

AN UPDATE ON FEDERAL CROP INSURANCE NOW AND IN THE FUTURE

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Presentation Overview

- Quickly review Wisconsin crop insurance participation and experience data
- Examine impact of recent changes
 - Combo Policy, GRIP/GRP subsidies, Trend-Adjusted APH, Enterprise unit discounts, Biotech Endorsement
- Drought Relief
 - Cover crop rules
 - Forage Insurance
- Farm Bill
 - Supplemental Coverage Option
 - Conservation compliance for crop insurance

WI Crop Insurance Policies: Corn & Soybeans

| | Individual (Farm) | Area-Wide (County) |
|---------|--|--|
| Yield | <p>YP Yield Protection</p> | <p>GRP Group Risk Plan</p> |
| Revenue | <p>RP Revenue Protection</p> | <p>GRIP-HR Group Risk Income Protection With Harvest Revenue Option</p> |
| | <p>RP-HPE: Harvest Price Exclusion</p> | <p>GRIP: without Harvest Revenue Option</p> |

- **Catastrophic coverage (CAT):** For YP, GRP, GRIP
- **AGR-Lite:** Insure Schedule F income

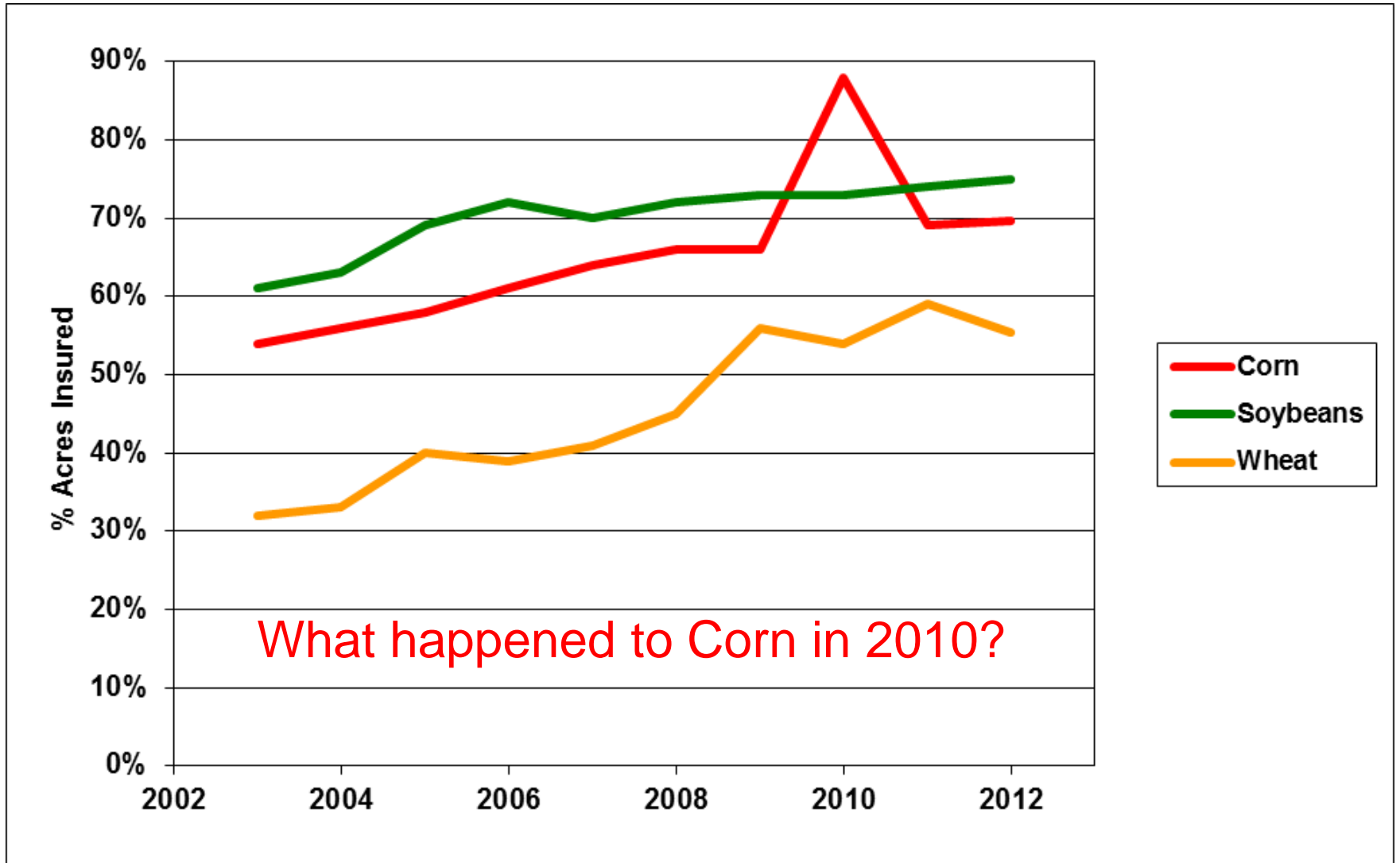
WI vs. neighboring states

% Planted Acres Insured in 2011

| State | Corn | Soybeans | Wheat |
|-------|------|----------|-------|
| IA | 90% | 91% | 34% |
| IL | 81% | 78% | 62% |
| MN | 94% | 94% | 94% |
| MI | 72% | 71% | 63% |
| WI | 69% | 74% | 59% |

Historically WI has had a low participation rate

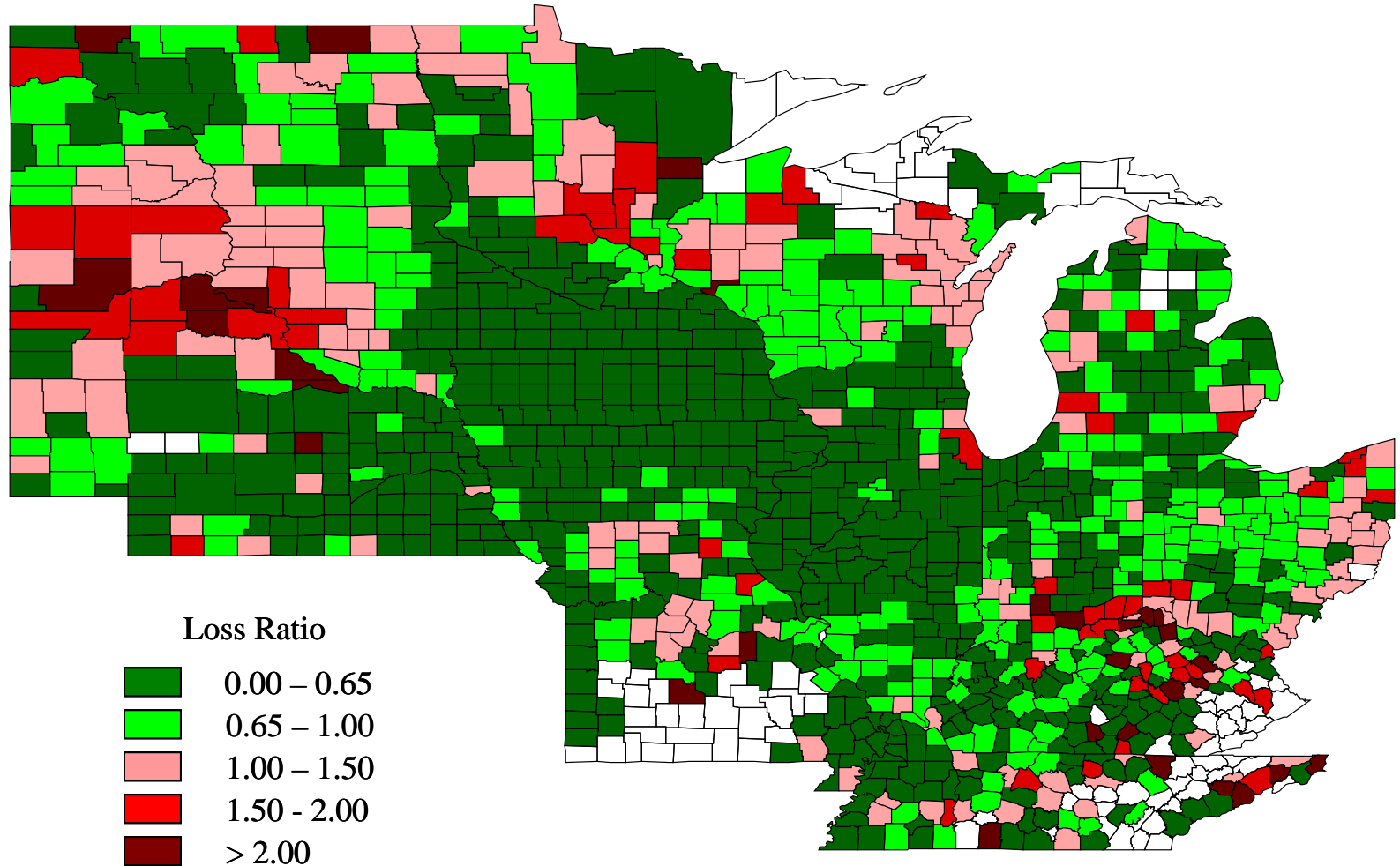
Trends in WI Crop Insurance Participation



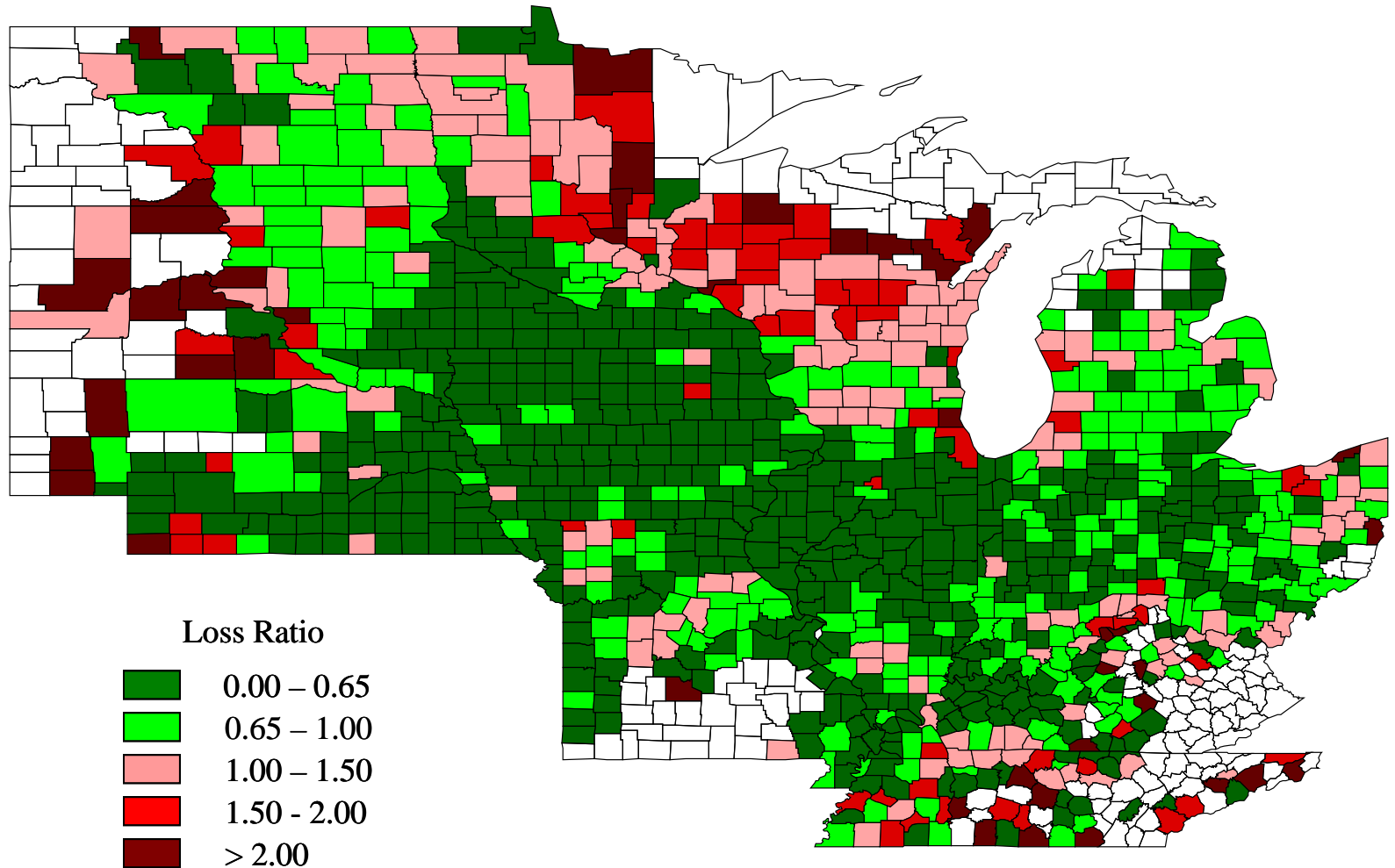
Experience with Crop Insurance

- 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/(Total Premium)
= Indemnity/(Govt. + Farmer Premium)

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



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



Implications

- Low program loss ratios in Corn and Soybean belts
- Means these farmers are subsidizing crop insurance for everyone else
- RMA has been receiving pressure to improve rates to improve loss ratios in these areas
- Refined premium rating methods with Combo policy, trend adjusted APH, etc.

Several Recent Changes

- Combo policy rolled out in 2011
 - Rating adjustments, plus brought HPE to WI
 - Did WI farmers change policies or adjust coverage?
- GRIP/GRP: Premium subsidies decreased and rating methods changed
 - Did GRIP popularity change?
- Trend-Adjusted APH: new for 2012
 - Did farmers reduce coverage levels?
- Enterprise unit subsidies increased in 2009
 - Did WI farmers move to fewer units?
- Biotech Endorsement (pilot program) ended in 2011
 - How much premium savings were “lost”

Combo Policy

| Combo Product | Policy Replaced |
|--|---|
| Yield Protection | APH Yield Insurance |
| Revenue Protection | CRC Revenue Insurance Revenue Assurance with Harvest Price Option (RA-HP) |
| Revenue Protection with Harvest Price Exclusion | RA with Base Price Option (RA-BP) Income Protection (IP) |

Policies in RED were not previously available in Wisconsin

Have WI Farmers shifted policies with Combo changes?

Have WI farmers shifted policies used in recent years

CORN: % insured corn acres under each policy

| Year | RP/CRC | YP/APH | All GR |
|------|--------|--------|--------|
| 2009 | 69% | 22% | 9% |
| 2010 | 71% | 21% | 8% |
| 2011 | 76% | 16% | 7% |
| 2012 | 81% | 14% | 4% |

Farmers moving towards RP from YP and GRIP/GRP

Have WI farmers shifted policies used in recent years

SOYBEAN: % insured corn acres under each policy

| Year | RP/CRC | YP/APH | All GR |
|------|--------|--------|--------|
| 2009 | 77% | 16% | 8% |
| 2010 | 82% | 13% | 5% |
| 2011 | 84% | 11% | 4% |
| 2012 | 88% | 10% | 1% |

Farmers moving towards RP from YP and GRIP/GRP

Revenue Protection vs. Revenue Protection with Harvest Price Exclusion

- RMA announces Base Price before March 15 based Feb Average of Dec futures prices
- Revenue Guarantee: $APH \text{ Yield} \times \text{Base Price}$
- RMA announces Harvest Price in Oct/Nov based on Dec futures prices in Oct/Nov
- **If Harvest Price higher than Base Price**
 - **RP Revenue Guarantee increases**
 - **RP-HPE: no change in Revenue Guarantee**
- RP-HPE does not increase revenue guarantee if price increases between planting and harvest,
- RP-HPE has lower premiums
- Compare RP, RP-HPE and YP

RP vs. RP-HPE vs. YP

(150 bu/ac APH and 70% coverage level)

| Policy | Base Price \$/bu | Gtee \$/ac bu/ac | Harvest Price \$/bu | Gtee \$/ac bu/ac | Actual Yield bu/ac | Actual Rev \$/ac | Indemnity \$/ac |
|--------|---------------------|------------------------|---------------------------|------------------------|--------------------------|------------------------|----------------------------------|
| RP | \$5.00 | \$525 | \$6.00 | \$630 | 75 | \$450 | 630 – 450 = \$180 |
| RP-HPE | \$5.00 | \$525 | \$6.00 | \$525 | 75 | \$450 | 525 – 450 = \$75 |
| YP | \$5.00 | 105 bu/ac | \$6.00 | 105 bu/ac | 75 | \$450 | 5 x (105 - 75) = \$150 |
| RP | \$5.00 | \$525 | \$4.00 | \$525 | 75 | \$300 | 525 – 300 = \$225 |
| RP-HPE | \$5.00 | \$525 | \$4.00 | \$525 | 75 | \$300 | 525 – 300 = \$225 |
| YP | \$5.00 | 105 bu/ac | \$4.00 | 105 bu/ac | 75 | \$300 | 5 x (105 - 75) = \$150 |

RP vs. RP-HPE vs. YP

- If harvest price $>$ base price and low yield, larger indemnity for RP than for RP-HPE
- If harvest price $<$ base price, no difference for RP vs RP-HPE
- Notice: RP-HPE: can do worse than YP if high prices and low yields
 - RP-HPE uses actual higher harvest price to calculate actual revenue, while YP uses actual yield loss at lower base price
- **RP-HPE: worst if low yields and high prices, best if low yields and low prices**

How popular is RP-Harvest Price Exclusion & GRIP without the Harvest Revenue Option?

| Crop | Year | %RP Acres as RP-HPE | %GRIP Acres w/out HRO |
|----------|------|---------------------|-----------------------|
| Corn | 2011 | 2.3% | 7.4% |
| | 2012 | 2.8% | 7.4% |
| Soybeans | 2011 | 1.1% | 13.3% |
| | 2012 | 1.1% | 9.6% |

- Few WI farmers use RP-HPE
- GRIP without HRO (equivalent to RP-HPE) relatively more popular than RP-HPE, especially for soybeans

Have WI farmers shifted policies used in recent years?

- Trend was towards increasing acres under RP, but trend accelerated in recent years
 - 10 % points more insured acres under RP in 2 years
 - 6 % points fewer insured acres under YP in 2 years
 - Proportion of insured acres under GRP/GRIP cut in half in 2 years, with bigger drop for soybeans: GRIP not used much anymore
- Few WI farmers use RP-HPE
- GRIP without HRO (equivalent to RP-HPE) has about 10% of GRIP insured acres, but GRIP acres declining

GRIP/GRP “Little” Changes

- Reduced premium subsidies: farmers got better subsidy rates for individual policies (RP/YP)
 - 75% RP (most popular): 55% premium subsidy
 - 90% GRIP (most popular): 43% premium subsidy
- Premium rating methods for GRIP/GRP changed, so premium, costs increased as well
- Enterprise and whole farm unit discounts
- Proposing to have GRIP/GRP farmers file APH yield reports: no longer paperless as before
- Recent article in DTN calling these the GRIP Killers

Trend-Adjusted APH new for 2012

- Problem: If yield trending upward, using average of up to 10 years under estimates expected yield
- Implication: APH yields too low, so farmers have to buy higher coverage to get adequate yield guarantee, which means higher premiums due to lower subsidies
- Solution: Trend-Adjusted APH increases APH, so get higher yield guarantee at lower cost
- Farmers can cut coverage level and get same guarantee as with old APH, but at lower cost, or keep same coverage level and enjoy higher effective coverage
- Did WI farmers reduce coverage levels in 2012?

Have WI farmers adjusted coverage in recent years

% Corn RP/CRC Acres by Coverage Level

| Coverage Level | 2010 | 2011 | 2012 |
|----------------|------|------|------|
| 50% | 1% | 1% | 1% |
| 55% | 0% | 0% | 0% |
| 60% | 3% | 2% | 2% |
| 65% | 6% | 5% | 5% |
| 70% | 28% | 26% | 25% |
| 75% | 38% | 40% | 42% |
| 80% | 20% | 20% | 20% |
| 85% | 4% | 4% | 5% |

Even more farmers moving towards 75% coverage level

Have WI farmers adjusted coverage in recent years

% Soy RP/CRC Acres by Coverage Level

| Coverage Level | 2010 | 2011 | 2012 |
|----------------|------|------|------|
| 50% | 1% | 1% | 1% |
| 55% | 0% | 0% | 0% |
| 60% | 2% | 1% | 2% |
| 65% | 5% | 5% | 5% |
| 70% | 25% | 24% | 24% |
| 75% | 38% | 40% | 43% |
| 80% | 23% | 23% | 21% |
| 85% | 7% | 5% | 4% |

Even more farmers moving towards 75% coverage level

Have WI farmers adjusted coverage in recent years

% Corn YP/APH Acres by Coverage Level

| Coverage Level | 2010 | 2011 | 2012 |
|----------------|------|------|------|
| CAT | 38% | 44% | 43% |
| 50% | 6% | 7% | 7% |
| 55% | 1% | 1% | 1% |
| 60% | 6% | 5% | 6% |
| 65% | 15% | 15% | 15% |
| 70% | 21% | 20% | 22% |
| 75% | 11% | 7% | 6% |
| 80% | 2% | 1% | 1% |
| 85% | 0% | 0% | 0% |

CAT policy has gotten more popular

Have WI farmers adjusted coverage in recent years

% Soy YP/APH Acres by Coverage Level

| Coverage Level | 2010 | 2011 | 2012 |
|----------------|------|------|------|
| CAT | 36% | 41% | 40% |
| 50% | 8% | 7% | 7% |
| 55% | 1% | 2% | 2% |
| 60% | 6% | 4% | 6% |
| 65% | 15% | 15% | 15% |
| 70% | 23% | 20% | 21% |
| 75% | 10% | 10% | 8% |
| 80% | 2% | 1% | 2% |
| 85% | 0% | 0% | 0% |

CAT policy has gotten more popular

How have WI farmers changed coverage levels in recent years?

- For farmers using RP: More have moved to 75% coverage level from 70% and 80% coverage levels
 - Increased by 4-5 percentage points
- For farmers using YP: CAT has gotten more popular, moving from 70% and 75% coverage levels
 - Increased by 4-5 percentage points
- My interpretation
- RP users have found the 75% “sweet spot” of high premium subsidies with good return on investment
 - Crop insurance provides a useful benefit, want to get good ROI
- YP users have gotten more cost conscious
 - Crop insurance a necessary evil, minimize the cost

Unit Structure

- Optional Unit < Basic Unit < Enterprise Unit < Whole Farm Unit
- Larger Units: Less likely to trigger indemnities because averaging over more acres, but smaller premiums
- 2008 Farm Bill created Enterprise Units with larger premium subsidies: enterprise unit discounts
- Implemented in 2009 crop year
- Increased premium subsidies to encourage farmers to use enterprise units: 1 unit for all insured crop in county
- Whole farm unit: combine all crops into one unit

Enterprise Unit Discounts

Premium subsidy rates by level of coverage and units.

| Coverage level | Basic and Optional Units | Enterprise Units | Whole Farm Units |
|----------------|--------------------------|------------------|------------------|
| 50% | 67% | 80% | 80% |
| 55% | 64% | 80% | 80% |
| 60% | 64% | 80% | 80% |
| 65% | 59% | 80% | 80% |
| 70% | 59% | 80% | 80% |
| 75% | 55% | 77% | 80% |
| 80% | 48% | 68% | 71% |
| 85% | 38% | 53% | 56% |

Have WI farmers responded?

Average Units per Policy in WI

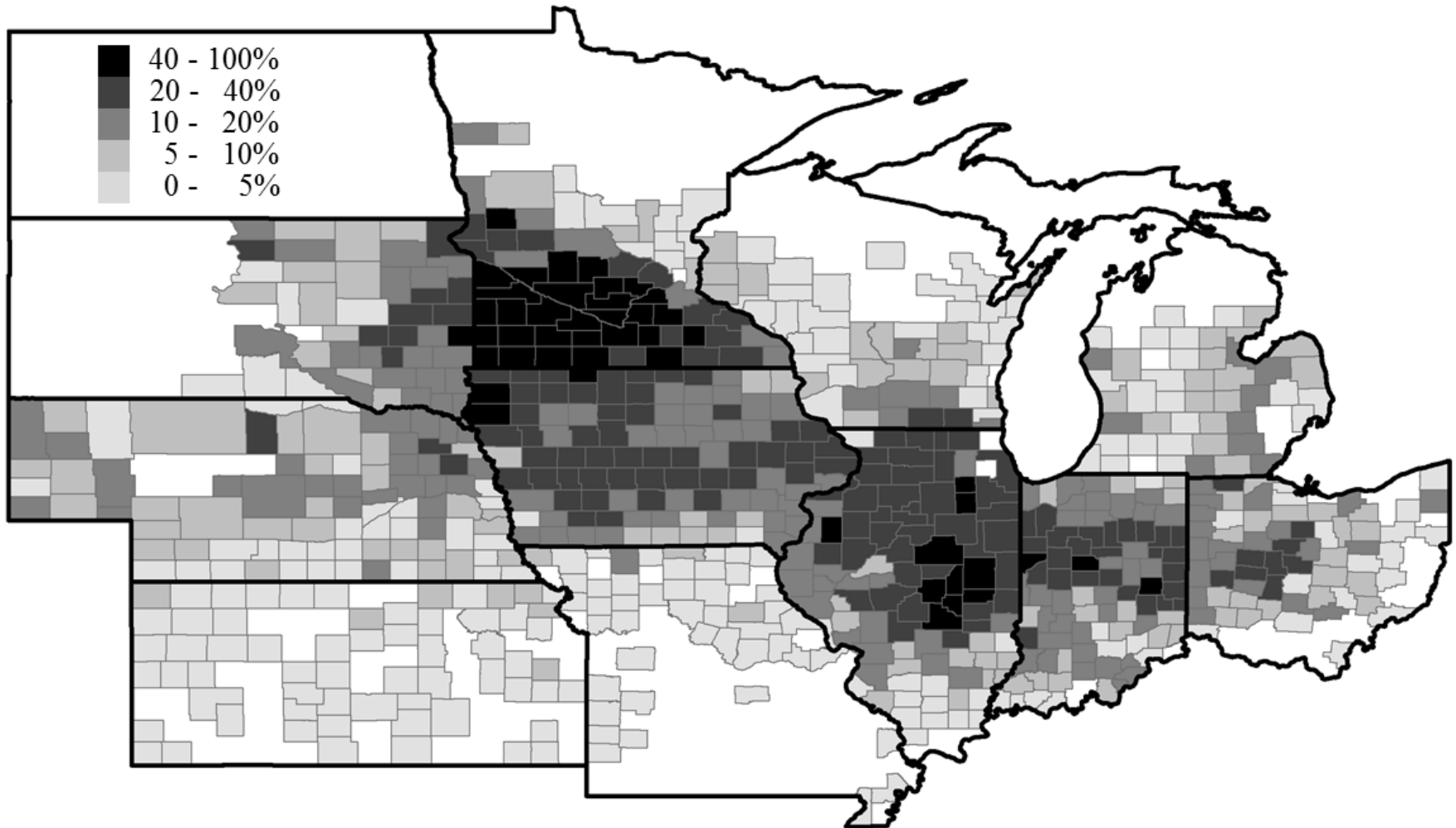
| Year | CORN RP Units/Policy | CORN YP Units/Policy | SOY RP Units/Policy | SOY YP Units/Policy |
|------|-------------------------|-------------------------|------------------------|------------------------|
| 2009 | 2.32 | 2.11 | 2.04 | 1.84 |
| 2010 | 2.13 | 2.08 | 1.89 | 1.71 |
| 2011 | 3.51 | 2.14 | 2.80 | 1.77 |
| 2012 | 3.52 | 2.22 | 2.81 | 1.86 |

- Big jump in average units per policy in 2011 for both corn and soybeans RP, but YP stayed constant
- WI farmers using RP not using Enterprise and Whole Farm units, but using more units per policy: Optional units
- WI farmers using YP: no unit changes

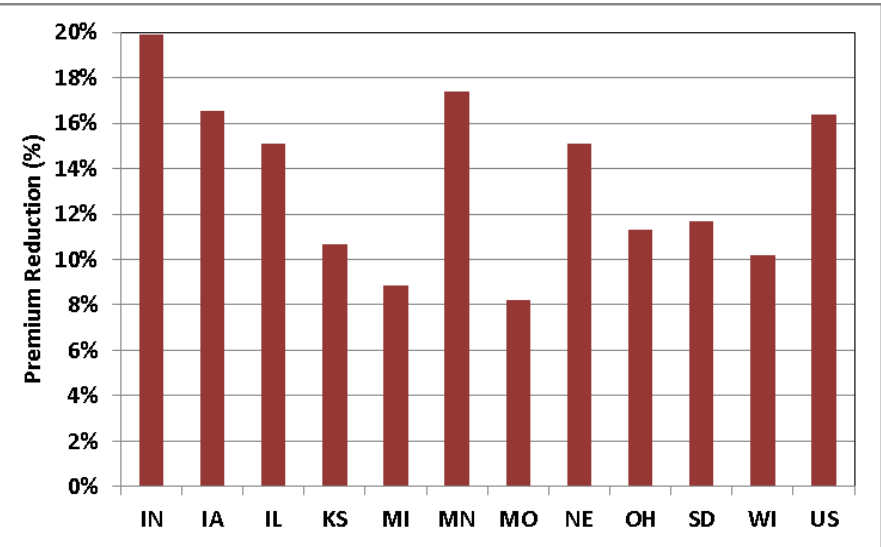
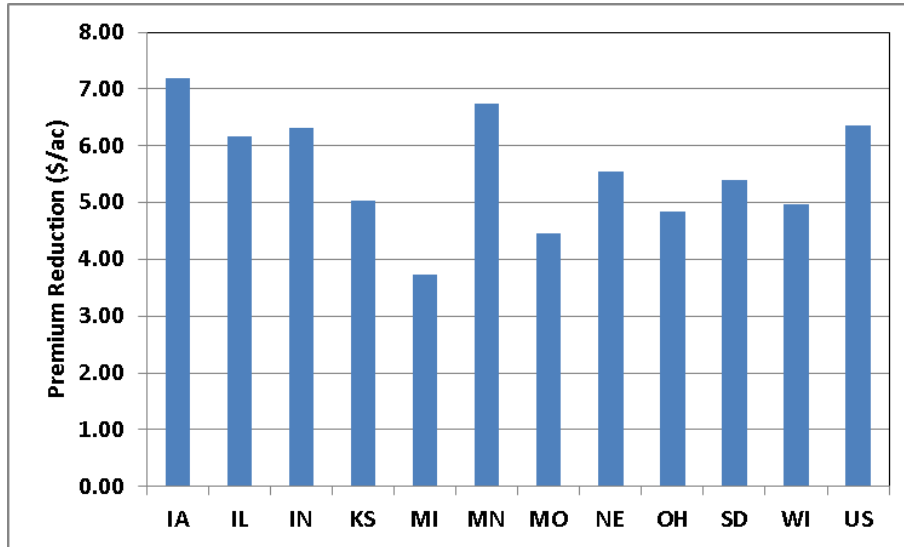
Biotech Endorsement

- In 2008, 4 state (IA, IL, MN, IN) pilot program that reduced premiums for farmers planting approved triple stack (RR, CB-Bt, RW-Bt) corn
- Expanded to WI and other states in 2009
- Pilot program ended so not available in 2012
- How much premium discount was “lost” by WI growers planting triple stack Bt crops when pilot was discontinued?

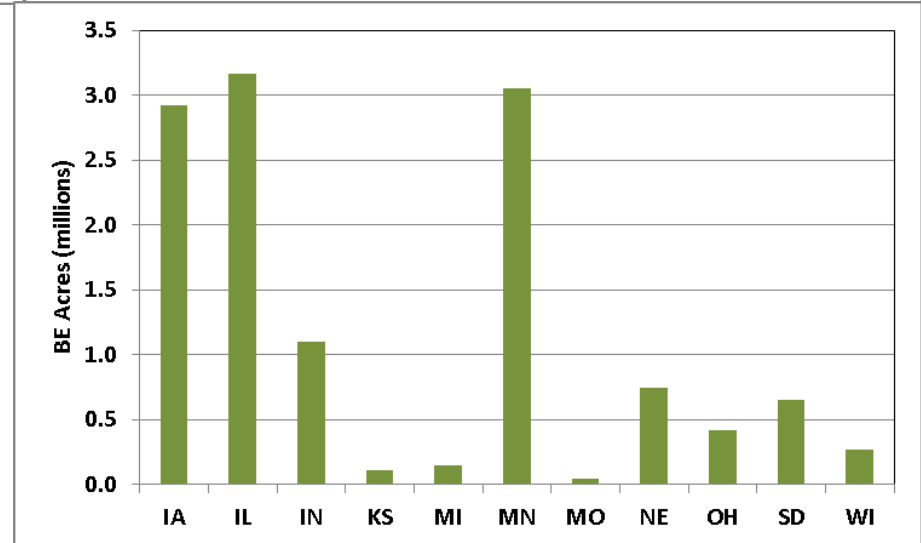
% Corn Planted Acres in BE in 2010



Average BE Impact on Premiums



- BE saved WI growers about \$5/ac (~10%) on premiums in 2010
- WI had 267,500 BE acres, so BE saved WI farmers \$1.33 million



Several Recent Changes

- Combo policy rolled out in 2011
 - Did WI farmers change policies or adjust coverage? **YES, RP became even more popular**
- GRIP/GRP: Premium subsidies decreased and rating methods changed
 - Did GRIP popularity change? **YES, became less popular**
- Trend-Adjusted APH: new for 2012
 - Did farmers reduce RP or YP coverage levels? **NO, little change**
- Enterprise unit subsidies increased in 2009
 - Did WI farmers move to fewer units? **NO, more units per policy**
- Biotech Endorsement (pilot program) ended in 2011
 - How much premium savings were “lost”? **About \$1.33 million**

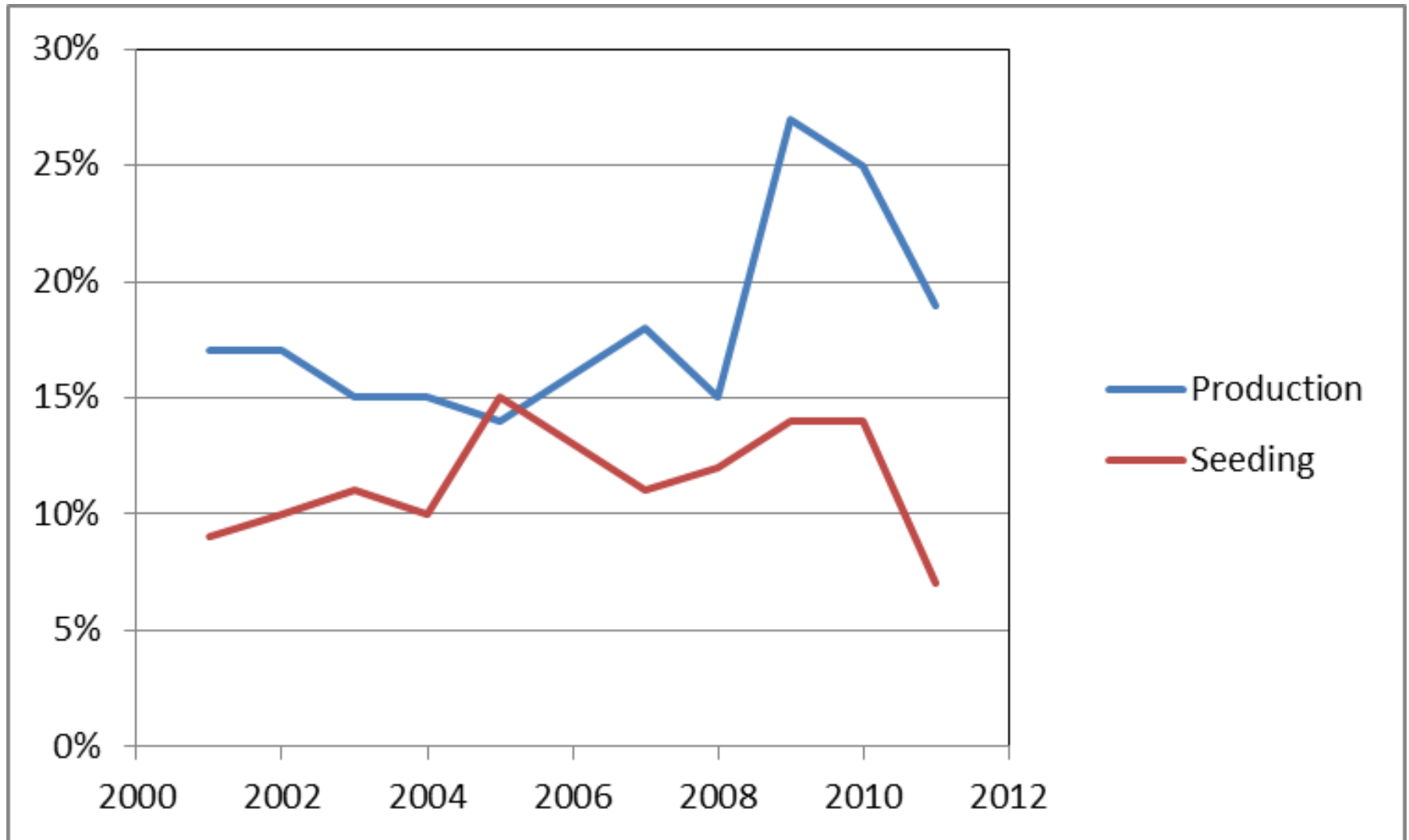
Forage Rule Changes

- Cover crops: RMA rules do not allow insuring a crop planted after harvesting an early season cover crop
 - Rye or oats/pea followed by corn: can't insure the corn
 - Early cut alfalfa followed by corn: can't insure the corn
 - Worried about adequate moisture for the follow crop
- RMA drought response: Emergency Forage: For 2013 only, can insure a crop following a harvested cover crop
 - Likely: harvest by early May, then terminate cover crop
 - Insuring crop planted after early cut alfalfa likely not allowed: annual, not perennial, cover crops
 - Final details announced November 30, 2012

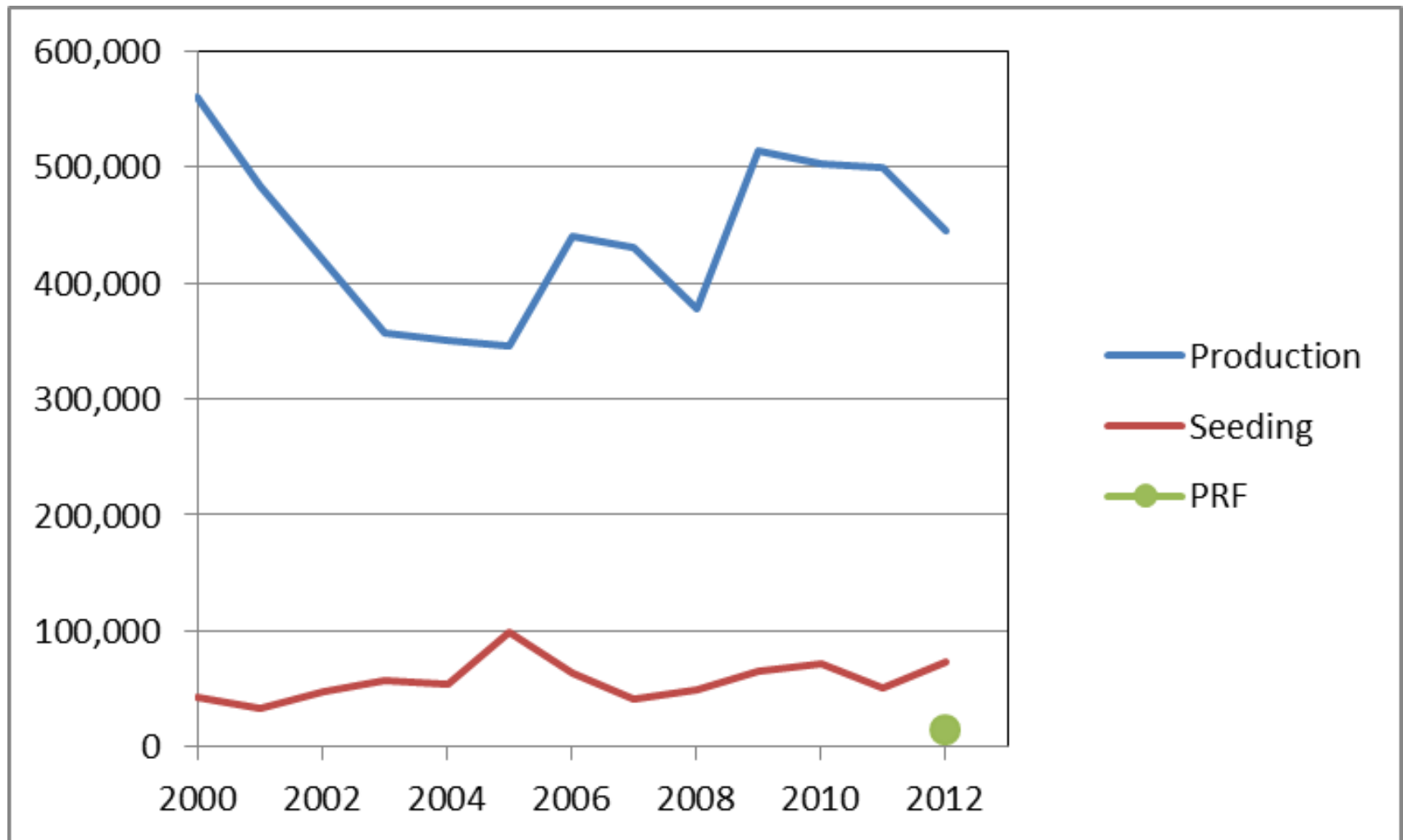
Forage Insurance

- Forage insurance policies sold in WI
- Forage Production: like YP for forage
- Forage Seeding: insures stand establishment
- Pasture Rangeland Forage (PRF): Rainfall Index insurance – indemnities based on rainfall over an area, not actual forage production
 - New in several states, including WI, in 2012
 - Sales closing date for 2013 was September 30, 2012
 - WI: 138 policies sold, 15,400 acres insured, in 2012
- With the drought, will there be a surge in Forage insurance and PRF?

% Forage Acres Insured



Total Forage Acres Insured



2012 Farm Bill?

- Senate passed Farm Bill on June 21
 - Agriculture Reform, Food & Jobs Act (S. 3240)
- House Ag Committee passed Farm Bill July 1
 - Federal Agriculture & Risk Management Act (H.R. 6083)
- 2008 Farm Bill expired on September 30, 2012
- Eventually Congress will pass a Farm Bill: what will it look like in terms of crop insurance?
 - Supplemental Coverage Option
 - Conservation Compliance

Supplemental Coverage Option (SCO)

- Senate and House Ag both create Supplemental Coverage Option (SCO)
- Farmer can buy GRIP policy to cover part of RP crop insurance deductible
- Suppose farmer has 70% RP: means a 30% deductible
- Can buy 90% GRIP coverage as SCO for losses above 10% and less than 30% (when crop insurance kicks in)
- GRIP premium for use as SCO is subsidized at 70%
 - GRIP with 90% coverage level has 55% subsidy
- Both have new revenue support programs (ARC or RLC) and SCO is layered with these

Effect of Revenue Protection Coverage Level on Losses Covered by SCO with ARC

| RP Coverage | Deductible | Farmer | ARC | SCO |
|-------------|------------|--------|-----|-----|
| 85% | 15% | 11% | 10% | 0% |
| 80% | 20% | 11% | 10% | 0% |
| 75% | 25% | 11% | 10% | 4% |
| 70% | 30% | 11% | 10% | 9% |
| 65% | 35% | 11% | 10% | 14% |
| 60% | 40% | 11% | 10% | 19% |
| 55% | 45% | 11% | 10% | 24% |
| 50% | 50% | 11% | 10% | 29% |

Effect of Revenue Protection Coverage Level on Losses Covered by SCO with RLC

| RP Coverage | Deductible | Farmer | RLC | SCO |
|-------------|------------|--------|-----|-----|
| 85% | 15% | 15% | 10% | 0% |
| 80% | 20% | 15% | 10% | 0% |
| 75% | 25% | 15% | 10% | 0% |
| 70% | 30% | 15% | 10% | 5% |
| 65% | 35% | 15% | 10% | 10% |
| 60% | 40% | 15% | 10% | 15% |
| 55% | 45% | 15% | 10% | 20% |
| 50% | 50% | 15% | 10% | 25% |

SCO Main Idea

- SCO layers GRIP with RP and ARC/RLC
- **Farmers can reduce RP coverage and use SCO with “free” ARC/RLC coverage**
- GRIP premium for use as SCO is subsidized at 70%
 - GRIP with 90% coverage level has 55% subsidy
- Problem: “basis risk” for GRIP coverage of RP deductible
 - How often will GRIP pay when farmer has actual loss?
- How will the ARC/RLC payments factor in???

Conservation Policies

- Many worry that with cuts to CRP and other conservation programs and ending of DCP, government will have not policy tools to get conservation practices adopted
- Crop insurance premium subsidies are subsidies, so add strings to them
- Sod Saver: reduced premium subsidies 50% points for 4 years if break native sod for crop production
 - Senate whole US, House Ag if in Prairie Pothole region
- Senate only: Requires Conservation Compliance within 5 years and Wetland Compliance immediately to receive premium subsidies

Quick Summary

- Reviewed WI crop insurance data
- Examine impact of recent changes
 - Combo Policy, GRIP/GRP subsidies, Trend-Adjusted APH, Enterprise unit discounts, Biotech Endorsement
- Drought Relief
 - Cover crop rules
 - Forage Insurance
- Farm Bill
 - Supplemental Coverage Option
 - Conservation compliance for crop insurance

Thanks for Your Attention!

Questions?

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