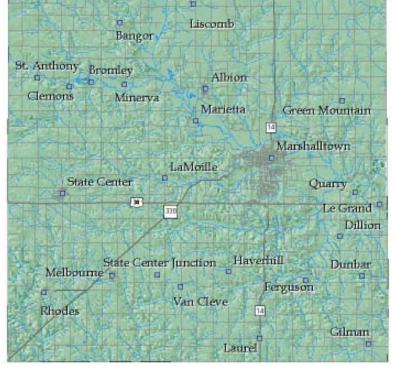
Marshall County Food System Atlas Exploring Community Food Systems















Iowa State University Department of Sociology with support from The Leopold Center for Sustainable Agriculture

Introduction to Community Food Systems



Food and agriculture systems in Iowa have been changing. A growing interest in local food systems is emerging as one of these changes. Currently, much of Iowa's food comes from a global food system.

Iowa's agriculture provides many of the commodities for the global food system. However, much of this system operates beyond Iowa. Wholesale commodity production provides some benefits to farmers and rural communities. But the most significant returns are often experienced by businesses outside of Iowa communities. The food dollar multiplies many more times after the commodities have left Iowa, eventually returning as retail food purchased from global businesses.

What would happen if more of our food dollars were spent on products grown and processed

locally? A community food system creates more direct local linkages among food producers, food consumers and the people and businesses in between.

Parts of a Community Food System Farms and Food Production Food Processors Food Distributors and Wholesalers Retail Food Outlets Consumers Schools Nursing Homes Restaurants Hunger Assistance Programs

Thriving community food systems can support local farmers who practice environmentally sound agriculture. A community food systems approach can encourage local processing and retail enterprises, create jobs and recirculate money for local economic development, and improve access to nutritious food for all people in the community.

A community food systems perspective can also help identify and strengthen community assets. This food system atlas "maps" opportunities and challenges for community food systems based on the unique qualities and situation of Marshall County.

Community food systems offer exciting possibilities for Iowa's rural communities. But community food systems only flourish when communities get involved. How are people in your county working to bring farming, food, and community together? What tools or resources might be helpful to further these efforts?

This community food system atlas highlights work already done in Marshall County and points to future opportunities.



Johnson County Local Food Systems Project

Cover photo credits clockwise from top right corner: Helen Gunderson, Shelly Gradwell, Practical Farmers of Iowa, Gradwell, Bob Atha, Atha.

What do we eat and where does it come from?

What do Americans eat?				
	person	County		
fresh fruit	127.0 lbs	2496 tons		
fresh				
vegetables	202.0 lbs	3970 tons		
poultry	66.8 lbs	1313 tons		
beef	64.5 lbs	1268 tons		
pork	47.7 lbs	938 tons		
eggs	249.7 lbs	4908 tons		
milk	22.6 gal	888,429 gal		

This includes fresh:

tomatoes	17.3 lbs	371 tons
leaf lettuce	8.0 lbs	607 tons
sweet corn	9.0 lbs	159 tons
carrots	1 1.1 lbs	246 tons
strawberries	5.9 lbs	83 tons

Source: Economic Research Service data from the food consumption (per capita) data system on the Internet: <u>www.ers.usda.gov/data/foodconsumption</u>. County consumption figured by multiplying per capita consumption by county population. All data for 2000. Data accessed September 25, 2002

Where does Iowa's food come from?

Iowa imports more than 80 percent of its food, most of which travels at least 1,200 miles. We get vegetables from places like California and Mexico, fruit from Chile and China, and meat from Texas and Argentina.

Just consider apples...

We each eat an average of 47.1 pounds of fresh and processed apples each year. But where do these apples come from? The boxes to the right trace the journey of an apple through both the global and the local food system.



Did you know...

By the late 1800s, southwest Iowa had become an important center of apple production for in-state consumption and export. Seven southwest counties alone shipped one-half a million bushels in 1889.

In 1940, many apple trees were killed by frost, and orchards were replaced with row crops. Iowa now grows only about 15 percent of the fresh apples it consumes. Yet growing condi-

The Global Apple

From farm to table takes up to eight months, traveling thousands of miles.

Tree→ Truck→ Warehouse→ Shipping→ Warehouse→ Storage→ Store→ Consumer

Controlled atmosphere storage for eight months or longer. Shipped for international wholesale market with most profits going to multinational corporations.

The Local Apple

From farm to table takes one day to two months, often traveling at most 100-200 miles.

Tree→Orchard or Store→Consumer

Sold retail at orchards, markets, and grocery stores.

tions are still good for growers to produce more fresh, local apples.

How are landscapes and food systems related?

I went to see the farm where we were to live and there I looked on an ocean of prairie, skirted by a little grove which made good shelter and shade.... We gathered wild berries from the timber nearby and crab apples and plums.... Wild game made a good change of meat.... In due time we had produce to sell. Joseph Tuffree, 1850s Marshall County pioneer; written at age 100, February 10, 1910

Before farming began in Marshall County, much of the landscape was covered in tallgrass prairie. Wildlife was abundant. Early settlers remarked, "Wild geese, ducks, prairie chickens, and quail were the most numerous while there was a wild prairie for them to occupy. And sand-hill cranes went in considerable flocks."

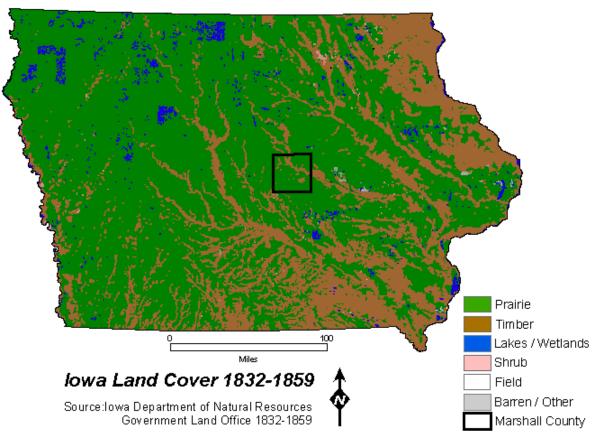
Prairie chickens were plentiful. They were trapped for food and their eggs were also gath-



ered. Elk, deer, and bison were hunted and the creeks and rivers were full of fish. In the wooded areas, wild berries, crab apples and plums were gathered.

Every year the prairie grew, and rich soil formed. When people began plowing that soil, they found it to be some of the most productive land in the world. Iowa's soils remain some of the richest in the world, although it is estimated that more than half of the topsoil has been lost from agricultural fields through erosion in the last century.

As more people settled in Iowa and began farming, they gradually converted almost all of the rich prairie to cropland. Today less than *half of one percent* of the original prairie remains in



Iowa. The flat, almost treeless landscape allowed Iowa farmers to use

larger machinery to farm more and more acres over time.

As food systems ex-

panded to the regional, national, and then global level, farm products came to be viewed not as

food, but as commodities to be bought in large

quantity at the lowest

ers had to grow more

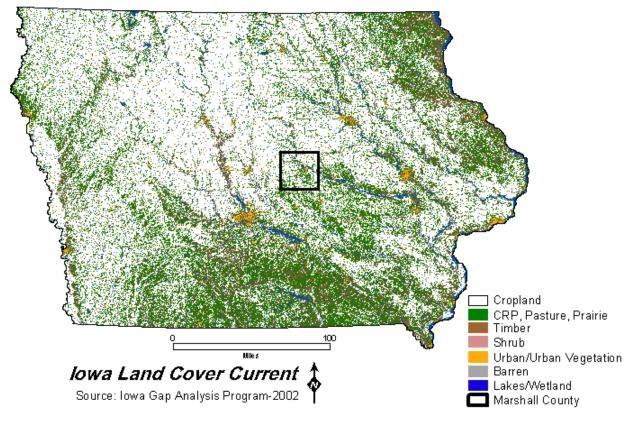
price. In response, farm-

grain and raise more ani-

mals, and farms and ma-

In what ways can community food systems improve Marshall County's ecosystems?

chinery grew larger. Most farms began to specialize in one or two commodity crops, instead



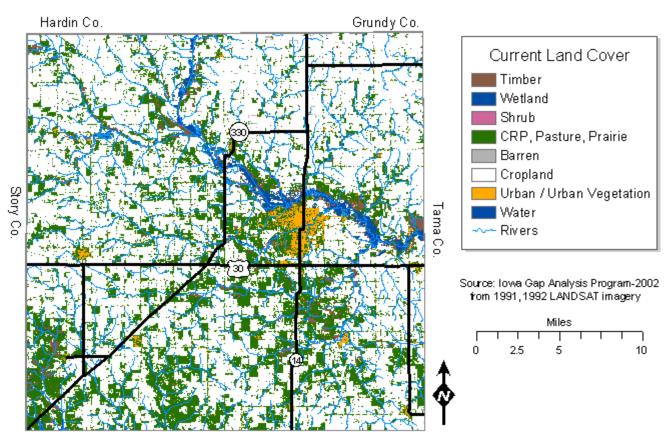
of growing a diversity of products. Today, the Iowa landscape is dominated by fields of corn and soybeans, and the beef feedlots and hog confinements that consume the grain.

Marshall County has a somewhat more diverse landscape than many counties in central lowa due to the hills and timber of the glacial moraine in the western part of the county and the lowa River. Wildlife is common in those areas, in habitat areas on farms, and in parks and refuges. One farmer in the county has reconstructed many acres of prairie and harvests the seed as a specialty crop. In April 2002, sandhill cranes were once again seen flying in Marshall County.

Across Iowa, through their purchases of local, sustainably-raised food products, many consumers are now supporting conservation practices on farms that strengthen the connection between ecosystems and food systems.



How is the land in Marshall County used?



Jasper Co.

6

Marshall County Food System Atlas

The natural qualities of the land influence agricultural practices, and those practices in turn affect the land. Marshall County's land use currently shows a diverse mix of row cropland, pastures, river bottom and timbered areas, small towns, and a sizable urban area, Marshalltown.

Marshall County has 2.4 percent of its land in CRP (Conservation Reserve Program), protecting water quality and helping prevent erosion on steep slopes.

The flat lands of the northeast part of the county are dominated by row crops whereas the hilly southwest has more CRP and pasture. The remainder of the county is a mixture of rolling crop and pasture land, towns, wetlands, and timber.

Who lives in Marshall County?

What strategies could

bring new agriculture,

population trends and

community assets

Marshall County?

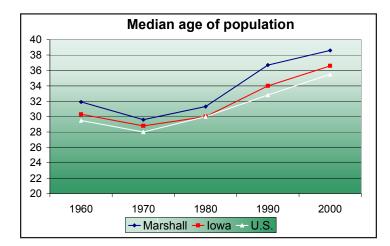
together to revitalize

Marshall County grew steadily for the first 80 years of the 20th century. However, the county's population has declined somewhat in the last 20 years. It is interesting to note that the city of Marshalltown has experienced growth in the last ten years, masking an even greater decline in the

rural areas of the county.

Although the median age for the county is 38.6, which is older than the state average, newcomers to the county represent a younger population of single people and young families. These

new residents of Marshall County have arrived from across the country and other parts of the



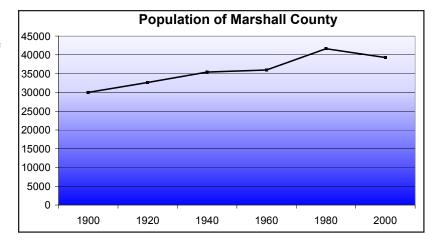
world, particularly Villachuato, Mexico. Also contributing to the cultural and social diversity in Marshall County are people from Central America, Eastern Europe, Africa, Asia, and the

> Middle East. These newcomers have helped revive the local economy.

Several small towns in the county are also experiencing population growth. Newcomers, includ-

ing young families, are attracted to the amenities of these smaller communities.

In 1980, 1,678 jobs in farming were part of the Marshall County economy. That number dropped to 1,106 by 1999. During this same period, manufacturing jobs also declined, while jobs in construction, state employment, transportation and public utilities, services, and retail trade all increased. In 1999, Marshall County provided a total of 24,930 jobs.



Recent demographic changes pose some challenges for the county's food system. These include retaining farmland, keeping medium sized farmers in operation, increasing opportunities for new farmers, and addressing changing patterns in how people are making homes in the countryside.

Population changes also provide opportunities. New markets and especially markets for non-traditional or ethnic food products may exist for farmers growing food for direct human consumption. Families who do not farm may value a connection with local farmers and want to buy fresh food grown on family farms. New or expanded local food enterprises could increase employment possibilities within Marshall County.

What does farming have to do with food?

American farms once produced a diversity of crops and livestock that were marketed regionally. Today American commercial farms tend to be larger and more specialized. Most products from today's farms go to a global market. For example, most of the fruits and vegetables eaten in Iowa come from California, Florida, and increasingly from other countries.

Iowa is clearly capable of raising some of these foods. Is it economically feasible? What are some of the benefits? What are some of the challenges?

As the Iowa farmer's share of the consumer

food dollar gets smaller, a widening gap emerges between the growing of food and eating of food in Iowa. The opposite page shows the mix of crops

> What would it take to bring a job growing and marketing food back to the farm?

and livestock raised in Iowa during the 20th Century. Notice how many foods were listed as important in Iowa agricultural production in 1920. But by 1997, the number had narrowed to ten

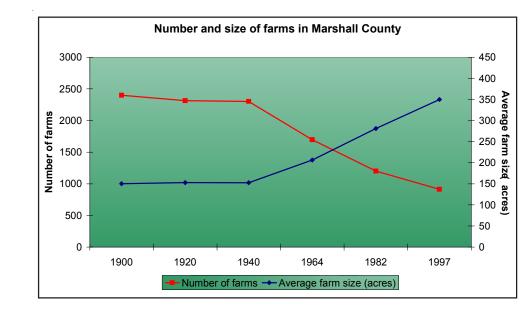
> How many of these ten products make it to the dinner plate in Marshall County? And of those that do, which arrive directly as foods and which come as inputs and components of other food we eat?

products.

Certainly, commodity production remains important to Iowa agriculture and the economic health of Marshall County. Advances in agricultural technology and production have allowed Marshall County farmers to specialize in a few crops. However, these trends have encouraged an increase in farm size and a decrease in farm numbers. Are there possibilities beyond commodity agriculture for bringing Marshall County farms and Marshall County food closer together?

How do trends in agriculture reflect changes in what and where lowans eat?

Photo by Matt Russel



Crops and livestock produced for sale on at least 1% of Iowa farms

1920 HorsesCattleChickensComHogsApplesHayOatsPotatoesCherriesWheatPlumsGrapesDucksGeeseStrawberriesMulesSheep	1935CattleHorsesChickensComHogsHayPotatoesApplesOatsCherriesGrapesPlumsSheepPeachesPearsMulesDucksWheatGeese	19451954CattleComChickensCattleComOatsHorsesChickensHogsHogsHayHayOatsHorsesApplesSoybeansSoybeansPotatoesGrapesSheepPotatoesDucksCherriesApplesSheepPeachesPlumsGoatsPearsGrapesRed CloverPearsMulesPlums	Com Cattle Oats Chickens Hogs Hay Horses Soybeans Potatoes Sheep Ducks Apples Cherries Peaches Goats Grapes Pears Plums Wheat	1964 Com Cattle Hogs Hay Soybeans Oats Chickens Horses Sheep Potatoes Wheat Sorghum Red Clover Apples Ducks Goats Geese	1978 Com Soybeans Cattle Hay Hogs Oats Horses Chickens Sheep Wheat Goats Ducks	1987 Com Soybeans Cattle Hay Hogs Oats <i>Horses</i> <i>Sheep</i> <i>Chickens</i> <i>Ducks</i> <i>Goats</i> <i>Wheat</i>	1997 Corn Soybeans Hay Cattle Hogs Oats Horses Sheep Chickens Goats	Does Marshall County reflect these trends? Are there additional crops and livestock grown today in Marshall County?
Timothy Peaches Bees Barley Raspberry Turkeys Watermelon	Sorghum Barley Red Clover Strawberries Soybeans Raspberry Bees	Ducks Wheat Timothy Geese Rye Popcorn Sweet Corn	Timothy Sweet potato Sweet corn	Grown	on 15-49% of 1	% of Iowa farms owa farms & of Iowa farms	;	What are the possibilities for 2020?
Sorghum Gooseberry Sweet Com Apricots Tomatoes Cabbage Popcorn	Timothy Turkeys Rye Popcorn Sweet Corn Sweet Clover Goats	Raspberry Bees Sorghum	-	L				

Currants

Source: Michael Carolan, Sociology Department, Iowa State University. Data from U.S. Census of Agriculture

How has farming changed in Marshall County?

One way to see change on the farming landscape is to follow the history of different agricultural commodities. We chose six products that have continued to be important commodities in Midwestern agriculture and whose place in

Marshall County has changed significantly since 1929. We also looked at fruit and vegetable production.

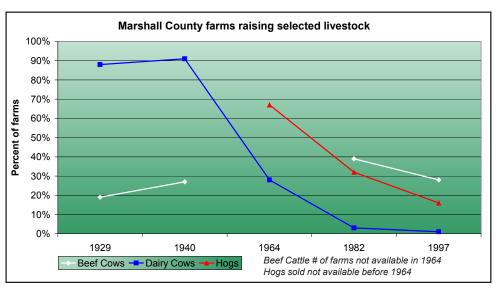
How has technology in agriculture affected people's choices of food?

The charts and

graphs of census data on these two pages show some of the significant changes in land use, crop diversity, and livestock production patterns. The proportion of Marshall County farms with livestock has significantly declined since 1940, especially for dairy cattle and hogs. The dairy cattle and hogs that remain in the county have been concentrated on fewer farms. Soybeans have

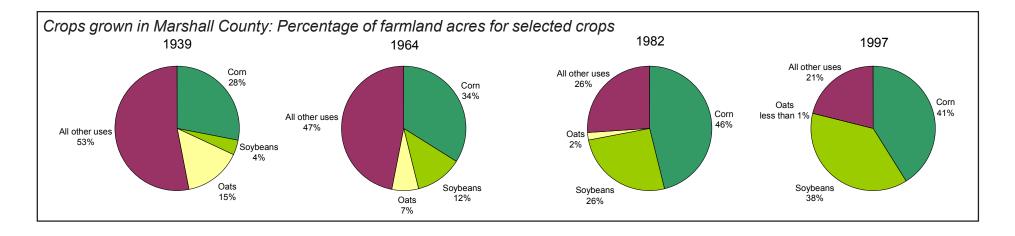
increased from

2,657 acres in 1929 to 120,612 acres in 1997. Corn and soybeans, both heavily supported by government programs, made up nearly 80 percent of the farm acres in Marshall County in 1997.



While soybeans have increased, oats have nearly disappeared from Marshall County.

These trends present farmers, landowners, beginning farmers, communities, and the landscape



with challenges and opportunities. Do different production and marketing practices hold some promise for creating new opportunities?

In the past, many farms in Marshall County and around the state raised fruits and vegetables both for home use and sale. The

What would it take to increase fruit and vegetable production in Marshall County?

as pumpkins, sweet corn, tomatoes, and apples. Acknowledging fruit and vegetable growers in the 1997 Census of Agriculture sets Marshall County

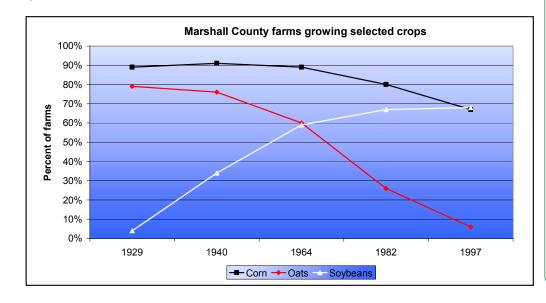
much shorter than the bounty

harvested in 1929.

apart from many Iowa counties. And there are probably more growers today who were not mentioned in the 1997 Census. But the list of produce grown today is still Certainly the situation is different than in 1929, but do possibilities exist today for locally grown produce to become a more significant part of Marshall County's food and agriculture? What other foods and farm products could connect Marshall County dining tables with Marshall County farms?

box to the lower right shows the diversity of fruits and vegetables that were harvested for sale in 1929 on two or more Marshall County farms.

The 1997 Census of Agriculture records a few farms growing fruits and vegetables for sale such



Fruits and vegetables grown for sale on at least two Marshall County farms in 1929:

Asparagus

Cantaloupes

Cucumbers

Onions

Spinach

Cherries

Apricots Gooseberries

Currants

Pears

Potatoes
Cabbages
Celery
Lettuce
Pumpkins
Tomatoes
Grapes
Pecans
Raspberries
Plums

Beans Carrots Sweet Corn Peas Watermelons Peaches Blackberries Apples Strawberries

Which of these are still or could be grown in Marshall County today?

Exploring Community Food Systems 11

What about food processing & retailing in Marshall County?

While recreating the past is not possible, Marshall County's rich food production, processing, and retailing history highlights local assets and offers some clues about what might be possible in the future.

The first store in the county was built in LeGrand in 1850. By the late 1800s Marshall County was home to several flour mills.



The Gilman Canning Company was founded in 1880. At one time it employed 200

workers and claimed to be the second largest canning factory in the world–packing 85,000 cases of corn in 1946.

In Marshalltown, several large canning factories, processing such brands as "Opal" and "Jack Sprat," have operated through the years. Many of the vegetables canned were grown on farms in the region.

Several creameries and dairy processors operated in State Center, Clemons, Dunbar, and Marshalltown. In 1874, the county produced 625,418 pounds of butter and 5,083 pounds of cheese.



Even larger quantities of butter, cheese and ice

cream were processed at the State Center Farmers Co-op Creamery, which was in business until 1982. In 1949, this creamery was ranked as one of the first ten cooperatives in the nation with a yearly output in excess of two million pounds of butter. In 1961, the creamery association involved well over 590 stockholders in their annual

meeting.

Strands Bakery was established in 1918 in



Marshalltown. By 1952, it nau 92 employees and 26 trucks serving more than 700 accounts within a 60 mile radius. The thriving bakery was purchased by Metz Bakery and moved to Sioux City in 1977.

Unique processing and retailing businesses continue in Marshall County today. Paul's Grains, a family farm business near Laurel, grows wheat, rye, barley, spelt, buckwheat, corn, oats, and soybeans. The family processes the grains into value-added whole grain flours and cereals for "direct-to-customer" sale. Kelly and Nina Biensen of Eden Farms raise certified Berkshire pork. They partner with the

State Center Locker for processing and sell their premium products to restaurants and other local markets.



Home to four grocery

stores in the late 1940s, State Center has successfully sustained a full-line grocery store. It was recently purchased by a young couple. They feature some new meat products, produce, and eggs from local family farmers.

Rural and urban communities across Iowa are now successfully growing and marketing fresh produce and meats to restaurants and institutions. A restaurant in Waterloo buys nearly \$150,000 of products direct from local farmers and lockers.

In Marshall County, 15 grocery stores, several nursing homes, school districts, and over 60 restaurants are possible markets for local foods.

What other products could be processed and sold in Marshall County today?

Where are opportunities for local marketing?

Because it is vital for life itself, food is crucial in our market economy. Therefore, people argue that marketing possibilities for food are endless. While this may be true in theory, marketing food is difficult, especially in our society where food is so often taken for granted.

Fortunately, many people are finding ways to grow and sell food directly to consumers. National trends indicate a growing demand for food purchased directly from farmers. Advantages of food that travels more directly from the farm to the table include freshness, nutrition, quality, taste, and accountability. Increasingly people are interested in knowing about the source of their food.

Examples of how Iowa farmers sell more

Some of the products that are grown, marketed, or processed in Marshall County:

Honey, strawberries, raspberries, grapes, apples, vegetables, whole grains, cereals, flour, specialty meat products (beef, emu, lamb, poultry), baked goods, cider, milk, eggs, jams, jellies directly include farmers' markets, roadside stands, community supported agriculture (CSA), and sales to restaurants, nursing homes, and schools. Often, farmers work together in alliances or cooperative relationships. Legal, economic, marketing, and regulatory issues pose real barriers and significant risks. However, the benefits of such entrepreneurship are proving to

be significant for both farmers and consumers. Community and environmental benefits also develop when farmers and consumers become more connected.

Trends such as specialization and concentra-

tion in agriculture are creating a global food system in which corporations benefit more than farmers. Farmers, retailers, processors, and consumers work together to revitalize commu-



Photo by Shelly Gradwell

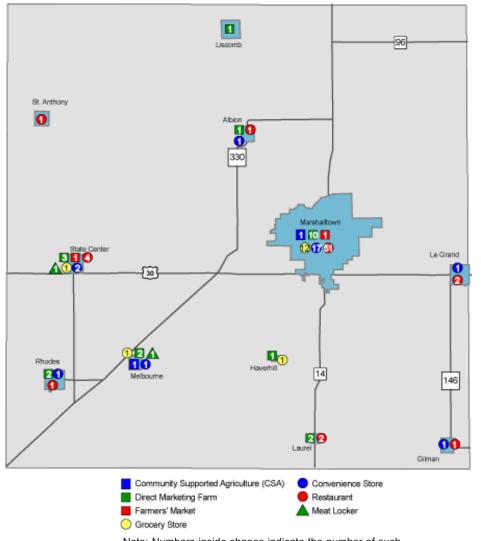
nity food systems. These efforts attempt to build food systems based on local assets that create opportunities for local communities. Developing local markets is crucial for strong community food systems.

Direct Marketing of Food in Iowa

Total Iowa	1992	1997
Farms direct marketing	2,235	2,174
Total value of sales	\$5,382,000	\$7,475,000

Source: 1997 Census of Agriculture. Value of agricultural products sold directly to individuals for human consumption in Iowa.

Where can people buy food in Marshall County?



Note: Numbers inside shapes indicate the number of such enterprises located in or associated with that community. This food system map only tells part of the story for Marshall County. People can buy food from additional places in the county. For example hospitals and schools usually have cafeterias that sell meals. Catering services may or may not be included on the map. Bed and breakfasts serving meals can potentially add value to local produce and meat products.

Many communities have food-buying clubs where people pool their food needs with others in order to create a demand large enough to reap discounts or improved service. As the largest food retailer in the U.S. now, Walmart demonstrates that stores with general merchandise also sell a great deal of food.

Hospitals, restaurants, and other institutional food services are increasing the amount of local food they serve and grocery stores have increased their marketing of local fare. The components of your local community food system identified on this page give a sense of the numbers and diversity of opportunities for those with a stake in the business of eating.

Where else can people get food in the county?

Across the nation, people obtain food in ways other than buying at a grocery store or market. While hunger still persists in America, there are many publicly and privately funded programs to combat it. In Marshall County, these programs can benefit everyone, from the very young to the very old. The programs are usually based on financial need, but they fill other community needs as well. The challenge is to increase the benefits of these services throughout the county.

Some things, like neighbors lending a helping hand or backyard gardens, are difficult to map. But they have real benefits. What strategies can be designed to develop these networks of support and self-reliance?

Other services are much easier to identify. Governmental programs provide commodities and funding for local services. These funds and food services make such programs as school lunch, Congregate Meals, nursing home food service, and Head Start meals possible throughout the county. However, the benefits are only remotely related to the county's agriculture. Very little food grown in the county makes it into these programs. Across the country and in Iowa, people are starting to connect local production to these programs.

The Farmers Market Nutrition Program for WIC and for seniors are two additional examples of connecting local farming with local food needs. These programs allow at-risk residents to use federal money to purchase fresh produce from farmers' markets. The result is increased demand at farmers' markets and federal money staying in the community to be spent again.

Combining current nutrition programs with community gardens and produce marketing could provide many benefits for Marshall County. What are the possibilities for developing an integrated community food security plan that benefits the entire community--program participants, farmers, and local businesses?



Gardens provide people in the county with healthy food for very little money.

Some Extra-market Food Resources in Marshall County

SHARE lowa: reduced price box of food in exchange for volunteer efforts (Marshalltown) Congregate Meals/Meals on Wheels: federal, state, and local subsidized meals for seniors (Gilman, State Center, Marshalltown) Nursing homes: commodities and programs for meals (State Center, Marshalltown) Head Start: federal meal/snack program for preschool children (Marshall County) **School lunch**: federal program for school children, can include breakfast and snacks (Marshalltown, East Marshall, and West Marshall)

Community Garden Plots (Marshalltown) Emergency Food Box (Marshalltown) Salvation Army Food Pantry (Marshalltown) MICA Food Programs (Marshall County) Church Food Pantries (State Center) WIC (Women, Infants and Children): food assistance, includes Farmers Market Nutrition Program (Marshall County)
Farmers Market Nutrition Program for Seniors: one time program combining federal funds for food purchases with state funds for administration (Marshall County)
Food Stamps: federal program providing food assistance coupons based on financial need

How are food and agriculture promoted and celebrated in Marshall County?

Promoting and celebrating food and agriculture are important ways to build community spirit and educate people about where their food comes from.

Marshall County provides a wide variety of "agritourism" related education programs, tours, museums, and celebrations to promote food and agriculture in the area.

The Marshall County Fair, first held in Marshalltown in 1858, is still held there each July. Through 4-H and FFA projects, the fair continues a long tradition of youth education about food and agriculture.

The Marshall County Farm, established in 1867, is now the site of the Mid-Iowa Antique

Power Show every August. Each year, the crop fields and show provide "living history" demonstrations of Iowa farming in the early and mid-1900s.

Watson's Grocery Museum in State Center, is a restored turn-of



Photo by Shelly Gradwell

the-century grocery store. Built in 1895, it continued as a grocery store until 1981 and is now on the National Register of Historic Places. Watson's shelves are stocked with a collection of period grocery items.

Watson's Grocery Store and the State Centre Farmers' Market are two food and agriculture



promotions supported by the State Centre Main Street Program. As one of 33 "Main Street Iowa" communities, the program maintains the goal of economic development through historic preservation. The State Centre Farmers' Market, held Friday evenings, is a social, economic, and cultural event celebrating local food and businesses.

Wolfie's Jack and Jill grocery in State Center, and Our Family Farms, in neighboring Hardin County, have started a new community food system promotion. Wolfie's is now offering a new line of Our Family Farm meat products. This type of partnership supports family farms and brings local customers high-quality, affordable meat in community grocery stores.

The Marshall County Master Gardeners spon-

sor gardening workshops and an educational "Children's Garden" in Marshalltown.

Appleberry Farm invites visitors to tour the fields and purchase apples, pumpkins, cider, and other food and craft items. Appleberry Farm hosts hundreds of school children each year for hands-on education about food and farming.



Photo by Bob Atha

The Grimes Conservation Farm, managed by the Marshall County Conservation Board, features an "Agricultural Interpretive Trail," which demonstrates farming techniques that conserve soil and benefit water quality and wildlife.

The Marshall County Beef and Pork Producers, 4-H, and Boy and Girl Scouts have agriculture and food related education programs. FFA programs and Farm Bureau Ag in the Classroom bring food and agriculture education to area schools.

How are people making community food systems work?

Eden Farms, Rhodes State Center Locker, State Center Goodman Beef Farm, Haverhill

Kelly and Nina Biensen raise certified Berkshire hogs and develop premium pork products that are



served at someof the area's finest restaurants. The Biensens

work with

Photo by Kelly Biensen

Ralph and Janice Roloff, owners of the State Center Locker, to develop and process the value-added pork products. The State Center Locker produces a variety of specialty meat products purchased by organizations and restaurants.



The State Center Locker also processes meat products for Kevin and Dana Goodman of Haverhill. The Goodmans market beef halves, bundles, jerky, and beef sticks directly to local customers.

Appleberry Farm, Marshalltown

Bob and Donna Atha started Appleberry Farm in 1982, planting apple trees and raspberry bushes. They now have more than 12 acres of 15 varieties of



Photo by Bob Atha

apple trees and use integrated pest management to protect the environment.

In addition to their fruit production, they grow a three-acre garden of strawberries, tomatoes, cucumbers, sweet onions, pumpkins, green beans, and peppers. The garden produce, as well as the apples, can be purchased already picked or on a pick-your-own basis.

The Athas also press cider, and grow a variety of flowers, corn, and gourds for crafts. Their attractive store provides a retail outlet for their produce and other food and craft items. The Athas



Photo by Bob Atha

also sell their products at the Marshalltown Farmers' Market. Thousands of people visit Appleberry Farm each year.

Rocky Ridge Farm and Greenhouses, Clemons

Mike and John Maddick farm 21 acres between Clemons and State Center. Fifteen acres are dedicated to pumpkins and squash. Four to five hundred in-ground tomato plants grow in their greenhouses and 500 more in the field.

They also grow 500 pepper plants along with peas, potatoes, green beans, carrots, radishes,



sweet corn, zucchini, cucumbers, and a variety of herbs and flowers. Along with

selling their plants and produce to local wholesale accounts and customers who visit their farm, the Maddicks sell their goods at local stores such as Wolfie's Jack and Jill grocery in State Center, and at farmers' markets in State Center,

Marshalltown, and Des Moines.

Rocky Ridge Farm has been steadily growing for more than seven years and involves three generations of the Maddick family, as well as their church community.

What about economics in Marshall County's food systems?



Current Production Situation

In 2000, Marshall County sold \$109,836,000 of farm products and received government payments of \$26374,000. Net farm income was \$13,780,000.

In 2000, Marshall County's farmers spent \$131,527,000 raising farm products. Many of these purchases were made from distant rather than local suppliers.

Opportunities

Local grain and livestock farmers can meet changing regional demands more quickly than large international corporations. Focusing on local and regional markets is a way for Marshall County farmers to distinguish their specialty products and add value to bring higher economic returns.

Current Consumption Situation

Each year, Marshall County's 39,311 residents spend more than \$55 million at food stores and more than \$31 million on eating and drinking away from home. Even though most of these food purchases are currently made within the county, there are many ways to capture more of the value from these food dollars.

If just five percent of the food purchased by Marshall County residents came from local farms, this would generate more than four million dollars per year for Marshall County farmers, businesses, and entrepreneurs. This money would stay longer in the community instead of moving rapidly out of the county.

Opportunities

If farmers, processors, store owners, restaurants, nursing homes, hospitals and schools worked together to create more community-based food systems, the food dollars could further multiply in the local economy to create a more thriving Marshall County.



Local Harvest CSA

Some Community Food Systems Resources

Iowa

Ecumenical Ministries of Iowa, Des Moines, 515-255-5905, www.iowachurches.org

Agricultural Law Center, Drake University, Des Moines, (800) 44-DRAKE x2824 or (515) 271-2824, www.law.drake.edu/centers/agLawCenter.

Iowa Department of Agriculture and Land Stewardship (IDALS), Bureau of Horticulture and Farmers' Markets, 515-242-5043, Direct Marketing Specialist, 515-281-8232. www.agriculture.state.ia.us/horticulture.htm

Iowa Local Food Systems homepage, www.ialocalfood.org

Iowa Network for Community Agriculture (INCA), Jan Libbey, Coordinator, 641-495-6367, <u>libland@frontiernet.net</u>

ISU Extension Value Added Agriculture Program, 515-294-6946, www.extension.iastate.edu/Pages/valag

Iowa State Sustainable Agriculture Extension Program, Dr. Jerry DeWitt and Margaret Smith, 515-294-1923, http://extension.agron.iastate.edu/sustag

ISU Organic Agronomy/Horticulture Program, Dr. Kathleen Delate, 515-294-7069, <u>kdelate@iastate.edu</u>, <u>http://extension.agron.iastate.edu/organicag</u>

Taste of Iowa, <u>atasteofiowa@ided.state.ia.us</u>, www.atasteofiowa.org

Leopold Center for Sustainable Agriculture, Iowa State University, 515-294-3711, <u>leocenter@iastate.edu</u>, www.ag.iastate.edu/centers/leopold National Catholic Rural Life Conference, Des Moines, Carol R. Smith, Director of Community Resources for the Ligutti Rural Community Support Program, 515-270-2634, csncrlc@aol.com, www.ncrlc.com.

Practical Farmers of Iowa, Robert Karp, Gary Huber or Rick Hartmann, 515-232-5661, robert@practicalfarmers.org, www.pfi.iastate.edu/ PFIhomenew.htm

Slow Food, Iowa City, Kurt Friese, 319-337-7885, SlowFoodIowa@Devotay.com, www.devotay.com/ SlowFoodIowa%20Main.htm\

Women, Food, and Agriculture Network, Denise O'Brien, Coordinator, 59624 Chicago Rd., Atlantic, IA 50022, 712-243-3264, <u>hnob@metc.net</u>

Regional and National

Alternative Farming Systems Information Center, National Agricultural Library, Rm 304, 10301 Baltimore Ave, Beltsville MD 20705-2351. 301-504-6559

Center for Integrated Agricultural Systems (CIAS), 1450 Linden Drive, Rm 146, UW Madison, Madison WI 53706. 608-262-5200, <u>www.wisc.edu/cias</u>

Community Food Security Coalition, P.O. Box 209, Venice, CA 90294. 310-822-5410, <u>www.foodsecurity.org</u>

Land Stewardship Project, 2200 Fourth Street, White Bear Lake, MN 55110, 651-653-0618, www.landstewardshipproject.org.

Michael Fields Agricultural Institute, W2493 County Rd ES, East Troy, WI 53120. 262-642-3303, Fax: 262-642-4028 Small Farm Program, USDA, Cooperative State, Research, Education, and Extension Srvice Stop 2215, Washington, D.C. 20250-2215. 800-583-3071. smallfarm@reeusda.gov, www.reeusda.gov/smallfarm

Sustainable Agriculture Research and Education

Program (SARE), USDA, 1400 Independence Ave. SW, Stop 2223, Washington, D.C. 20250-2223. 202-720-5203, www.sare.org

Sustainable Agriculture Research and Education Program—North Central Region (NCSARE), University of Nebraska, Lincoln, 13A Activities Bldg., P.O. Box 830840, Lincoln, NE 68583-0840. 402-472-7081, www.sare.org/ncrsare

Sustainable Agriculture Network (SAN), Hills Building, Room 10, University of Vermont, Burlington, VT 05405, <u>www.sare.org</u>

USDA Farmer Direct Marketing Website www.ams.usda.gov/directmarketing



Photo by Bob Atha

References

U.S. Census of Agriculture 1930, 1940, 1964, 1982, 1997

U.S. Census of Population and Housing 1900-2000.

PROfiles Iowa State University Department of Economics http://ia.profiles.iastate.edu

The Continuing History of Marshall County, Iowa. Published by the History Committee of Marshall County Iowa Sesquicentennial Commission, Marshalltown, Iowa, 1999.

History of Marshall County Iowa by Judge William Battin and F. A. Moscrip B.F. Bowen & Co., 1912.

The History of Marshall County, Iowa Western Historical Company, 1878.

Marshalltown New Iowans Pilot Community Assessment. by Mark A. Grey. University of Northern Iowans Program, June 2001.

"Comparing Apples to Apples: An Iowa perspective on apples and local food systems." Rich Pirog, Education Coordinator Leopold Center for Sustainable Agriculture www.ag.iastate.edu/centers/leopold Farm Fresh Directory and Iowa Family Farm Meats Directory Iowa Department of Agriculture and Land Stewardship <u>www.agriculture.state.ia.us</u>

> For more information about this community food systems study of Audubon, Benton, Johnson, and Marshall counties in Iowa, please contact Clare Hinrichs, Dept. of Sociology, East Hall, Iowa State University, Ames, Iowa 50011. September 2002.

Credits

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Geographic Information Systems Maps by Patrick Brown, GIS Analyst Iowa State University GIS Lab.

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This county food system atlas is one product of an action research project (2000-69) funded by the Leopold Center for Sustainable Agriculture and directed by Dr. Clare Hinrichs, Dept. of Sociology, Iowa State University. The three-year project has involved assembly of secondary data and primary field research about multiple facets of community food system development and change in four Iowa counties. A "community food system" may not perfectly match a county's borders, but counties are still good places to begin due to the availability of county-level data and prevalence of county organizations and affiliations in Iowa. ISU researchers and people working in and concerned about agriculture and food in this county came together at a workshop held the first half of 2002 to discuss information and ideas in an early draft of the atlas. The workshop experience promoted dialogue and improved shared understandings of the county's food system. The present version of the atlas incorporates comments and concerns of community members and ISU researchers.