

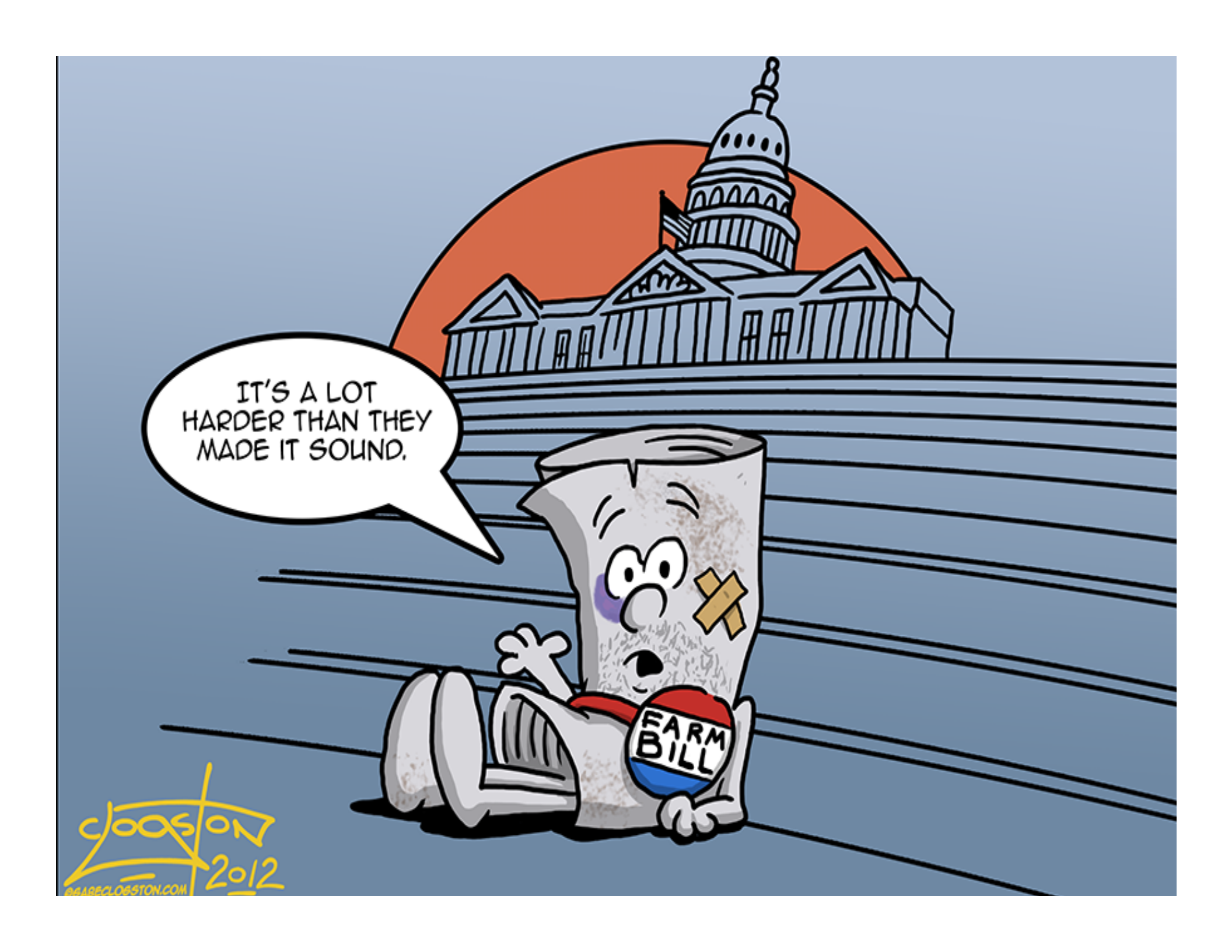
2014 Crop Insurance Decisions March 6, 2014

Roger Betz
Senior District Extension Farm
Management Agent

MICHIGAN STATE
UNIVERSITY

Extension





IT'S A LOT
HARDER THAN THEY
MADE IT SOUND.

Today's Topics



- 1. Crop Insurance Basics Review**
- 2. 2014 Crop Insurance Choices**
- 3. Crop Insurance Strategies**
- 4. Computer model ?**
- 5. 2014 Farm Bill FSA Programs**

Federal Crop Insurance

Individual Producer Coverage

✓ RP Revenue Protection

Includes the same levels of coverage choices as YP (Yield Protection). However, RP insures against losses of revenue caused by both yield loss and/or price changes.

REVENUE = Yield X Price

150 bu Yield X \$6.00 Price = \$900.00 Revenue

Revenue Protection addresses both Yield and Price

YP (Yield Protection)

- ✓ Protects against losses to crop yield only
- ✓ Based on actual production history (APH) or County T Yield
- ✓ Replant & prevented planting coverage included
- ✓ Coverage based on “Market Price Election,” APH, and percent coverage selected
- ✓ Premium payments subsidized

YP (Yield Protection)

✓ Coverage calculation

- APH Yield x Coverage % = Guaranteed Bushels
- Guaranteed Bushels x Market Price Election =

Coverage Level in \$/Acre

RP (Revenue Protection)

- ✓ Protects against revenue loss due to yield loss and/or price changes. Converts your bushel guarantee to a dollar guarantee per acre.
- ✓ Same as YP
 - Uses APH or County T Yields (60%)
 - Coverage choices range from 50 to 85%
 - Premium subsidized, based on coverage
 - Replant & prevented planting included

RP (Revenue Protection)

- ✓ Offers 3-way protection
 - Coverage if yields are low
 - Coverage if prices fall
 - Coverage if a short crop and prices rise

Rev. Prot. Price Guarantees

Crop	Contract	Base Price	Harvest Price
Corn - Mich	Dec CBOT	February	November
Soybean	Nov CBOT	February	October
Winter Wheat	Sept CBOT	8/15 to 9/14	Sept. '14

Rev. Prot. Price Guarantees

Crop	Contract	Base Price	Harvest Price
Corn-MI	Dec CBOT	February	November
Soybean	Nov CBOT	February	October
Winter Wheat	Sept '13 CBOT	8/15 to 9/14	Sept. '14

Base Price Announced early March or Sept. for wheat.
Used to calculate the minimum revenue guarantee.

$$\text{APH} \times \% \text{ Coverage} \times \text{Base Price}$$

Rev. Prot. Price Guarantees

Crop	Contract	Base Price	Harvest Price
Corn	Dec CBOT	February	November
Soybean	Nov CBOT	February	October
Winter Wheat	Sept '13 CBOT	8/15 to 9/14	Sept. '14

Harvest Price Announced early Nov/Dec. If higher than base price, used to calculate a new higher revenue guarantee.

R.P. Indemnity (Loss) Payments

- ✓ The Harvest Price is used to value your production
- ✓ If the Harvest Price is lower than the initial Base Price, it's as though the amount of bushels covered by insurance increases.

RP Indemnity (Loss) Payments

- ✓ If the Harvest Price is higher than the initial Base Price, the revenue guarantee increases -- but so does the value of your harvested production
- ✓ This is the feature in RP that protects you if you have pre-harvest marketed grain (forward contract before harvest)

Crop Insurance Comparison

Same Price	2014 Yield Protection	2014 Revenue Protection
APH	40 bu/A	40 bu/A

Crop Insurance Comparison

Same Price	2014 Yield Protection	2014 Revenue Protection
APH	40 bu/A	40 bu/A
Coverage	75%	75%

Crop Insurance Comparison

Same Price	Y P	R P
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
<u>Base Prices for 2014</u>		
YP	\$11.36	
RP	\$11.36	

Crop Insurance Comparison

Same Price	Y Protection	R Protection
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A

Crop Insurance Comparison

Same Price	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A

Minimum Revenue Guarantee
APH x % coverage x Base Price
 $40 \text{ bu} \times 75\% \times \$11.36 = \$340.80$

Crop Insurance Comparison

Same Price	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A

Crop Insurance Comparison

Same Price	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		\$11.36

Crop Insurance Comparison

Same Price	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		\$11.36
New Guarantee		-----

Crop Insurance Comparison

Same Price	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		\$11.36
New Guarantee		-----
Indemnity	\$90.88/A	\$90.88/A

Crop Insurance Comparison

Same Price	Yield Prot.	Revenue Prot.
<p><u>Indemnity</u></p> <p>Guarantee - Actual Production x Harvest Price</p> <p>$\\$340.80 - (22 \text{ bu} \times \\$11.36)$</p> <p>$\\$340.80 - \\$249.92 = \\$90.88$</p>		40 bu/A
		75%
		\$11.36
		\$340.80/A
		22 bu/A
		\$11.36
	New Guarantee	
Indemnity	\$90.88/A	\$90.88/A

Crop Insurance Comparison

Price Decrease	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		
New Guarantee		
Indemnity	\$90.88/A	

Crop Insurance Comparison

Price Decrease	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		\$9.50
New Guarantee		-----
Indemnity	\$90.88/A	\$131.80

Crop Insurance Comparison

Price Decrease	Yield Prot.	Revenue Prot.
		40 bu/A
		75%
		\$11.36
		\$340.80/A
		22 bu/A
		\$9.50

		\$131.80
<u>Indemnity</u>		
Guarantee - Actual Production x Harvest Price		
\$340.80 - (22 bu x \$9.50)		
\$340.80 - \$209.00 = \$131.80		
New Guarantee		
Indemnity	\$90.88/A	

Crop Insurance Comparison

Price Increase	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		
New Guarantee		-----
Indemnity	\$90.88/A	

Crop Insurance Comparison

Price Increase	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		\$13.00
New Guarantee		
Indemnity	\$90.88/A	

Crop Insurance Comparison

Price Increase	Yield Prot.	Revenue Prot.
APH	40 bu/A	40 bu/A
Coverage	75%	75%
Base Price '14	\$11.36	\$11.36
Guarantee	30 bu/A	\$340.80/A
Harvest Yield	22 bu/A	22 bu/A
Harvest Price		\$13.00
New Guarantee		\$390.00
Indemnity	\$90.88/A	

Crop Insurance Comparison

Price Increase	Yield Prot.	Revenue Prot.	
<p><u>Final Guarantee</u></p> <p>With a higher harvest price, a new Guarantee is calculated.</p> <p>APH x % cover x Harvest Price</p> <p>40 bu x 75% x \$13.00 = \$390.0</p>		40 bu/A	
		75%	
		\$11.36	
		\$340.80/A	
		22 bu/A	
		\$13.00	
	New Guarantee		\$390.00
	Indemnity	\$90.88/A	

Crop Insurance Comparison

Price Increase	Yield Prot.	Revenue Prot.
		40 bu/A
		75%
		\$11.36
		\$340.80/A
		22 bu/A
		\$13.00
		\$390.00
		\$104.00
New Guarantee		\$390.00
Indemnity	\$90.88/A	\$104.00

Indemnity

Guarantee - Actual Production x Harvest Price

$$\$390.00 - (22 \text{ bu} \times \$13.00)$$

$$\$390.00 - \$286.00 = \$104.00$$

Market Year Average Price

	Red = Projected					
<u>Crop Prices</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
<u>CORN</u>						
Base -CRC, RA, GRIP, RevProt	\$ 4.04	\$ 3.99	\$ 6.01	\$ 5.68	\$ 5.65	\$ 4.62
APH Mult Peril Crop Insuran	\$ 4.00	\$ 3.90	\$ 6.01	\$ 5.68	\$ 5.65	\$ 4.62
Harvest - CRC, GRIP	\$ 3.72	\$ 5.46	\$ 6.27	\$ 7.50	\$ 4.23	
Harvest RA	\$ 3.90	\$ 5.52	\$ 6.27	\$ 7.40	\$ 4.23	
MYA Producer Price	\$ 3.55	\$ 5.18	\$ 6.22	\$ 6.89	\$ 4.50	\$ 3.85

	Red = Projected				
<u>Crop Prices</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
<u>Soybeans</u>					
Base -CRC, RA, GRIP, RevProt	\$ 8.80	\$ 9.23	\$ 13.49	\$ 12.55	\$ 12.87
APH Mult Peril Crop Insuran	\$ 9.90	\$ 9.15	\$ 13.49	\$ 12.55	\$ 12.87
Harvest - CRC, GRIP	\$ 9.66	\$ 11.63	\$ 12.14	\$ 15.39	\$ 12.87
Harvest RA	\$ 9.66	\$ 11.63	\$ 12.14	\$ 15.39	\$ 12.87
MYA Producer Price	\$ 9.59	\$ 11.30	\$ 12.50	\$ 14.40	\$ 12.70

RP - Revenue-Based Insurance Advantages

- ✓ May have larger indemnities than yield-based crop insurance
- ✓ 3-way coverage means a greater chance of indemnity payment
- ✓ May be competitively priced with yield-based crop insurance
- ✓ Can use it as an integral part of your marketing strategy!

Fact or Fiction # 1

"It's March and cold out - I don't dare forward price 40% of next fall's crop now - I might not get it planted!"

✓ FICTION

- YP and RP automatically include prevented planting coverage at 60% of your coverage level. For example, at the 75% level, you have 45% coverage if you don't get the crop planted
- What are the odds that you won't get some of the crop planted?

Fact or Fiction # 2

"My APH is 150, I have 80% Rev. Prot., and I just harvested 155 bushels per acre. I can't have a crop insurance loss."

✓ FICTION, Yes You Can

- In 2013, the base price in February was \$5.65. The harvest price was \$4.23.
- Your minimum revenue guarantee was \$678 (150 bpa x 80% X \$5.65). Your harvest of 155 bpa x \$4.23 is \$656. You have a \$22 indemnity coming.

Fact or Fiction # 3

"My spouse went to a meeting & tells me I am wasting my money if I buy Rev. Prot. and don't have a plan to pre-harvest market my grain."

✓ FACT??

- RP has the feature that increases the revenue guarantee if the harvest price is higher than the spring base price. In most cases, you pay for this feature.
- The intent of these tools was to allow you to pre-harvest market your grain. (up to coverage level)

Fact or Fiction # 4

"I have RP & forward priced 75% of my APH on 600 ac soybeans. Yields are bad, prices have skyrocketed, I can't deliver on my contracts - I am going to lose my shirt"

✓ FICTION, You Are Covered

- The final revenue guarantee with RP is re-calculated using the harvest price if it is higher than the base price. The insurance increase will offset the cost of buying the higher priced grain to fill your contracts.
- Let's look at an example

I can't deliver,
I'm going to lose... Fiction!

- ✓ 600 acres of soybeans
- ✓ 40 bu/acre APH
- ✓ 75% coverage revenue-based insurance
- ✓ $600 \times 40 \times 75\% = 18,000$ bushels --
insured amount to pre-harvest market
- ✓ You get it sold and August turns dry

I can't deliver, I'm going to lose... Fiction!

- ✓ Marketed 18,000 bu pre-harvest
(75% of APH) at \$11.36 = \$204,480
- ✓ Only produced 13,200 bu.
Buy back 4,800 bu. at \$14.90 - \$71,520
 - (price includes extra \$.10 for purchase) \$14.80 local cash price
- ✓ Crop insurance indemnity + \$72,000
Based off of Futures at \$15.00
- ✓ Gross Return = \$204,960
 - There is basis opportunity/risk

I can't deliver,
I'm going to lose... Fiction!

Optional Unit	YP	RP	RPwHPE
Premium per acre	\$9.52	\$13.43	\$11.05

I can't deliver,
I'm going to lose... Fiction!

Optional Units 600Ac	YP	RP	RPwHPE
Premium per acre	\$9.52	\$13.43	\$11.05
18,000 bu at \$11.36	\$204,480	\$204,480	\$204,480
Repurchase beans (-)	- \$71,520	- \$71,520	- \$71,520
Total Indemnity (+)	+\$54,528	+ \$72,000	+\$6,480
Total premium (-)	- \$5,712	- \$8,058	- \$6,630
Net result	\$181,776	\$196,902	\$132,810

I've found a delivery option!

RP with the Harvest Price Exclusion is a bad choice if you plan to pre-harvest market grain. The spring minimum guarantee is also the final guarantee - but it uses the harvest price to value production.

Option			RPwHPE
Premium		43	\$11.05
18,000		480	\$204,480
Repurchase		520	- \$71,520
Total Indemnity (+)	+\$54,528	+ \$72,000	+\$6,480
Total premium (-)	- \$5,712	- \$8,058	- \$6,630
Net result	\$181,776	\$196,902	\$132,810

Fact or Fiction # 5

"There is a possibility I could get mites or aphids in my fields this summer. I don't need to worry -- my crop insurance will cover the loss."

✓ FACT & FICTION

- YP & RP will cover losses from soybean diseases if you use good agronomic practices. If you scout & treat the field if needed – you are covered!

The Facts of Revenue-Based Crop Insurance

High Yield		
Low Yield	Covered	
	Low Price	High Price

The Facts of Revenue-Based Crop Insurance

High Yield	Covered	
Low Yield	Covered	
	Low Price	High Price

The Facts of Revenue-Based Crop Insurance

High Yield	Covered	
Low Yield	Covered	Covered
	Low Price	High Price

The Facts of Revenue-Based Crop Insurance

High Yield	Covered	Tax Problem!
Low Yield	Covered	Covered
	Low Price	High Price



Strategies:

Many individuals take

1. Revenue Protection (RP)
2. 75 to 85% coverage level
3. Enterprise units
4. Add TA-APH yield endorsement
5. ACR (90% coverage level, lower protection level to adjust payment)

What Questions Do You Have?

- ***If you would like a PDF file of these slides, email me and I will send you the file.***
- ***Email: betz@msu.edu***
- ***Roger Betz***
Sr. Dist. Extension Farm Management
315 West Green Street
Marshall MI 49068
Fax 269 781 0768
- ***Web page: <https://www.msu.edu/user/betz/>***
- ***Program Support: Janice Wright (269) 781-0780***

BREAK!!!!

Crop Insurance Decisions 2014

MICHIGAN STATE
UNIVERSITY | **Extension**

Roger Betz

Michigan State University

Gary Schnitkey

University of Illinois

Topic

- 1. Review of Crop Insurance Terms**
- 2. Comparison of 2013 vs 2014 policies**
- 3. Impacts of 2014 Farm Bill**
- 4. Performance in 2014**
- 5. Changes from 2013 to 2014**
- 6. Product recommendations**

Crop Insurance Terms

2013 COMBO

- 1. Group Risk Plan GRP, Group Risk Income Plan GRIP, GRIP-HR**
- 2. Yield Protection YP**
- 3. Revenue Protection RP**

2014 Area Risk Protection Insurance (ARPI)

- 1. Area Revenue Protection (ARP)**
- 2. Area Revenue Protection with Harvest Price Exclusion (ARPwHPE)**
- 3. Area Yield Protection (AYP)**

2014 Farm Bill and Crop Insurance

No changes in 2014 crop year for crop insurance.

But the “FSA program choice” does effect your total combined risk management plan.

In future years:

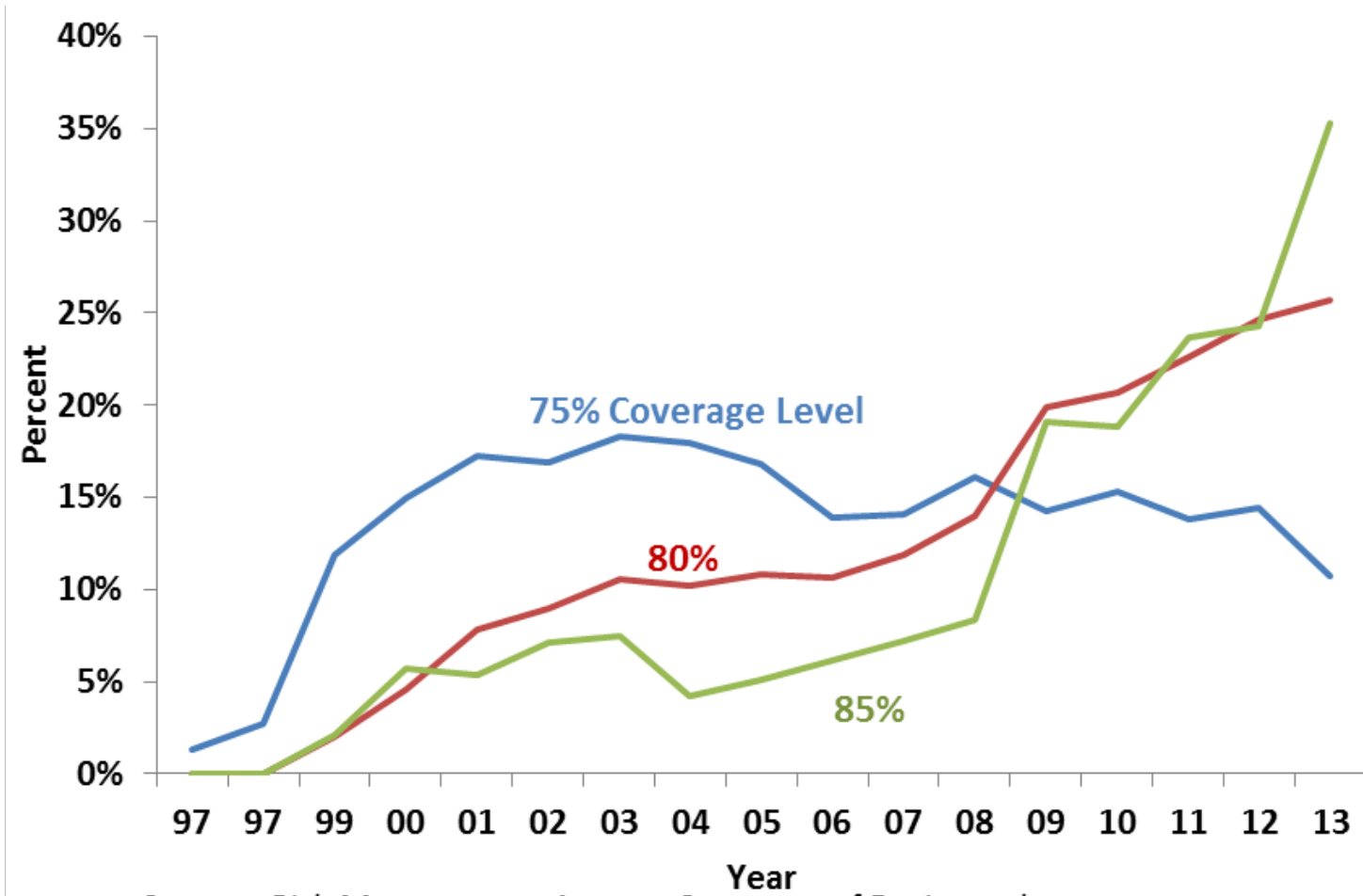
- **2014 Farm Bill does not change COMBO or ARPI products**
- **2014 Farm Bill does not change subsidy rates**
- **In 2015 SCO (Supplemental Coverage Option) is a crop insurance program that is available only if you choose the PLC (Price Loss Coverage) FSA farm payment program.**

2014 Farm Bill and Crop Insurance

In 2015:

- **Introduces conservation compliance for highly erodible farmland**
- **Introduces Supplemental Coverage Option (SCO)**
 - **County product from 86% coverage level to coverage level of COMBO product**
 - **Farmdoc webinar on March 12 dealing with SCO**

RP, Corn, Illinois at 75%, 80%, and 85% Coverage Levels



Source: Risk Management Agency, Summary of Business data

Crop Insurance Changes

- 1. Projected prices much lower in 2014 than 2013**
- 2. Group products combined into Area Risk Protection Insurance (ARPI) policy**

Projected and Harvest Prices

	2009	2010	2011	2012	2013	2014
Corn						
Projected Price	4.04	3.99	6.01	5.68	5.65	4.62
Harvest Price	3.72	5.46	6.27	7.50	4.23	
Soybeans						
Projected Price	8.80	9.23	13.49	12.55	12.87	11.36
Harvest Price	9.66	11.63	12.14	15.39	12.87	

- Projected price – average of Dec. (corn) of Nov. (beans) CME futures contract in February, used to set insurance guarantees.
- Harvest price – average of Dec. (corn) Nov. (beans) CME futures contract in Nov. (corn) Oct. (beans), used to calculate insurance revenue.

Last Year's Products

RP – Revenue Protection, Farm, Revenue with guarantee increase

RPwHPE – Revenue Protection with harvest price exclusion, Farm, Revenue with no guarantee increase

YP – Yield Protection, Farm, Yield

GRP – Group Risk Plan, County, Yield

GRIP – Group Risk Income Plan, County, Revenue no guarantee increase

GRIP-HR – Group Risk Income Plan with Harvest Revenue Option, County, Revenue with guarantee increase

Area Risk Protection Insurance

Starts with the 2014 crop year

- **Replaces Group products**
- **New plans (2014)**

ARPI Plan	Replaces	Type
Area Revenue Protection (ARP)	GRIP-HR	Revenue
ARP with harvest price Exclusion (ARPwHPE)	GRIP	Revenue, no harvest price increase
Area Yield Plan (AYP)	GRP	Yield

ARP offers similar coverage to GRIP-HR, but with following differences

- 1. ARP coverage begins when planted, must be planted by final plant date (late June for corn, mid July for soybeans)**
- 2. Producers must complete production reports**
- 3. Choose a protection factor (.8 to 1.2) rather than a protection level (60% to 100%)**
- 4. Payments of ARP are lower than GRIP-HR at vary low revenues which are not likely to happen**

See January 7, 2014 farmdocDaily post

Basic Insurance Product

for 2014 crop year same as before

- Revenue Protection
- 75%, 80% and 85%
- Enterprise Units
- With Trend Adjustment Actual Production History (TA-APH)
Yield Endorsement

USE THIS: Unless have some characteristics of products listed below

Do not lower coverage level from last year

Macon County RP Premium Costs

Coverage Level	Revenue Protection			Minimum Revenue
	Enterprise	Basic	Optional	Guarantee
	<u>\$ per Acre</u>			<u>\$/acre</u>
50%	0.42	0.87	1.24	438
55%	0.65	1.60	2.18	482
60%	0.94	2.35	3.00	526
65%	1.34	3.86	4.70	569
70%	2.10	5.62	6.50	613
75%	3.70	8.93	9.92	657
80%	7.53	14.70	15.71	701
85%	16.25	25.16	25.94	745

From *2014 Crop Insurance Decision Tool* available on Farmdoc website in FAST or crop insurance sections

For a 190 TA-APH and a 178 APH yield, 125 acres, Macon County

Ingham County RP Premium Costs

Revenue Protection

Coverage Level	Revenue Protection			Minimum Revenue
	Enterprise	Basic	Optional	Guarantee
	<u>\$ per Acre</u>			<u>\$/acre</u>
50%	1.39	2.61	3.58	355
55%	1.90	3.96	5.18	391
60%	2.55	5.37	6.62	426
65%	3.36	7.99	9.53	462
70%	4.72	10.87	12.43	497
75%	7.13	15.23	16.88	533
80%	12.71	22.04	23.62	568
85%	23.99	32.93	34.24	604

From *2014 Crop Insurance Decision Tool* available on Farmdoc website in FAST or crop insurance sections

For a 153.8 TA-APH and a 146 APH yield, 125 acres, Ingham County

Units

- **Enterprise – all of one crop in a county (need to meet eligibility requirements)**
- **Basic – division of one crop by ownership split (all owned and cash rent land is a basic unit, all share rent landlords are individual basic unit)**
- **Optional – division of basic units by township section**

Use enterprise units
unless much variability in farmland

RP Guarantee Example

Revenue Protection

	Corn	Soybeans
TA-APH yield	160	48
Projected price	4.62	11.36
Harvest price (avg during Oct)	< 4.62	< 11.36
RP uses higher of projected or harvest price in guarantee		
Coverage level	85%	85%
Guarantee (Corn 160 x 4.62 x .85)	\$628	\$463

Harvest price will not be known till end of Nov/October

RP Guarantee Example

Revenue Protection

	Corn	Soybeans
TA-APH yield	160	48
Projected price	4.62	11.36
Harvest price (avg during Nov/Oct)	6.00	13.00
RP uses higher of projected or harvest price in guarantee		
Coverage level	85%	85%
Guarantee (Corn 160 x 6.00 x .85)	\$816	\$530
Yield below which payments occur	136	40.8

Harvest price will not be known till end of October

Who Should Use RPwHPE

- One who does not pre-harvest hedge
- One who is cost conscious
- **Willing to take the drought year risk of getting no or low payments**

Corn, Illinois, 2012, 85% Coverage Level

	Acre Insured	Farmer-Paid Premium	Payment
		\$/acre	\$/acre
RP	2,708,000	\$29	\$326
RPwHPE	315,000	\$15	\$128

RP Premium Costs Corn

Coverage Level	Revenue Protection			Minimum Revenue	Revenue Protection with Harvest Price Exclusion			Revenue
	Enterprise	Basic	Optional	Guarantee	Enterprise	Basic	Optional	Guarantee
	\$ per Acre			\$/acre	\$ per Acre			\$/acre
50%	1.39	2.61	3.58	355	1.27	2.41	3.30	355
55%	1.90	3.96	5.18	391	1.71	3.61	4.73	391
60%	2.55	5.37	6.62	426	2.26	4.84	5.99	426
65%	3.36	7.99	9.53	462	2.94	7.14	8.48	462
70%	4.72	10.87	12.43	497	4.06	9.50	10.78	497
75%	7.13	15.23	16.88	533	5.96	12.94	14.18	533
80%	12.71	22.04	23.62	568	10.30	18.12	19.29	568
85%	23.99	32.93	34.24	604	19.03	26.38	27.30	604

From Crop Insurance Decision Tool available on Farmdoc website in FAST or crop insurance sections

For a 153.8 TA-APH yield, 140 APH yield Ingham County

Who Should Take ARP?

Area Risk Protection

- **90% coverage level**
- **Vary protection factor (80% to 120%)**

Characteristics

- **More concerned about price risk protection**
- **Can only take basic units**
- **APH yield lower than expected yield**

ARP Premium Costs

Coverage Level	Area Revenue Protection			Minimum Revenue Guarantee
	Protection Level			
	120%	90%	80%	
	\$ per Acre			\$/acre
70%	18.53	13.90	12.35	460
75%	28.04	21.03	18.69	493
80%	37.52	28.14	25.01	526
85%	50.89	38.17	33.93	559
90%	66.31	49.73	44.21	592

From *Crop Insurance Decision Tool* available on Farmdoc website in FAST or crop insurance sections

Ingham County in 2014

Ingham County, Corn, Example

ARP Area Revenue Protection

Guarantee

Expected yield (1)	149.8 bu.
x Higher of projected or harvest price (2)	\$4.62
x Coverage level (3)	90%
Guarantee	\$623

(1) Set by RMA for each year

(2) ARP with harvest price exclusion does not have the higher provision

(3) Coverage level ranges from 70 to 90% in 5% increments

Ingham County, Corn, Example

ARP Area Revenue Protection

Policy Protection

Expected yield	149.8 bu.
x Higher of projected or harvest price (1)	\$4.62
x Farmer choice of protection factor (2)	1.2
Protection level	\$830

(1) ARP with harvest price exclusion does not have higher of provision

(2) Ranges from .8 to 1.2, under GRIP was the Protection Level

Ingham County, Corn, Example

Area Revenue Protection

Shortfall Calculations

	High Yield Low Price	Avg Yield Avg Price	Drought
Actual County Yield	175	149.8	110
Actual Harvest Price	\$3.50	\$4.62	\$6.00
Harvest Revenue	\$613	\$692	\$660
Coverage Guarantee (90%)	\$623	\$623	\$809
Cov.Grnt' MINUS Hrvst' Revenue	\$10	\$0	\$149
Shortfall Divisor	498	498	684
Shortfall Ratio ***	0.021	-	0.218
Protection Level (1.2)	\$830	\$830	\$1,079
Shortfall Payment	\$17	\$0	\$235

***** Shortfall Ratio = (guarantee – harvest revenue)
/ (guarantee - .18 x projected price x exp yield)
when harvest revenue < guarantee**

Summary

Most will find:

1. RP Revenue Protection

- 1. high coverage level (80 to 85%)**
- 2. enterprise units (if can)**
- 3. TA-APH yield**

2. ARP Area Revenue Protection

- 1. 90% Coverage Level**
- 2. Vary Protection Factor 0.8 to 1.2**
 - 1. cost vs desired benefit**