

Guidebook for

Organic Certification



Seventh Edition

MIDWEST ORGANIC
& Sustainable Education Service
MOSES

Benefits of Organic Certification

- 🌿 Access to robust organic marketplace
- 🌿 Increased profit potential, partly from reduction of purchased inputs
- 🌿 Improved soil performance, especially in droughts
- 🌿 Yields that can equal or surpass non-organic systems
- 🌿 Better water quality and biodiversity on and around the farm
- 🌿 More effective planning based on production records
- 🌿 Research showing organic's benefits to health and environment
- 🌿 Marketing advantage of clearly defined USDA organic seal
- 🌿 Reduced exposure to toxic agricultural chemicals

MOSES is a nonprofit that provides education, resources, and practical advice to help farmers succeed in organic and sustainable production.

About This Guidebook

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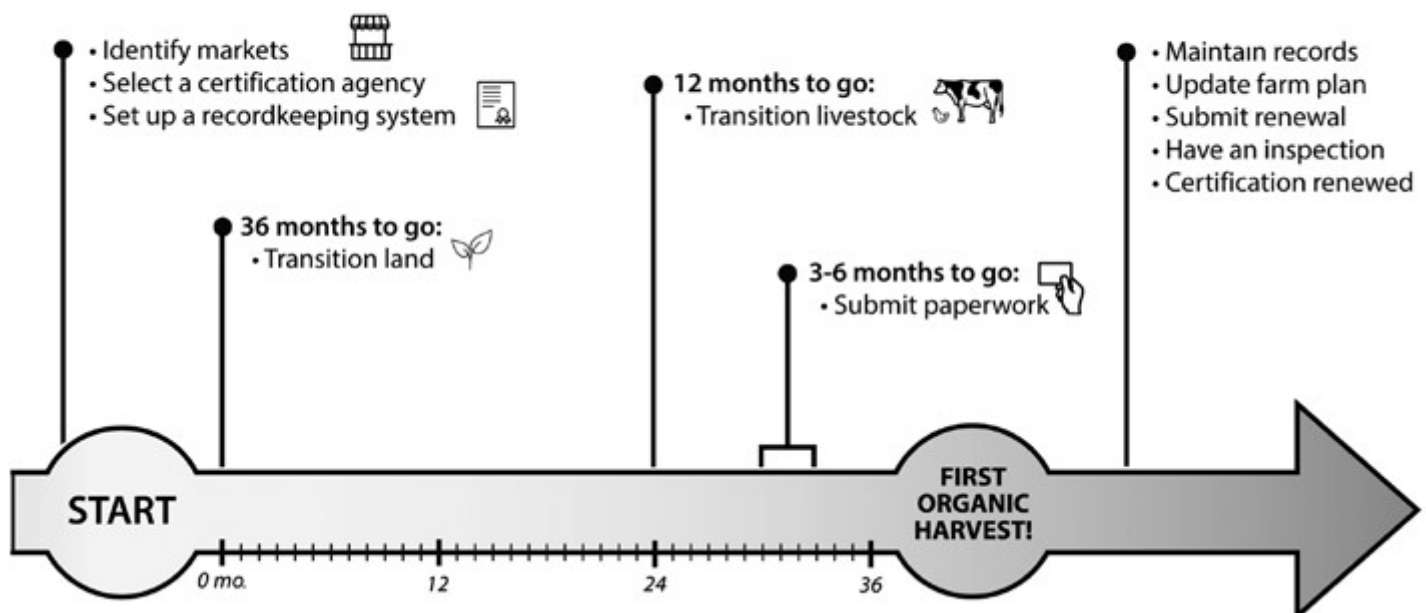
The *Guidebook for Organic
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Contents

Organic Farming 101	2
Organic Certification: Step-by-Step	5
Allowed and Prohibited Substances	10
Organic Crops	12
Organic Livestock	17
Organic Dairy	21
Organic Processing and Handling	22
Marketing Organic Products	27

Organic Transition Timeline



Organic Farming 101

Organic agriculture is a whole-system approach to farming. Organic farmers raise healthy livestock and grow strong crops by using cultural, mechanical, and biological practices to build the soil and interrupt the cycles of weeds, pests and disease.

Healthy soil is the foundation of organic farms. Soil that is managed organically becomes biologically active and produces robust crops better able to resist drought, diseases, and insect pressure.

Instead of focusing on controlling symptoms with herbicides and pesticides, organic farmers rely on management techniques—such as crop rotation, soil improvements, birds and predator insects, row covers, and labor—to control pests and weeds. The organic toolkit includes naturally derived pesticides and a short list of approved synthetic pesticides that can be applied in the rare situations when these management techniques aren't enough. Certified organic crops and animal products garner higher prices in the marketplace, compensating farmers for these management efforts.

One principle of organic farming is that farmers maintain or improve the natural resources—soil, water, wildlife, etc.—of the land they work. Organic agriculture is attractive to many farmers because it encourages farm system experimentation and good stewardship of the land.

Farming organically requires a different approach to farm management and production than what might be familiar to you. But you'll soon find that the planning, recordkeeping, and production practices that create a successful organic system will become routine.

Organic Yields

The Farming Systems Trial at Rodale Institute, which has been running side-by-side comparisons of organic and conventional crops since 1981, shows organic yields equal conventional. The organic system performs even better in drought, with corn yields 31% greater than conventional. Research done at land-grant universities shows similar results.

In the Rodale trial, the organic system experienced an initial decline in yields during the first few years of transition. This is likely to happen for most farmers who are new to organic production. However, experienced farmers who are good soil managers and skilled at mechanical weed control may not see a reduction in yield during transition. If they want to compare yields to non-organic systems, organic crop farmers should look at how much money they make per acre, not just how many bushels per acre they can produce.

After conversion to organic, dairy producers may see lowered rolling herd milk averages due to a more forage-based diet and reduced push for high milk production. Organic dairy producers should look at how much money they make per cow rather than how many pounds of milk are in the bulk tank. Organic cows tend to have a longer life, more lactations, more calves, and lower veterinarian bills. Over its lifespan, an organic cow produces more income for the farmer, even if its annual milk production might be less than the non-organic average.

Organic Integrity

Products labeled “organic” come from farms that have been certified to show they are meeting national organic standards set by the U.S. Department of Agriculture. The standards help farmers understand and use organic production practices, as well as assure consumers that the organic products they purchase are grown according to specific guidelines. The transparency of the organic label is what has made it such a trusted hallmark—and why it’s a great marketing tool for farmers.

The USDA enforces organic regulations by taking action against farmers and businesses that misuse the organic label or certified operations that violate organic regulations. Depending on the nature and scope of a violation, enforcement can include financial penalties up to \$11,000 and suspension or revocation of organic certification.

Exemption: Producers whose sales of organic products total less than \$5,000 a year do not need to be certified to sell organic products. But, they still must comply with all organic standards, including soil building, the use of organic seed, pest and disease management, and recordkeeping. Products from exempt operations may not be used as organic ingredients in organically labeled processed products produced by another operation, or used as organic feed or bedding for organic livestock.

Monitoring Organic Standards

USDA’s National Organic Program (NOP):

The NOP oversees the standards, which are known as the National Organic Standards (NOS) or NOP Final Rule/Regulation. The NOP also manages the National List of Allowed and Prohibited Substances, which specifies approved synthetic substances that may be used in organic production and natural substances that may not be used.

National Organic Standards Board (NOSB):

This 15-member board makes recommendations to the NOP about the materials and practices that may be used in organic production. The board holds meetings twice annually to hear public comments, continually evaluating and improving the standards as new materials become available and new information comes to light. The NOSB is comprised of farmers, processors, retailers, environmentalists, scientists, consumers and representatives of certification agencies.

Organic Certification Agencies:

The USDA accredits certification agencies to act on its behalf to ensure that farms and processing facilities are complying with organic regulations. These agencies have the power to grant or revoke organic certification.

Farmers may choose a certification agency based on a number of factors (*see page 6 for details*). In addition to determining certification status, the agency keeps the farmer/processor updated about changes to regulations.

Organic Inspectors:

These trained individuals visit farms to audit records, inspect fields and facilities, and verify that producers and processors are following NOP rules. They do not grant or revoke certification; rather, they provide the information to the certification agency, which will make a decision. Organic inspectors are not allowed to recommend farming practices or products.

Learning What Works

Organic production focuses on preventive problem-solving to manage weeds and pests and improve fertility. It can take time to learn what works best on your farm—and every farm has its own unique profile. Here are some suggestions to help you jumpstart your organic system:

Field Days

It's very useful to see how other organic farms are managed. MOSES and other organizations offer field days where you can see how other farmers tackle issues you might face. Find events from all over the Midwest on the MOSES Community Calendar (under "Events") at mosesorganic.org.

MOSES Organic Farming Conference

The country's largest conference on organic farming takes place each February. The event includes more than 65 workshops, experts who share what works, networking opportunities, and a large exhibit hall to learn more about products and organizations to help you farm organically. Day-long "Organic University" courses prior to the annual conference provide in-depth training on various topics. It's also an excellent opportunity to network with other organic farmers and learn what's working on their farms.

Organic Specialists

Our trained Organic Specialists can help you find solutions specific to your farming issues. Reach a specialist during business hours by phone (715-778-5775) or anytime by submitting a question online at mosesorganic.org/ask. That page also has answers to farmers' frequently asked questions.

Mentoring

MOSES provides help for farmers who are new to organic through the Farmer-to-Farmer Mentoring Program. This 14-month program pairs experienced and new organic farmers, providing insights to advance the success of new farms. Learn more about the program on our website under "Projects."

Organic Broadcaster

This 20-page newspaper—offered free to farmers—provides practical articles written by MOSES staff, researchers, and farmers who have first-hand experience to share. It is published in print and online editions every other month. Sign up for a free subscription at mosesorganic.org/sign-up.

Fact Sheets

Our Organic Specialists have written easy-to-follow guidelines on specific organic regulations and farming practices. There are more than 40 titles on our website under the Publications tab.

Tip:

Find buyers, processors, certification agencies, and organic suppliers in the Midwest Organic Resource Directory:



[mosesorganic.org/
organic-resource-directory](http://mosesorganic.org/organic-resource-directory)

MOSES Bookstore

Find books selected by our Organic Specialists and conference workshop presenters through our online store and the more extensive bookstore at the annual MOSES Conference. The online store also carries audio recordings of conference workshops. See mosesorganic.net.

Organic Certification: Step by Step

The process of becoming certified organic begins three years before you sell your first organic products in most cases—see exceptions under Fast Track for Land and Livestock on page 7. This is the “transition” period. During this time, you’ll be getting your fields and livestock ready for organic production. You’ll also use this time to find markets for your future organic products, establish a recordkeeping system to document your organic practices, and choose an agency to certify your farm.

The boxes on the right side of this page outline those initial steps, followed by the steps you’ll take to apply for organic certification—you’ll repeat the “annual steps” every year to renew your certification. The following sections describe each of these steps in more detail.



Identify Markets

Before you make any major changes on your farm or processing facility to transition to organic, first identify potential markets for your organic products. Organic markets may be different from the ones you currently use. They may have geographic, varietal, storage, or timing requirements or secondary certifications (such as animal welfare or food safety) that will direct your production decisions. See if you can line up buyers ahead so you’re sure to have access to the organic marketplace. A large buyer might even have a preference about which agency will handle your certification.

At the same time, make sure you have access to certified facilities if you’ll need to process your products.



Set Up a Recordkeeping System

Not only are good records needed to document your compliance to the organic regulations, they also provide an invaluable management tool, giving you historical data on what has worked well and what you don’t want to repeat. Records also help you make decisions about culling or breeding animals based on production information you have gathered over the years.

Records for organic certification need to include all seeds planted (including cover crops); receipts for all farm purchases; dates of tillage, cultivation and harvest activities; and, running inventories of stored crops and sales. From livestock management to equipment cleaning to seed selection, there is a lot of information to manage.

Initial Steps (these may overlap)

Identify markets



Set up a
recordkeeping system



Select a
certification agency



Transition your
land and animals



Annual Steps

Submit an application
and organic system plan



Have an inspection



Respond to
agency questions



Receive a decision



Apply for a
cost-share rebate



Start to develop your own system now to track this information in a way you can access easily throughout each farming season. Some farmers find it works well to carry a pocket-sized calendar or notebook to record dates and brief details of activities for each field, crop, or animal group. These notes can be transferred easily to a handwritten ledger or computer recordkeeping program.

You can develop your own system or use your certification agency's forms to document field activities, seed and inputs used, storage and sales records. Free downloadable template forms for organic recordkeeping are online at attra.ncat.org. There is a small fee to order printed copies. Search IP412 for forms for livestock and crop production. Search IP285 for market farm forms. If you don't have internet access, call 800-346-9140 to request these forms.



Select a Certification Agency

Contact a certification agency during the transition time—don't wait until your land qualifies for certification. Getting set up with a certification agency while you're transitioning your land/animals helps ensure you're completing all the necessary steps to achieve your certificate before your first organic harvest. The certifier can send you regulatory information, guide your application, and help you through a successful transition process. You can also use the agency's certification forms to set up your recordkeeping system.

During transition, your certifier—and MOSES—can be valuable assets to make sure you don't inadvertently undermine your own steps into organic agriculture. The certifying agents cannot answer your specific questions about organic production, but they can answer inquiries about whether specific inputs are allowed. When you have other production questions, call MOSES.

The MOSES Organic Fact Sheet "How to Choose a Certification Agency" suggests questions you can ask agencies as you "interview" them to judge if they are a good fit for you. This fact sheet is available free on the MOSES website or you can request a mailed copy.

It's a good idea to talk to other organic farmers in your region to see which agency they use. Working with the same agency as other local farms may save you money on organic inspections—the agency might batch annual inspections in your area, and offer farmers a reduced share of the inspector's travel expenses. It also helps to have a certifier who is familiar with your region, the fertility input suppliers, and organic feed suppliers, etc., that are providing products to organic farmers.

All certification agencies certify to the same National Organic Standards, but they compete based on cost and the services they offer. Some have particular geographic areas where they focus their activities (including international), others specialize in particular types of operations. It's wise to explore the agencies active in your area and choose the one that best meets your needs. Be sure the certifying agent you choose is accredited in the scope(s) of production—crops, livestock, wild crops, and/or handling (an operation that handles organic food beyond growing a raw commodity, including processing) — that you are pursuing.

You may apply for certification through any USDA-approved certification agency you choose and may change from year to year if you desire. If you change agencies, you must provide the new agency a copy of your current certification or denial from your previous agency. There may be longer forms and extra fees for first-time applicants to an agency. If you stay with the same agency, you can avoid these issues.



Cost of Certification:

Each certification agency has its own fee structure, which typically includes an annual fee, a charge for inspection and travel costs, and a user fee (a percent of annual, gross organic sales). Certification for most farms will be between \$600 and \$1,100 a year. Organic livestock or handling operations will have additional costs, as will operations certifying more than one scope (crops, livestock, wild crops, handling).

There are USDA programs that cover some of the costs of implementing conservation-focused practices on your farm while you transition to organic. Check with your local Natural Resources Conservation Service, Farm Service Agency, or county conservation office.

When you choose a certifying agency, request a certification application packet specific to your type of operation—what you plan to grow or raise organically. By obtaining this packet at the start of your transition, you can see everything you'll need for your application, and can take steps to ensure you'll have all your ducks in a row when it comes time to submit your application.



Transition Your Land and Animals

In order to sell a certified organic crop, the land on which it was grown must be free of prohibited substances for 36 months prior to the harvest of the first organic crop. This is the “transition” time. You will have an easier time meeting this requirement if you document the last day or month that a prohibited material is applied.

During transition, you cannot use genetically modified (GMO) seeds or bacteria, prohibited inputs, or seeds treated with prohibited synthetic materials. It is not required that certified organic seed be used during the transition years; but, it is wise to trial organic seed varieties during these years. That way, you'll know which seed varieties work best when you are ready to grow the higher value organic crop.

The production practices you learn and the decisions you make during transition will help you develop your Organic System Plan (OSP), which describes how you will comply with the organic regulations based on your operation's unique characteristics. It includes a map of your farm fields and details about your production practices as well as handling and transportation and all inputs you will use. You will submit this plan when you apply for organic certification, typically 3-6 months before you wish to sell organic products.

Are you on track for certification?

Check your progress against the timeline on page 1.



Fast Track for Land

You don't need to wait 36 months if your land has been fallow or free of prohibited materials for the last three years. This crop or pastureland is certifiable as organic and ready for you to submit an application to your organic certification agency without any further waiting period.

You or the previous operator can sign a declaration stating the land has been free of prohibited substances. Many organic certifiers have a form for this.

Livestock

Livestock don't have a 36-month transition period. Instead, they have a specific starting point for organic management:

Dairy cows—From one year prior to organic milk sale

Ruminants & swine—From last third of gestation

Poultry—From day two of life

From the starting points, these animals need to be managed organically for feed, healthcare, living conditions and pasture, and record keeping. See the “Organic Livestock” section of this book for details on organic management of animals.

Pasture Note: The National Organic Rule requires that ruminant animals receive a significant portion of their nutrition from grazing on pasture during the grazing season. Pastureland has the same 36-month transition period as cropland, unless it has been fallow or you have proof that prohibited materials have not been applied.



Submit an Application and Organic System Plan

Because the initial certification process often takes at least three months, you should submit your application 3-6 months before you wish to harvest and sell organic products. If you are growing crops, get your application in as early as possible during the growing season that you wish to sell an organic crop. That way, you can schedule an inspection while the crop is growing, which is an NOP requirement.

Be sure to submit your application within the agency's timeframe. Agencies typically charge a late fee or refuse to process late applications. Make sure you understand when your completed application needs to be received by the agency. Once you submit your application, the agency will do an

initial review of your Organic System Plan to see if there are any obvious major noncompliance issues that would rule out certification. If there is an issue, the agency will notify you. You have the option of withdrawing your application so you don't incur additional costs. In fact, you can withdraw your request for certification at any point in the process. This can be better than having a record of noncompliance. So if an event beyond your control happens while you are in the certification process (for example, someone else sprays your field), you can call the agency and withdraw your application.

The Organic System Plan you submit as part of your application outlines all the things you are doing or intend to do to comply with the National Organic Standards. Many times, farmers find they need to change the crops grown or inputs used between the time they apply for certification and when they actually plant crops. If that happens to you, note these changes on an updated field history form and give it to your inspector. (*See the next step.*)

If you change what you're doing in a way that varies significantly from your submitted plan, notify your certification agency to be sure your new plans also comply with the regulation. If you need to change any products or inputs you use, contact your certifier to check for acceptability before you use it—you don't want to jeopardize your status for organic certification.

Application Help:

Don't leave any areas of your application blank. Write "not applicable" on sections that don't apply to your operation. The certification agency will not process an incomplete application and may send it back to you, which would delay your process.

Your certification agency can answer questions that arise as you complete your application. MOSES Organic Specialists also can help: call 715-778-5775 during business hours.



Have an Inspection

If your plan looks compliant, your certification agency will send an inspector to verify that your farm practices match what you've submitted on your plan. The organic inspector will review your records and your Organic System Plan. The inspector also will visit every field, and look at your equipment, storage and livestock facilities.

The time needed for this inspection varies depending on the diversity, complexity and type of operation you have. You can expect it to take about three to five hours. A first-time inspection usually takes more time than subsequent annual inspections. You can help speed the process by being organized with your documentation and field/livestock physical review plan.

The organic inspector is there to verify your practices for the certification agency. The inspector is not a consultant or a crop advisor. If you have questions about organic production, you may contact the Organic Specialists at MOSES. You may also talk to your certification agency when you have questions about inputs or practices that might impact your compliance with organic regulations.



Respond to Agency Questions

After inspecting your farm, the inspector will submit a report to the certification agency, verifying that you are following the plan you submitted or clarifying any changes to your organic plan. Agency staff will review your entire file and determine if you are in compliance with the National Organic Program. Agency staff may call or write you to request information that was missing during your inspection, such as a seed invoice or farm map. They may want to discuss areas of minor noncompliance—such as an erosion issue where a waterway needs fixing—how to correct the issue, and a timeframe for doing so.



Receive a Decision

The agency will send you a “determination letter” by mail or email that tells you whether or not you are approved for organic production. If you’re approved, your actual organic certificate can arrive separately. Both the determination letter and this certificate will list products that you can sell as organic. Congratulations on achieving organic certification!

Annually, your certification agency will send you a continuation of organic certification letter that details your compliance to the organic regulation after your annual inspection. You must submit an organic plan update, be inspected during each growing season and pay your fees each year in order to continue your organic certification in good standing.

If you did not get approved and you disagree with this decision, you may ask for mediation with your certification agency or appeal this decision to the National Organic Program. The NOP website (ams.usda.gov/nop) explains how to appeal a decision and file a complaint under the heading “Compliance and Enforcement.”

Once you receive organic certification, you are considered certified as long as you continue to meet the requirements, submit your paperwork, and pay your certification fee each year. If you do not pay your certification fees on time, have your renewal inspection within the agency’s timeframe, or provide the documentation requested after your inspection, your certification could be “suspended” until you correct the issues. If you don’t correct an issue, your organic certification could be revoked, which is a difficult action to overturn. Depending on the infraction, a revoked operation cannot reapply for organic certification for up to 5 years.

Use of the USDA Organic Logo:

Once you are certified, you can use the USDA Organic logo to market your farm products. See page 24 to learn more about labeling your products.



Apply for a Certification Cost-Share Rebate

The USDA has allocated money to states in recent years to partially reimburse organic producers and handlers for certification expenses. The exact amount of funding is announced each year, but the program typically covers up to 75 percent of certification costs with a maximum of \$750 per category of certification. Your certification agency can tell you how to access these funds in your state.

There also has been a push to reimburse farmers for costs associated with transitioning to organic production. Two states, Minnesota and North Dakota, were offering these funds when this book was published. We expect others to follow. The programs will provide funding to cover 75 percent of eligible transition costs up to \$750.

For current details on cost-share programs, see mosesorganic.org/organic-certification.

Allowed and Prohibited Substances

The National List of Allowed and Prohibited Substances identifies what can and cannot be used in organic crop and livestock production, and processing of organic products. Basically, natural substances are allowed unless they are specifically prohibited on the list; synthetic substances are not allowed unless they are specifically approved on the list. Some substances on the list may be used only in specific situations or up to a maximum amount. The complete National List is online at ams.usda.gov/nop under “Key Activities.”

The National Organic Standards Board (NOSB) holds a public meeting twice a year to review items to be added or removed from the list. The NOSB then makes recommendations to the Secretary of Agriculture through the NOP. The USDA publishes amendments to the National List in the Federal Register. Your certification agency should update you when items are added or removed from the National List.

A non-profit organization, the Organic Materials Review Institute (OMRI), offers a brand-name product review program, where suppliers of agricultural inputs (both single ingredient and blends) can have their proprietary active and inert ingredients reviewed as compliant with NOP regulations. The OMRI product list is available either through your certification agency or online at omri.org.

While the OMRI seal can help you determine what is approved for use, not all suppliers pay OMRI the required fee to have their products reviewed. Given that, products other than those with the OMRI seal might be acceptable for organic production. (*See the tip on this page.*)

Tip:

Always check with your certification agency before using any product to verify the specific brand name and formulation is approved for organic production.



There are specific criteria used when deciding which synthetics are allowed in organic production. A synthetic may not be allowed if: there is a natural alternative; there are human or environmental health risks associated with the manufacture, use or disposal of the material; or, it is not essential or not compatible with an organic system of agriculture.

Remember, organic agriculture is not just substituting a prohibited input with an organically approved one. Many challenges with soil fertility, pests and weeds can be overcome through management and a systems-based approach.

More information about allowed inputs is included in the sections of this *Guidebook* that relate to specific categories.



Fence Posts or Wood Structures on Your Farm

Fence posts and wood structures (raised beds, plant stakes, greenhouse baseboards, etc.) made of cedar, redwood, oak, metal, fiberglass, or plastic composite are all allowed.

At the time book was published, the National List did not include synthetic wood treatments approved for organic. The rule is that no treated wood can contact soil where you are growing organic crops or grazing livestock. Chemicals from treated wood leach into the ground and can be taken up

by surrounding plants. Livestock can be impacted when they rub against treated fence posts, lick the posts or eat nearby plants.

If your farm already has wood in place before your first organic inspection, it can remain as long as it does not contact organic crops (according to current draft guidance from the NOP). This could include treated wood in livestock buildings, animal walkways where no vegetation is growing, or greenhouse benches if organic plants don't touch the surface (they're in containers) or grow near the bench. Once you are certified organic, you cannot use treated wood for new or replacement installations.

Some certifiers will allow treated wood to be used on fence corners if there is a wire stretched across the triangle's hypotenuse to keep livestock away from the corner. Physical barriers, such as plywood or metal flashing, also might be allowed to cover treated wood in a livestock shed to prevent livestock from leaning against the treated wood or licking it.

For crop fields, you can leave a buffer zone between organic crops and posts treated with prohibited synthetics. Your organic certifier can guide you on the size of a buffer zone.

Orchardists can use treated wood posts for deer fences as long as the posts are placed beyond the drip lines of mature trees.



**Questions about
organic farming?**

Ask a Specialist

MOSES Organic Specialists can answer your questions about organic production or certification.

CALL:

Organic Answer Line—
715-778-5775 or 888-551-4769.

SUBMIT:

Click "Ask an Organic Specialist" at mosesorganic.org/ask.

READ:

Browse answers to questions at mosesorganic.org/ask.

DOWNLOAD:

Organic Fact Sheets at mosesorganic.org/organic-fact-sheets.

Organic Crops

Organic farming is a system based on ecologically sound practices along with the use of allowed inputs. You will manage soil fertility not only to feed the current year's crop, but also to continuously build organic matter and improve soil tilth through crop rotations and the use of green manure plow-downs, animal manures, plant materials, and compost.

As you improve your soil, you'll notice increased yields and healthier crops that are more resilient to weather, pest or disease stresses. A healthy soil structure that's not compacted also makes it easier to cultivate or pull weeds.

Organic crops are grown on land that has not had prohibited substances used on it for at least three years prior to the harvest of the crop. Prohibited substances typically are synthetic substances that are not allowed under the NOP regulation. Document the last date of prohibited substance application so that your certification agency can determine when the crop can be harvested and sold as organic.

If you have both organic and non-organic crops, you'll need to document planting, harvest, storage and sales of both, and have that documentation available for review by the organic inspector during your annual inspection. Your protocols must keep prohibited materials and non-organic crops from contaminating or mingling with your organic crops.

Crop Rotations

Organic farming depends on soil-building crop rotations. Crop diversity ensures sufficient organic carbon and nitrogen for humus formation and nutrient availability for growing crops. The variety of root types and root depths of successive crops helps to distribute nutrients and improve soil organic matter. Organic crop rotations also are key to breaking the cycles of weeds, pests and disease.

A continuous corn-soybean-corn-soybean rotation doesn't build soil and won't work in an organic system. Continuous vegetable production, even if the vegetables are rotated from year to year, also does not build soil. Instead, a good soil-building rotation will include grains, forages, or cover crops. To find practical information about crop rotations and learn what's working for other farmers, see the stories from the Organic Broadcaster newspaper on our website at mosesorganic.org/field-crops.

Soil Amendments

Manure is very closely regulated in organic systems, particularly for crops that are grown for human consumption. Raw animal manure may be applied to crops not for human consumption as long as it is applied in a manner that does not contaminate crops, soil or water. This may limit winter spreading when runoff is likely to occur as snow melts. To monitor raw manure use, your

certifier may require a nutrient management plan as part of your certification application.

Manure originating from a non-organic source can be spread on organic land as long as the animals were not fed arsenic and unapproved synthetics were not applied to the manure after it came out of the animal. For example, you can't spray herbicides on solid manure piles or use a synthetic to control odor in a manure pit. The non-organic animal could have been fed GMO feed or treated with drugs or hormones not approved for organic, and still provide manure for organic land. The NOP has determined that these non-approved inputs break down over time and do not pose a threat to the organic land.

Processed manures (that meet the above requirements) can be used up until the day of harvest on crops for human consumption, as long as there is documentation that the processed manures had reached 165° F or 150° F for one hour or can be proven to contain less than 1000 most probable number (MPN) fecal coliform and 3 MPN Salmonella per 4 gram sample.

You can produce compost on your organic farm. The rules are laid out in the National Organic Standards §205.203(c)(2). According to these rules, compost must have an initial carbon-nitrogen ratio of between 25:1 and 40:1. A temperature of between 131° F and 170° F must be maintained for three days in a static, aerated pile, or between 131° F and 170° F for 15 days using a windrow composting system. During those time periods, the materials must be turned at least five times.

Compost that you create following these rules can be applied to your land and crops up until the day of harvest. If compost is not produced in accordance with these rules, it must be viewed as raw manure and applied as outlined above.

You may use purchased compost or processed manures provided you obtain documentation that it has been produced in accordance with the National Organic Standards. If you can't get this documentation, you can still use purchased compost if you apply it according to the rules for raw manure. *(See the box to the right.)*

Minerals and nutrients can be used to correct soil imbalances as long as they don't have additives, such as unapproved synthetic binders or dust suppressants. They also cannot have been chemically changed (e.g., heated) through processing. Many organic seed and feed suppliers carry salt, livestock mineral and fertility inputs that are approved for organic production.

Soil amendments might include synthetic ingredients that are allowed in limited situations/uses. Before you purchase products to use as soil amendments, check the National Lists to make sure you are using these materials correctly. Better yet, talk to your certification agency to ensure that the products are allowed and won't impact your certification.

Seeds and Planting Stock

The organic regulation requires that all seeds, bulbs, rhizomes and plant stock be organic, unless the quantity, quality, or variety of seeds desired are not available. If you do not use organic seeds or planting stock, you must keep records of your attempts to obtain them. Higher price is not an acceptable reason to not buy organic seeds.

Organic seed is not required in the transition years. In those 36 months, you can use non-GMO seed that hasn't been treated with prohibited substances or genetically modified inoculants. Examples of prohibited seed treatments are Apron and Captan. Legume inoculants are allowed if they are not genetically modified. Natural seed "treatments," such as clay for pelletizing small seeds like

Applying Raw Manure

You may apply raw manure to crops for human consumption using these guidelines:

Crops with edible portions that contact the soil surface or soil particles:

- Incorporate into the soil at least 120 days prior to harvest.

Crops with edible portions that don't contact the soil surface:

- Incorporate into the soil at least 90 days prior to harvest.

carrots, are allowed if you have documentation that only natural products are used in the treatment.

To find seed companies that offer organic seed varieties, use the MOSES Organic Resource Directory or ask your certification agency. OMRI also has a seed source search function that can be very helpful. The website organicseedfinder.org also has many sources of organic seed. For more information about seeds for organic crop production, see the MOSES Organic Fact Sheet “Transitioning to Organic Crop Production.”

The rule for planting stock is similar to seed: producers must attempt to source organic, but can use non-organic if organic stock can’t be found. Rootstock from any source can produce an organic crop as soon as it is planted on organic land. Perennial planting stock may be sold as organic after it has been under a system of organic management for at least one year. ***Annual transplants must be certified organic in order to sell the production from that plant as organic.***

Potting mixes cannot contain raw manure or any synthetic fungicides, fertilizers or wetting agents. Verify with your certifier that the potting mix and any soluble nutrients you wish to use are approved before using it to start your organic plants. Be cautious about purchasing mixes at garden centers or hardware stores—bags might be labeled “organic potting soil” just because they contain carbon. Look for the phrase “approved for organic production” or the OMRI seal. It’s always a good idea to verify acceptability of new products with your certifier.

Buffer Zones

The National Organic Standards require distinct, defined boundaries and buffer zones to prevent the unintended application of a prohibited substance to land under organic management (NOS §205.202(c)). A buffer zone must be large enough or include features (windbreaks or a diversion ditch) to block prohibited substances from reaching your organic fields.

Because there are so many variables that can affect the kind of protection needed between organic and non-organic land, the national standards do not specify dimensions for buffer zones. Determination of buffer adequacy is left to the organic producer, inspector, and the certifying agency on

a case-by-case basis. A typical grassy buffer where the risk of drift or runoff would be considered minimal is about 30 feet wide. A certifier might require a larger buffer zone or additional features when neighboring farms use aerial crop dusters or high-pressure sprayers, which increase the risk of drift.

Your Organic System Plan must describe how you will avoid drift from neighboring operations, particularly drift of prohibited pesticides and herbicides. You may harvest crops from the buffer zone, but cannot sell them as organic.

Keep documentation to verify that buffer zone crops were harvested, stored and

sold separately from the organic crops grown on your farm.

You’ll also need to clean and purge harvest and storage equipment used with non-organic crops before harvesting or storing organic crops. The same is true for planting equipment, spreaders and other equipment. Again, keep documentation that shows when and how you did this.

GMO Contamination

Genetically modified organisms (GMOs) are not allowed in organic production, but unintended contamination sometimes occurs. The preamble to the organic regulation states:

“This regulation prohibits the use of excluded methods (which include GMOs) in organic operations. The presence of a detectable residue of a product of excluded methods alone does not necessarily constitute a violation of this regulation. As long as an organic operation has not used excluded methods

Growing Organic Crops:

For practical information about growing crops organically, see:

mosesorganic.org/field-crops



and takes reasonable steps to avoid contact with the products of excluded methods as detailed in their approved Organic System Plan, the unintentional presence of the products of excluded methods should not affect the status of an organic product or operation.”

If a certifying agency is concerned that an organic product has come into contact with prohibited substances or has been produced using excluded methods, the agency can call for testing. In some cases, the result has been that a crop could no longer be considered organic.

GMOs are part of the DNA of the entire plant, and can be detected in the dust or other residue from GM crops. See more information in the section, “Equipment, Storage and Transportation.”

Markets where you sell your organic crops might have zero tolerance of GMOs, even if the crop retains its organic certification. Buyers of organic soybeans for Japanese and European markets frequently test for GMOs and reject loads that test positive. Discuss the GMO policy of buyers if you feel you have a high risk of GMO contamination. That way you can select buyers that are a better fit for you.

If your organic crop doesn’t meet the tolerance level for GMOs, some buyers might still purchase it at the non-organic price.

Weed, Disease and Pest Management

Organic farmers follow a tiered approach to manage weeds, pests, and disease. The first approach is to break the cycle of weeds, pests and disease through management practices such as crop rotations and cover crops. You can also plant buffer zones with flora that attracts and shelters animals and insects that prey on crop pests, or plant pollinator/pest-predator strips among your rows. Choosing fruit or vegetable varieties that are naturally pest- or disease-resistant is another example of a management practice.

Management practices in the first tier also include mechanical and physical methods. Examples include mowing between rows (especially in orchards), and tried-and-true or new methods of mechanical cultivation. Two of those new methods are flaming and “sandblasting,” both of which are showing good results in research. Physical methods include barriers to prevent weeds. Vegetable growers can use plastic mulch to suppress weeds, but it needs to be removed from the field at the end of the season. Organic mulches, such as straw, can be left to compost in the field or moved to windrows or compost piles.

To prevent pest problems, vegetable growers can use floating row covers to block insect pests until plants are big enough to either be unpalatable to the pest or can withstand some insect feeding. Foliar feeding with a fish emulsion, kelp and/or a compost blend can boost the plant’s immune system when pest pressure is challenging. Healthy plants are not as attractive to insects as those that are stressed.

If these management practices are not sufficient, natural products can be used. For example, kaolin clay can irritate feeding insects and drive them away from fruit. There also are organic-approved “pesticides” made from naturally occurring bacteria or plant extracts. There are no synthetic herbicides approved for organic crop production, although there are some acetic acid-based herbicides that can be used around organic storage facilities or livestock buildings. In general, these tend to be effective mostly on young plants.

As a last resort, you can use approved synthetic materials on the National List, but only after you have tried methods in the first two tiers, and they weren’t enough to stop the problem.

Pest-Control Hierarchy

First—Management Practices: Cultural, Mechanical & Physical

- Crop/Pasture Rotations
- Cover Crops
- Varietal Selection
- Pest-Predator Habitat
- Cultivation, Mowing, Grazing
- Mulches
- Row Covers
- Insect Lures, Traps, & Repellents

Second—Nonsynthetic Biological, Botanical, or Mineral Inputs

- Natural products
- Kaolin clay

Third—Allowed Synthetic Pesticides or Inputs

Equipment, Storage and Transportation

If your equipment is dedicated to organic production, you do not have to do more than basic cleaning before use—clean bins have fewer pest problems. However, if equipment used in planting or harvesting organic crops is also used for conventional crops, thoroughly clean the equipment between uses. Document this cleaning in your records—anytime you clean equipment or storage facilities, write down what you used and the date. Only transport and store organic crops in cleaned units, and keep documentation to show you’ve done that.

If a planter has residue of prohibited seed treatments, the seed boxes must be cleaned. If a tractor has saddle tanks used for non-organic liquid fertilizers, they should be emptied before this tractor is used on an organic field to prevent the risk of unintended leakage onto the organic field. Custom fertilizer spreaders or spray equipment should be documented as clean (what cleaning products used, how used and when) before using an organically approved input. Harvesting equipment of any type must be mechanically cleaned, and might need to be purged clean occasionally with organic crop, before beginning the organic harvest.

Small or large square balers will need to run organic hay through the equipment, pushing out any remains of the non-organic crop. The amount depends on the equipment. Round balers, which typically are self-cleaning, should be verified clean before organic harvest.

Combines that have been used to harvest non-organic and likely GM crops, may need 4-6 hours of cleaning. Run the combine with all of the doors open. Use compressed air to blow it out and a shop vac to suck out any remains of non-organic crop. Lastly, run a purge of organic crop through the combine to scour clean any remains of non-organic crop hung up inside the combine. Document to track the amount of the purge and the non-organic sale of the crop used to purge.

Your buffer zone is considered a non-organic crop. If you harvest that area first, you will need to clean the combine or purge it before you can begin harvest your organic crop. This cleaning protects you from having your organic load rejected as containing GMOs when you deliver it. Remember, just a few GM soybeans in a trailer can cause trouble, and even GMO dust can be detected in a load.

Make sure all storage areas are rinsed clean, and if your bin has a perforated floor, pull that up and clean underneath thoroughly so no residues of GMO are blown through your organic crop when you turn on the fan.

Augers, gravity wagons, rotary screen cleaners—all equipment that contacts your organic crop must be clean and the process and date documented.

Lastly, physically check the truck used to ship out your organic crop. If there are crop residues or dust, tell the trucker to clean it, or you clean it. If the trucker states that he previously hauled organic crop, ask the trucker for documentation or verify this with the buyer.

Produce growers should be careful not to place organic crops on any treated wood surfaces, such as wagons. You can put plastic tarps down, or cover the treated wood with raw plywood. All food contact surfaces must be free of residues of non-approved cleaning and sanitizing materials. (*See the Processing section for more information.*)

Organic Livestock

Organic farmers and ranchers raise healthy livestock without using growth hormones, antibiotics or slaughter by-products. Instead, they provide organic feed, verdant pastures, and humane, ample living spaces. Organically raised animals are allowed to behave naturally, which reduces stress and encourages strong immune systems. Organic farms and ranches typically have far fewer visits from veterinarians.

The NOP regulation for organic livestock requires organic management and inputs, including feed and supplements, from this age onward:

- **Ruminants:** Last third of gestation
- **Swine:** Last third of gestation
- **Poultry:** Day 2 of life
- **Dairy animals:** 1 year prior to sale of organic milk
(see *Dairy section for complete rules*)

Pastures, like cropland, have a 36-month transition period. Document the last date of prohibited substance application so that your certification agency can verify the organic status of your pasture.

Recordkeeping

Livestock records must track each animal's birth, vaccinations, health issues and treatments, and events such as castration, weaning, and when they enter or leave a livestock grouping. Poultry are tracked by flock. You can get recording forms from your certifier or ATTRA.

Grazing and Pasture

The NOP Regulation requires that ruminants receive 30% of their dry matter intake (nutrition) from grazing during the grazing season. The typical grazing season is between 150 and 180 days, although some regions could be as low as 120 days. Most certifiers will use NRCS grazing information to determine the actual length of the grazing season in their region.

The term grazing specifically denotes when an animal breaks off forage from a living plant whose roots are still attached to the soil. Fresh green chop transported to the animals does not meet this pasture requirement.

Ruminants must be allowed outdoor access every day (not just in the grazing season) except when the weather would provide a risk to their health or to the quality of the soil or water.

Your operation should have enough acres of organic pasture to provide sufficient feed to all animals old enough to graze. Good pasture management will minimize the spread of diseases

Livestock Production

The rules for livestock production are based on the animal's intended use—meat or products such as milk or eggs.

For specific requirements for raising cattle, poultry, sheep and goats for meat, dairy, or eggs, see the MOSES Organic Fact Sheets online at:

[mosesorganic.org/
organic-fact-sheets](https://mosesorganic.org/organic-fact-sheets)



and parasites among the grazing animals offering preventive measures for livestock health. You can irrigate pasture to encourage regrowth throughout the season.

By managing your pasture as a valued crop, and using rotational grazing, you can provide good forage on less acreage than non-managed grazing land. You can also plan to incorporate pasture into your rotation, or cut your high quality pasture as hay, to keep your pastures palatable and enticing to your stock.

Your Organic System Plan should include details about how you will manage your pasture, control soil erosion, and prevent water contamination. If your operation does not have sufficient pasture to maintain the health and vitality of your livestock, meet the grazing requirement, and maintain the condition of the pasture, you may need to use a lower stocking density, increase your pasture acres, or explain the pasture management techniques you will use to meet the grazing requirement.

Feed and Confinement

All organic livestock feed must be certified organic. Livestock cannot be fed mammalian or poultry slaughter by-products. There is no restriction against organic livestock feed supplements containing appropriate organic milk and organic egg products.

When there is no green forage in the fields (in other words, it is not the grazing season), livestock can access outdoors in yards, feeding pads, and feed as long as the area is large enough to prevent crowding and competition among the animals for the feed provided. Continuous total confinement of ruminants of any species is prohibited.

Temporary confinement is allowed before shipping, sorting, showing, shearing or other activities, but not for more than one week. Specific rules state that organic beef animals can be held for up to 120 days in feedlots or yards before slaughter. For small ruminants, this finishing period cannot exceed 1/5

of the animal's total life span, or 120 days, whichever is shorter. However, if the finishing period corresponds with the grazing season, these animals must still be maintained on pasture – they simply become exempt from the 30% dry-matter-intake-from-grazing requirement.

Raising Organic Livestock:

Find practical information about raising organic livestock:



mosesorganic.org/livestock

Poultry

Purchased day-old chicks do not need to be sourced as organic, but must be managed organically from day two of their life.

Poultry must be provided with outdoor access. If poultry eat the materials used for litter, the litter material must be certified organic. Sawdust does not need to be certified organic, but you should ensure that no prohibited materials have been added to it or were part of the source of the sawdust. For example, wood chips originating from a construction source which may have treatments, paints or glues, would not be acceptable as bedding for organic animals.

Careful consideration of bird density and ventilation in hen houses is important, although currently, there are no specific regulations other than providing living conditions that promote health. Poultry are not mandated to have access to grass, just the outdoors. Still, all poultry will appreciate having green living things to eat. Many organic poultry operations have numerous outside access areas that can be rotated to provide vegetation for the birds throughout the season.

The USDA is finalizing new animal welfare standards now (2016) that will provide more details on the square footage required both inside and outside per bird. Look for news in MOSES's publications and on the National Organic Program's website (www.ams.usda.gov/about-ams/programs-offices/national-organic-program).

Vaccinations

By providing good living conditions that promote health and lessen stress, you will be preventing many health issues in your livestock. Still, there may be occasions when you will need to vaccinate your animals or poultry. Many certifiers request vaccinations recommended by veterinarians in your geographic area. Always verify with your certification agency that the vaccines you plan to use are approved.

There are numerous organic-approved health products, including synthetic parasiticides, products that lessen pain, and more. You may use a variety of homeopathic and herbal remedies. You can find suppliers of these health products in the Midwest Organic Resource Directory, published by MOSES. *(See box to the right for details.)*

Antibiotics

Antibiotic use is not allowed as part of organic management. No animal that has been treated with any antibiotic at any time in its life can be an organic slaughter animal. While organic livestock systems focus on preventive care to avoid a situation where antibiotics are needed, it is also mandatory that no animal be neglected or go untreated in order to preserve organic status. If antibiotics or other prohibited medicines are needed to save an animal's life, they must be given. Then that animal is removed from organic production and cannot be sold as organic or supply organic products. Animals that can be transitioned to organic, such as breeding livestock and dairy animals, could have been given antibiotics before they were organic and still produce organic and producing organic milk or birth organic animals. However, these animals cannot be sold as an organic slaughter animal.

Midwest Organic Resource Directory

Find buyers, suppliers, and processors in the Midwest Organic Resource Directory:

[mosesorganic.org/
organic-resource-directory](http://mosesorganic.org/organic-resource-directory)



Supplements and Other Products

Livestock health is largely managed with healthy feed, preventing health issues and outside access in an organic farm system. But animals, like humans, need extra care sometimes. Always check with your certification agency for clarification on which supplements and health treatments are acceptable.

All natural minerals are allowed, as long as they do not contain non-approved additives and are not listed as prohibited on the National List. Even though they are natural substances, some minerals (such as arsenic and strychnine) are on the National List of Prohibited Substances and are not allowed in organic production.

Alcohol, iodine, aspirin, electrolytes, glucose and hydrogen peroxide are examples of allowed internal and external inputs. Even if supplements for organic livestock are labeled as “approved for organic production,” you should always check with your certification agency before using a new product. Your certification agency will check that all ingredients in these products are compliant with the National List.

A natural feed additive (supplement) can be from any source, provided it is not classified as a prohibited substance by the organic regulation or the National List. However, it must be in compliance with the Federal Food, Drug and Cosmetic Act. Any agricultural product (soy oil, wheat middlings) in the supplement must be certified organic and any organisms (yeast, enzymes) must be verified as non-GMO. Synthetic flowing agents such as yellow prussiate of soda (sodium ferrocyanide) in salt is not allowed; you will need to feed salt without this ingredient.

Agricultural products present in health products don't need to be organic; they can be natural

without synthetic additives. Any product fed routinely as a feed or feed supplement must contain only certified organic agricultural ingredients. For example, the oil used in a dust suppressant could be organic soy oil but not mineral oil, which is a petroleum product.

If a product is used as a health product and not as a feed, it can be natural with no prohibited ingredients or GMOs. An example would be feeding eggs to calves for scours. If the eggs are routinely fed on a daily basis, they would need to be organic. If they are fed only on the rare occasion that a calf has scours, then they could be non-organic eggs. However, if organic eggs are available, they are preferred. For animal health products, there may be an allowance in agriculturally based products for certain preservatives or other product-enhancing materials, interpreted as an “allowed excipient.” Check with your certifier for more clarification on specific products.

Organic Slaughter

In order to label fresh or frozen meat as organic, you must use a certified organic slaughterhouse. You can have a local slaughterhouse certified as part of your own organic certification or use an independently certified slaughterhouse. The Midwest Organic Resource Directory lists certified organic processors and suppliers. Your other option is to sell live organic animals to your customers, and they can use a slaughterhouse of their own choosing, but that meat cannot carry the organic label.

If you’re processing meats such as sausages that contain sugars or spices, all secondary ingredients must meet organic regulations, too. Agricultural ingredients must be organic or on the National List of agricultural items not currently available as organic. This website, www.theorganicpages.com, lists suppliers of organic ingredients nationwide.

In addition, all processing aids, and cleaning products used or that come in contact with organic food products must also be on the National List. Contact MOSES or your organic certification agency to help you determine what is allowed.

You may slaughter poultry yourself on your farm—if your state regulations allow that. You will need to have this approved as part of your organic certification application in order to use the organic label on the finished product.

Organic Dairy

Dairy animals (including sheep, goats, and cows) must be managed organically for one year prior to the production and sale of organic milk. Organic management includes feed, health care, living conditions, access to pasture when seasonally appropriate, and recordkeeping for the entire transitional year and thereafter.

During that initial one-year transition, you may use your own feed grown on your own organically managed land or your own land in its third year of transition (between 24 and 36 months since a prohibited substance was applied). All purchased feed during that time must be certified organic. After 12 months of transition, only certified organic feeds are to be fed to all current or future organic production animals.

Once you have started your transition to organic for the milking dairy animals, all young stock and dry females must also be managed organically. Dairy breed bull calves or steers sold on the non-organic market don't need to be managed organically. Breeding bulls only need to be managed organically if they are housed or pastured with the organic dairy herd. Supplied semen for artificial insemination also does not need to be from an organic source.

The introduction of new dairy animals into an existing organic dairy operation depends on the method the farmer used to originally obtain organic certification. Talk to your organic certification agency for specific details concerning the regulations dealing with the origin of your livestock. In most cases, new stock must be organic when brought into a herd that has been transitioned to organic.

Livestock that have been removed from organic management are no longer eligible to transition back into organic production. An example of a unallowed practice would be taking calves born to organic mothers, raising them non-organically for 8 months and then transitioning them back to organic for one year before freshening.

Dairy animals may be confined temporarily before freshening (three weeks) and post freshening or drying off (one week). Also, confinement is allowed before shipping, sorting, showing at exhibitions, shearing or other activities, but confinement may never last more than a week.

In order for dairy animals to be sold as organic meat, they must meet the same requirements as all organic meat animals. They must have been born from a mother who was managed organically during the last third of gestation. If that mother was fed on-farm transitioning feed during that period, the offspring cannot be sold as an organic meat animal. Transitioned organic dairy animals can produce organic milk and give birth to organic slaughter animals, but they themselves can never be sold as organic meat.

Raising Organic Dairy Animals:

Get practical information about organic dairying:

mosesorganic.org/livestock



Organic Processing and Handling

The National Organic Program regulates organic processing and handling in addition to organic farming to ensure the integrity of a certified organic product from field to table.

“Processing” is defined as: cooking, baking, curing, heating, drying, mixing, grinding, churning, separating, distilling, extracting, slaughtering, cutting, fermenting, eviscerating, preserving, dehydrating, freezing, chilling or otherwise manufacturing, packaging, canning, jarring or enclosing food in a container. Post-harvest handling to prepare a raw agricultural product for market, such as washing produce or cleaning grain before going into a bulk bin, is not considered “processing.”

Many farmers will do some processing of their crop or livestock production. These processes must be certified, along with fields and animals, in order to produce a certified organic product.

Processing Facilities

Facilities or plants that process or handle farm production after delivery from a farmer must also be certified in order for the final product to be considered certified organic. This includes seed cleaners or soybean roasters that perform custom processing where the grower of the crop will use the product on their own organic farm or sell it as organic.

A handler who receives sealed containers of certified organic product and only transfers or stores that product without altering or further processing the contents does not have to be inspected and certified in order to sell that product as certified organic. If the product is bulk in an open container, the handler would need to be certified to protect the organic integrity of the products in their possession.

Each facility where organic products are processed or handled, from butchering to packaged products, must be certified for organic production. The only exception is for processors with less than \$5,000 annual sales of organic products.

The steps for achieving certification are listed in the box to the left. Your organic handling plan should include facility and storage maps, ingredient sources, and product flow from its source through the various stages of processing to packaging, storage, sale and transportation. The plan also must include recipes for each product and each product’s proposed label—don’t print a label until your certifying agency has approved it.

A facility does not have to be restricted to processing only organic product. It may also process conventional products as long as organic products do not contact non-organic products or prohibited substances.

To prevent contamination of an organic run, equipment must be cleaned

Organic Processing Certification Steps

- Develop an organic handling plan.
- Fill out a processor or handler application.
- Have an inspection of all buildings where ingredients and final products are stored, all equipment used for processing, and product packaging.
- Pay fees.
- Keep records.



with organically approved cleaning products or purged with organic product that is diverted to non-organic sales or use. You should document that this purge is sufficient to remove any non-organic product or residue of a prohibited substance from the equipment.

Cleaning products must be on the National List or rinsed completely. A clear water rinse protocol should detail when the rinse has been effective in removing all residue, as shown by a test strip on the equipment surface. You can test once and maintain the protocol, or test each time you do a rinse.

When space allows, it is a good idea to store and label organic ingredients, product and packaging in a dedicated area so employees use the correct items during organic production.

Pest Management

Farms and processing facilities must have a pest-management plan that focuses on preventing pest problems by removal of habitat, food sources and breeding areas. The plan also needs to prevent pests' access to the facility, and manage environmental factors to prevent pest reproduction. The plan also may have mechanical or physical controls including traps, light or sound, and lures and repellents using approved substances. Only if these management practices are ineffective can pest control products on the National List be used.

If National List-approved substances are not effective, then conventional pest-control substances may be used after approval by the certification agency. Measures must be taken to protect against contact between these prohibited substances and organic products and packaging materials. Many handlers have secondary trailers where organic ingredients, products and packaging are removed for a specific amount of time when a prohibited pest control product is used.

These stages of pest control must be documented as being performed in this sequence in order to meet the NOP regulations.

Recordkeeping

All certified processing or handling facilities must keep records to show that organic integrity is maintained throughout the process at the facility. These records must show:

- Certification for organic ingredients;
- Recipes detailing the percentage of every ingredient (excluding water and salt) in every product;
- A product flow chart detailing the process, incoming transportation, ingredient and packaging storage, production processing with all inputs (i.e., water or steam), finished product storage and outgoing transportation;
- A tracking system of product from incoming through processing to storage and sales—with lot numbers, production records, inventory, storage and sales records, cleaning and pest-control records;
- Any non-organic ingredients also meet organic requirements, such as no synthetic flowing agents in the salt or processing aids are on the National List of Prohibited Substances;
- Packaging does not contain any pesticides or other prohibited materials;
- Inventory management and storage meets organic regulations;
- Sales tracked through production to specific ingredient lots or deliveries;
- Documentation that incoming and outgoing transportation was clean before organic product was present, where applicable;
- Pest control meets the hierarchy of activities described in the Pest Management section above.

Ingredients and Processing Aids

Processors have a specific list of allowed and non-allowed products that's separate from the National List of substances that can be used in organic farming. In the NOP Regulation, Section 205.605a and b list natural or synthetic substances allowed as ingredients in "organic" or "made with organic" products. Section 205.606 is a list of agricultural products that are not commercially available as organic, and can be non-organic ingredients in up to 5% of an organically labeled product, or up to 30% of a "made with organic" product. You still must show you searched for an organic version before using an ingredient on this list.

If you are purchasing organic ingredients for use in a certified organic product from someone else, that individual cannot be an exempt-from-organic-certification producer (under \$5000 per year in organic sales).

Labeling

Organic labels are closely regulated. Any operation that knowingly sells or labels a product as "organic" that is not in accordance with the Organic Foods Production Act and National Organic Standards may be subject to a civil penalty of up to \$11,000 per violation. In addition, if an operation commits fraud under the organic label, it may lose the right to sell organic products for up to five years.

The percent of organic ingredients in a "processed" product determines how it can be labeled. All organic ingredients must be identified as "organic" in the ingredient list for all labeling categories. The first three categories must be approved yearly through the organic certification process.

100% Organic:

- The final product contains only agricultural products, excluding water and salt, that are 100% certified organic.
- You may use the USDA Organic and/or the certifier's seal. You must name the certifier as described in the Retail Label section on the next page.
- If an agricultural processing aid is used, it must be organic. An example would be the use of an agricultural fiber (rice hulls) as a filtration aid.

Organic:

- The final product contains at least 95% (by weight or fluid volume) organic ingredients (excluding water and salt).
- All remaining ingredients and natural or synthetic processing aids must be on the allowed National List.
- Agriculturally produced ingredients must be organic or listed in NOP §205.606 as not commercially available as organic. You must document your search to show it is still not available.
- No ingredients may be irradiated, genetically engineered or grown using sewage sludge.
- The USDA Organic or certifier's seal may be used. You must name the certifier.

Made with organic ingredients:

- The final product contains at least 70% organic ingredients by weight or fluid volume (excluding water and salt).
- Conventional agricultural products may be used in the remaining 30%, but they cannot be irradiated, genetically engineered or grown using sewage sludge.
- All non-agricultural ingredients and processing aids must follow the National List.

- Up to three separate organic ingredients or three approved food groups may be listed on the front panel.
- Certifier's seal may be used, but not the "USDA Organic" seal. You must name the certifier.

List of ingredients with organic products identified:

- If your product contains less than 70% organic product (by weight or fluid volume), then you may not make any organic claim on the principal display panel, but may identify items on the ingredients list as organic.
- This type of product is not required to go through the organic certification process.
- You may list the percent of organic ingredients used on the information panel. For example, a cereal ingredient list can state: Ingredients: corn, organic oats, wheat... etc. In this case there are no restrictions on any non-organic ingredients.
- Final products in this category don't have to be processed in a certified organic facility.

Livestock feed:

- Feed labeled as "organic" must contain agricultural products that are 95-100% certified organic. There is no "made with organic" labeling for feed for organic livestock.
- Feed may include any percentage of additives and supplements allowed on the National List.
- Non-organic agricultural products are not allowed in feed or feed supplements. The USDA Organic or certifier's seal may be used. You must name the certifier. *(See the Retail Label section on the next page.)*

Information Allowed in Each Labeling Category

	100% Organic	Organic	Made with Organic Ingredients	Ingredient List with organic products identified	Livestock Feed
May use USDA Organic Seal	Yes	Yes	Not allowed	Not allowed	Yes
May use certifying agency's name	Mandatory	Mandatory	Mandatory	Not allowed	Mandatory
Minimum percentage of product's agricultural ingredients certified organic	100%	At least 95%	At least 70%	Less than 70%, or not a certified organic product	100% certified organic agricultural products <i>(may also include approved additives and supplements)</i>
Minimum percentage of remaining ingredients or processing aids on National List	100%	100%	100% of additives or processing aids; Non-organic agricultural ingredients are not on §205.606	This product is not certified organic and any processing aid or ingredient may be used.	100%
Conventional Agricultural Products allowed <i>(not irradiated, genetically engineered, or grown using sewage sludge)</i>	0%	Only if on the not-commercially-available-as-organic list §205.606	Up to 30%	This product is not certified organic and any processing aid or ingredient may be used.	0%

Bulk non-retail sales:

- All bulk sales of organic processed products or organic single commodities must have a unique lot number on all transfer documents, identifying that specific shipment and tracking it back to production or storage.
- The USDA Organic or certifier's seal may be used.

Retail labels:

- Retail labels must comply with all State and Federal regulations.
- All organic ingredients must be identified as "organic" in the ingredient list for all labeling categories by using the word organic, an asterisk, or another method.
- Labels must state the phrase "Certified organic by (your certifying agency)." This statement must be directly below your statement "distributed or made by..." on the information panel or back label of your product. The label must identify the processor or distributor of the finished product.
- Use of a certifying agent seal or logo is optional and can be placed on the front (principal display panel) or back label (information panel). The certifier logo cannot be larger than the USDA seal.
- The USDA Organic Seal can be used on labels of products in the "100% organic," "organic," and "livestock feed" categories, but there are restrictions on its size and color. You can get details from your certification agency or check NOS §205.303-311. Green, brown and white USDA logos or black and white USDA logos are allowed.
- Provide proofs of your labels to your organic certifier before you have them printed, since the agency must approve them before they are used in the marketplace.
- Bulk products not for retail sale that are made with organic ingredients may use the USDA seal. However, you cannot buy those products, repackage them for retail sale, and use the USDA seal. You must follow the labeling guidelines for retail products in the "made with organic" category.

Bulk organic sales:

- Must be accompanied by a lot number on the invoice or other transfer documents.
- If you sell commodity crops in bulk, your storage records should track which field's crop are in each bin (or mingled in a bin) as well as how many bushels were sold at each sale and to whom.
- If you feed your crops to organic livestock, you should still track which fields are mingled in each bin, and keep a periodic running inventory (every two months or so), detailing how much crop has been used.
- It is understood that many of the incoming bushels will be rough estimates, but the outgoing sales should be exact figures.

Marketing Organic Products

The organic marketplace has experienced rapid growth for many years, encouraging the development of many new avenues for selling organic products. Talk with other organic farmers about their markets to see where they sell. Check the Midwest Organic Resource Directory for marketing agencies, co-ops and companies who may be buying or using organic products. The directory is online at mosesorganic.org/organic-resource-directory. The Organic Trade Association (OTA) also has an online directory (ota.com) listing companies that buy and use organic. Classified ads on the MOSES website and in the *Organic Broadcaster* newspaper provide another way for farmers to sell products to other farmers in the Midwest. Your extension agent may know of local markets.

Direct-to-other farmers, direct-to-consumer, and farm-to-institution sales also are on the rise. Produce, meats, grains, beans and processed foods are sought by institutions and food service venues. If you are willing to be somewhat of an entrepreneur, there are retail stores, schools, restaurants, and farmers' markets that could be a source of income for any value-added products you develop. Grain farmers could grind flour and make pancake mixes. Beef producers could sell organic cuts of meat or develop special jerky or hot dog recipes. Vegetable producers could make salsas or pickles. The opportunities are only as limited as your imagination!

Organic Pricing

Organic prices historically have been higher than those for similar products that are conventionally produced. This is especially true for dairy products, where organic prices have been as much as twice the price of conventional dairy products. However, there is no guarantee that you will get more for an organic product. It is important to secure a market for your product and get a sense of the price you will receive before you produce the product.

The price you receive for your organic product depends on the market. If you are selling your product as a raw, unprocessed commodity (such as corn to a feed mill), you may be offered a posted price. If you market directly to consumers or create value-added products, you may receive a higher price.

Before you set a price, do a cost analysis to determine your production costs so you earn a decent profit. The required recordkeeping you do for organic production can help you understand your production costs. You can learn more about recordkeeping systems and pricing strategies in the book *Fearless Farm Finances*, available through the MOSES online bookstore, mosesorganic.net.

Grassy hay is one crop that typically does not have a large organic premium in the marketplace, unless bad weather has limited the supply. High quality alfalfa dairy hay is an exception. If your hay has a good nutritional analysis, you could get a premium for it from an organic dairy producer. To obtain non-organic hay prices in your area, contact your local extension agent.

A simple way to create a market for your organic product is to build relationships with local

Organic Price Reports

Find national price points for organic produce, meat, dairy, eggs, grain, feed and more:

www.ams.usda.gov/market-news/organic



organic farmers who could use your product—to fill CSA boxes or wholesale orders, or feed livestock, for example. You can develop your crop rotation with the needs of these buyers in mind, while they can be assured of high quality crops from a known entity. You might also find opportunities to combine organic loads to a larger buyer, if each of you has less than a load, and share the cost of trucking.

Selling Under Small Farm Exemption

If you fall under the small-farm exemption of producing under \$5,000 in organic sales per year and don't need to be certified, you may still sell your products as organic as long as you follow the full organic regulation, including recordkeeping. However, you may not sell your product in any situation where it will be further processed into an organic product or fed to certified organic livestock. This means that your "exempt" products can't be part of a certified organic processed product. You can make your own organic product from your "exempt" agricultural products as long as all total sales of organic products (including both fresh and processed) are less than \$5,000 per year and are only sold directly to the consumer. You may label your products as organic when selling directly to consumers, at a farmers' market or when selling to anyone such as a retailer who will not further process the product.

Products in Transition to Organic

Transitioning to organic products cannot be sold as organic. They must be sold as non-organic. There is no specific regulation defining the production and oversight of transitional crops, and therefore, there is no legal label for products in transition to organic production. At the time of the publication of this guidebook, the Organic Trade Association and others were developing privately run label programs approved by the USDA for the sale of transition to organic products. This may be an option, specifically for organic grain producers, for marketing during your transition.

International Markets

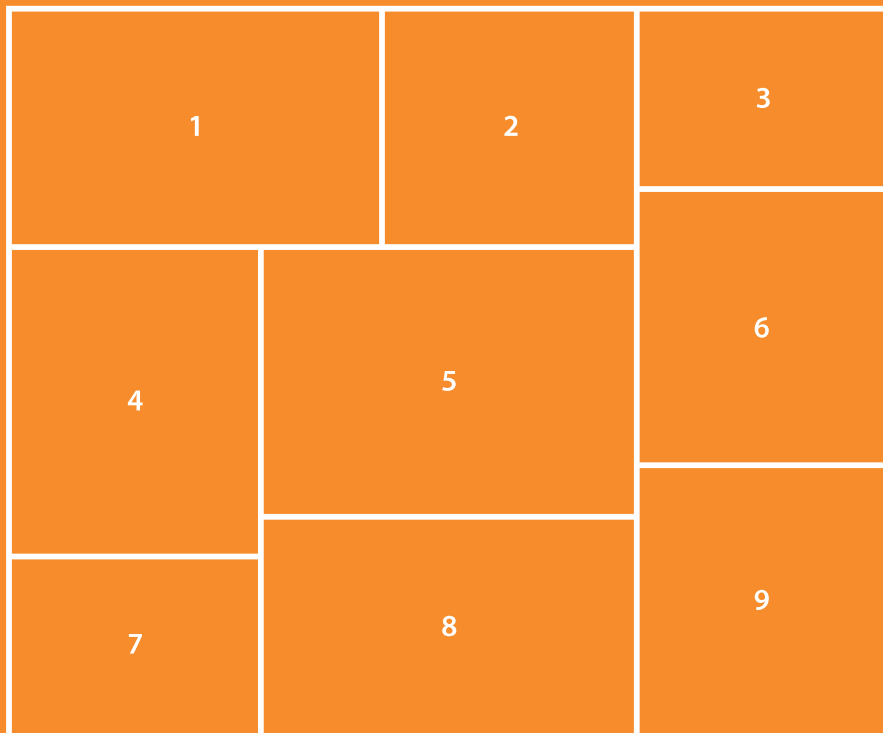
For many years, the differences between organic regulations around the globe led to trade barriers in the organic marketplace. However, many countries now have agreements with the U.S. National Organic Program that allow import and export of organic products. For Canada, Japan and the European Union, our equivalency agreements have some areas where trade is not allowed, due to differences in our standards. For instance, U.S. certified organic hydroponically grown crops cannot be sold as organic in the EU or Canada; organic fish from those countries cannot be labeled as organic in the U.S. If you know your product is going to be shipped overseas, make sure your organic certification agency is aware of this possibility, as they may have a few additional details they need to verify on your organic certificate to facilitate this sale.

Retail Sales

Retail stores are allowed to handle and sell organic products without being certified as long as they do not process organic products and distribute them to another location. They can cut large blocks of cheese into smaller ones or cube melons and sell them in containers and continue to label them as organic, but not "certified organic" unless they choose to voluntarily become a certified organic retailer. Many small and large stores have taken this organic certification step to illustrate their commitment to organic integrity to their customers. Retail stores of all types are required to prevent contamination with prohibited substances or commingling with non-organic products, and label organic products correctly.

Cover Photos:

1. GNARFoodz Farm, Duluth, Minnesota
2. Buttermilk Falls CSA, Osceola, Wisconsin
3. Sweet Springs Farm, Gays Mills, Wisconsin
4. Riverbend Farm, Delano, Minnesota
5. WCROC, Morris, Minnesota
6. Three Brothers Farm, Oconomowoc, Wisconsin
7. Radical Root Farm, Libertyville, Illinois
8. Genuine Faux Farm, Tripoli, Iowa
9. Second Glance Farms, Itasca, Minnesota



Inside Front Cover:

Full Circle Farm, Seymour, Wisconsin

Talking about “Organic”

Most consumers know the term “organic,” but might not understand all that it entails. Unlike the word “natural,” organic has a specific definition. Products labeled organic have third-party verification that they meet growing and processing standards.

Many organic producers have found it helpful to educate their customers about organic production practices. Your own farm’s story and the reasons you are transitioning to organic are powerful testimonials to the benefits of organic farming and organic food.

MOSES can help you explain organic to your customers. We have rack cards and wallet cards for consumer education, and information from research studies that show the impacts of eating and growing organic food. To request these materials:

Call: 715-778-5775

Online: mosesorganic.org/for-consumers

Guidebook for **Organic Certification**

Consumer demand for food and products grown and processed without harmful pesticides, hormones, antibiotics, and GMOs is driving growth in organic farming.

In the past 10 years, the number of certified organic operations in the U.S. increased by more than 250 percent. Yet demand still outpaces production, creating a ripe opportunity for farmers *like you*.

Organic farming works.

It is a proven production system used by thousands of farmers. This book will help you understand this system and the standards that ensure its integrity.

