
CLEAN LABEL
CONFERENCE
Consumer
Friendly
Simple
ure
Natural
2016
BREAKING NEW GROUND
in organic & non-gmo markets
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March 29-30, 2016, Itasca, Illinois, USA
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The Organic & Non-GMO Supply Chain: What Companies Need to Know to be Competitive

Interest in non-GMO and organic foods by consumers and marketers grows steadily. The OTA reports US sales of organic products reached $39.1B in 2014, a growth of 11.3% from 2013. As demand for these products increases, so does the strain on the supply chain. For companies who are creating products to meet this demand—or anyone researching this industry segment—key information on these emerging markets must be acquired with the purpose of supporting a company's own growth strategies. Understanding the organic & non-GMO supply is critical. This presentation covers the unique characteristics, supply and demand factors that impact sourcing and sustainability.

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Today's Presentation Goals

- Understand the big picture of the organic supply chain is important even if you're not in Procurement
- Appreciate the nuances, challenges and opportunities your procurement colleagues face in commercialization when product development and market research launch new clean label initiatives

Agenda

- About Mercaris
- Macro-level Organic Market Primer
- Upstream/ Farmer Hurdles
- Processor Challenges
- Downstream / Food Manufacturer Challenges
- Addressing these Issues

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Who we are…..

Market Data Service and **Trading Platform**
for organic and non-GMO agricultural commodities.

-We collect and report **Market Data**

-We connect **growers** and **buyers**

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Commodity Market Research

- Market prices, supply and demand analysis
- Custom organic, non-GMO, IP industry analysis
- Organic & Non-GMO Corn
- Organic Wheat
- Organic & Non-GMO Soybeans
- Organic Edible beans

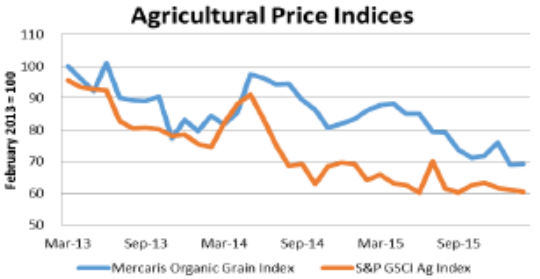
MERCARIS **MARKET UPDATE - FEBRUARY 2016**

Macroeconomic Impacts on Organic Grain Market

The global commodity market selling off is weighing heavily on organic grain markets. This month, the S&P GSCI Agriculture Index stumbled lower and is now 34% below its high set in 2014. Organic grain markets remain uninsulated as price declines accelerated to nearly match the magnitude of the move witnessed in conventional grain prices.

The Mercaris Organic Grain Index (TM) is unchanged versus January, yet 9% lower since December, and 20% below its level one year ago.

Anecdotally, we have heard some processors have built inventories, overbought, cannot compete against cheaper finished products, or have delayed or defaulted outright on grower contracts.

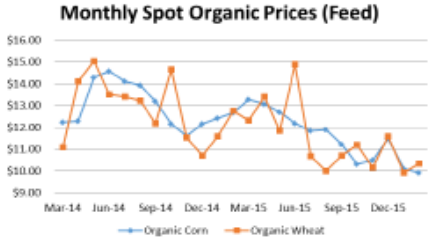


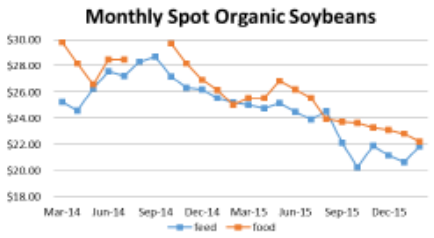
Average Organic Spot Market Delivered Prices

$/bushel	Dec.	Jan.	Feb.
Organic Corn (feed)	$ 11.49	$ 10.10	$ 9.93
Organic Soybeans (feed)	$ 19.75	$ 21.49	N/A
Organic Soybeans (food)	$ 23.38	$ 22.21	N/A
Organic Wheat (feed)	$ 11.58	$ 9.93	$ 10.33

Comments

Spot organic grain prices continued lower in February for feed corn and wheat. Organic soybean trades were lower, but too light to report a spot price. Forward contracting prices for organic soybeans were flat/lower versus January price.





Note: Soybean chart shows 2-month average spot prices

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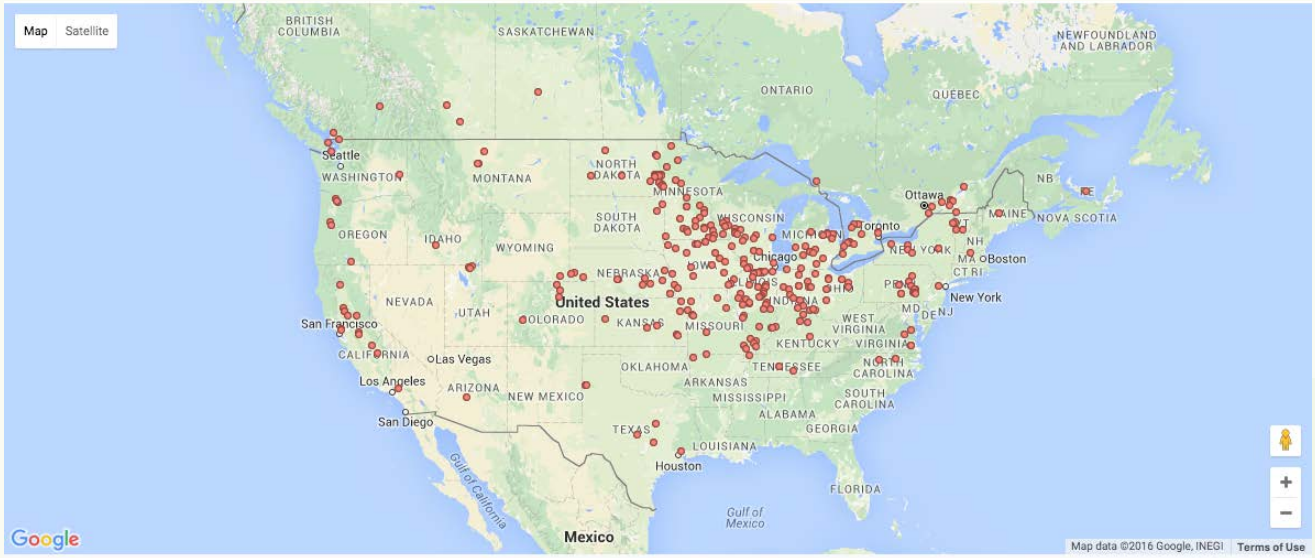
Online Grain Auctions



314 facilities were found w/ the following filters:

Update Assets

Location:	United States & Canada		
Commodities:	Any Commodity	End Use:	Feed, Food, Unknown
Transportation:	Truck, Rail Sidings, Containers, Unknown		
Business Activities:	Processing, Cleaning, Storage, Unknown		
Facility Type:	Grain Mill, Elevator / Bin Storage, Crush Facility, Transloading, Unknown		
Estimated Volume:	<10k bushels, 10k-100k bushels, 100k-500k bushels, 500k-1.0 mil bushels, 1.0 mil-5.0 mil bushels, 5.0 mil+ bushels, Unknown		

CME Corn Futures

Bid	Ask
$3.70	$3.71

Market value
$3.705

Organic Corn

Bid	Ask
$7.75	$9.00

Market value
?

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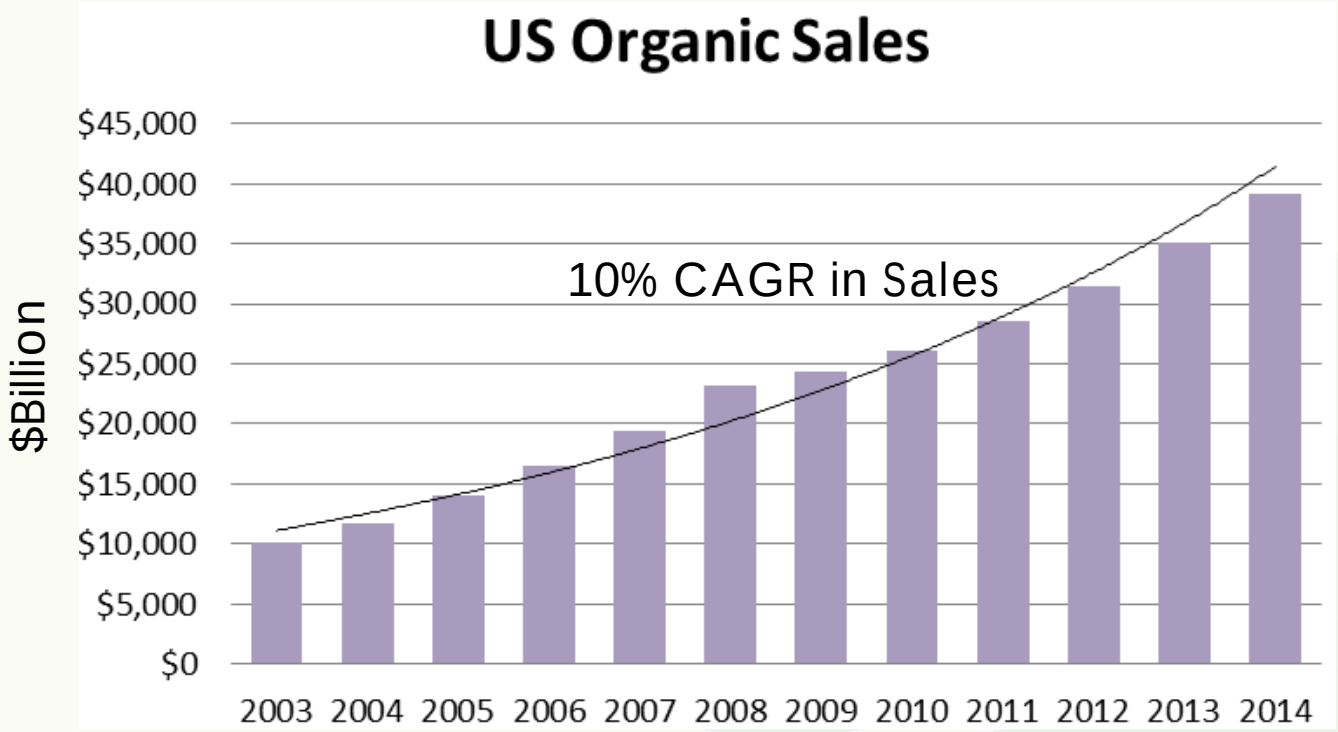
Organic as Driver of Food Industry Growth



Source: OTA State of the Industry 2015

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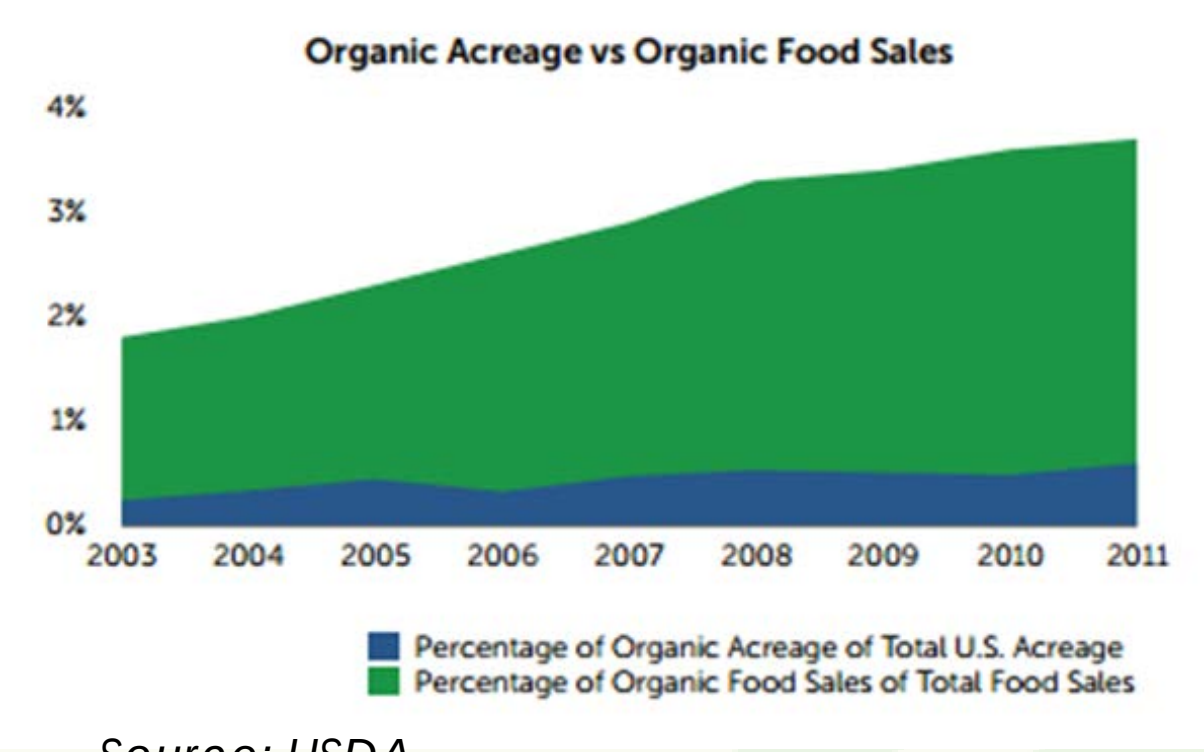
Is Organic Demand Outpacing Supply?



Source: USDA

Annie's president at expo west: "Today 4-5% of the US food market is organic, and I think it will ultimately get to 20%"

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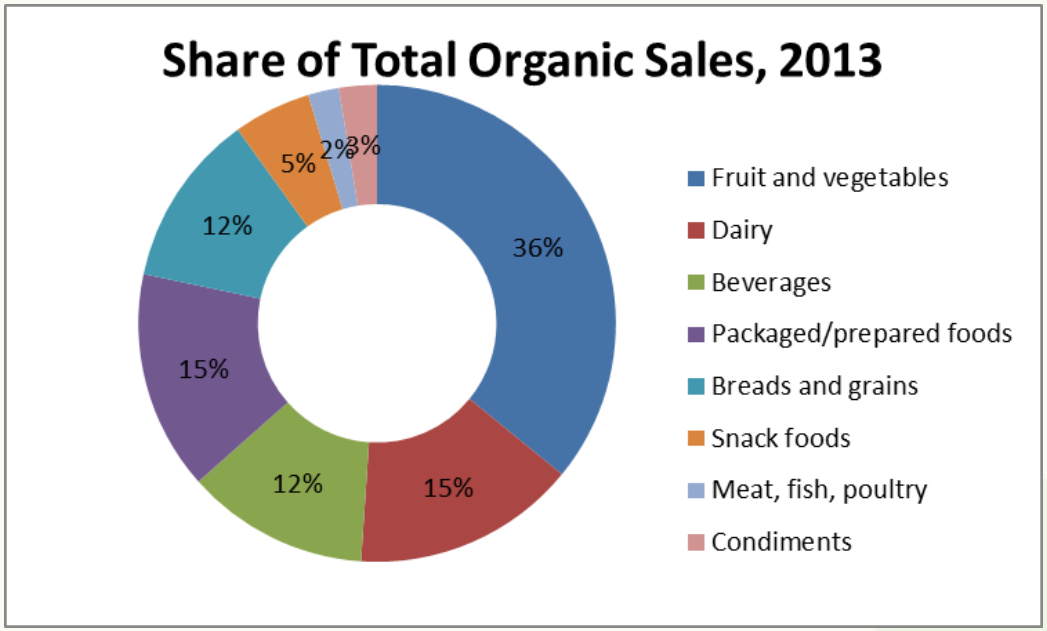
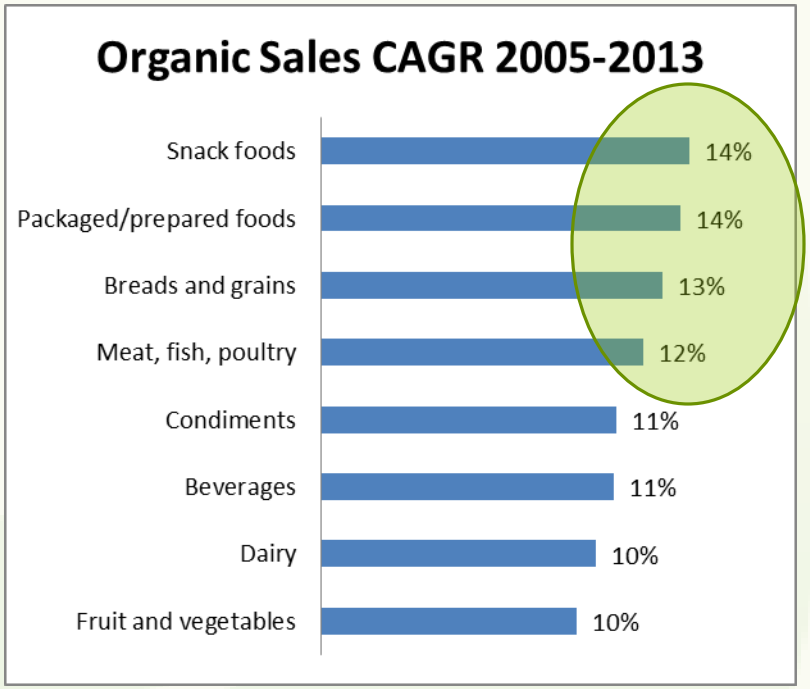
Organic Sales by Category





- **Established**: Fruits and vegetables accounted for an estimated 36% percent of U.S. organic food sales but only 16 percent of certified organic cropland.
- **Emerging:** Meat, fish, poultry, snack foods, breads, grain, packaged foods will require disproportional growth in grains & oilseeds relative to other crops

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Conventional vs. Organic Cropland

Crop	U.S. cropland Acres Thousands	U.S. cropland Share of total Percent	Certified organic Acres Thousands	Certified organic Share of total Percent	Organic intensity Share of total Percent
Corn	91,900	30%	235	12%	0.3%
Soybeans	78,000	26%	132	7%	0.2%
Hay	61,600	20%	786	39%	1.3%
Wheat	54,400	18%	345	17%	0.6%
Fruit and nuts	4,000	1%	155	8%	3.9%
Vegetables	2,800	1%	161	8%	5.7%
Rice	2,700	1%	49	2%	1.8%
Barley	2,600	1%	64	3%	2.5%
Oats	2,500	1%	62	3%	2.5%
Dry beans, peas & lentils	2,100	1%	47	2%	2.2%
Total, selected crops	302,500	100%	2,034	100%	0.7%

0.6% of total US acres are organic, strong organic share in fruits, nuts & vegetables

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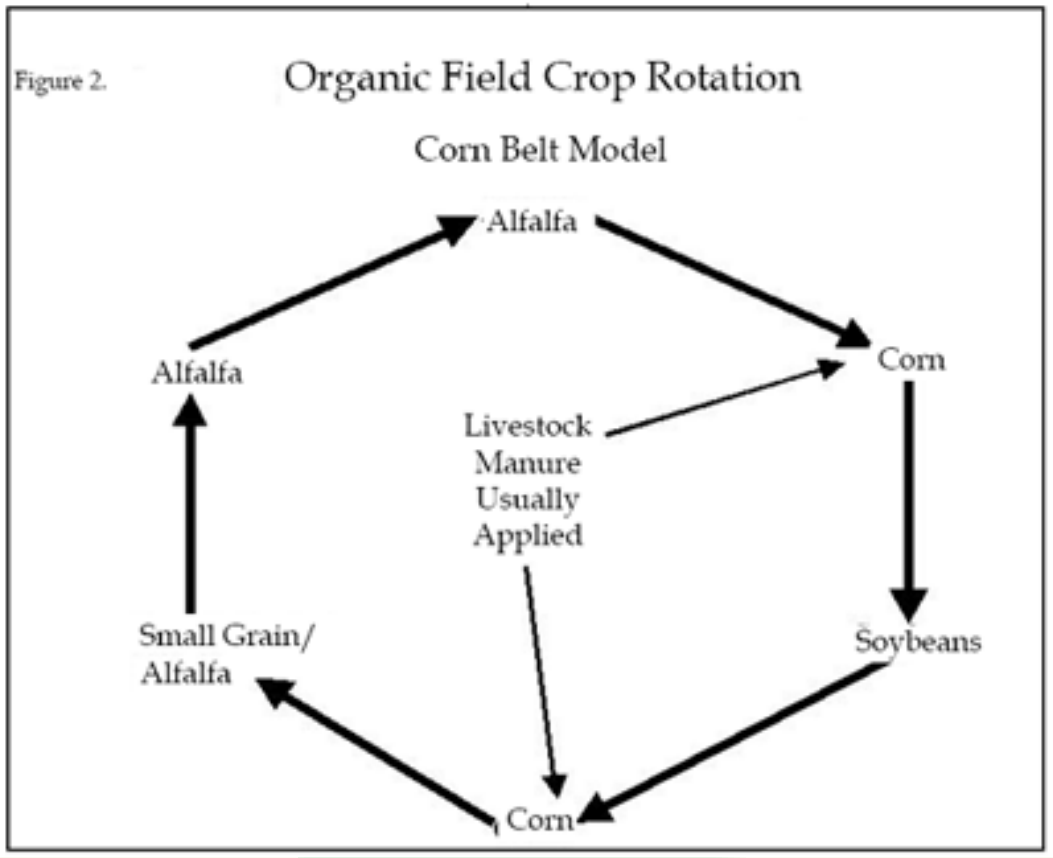
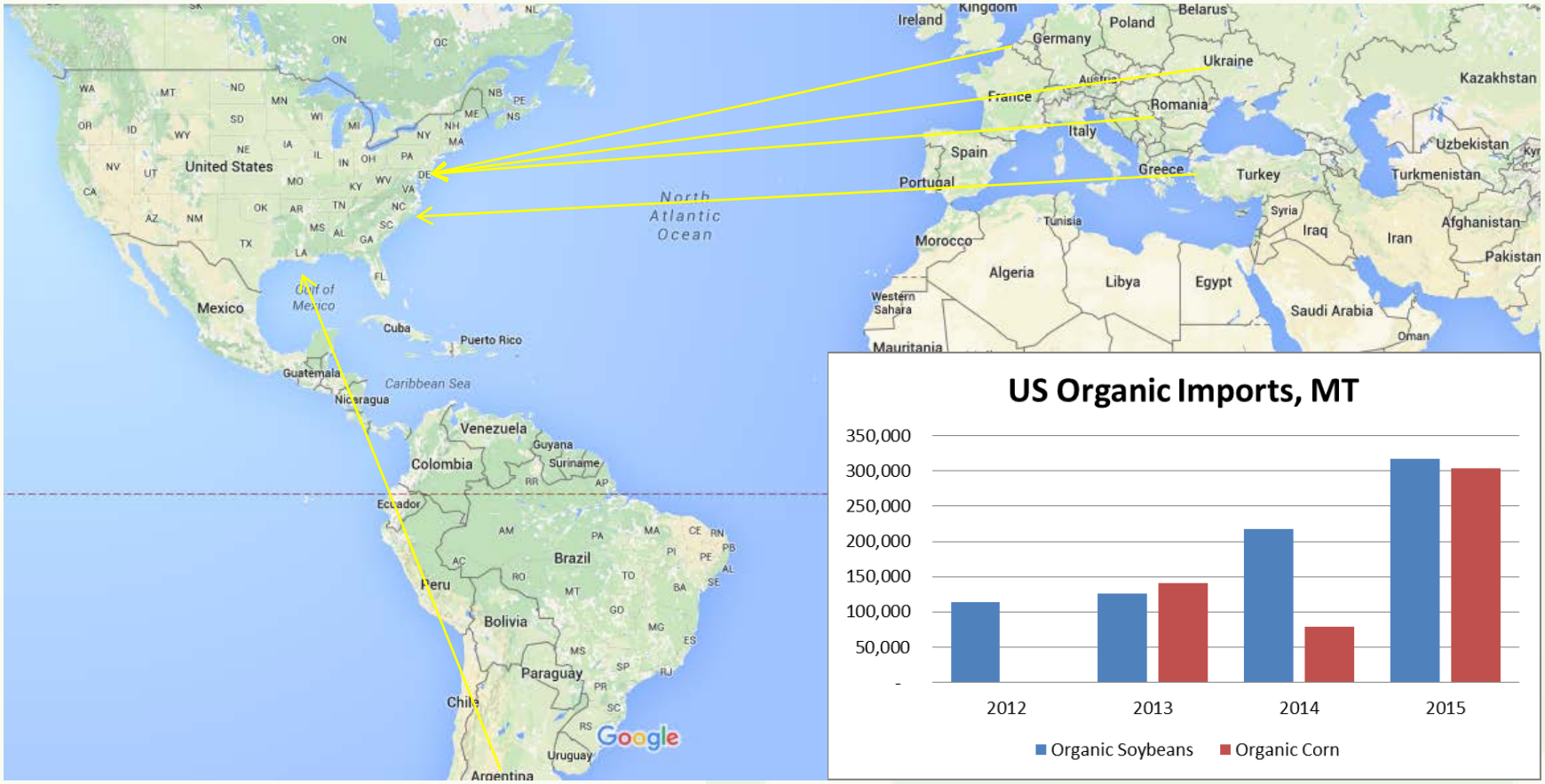
Crop Rotation and Planting Decisions

- Conventional Farmer: market-based
  - Corn, Soy/Corn, repeat
- Organic Farmer: soil nutrient-based



Short Term Solution: Organic Grain Imports



75% and 22% of organic soybean and corn supplies were imported in 2015

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Economic Incentives for Crop Farmers

Net Return Per Acre, 2010-2014

	Conventional	Transitional	Organic
Corn	$ 129	$ (13)	$ 552
Soybeans	$ 91	$ (105)	$ 187
Alfalfa	$ 168	$ 134	$ 157
Average	$ 129	$ 5	$ 299

Source: FINBIN.umn.edu

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Convincing Growers to Transition is Tough Sledding

- Organic Certification requires 36-month organic transition - **a significant investment**
- Third-party certifier
- New crop rotation management system needed
- Prohibitive costs
  - Negative cash flow impact during transition
  - Bank financing availability
  - Farmers who rent land
- Lack of market transparency, price risk management tools
- Limited transitional outlets
- Limited Organic & non-GMO processing and storage availability

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Some Perspective on Market Size

Illinois' 74,300 farms cover nearly 27 million acres -- about 75 percent of the state's total land area.

This compares to 14,870 organic farms with 2 million acres nationally

Illinois > 10x total US organic acres

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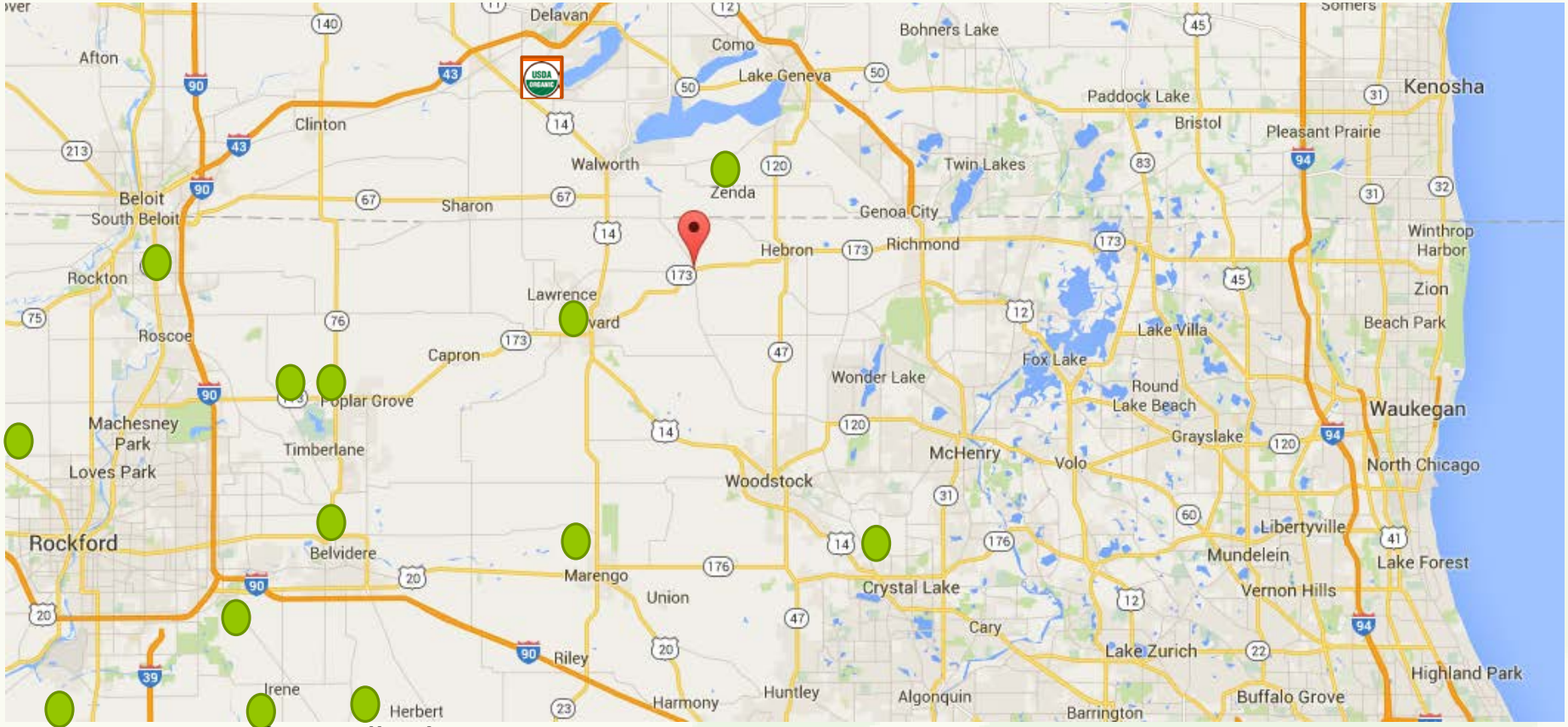
Corn Producer in Alden, IL



(30 miles)

↓ 113 miles

↓ 160 miles

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Processor Challenges

- Finding organic raw commodity supply
- Smaller growers, variable quality, sophistication and reliability
- Longer supply chain costs / lead time
- Financial risk management, higher stakes
- Regulation/certification- achieving Organic or non-GMO labeling status

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Food Manufacturer Challenges

- Quantifying and securing raw material supply
- Finding reliable suppliers and understanding available capacity if it exists
- Market transparency issues in commodity and finished product market
- Understanding sustainability implications of going organic or non-GMO
- Communicating upcharge in reformulation for cost/benefit analysis
- Creating market for transitional crops
- Product development of these smaller grains (flax, wheat, barley, oats), legumes much needed

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How Food Manufacturers are Getting Creative

1. Direct contracting with growers and co-ops, some long-term
2. Transitioning farmer incentives
3. Vertical integration – buying, leasing land
4. Investments in new supplier production capacity
5. Whole rotation contracting
6. New product launches

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Final Takeaways

- The organic market will grow by itself, intensifying competition for supply
- Innovative food manufacturers will take action
- Competitive edge if you can use these crops smaller grains, legumes in new product launches
- It is imperative to understand how your company will be impacted by the demand growth stresses on the supply chain

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Thank You!

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