

Benton 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 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 farmers, processors, distributors, retailers, consumers, food preparers, and hunger 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 re-circulate money for local economic development, and improve access to nutritious food for all people in the community.

A community food systems perspective can encourage the identification and building up of community assets. In this food system “atlas”, we

are “mapping” opportunities and challenges for community food systems based on the unique qualities at the county level in Iowa.

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 your county and points to future opportunities.



JUNIATA COUNTY LOCAL FOOD SYSTEMS PROJECT

Cover photo credits clockwise from top right corner: Helen Gunderson, Shelly Gradwell, Gunderson, Gradwell, Gradwell, Gradwell.

What do we eat and where does it come from?

What do Americans eat?

	<i>one person</i>	<i>Benton County</i>
<i>fresh fruit</i>	<i>127.0 lbs</i>	<i>1607 tons</i>
<i>fresh</i>		
<i>vegetables</i>	<i>202.0 lbs</i>	<i>2556 tons</i>
<i>poultry</i>	<i>66.8 lbs</i>	<i>845 tons</i>
<i>beef</i>	<i>64.5 lbs</i>	<i>816 tons</i>
<i>pork</i>	<i>47.7 lbs</i>	<i>603 tons</i>
<i>eggs</i>	<i>249.7 lbs</i>	<i>31597 tons</i>
<i>milk</i>	<i>22.6 gal</i>	<i>571,961 gal</i>

This includes fresh:

<i>tomatoes</i>	<i>17.3 lbs</i>	<i>219 tons</i>
<i>leaf lettuce</i>	<i>8.0 lbs</i>	<i>101 tons</i>
<i>sweet corn</i>	<i>9.0 lbs</i>	<i>113 tons</i>
<i>carrots</i>	<i>11.1 lbs</i>	<i>140 tons</i>
<i>strawberries</i>	<i>5.9 lbs</i>	<i>75 tons</i>

Source: Economic Research Service data from the food consumption (per capita) data system on the Internet: www.ers.usda.gov/data/foodconsumption. 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 1800's, 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 conditions

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.

are still good for Iowa farmers to produce more fresh, local apples.

How are landscapes and food systems related?

His eyes were misty as he described the prairie, where he herded cattle and sheep, as a garden of flowers, where he never failed to find a beautiful bouquet to take to his mother at night...A veritable paradise...the streams abounding with fish, the woods and prairie swarmed with deer, prairie chicken, quail, squirrel, and other game. The streams and ponds were black with ducks and geese. ”

~Reflections of 1860’s pioneer Adam Schulte, Sr. on his life in Benton County, from *Pioneer Recollections: Benton County*.

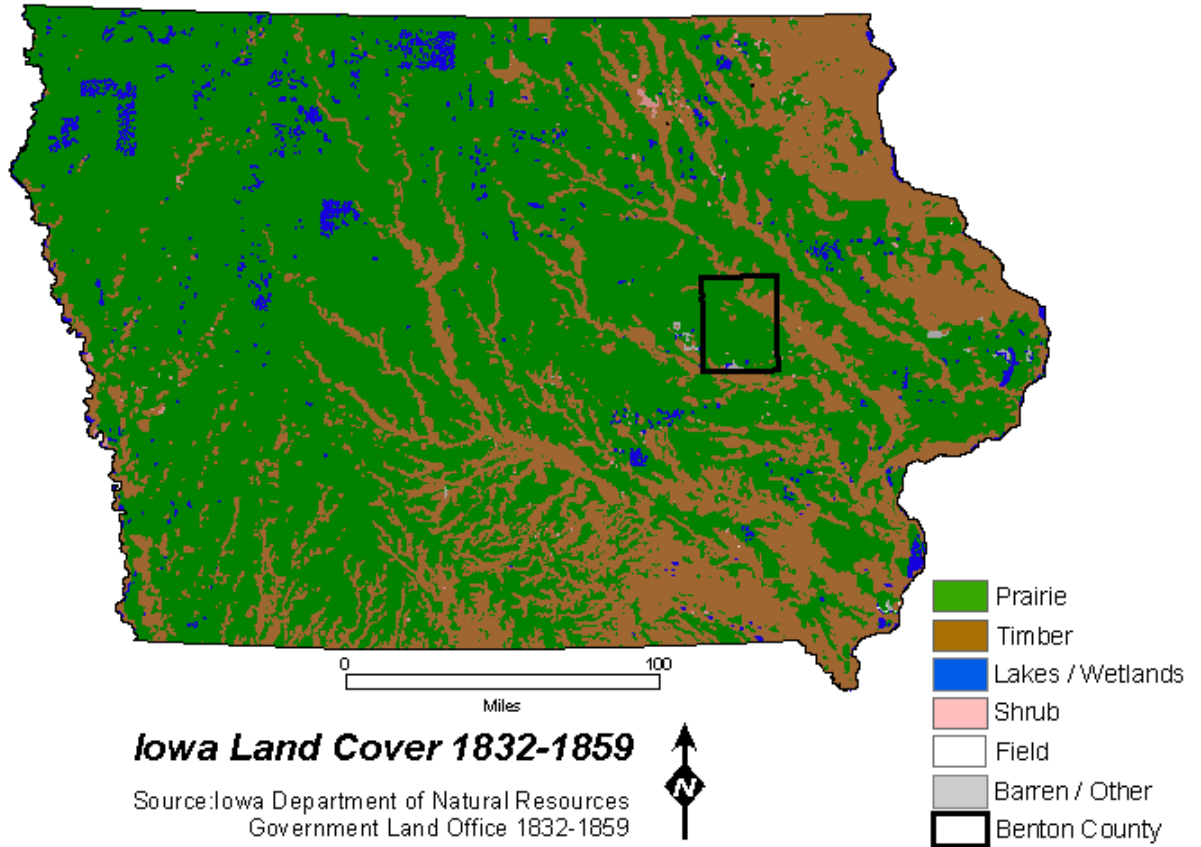
Before farming began in Iowa, most of the landscape was covered in tallgrass prairie. Wildlife was abundant. Bears and wolves were seen and elk and deer were very common. Wild geese,



ducks, sandhill cranes, and swans came through in spring and fall, and prairie chickens were common all year. The grand ball and supper of 1856 in the new Benton County courthouse featured buffalo and elk meat, along with prairie chicken and quail. The creeks and rivers were full of fish.

Every year the prairie grew, and every year rich soil formed. When people began plowing that soil, they found it to be some of the most productive land in the world. As more and more people settled in Iowa and began farming, almost all of the rich prairie

What unique qualities exist in Benton County’s landscape?



was converted 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 machinery and farm more acres while people farther east in hilly areas still used draft animals on small fields.

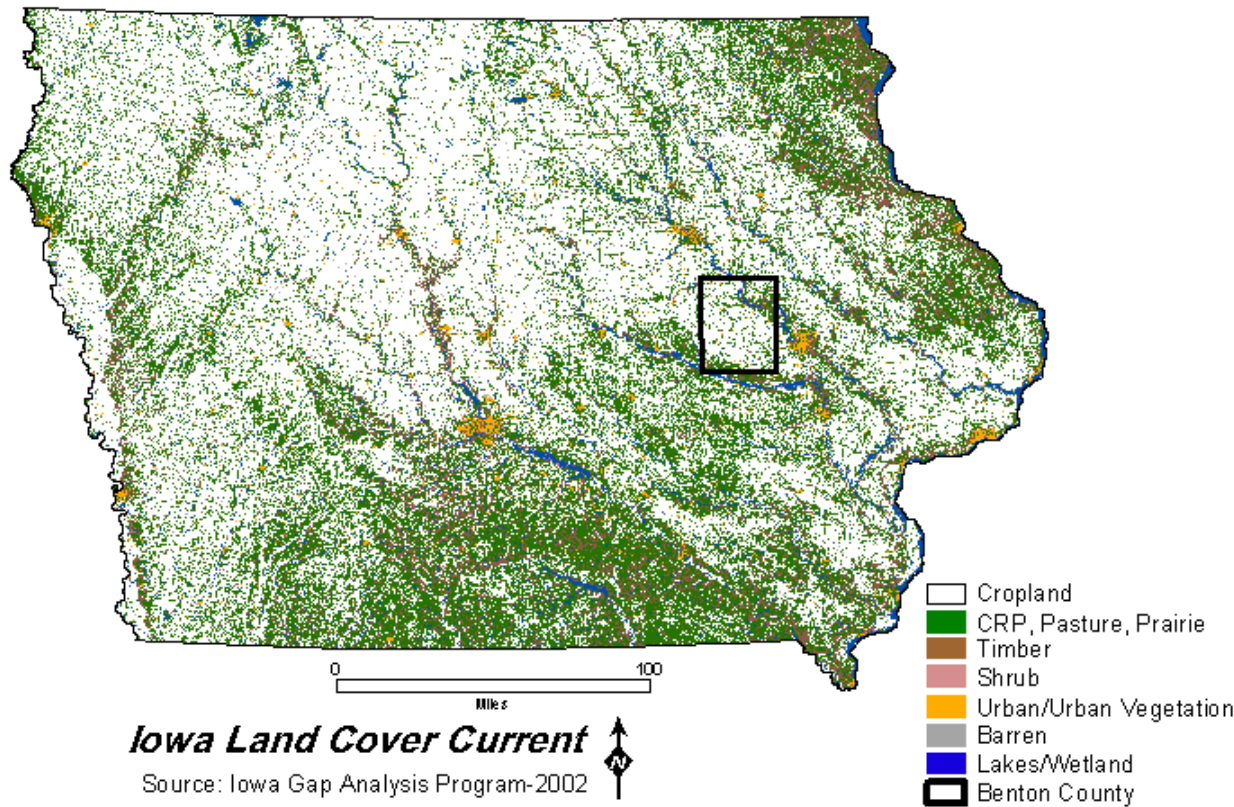
As food systems expanded to the regional, national, and then global level, farm products came

to be viewed, not as food, but as commodities to be bought in the greatest quantity at the lowest price. In response farmers needed to grow more grain and raise more animals, and farms and machinery grew larger. Most farms began to specialize in one or two commodity crops, instead of growing a diversity of products on each farm.

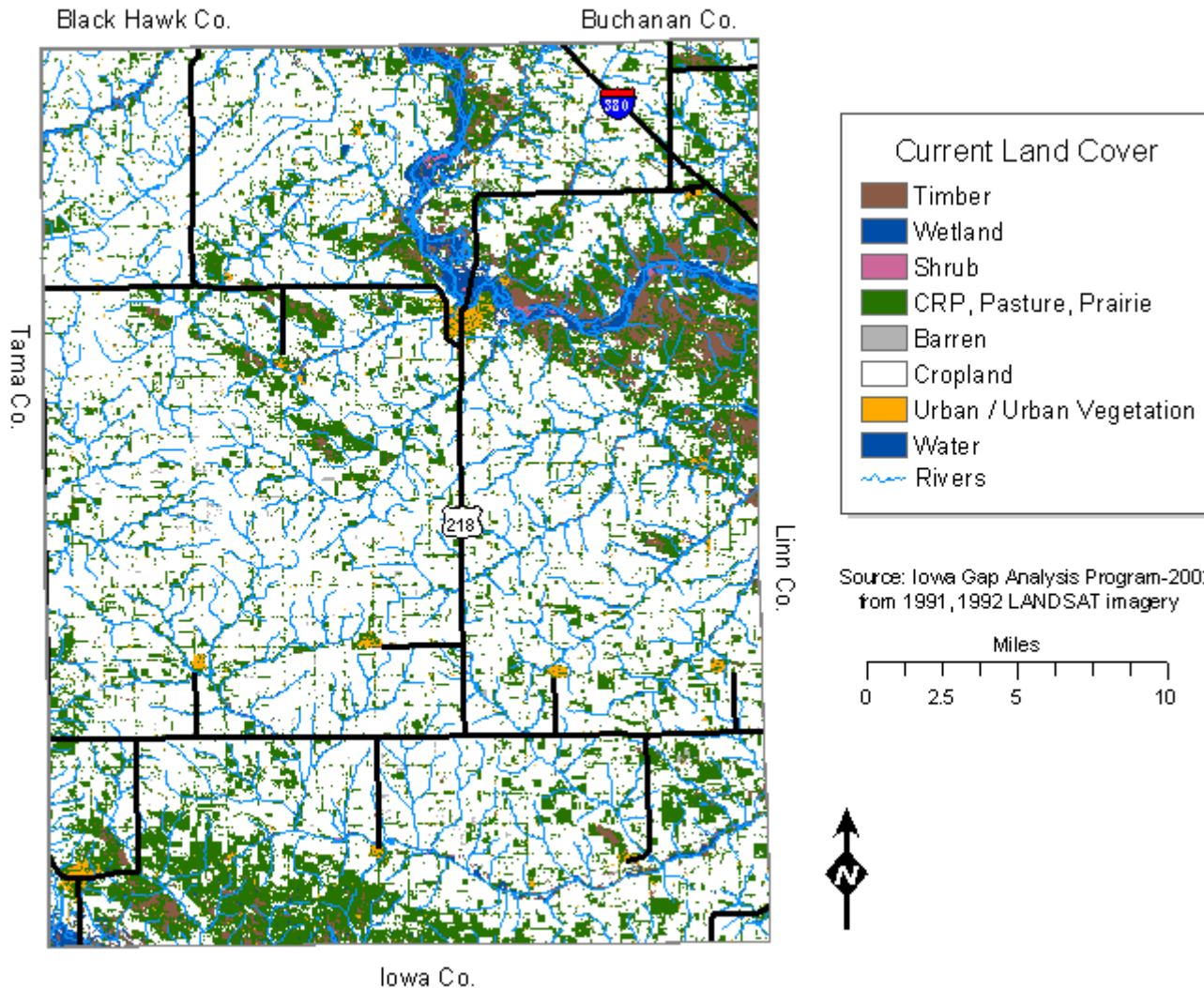
Today, the Iowa landscape is dominated by

fields of corn and soybeans and the beef feedlots and hog confinements that consume the grain. Benton County has a more diverse landscape than many counties in central Iowa due to the hills and timber of the Cedar and Iowa River bottoms. River otters are being successfully reintroduced, and migrating sandhill cranes use the area once again.

In what ways can community food systems improve Benton County's ecosystem?



How is the land in Benton County used?



The natural qualities of the land influence agricultural practices, and those practices in turn affect the land.

Benton County's land is used mostly for cropland. Pasture is more plentiful in the southern part of the county. Benton County farmers have a long history of growing specialty grain crops.

Slightly more than three percent of Benton's land is in CRP (Conservation Reserve Program), protecting water quality and helping prevent erosion on steep slopes.

Acreages have become increasingly popular as nonfarmers reinhabit the countryside. Benton County's proximity to Iowa City, Waterloo, and Cedar Rapids increases the pressure to shift land from agricultural to residential, recreational, and other uses.

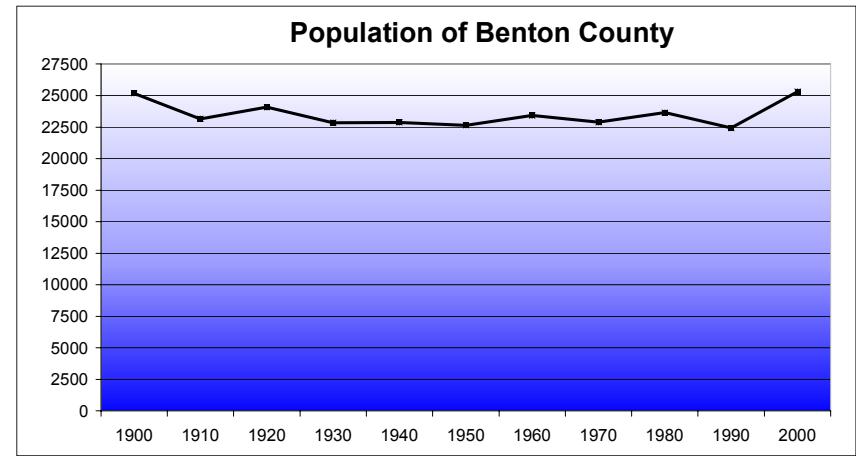
Who lives in Benton County?

Benton County began and ended the 20th century with nearly the exact same number of people, slightly more than 25,000. The population trended towards a slight decline through 1990 and then grew by more than twelve percent during the last decade of the century. Also, the median age of Benton's population lies closer to the state and national median ages than other rural Iowa counties. Today the county is poised to see more growth because of its location near the thriving urban centers of Cedar Rapids, Waterloo, and Iowa City.

What strategies could bring new agriculture, population trends and community assets together to revitalize Benton County?

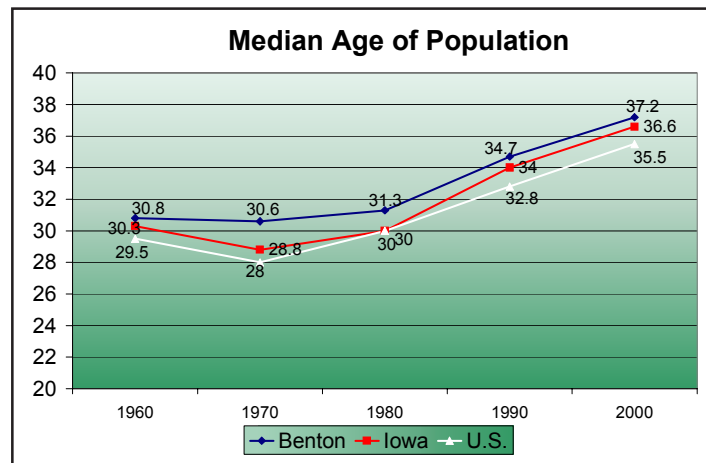
Families are moving into the county to take advantage of valued aspects of rural life such as small town atmosphere and more open space. However, many new and established residents commute out of the county for work.

Historically, the county



included Scottish, German, Norwegian, and Czech descendents. Today new immigrants may add to this diversity.

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



In 1980, farming made up nearly 24 percent of

Benton County employment. New employment in service and retail sectors grew through the 1990s. By 1999, both of these sectors as well as government related employment surpassed farming as a percentage of county employment. By 1999, farm employment dropped to fourth place, with less than fourteen percent of jobs.

But population changes also provide some opportunities. New markets may exist for farmers growing food intended for direct human consumption. Families who do not farm may value a connection with farms and farmers. And new or expanded local food enterprises could increase employment possibilities within Benton 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, the lion's share of 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. Would it be economically feasible? What would be some of the benefits? What would be 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

products.

How many of these ten products make it to the dinner plate in Benton County? And of those that do, do they arrive directly as foods or do they come as inputs and components of

other food we eat?

Certainly, commodity production remains important to Iowa agriculture and the economic health of Benton County. Advances in agricultural technology and production have allowed Benton County farmers to specialize in just 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 Benton farms and Benton food closer together?

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

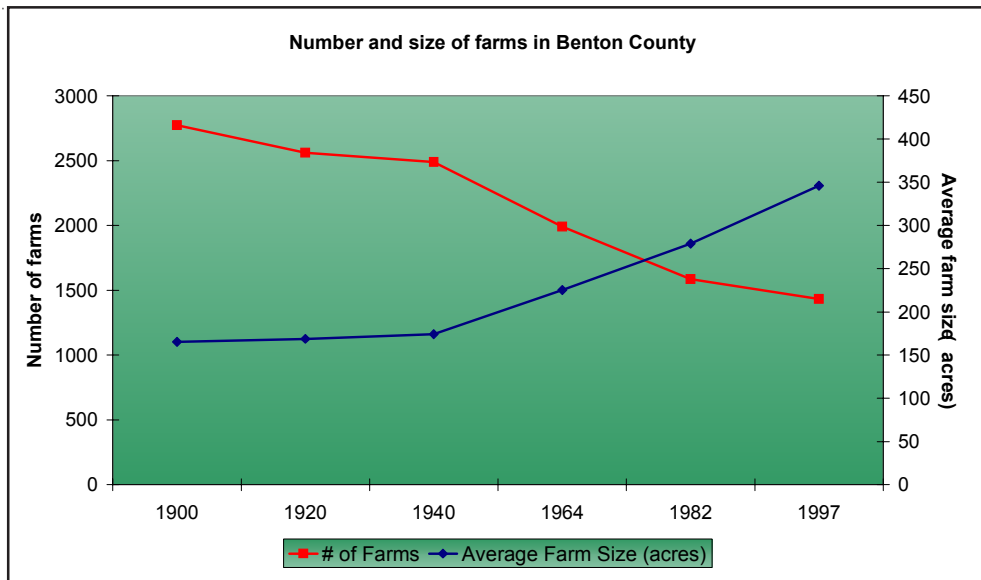


Photo by Matt Russell

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

<u>1920</u>	<u>1935</u>	<u>1945</u>	<u>1954</u>	<u>1964</u>	<u>1978</u>	<u>1987</u>	<u>1997</u>
Horses	Cattle	Cattle	Corn	Corn	Corn	Corn	Corn
Cattle	Horses	Chickens	Cattle	Cattle	Soybeans	Soybeans	Soybeans
Chickens	Chickens	Corn	Oats	Hogs	Cattle	Cattle	Hay
Corn	Corn	Horses	Chickens	Hay	Hay	Hay	Cattle
Hogs	Hogs	Hogs	Hogs	Soybeans	Hogs	Hogs	Hogs
Apples	Hay	Hay	Hay	Oats	Oats	Oats	Oats
Hay	Potatoes	Oats	Horses	Chickens	Horses	Horses	Horses
Oats	Apples	Apples	Soybeans	Horses	Chickens	Sheep	Sheep
Potatoes	Oats	Soybeans	Potatoes	Sheep	Sheep	Chickens	Chickens
Cherries	Cherries	Grapes	Sheep	Potatoes	Wheat	Ducks	Goats
Wheat	Grapes	Potatoes	Ducks	Wheat	Goats	Goats	
Plums	Plums	Cherries	Apples	Sorghum	Ducks	Wheat	
Grapes	Sheep	Peaches	Cherries	Red Clover			
Ducks	Peaches	Sheep	Peaches	Apples			
Geese	Pears	Plums	Goats	Ducks			
Strawberries	Mules	Pears	Grapes	Goats			
Pears	Ducks	Red Clover	Pears	Geese			
Mules	Wheat	Mules	Plums				
Sheep	Geese	Strawberries	Wheat				
Timothy	Sorghum	Ducks	Red clover				
Peaches	Barley	Wheat	Geese				
Bees	Red Clover	Timothy	Popcorn				
Barley	Strawberries	Geese	Timothy				
Raspberry	Soybeans	Rye	Sweet potato				
Turkeys	Raspberry	Popcorn	Sweet corn				
Watermelon	Bees	Sweet Corn	Turkeys				
Sorghum	Timothy	Raspberry					
Gooseberry	Turkeys	Bees					
Sweet Corn	Rye	Sorghum					
Apricots	Popcorn						
Tomatoes	Sweet Corn						
Cabbage	Sweet Clover						
Popcorn	Goats						
Currants							

Does Benton County reflect these trends?

Are there additional crops and livestock grown today in Benton County?

Grown on more than 50% of Iowa farms

Grown on 15-49% of Iowa farms

Grown on less than 15% of Iowa farms

What are the possibilities for 2020?

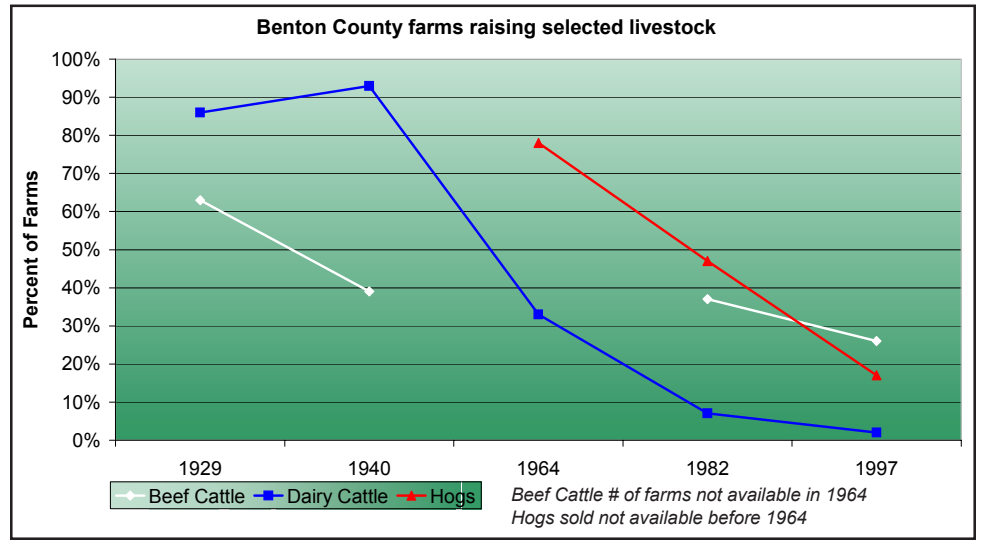
Source: Michael Carolan, Sociology Department, Iowa State University. Data from U.S. Census of Agriculture

How has farming changed in Benton 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 Benton 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?

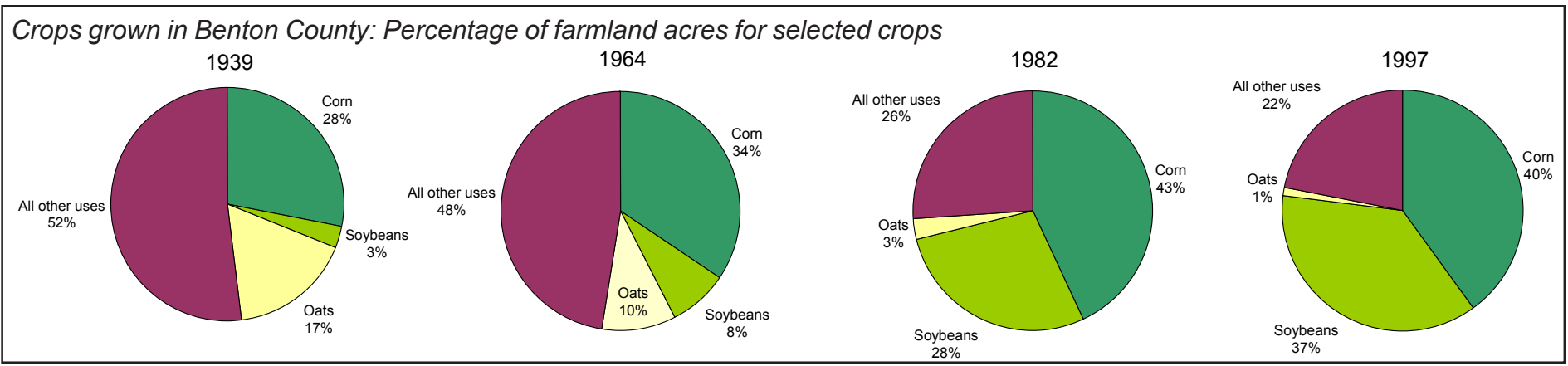
main high, however those animals are concentrated on fewer farms. Soybeans have



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 Benton County farms with livestock has significantly declined since 1940, especially for dairy cattle and hogs. The number of dairy cattle and hogs in the county re-

increased from 2657 acres in 1939 to 155,595 acres in 1997. Corn and soybeans, both heavily supported by government programs, made up more than 75 percent of the farm acres in Benton County in 1997. In ISU Extension's recent "Specialty Crops and Livestock" survey,

161 Benton County farmers reported that within the next three to five years they are likely to: join a marketing alliance to increase market access (32%); add or expand their livestock (26%); and produce non-GMO crops under contract (22%).



These trends and preferences present farmers, landowners, beginning farmers, communities, and the landscape with challenges and opportunities. Do different production and marketing practices hold particular promise for creating new opportunities?

In the past, many farms in Benton County and around the state raised fruits and vegetables both for home use and sale. The box to the lower right shows the diversity of fruits and vegetables that were harvested for sale on two or more farms in Benton County in 1929.

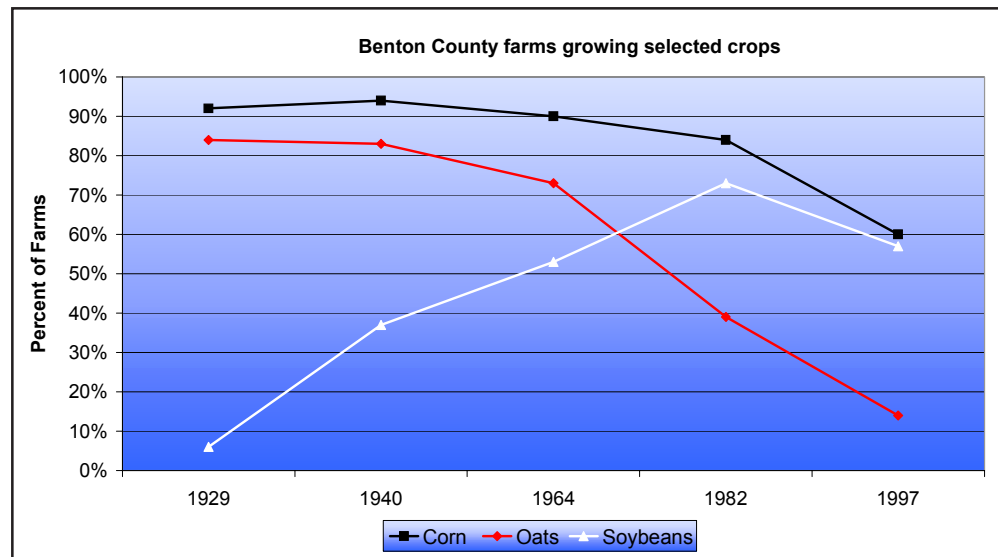
The 1997 Census of Agriculture records sev-

eral farms growing a number of fruits and vegetables for sale, including snap beans, head cabbage, cucumbers, sweet corn, tomatoes, apples, other fruits and nuts, and strawberries. While acknowledging fruit and vegetable growers in the most recent Census of Agriculture sets Benton County apart from many Iowa counties, the list is still short compared to the bounty harvested in 1929.

Certainly the situation is different than in 1929, but do possibilities exist today for locally grown produce to become a more significant part of Benton

County's food and agriculture? What other foods and farm products could connect Benton County dining tables with Benton County farms?

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



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

- | | | |
|----------------------|--------------------|--------------|
| Potatoes | Asparagus | Beans |
| Cabbages | Cantaloupes | Celery |
| Sweet Corn | Cucumbers | Onions |
| Peas | Watermelons | Tomatoes |
| Apples | Apricots | Cherries |
| Peaches | Pears | Plums |
| Grapes | Pecans | Blackberries |
| Currants | Raspberries | Strawberries |
| Other orchard fruits | Other small fruits | |

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

What about food processing & retailing in Benton County?

While recreating the past is not possible, Benton County's rich food production, processing, and retailing history highlights assets and offers some clues to what might be possible in the future. Benton County was the home of the Iowa Canning Company, originally known as the Kelly Canning Company and founded in 1892. With canneries in Vinton, Van Horne, and Garrison,

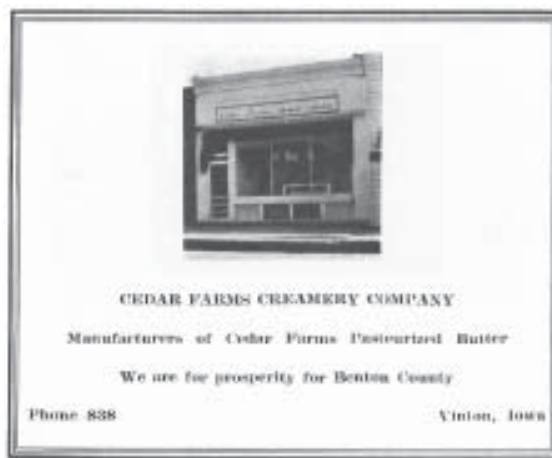
Benton County was also known as the "Corn Canning Capital of the World" for many years. Garrison's corn cannery was eventually bought out by Green Giant and then later turned into the Garrison Creamery in the 1950's. The poultry processor in Garrison eventually moved to Urbana, where it is still doing business today.

Over the years, there have been many other processing and retailing food businesses in the county. And to the credit of the strong entrepreneurial spirit of Benton County's residents, there

are still many successful food and agriculture-related business. Several of these business were innovators and leaders in the development of value-added agriculture in Iowa.



Newhall Locker, Vinton boasts a state-of-the art



Seven towns in Benton County maintain grocery stores. Altogether, there are eight grocery stores, nineteen convenience stores, three farmers' markets, three CSAs, and several "direct from the farm" retailers in the county. Newhall is home to the award winning



soy food products processor and Shellsburg is home to the unique K & K popcorn grower, processor, and distributor. In Norway, Frontier Natural Products processes herbs and Frontier Natural Brands Inc. offers the Simply Organic Line which includes boxed and frozen dinners. The Frontier coffee processing plant operates in Urbana.

Both rural and urban communities across Iowa are now successfully growing and marketing fresh vegetables, fruits, and meats to restaurants and institutional markets. One restaurant in Waterloo, Iowa, for example, buys nearly \$150,000 worth of locally-produced meats and vegetables each year. There are at least 18 restaurants in Benton County, along with several nursing homes, one hospital and three school districts, all possible markets for nutritious, locally-grown food.

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.

However, 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 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 concentration in agriculture are creating a global food system in which corporations benefit more than farmers. Farmers, retailers, processors, and consumers work together to revitalize community food systems. These efforts attempt to build food systems based on local assets that create opportunities for local commu-



Photo by Shelly Gradwell

nities. Developing more local markets is crucial for strong community food systems.

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

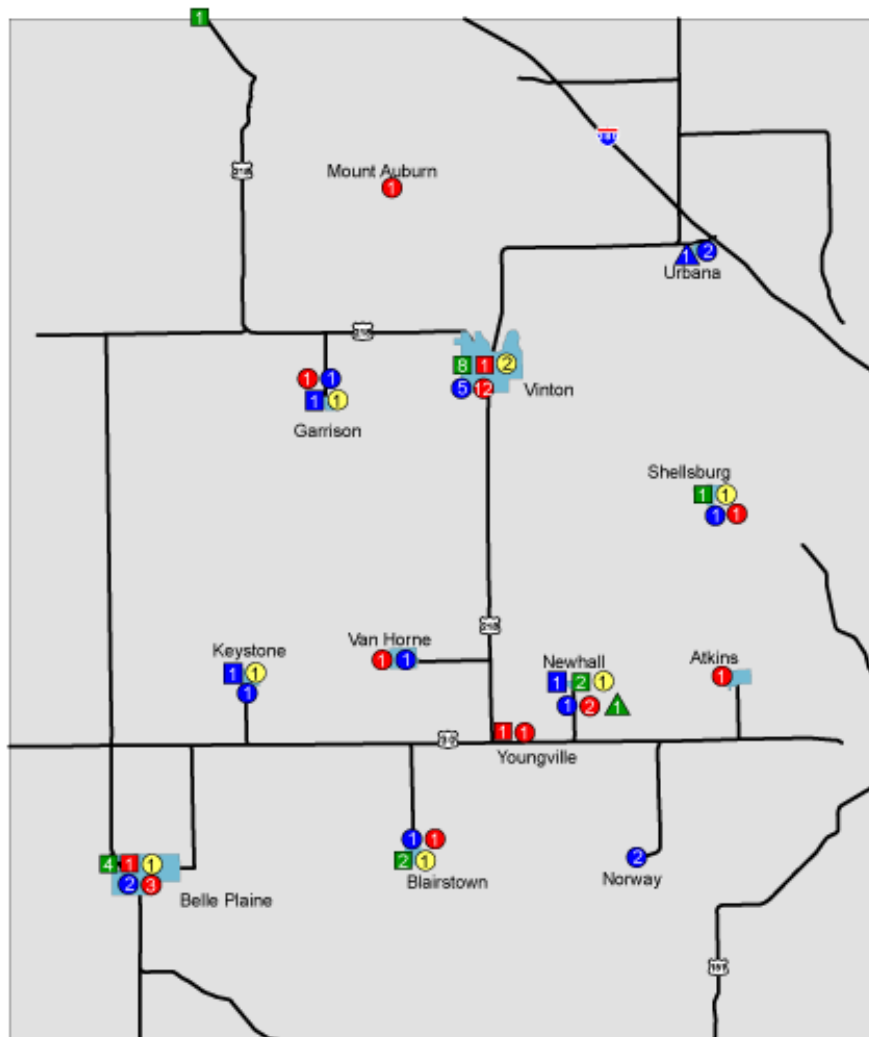
Popcorn, apples, milk, fruits, vegetables, soy products, sweet corn, specialty meats, herbs, spices, packaged organic food products, coffee.

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 Benton County?



- Community Supported Agriculture (CSA)
- Direct Marketing Farm
- Farmers' Market
- Grocery Store
- Convenience Store
- Restaurant
- ▲ Meat Locker
- ▲ Poultry Processor

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 Benton 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 community food system identified on this page give a sense of the number 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 Benton 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 could be designed for developing 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 other parts of Iowa, people are starting to connect local production to these programs. In Benton County, one farmer grows vegetable plants to distribute through the self-help SHARE Iowa food program.

The Farmers' Market Nutrition Programs 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.

What are the possibilities for developing a more 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 Benton County

SHARE Iowa: reduced price box of food in exchange for volunteer efforts (Belle Plaine and Vinton)

Congregate Meals/Meals on Wheels: federal, state, and local subsidized meals for seniors (Belle Plaine and Vinton)

Nursing homes: commodities and programs for meals (Vinton and Belle Plaine)

Benton County Food Pantry, Blairstown and Belle Plaine

HCAP Food Pantry, Vinton

School lunch: federal program for school children, can include breakfast and snacks (Benton Community, Vinton-Shellsburg, and Belle Plaine school districts)

Head Start: federal meal/snack program for pre-schoolers

WIC (Women, Infants and Children): food assistance, includes Farmers Market Nutrition Program

Farmers' Market Nutrition Program for Seniors: one time program combining federal funds for food purchases with state funds for administration

Food Stamps: federal program providing food assistance coupons based on financial need

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



Photo by Shelly Gradwell

Promoting and celebrating agriculture is an important way to build community spirit and to educate people about the importance of agriculture and community food systems. Benton County provides a wide variety of education programs, tours, museums, and celebrations to promote food and agriculture in the area.

The Keystone Agricultural Museum and the FFA Historical and Agriculture Museum in La Porte City offer a view into the history of agriculture and food production in Benton County. For many years, Benton County residents celebrated their fame as the “Corn Canning Capital” with a “Corn Festival” each summer. The Benton County Fair is held in late July and continues a

long tradition of youth education and experience in agriculture through 4-H and FFA programs.

Five elementary schools in Benton County participate in the “Growing in the Garden” education program. With the help of the Benton County Master Gardeners, these five schools maintain gardens that provide youth with hands-on experiences in growing food and understanding agricul-

ture.

The Benton Development Group is well known statewide for their assistance in the development and promotion of value-added food and agriculture businesses, some of

which offer educational tours.

In honor of regional food traditions, Atkins celebrates “Watermelon Days” in August and Blairstown celebrates “Sauerkraut Days” in September.

The Youngville Café, which is the last remaining 1930s café on the historic Lincoln Highway in Iowa, has been recently restored by Benton

County leaders. The Café serves as an educational museum on the corner of the well-traveled Highways 30 and 218. During the summer season, the Café serves regional foods and features a popular farmers’ market on Friday afternoons.

The Benton County Beef Producers, Benton County Pork Producers, Garden Club, 4-H and Boy and Girl Scouts have agriculture related education and promotion programs. The Benton County Farm Bureau sponsors “Ag in the Classroom” activities. All three school districts have high school agriculture education and FFA programs.



Photo by Shelly Gradwell



Photo by Shelly Gradwell



How are people making community food systems work?

Community Supported Agriculture

WildWood Gardens, Virginia and Marion Moser; **Blue Ridge Garden CSA**, Jodi and Paul Bierschenk

These Benton County farmers pioneered two of the first Community Supported Agriculture projects in Iowa in 1995. Community Supported Agriculture (CSA) is an effort to unite producers and consumers of fresh food, grown with environmentally-sound methods. In a CSA, “shares” of a season’s worth of produce are sold to local families before the season begins. CSA provides a way for consumers to learn more about their food and the people that grow it, while providing a guaranteed market and shared risk for farmers.

The Mosers and the Bierschenks have inspired and provided leadership for many of the



Photo by Shelly Gradwell

Soy Specialties, Vinton

In 1992, a small group of farmers organized a specialty crop cooperative called Iowa Producers Cooperative (IPC). Today, this organization has more than 100 members.

In 1997, three of the founding members of the Iowa Producers Cooperative started a processing company called Iowa Soy Specialties. In cooperation with IPC members, “identity preserved” crops can be grown and processed locally. Iowa Soy Specialties is currently producing and processing natural, organic, and kosher soy food products.

now 50 other CSA projects in Iowa. The Bierschenks have shown how a traditional family farm can add a value-added enterprise while providing fresh food to their rural neighbors.

The Mosers also sell produce from their eight acres of vegetables and fruits at several farmers’ markets and have recently organized a network of family farmers who provide vegetables, fruit, eggs, and meats to area consumers and restaurants.

K & K Specialty Popcorn

Gene and Lynn Mealhow, Shellsburg

This unique specialty popcorn has been in production for many generations of family farmers, who have worked to optimize the quality and yield of this variety of popcorn. This has been particularly challenging in light of the desire to maintain the popcorn in its genetically unaltered state. Crossbreeding, or hybridization would have



made producing this popcorn much easier. However, its proud heritage and unique features would have been diminished.

This popcorn grows on a smaller and more fragile stock that produces a smaller per acre yield than conventional popcorns. The tiny kernel is difficult to process and has required some innovative adaptations of conventional machinery. The petite popcorn kernel produces a very tender and nearly hull-less popcorn.

What about economics in Benton County's food systems?



Current Production Situation

In 2000, Benton County sold \$146,036,000 of farm products and received government payments of \$35,141,000. Net farm income was \$14,923,000.

In 2000, Benton County's farmers spent \$170,404,000 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. Benton County farmers can continue to find ways to distinguish their specialty products and added value to bring higher economic returns.

Current Consumption Situation

Each year, Benton County's 25,308 residents spend more than \$31 million on food purchases and more than \$18 million on eating and drinking away from home. Even though most of these food purchases are currently made outside of the county, there are many ways to capture more of these dollars locally.

If just *five percent* of the food purchased by Benton County residents came from local farms, this would generate nearly *two and a half million dollars* per year for Benton 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 multiply in the local economy to create a more thriving Benton 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, libland@frontiernet.net

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, kdelate@iastate.edu, <http://extension.agron.iastate.edu/organicag>

Taste of Iowa, atasteofiowa@ided.state.ia.us, www.atasteofiowa.org

Leopold Center for Sustainable Agriculture, Iowa State University, 515-294-3711, leocenter@iastate.edu, 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, csnrcrc@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, hnob@metc.net

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, www.wisc.edu/cias

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

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 Srvce 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, www.sare.org

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



Photo by Bob Atha

References

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

PROfiles

Iowa State University

Department of Economics

<http://ia.profiles.iastate.edu>

Pioneer Recollections, Benton County: Stories and pictures depicting the early history and development of Benton County. Compiled by Harley Ransom, Published by the Historical Publishing Company, Vinton, Iowa. 1941.

Information on Benton County Agriculture Projects from Benton Development Group, 1999

Specialty Crops and Livestock Project
Benton County

“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 www.agriculture.state.ia.us

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.

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.

Credits

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Geographic Information Systems Maps
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