Gearing up to transition to organic

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Overview

- Principles of organic agriculture
- Process to transition
  - Learning curve
  - Farm preparation
  - Getting pieces in place from soil to markets
- Identifying a certifying agency
- Q & A with organic farmers

Principles of Organic Agriculture Production

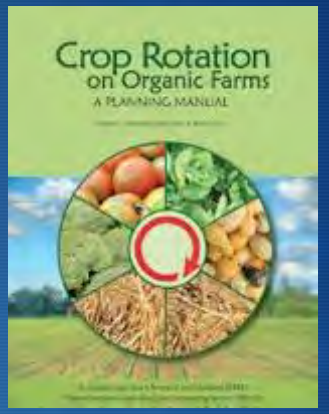
Areas of Emphasis

- ✓Soil Health
- ✓Plant and Animal Health
- ✓Strong Business
- ✓Family

Principles of Organic

- **Health**
  - soil
  - plant
  - animal
  - human as one and indivisible
- **Ecology**
  - living ecological systems
  - cycles
  - work with them, emulate them and help sustain them
- **Fairness**
  - In the common environment
  - life opportunities
- **Care**
  - manage in a precautionary and responsible manner
  - protect the health and well being of current and future generations
  - protect the environment

Certify organic? What to consider



- Are you and your family committed to the values and organic program?
- Are you able to manage the records required?
- Do you have committed organic markets or market opportunities?
- Do you have the needed technical knowledge?

Where does Michigan Fall/Rise?

Who Can Certify Your Farm?

- Agencies are independent companies that are approved by USDA
- You choose the agency from any state, but it must be USDA approved
- They cannot provide technical information only guidance for certification

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Identifying a NOP certifier

- You choose who
- Ask questions and evaluate them
- Refer to MSUE bulletin # 3067

"Transitioning to Certified Organic in Michigan-Where to Start?"

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Transitioning to Certified Organic in Michigan – Where to Start?

By Vicki Morrone, Michigan State University Center for Regional Food System Outreach specialist for organic production

Who Can Benefit From This Information?
- Farmers seeking to transition to organic practices.
- New farmers deciding whether to farm organically.
- Agricultural educators who want to have a better understanding of organic farming.
- Farmers who want to include "USDA organic" or "organic" on the label of their grains, produce and livestock.

Facts to Consider
- Food labeled as organic must be USDA-certified.
- Certification can be done only by a USDA-approved certifying agency.
- Farms that gross less than $5,000 per year are exempt from organic certification but still follow the guidelines of the National Organic Program (NOP).
- Growers wishing to export organic produce from the United States must meet the certification requirements of the importing country.

Should You Certify Your Farm?
- Do you have the knowledge or means to obtain the knowledge to farm using the organic practices required for certification?
- Will you gain value if the farm is certified, through either price premium, additional customers or personal satisfaction?
- Does this method of farming fit with your short- and long-term production and marketing goals?

Possible Benefits from Certification
- To gain a price premium on your agricultural products.
- To ensure your customers that you follow organic practices.
- To enter into a market growing at a rate of 20 percent per year (USDA/ARS).

Why You May Not Wish to Certify Your Farm
- You already have a reliable customer base.
- You do not or are not able to follow NOP guidelines.
- You do not have a market that offers a premium for organic products.

What is Needed for Certification?
- Land that has not received any NOP-prohibited inputs for 3 years or more (see page 4, #8).
- A farm plan that explains how the land was managed and will be managed for the next 3 years (see page 5, # 5).
- Records of your inputs and harvests for the past 3 years.
- Annual inspection of the farm by a certifying agency.

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What does TRANSITION mean?

- Organic OR Non-treated, non-GMO seed
- Organic feed and additives
- OMRI ok pesticides and soil amendments
- Apply manure 90-120- days before harvest
- Include crop rotations in 3 year plan
- Maintain records for the 3 years

OMRI™ Listed
Organic Materials Review Institute
www.omri.org

Steps to get to organic

- Building your knowledge
- Building your soil
- Building your farm resources
- Building your markets

Organic Transition?

- What does it mean?
- Why is it part of organic?
- How do I practice it?

Transitioning Check-list

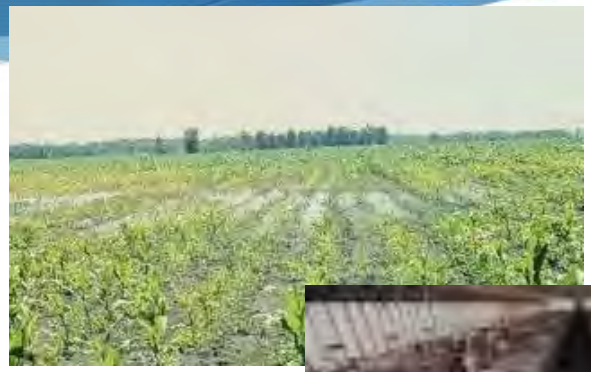
- What happens during the 3 years
  - Farmers learn about organic
    - Soil health
    - Organic crops
    - Pest cycles & multiple ways to manage pests
    - Encouraging beneficial diversity (bees, parasites, hawks)
    - Markets interested in buying organic
  - Maximize learning opportunities

Land…

- Soil
- Slope
- Host to critters and creatures
- Nutrients
- Weeds
- Borders
- Contaminants

Transitioning Checklist-Field Prep

- Select field (portion)
  - Drainage
  - Past uses & management
  - Past abuses
  - Organic matter
  - Surrounding conditions (buffers)
- Soil test-annual
  - Nutrients, OM, texture, micronutrients*
- Source inputs and cover seed-OMRI approved



Transitioning Check-list
Build Soil

- Use annual soil test to help determine inputs
- Grow legume cover crops (clovers, vetch, peas) with rye or oats (diversify cover types)
- Maximize soil cover to reduce weed increase
- Add manure to stimulate soil biology

Improve Soil Health

Field Preparation-Maintain Plant Cover

Manage Pests

Pest management
Insects and nematodes

- **Knowledge**
  - Insect ID
  - Common pests in your area (ID and lifecycle)
  - How to track Degree days
  - How to scout effectively
- **Reduction**
  - Remove infected plant material from fields/gardens
  - Select crop varieties less attractive or resistant to known pests
  - Interplant varieties that deter or "mix up" insects (e.g. basil, marigolds)
  - For long life cycle pest rotate out of that crop for adequate time (RKN)
  - Grow flowering plants to support beneficial insects
- **Control**
  - Use non-family varieties for crop rotation
  - Scout weekly and spray when needed according to directions
  - Spray when bees and other pollinators are not out (early AM)

Pest Management-Plant Diseases

- **Knowledge**
  - Common diseases lifecycles (in your area)
  - Disease identification by symptoms
  - Lab to get confirmation of disease

- **Manage**
  - Don't overcrowd plants (or thin) to allow air circulation
  - Grow on hills or raised beds to encourage soil drainage
  - Promote good crop health to be resilient to pest problems
  - Field sanitation

- **Control**
  - Use resistant varieties (fusarium, verticillium, scab)
  - Scout weekly and manage as needed (pull, spray, thin)

Pest management- Weeds

- Control
  - Appropriate tillage
  - Mowing before weed-seed set
  - Stale bed to plant crops
  - Organic herbicide (hydrogen peroxide)
  - Hand rogue perennial weeds
- Reduction
  - Cover crops
  - Maximize ground coverage (year around)
  - Establish permanent living walkways when appropriate

Critical Management for Organic Animal Production

- Feed must be certified organic
- No NON-organic substance on bedding
- Access to pasture
- Once you give animal antibiotic they can no longer be sold/used as organic
- Vaccines allowed but cannot be GMO produced
- Wormer given if + and only ivermectin

Pest Management- Animal Illnesses and Diseases

- Knowledge
  - What are the common illnesses for animal type and area
  - Life cycle of illness
  - Veterinary that understand organic management

- Control
  - Select hardy and resistant breeds
  - Include prophylactics in diet (vinegar, garlic, aloe, neem oil)
  - When illness/disease is present use OMRI approved medicines/treatments
  - Separate sick from healthy animals
  - Give antibiotics when needed and remove from organic herd

- Management
  - Remove secondary host materials
  - Maintain clean living area
  - Provide sound diet for animals to improve resilience to illnesses
  - Insure that new-borne nurse from mother at least for first week of life
  - Vaccinate animals with relevant and OMRI approved vaccines

Record Keeping

- Maintain records
  - Create a system and train all staff on farm
  - Make it easy to complete records
  - Include Who, When, What on every record
  - These records will be viewed by Certification inspector
- Records can be paper or electronic

Transitioning Checklist- Record System

- Use paper or electronic
- Complete forms supplied by certifier agency
- Receipts for…
  - Purchases of seed, compost, sprays, soil additives, nutrients, feeds, organic allowed sprays/chemicals
  - To show date, who, what and how
- Input labels must be kept to verify variety, amount, additives, seed coatings
- Maintain field maps for each field

Farm Plan

- Farm
  - Identification of each field (section)
  - Identify different uses for each section on map
  - Include roads, waterways, fallow fields, fields non-organic, in transition, production areas, and buildings.
- Farm Plan
  - What will be grown where (3 years prior and 3 years in the future
  - Rationale/goals for what is where

Farm Preparation

Field Preparation-
protect from non-organic

- Include a buffer zone around fields
  - Manage it organically
  - Harvest it as conventional
  - Should be 25 or more ft between risk and field

Transitioning Check-list- Seeds & Transplants

- Identify from organic source
- Seek varieties for markets AND resistance
- Consider varieties for "durability" and flavor
- Keep organic and conventional separated
- If no organic seed is available check and record Check and record from 3 suppliers

  Provide info that NOT GMO

Transitioning Check list
Animal Production

- Chicks raised from 2 day as organic
- All animals for meat must be raised from last 1/3 gestation through birth and calf born into organic
- Dairy goats and sheep managed for 12 months organically prior
- Animals have access to pastures
- Pastures are grown organically
- Barns and pens cannot use treated lumber

Animal production- When can you certify?

- Pasture and feed fields have been managed organically for 3 years (with records or signed affidavit)
- Animals are born in organic system
  - Mother is managed organically at the 3rd trimester of pregnancy
- Poultry is managed organically after 1 day of life

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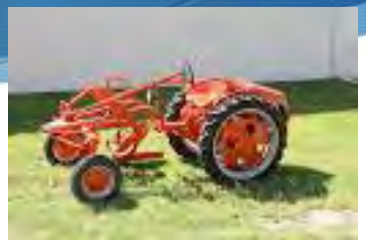
Transitioning Check-list Equipment



- Field Equipment
  - Access
    - Buy only what you can afford
    - Rent or have done custom if you cannot afford
    - Farming is like other businesses-start small
  - Split operation
    - If part of farm is organic and part conventional
    - Clean equipment between use at each operation
    - Keep records to verify these actions

Transitioning Check-list Storage

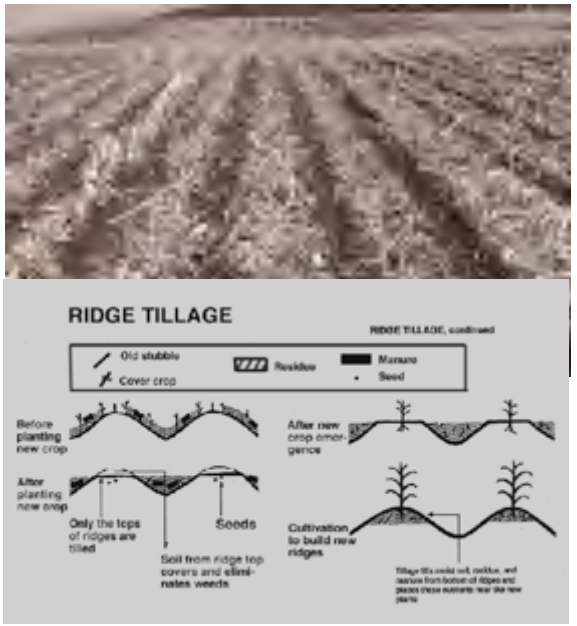
- Storage & Transport of organic products
  - Must be separate from conventional (pallets, bins)
  - Maintain bin labels to correspond to field maps (harvest)
  - Do not apply any product on harvest that has not been approved by certifier (organic)
  - Develop a storage area that offers some climate control if possible

Focus on key areas

Plants	Animals
Build soil for > organic matter	Provide healthy environment
Select strong crop varieties resistant to key disease	Choose breeds with good resistance
Scout fields weekly- soil, under and leaves	Observe animals daily for feeding, walking, giving birth, drinking, gaining weight
Grow crops and cover crops good for soil and	Produce animals that are sound and in demand by

Land and Soil Preparation

- Goals:
  - Reduce weeds-aggressively manage perennial weeds
  - Build organic matter
  - Improve drainage
  - Maintain soil coverage



- Management
  - Test soil to establish base line
  - Select covers for purpose
  - Add inputs to meet goals

Top Priorities for Transitioning

- Build soil
  - Conduct a soil test annually (not OM)
  - Support plant growth and development
  - Improve ability to drain and hold water
  - Stay in the field during weather events

Records Alert!
Keep or photograph all receipts
Photograph all input bags
If you use your own compost track process with records (T°, turning, inputs).
Inputs must be supported by soil test

Top Priorities for Transitioning

- Use seed that is certified organic
  - If variety is not available as organic
    - Use NON-GMO seed
    - Use NON-treated seed
    - Use inoculant for legumes that is OMRI approved

Records Alert!

Show where you purchased seed with receipt and package label.

If not organic

-show 3 sources

-verify they are non-GMO

Top Priorities-Record Keeping

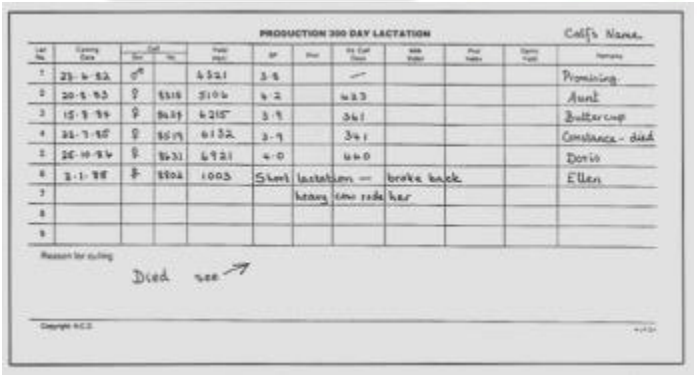
- ✓ Sources of inputs
- ✓ What and when applied- everything
- ✓ Practices implemented on farm
- ✓ Cleaning equipment and housing
- ✓ Harvest records with weights and volumes
- ✓ Pest observations and plans to manage (long-term)
- ✓ Adjust farm plan as needed

Use all those records…

- Farm plan
- Farm map
- Management logs
- Harvesting and marketing records
- Animal identification

THEY WILL HELP YOU IMPROVE

YOUR BUSINESS!!



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Ask Our Farmers Questions

- Q& A with experienced organic farmers-your best resource!

- Please type in your questions in the Q&A box on your screen. They will answer as appropriate.

- Thanks for your participation

Questions??

Email Vicki Morrone: sorrone@msu.edu

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