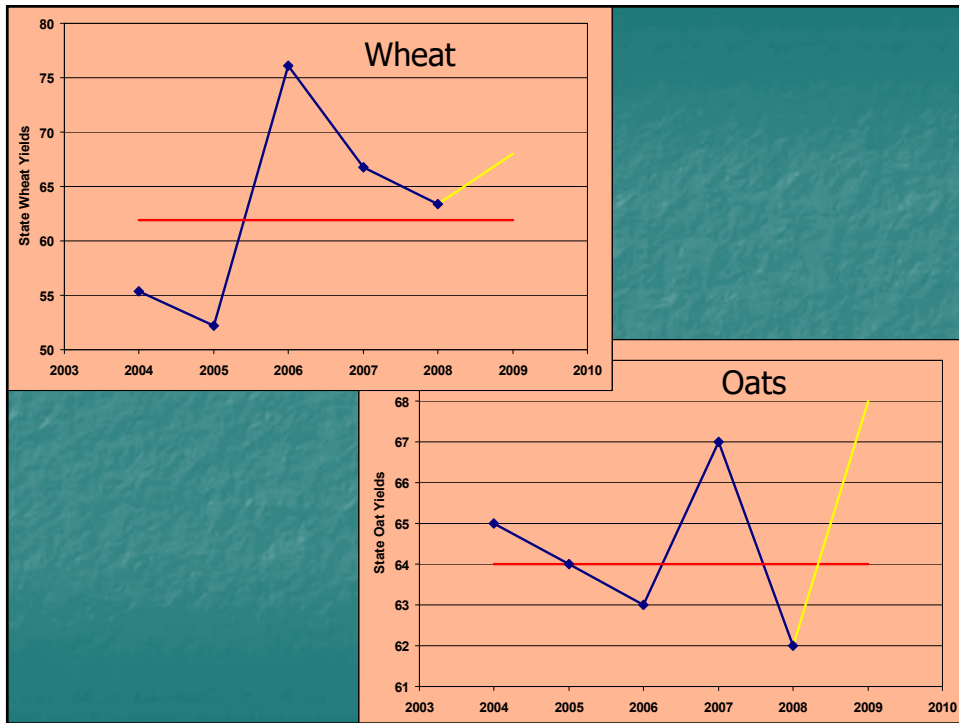
What happened in 2009?

- Bizarre weather in 2009
 - Wet spring—Reduced planted acres
 - Cool summer and fall—Worry about early frost
 - Wet fall—Delayed harvest, some still standing
- NASS announced preliminary estimates of 2009 yields on Jan 13, 2010
 - Record yield for corn (153), high yields for soybeans (40), wheat (68) and oats (68)
 - Actual State Yields higher than ACRE benchmarks

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National Marketing Year Average Price

- Corn & Soy marketing year Sep 1 to Aug 31
- For 2009, ACRE uses avg of 2007 and 2008
 - 2007: \$4.20 corn & \$10.10 soybeans
 - 2008: \$4.06 corn & \$9.97 soybeans
- 2009 ACRE guarantees
 - \$4.13 corn and \$10.04 soy
 - \$6.63 wheat and \$2.89 oat prices
- Will not know prices when/if sign up for ACRE 2010

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2009 State ACRE Guarantee

- 90% x Benchmark State Yield x 2-Year National MYA price
- 2009 State ACRE Guarantee set Oct 2009
 - Corn: $90\% \times \$4.13 \times 138 = \mathbf{\$512.95/ac}$
 - Soybeans: $90\% \times \$10.04 \times 39 = \mathbf{\$352.40/ac}$
 - Wheat: $90\% \times \$6.63 \times 61.9 = \mathbf{\$369.36/ac}$
 - Oats: $90\% \times \$2.89 \times 64 = \mathbf{\$166.46/ac}$
- State ACRE Guarantee cannot change more than 10% from previous year

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Farm ACRE Guarantee

- 5-year Olympic avg farm yields x 2-year avg national price + crop insurance premiums paid
- Same prices, your yields instead of state's, plus add crop insurance premiums

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Farm ACRE Guarantee

- Establish historical farm yields 2004-2008
 - Crop insurance or similar records
 - Silage: number of loads, or other measures, then FSA help convert to grain equivalents
 - Silage & Grain: Carry grain yields over to silage acres
 - Continuity rules apply: Cannot drop or "lose" records for bad years

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Farm ACRE Guarantee for Farmers without yield records

- Use yield "plugs" = 95% of NASS county avg yield, officially posted by FSA
- Get max of own yield & plug for each year
- Give "benefit of the doubt" for sign-up
- **Begin keeping production records**
- Each year FSA drops one plug
- Accurate reporting of acreage intentions

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Dane County ACRE Yield Plugs

Year	Corn	Soybeans	Wheat	Oats
2004	154.3	42.2	52.3	56.0
2005	152.9	49.6	60.9	62.5
2006	163.6	49.6	82.9	74.9
2007	145.0	46.4	70.3	74.4
2008	126.1	34.3	60.4	59.2
Olympic Avg	151	46	64	65

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ACRE Payments

- If **BOTH** triggers satisfied, then ACRE payment calculated as Planted Acres x 83.3% x (Farm Yield/State Yield) x (State Guarantee – Actual State Revenue)
- Planted or considered planted acres
- 83.3% (or 85%) standard multiplier
- (Farm Yield/State Yield) adjusts for your farms' greater yield potential
- "Income Loss" = State Guarantee – Actual State Revenue

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ACRE payments for 2009?

- State yields: 150 corn & 40 soybean
- State guarantees: \$512.95 and \$352.40
- Need national MYA prices below \$3.42 and \$8.81 to meet state triggers
 - Still need to meet farm trigger too
- Prices Sep-Dec 2009: corn averaged \$3.53 and soybeans averaged \$9.67
 - **With high state yields, need avg prices of \$3.36 and \$8.38 for rest of market year for ACRE payments for 2009 crop year**

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ACRE Flexibility Advantage: Base Acres vs Planted Acres

- Base acres establish total acres eligible for ACRE payments, but not your eligible crops
- Suppose farm has 50 ac of oat base, but plants 100 ac of corn
 - Give up 20% of oat DP & enroll 50 corn acres in ACRE, even if farm has no corn base acres
- Suppose farm has 50 ac of corn base, but just seeded it down to alfalfa
 - Can't enroll alfalfa in ACRE, stay in DCP until later
- Note: Cannot establish new base acres

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ACRE Summary

- Very quick overview, work out ACRE vs DCP details for your farms
 - FSA ACRE calculator to enter your farm information www.fsa.usda.gov/dcp
 - See county FSA office for more help
- ACRE will have an annual signup period
 - 2010 currently open until June 1, 2010
- ACRE irrevocable choice, be sure want to do it
- All landowners & tenants must sign election form
- After that, then fill out ACRE enrollment form

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Questions on How ACRE works?

Quick Overview of
ACRE Sign-up Data & Research

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Farm Survey of ACRE Intentions

- Risk management survey of farmers in WI, TX, NC, MS in Mar-Apr 2009
- ACRE Question:
“Which of the following farm program options are you more likely to choose?”

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	WI	MS	NC	TX
Switch to ACRE in 2009	13 (3%)	4 (2%)	10 (5%)	2 (1%)
Wait, maybe switch after 2009	124 (32%)	41 (24%)	60 (27%)	75 (26%)
Stay in DCP for this Farm Bill	205 (54%)	112 (67%)	127 (58%)	194 (68%)
Not in Commodity Programs	41 (11%)	11 (7%)	23 (10%)	14 (5%)
Total	383	168	220	285

If you were hesitant and unsure, you were not alone!

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2009 Sign-up Data

- 2,601 WI FSA farms signed up for ACRE **(3.5% of eligible)**
- 371,433 base acres enrolled (7.5%)
- Survey estimate close to actual number of WI farms

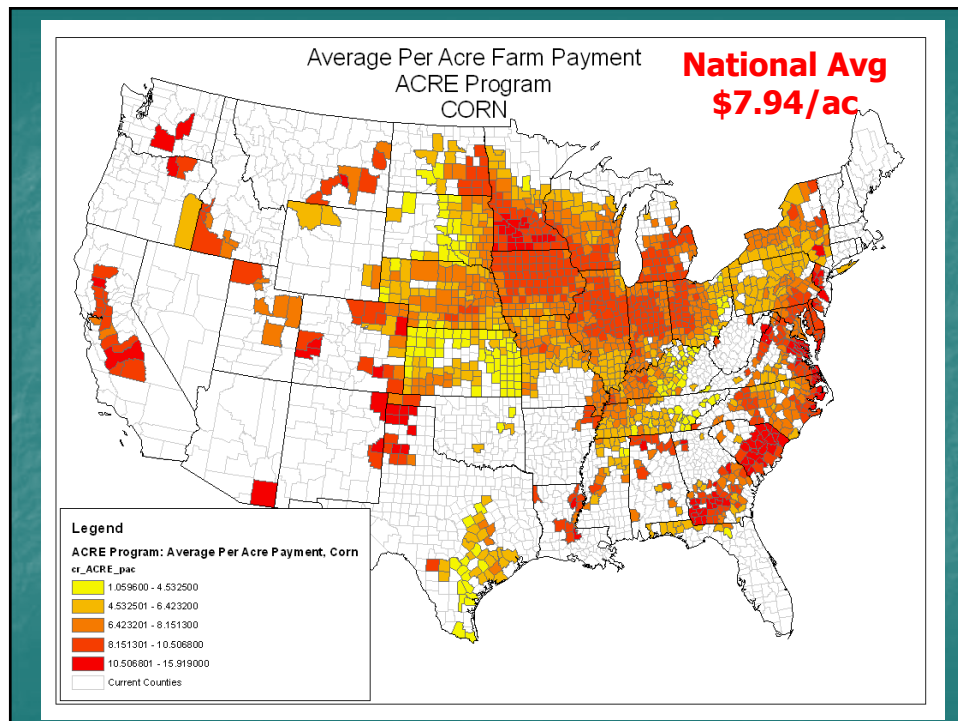
Crop	Farms	Base Ac
Corn	2,579	275,623
Soybeans	1,878	73,286
Oats	1,067	11,457
Wheat	641	8,719
Barley	343	2,272

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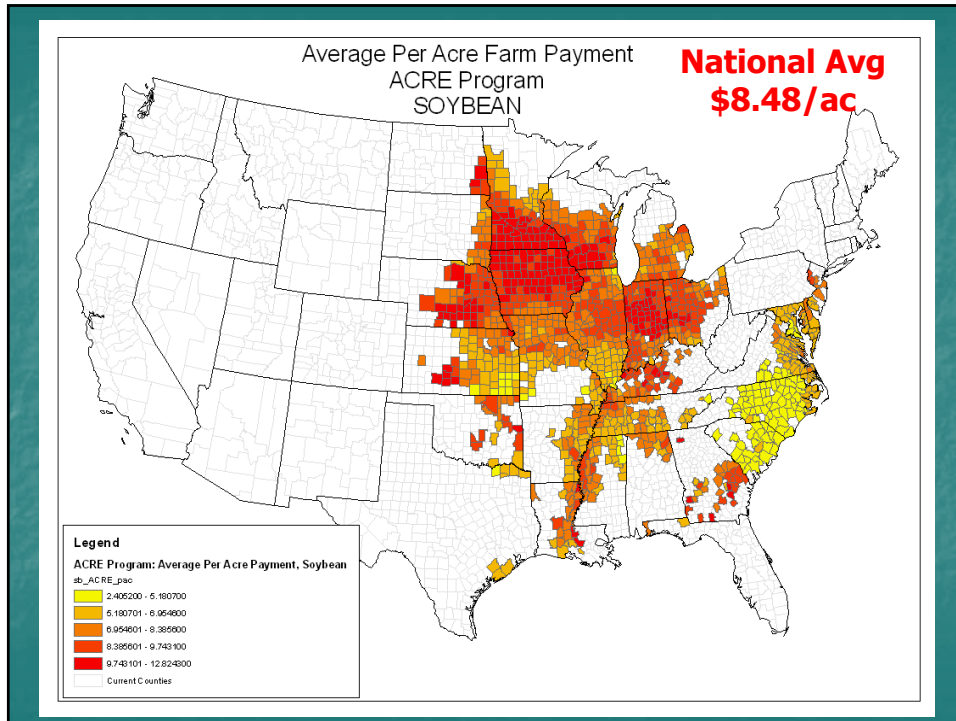
ACRE Simulations

- Keith Coble, Ag Econ, Mississippi State
- Robert Dismukes and Christine Arriola, USDA-ERS
- Simulate counties to predict ACRE payments
 - Representative farms with county average yield and variability to match APH premiums
 - Price variability based on CBOT Dec corn futures historical variability over last few years
 - Run to predict 5 years into the future 1000 times

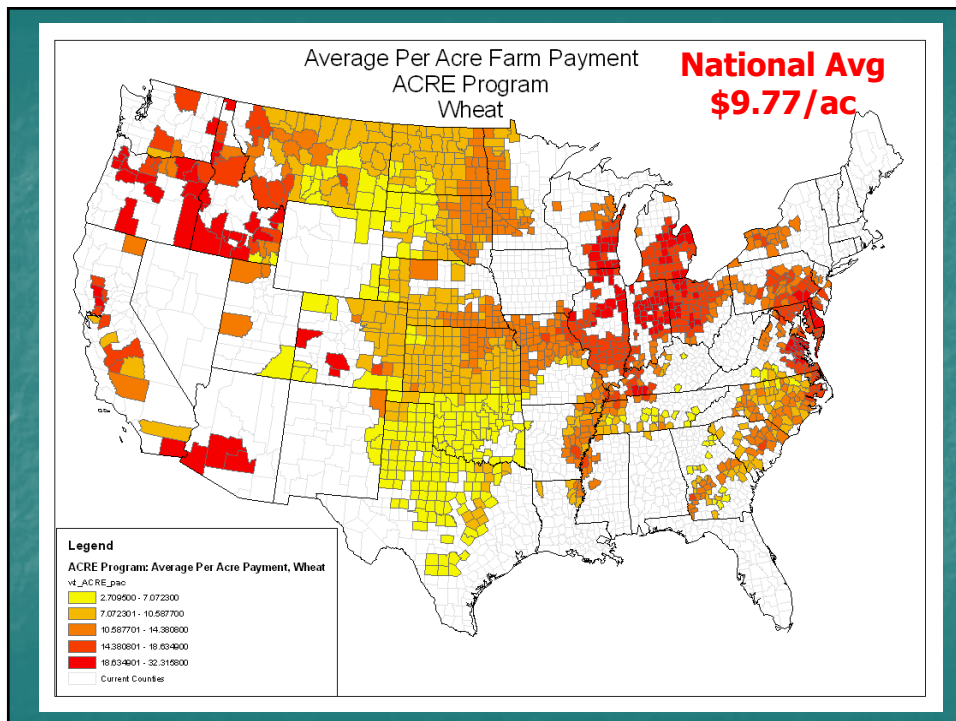
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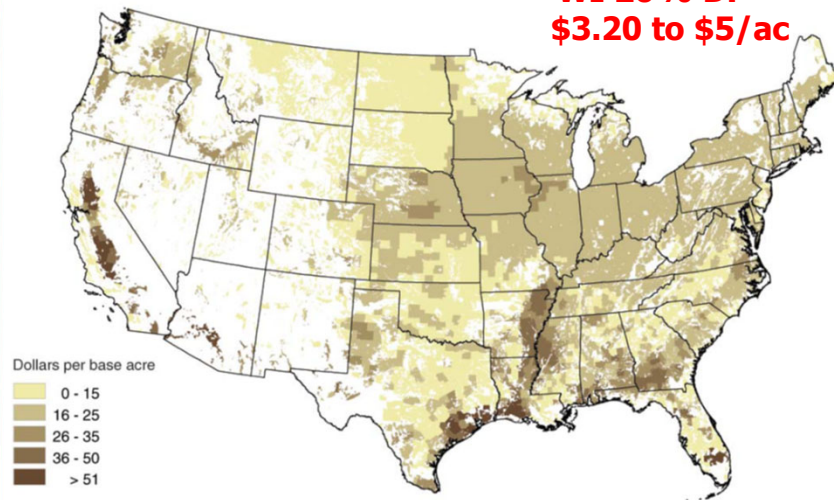


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Direct Payments (\$/ac)

Projected direct payments per base acre under the 2008 Farm Act

**WI 20% DP =
\$3.20 to \$5/ac**



Source: USDA, Economic Research Service analysis of data from USDA, Farm Service Agency.
<http://www.ers.usda.gov/Publications/ERR84/ERR84.pdf>

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Main Point

- ACRE looks valuable for Wisconsin farmers
 - Farm with average yield and typical variability on average should receive ACRE payments > 20% DP
- Farms with higher average yields will get even more, since have the Farm:State average yield ratio multiplier
 - But are they less likely to meet farm trigger???
- Each farm and farmer is different, no one is typical or average

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Integrating Crop Insurance and ACRE

- Most WI farmers use crop insurance, percentage grows each year
- How to best use this new programs with crop insurance?
- ACRE provide some protection from bad income years, a safety net so US maintains a productive ag sector
- Use them to your advantage within the rules

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ACRE: not really much of a risk management benefit

- Coble et al.'s simulation analysis shows, ACRE reduces farm income variability very little—CRC helps much more
- ACRE a subsidy program, not a risk management program
 - Money paid late, weakly tied to actual prices & yields
 - How much did counter cyclical payments help your risk management?

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ACRE and Crop Insurance

- Don't sweat too much about ACRE decision
 - Some benefit to ACRE on average over the long run, but not large \$/ac change
 - Doubt that DP/ACRE payments are what's keeping you farming
 - Treat ACRE/DP as nice side dish/condiment, not the meat and potatoes of farming
 - ACRE payments mostly driven by lower than average prices over the marketing year, but hopefully you can do a better job marketing than national average price

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Any Final Questions on ACRE?

Let's Start SURE

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SURE: Supplemental Revenue Assistance Payments

- New comprehensive permanent disaster program for crop farmers to replace ad hoc aid
- Whole farm revenue guarantee added on top of crop insurance guarantees
- If actual farm revenue below SURE guarantee, SURE pays up to 60% of the difference
 - \$100,000 SURE guarantee, \$90,000 actual revenue, receive 60% of ($\$100,000 - \$90,000$) = \$6,000
- **Free increase in your crop insurance coverage, but at whole farm level**

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SURE Guarantee

- Sum of all crop insurance guarantees for whole farm increased by 15%, capped at 90%
- If only a one crop farm, then
 - 75% coverage now $75\% \times 1.15 = 86.25\%$
 - 80% coverage now $80\% \times 1.15 = 92\%$, cap at 90%
 - 85% coverage now $85\% \times 1.15 = 97.75\%$, cap at 90%
- NAP policies use 120%, not 115%
- American Recovery and Reinvestment Act
 - Higher than 115% for 2008 SURE guarantees
 - Especially for low coverage levels

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SURE Actual Revenue

- Actual yields x USDA marketing year average price (Sept-Aug) (**Not CBOT**)
- Plus crop insurance indemnities, including replant and prevented planting
- Plus 15% of DP's, all CCPs & ACRE payments, all proceeds from Marketing Assistance Loans
- Plus other disaster payments received

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The devil is SURE in the details!

- This the general idea, lots of details
 - 19 page explanation in Federal Register
 - 11 page SURE Backgrounder white paper
- Farm Bill late, took time to work out details
- American Recovery & Reinvestment Act made changes
- I'll cover a few that I think matter, but are more
- Your county FSA office should have all details, were finalized a few weeks ago

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SURE Eligibility Details

- Produce in a disaster county or contiguous county or suffer 50% production loss
- Suffer at least 10% production loss on at least 1 crop from a natural disaster
(Price drops alone will not trigger SURE)
- Satisfy the Risk Management Purchase Requirement
 - Buy crop insurance!

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Risk Management Purchase Requirement Details

- Must have insurance for all crops of economic significance on farm
 - Economic Significance: crop contributes at least 5% of expected total farm crop revenue
 - Need not insure forage for grazing, but hay must be insured
 - Exclusions: NAP fee exceeds 10% of the value of NAP policy

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Losses not Covered Details

- Not a natural disaster
- Poor management
- Due to conditions outside applicable year
- Crop not to be harvested during applicable year
- Electrical brown out
- Losses of crop by-products (stover, straw)
- First year seedlings of forage crops
- **More details: contact county FSA office**

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SURE Calculator

- National FSA web page has many details, but likely need county FSA offices to help
- <http://www.fsa.usda.gov/FSA/webapp?are=a=home&subject=diap&topic=sure>
- New SURE Producer Calculator on web for farmers to use (Jan 11, 2009)
- Be sure have the newer SURE calculator

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Questions?

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Integrating Crop Insurance and SURE

- Sign-up for SURE!!!
- Free increase in crop insurance coverage at the whole farm level—a real risk management benefit
 - Safety net for your farm income, what really matters
 - Some farm situations make SURE eligibility difficult or cumbersome, but likely worth it

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Integrating Crop Insurance and SURE

- Made rules so SURE not so cumbersome as it seemed at first
 - Don't have to insure your pasture now!!!
 - Economic significance check now
- Sweetens crop insurance so farmers rely on crop insurance for disaster aid, not ad hoc programs

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Using SURE with Insurance

- **SURE increases your effective coverage at farm level for free, so can cut back on crop coverage level you pay for**
 - 60% CRC + SURE = 69% farm coverage
 - 65% CRC + SURE = 74.75% farm coverage
 - 70% CRC + SURE = 80.5% farm coverage
 - 75% CRC + SURE = 86.25% farm coverage
 - 80% CRC + SURE = 90% farm coverage
 - 85% CRC + SURE = 90% farm coverage
- 75% CRC + SURE gives you slightly better than 85% CRC alone, so why buy 85% CRC?

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Summary

- Think about ACRE
 - Probably will increase your government payments on average over the long term a few dollars per base acre
 - Not a big risk management benefit, but the extra money will be nice
- Sign up for SURE
 - Clearly worth the free increase in coverage
 - Evaluate whether want to cut back on crop insurance coverage levels

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Questions?

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WI vs. neighboring states % planted acres insured in 2007

State	Corn	Soybeans	Wheat
IA	92%	75%	24%
IL	78%	71%	47%
MN	91%	93%	91%
MI	67%	66%	56%
WI	64%	70%	41%

WI in 2004: 54% corn, 63% Soybeans, 33% Wheat

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WI corn policies in 2008

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	6.5%	9.8%	9.7%	1.03
APH BuyUp	12.2%	18.5%	37.9%	2.43
CRC BuyUp	40.7%	61.6%	55.4%	3.24
GRIP BuyUp	4.9%	7.5%	4.2%	1.21
GRP CAT	0.2%	0.3%	0.1%	1.00
GRP BuyUp	1.5%	2.3%	2.8%	1.11
All Total	66.1%			2.83

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WI soybean policies in 2008

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	4.9%	6.9%	6.7%	1.05
APH BuyUp	9.0%	12.6%	20.2%	1.93
CRC BuyUp	51.2%	71.7%	67.5%	2.66
GRIP BuyUp	4.4%	6.1%	3.7%	1.19
GRP CAT	0.1%	0.1%	0.1%	1.00
GRP BuyUp	1.8%	2.6%	1.9%	1.01
All Total	71%			2.41

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Corn Coverage Levels in Dane County 2008

Cvg	CRC		APH	
	Policies	Acres	Policies	Acres
50	1	215	78	17,868
55	1	94	2	89
60	6	777	1	285
65	44	9,065	52	5,957
70	147	32,588	40	3,651
75	146	33,329	19	1,486
80	20	6,802		
85	12	5,192		

Most Popular

CRC: 70%-75%

APH: 50% CAT
and then 65%

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Soybean Coverage Levels in Dane County 2008

Cvg	CRC		APH	
	Policies	Acres	Policies	Acres
50	2	433		
55	1	60		
60	6	896	1	96
65	28	3,579	27	1,923
70	101	11,020	22	1,770
75	130	16,455	18	938
80	46	4,550	1	89
85	21	4,562	2	50

Most Popular

CRC: 70%-75%

APH: 65% and
no CAT

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GRP/GRIP Coverage Levels in Dane County 2008

Plan	Cvg	Corn		Soybeans	
		Policies	Acres	Policies	Acres
GRIP	70			1	238
	85	1	84		
	90	23	6,058	6	595
GRP	70	1	33		
	75	1	101		
	90	4	488	2	132

Most Popular: GRP/GRIP: 90%

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Summary

- Lots of grain acres insured, more could be
- CRC most popular among those buying insurance
 - Slightly larger than average sized farms buy it
 - Use more than average number of units
 - 70-75% coverage level popular
- APH popular among smaller farms (cheap)
 - Use fewer than average number of units
 - CAT (corn) and 65% coverage level popular
- GRIP (and GRP) used by some of larger farms
 - 90% coverage level most popular

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Experience with Crop Insurance

- Loss Ratio measures insurance performance
- Loss Ratio = Indemnities/Premiums
 - Loss Ratio of 1.5 means, on average, \$1.50 in indemnities paid for every \$1.00 of premiums
- Crop insurance: Subsidized premiums, farmers and government each pay part
 - **Program** loss ratio = Indemnity/(Govt. + Farmer Premium)
 - **Farmer** loss ratio = Indemnity/Farmer Premium
- Farmers care about farmer loss ratio

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WI Crop Insurance for Corn in 2007

	total prem. /A	farmer prem. /A	indem./A	program loss ratio	farmer loss ratio
APH CAT	7.48	--	1.97	0.26	--
APH BuyUp	28.30	11.48	29.64	1.05	2.58
CRC BuyUp	53.03	23.16	42.75	0.81	1.85
All Total	45.48	19.50	30.97	0.68	1.59

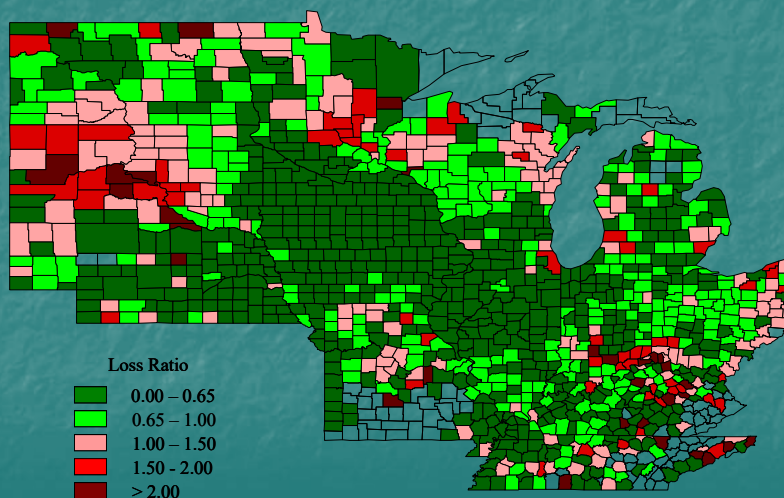
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WI Crop Insurance for Soybeans in 2007

	total prem. /A	farmer prem. /A	indem./A	program loss ratio	farmer loss ratio
APH CAT	2.86	--	0.64	0.22	--
APH BuyUp	12.77	5.28	10.48	0.82	1.99
CRC BuyUp	26.36	11.87	23.74	0.90	2.00
All Total	23.44	10.40	18.12	0.77	1.74

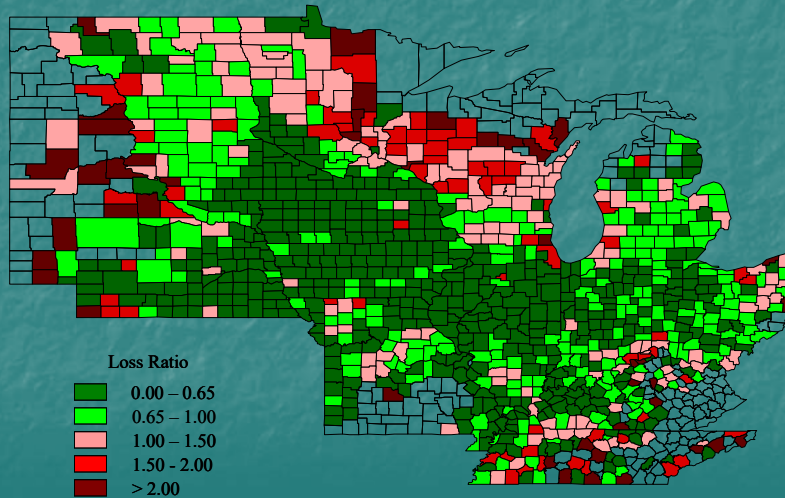
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APH+CRC+RA Average County Program Loss Ratios for Corn 1995-2007



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APH+CRC+RA Average County Program Loss Ratios for Soybeans 1995-2007



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Main Point

- Farmers, on average over the whole state, generally win on crop insurance policies
 - Especially in the north
 - Especially for soybeans
- Payments come when you need them
 - Years 1-3: pay \$1 premium, no indemnity
 - Year 4: pay \$1 premium, \$8 indemnity
 - 4-Year Avg Loss Ratio = $8/4 = 2.0$

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