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Crop Insurance 101
Managing price and yield risk through RMA's crop insurance products

USDA
U.S. Department of Agriculture
Risk Management Agency

agriskmanagement.cornell.edu

What is crop insurance?

Crop insurance helps producers **manage risk**.

You pay an annual **premium** (the cost is shared with the Federal government) to buy an insurance policy.

Crop insurance is purchased from private agents

If your yields or revenues fall below a certain level due to a “covered cause”, you receive an **indemnity** payment.

Photo: Regan Walsh via Flickr

How does crop insurance work?

- It is similar to other types of insurance, such as car insurance:
  - You pay a premium to buy a policy
  - If something bad happens, you file a claim
  - Indemnity payment helps make you whole

Single Crop "Multi-Peril" Insurance

Most commonly, farmers buy crop insurance policies for one **single** crop at a time

Single crop policies are available as either **yield** or **revenue** insurance

In New York, single crop policies are available for:

Field crops: Barley, Corn (silage and grain), Forage, Grain Sorghum, Oats, Soybeans, Wheat;

Vegetables: Cabbage, Dry Beans, Green Beans (fresh and processing), Green Peas, Onions, Potatoes, Sweet Corn, Tomatoes**;**

Fruit: Apples, Grapes, Peaches, Tart Cherries**.**

Photo: John Lillis via Flickr

What coverage level to buy?

Catastrophic or "CAT" level

- Cheapest option: free coverage with $300 administrative fee
- Only provides an indemnity payment when the grower loses 50% or more of the harvest
  - Indemnity only covers 55% of insured price
- 12% of NY policies in 2017 were for CAT-level crop insurance
  - Indemnities are relatively rare

Buy-up

- Growers can choose to purchase more coverage, up to 85% of yields or revenues
- Premium subsidies decrease as coverage increases
- Coverage decisions balances higher premium costs with higher likelihood of indemnity when a covered yield or revenue loss occurs

Prevented Planting

What happens if I can't get my crop in? Or need to replant it?

Most policies include special provisions related to **prevented planting** and **replant**

(Exceptions: group risk policies like (GRP, GRIP, and ARPI) and catastrophic-level ("CAT") policies)

The **prevented planting guarantee payment** for most crops is typically 60% of the production guarantee purchased for "timely planted acreage"

In some cases higher prevented planting protection levels can be purchased

The **replant payment** is typically equal to the lesser of either (1) your actual costs of replanting or (2) a formula provided in your crop insurance policy

For example: for corn, the per-acre replant payment equals the projected price/bushel x 8 bushels

Pasture, Rangeland, and Forage (PRF)

PRF insures livestock growers against **lack of precipitation (rain or snow)** relative to historic levels

Using a grid system, USDA tracks precipitation in an area, and **sends payments automatically** when levels are low

Enables producers to buy feed when forage is limited

No record keeping required!

Important consideration: if you experience low rainfall in your fields but the grid rainfall levels are different, there is a chance you may not receive an indemnity

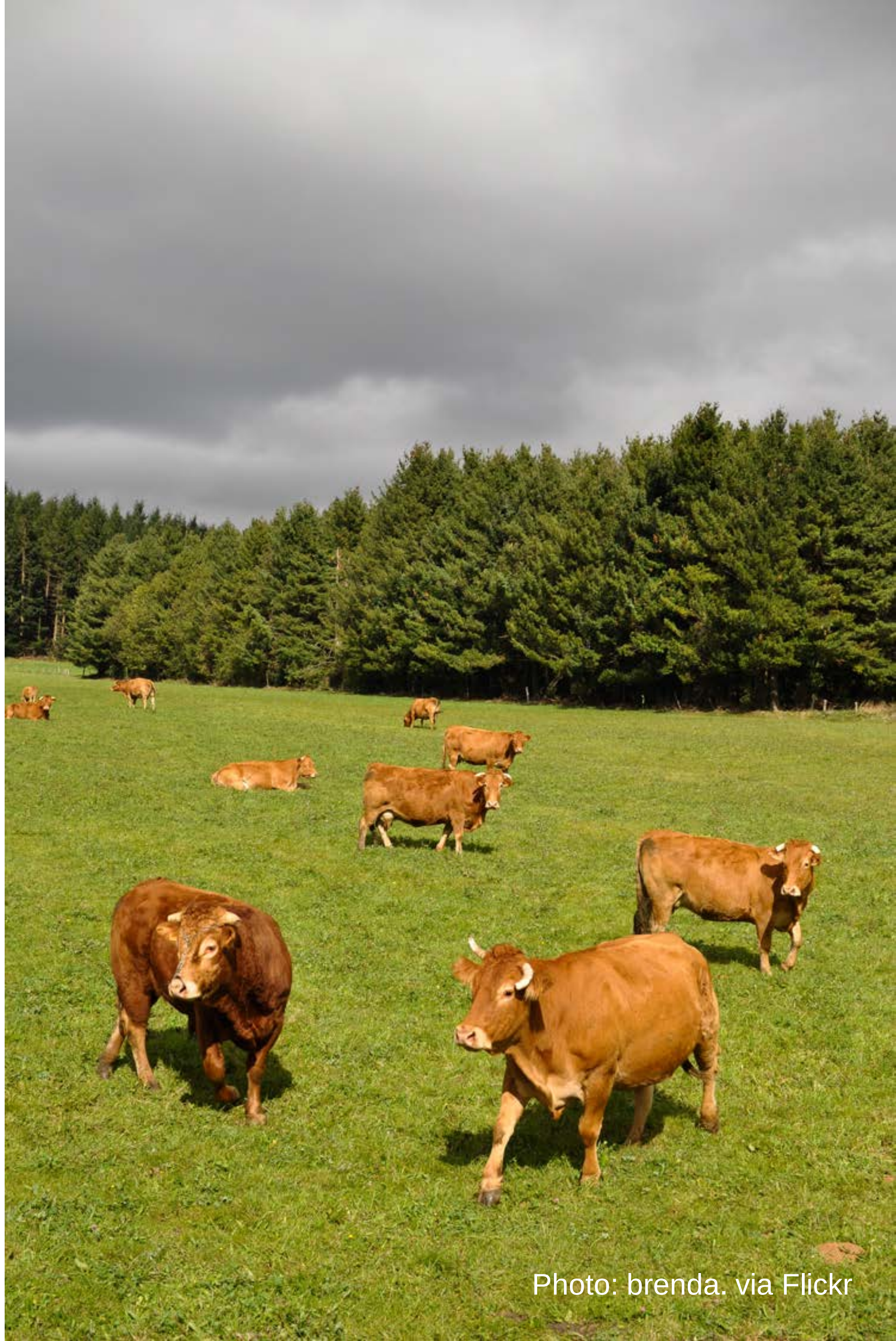


Photo: brenda. via Flickr

Insurance Options for Beekeepers

PRF insurance (which insures against drought or low precipitation) is available to beekeepers under the name **API**

- Colonies are insured instead of acres, otherwise similar to PRF
- 3 policies sold in NY in 2017

Beekeepers can also insure using **Whole Farm Revenue Protection**

- Honey and colonies sold to other operations may be insurable, “rental activities” are not
- Livestock and livestock products coverage is capped at $1 million in revenue


Photo: Thien Gretchen via Flickr

Actual Production History (APH) Insurance

Most NY produced crops are covered by APH policies!

What is covered?

- This is a single crop policy that offers protection for various crops.
- Covers yield losses that cause production to fall below your historical production levels.
- Protected losses may be caused by:
  - adverse weather
  - fire
  - wildlife
  - insects or plant disease (when not due to insufficient control measures)

What is NOT covered?

- Protection is only for yield risk and NOT price risk!
- Failure to market your cabbage is NOT covered!
- Losses due to poor management practices are NOT covered!

APH Cabbage Insurance - Example

Assume a Niagara Co. producer with a fresh green cabbage APH yield of 400 cwt/acre is insuring at the 65% coverage level.

- The premium for this producer would be approximately $79/acre
- The yield guarantee would equal 260 cwt/acre (65% X 400 cwt/acre)

What would happen if this producer experienced an exceptionally poor season with a yield of only 240 cwt/acre?

- 260 cwt/acre yield guarantee – 240 cwt/acre actual yield = 20 cwt/acre loss per acre
- 20 cwt/acre loss per acre X $16.25/cwt price election = $325/acre indemnity
- Total Payout: $325/acre indemnity - $79/acre premium = $246/acre payout

Estimated premium used for educational purposes only. Only insurance agents can quote actual rates.

Whole Farm Revenue Protection (WFRP)

WFRP allows **diversified farmers** to insure their whole operation with just one policy

More diversified farms benefit from **higher premium subsidies** and **lower premium rates**

Schedule F tax records for farm activities over past 5 years are required

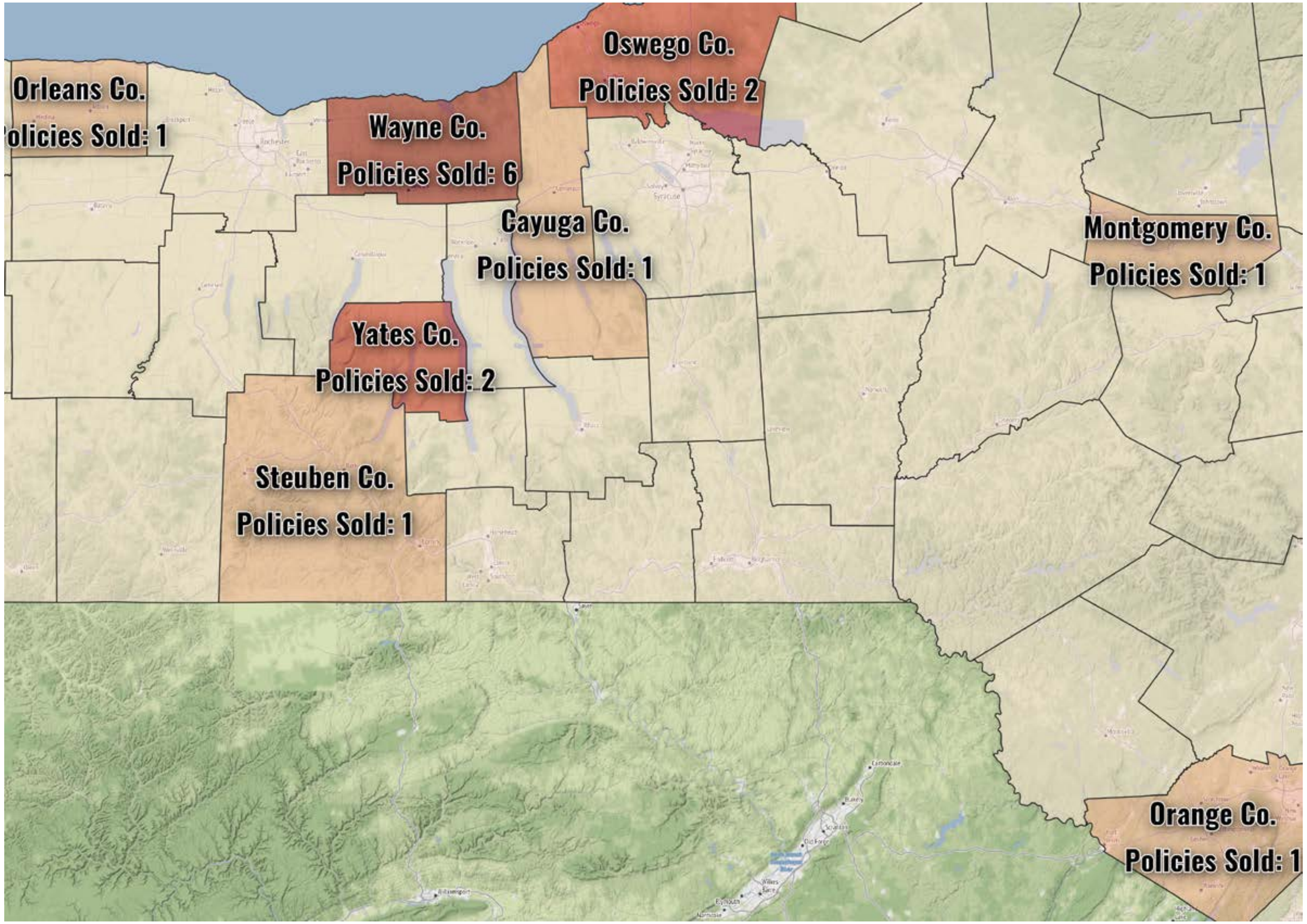
WFRP policies cover *all* crops or livestock produced by a farm

- Record keeping requirements may be a challenge for “highly diversified” farms

So far, NY usage is low: 15 total policies sold in 2017

Photo: Michigan Municipal League via Flickr

Whole Farm Revenue Protection (WFRP) – NY Participation 2017



Whole Farm Revenue Protection (WFRP)

Things to be aware of…

- WFRP is available in all New York Counties
- Important Dates:
  - Sales Closing Date: March 15^{th} (early fiscal filers) November 20^{th} (late fiscal filers)
  - Acreage Reporting: July 15^{th}
  - Billing Date: August 15^{th}
- The insurable period coincides with the duration of the producer's tax year.
- CAT coverage is NOT available.
- This policy provides replant coverage for:
  - For annual crops, except those covered by another Federal crop insurance policy
  - Equal to the cost of replanting up to a maximum of 20 percent of the expected revenue
  - When 20 percent or 20 acres of the crop needs to be replanted.

Whole Farm Revenue Protection (WFRP)

Diversified Producer Case

- Suppose you are a diversified New York farm with the following average revenues.

Crop	Acres	Yield	Price	Revenue
Snap Beans	20	3.6 tons/acre	$300/ton	$21,600
Sweet Corn	30	95 cwt/acre	$20.75/cwt	$59,137.50
Dry Beans	20	15 cwt/acre	$37.00/cwt	$11,100
Barley	30	45 bu/acre	$4.25/bu	$5,737.50
Cabbage	20	380 cwt/acre	$17.50/cwt	$133,000
			Total:	**$230,575**

- Upon purchasing a WFRP policy, you qualify as a diversified operation and are able to protect your approved revenue of $230,575 at the 85% level and receive the diversified operation premium subsidy.
- With this policy you have an insured revenue of $195,989 ($230,575 X 85%) with an estimated producer premium of $11,469.

Estimated premium used for educational purposes only. Only insurance agents can quote actual rates.

Whole Farm Revenue Protection (WFRP)

Example – One crop losses and no payout triggered

- Your operation experiences a case of aphids and has a sweet corn yield loss of 50%, all other crops experience average yields and prices remain average.

Crop	Acres	Yield	Price	Revenue
Snap Beans	20	3.6 tons/acre	$300/ton	$21,600
Sweet Corn	30	47.5 cwt/acre [95 X (1-50%)]	$20.75/cwt	$29,568.75
Dry Beans	20	15 cwt/acre	$37.00/cwt	$11,100
Barley	30	45 bu/acre	$4.25/bu	$5,737.50
Cabbage	20	380 cwt/acre	$17.50/cwt	$133,000
			Total:	**$201,006.25**

- Although you incurred significant losses in your sweet corn crop, your revenue is still $5,018 above the insured revenue value of $195,989. You do not receive an indemnity payment.

Whole Farm Revenue Protection (WFRP)

Loss Example – One crop losses that trigger payout.

- Your operation experiences a case of worms that reduce cabbage yields by 30%, all other crops experience average yields and prices remain average.

Crop	Acres	Yield	Price	Revenue
Snap Beans	20	3.6 tons/acre	$300/ton	$21,600
Sweet Corn	30	95 cwt/acre	$20.75/cwt	$59,137.50
Dry Beans	20	15 cwt/acre	$37.00/cwt	$11,100
Barley	30	45 bu/acre	$4.25/bu	$5,737.50
Cabbage	20	152 cwt/acre [380 X (1-60%)]	$17.50/cwt	$53,200
			Total:	**$150,775**

- You incurred significant losses in your cabbage crop, which caused your operation's revenue to decrease to $150,775, or $45,214 below your insured revenue value of $195,989. You will receive a payout of $33,745 ($45,214 - $11,469) for that year.

Cornell Crop Insurance & Risk Management Education Project Resources Website: **agriskmanagement.cornell.edu**

Currently available

- Newly updated website including
  - Articles
  - Fact sheets
  - Presentations
  - Videos
  - Farmer testimonials

Coming soon

- Risk management podcast series
- More NY case studies
- More fact sheets
- Whole Farm Revenue Protection examples

Cornell University delivers crop insurance education in New York State in partnership with the USDA Risk Management Agency.

Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

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