

Raising Organic Pigs: A Guide to USDA Certified Organic Requirements

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Pigs effectively convert grains, produce, and unsalable agricultural products into highly marketable pork and provide readily available crop nutrients as manure. The label “USDA certified organic” is reserved for those products raised and produced in compliance with federal regulations. This publication addresses the four general topics related to organic certification for pigs: source of animals, feed, healthcare, and living conditions. Emphasis is given to reviewing allowed and prohibited practices for the experienced pig farmer considering organic pig production.

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Access to plenty of clean, dry bedding is essential in organic pig-production systems.
 Photo: Peter Lammers, NCAT

Introduction

Organic agriculture is an approach to producing food and fiber that maintains and enhances the productive capacity of a farm’s soils by relying on ecological processes and cycles adapted to local conditions rather than the use of chemical inputs (IFOAM, 2009). The phrase “USDA certified organic” refers to farms managed and products produced in accordance with the rules and guidelines presented in Title 7, Part 205, of the Code of Federal Regulations. The National Organic Program (NOP) is the program authorized by this portion of federal code and is responsible for implementing its provisions. Organic farmers typically work

with a third-party certifier to develop an organic systems plan (OSP) and to verify compliance with federal regulations regarding organic production and marketing.

Organic Systems Plans

Under National Organic Program (NOP) regulations, each certified organic farm must have an organic systems plan (OSP). The OSP is a detailed outline that explains how you intend to operate your farm to satisfy the requirements of the NOP regulations. Refer to the ATTRA publication *Organic System Plans: Livestock Production* for more information and example OSPs.

Related ATTRA publications

Assessing the Pasture Soil Resource

Farm-Scale Composting Resource List

Getting Started with Livestock

Hog Production Alternatives

Holistic Management—A Whole-Farm Decision Making Framework

Hooped Shelters for Hogs

Alternative Meat Marketing

Pork: Marketing Alternatives

Manures for Organic Crop Production

Nutrient Cycling in Pastures

Organic System Plans: Livestock Production

Pastures: Sustainable Management

Protecting Water Quality on Organic Farms

Rotational Grazing

Sustainable Soil Management

Pig production certified as organic by the U.S. Department of Agriculture is a relatively small part of the country's agriculture—17,000 pigs sold by 202 farms in 2008 (USDA, 2010). Although demand for organic meat is strong in the U.S. (Dimitri and Oberholtzer, 2009), high prices for organic grains and the challenges that come with raising pigs in compliance with federal organic standards have slowed the growth of organic pork production. That said, organic pork is a product that can command price premiums, so organic pig production may be a viable option for some farms.

On mixed crop-livestock farms, pigs play a critical role as recyclers of nutrients. For example, pigs will readily grow when fed grain that does not meet quality standards for the human food market. Thus, organic grain that cannot be sold at the highest premium can be converted to high-value organic pork. Similarly, organic produce that cannot be economically stored and sold as produce to consumers can be fed to hogs and ultimately sold as organic pork.

Because organic production prohibits the use of chemical fertilizers, organic grain farmers must find other means to provide crop nutrients. Livestock manure, and especially pig manure, is an excellent source of readily available plant nutrients. Although manure applied to organic cropland in the United States is not required to be sourced from organic livestock (eCFR, 2010), some organic farmers keep pigs for the manure they provide.

There are four major aspects of USDA certified organic regulations that relate to pig production—source of animals, feed, health-care, and living conditions. These topics will be discussed below, with emphasis given to complying with the rules and guidelines of the NOP. This guide is written primarily for experienced pig farmers considering organic production. For less experienced farmers considering raising pigs, the *Niche Pork Production Handbook* from Iowa State University provides a good introduction to raising pigs in alternative systems.

Source of Animals

One of the easiest ways to begin raising pigs is to buy feeder pigs and feed them to market weight. However, for a pig to be sold as USDA certified organic, it must be managed in

Marketing Organic Pigs

The key to long-term profitability for organic pig farms is identifying and meeting consumer needs. Demand for meat produced locally following natural or organic principles is growing in many areas, and many farmers find that selling directly to consumers can be very profitable. However, selling directly to consumers is often a different marketing niche than selling USDA certified organic products. In order to be labeled USDA certified organic, pork must not only come from pigs raised on organically certified farms—those pigs also must be processed by a USDA certified organic processing plant. Although some USDA certified organic pigs are sold directly to consumers or retailers by farmers, most are marketed to one of a few national companies that supply major organic- and natural-food retailers. Before pig producers undergo the process of becoming USDA certified organic, they should carefully consider their marketing options. Unless their customers are specifically asking for USDA certified organic pork and they can find an inspected and certified processing plant, it may not make economic sense for producers to become USDA certified organic.

compliance with organic regulations at least 38 days prior to birth. In other words, the only pigs that can be sold as organic are pigs born to a sow or gilt that has been managed organically since the last third of gestation. Although organic feeder pigs may be available in some areas, most organic pig farms are farrow-to-finish operations.

A bred sow or gilt purchased from a conventional farm can give birth to organic piglets if the sow or gilt is managed organically for the last third of gestation. However, even after a farm has been managed organically for multiple years, a pig not farrowed by an organically managed dam will not qualify as USDA certified organic slaughter stock. Currently, there is a small market for organic cull sows that qualify as organic slaughter stock—they were managed organically 38 days prior to birth and maintained their organic status over their entire lives. There is no current market for organic cull boars, and culled breeding stock from organic farms are most commonly sold into conventional markets at conventional prices.

Feed

Organic pigs must be fed an organic diet. Organic pig diets are primarily organic grains and protein sources. Organic soybean meal is commercially available in some locations and is the most common source of amino acids—the building blocks of protein—in organic pig diets. Organic feed grains also can be purchased; however, most organic pig farmers find that it is more cost effective to grow their own grain than to purchase it on the open market.

Supplemental minerals and vitamins can be included in the diet and do not necessarily have to be certified organic. Some premixes and supplements contain prohibited substances and thus are not allowed. Before using a product in organic pig diets, it is essential to confirm that the product does not contain any prohibited substances. The NOP maintains the official “National List of Allowed and Prohibited Substances,” often called the National List, which can be accessed at the link provided in the Further Resources section. Organic-certification agencies also generally maintain lists of products and supplements that are approved for use in organic livestock production. Before using a new feedstuff or supplement, producers should consult with their organic-certification agency to ensure compliance with USDA organic regulations. All feedstuffs and supplements should also be noted in the farm’s OSP.

A number of feed ingredients commonly used in conventional pork production are prohibited in organic production. The feeding of mammal- and poultry-slaughter by-products—tallow, grease, meat and bone meal, feather meal, and spray-dried plasma—is prohibited. However, organic eggs, organic dairy products, and commercial fishmeal are allowed. Feeding crystalline amino acids such as L-lysine, DL-methionine, L-threonine, and L-tryptophan is not allowed; similarly, feeding exogenous phytase, subtherapeutic antibiotics, or hormones is prohibited.

Health Care

Because treatment options are limited in organic production systems, the prevention of disease and pest problems is paramount. Organic pig farmers should work closely with their veterinarian to establish and maintain swine-herd health. A positive working relationship with a veterinarian who is open to the challenges of organic

production is a major asset for the organic livestock producer. Thoroughly sanitizing equipment and housing between groups of pigs can be very effective and is strongly encouraged. The National List includes a number of commonly available synthetic substances approved as disinfectants and sanitizers in organic production. Identifying potentially sick animals and quickly isolating them from the larger group also is key to avoiding disease outbreaks. The book *An Outline of Swine Diseases: A Handbook*, by Ross P. Cowart and Stan C. Casteel, is an excellent resource for identifying and diagnosing sick pigs.

The use of antibiotics is explicitly prohibited for USDA certified organic pig herds. No pig treated with antibiotics for any reason may be marketed as organic. Organic pig producers are required to care for sick animals with appropriate treatments. If all other alternatives have proved ineffective, a producer may not withhold antibiotics from a sick pig. However, once treated with antibiotics, that pig can no longer be marketed as organic.

Vaccines are allowed and encouraged in organic pig production, and some synthetic medications also are allowed. Injecting newborn pigs with supplemental iron to prevent anemia is allowed as well. The use of feed additives such as organic acids, probiotics, and directly fed microbials to encourage animal health is not prohibited, but not all health-promoting feed additives are approved for use in organic production. In order to ensure compliance with federal regulations, organic pig producers should consult with their third-party certifier before administering vaccines, medications, veterinary biologics, or feed additives.

Artificial insemination is allowed, but administering hormones to synchronize estrus or stimulate growth is prohibited in organic production. However, therapeutic use of oxytocin post-parturition is allowed. Approved parasiticides can also be used when preventive practices have proved ineffective. Currently, the only parasiticide that is approved is the product ivermectin. The use of parasiticides is restricted to breeding stock, and they must be administered prior to the last third of gestation. Treating lactating sows or market animals with parasiticides is prohibited.

Physically altering organic livestock to promote their welfare is allowed, but it should be performed in a manner that minimizes pain and

The use of antibiotics is explicitly prohibited for USDA certified organic pig herds.

stress. Although the language of the NOP regulations is vague, most third-party certifiers interpret the rules as not allowing the routine clipping of needle teeth, docking of tails, or nose-ringing sows. Young boars are generally expected to be surgically castrated within the first three to four days of life. Organic livestock must be identified, and ear notches, ear tags, and tattoos are currently all approved methods for individually marking breeding stock and potential replacements.

Living Conditions

The first line of defense against disease and illness is providing pigs with an environment that reduces stress and promotes natural behavior. Federal organic regulations require that pigs have access to the outdoors, shade, shelter, exercise areas, fresh air, clean drinking water, and direct sunlight, as suitable for the animal's stage of life and the climate and environment (eCFR, 2010). Third-party certifiers may interpret this statute differently based on local conditions. That said, keeping newborn pigs inside a building during January in northern Michigan is generally allowed, but preventing adult animals from going outside on a warm fall day is not. Pigs are required to have access to the outdoors, but raising pigs on pasture is not explicitly required by the organic regulations. Many organic pig producers do use pastures as their climate and farmland allow, but being pasture based is not a prerequisite of certified organic pig production.

Organic pigs must have access to clean, dry bedding. If the bedding is crop residue, it must be from organic crops. Because most organic pigs are part of a larger organic crop-and-live-stock farm that practices extensive crop rotations, sourcing organic bedding is not usually problematic. Other bedding materials such as shredded newsprint, wood chips, wood shavings, sawdust, and sand are allowed in organic systems and do not need to be certified organic.

Manure must be managed in a way that avoids runoff and contamination of bodies of water. Organic systems have a particular incentive to optimize the recycling of nutrients from manure back to growing crops. Outdoor areas and pastures also must be managed in a way that avoids soil erosion and protects water quality. Temporarily restricting pigs' access to the

outdoors in order to prevent erosion and soil compaction or avoid degrading water quality is allowed under USDA certified organic regulations.

NOP regulations require animals to have adequate space for natural maintenance, comfort behaviors, and opportunity for exercise (eCFR, 2010), but they do not specify exactly how much space is adequate. However, most firms that buy organic pigs and many retailers that market organic pork have adopted more specific space requirements. Because different markets may require different space allocations, it is important for organic pig farmers to carefully consider where they plan to sell their animals. Space requirements for most organic pork markets are greater than typical space allowances in conventional confinement barns. Standard farrowing crates and gestation stalls are prohibited as well. Feeding stalls for sows are allowed, as is temporarily restraining sows in a stall to inseminate, check for pregnancy, or administer medical treatment. To avoid expensive mistakes, organic pig farmers should consult with their third-party organic certifier and their market before building or renovating facilities.

Conclusion

Raising USDA certified organic pigs requires understanding and following specific production protocols. Federal organic regulations are intended to promote environmental stewardship and foster consumer confidence. There is growing demand for organic meat, and farmers willing and able to adhere to the USDA certified organic standards can capture a premium for their efforts. Pigs that are marketed as organic must be born to sows that were managed organically for at least 38 days prior to farrowing and fed organic diets. Antibiotics are prohibited in organic production, and organic pigs must have access to the outdoors, bedding, and more space than is typically allotted in conventional confinement systems. Pig producers considering transitioning to organic production should carefully consider whether the potential price premium for organic pigs outweighs the costs of adhering to organic regulations. Actively communicating with your third-party certifier and your market is essential to successful organic pig farming.

Pigs are required to have access to the outdoors, but raising pigs on pasture is not explicitly required by the organic regulations.

References

Dimitri, C., and L. Oberholtzer. 2009. Marketing U.S. Organic foods: Recent trends from farms to consumers. USDA. Washington, DC

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International Federation of Organic Agriculture Movements (IFOAM). 2009. Frequently asked questions. Bonn, Germany. www.ifoam.org/sub/faq.html

USDA-National Agricultural Statistics Service. 2010. Organic production survey (2008). Washington, DC. www.agcensus.usda.gov/Surveys/Organic_Production_Survey/index.asp

Further Resources

ATTRA Organic Certification Publications

NCAT's Organic Livestock Workbook

This workbook was created to assist organic and transitional producers with livestock or mixed crop-livestock operations in understanding the range of practices and materials allowed under the National Organic Program Regulations.

Organic Livestock Documentation Forms

In order to become certified organic, livestock producers must demonstrate to an accredited certifier that their operation complies with National Organic Program Regulations. The 32 forms in this package are provided as tools that livestock producers can use for documenting practices, inputs, and activities that demonstrate compliance with regulations or that assist in other aspects of farm recordkeeping.

Organic Standards for Livestock Production: Excerpts of USDA's National Organic Program Regulations

This collection of standards from the USDA's National Organic Program provides the reader with key standards relevant to certified organic livestock production.

Organic System Plans: Livestock Production

This guide was developed to assist producers in completing the application for organic certification by explaining just what information certifiers want in a system plan and why it is required.

Books

Blair, Robert. 2007. Nutrition and Feeding of Organic Pigs. CAB International, Oxfordshire, UK.

This book presents advice on formulating appropriate diets and integrating them into organic pig production. It outlines both U.S. and international standards of organic feeding.

Cowart, Ross P. and Stan W. Casteel. 2001. An Outline of Swine Diseases: A Handbook. Iowa State University Press, Ames, IA.

A concise summary of the major concepts and facts of swine health, this book includes easy-to-use outlines of clinical signs and diagnoses for a broad range of pig diseases.

Kyriazakis, Ilias and Colin T. Whittemore (eds.). 2006. Whittemore's Science and Practice of Pig Production. 3rd edition. Blackwell Publishing, Oxford, UK.

This long-established reference book on management, breeding, nutrition, health, and welfare of pigs is based on practical and scientific aspects of pig production.

Morrison, Frank B. 1948. Feeds and Feeding. 21st edition. The Morrison Publishing Company, Ithaca, NY.

Although the book is out of print, its discussion of feeding and managing pigs is widely applicable to current organic production systems.

Thornton, Keith. 1990. Outdoor Pig Production. Farming Press Books, Ipswich, UK.

Developments in outdoor pig production are explored in this book, which also discusses specific details of pig management in an outdoor setting.

Useful Websites

American Holistic Veterinary Medicine Association
www.ahvma.org

The American Holistic Veterinary Medical Association explores and supports alternative and complementary approaches to veterinary health care. The association maintains a searchable database of holistic veterinarians, which is available at www.holisticvetlist.com.

Midwest Organic and Sustainable Education Service
Organic Production Fact Sheets

www.mosesorganic.org/productioninfo_factsheets.html

This site has a wide variety of fact sheets covering such topics as choosing a certifying agent, frequent mistakes on applications, and transitioning to organic production.

National List of Allowed and Prohibited Substances. USDA National Organic Program www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateN&navID=NationalListLinkNOPNationalOrganicProgramHome&rightNav1=NationalListLinkNOPNationalOrganicProgramHome&topNav=&leftNav=NationalOrganicProgram&page=NOPNationalList&resultType=&acct=nopgeninfo

This list is maintained by the National Organic Program and is regularly updated.

Organic Livestock Feed Suppliers, National Center for Appropriate Technology

http://attra.ncat.org/attra-pub/livestock_feed

This site is a searchable database of self-listing suppliers of organic livestock feed.

The Niche Pork Production Handbook. 2007. Peter Lammers, David Stender, and Mark Honeyman. Iowa State University Extension, Ames, IA. www.ipic.iastate.edu/publications.html

The handbook is a collection of fact sheets covering pig

husbandry, feeding, housing, reproduction, scheduling, and business management.

USDA-Alternative Farming Systems Information Center, Organic Livestock Resources http://afsic.nal.usda.gov/nal_display/index.php?info_center=2&tax_level=2&tax_subject=296&topic_id=1414

The USDA's clearinghouse for information regarding organic livestock production, this site provides a wealth of links to other resources.

Notes

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