AN OVERVIEW OF FEDERAL CROP INSURANCE IN WISCONSIN

PAUL D. MITCHELL

AGRICULTURAL AND APPLIED ECONOMICS UNIVERSITY OF WISCONSIN-MADISON UNIVERSITY OF WISCONSIN-EXTENSION

Goal Today

Overview major crop insurance policies available in Wisconsin Explain how they work General recommendations for producers You will leave with Some new knowledge (hopefully) Written materials Know where to go for more information

Crop Insurance

USDA's Risk Management Agency (RMA) operates the Federal Crop Insurance Corporation (FCIC) to manage the federal crop insurance program RMA "endorses" policies: makes subsidies available for companies and farmers Without RMA endorsement/subsidy, few crop insurance polices would be available

Insurable Crop	Insurance Plans			
Apples	GYC			
Barley	APH			
Cabbage	GYC			
Cigar Binder Tobacco	Tobacco (Guaranteed Production)			
Corn	APH, CRC, GRP, GRIP			
Cranberries	APH			
Dry Beans	APH			
Forage Production	APH, GRP			
Forage Seeding	Dollar Amount of Insurance			
Grain Sorghum	APH, CRC			
Green Peas	GYC			
Hybrid Seed Corn	GRP, GRIP, Yield-Based Dollar Amount of Insurance			
Mint	APH			
Nursery	Dollar Amount of Insurance			
Oats	APH			
Potatoes	GYC			
Processing Beans	GYC			
Processing Sweet Corn	APH, GRP, GRIP			
Soybeans	APH, CRC, GRP, GRIP			
Wheat	APH, CRC			
Feeder Cattle	LRP			
Fed Cattle	LRP			
Swine	LRP			

Insurable Crop	Total Crop Acres	% Insured
Apples	6,400	17%
Barley	45,000	10%
Cabbage	2,270	100%
Cigar Binder Tobacco	1,820	65%
Corn	3,750,000	56%
Cranberries	16,300	95%
Dry Beans	6,600	27%
Forage Production	2,400,000	15%
Forage Seeding	550,000	10%
Grain Sorghum	the second second	0%
Green Peas	37,800	46%
Hybrid Seed Corn	9,515	100%
Mint	3,900	56%
Nursery	1730 farms	2%
Oats	340,000	8%
Potatoes	81,000	47%
Processing Beans	75,000	53%
Processing Sweet Corn	92,800	43%
Soybeans	1,720,000	63%
Wheat	247,000	33%

Why Low Participation in WI? More diversified production, so less need for external risk management tools More crops per farm Livestock/Dairy common Rates seem higher: Premiums jump when cross state border McHenry to Walworth: 40%-75% Washington to St. Croix: 17%-35% Allamakee to Crawford: 16%

Quick description of major policies
 APH, CRC, GRP, GRIP, Dollar Plan

How each determines Coverage (Liability)
 How each Triggers an Indemnity

Actual Production History (APH) The fundamental crop insurance policy Yield guarantee based on actual yield history If harvested yield is less than yield guarantee, farmer receives an indemnity Multiple Peril Crop Insurance (MPCI) Grower Yield Certification (GYC) Catastrophic Coverage (CAT) is the minimum APH coverage anyone can buy

Crop Revenue Coverage (CRC) Revenue guarantee based on actual yield history and futures markets prices at plant □ If harvest revenue is less than revenue guarantee, farmer receives an indemnity Essentially combines APH yield coverage with price coverage More popular than APH

Group Risk Protection (GRP) If USDA-NASS county average yield less than chosen guarantee, farmer receives indemnity Like APH, but for county yield Group Risk Income Protection (GRIP) If county average revenue less than chosen guarantee, farmer receives indemnity Adds low price coverage to GRP Like CRC, but for county average yield

Dollar Amount of Insurance (Dollar Plans) RMA determines available dollar amounts of coverage and producer chooses amount If stand kill/yield loss occurs, then grower receives indemnity Like APH, but RMA, not grower yield history, determines available coverage. Forage Seeding, Hybrid Seed Corn

Policies NOT available in WI Revenue Assurance (RA) Like CRC, but lower premium for same coverage More popular than CRC when both available Available for corn and soybeans in 19 states (ND to CO to OK to LA-TN-NC to MI) Adjusted Gross Revenue (AGR) and AGR-Lite Whole farm income insurance for diversified producers of under-served commodities in underserved states Income Protection (IP): farm level income insurance for few crops in few states

How APH Works

Unit Structure
APH yield calculation
Coverage Level and Price Election
Premiums
Late and Prevented Planting
Farmer Responsibilities

Insurance Unit

If yield for the whole unit is less than the unit's yield guarantee, triggers indemnity A 300 acre unit with a 100 bu/ac guarantee would have to yield less than $100 \times 300 =$ 30,000 bu to trigger an indemnity 100 ac with 0 yield + 200 ac with 150 bu/ac = 30,000 bu, triggers no indemnity Each unit is possibly/likely several fields Farmers do better with more/smaller units

Unit Structure

RMA has rules for unit structure Each unit Planted to same crop during insurance period Cannot cut across a county line Separate production records for each unit Three unit types Basic Unit, Optional Unit, Enterprise Unit

Basic Unit

<u>One</u> basic unit for all acres planted to the insured crop on land producer owns/cash rents
 <u>One</u> additional basic unit designation for all acres planted to the insured crop on land the producer share rents with a <u>different</u> landlord
 Producers insuring all acreage of a crop as basic units receive a 10% premium discount.

Optional Unit

One optional unit for all acres in different township sections planted to the insured crop on land that the producer owns/cash rents Possibly separate optional units for different practices or crop types Dryland and irrigated acreage of the same crop Corn for grain and corn for silage Alfalfa, alfalfa-grass mix, and red clover Producers usually want as many optional units as possible

Enterprise Unit

Combines all of a producer's acreage for the insured crop in the county into a single unit, whether it is owned, cash, or share rented

 Producers using an enterprise unit pay lower premiums

Farms A-G: Same operator planting the same crop

Farm A Owned Township Section 1	Farm B 50-50 crop share lease from Smith Earm C cash rent lease from Smith	Farm D cash rent lease from Jones Farm E 50-50 crop share lease from Smith	Township Section 2	Bas 1) 2) 3) Opt 1)
Farm F Owned		Farm G 60-40 crop share lease from Black		2) 3) 4)
Township Section 12			vnship tion 11	5) 6) Ente 1)

sic Units A, C, D, and F B and E G tional Units A and C B D Е F G cerprise Unit A thru G

Adapted from W. Edwards, "Insurance Units for Crop Insurance." Iowa State University Extension A1-56, February 2003. www.extension.iastate.edu/agdm/crops/pdf/a1-56.pdf

APH Yield Calculation

Use actual yield history for unit to determine unit's average yield and calculate unit's yield guarantee Up to 10 years of continuous records No missing years (can file for exception) If less than 4 years, use Transition Yields Use a Yield Cup, Cap, and Floor

Transition (T) Yields Need 4 years of yield history If only have 3 years Add one 1 year of 100% county T-yield If only have 2 years Add one 2 years of 90% county T-yield If only have 1 year Add one 3 years of 80% county T-yield If have no yield history Have 65% of county T-yield

Year	4 Years	3 Years	2 Years	1 Year	None
2004	143	143	143	143	$112 \ge 0.65$ = 73
2003	128	128	128	112 x 0.80 = 90	112 x 0.65 = 73
2002	101	101	$112 \ge 0.90$ = 101	112 x 0.80 = 90	112 x 0.65 = 73
2001	122	112 x 1.00 = 112	112 x 0.90 = 101	$112 \ge 0.80$ = 90	112 x 0.65 = 73
APH Yield	124	121	118	103	73

Yield Cup, Cap, and Floor

- Yield Cup: APH yield cannot decrease more than 10% in any 1 year
- Yield Cap: APH yield cannot increase more than 20% in any 1 year
- Note: Good/bad years eventually work their way into APH yield, cup/cap prevent rapid changes
 Yield Floor
 - 0 years of Yield History: 65% of the county T-yield
 1 year of Yield History: 70% of the county T-yield
 2-4 years of Yield History: 75% of the county T-yield
 5 or more years of Yield History: 80% of the county T-yield

Coverage Level

Pick percent of APH yield to guarantee: **50%**, 55%, 60%, 65%, 70%, and 75% 80% and 85% for some counties/crops Unit yield below this yield guarantee triggers an indemnity ■ 100% – Coverage Level ~= Deductible Higher coverage level has higher premium

Price Election

Crop price used to pay indemnities Each bushel the unit's yield is less than the yield guarantee is compensated at this price RMA announces price elections at sign-up, usually based on futures prices Available options: 55% to 100% by 1% increments of announced price election Usually best to take max price election and adjust coverage level

APH Example 100 ac corn unit, APH yield = 120 bu/ac Chooses 65% coverage level Yield guarantee $-120 \times 0.65 = 78 \text{ bu/ac}$ ■ 78 bu/ac x 100 ac = 7,800 bu for the unit Price Election \$2.15/bu, chooses 100% • Harvest for unit = 6,500 bu Indemnity: 7,800 − 6,500 = 1,300 bu ■ 1,300 bu x \$2.15/bu = \$2,795

Premium Subsidies
 Company receives A&O subsidy, so it cannot add a load to premium
 Producer Premium Subsidy

Coverage Level (%)5055606570758085Premium Subsidy (%)6764645959554838Producer Share (%)3336364141455262

Main Point: producers <u>on average</u> should make money with crop insurance

Catastrophic Coverage Subsidy

CAT: 50% coverage, 55% price election
CAT premium completely subsidized
Producer pays \$100 administrative fee per crop in each county
CAT cost can be waived for limited-resource farmers

Premium Calculation Consult with crop insurance agent RMA Premium Calculator www3.rma.usda.gov/apps/premcalc/index.cfm Requires login ID and password Saves calculations for later use Provides useful print out Farmdoc Premium Estimator http://www.farmdoc.uiuc.edu/cropins/index.html Both are useful for planning and comparing insurance options

Special Issues in APH

Late and Prevented Planting
Replant Provisions
Farmer Responsibilities
Fraud and Program Abuse

Late and Prevented Planting

- Many crops/policies have Late and Prevented Planting provisions
- If weather prevents planting by required date
 - <u>Tell the crop insurance agent</u>

Plant anyway, but with reduced coverage
Plant a different crop, possibly with reduced coverage
Leave fallow and receive prevented planting indemnity
Several rules/restrictions, ask crop insurance agent to explain options and their impact
Can exclude from policy to reduce premium

Replant Provisions

Crop severely damaged early in season so projected yield < 90% of yield guarantee Indemnity for actual replant costs Maximum = chosen price election x 20% yield guarantee; up to 8 bu for corn, 3 bu for soybeans, and 1 ton for corn silage Replanted yield guarantee as for original plant date (no reduction for late planting)

Farmer Responsibilities Know all dates and required activities Sales closing/cancellation Acreage reports File Notice of Crop Damage Submit Claim Variety/Hybrid and Practice Restrictions Hybrid maturity restrictions No early cutting alfalfa and planting corn

Farmer Responsibilities Use "good farming practices ... generally recognized by agricultural experts for the area" Extension often defines No coverage for losses due to negligence, mismanagement, etc. (long list) Soybean Rust: would have to treat if experts say so Alternative Crop Uses Get permission from agent first Can chop for silage corn insured as grain Mow "weeds" in flooded out crop Graze remainder of hailed crop

Farmer Responsibilities

When a loss occurs File notice of damage within 72 hours of discovery (not occurrence), but no later than 15 days after the end of the insurance period Continue to protect crop from further damage Follow Agent's guidance, leave unharvested strips as requested, provide documents, cooperate with loss adjustors

Fraud and Program Abuse

RMA very serious about fraud, federal prosecution if they detect fraud Latest statistical and monitoring technology Random audits, audit suspicious claims Everyone asked to report fraud or program abuse (USDA-FSA, Extension faculty) If suspect, contact USDA's Office of Inspector General: (800) 424-9121

Other Crop Policies

Quick overview of other policies and how they differ from APH

CRC
GRP
GRIP
Dollar Plans

Crop Revenue Coverage (CRC) Revenue insurance, not yield insurance Most policy provisions same as APH Price Election: 100% or 95% of Base Price Base Price: Average of daily closing price of harvest time futures contract for the month before normal planting Corn CRC Base Price: February average closing price of CBOT December corn futures contract

CRC Revenue Guarantee Preliminary revenue guarantee 100% or 95% of Base Price x APH Yield Harvest Price: Average new crop closing futures price for month before expiration of harvest future contract Corn Harvest Price: November average closing price for CBOT December futures Final guarantee: calculated with whichever price is higher—base price or harvest price

CRC Example

300 acre corn unit, APH yield is 140 bu/ac Announced CRC Base Price is \$2.32/bu 70% coverage level and a 100% price election • APH yield guarantee: $140 \times 0.70 = 98$ bu/ac, then 98 x 300 = 29,400 bu for the unit Preliminary revenue guarantee 29,400 bu x \$2.32/bu = \$68,208 for the unit Harvest = 29,800 bu, Harvest price = \$2.05/bu Harvest Revenue for unit = 29,800 bu x \$2.05/bu = \$61,090, which triggers indemnity of \$68,208 - \$61,090 = \$7,118 APH in this case, no indemnity

Group Risk Plan (GRP)

Indemnity received if NASS county average yield is below chosen trigger yield Coverage level: % county average yield ■ 65%, 70%, 75%, 80%, 85%, and 90% Price Election: wide range available, choose 100% to 60% (1% increments), or 45% as CAT

GRP Example

Assume 500 corn acres in Adams County 2005 expected county average yield: 117.5 bu/ac 100% level of protection: \$414.19 (\$3.53/bu) Choose 90% coverage yield, implying a trigger yield of 117.5 x 0.90 = 105.8 bu/ac Assume 2005 Adams County NASS yield = 100.0 bu/ac, which triggers an indemnity Indemnity Calculation: Yield loss 105.8 – 100.0 = 5.8 bu/ac, or 5.8/105.8 = 5.5% loss Indemnity (\$/ac) 0.055 x \$414.19/ac = \$22.78/ac Total Indemnity: 500 ac x \$22.78/ac = \$11,390



County yields not finalized until April, so indemnities come much later Must file acreage report, no yield history needed, use good farming practices, etc. GRP good if no or poor yield history, yield closely track county average Often combine with Hail/Fire policy for localized losses

Group Risk Income Protection (GRIP)

Trigger indemnity of county revenue less than county revenue guarantee
Yield: NASS county yield (just as GRP)
Expected County Price: average futures contract closing price for 5 days before the sales closing

 Actual County Price: average futures contract closing price for month before harvest (just as CRC harvest price)

Dollar Plans: Forage Seeding and Hybrid Seed Corn

List available dollar amounts of coverage Indemnity if annual crop value less than chosen amount of insurance Key: How is annual crop value calculated Forage Seeding: plant stand >75% normal, crop value = dollar amount of coverage Hybrid Seed Corn: yield at contract prices

10 Recommendations

- 1. Use as many optional units as possible
- 2. Avoid 80% and 85% coverage levels for CRC and APH: generally over priced
- 3. Consider getting at least CAT
- 4. Choose max price election and vary coverage level to get desired premium
- 5. If no yield history or poor yield history, consider GRP/GRIP with hail coverage

10 Recommendations

- 6. Know hybrid and practice restrictions
- 7. Know late and prevented planting and replant provisions and restrictions
- 8. Talk to crop insurance agent before implement alternative crop uses
- Keep good yield & management records
 Don't Cheat! Very likely caught and federally prosecuted

Additional Resources USDA-RMA: <u>www.rma.usda.gov</u> Premium Calculator State Fact Sheets, Events/Conferences Official Announcements/Rulings National Ag Risk Education Library www.agrisk.umn.edu Clearinghouse for Extension risk management materials from all states: large Farmdoc: <u>www.farmdoc.uiuc.edu</u> Publications, Spreadsheet Tools, Income Simulators Premium <u>Estimator</u> for available crops in a county

Contact Me

Paul D. Mitchell **Agricultural and Applied Economics** University of Wisconsin-Madison Office: (608) 265-6514 Cell: (608) 320-1162 Email: <u>pdmitchell@wisc.edu</u> Extension Web Page: www.aae.wisc.edu/mitchell/extension.htm