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**Is Organic Farming Risky?**

***Overcoming Crop Insurance Barriers to Expanding Organic Food Production and Markets***

Mike Morris, Ph.D., National Center for Appropriate Technology, Eric Belasco, Ph.D., Montana State University

***Selected paper/poster prepared for presentation at the 2018 Agricultural & Applied Economics Association Annual Meeting, Washington, D.C., August 5-7, 2018***

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# Is Organic Farming Risky?

## Overcoming Crop Insurance Barriers to Expanding Organic Food Production and Markets

Mike Morris, Ph.D., National Center for Appropriate Technology, Eric Belasco, Ph.D., Montana State University



### Problem

- Limited crop insurance options have historically reduced the ability of organic farms to access loans and survive disasters: creating a market disadvantage and discouraging transitioning to organic certification.
- Although new crop insurance options have recently become available—especially Whole-Farm Revenue Protection (WFRP)—few organic growers are aware of them and questions remain about their usefulness.
- Harmful negative stereotypes persist about the risks of organic farming, and there is a need for empirical evidence on a broad range of risk-related topics.

### Objectives

- Enhance the ability of organic producers to grow and market agricultural products, by improving their access to federally-insured crop insurance.
- Understand the specific application of new crop insurance options for organic farms.
- Provide extensive education on crop insurance for organic producers and stakeholder groups.
- Make national policy recommendations that will lead to improving crop insurance for organic farms.

### Research

- Survey attitudes, needs, and willingness to buy crop insurance by organic farmers in all parts of the country.
- Interview crop insurance agents and companies, and representatives of the USDA Risk Management Agency (RMA), looking for barriers in the delivery system that may negatively affect organic producers.
- Study practical questions that are urgently important to organic growers, such as how to decide between WFRP and the Noninsured Crop Disaster Assistance Program (NAP) from the USDA Farm Service Agency, or the advantages of combining WFRP with single-crop MPCCI policies.
- Carry out empirical studies that shed light on the actual risks of organic farming: Compare organic and conventional farms in the FINBIN farm financial database maintained by the Center for Farm Financial Management. And research *adverse selection* by organic growers, through a study of Agricultural Resource Management Survey (ARMS) data.

### Education

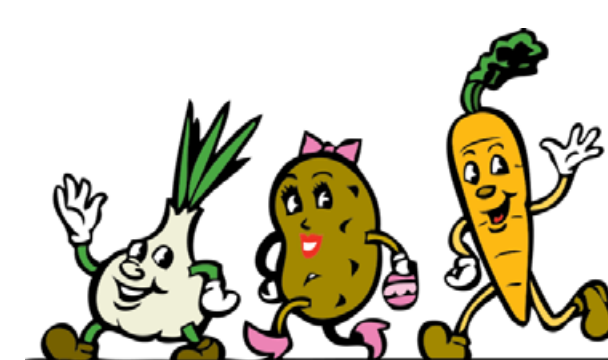
- Awareness campaign: Promote optimal usage of new crop insurance products by organic farms.
- Education will include a strong focus on preparing growers to file successful claims.
- Train ATTRA staff in all parts of the country to answer questions about crop insurance.
- Train-the-trainer activities aimed at certifying agents, extension, agencies, advocates, and educators.
- Close coordination with RMA and stakeholder groups interested in better crop insurance options for organic farms.



Many organic growers have little or no experience with crop insurance.

Thanks goodness we finally got **Crop Insurance!**

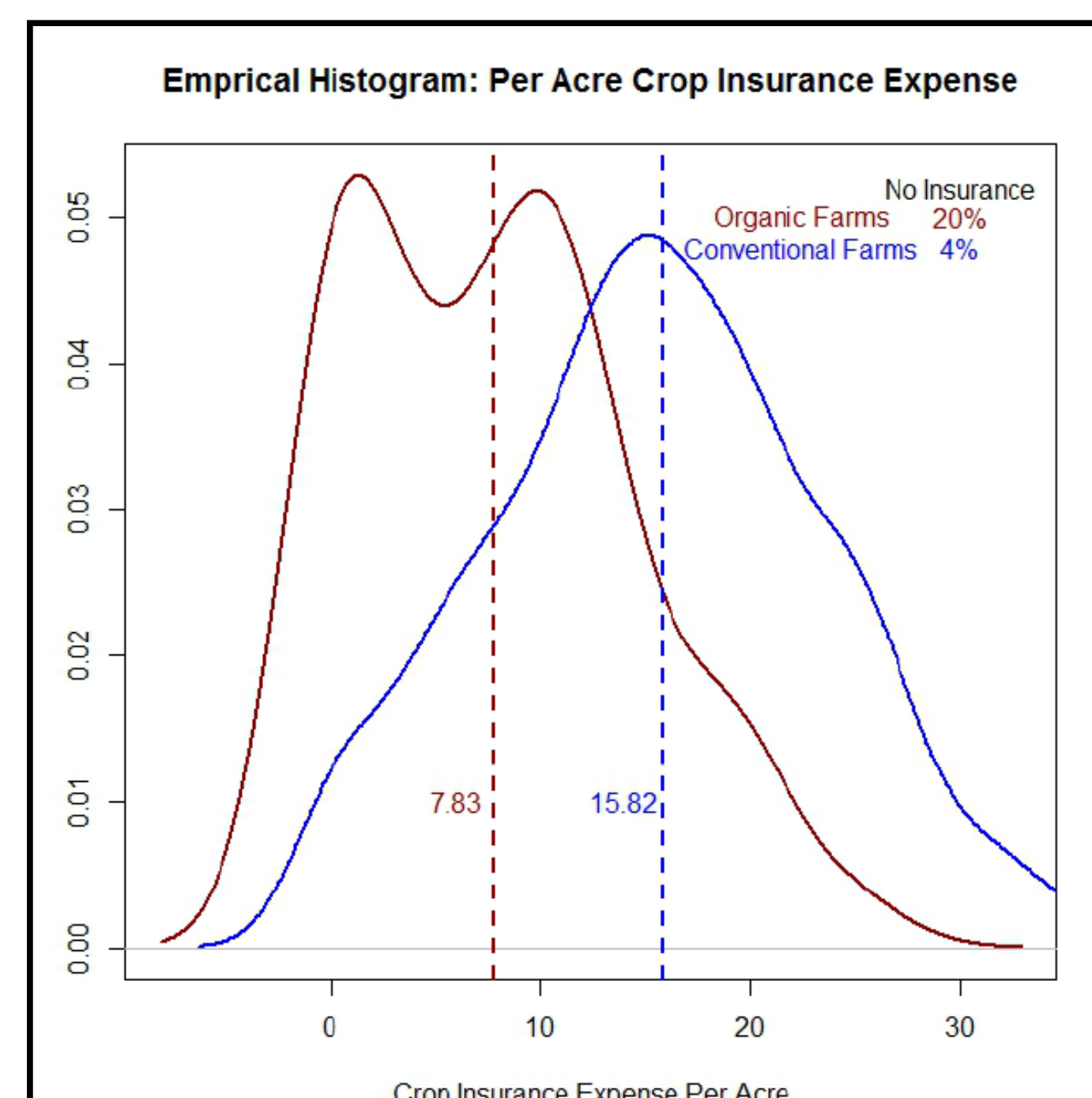
(It's not just for big conventional farms anymore.)



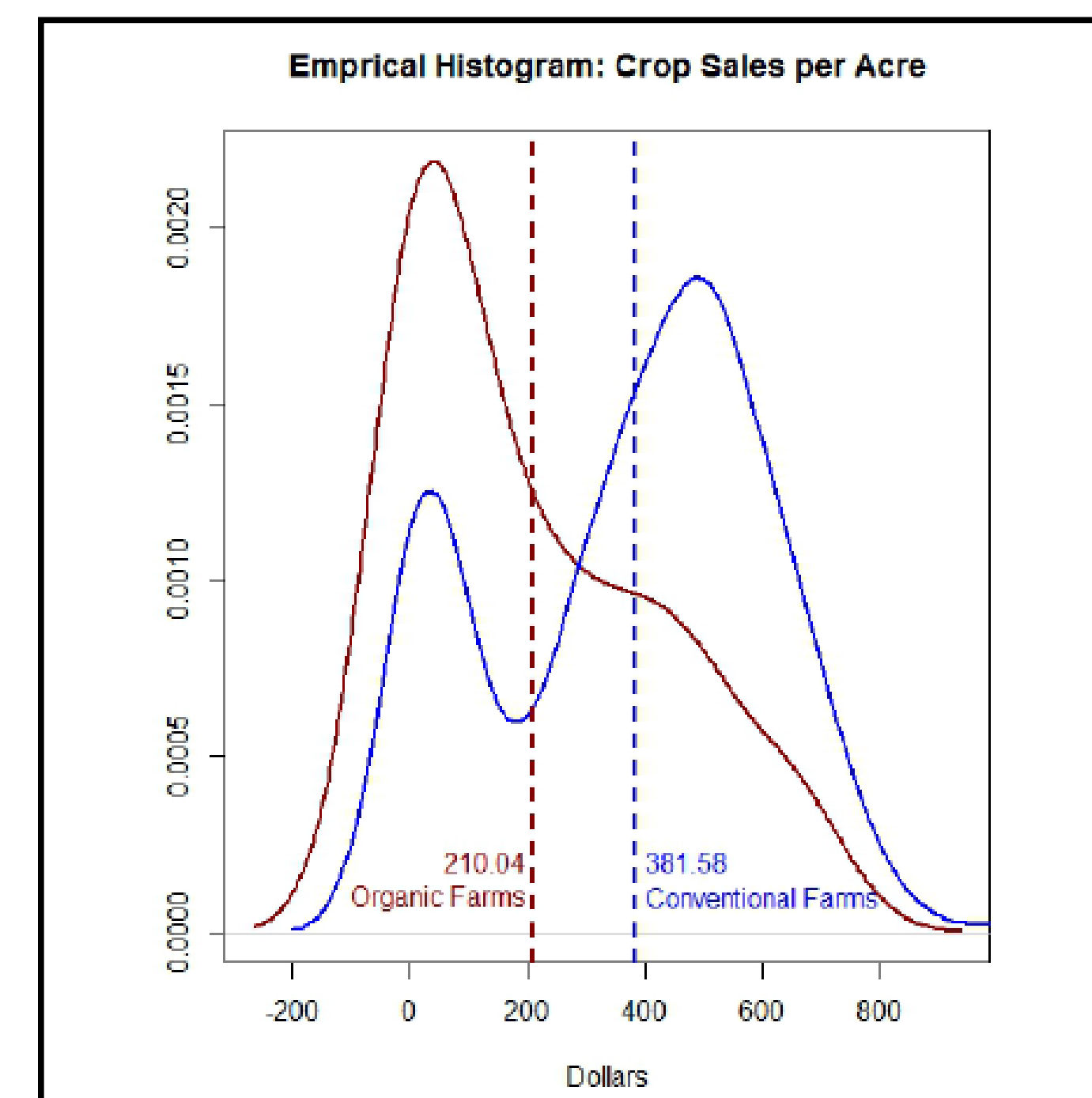
Flyer for organic farming conferences: making a dull topic interesting.

### Accomplishments to Date

- Compared matched sets of conventional and organic farms in the FINBIN database, looking at various indicators of risk.
- Calculated hypothetical WFRP premiums and indemnities for farms in the FINBIN database: “proof of concept” showing how this could be done with historical data.
- Presentations given at organic farming conferences, educational materials developed and distributed.
- Face-to-face project team meetings held in 2015 and 2016: collecting reports from around the country, identifying research needs, and planning educational efforts.
- Working relationships formed with RMA staff and stakeholder groups at the regional and national level.



Results from comparative study of organic and conventional farms in the FINBIN database.



Hail damage.



Flood damage.



Healthy "drought-proof" soil.



### Coming Soon...

- A survey of needs and attitudes by organic growers around the country.
- A report on the crop insurance delivery system and compensation issues.
- Webinars, journal articles, and many more presentations and workshops.
- Train-the-trainer efforts for certifying agents and organic advocacy groups.
- A new guide to organic crop insurance on the ATTRA website, aimed at those who have little or no experience with crop insurance.



### Project Team

- Roger Noonan, New England Farmers Union
- Doug Crabtree, Montana Organic Association
- Chris Schreiner, Oregon Tilth
- Michael Diaz, New Mexico Department of Agriculture
- Marty Mesh, Florida Organic Growers
- Ellen Gray, Washington Sustainable Food & Farming Network
- Mike Morris, National Center for Appropriate Technology (Co-PI)
- Harriet Behar, Midwest Organic Sustainable Education Service
- Margaret Krome, Michael Fields Institute
- Eric Belasco, Montana State University (Co-PI)
- Carl Little, manager of NCAT's ATTRA program
- Dale Nordquist, Center for Farm Financial Management

#### Not shown

- Mary Fund, Kansas Rural Center
- Molly Lutton, Rural Advancement Foundation International



### Educators and service providers: We need your help.

- Learn about new crop insurance options, especially Whole-Farm Revenue Protection.
- Spread the word to organic growers, agency personnel, and other stakeholders.
- Let us know about problems encountered and success stories in your area.
- Watch for educational resources on the ATTRA website. And call or e-mail ATTRA with questions.



Beneficial insect habitat on organic farm.

### Acknowledgment

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United States Department of Agriculture

National Institute of Food and Agriculture

Whole-Farm Revenue Protection Examples for Bastrop County, Texas (Source: RMA Cost Estimator)

**Example #1: Growing highly-diversified small farm (10 crops)**  
 Revenue history: 2010 \$7,000, 2011 \$15,000, 2012 \$20,000, 2013 \$25,000, 2014 \$35,000  
 Expected revenue is \$40,000 as follows:

|                  |          |                  |         |               |         |
|------------------|----------|------------------|---------|---------------|---------|
| Alfalfa          | \$5,000  | Cabbage          | \$2,800 | Bell Peppers  | \$7,500 |
| Cattle (Stocker) | \$10,000 | Sweet Potatoes   | \$1,800 | Winter Squash | \$1,200 |
| Jalapeno Peppers | \$3,000  | Mixed Vegetables | \$5,200 |               |         |
| Dry Beans        | \$2,500  | Raspberries      | \$1,000 |               |         |

| Coverage Level   | 85%      | 80%      | 75%      | 70%      | 65%      | 60%      | 55%      | 50%      |
|------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Liability amount | \$34,000 | \$32,000 | \$30,000 | \$28,000 | \$26,000 | \$24,000 | \$22,000 | \$20,000 |
| Total premium    | \$3,026  | \$2,464  | \$2,040  | \$1,652  | \$1,352  | \$1,104  | \$924    | \$760    |
| Producer premium | \$1,331  | \$715    | \$408    | \$330    | \$270    | \$221    | \$185    | \$152    |

**Example #2: Growing less-diversified small farm (3 crops)**  
 Revenue history: 2010 \$7,000, 2011 \$15,000, 2012 \$20,000, 2013 \$25,000, 2014 \$35,000  
 Expected revenue \$40,000 as follows: Alfalfa \$15,000 Mixed Vegetables \$10,000 Cattle (Stocker/Feeder) \$15,000

| Coverage Level   | 85%      | 80%      | 75%      | 70%      | 65%      | 60%      | 55%      | 50%      |
|------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Liability amount | \$34,000 | \$32,000 | \$30,000 | \$28,000 | \$26,000 | \$24,000 | \$22,000 | \$20,000 |
| Total premium    | \$3,808  | \$3,008  | \$2,430  | \$1,960  | \$1,560  | \$1,272  | \$1,012  | \$820    |
| Producer premium | \$1,676  | \$872    | \$486    | \$392    | \$312    | \$254    | \$202    | \$164    |

**Example #3: Growing highly-diversified medium-sized farm (10 crops)**  
 Revenue history: 2010 \$49,000, 2011 \$105,000, 2012 \$140,000, 2013 \$175,000, 2014 \$245,000  
 Expected revenue \$275,000 as follows:

|                  |          |                  |          |               |          |
|------------------|----------|------------------|----------|---------------|----------|
| Alfalfa          | \$30,000 | Cabbage          | \$21,800 | Bell Peppers  | \$45,000 |
| Cattle (Stocker) | \$32,000 | Sweet Potatoes   | \$19,300 | Winter Squash | \$22,200 |
| Jalapeno Peppers | \$18,000 | Mixed Vegetables | \$31,200 |               |          |
| Dry Beans        | \$19,000 | Raspberries      | \$16,500 |               |          |

| Coverage Level   | 85%       | 80%       | 75%       | 70%       | 65%       | 60%       | 55%       | 50%       |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Liability amount | \$233,750 | \$220,000 | \$206,250 | \$192,500 | \$178,750 | \$165,000 | \$151,250 | \$137,500 |
| Total premium    | \$21,038  | \$17,380  | \$14,438  | \$11,935  | \$9,474   | \$7,920   | \$6,655   | \$5,500   |
| Producer premium | \$9,257   | \$5,040   | \$2,888   | \$2,387   | \$1,895   | \$1,584   | \$1,331   | \$1,100   |

**Example #4: Flat-growth less-diversified medium-sized farm (3 crops)**  
 Revenue history: 2010 \$220,000, 2011 \$260,000, 2012 \$320,000, 2013 \$240,000, 2014 \$265,000  
 Expected revenue \$275,000 as follows: Alfalfa \$100,000 Mixed Vegetables \$75,000 Cattle (Stocker/Feeder) \$100,000

| Coverage Level   | 85%       | 80%       | 75%       | 70%       | 65%       | 60%       | 55%       | 50%       |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Liability amount | \$233,750 | \$220,000 | \$206,250 | \$192,500 | \$178,750 | \$165,000 | \$151,250 | \$137,500 |
| Total premium    | \$25,946  | \$20,680  | \$16,706  | \$13,475  | \$10,546  | \$8,745   | \$6,958   | \$5,775   |
| Producer premium | \$11,416  | \$5,997   | \$3,341   | \$2,695   | \$2,109   | \$1,749   | \$1,392   | \$1,155   |

Handout for growers showing sample premiums.