

ORGANICS: NEW OPPORTUNITIES IN CROP CONSULTING

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Introduction

Wisconsin is a national leader in the small, but rapidly growing organic sector of agriculture. The number of organic farms in the state has more than tripled since 2002 to over 1200 farms today (Figure 1). We are second in numbers of organic farms after California, and first in the nation in numbers of organic dairy farms (National Agricultural Statistics Service 2008). We are also in the top ten in numbers of organic farms producing livestock, vegetables, grain, and forages. In 2008, farmgate sales totaled over \$132 million (Table 1).

Wisconsin's certified organic farms represent a community that has traditionally been outside the communication system that serves most of the rest of agriculture. For some organic producers this is by choice, but many are looking for information to help them in their transition or to help them improve their existing systems. They also have some of the same technical assistance needs as conventional farmers such as meeting nutrient management planning requirements.

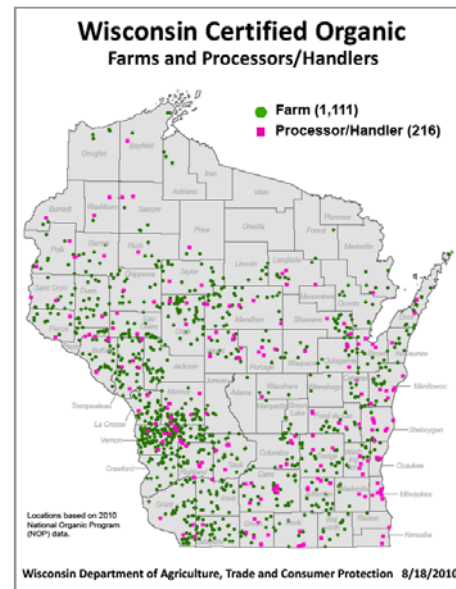


Figure 1. Map of WI organic farms and processors.

Table 1. Wisconsin organic farm statistics from the 2008 National Agriculture Statistics Service Organic Production Survey (www.agcensus.usda.gov).	
Number of organic farms	1222
Number of acres	195,603
Total value of farmgate sales	\$132,764,000
Wisconsin rank among states	
Number of farms	2 (after CA)
Value of sales	2 (after CA)
Number of acres	4 (after CA, TX, MT)
Number of organic dairy farms (455)	1

Although there has historically been a dearth of research-based information on organic farming systems, that is changing rapidly. Recent federal Farm Bills have provided increased funding for organic research, as well as additional funding for direct cost-sharing to farmers for transitioning or maintaining organic certification. The papers in this session will summarize these new programs and some of the research that is being conducted to support this growing industry.

What's fueling the growth?

Consumer Demand: The growth in organic agriculture is being fueled by several related factors. Consumer demand is one. Consumer spending on organic foods grew more than 20% per year from 1988 to 2008. With the recession, growth slowed to about 11% in 2009, with 2010 growth

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predicted to be about 6%. Although it represents less than four percent of the entire U.S. food economy, the \$23 billion organic sector is the only segment of the food industry that has seen significant, consistent growth for so many years (Mintel 2009).

Among all of the ‘ecolabels’ consumers see in the grocery store, the organic seal (Figure 2) is the only one that has a comprehensive legal framework behind it. The National Organic Program (NOP), an agency of the United States Department of Agriculture (USDA), is tasked with managing organic certification. The organic seal assures the buyer that the product was produced by a farm or processor using organic practices, is third-party certified, and is inspected annually.



Figure 2. USDA Organic Seal.

Approximately 60 percent of consumers purchase organic foods at least occasionally, with about 10% being regular buyers (Mintel 2009). The organic seal provides consumers more specific information about how the product was produced than other ecolabels because of the enforcement capacity of the National Organic Standard. And while consumer surveys indicate significant confusion about what the organic seal stands for, these surveys also suggest that many consumers are motivated to buy organic foods by an interest in supporting agriculture that reduces use of pesticides, antibiotics and artificial hormones (60%). Fifty-seven percent feel they are helping small and local farmers with their purchases. A growing number of consumers are turning to organic foods because they feel it is better for their health (68%). Avoiding pesticide residues in foods is a motivating factor for many of these consumers (Mintel 2009). In addition, several studies have shown that some organic fruits and vegetables have higher amounts of vitamins and antioxidants in them (Lairon 2009).

Farmer and Processor Interest: The dramatic growth in demand for organic foods has put pressure on the agricultural community to produce for this market. In response, many retailers have turned to overseas markets to keep their shelves stocked. This situation represents an opportunity for U.S. farmers. Wisconsin is positioned well to contribute to this growing market, especially with the growing complimentary consumer interest in local foods. The number of companies processing organic raw materials in Wisconsin increased by 70% between 2005 and 2010 and now stands at 217 (NOP, unpublished data).

Farmers who convert to an organic system do so for many reasons. In a 2004 national survey of organic farmers, Walz (2004) found that four of the top five responses to the question, “Why do you choose to farm organically?” were related to land stewardship and reducing pesticides in the environment. The second most important reason was reducing pesticide exposure for their families and farm workers.

Economics was another consideration for many farmers. Organic crops and livestock products command a substantial premium in the market (Table 2). Although organic grain prices are at historically low levels and conventional prices are historically high in 2010, organic producers averaged a 16% premium for their corn and a 33% premium for their soybeans. Organic milk prices average about 70% higher than conventional farmgate prices and remained above \$20/hundredweight (CWT) during the recent downturn in conventional milk prices (NODPA 2010, UW Center for Dairy Profitability 2010). Respondents to the Walz survey also reported that they were able to significantly reduce purchased inputs and that they can generate a higher income on fewer acres than they did when they were farming conventionally (Walz 2004).

Table 2. Comparison of current conventional and organic prices (Fall 2010).		
Commodity	Organic	Conventional
Corn (bu)	\$6.25	\$5.38
Soybeans (bu)	\$16.75	\$12.63
Milk (cwt)	\$25.85	\$15.44

Agency Support: The 2002 and 2008 Farm Bill contained a significant increase in resources for organic farmers. The Natural Resource Conservation Service (NRCS) provides Environmental Quality Incentives Program (EQIP) cost sharing for adoption of organic practices as well as funding for hiring a consultant to assist in writing an organic transition plan and/or an organic system plan. Approximately \$50 million was set aside in the 2008 Farm Bill for this program nationally. Wisconsin led the country with 363 applications when the program was first announced in 2009 (National Sustainable Agriculture Coalition, unpublished report).

The NOP provides funds to reimburse farmers for 75% of their certification costs up to \$750 per farm. The program, administered by DATCP, provides nearly \$400,000 per year in cost-share funds to over 700 organic farmers, input suppliers and processors (Paine 2010).

In addition, funding for research has supported establishment of organic research programs at universities across the country. Several universities, including the University of Wisconsin, have hired organic research coordinators. Dr. Erin Silva, with the UW Agronomy Department serves in that capacity (Contact information: 608-890-1503; emsilva@wisc.edu).

The Missing Link

The missing link in this picture of a rapidly growing agricultural sector is a bridge between farmers interested in organic practices and sources of research-based information and technical assistance. What the organic sector needs is a system of crop consultants and technical service providers (TSPs) similar to what exists for mainstream agriculture.

Many people in both the organic world and the conventional world view organic farming as a separate system. For the purposes of providing technical assistance to organic farmers, it might be more effective to picture it as part of a continuum with certified organic at one end, integrated pest management in the middle, and farming that relies heavily on synthetic fertilizers and pesticides at the other end. The primary goal, no matter who we're helping, is to meet producers where they are and move them toward more economically and environmentally sound practices.

Many practices that are part of the organic toolbox are also included in IPM recommendations. Some examples include cover crops and green manures, diversifying crop rotations and increasing rotation length, and utilizing pest and disease resistant crop varieties. All of these practices are effective because they work with the checks and balances that exist in nature, breaking up pest and disease cycles and utilizing nitrogen fixation and organic matter to enhance fertility. While there are approved 'natural' products available for pest control and fertility, organic farming places emphasis on mechanical and cultural tools to optimize the system.

Opportunities for Crop Consultants

Existing Organic Farmers: One goal of the new NRCS Organic EQIP program is to reach out to existing organic farmers who may not have previously worked with government agencies. Crop consultants can serve as a bridge for these farmers to help them access research-based information as well as assisting with bringing their farms into compliance with state and federal regulations for environmental performance. Ironically, the NRCS and NOP, two agencies within

USDA, have developed parallel, but different standards for nutrient management planning, soil erosion control, water quality, and other environmental standards. Efforts are currently being made to correlate the two sets of practices and provide guidance on NRCS practices to utilize to meet NOP requirements.

Farmers Transitioning to Organic: With cost-share funding available, many farmers new to organics need assistance in developing transition plans and organic system plans. Most farmers who transition to an organic system have farmed conventionally. One of the errors often made is simply attempting to substitute a few organic practices for their current conventional ones. Successful organic farms employ multiple layers of cultural and mechanical practices to help keep their crops and livestock healthy and productive. These farmers need assistance not just in writing their plans, but in learning how best to manage their farms and their crop rotations as they make the three year transition to organic production.

Organic certification provides a framework for farmers to do the kind of whole farm, system-based planning that we as crop consultants and agriculture educators encourage farmers to engage in. The organic farmer must develop and annually update an organic system plan for his or her farm. This involves establishing crop rotations, monitoring soil health, documenting crop varieties used, developing pest, weed, and disease thresholds and control practices to be used, and nutrient management planning, among other things.

The new EQIP organic program requires farmers to work with a NRCS certified planner to complete their organic transition plans and organic system plans, similar to the way nutrient management planning cost share works. Congress provided the funding for this program without first having TSPs in place. Since the farm bill was passed in 2008, agencies have worked together in Wisconsin to provide training for this certification, but there is still a great need for TSPs for this program and in general, to provide research-based information to this growing sector of agriculture.

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