# Ausborn Farm Organic Transition Field Day
# July 11th, 2017

# Agenda / Overview

- Quick review of organic agriculture
- Steps to get certified
- Transitional and organic rotations
- Benefits of small grains
- Budgets and Marketing options
- Paul Mugge and Seth Smith
- Tour oat field
- Tour equipment

# Organic Overview: Iowa

## 2014 Organic Survey

- 6th in the nation for total number of organic farms: 612
- Roughly 100,000 acres certified organic
- Over 102 million in organic sales
- Organic grain corn: #1 with over 25,000 acres (15% nationally)
- Organic Soybeans: #1 with over 15,000 acres (18 % nationally)
- #1 in organic hogs
- 8.6 million organic eggs

# Organic Rules

- 36 months with no application of prohibited materials prior to first harvest of organic crops
  - No use of prohibited synthetic fertilizers, pesticides, or GMO's
- Implementation of an Organic System Plan
- Choose a certification agency
- Submit application before the first year of organic (Feb-April 2018)
- Organic Inspection
- Review and certification, payment to accredited agency

# Ausborn Farm

# Ausborn Farm History

- Started farming in Iowa 1985
- Moved to current location 1988
- Purchased this farm in 1996
- Started transition in summer of 2015 (50 acres)
- Additional 10 acres added to transition summer of 2016

# #1 Decision: Why Organic

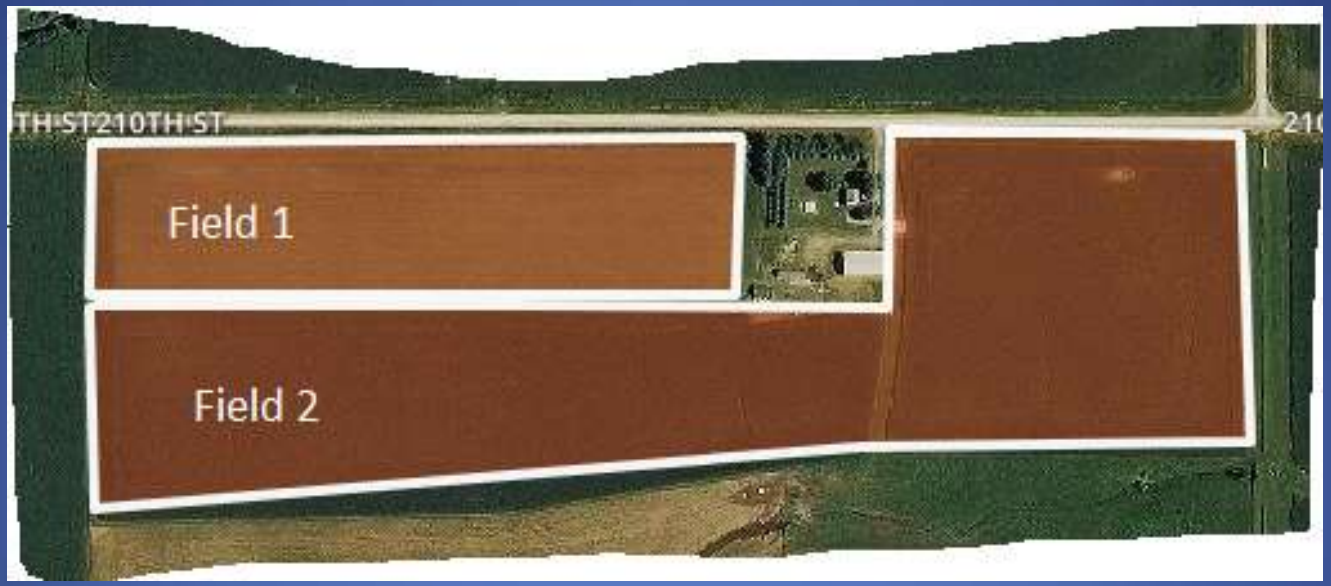
- It's FUN: brings joy and fulfillment
- It's not the convention ag cycle
- Believe in the process and the product
- Network of resources: farmers, universities, associations
- Ability to provide with less acres
- Sustainability and resource management
- Knowledge of organic farming methods
- Equipment inventory / access to land
- Storage

# Ausborn Farm Transition Plan: What fields to convert

# Ausborn Farm Transition Plan: What fields to convert

- Owned or rented
- Topography
- Crop history and management techniques
- Location and previous crop
- Workload
- Access to livestock
- Field border and isolation
- Proximity to house

# Rotation and Transition Plan




**Field 1**

2015 crop – Corn (cnv)
2016 crop – Alfalfa/oats (T)
2017 crop – alfalfa (T)
2018 crop – Organic Corn

**Field 2**

2015 crop – Corn (cnv)
2016 crop – Soybeans (T)
2017 crop – oats/alfalfa/rc (T)
2018 crop – Organic Corn

# Field 1- Oats/Alfalfa transition

- 2016
  - March 18- Applied 1 ton turkey manure
  - March 22- Seeded oats and alfalfa
  - July 10- Direct cut oats
  - July 14- Baled straw, small square and large round
  - August 25- Cut and bale hay/straw stubble, large rounds
  - November 21 – Applied 1.5 ton turkey manure
- 2017
  - May 27- Cut hay
  - May 30- Bale hay, large rounds


JOHN DEERE

# Benefits of Small Grains

- Rotational diversity
  - Helps compete against summer weeds, uses less chemicals
  - Decrease in root diseases and pest cycles
  - Increases soil health
- Improve water quality
  - Capture water and nitrates in the spring and fall
  - More roots in the ground more often
- Help to establish cover crop
- Breaks the weed cycle in organics, required in the rotation


8312 CASE

# Field 2- Soybean transition

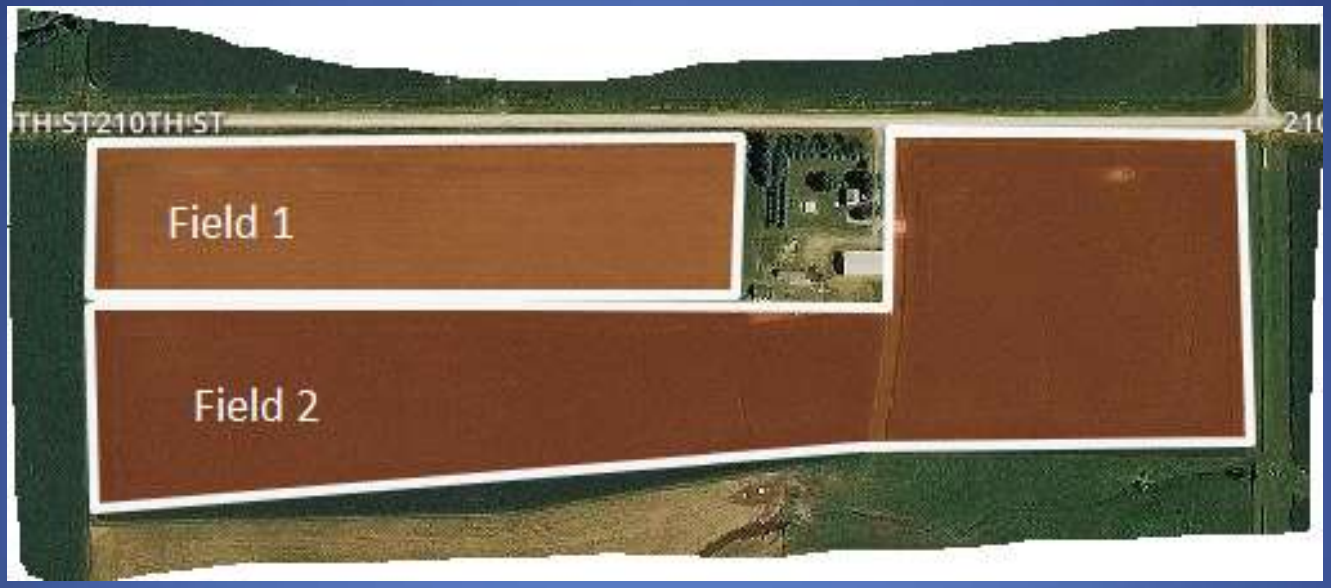
- 2016
  - May 7- Disc
  - May 19- Field Cultivate
  - May 20- Plant Soybeans
  - May 22 and June 2- Rotary Hoe
  - June 12 and June 27- Cultivate
  - July 16, August 8, August 23- Walk beans
  - October 13- Harvest
  - October 14- Seeded cover crops
  - December 2- Applied 1 ton turkey manure
- 2017
  - March 10- Field cultivate west half
  - March 19- Field cultivate east half
  - March 19- Seeded oats. Underseed alfalfa east, red clover west


JOHN DEERE
4440


One Day
One Night
One Reason


9660STS

# Tentative Organic Rotation




**Field 1**

2018- Organic Corn
2019- Organic Soybeans
2020- Organic Corn
2021- Organic Oats/Alfalfa
2022- Organic Alfalfa or Corn

**Field 2**

2018- Organic Corn
2019- Organic Soybeans
2020- Organic Small Grain
2021- Organic Corn
2022- Organic Soybeans

# Transitional Markets

- USDA Certified Transitional Program
- Soybeans- look at non-GMO and food grade markets
- Oats-  milling quality above 36 TW
- Straw- small squares, possibly certified weed free markets
- Corn- small premium for Non-GMO
- Hay- not known
- USDA- NRCS- EQIP- CAP138- Transition to Organic Plan

# Organic Grain Markets

- Feed processors
- Food processors
- Direct market to feeders
- MOSES Resource Directory- http://directory.mosesorganic.org/
- Iowa Organic Association
  - Organic Farmer Resources and Services http://www.iowaorganic.org/organic_farmer_resources_services

# Organic Soybeans

**Ag Decision Maker A1-18 -- Iowa State University Extension and Outreach**

For more information, see Information File, A1-18 Organic Crop Production Enterprise Budgets.

Place the cursor over cells with red triangles to read comments.

Enter your input values in shaded cells.

| | | Quantity | | $/Unit | Total per Acre | |
|---|---|---|---|---|---|---|
| **Receipts** | | | | | | |
| Organic soybean sales (cleaned) | | 56 | bu | $12.21 | $680.03 | **1,791 bushels sold total** |
| Organic soybean sales (screened) | | 0 | bu | $0.00 | $0.00 | |
| **Total Receipts** | | **56** | | | **$21,761.08** | **21, 868 / 32 = $683.37** |
| **Income Per Acre** | | | | | **$680.03** | |

| | | Fixed Cost | Variable Cost | | |
|---|---|---|---|---|---|
| **Preharvest** | | | | | |
| Fall - disk stalks | | $3.80 | $2.60 | $6.40 | |
| Fall - plant rye | | $2.90 | $1.50 | $4.40 | |
| Spring- disk stalks | | $3.80 | $2.60 | $6.40 | |
| Field cultivate | | $2.70 | $2.40 | $5.10 | |
| Plant | | $6.20 | $4.90 | $11.10 | |
| Rotary hoe (2x) | | $3.60 | $2.00 | $5.60 | |
| Row cultivate (2x) | | $5.20 | $4.60 | $9.80 | |
| Other | | $0.00 | $0.00 | $0.00 | |
| Total Machinery Costs | | **$28.20** | **$20.60** | **$48.80** | Per Acre |
| Soybean seed (price per bushel) | | | $1,914.00 | **$59.81** | Per Acre |
| *Quantity* | *66.0* | | | | |
| *$/Unit* | *$29.00* | | | | |
| Ryegrass seed (price per bag) | | | $175.00 | **$5.47** | Per Acre |
| *Quantity* | *5.0* | | | | |
| *$/Unit* | *$35.00* | | | | |
| Crop insurance | | | $5.00 | $5.00 | Per Acre |
| Misc. expenses | | | $0.00 | $0.00 | |
| Interest on preharvest variable costs | | | $0.00 | $0.00 | |
| *length of period (months)* | *0* | | | | |
| *interest rate* | *0.0%* | | | | |
| **Harvest** | | | | | |
| Combine | | $15.90 | $6.80 | $22.70 | Per Acre |
| Haul (per bushel) | | $2.40 | $2.40 | $4.80 | Per Acre at 60 Bushel |
| *Fixed- price per bushel* | *$0.04* | | | | |
| *Variable- price per bushel* | *$0.04* | | | | |
| Handle (per bushel) | | $1.20 | $1.20 | $2.40 | Per Acre at 60 Bushel |
| *Fixed- price per bushel* | *$0.02* | | | | |
| *Variable- price per bushel* | *$0.02* | | | | |
| Total Harvest Costs | | **$19.50** | **$10.40** | **$29.90** | Per Acre |
| Labor (hours per acre) | | $0.00 | | $0.00 | |
| *Hours* | *0* | | | | |
| *Rate* | *$13.00* | | | | |
| Land (cash rent equivalent) | | $0.00 | | $0.00 | |
| **Total Costs Per acre** | | | | **$148.98** | Machinery + Seed + Insu + Harv |
| **Net Profit Per Acre** | | | | **$531.05** | |
| **Total Income** | | | | **$21,761.08** | |
| Total Equipment Costs | | | | $2,518.40 | $48.80 + $31.10 = $79.90 x 32 ac |
| Total Seed Costs | | | | $2,089.00 | Soybean and Rye seed |
| Crop Insurance | | | | $160.00 | |
| **Total Costs without trucking** | | | | **$4,767.40** | pay to Jack |
| **Total Trucking Cost** | | $0.68/bushel | | **$1,222.64** | 1,798 bushels Total |
| **Total Net Profit** | | | | **$15,771.04** | |

# Organic Oats

**Ag Decision Maker A1-18 -- Iowa State University Extension and Outreach**

For more information, see Information File, A1-18 Organic Crop Production Enterprise Budgets.

Place the cursor over cells with red triangles to read comments.

Enter your input values in shaded cells.

| | | Quantity | | $/Unit | Total per Acre | |
|---|---|---|---|---|---|---|
| **Receipts** | | | | | | |
| Organic oat sales | | 97 | bu | $2.50 | $242.50 | 1,360 bushels Total = $3,400 |
| Straw sales small square | | 31.0 | bales/acre | $4.00 | $124.00 | 428 bales sold= $1,709 (no rounds) |
| Organic alfalfa sales large round | | 1.5 | bales/acre | $60.00 | $90.00 | 21 round bales / 14 acres |
| **Total Receipts** | | | | | **$456.50** | |

| | | Fixed Cost | Variable Cost | | |
|---|---|---|---|---|---|
| **Establishment** | | | | | |
| Field cultivate | | $2.60 | $2.30 | $4.90 | |
| Harrow | | $2.00 | $1.30 | $3.30 | |
| Drill oats | | $4.40 | $3.70 | $8.10 | |
| Cultipack | | $2.60 | $2.30 | $4.90 | |
| Other | | $0.00 | $0.00 | $0.00 | |
| Total Machinery Costs | | **$11.60** | **$9.60** | **$21.20** | |
| Oat Seed (unit price per bushel) | | | $280.00 | **$20.00** | Per Acre |
| *Quantity* | *30.0* | | | | |
| *$/Unit* | *$9.33* | | | | |
| Alfalfa mix (unit price per pound) | | | $1,026.00 | **$73.30** | Per Acre |
| *Quantity* | *5.0* | | | | |
| *$/Unit* | *$205.20* | | | | |
| Crop Insurance | | | $0.00 | $0.00 | |
| Turkey Manure (1 ton per acre) | | Total | $564.00 | $47.00 | $35 + $12/ton haul= $47 per ton |
| Interest on preharvest variable cost | | | $0.00 | $0.00 | |
| *length of period (months)* | *0* | | | | |
| *interest rate* | *0.0%* | | | | |
| **Total Seed and Manure Cost Per Acre** | | | | **$140.30** | Per Acre |
| **Harvest** | | | | | |
| Combined | | $11.70 | $4.30 | $16.00 | |
| Haul oats | | $0.00 | $0.00 | $0.00 | |
| *Fixed- price per bushel* | *$0.04* | | | | |
| *Variable- price per bushel* | *$0.03* | | | | |
| Handle oats | | $0.00 | $0.00 | $0.00 | |
| *Fixed- price per bushel* | *$0.02* | | | | |
| *Variable- price per bushel* | *$0.02* | | | | |
| Baled oat straw (large round) | | $11.50 | $7.00 | $18.50 | |
| Haul oat straw | | $0.00 | $0.00 | $0.00 | |
| *Fixed- price per ton* | *$0.00* | | | | |
| *Variable- price per ton* | *$0.00* | | | | |
| Mowed alfalfa mix | | $6.20 | $3.60 | $9.80 | |
| Raked alfalfa mix | | $3.50 | $2.10 | $5.60 | |
| Baled alfalfa mix (large round) | | $11.50 | $7.00 | $18.50 | |
| Haul alfalfa mix | | $0.00 | $0.00 | $0.00 | |
| *Fixed- price per ton* | *$1.87* | | | | |
| *Variable- price per ton* | *$2.47* | | | | |
| Total Harvest Costs | | **$44.40** | **$24.00** | **$68.40** | |
| Labor (hours per acre) | | $0.00 | | $0.00 | |
| *Hours* | *0* | | | | |
| *Rate* | *$13.00* | | | | |
| Land (cash rent equivalent) | | $0.00 | | $0.00 | |
| **Total Costs per Acre** | | | | **$229.90** | Machinery + Seed/Manure + Harvest |
| **Net Profit per Acre** | | | | **$226.60** | |
| **Total Income** | | | | **$6,369.00** | $3,400 oats + $1,709 straw + 1,260 hay |
| Total Equipment Costs | | | | **$1,302.00** | $21.20 + $71.80 = $93 x 14 acres |
| Total Seed and Manure Cost | | | | **$1,870.00** | Oat and Alfalfa and Manure cost |
| **Total Equipment and seed cost** | | | | **$3,172.00** | pay to Jack |
| **Total Net Profit** | | | | **$3,197.00** | |

# Take Home Points

- Better understanding of organic farming
- Utilization of conservation techniques
- Diversifying rotations with small grains and cover crops
- New ideas for weed control
- Community engagement

Thank You and God Bless
Ausborn Family