

Listed below are a few things to consider when you are switching from a conventional system to an organic system. This also includes land that is coming out of CRP, land that has been in a perennial cropping system like alfalfa, or from a conventional farming system.



1. Land must be free from materials prohibited in organic production such as urea, NPK fertilizers, herbicides, insecticides, and fungicides for 36 months.
 2. Crop rotation: Crop rotation is the practice of alternating the species or families of crops and green manures grown on a specific field in a planned pattern or sequence so as to break weed, pest, and disease cycles and to improve soil fertility and organic matter content.
 - a. Crop rotations are an essential part of any organic production system. Rotations must be designed to maintain and build soil quality; reduce nutrient loss through erosion and leaching; reduce weed, insect and disease problems; produce crops of high quality; and promote ecological diversity. An ideal crop rotation for annual crops includes a mixture of small grains/grasses, broad-leaved plants, and legumes.
 - b. Crop rotations should also include plants representing a range of botanical families, the use of early and late season crops, and alternations between solid-seeded and row crops.
 3. Soil Building: A plan for soil building should include:
 - a. Using crop varieties that produce maximum bio-mass
 - b. Plantings of deep rooted legumes or other green manure crops with extensive root systems
 - c. Reducing the number and speed of tillage operations
 - d. Maintaining sufficient surface residue and/or growing plants for as long as possible throughout the seasons
 - e. Cycling nutrients from a grass, hay, or forage crop back to the soil through applications of livestock manure to fields
 - f. Grazing stubble or crop residue
 - g. Reducing weed, insect, and disease problems through diverse and varied crop rotations
 - h. A green manure crop should be grown for the purpose of working down to feed the soil microbiology and building levels of organic matter in the soil. This should be done once every four years
 - i. Clover and alfalfa are two of the most common legume green manure crops. Non legume green manure crops can be used when you have other sources of organic nitrogen such as manure or frequent legumes in the rotation. Rye or buckwheat are the most common non legume green manure crops
- The use of off-farm inputs to maintain or supplement soil fertility or control pests is not meant to replace any of the management practices listed above.

The need for substantial use of off-farm inputs is indicative of the need for a better rotation design.

Transitioning (cont)

4. Record Keeping:
- Written field histories (covering at least the previous 36 months) which correspond to numbered field maps that include:
 - * Cover crops
 - * Crop planted
 - * Grazing
 - * Acreage
 - * Green manures
 - * Manure applications
 - * For all inputs: the type, amount, method, and date of application
 - Harvest and storage records which document:
 - * Yields (quantities harvested from each field)
 - * Each field from which organic crop was harvested
 - * Number each bin that receives each crop
 - Sales records of all crops:
 - * Customer Name and Date of sale
 - * Quantity
 - * Storage unit (if applicable)
 - * Lot number (A lot numbering system adequate to trace the crop to the field of origin)
5. Seeds & Planting Stock: Operators must use certified organic seeds, seedlings, sets, and perennial stock whenever they are commercially available. Annual transplants must be organic.

Resources

Websites:

- * Agricultural Research Service (ARS) (www.ars.usda.gov/main/main.htm)
- * ATTRA (www.attra.org/)
- * Dakota Lakes Research Farm (www.dakotalakes.com/index.htm)
- * National Organic Program (NOP) (www.ams.usda.gov/nop/indexIE.htm)
- * New Farm (www.newfarm.org/)
- * North Dakota Natural Resource Trust (www.ndnrt.com/)
- * Northern Prairie Wildlife Research Center (www.npwrc.usgs.gov/index.htm)
- * Organic Materials Review Institute (OMRI) (omri.org/)
- * Soil Water Conservation Society (SWCS) (www.swcs.org/)
- * Sustainable Agriculture Research and Education (SARE) (www.sare.org/)
- * Alternative Farming Systems Information Center (www.nal.usda.gov/afsic)
- * The Northeast Organic Dairy Producers Alliance (www.organicmilk.org)
- * The Northeast Organic Network (NEON) (www.neon.cornell.edu)
- * Northern Plains Sustainable Agriculture Society (NPSAS) (www.npsas.org)
- * Organic Trade Association (OTA) (www.ota.com)
- * University of California Sustainable Agriculture Research & Education Program (www.sarep.ucdavis.edu/organic)
- * Minnesota Organic Farmers Information Exchange Program (mofie.coafes.umn.edu)
- * Missouri Alternatives Center (agebb.missouri.edu/mac/)
- * Biological Control: A Guide to Natural Enemies in North America (www.nysaes.cornell.edu/ent/biocontrol/)
- * Organic Ag Info (www.organicinfo.org)
- * Crop Rotational Budgets for Three Cropping Systems in the Northeastern United States (Aesop.rutgers.edu/~farmmgmt/ne-budgets/nebudgets.html)

Books and Publications:

- * Farm Verified Organic Requirements Manual (www.ics-intl.com; 701-486-3578)
- * ICS Rotation and Soil Building letters (701-486-3578)
- * Future Harvest: Pesticide-free Farming (University of Nebraska Press; nebraskapress.unl.edu/bookinfo/2596.html or 1-800-755-1105)
- * Available through SWCS (www.swcs.org): Growing Carbon: A New Crop that Helps Agricultural Producers and the Climate Too; Soil Biology Primer
- * The New Organic Grower: A master's manual of tools and techniques for home and market gardeners (www.chelseagreen.com or 800-639-4099)
- * The Organic Decision: Transitioning to Organic Dairy Production (aem.cornell.edu/outreach/materials.htm)
- * Organic Farming Research Foundation Publications (www.ofrf.org/publications; 831-426-6606)
- * The Transition Process: Making the Transition to Sustainable Agriculture (610-683-6009)
- * A Case Study Report: Farming Without Chemicals in Ohio (www.ifoh.org/farming_without_chemicals.htm; 740-368-8552)
- * Upper Midwest Resource Directory (www.mosesorganic.org/directory.htm)
- * Organic Grain: Another Way (607-255-2080)
- * Organic Crop Budgets for Upper Midwest (www.ext.nodak.edu/extpubs/agecon/ecguides/2003org.pdf)