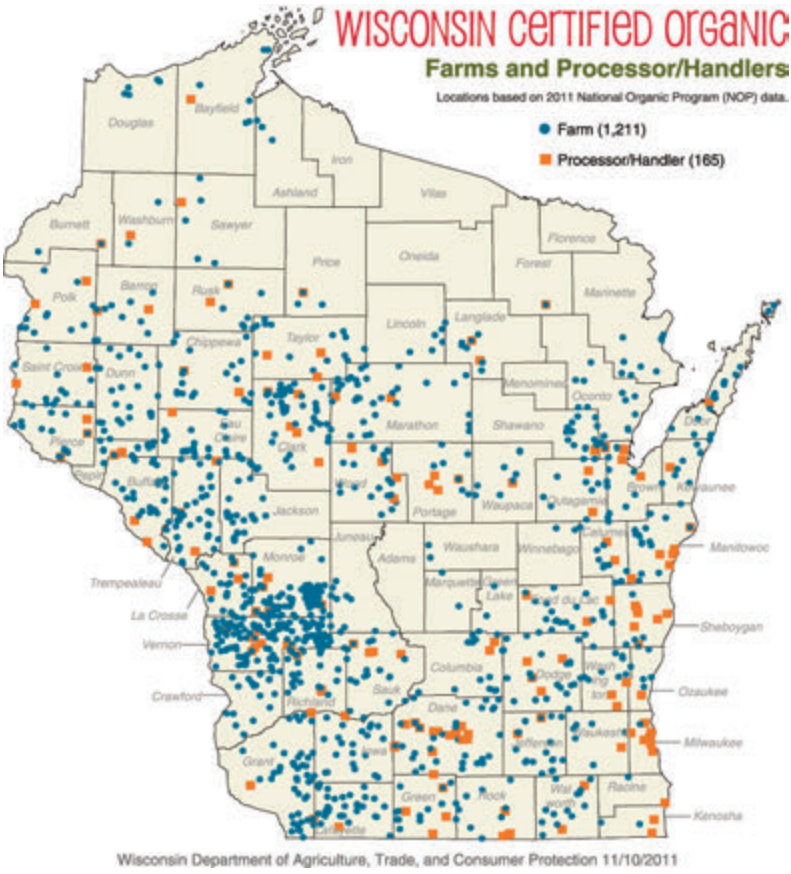

WI Organic Farm and Business Directory:
http://datcp.wi.gov/Farms/Organic_Farming/Directory/index.aspx

A Consumer's Guide: Information about USDA certified organic food

This consumer's guide will explain how organic farmers farm, what the organic seal on a product means, how the organic seal compares with other product labels, and what you're paying for when you buy organic products. This guide also describes how organic foods compare with conventional foods in terms of nutritional quality and pesticide residues and provides insights into the future role of organic farming in feeding the world.

What is organic agriculture?

Organic farmers follow specific practices in order to be certified by the United States Department of Agriculture (USDA) National Organic Program (NOP), which regulates organic farming in the United States[12]. USDA accredits private companies and some state governments to provide inspection and certification of farms and processors.

Organic farmers DO NOT:

- Use synthetic pesticides (herbicides, insecticides, or fungicides), except for a few least toxic materials which have no natural alternative.
- Use synthetic fertilizers or sewage sludge.
- Use genetically engineered plants and animals (GMOs).
- Use antibiotics or synthetic growth hormones in animal production.
- Feed animal byproducts to livestock.

Organic farmers DO:

- Maintain an organic system plan that they follow to manage their farms in accordance with NOP rules.
- Use multiple benign practices such as physical barriers, cultivation, and resistant varieties to control pests, diseases, and weeds.
- Use natural, approved pesticides and a limited number of least toxic synthetic products as a last resort.
- Use natural sources of fertility including manures, composts, cover crops, and natural fertilizers.
- Use preventive practices and natural medicines to maintain animal health.

At its best, organic farming is an ecological system that focuses on building healthy soils and integrating cultural, biological, and mechanical practices to produce healthy crops and livestock. More than simply prohibiting synthetic pesticides and fertilizers, organic production rules require a proactive, knowledge-based management plan that uses diverse crop rotations to interrupt insect, pest, disease and weed cycles, reducing the need for toxic materials to control these problems. Organic production is a system that is managed in accordance with the Organic Foods Production Act to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Processed organic products must be made and handled in certified organic facilities, ensuring that organic standards are maintained throughout food production, processing, and packaging.

"I have chosen to farm organically because I believe it is the best way to provide the public with clean, nutrient-dense food now and into the future. This occurs through continuous improvement of our soil base, an indispensable resource for future generations."

Chris Malek
Malek Family Stewardship Farm, Stevens Point, WI

The Organic Label

Food that is labeled with the **USDA Organic Seal** is produced using organic practices by farmers who are certified and inspected annually to verify that their farms meet national standards for organic production. Organic is the only food label that is regulated in this way.

Food can be labeled organic in four ways:

- "100 percent Organic" means that all ingredients and processing aids are certified organic.
- "Organic" can be used on products that contain at least 95 percent certified organic ingredients, with the remainder only approved ingredients.
- "Made with Organic Ingredients" can be used on products that contain at least 70 percent organic ingredients.
- Products with less than 70 percent organic ingredients are not allowed to use the term "Organic" on their label. Organic ingredients can be identified in the ingredients list.
- Only the first two categories are allowed to use the Organic Seal on labels.
- For more information: ***http://www.ams.usda.gov/AMSv1.0/nop***

Organic Not Equal To Natural

Many people equate natural products with organic ones, but unlike organic foods, the meaning of the word 'natural' on a label varies with the product it is used to describe. For example, natural peanut butter does not have added vegetable oil, but the peanuts in the product can be raised using synthetic pesticides. Natural meat is raised without antibiotics and synthetic hormones, but the animals can be fed genetically modified grain and other feeds that have been produced using synthetic pesticides[16]. In contrast, the organic rules provide the following assurances for all certified products:

- Meaningful and verifiable standards that farmers and handlers must follow (as described above).
- Consistency across all types of farming and handling.
- Annual, third party verification of adherence to standards by independent accredited certifiers.
- Transparency of the National Organic Program including solicitation of public comments when changes are proposed and a complaint process in cases where there is suspected misuse of the organic seal.

The website EcoLabel Index.com lists 125 ecolabels for food products worldwide. The volume and diversity of ecolabels, including 'natural,' 'sustainable,' 'free-range,' 'certified humane,' 'wildlife friendly,' 'grass-fed,' 'fair trade,' and many others, can be confusing. Consumers are encouraged to research these labels and what they stand for. Some of these labels have verification processes in place, but none have the oversight, nor enforcement, that the National Organic Standard has in the marketplace. Visit the NOP website for more details: ***http://www.ams.usda.gov/AMSv1.0/nop***.

Photo by USDA NRCS

What about Buy Local?

When you cannot talk to the farmer yourself or are unsure what questions to ask, the organic seal provides the assurance that the product you are buying was produced on a farm that meets the requirements for organic certification.[9]

Excluding transportation costs, organic farms, on average, use about 30 percent less fossil fuel to produce the same amount of food as conventional farms.

Buying local AND organic may be the best of both worlds.

Which is better, organic or local? Local AND organic may be the best of both worlds. The Buy Local movement is about knowing where your food comes from and supporting local farmers. Organic and local are both good ways of knowing more about how our food is produced. The benefit to buying locally produced foods is that you can often talk with the farmers who produced them, ask them questions about their production systems, and even visit their farms. Purchasing from local farmers provides the opportunity to establish trust in their production practices that can support your food buying goals. Organic certification does the same thing in a different way. The organic seal on a product verifies that the farm where it was produced is annually inspected by an independent third-party certifier to ensure that the food you are buying was produced according to organic standards. Those certifiers are your eyes and ears when you cannot visit the farm yourself or you are unsure what to look for.

Buying organic food from local producers encourages environmentally beneficial organic land management in your own community.

Food Miles. Buy Local emphasizes energy use in our food system with the concept of 'food miles.' Most food we eat travels an average of 1,500 miles to reach our plate. Those miles represent a lot of fossil fuels used in transportation. Another large source of energy use in our food system is the production of synthetic fertilizers and pesticides. Together, the production and use of chemical fertilizers and pesticides accounts for 40 percent of the total energy used in farming[7, 14]. Overall, organic farms use approximately one-third less energy than conventional farms to grow the same amount of food[9]. Buying organic foods supports agriculture that reduces environmental impacts wherever those foods are grown. Buying from

a local organic farm saves energy and transportation costs.

Educate yourself, talk to local farmers and make an informed decision based on your own personal values. Consumers who strive for a 'green' lifestyle as it applies to food choices are most successful if they combine buying local organic food with 'eating seasonally' and growing as much as possible in their own backyards!

What's important to you?

Ask your farmer:
Are you certified organic?

If not...

- Do you use synthetic pesticides or fertilizers?
- Do you use antibiotics to treat a sick animal?
- Do you use antibiotics to promote faster growth?
- Do you use synthetic hormones to promote growth or production?
- Are your animals pastured?
- Are they fed grain? (pigs and chickens require grain in their diet; cattle and sheep do not but are commonly fed grain in both organic and conventional systems)
- Are your chickens cage free? Do they have outdoor access?

The questions you ask depend on what is most important to you.

"Come out and visit farms, talk to the farmers about how they raise the food that your family eats."

Bob Van De Boom
VDB Organic Farms
Delavan, WI

What do your organic food dollars pay for?

Certified organic food is often more expensive than non-organic foods for a number of reasons. Organic farmers and processors pay annual fees for their inspection and certification. We help pay for those costs when we buy organic foods. In return we receive the assurance that these farms are inspected annually to verify that the food was produced according to the National Organic Standard.

Cost of production. Another reason why organic food may cost more is that it often costs more to produce. The price of organic food reflects labor intensive practices such as hand weeding and tillage as opposed to the use of herbicides, higher prices for organically produced seed, and the cost of growing non-cash crops such as cover crops and green manures to improve soil fertility. Producing food using these natural tools sometimes results in reduced production per acre or per animal, and may result in higher prices. The higher prices you pay reward organic farmers for their stewardship.

Record-keeping and source verification. All certified organic farmers and food handlers maintain extensive records of their practices including everything from seed sources and veterinary products to crop rotations to packaging materials. Annual inspections of farms

and facilities allow certifiers to examine these records as well as the operations and to verify practices with the farmer or operator.

Economies of scale. Another source of higher costs for organic foods is the relatively small scale of production and sales. Many organic foods are produced on small farms or by small companies. Even national brands of organic foods tend to be produced in much smaller batches than their conventional counterparts, which adds to the cost of aggregation, processing, and distribution.

Supply and Demand. Finally, there is supply and demand at work. Organic is still a tiny part of our food system—less than four percent of food sales nationwide. As production grows to meet demand, the cost of some organic foods will come down. For now, choosing to pay more for organic food is a personal decision to vote with your dollars. When you pay a little more for an organic product, especially when you purchase it directly from the farmer, not only are you supporting a sustainable food production system, but you are often putting a higher proportion of those dollars into the farmer's pocket and helping circulate your dollars in local and regional communities.

Is organic food better for you?

Reduced pesticide exposure with organic foods.

- FDA and EPA set limits for both synthetic and natural pesticide residues in foods.
- Organic foods are grown without synthetic pesticides, except for a few least toxic materials for which there is no natural alternative.
- Organic farmers can use natural pesticides, but only after other, non-chemical methods of control have been unsuccessful.
- The National Organic Standard limits the amount of natural and other allowed pesticide residuals on food to 1/10 of the FDA limit.
- The tolerance level for prohibited synthetic pesticides on organic crops is zero.

The U.S. President's Cancer Panel Report[15], published in 2010, links many cancers to pesticide exposure through food as well as occupational exposure, water contamination, and pesticides used in home lawn and garden care. The report states "Exposure to pesticides can be decreased by choosing, to the extent possible, food grown without pesticides or chemical fertilizers." Although buying organic food doesn't eliminate your risk of exposure to toxins, on-going monitoring by the USDA consistently documents very low or no pesticide residues in organic foods[2].

GMOs and Organics

Advocates of genetically modified organisms (GMOs) argue that GMOs provide for increased yields and reduced pesticide use and thus contribute to agricultural sustainability.

There is also peer-reviewed research that suggests that GMO crops may not yield significantly better than conventional varieties and their use may not result in an overall reduction of synthetic pesticide use in crop production[6]. In addition, concerns about environmental and human health risks associated with GMOs persist both within the scientific community and among consumers[8].

The organic community views GMOs through the lens of the "precautionary principle" which states that if the long term environmental and human health effects are not known, the technology in question should not be used. **For this reason, GMOs are not allowed in organic agriculture.**

Genetically modified crops present an on-going contamination challenge to organic crop production because it is not always possible to establish barriers to prevent cross-pollination from nearby or even distant conventional crop fields.

Nutritional Quality.

- *Several studies show that some organic fruits and vegetables have higher levels of certain nutrients than the same product conventionally produced.*
- *Research suggests that meat and milk from pasture raised livestock (both organic and non-organic) is higher in nutritionally important fatty acids such as Omega 3 and conjugated linoleic acid (CLA).*
- *However, there is no consistent pattern of higher nutritional quality across organic food categories.*

Research to date presents a complicated picture of the effects of organic production practices on nutritional quality of foods. And while it must be noted that the scientific community is debating this topic and more research is needed, a growing body of research suggests that there are nutritional benefits to eating some organic foods.

A number of recent studies have documented that, in side-by-side comparisons with the same conventionally raised products, some organic fruits and vegetables have higher levels of some vitamins, minerals and antioxidants (plant chemicals that help to protect our bodies from cancer - causing free radicals). A recent review of nearly 100 nutrition studies showed that 44 out of 59 studies found higher antioxidant levels, 41 out of 67 studies found higher levels of vitamins, and 34 out of 65 studies found higher levels of minerals in a variety of organically grown fruits and vegetables than in comparable produce grown with conventional pesticides and fertilizers[3].

Other studies document that livestock that consume fresh pasture, a requirement for organic certification, form higher proportions of 'healthy fats,' such as Omega 3 fatty acids. Other studies show higher levels of fat soluble vitamins such as vitamins A and E in the meat and milk of pastured animals[5].

Organic farming is sustainable.

A working definition of sustainable agriculture includes these three items: environmental stewardship, farm profitability, and prosperous and stable communities.

- **Environmental stewardship:** The centerpiece of organic farming is taking care of the environment. Organic farmers focus on minimizing chemical inputs, managing nutrients responsibly, fostering healthy soils, maintaining complex cropping systems that support biodiversity and wildlife habitat, as well as managing livestock as an integral part of the system.
- **Farm profitability:** A national survey conducted by the USDA National Agricultural Statistics Service shows that, in Wisconsin, organic farms tend to be smaller (average = 80 acres) than their nonorganic counterparts (average = 194 acres). Because of price premiums and reduced purchased inputs, these farms return 34 percent more income per acre than conventional farms[11].
- **Prosperous communities:** Small, owner-operated farms tend to purchase inputs locally--patronizing local businesses. Rural communities that depend on agriculture economically are more likely to survive with many smaller scale farms than with a few very large ones. The number of business processing and selling organic products in Wisconsin has increased over 70 percent since 2005, sourcing raw product from local farms and providing jobs in Wisconsin communities.

The price premium paid for organic food is support for sustainability—for the environment, for family farming, and for healthy rural communities.

"We find that farming organically is much more in tune with who we are.

Working with nature and the natural rhythms of animal and plant life just makes sense to us."

Rebecca Goodman
Northwood Farm, Wonewoc, WI

Photo credit Bill Lubing

Can organic agriculture feed the world?

- Numerous studies have shown that organic agriculture can yield enough to meet the world's food needs.
- A growing body of research indicates that organic farming can produce as much or only slightly less per acre as agriculture using synthetic pesticides and fertilizers.
- Organic farming may be a more appropriate system of food production in the developing world where access to synthetic inputs is limited and local production is a key to food security.
- On-going research is identifying new organic methods and tools to help organic agriculture 'scale up' to produce volumes needed to feed society.

There is an on-going public debate about whether we can produce enough food organically to feed our growing global population. Most people agree that it is a good idea to move toward decreasing use of synthetic pesticides and fertilizers, but some argue that we won't be able to produce enough food to feed the world if we don't use them. On the other side of the debate, many have argued that more sustainable methods of food production are essential to lessen negative impacts of agriculture on the environment and human health. Organic agriculture has been shown to benefit soil fertility and conservation, biodiversity, and water resources, but can it produce enough organic food to feed the world's population?

Numerous studies have shown that organic agriculture can yield enough to meet the world's food needs. A 2007 study examining nearly 300 global datasets compared the average yields of organic versus conventional food production[1]. On average, in developed countries like the United States, organic farms produce between 92 and 100 percent of conventional yields. In developing countries, organic systems produce up to 80 percent more than conventional systems. These data show that organic methods could produce enough food to sustain current and future human populations without increasing the amount of farmland in production.

Some studies also suggest that organic systems tend to retain more nutrients, organic carbon and moisture in the soil, which allows organic crops to better withstand climatic stress. While organic yields are comparable to conventional yields during years of normal weather patterns, they are often much higher in drought years[10].

Organic agriculture can contribute significantly to a sustainable future. The more we 'vote with our dollars' the more potential it has to grow. Next time you are in the grocery store or at the farmers market, look for the organic seal.

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Resources

Where can I find organic products?

- Eat Well Guide: ***http://www.eatwellguide.org/***
- Local Harvest: ***http://www.localharvest.org/***
- Organic Foods Store Locator: ***http://www.organicstorelocator.com/***
- SavorWisconsin: ***http://www.savorwisconsin.com/***
- WI Department of Agriculture, Trade, and Consumer Protection: ***http://datcp.wi.gov/Farms/Organic_Farming/index.aspx***
- WI Organci Advisory Council: ***http://www.organic.wisc.edu/***
- Where can I find organic-related research?
- The Organic Center: ***http://www.organic-center.org/***
- Organic Farming Research Foundation: ***http://ofrf.org/***
- The Rodale Institute: ***http://www.rodaleinstitute.org***
- eOrganic: ***http://eorganic.info/***
- USDA Organic Research and Education Initiative: ***http://www.csrees.usda.gov/funding/rfas/OREI.html***

Where can I find general information about organic food?

- USDA National Organic Program: ***http://www.ams.usda.gov/AMSv1.0/nop***
- Midwest Organic & Sustainable Education Service (MOSES): ***http://www.mosesorganic.org/***
- National Sustainable Agriculture Information Service: ***http://attra.ncat.org/***
- Sustainable Table: ***www.sustainabletable.org***
- EcoLabel Index: ***www.ecolabelindex.com***
- Organic Trade Association: ***http://www.organicitsworthit.org/***
- USDA, Should I purchase organic foods?: ***http://www.nal.usda.gov/afsic/pubs/faq/BuyOrganicFoodsIntro.shtml***
- Organic Consumers Association: ***http://www.organicconsumers.org/***

History & Current Status of Organic Agriculture in Wisconsin

Organic agriculture has an expanding role in the food economy, in Wisconsin, across the country, and around the world. Sales of organic food and beverages in the United States grew from $1 billion in 1990 to $24.8 billion in 2009 and continue to increase[13]. Nearly three quarters of American families now include organic products in their food purchases and predictions show continued growth in demand for more quantity and diversity of organic products.

From organic cranberries to organic dairy, Wisconsin farms are equipped to serve this market with a diverse array of high-quality products. Since the inception of the National Organic Program in 2002, Wisconsin has ranked second in the United States in numbers of organic producers, with more than 1,211 farms currently. From its beginnings in southwestern Wisconsin, organic farming has spread throughout the state and includes both large- and small-scale operations. More than 80 percent of organic farms are comprised of 50 or more acres. According to the National Agricultural Statistics Service (NASS)[11], Wisconsin ranks in the top five states for the number of organic dairy, beef, and poultry and also in the number of organic livestock, grain crop, and vegetable farms. Dairy remains the predominant organic industry in the state, with sales reaching $57.6 million in 2008, but all organic farm types are experiencing growth.

Wisconsin is also a national leader in organic processors and handlers with 70 percent growth in businesses certified to produce organic products since 2005[4]. More than 220 companies in Wisconsin produce a diverse array of organic products from beer and cheese to cosmetics and teas.

The success of organic agriculture in Wisconsin would not be possible without the infrastructure and resources provided by federal and state initiatives. Critically important resources include the Wisconsin Organic Advisory Council, a public-private partnership including farmers, organic businesses, and agencies, among others; federal cost-share dollars for organic certification; and technical and financial assistance to farmers for implementing conservation practices through the Natural Resources Conservation Service's (NRCS) Environmental Quality Incentives Program (EQIP) Organic Initiative and Conservation Stewardship Program. Resources such as these are important to maintain Wisconsin's position as a competitive player in the nation for organic products.

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