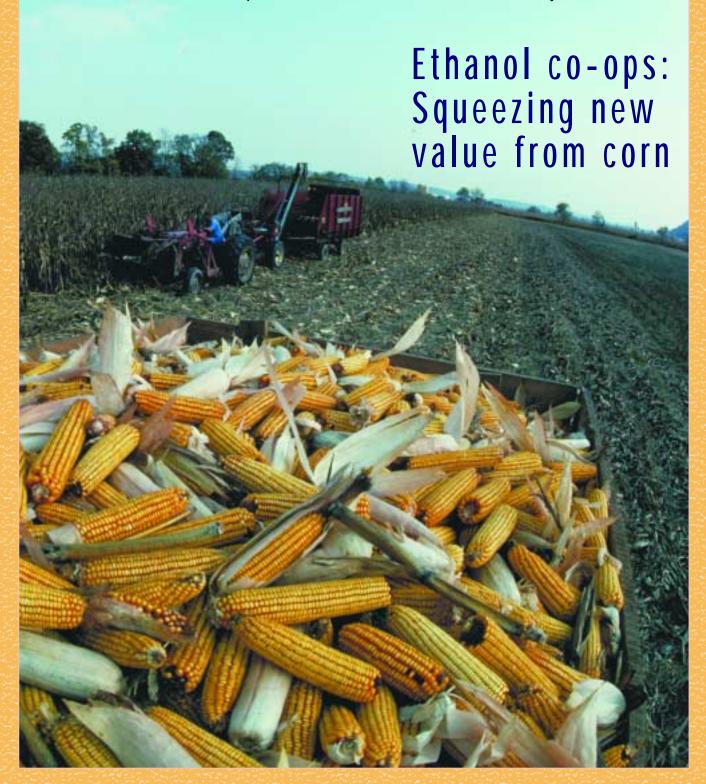


USDA / Rural Development

May/June 2000



USDA Rural Development programs help fuel co-op movement

Rural Americans looking for an effective business structure to process and market their products or to acquire goods and services have long looked to cooperatives. As part of its mission to create new opportunities for rural Americans, USDA Rural Development is striving to stimulate the creation of cooperatives that can help boost the rural economy and ensure that family farmers remain a dominant link in our nation's food production chain.

Since the 1920s, USDA has offered technical assistance to those looking to start or improve cooperatives. Through research and education products (including this magazine), USDA has also done much to increase public awareness of cooperatives.

USDA is expanding the ways in which it can provide financial backing for cooperatives. Through the Business and Industry (B&I) Guaranteed Loan program, USDA Rural Development can help finance cooperatives engaged in value-added processing and marketing. Likewise, USDA's Rural Business Enterprise Grant (RBEG) and Rural Business Opportunity Grant (RBOG) programs can provide seed money for fledgling coops.

Under the B&I program, a cooperative pursuing a value-added project first seeks financing from a local lending institution, which can then ask USDA to guarantee a portion of the loan; the percentage of the loan covered by the guarantee depends on the size of the loan.

Our Cooperative Stock Purchase Program works much the same, but in this case, family farmers who want to borrow money to buy membership shares (or stock) in a new, value-added cooperative can receive a USDA guarantee for up to 80 percent of the loan. Interest rates are negotiated between the lender and the farmer, and may be fixed or variable.

For a real-life example of how our programs are promoting new co-ops, turn to page 4 of this issue and read about how USDA helped turkey producers in Michigan open their own processing plant. These growers turned adversity into opportunity when faced with the sudden closure of the processing plant which had been buying their flocks. USDA helped kick-start the coop with technical assistance and a \$95,000 RBEG to fund the co-op's feasibility study. Eight of the 15 farmers who started the co-op also used our Co-op Stock Purchase Program to secure USDA financial backing for their membership investments. In all, USDA backed nearly \$2.3 million in loans issued by a local Farm Credit bank in Michigan.

Our cover story examines the surge in activity among co-ops seeking to turn corn and other crops into ethanol. USDA has also been active in this arena. both with technical assistance and financial support. As I write this, USDA has just provided a \$95,000 RBOG to a cooperative of grain growers in Western Kentucky, who will use the money to study the feasibility of starting an ethanol production facility. USDA also just approved a \$10 million B&I guaranteed loan to purchase machinery for a new a dry-mill ethanol plant in Craig, Mo., owned by a farmers' cooperative. USDA also provided technical assistance to help launch a new co-op-owned ethanol plant in Macon, Mo., the state's first. Both plants are discussed on page 12.

The future of ethanol as a clean, bio-



fuel additive for gasoline appears to be bright and could help stabilize corn prices. Our story quotes one expert who believes that the ethanol industry could soon consume 600 million bushels per year, which he says could raise corn prices by about 35 cents per bushel. The ethanol industry has been on a roller coaster ride during the past decade, its fortunes rising or falling depending on factors such as the price of foreign oil and various financial incentive programs. Prospects for the ethanol industry are much improved, but when it comes to the economics of energy, there is always a high element of risk.

To learn more about any of our programs, visit our website at: www.rurdev. usda.gov and click on the "Rural Business-Cooperative Service" button. Or contact your USDA Rural Development state office, which you can reach by dialing (202) 720-4323.

Gie Long Thompson

Jill Long Thompson Under Secretary, USDA Rural Development



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On the Cover:

The resurgent ethanol industry could soon be consuming up to 600 million bushels of corn each year. Farmer-owned cooperatives are building new plants to help their members capture some of the added value derived from processing corn into ethanol. Story on page 7. USDA Photo



Saving an industry

Plant closure leads Michigan growers to form new turkey cooperative



By Laura Moser



When the 25 turkey growers supplying the Sara Lee plant in Zeeland, Mich., received notice that they no

longer had a market for their birds, tough decisions had to be made. With no local market, these growers had to act quickly or suffer great losses due to transportation costs.

Like most farmers, these growers had weathered tight times in recent years. For some, the closure notice was the final hurdle and they left the business. But for 15 of them, this was just another challenge — another chance — to gain control of their business.

"It was really a blessing in disguise," says Dan Lennon, chief executive officer and plant manager. "Many of the growers knew they would be better off and have more security if they owned their own processing facility. But until they actually lost their market, the option wasn't seriously considered.

"Transportation is tough on the birds," he explains. "They needed a plant close to their farms. We saw a significant mortality loss when the birds were hauled to facilities in other states."

Michigan Turkey Producers Cooperative

Forming a cooperative was the first step in creating a producer-owned processing business. In October 1998, just four months after receiving their cancellation notices, the growers formed the Michigan Turkey Producers Cooperative.

The 15 members operate 40 farms in west Michigan and farm more than

15,000 acres. The largest operation, owned by Harold Walcott, raises over 1.6 million birds per year. The chairman of the board, Harley Sietsema, raises 1.2 million birds on seven farms.

The vision of the growers to save Michigan's turkey industry captured the attention of many in the state. Michigan State University (MSU)

were growing nearly 8 million birds a year. It is estimated that the turkey industry in western Michigan has an economic impact of \$60 million. Ernie Birchmeier, Michigan Farm Bureau commodity specialist, says feed consumption for 4 million turkeys each year equates to 50,000 tons of soybeans, estimated at \$6.5 million annu-



Producers took matters into their own hands to save the turkey industry in western Michigan, by purchasing a closed processing plant and reopening it as a farmerowned and -operated facility. Photo courtesy Laura Moser

poultry economist Allan Rahn supplied necessary market analysis and feasibility studies. The Michigan Farm Bureau, MSU Extension, the Michigan Department of Agriculture and USDA Rural Development also stepped forward to help the cooperative.

Rahn reported that in 1998 western Michigan turkey growers had \$30 million invested in farm-related assets and ally, and more than 4 million bushels of corn, valued at \$8.6 million annually. Additionally, more than 200 people are employed on the farms and 300 at the plant with a combined payroll of \$10 million. Over \$6 million a year is spent on purchasing poults.

The group received a \$95,000 grant from USDA Rural Development to conduct feasibility studies.

"USDA Rural Development has placed a strong emphasis on providing financial assistance to Michigan producers and has encouraged agricultural producers to find ways to add value to their agricultural products," says Donald Hare, Michigan state director for USDA Rural Development.

The grant was part of USDA's Rural Business Enterprise Grant Program. This program is designed to help public bodies, non-profit corporations and federally recognized Indian Tribal groups finance and facilitate development of small and emerging private business enterprises located in rural areas.

"As commodity prices continue to be low and volatile, more producers are looking at forming their own cooperative," says Jason Church, a cooperative specialist with the Michi-

Finding the right facilities

In February 1999, armed with the work from Rahn and a feasibility and market study from Sparks Commodities Inc., the growers began searching for the right facilities and financial backing.

They located a vacant potato processing plant in Wyoming, a southwest suburb of Grand Rapids, Mich. The location — within 40 miles of their farms — suited their needs and had a large labor pool available. Once found, plans were made to convert the building into a turkey processing plant.

"We gutted the building and started over," Lennon says. "We had to build a new building inside the old building."

The 190,000-square-foot plant is furnished with state-of-the art equipment. Some of the equipment came



gan state office of USDA Rural Development. "These cooperatives, such as the turkey growers', allow the producers to become more vertically integrated. It is not a guarantee for success, but it does give the producer more control."

Taking processing into their own hands was a good thing for the producers, Sietsema told Michigan Farmer, an agricultural publication. "It forced us to look at where we were in the food chain. I think it was just a matter of time, and we needed to do this anyway."

from the Sara Lee plant in Zeeland. That plant, once used for raw processing as well as cooked products, was now strictly a cooked-product plant.

The newly renovated processing plant is targeted to process 4.25 million birds a year with annual sales projected to top \$70 million. Over 300 jobs were created when the plant reopened.

"This is the first new turkey processing plant to be built in the United States in the past 15 years," Lennon explains. "We built the plant with an eye toward food safety and prevention of problems. So much has happened in the area of food safety in the past 15 years, we were able to draw on others' experiences."

Financing the dream

The Michigan turkey industry was not the only commodity sector experiencing unrest in 1998. The failure of other commodity plants and depressed farm prices left lenders hesitant to extend the necessary capital for the processing facility. The location of the plant in a non-rural area also limited the amount of backing available through USDA Rural Development.

"We worked out a loan package with CoBank in May 1999 to finance the \$20 million project," Lennon explains. "We were close to finalizing the loan when the equity position needed to be changed from 30 percent to 50 percent."

The growers had generated the 30 percent capital through stock purchases in the cooperative. Growers purchased stock at \$1.50 per shackle (the hooks used to hold turkey carcasses in the plant); one share equals 1,000 shackles. The stock purchases gave growers the right to send birds to the plant as well as an obligation to keep the plant supplied. The growers subsequently increased their per-shackle commitment by 50 cents, to a total of \$2 each, to help close the gap.

Eight of the producers received loan guarantees through the USDA Rural Business Guaranteed Cooperative Stock Purchase Program. Slightly more than \$2.28 million was approved to the GreenStone Farm Credit Services for loan requests made by the

"Agricultural producers in Michigan are searching for ways to be more competitive in the marketplace," says Hare. "If they are going to compete in the national and international markets, they need to find ways to cut cost, bring greater value to their products and reap higher bottom-line profits for their commodities."

The additional capital needed to meet the bank requirements was generated through investments by "friendly parties" interested in the success of the cooperative. To allow outside investors,

an LLC (limited liability corporation) was formed, with the cooperative as a member.

By April 2000, the necessary equity position had been obtained and the \$20 million loan package was in place.

"We are anxious to conclude this start-up chapter," Lennon says. "It was stressful waiting to have all the financing in place so we could move forward."

On March 7, 2000, just 18 months

after the cancellation notices, the first turkeys were processed at the plant.

Building a name and a market

"The key to success for new cooperatives looking to add value to their commodities is to hire professional managers," Church says. "The members need to be successful in their own individual businesses and bring in top management to run the processing facilities."

Before joining the turkey cooperative, Lennon was a sales and marketing director for Bil Mar products at Sara Lee. His experience in turkey product development and sales will be critical to the success of the cooperative. Lennon and Don Delardo, sales manager, began looking for customers months before the first turkeys were brought in.

"Our first phase is to sell to other industrial processors, we will then branch out into food service and the retail food markets," Lennon says.

As the customer base broadens, so will the line of products produced. Currently the facility is equipped for strictly raw processing. The growers are supplying heavy Tom turkeys (34-36 pounds).

The growers have developed a brand name and "story line" for the products when they enter the retail market. The products from the Michigan plant will be marketed under the name "Legacy," or Golden Legacy for top products such as breast meat; Silver Legacy for "second-tier" products, such as thighs and drumsticks; and Legacy for the ground products.

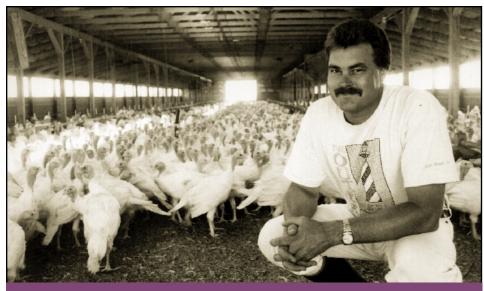
Accompanying the brand and logo is a history of the cooperative and the name. This story captures the long history of turkey production in Michigan and lists the members of the cooperative.

"Raw turkey meat is basically a commodity," Lennon explains. "We hope to differentiate our product by adding flavors and create portioned cuts like steaks, roasts and ground products."

Long-term, the co-op plans to add more processing equipment to prepare product in vacuum sealed packaging for food service and to eventually move into a cooked-product line.

"I don't think people realize how close this industry was to being extinct in Michigan," Lennon said." Without the diligence and the commitment of the turkey growers to raise additional capital, this dream never would have become a reality.

Editor's Note: Laura Moser is an agricultural writer based in Williamstone, Michigan.



Dirk Pyle, Zeeland, Mich., is back in the turkey business as one of the 15 members who started the Michigan Turkey Producers Cooperative. Photo courtesy of Farm & Country Journal

Building a Cooperative on the Fast Track

July 1998 — Twenty-five growers receive notice from Sara Lee- Bil Mar turkey processing plant in Zeeland, Michigan that they no longer have a local market for the 8 million turkeys raised annually in west Michigan.

September 1998 — Fifteen growers form a cooperative, Michigan Turkey Growers Cooperative, and begin their own business.

December 1998 — Turkeys no longer processed at the Zeeland plant, growers begin transporting birds to out-state markets in Iowa and Indiana.

December 1998 — Cooperative receives USDA grant to conduct feasibility study.

May 1999 — Formation of LLC to generate additional equity.

June 1999 — Renovation of Simplot Potato Processing plant into a turkey processing plant begins.

February 2000 — Eight members receive USDA loan guarantees for stock purchases.

February 2000 — USDA inspection and approval granted.

March 2000 — First turkeys are processed at new facility.

Power formula

Gas price hikes fuel drive for ethanol production; farmers look to co-ops to gain market share

By Mary Farrell-Stieve



outh Dakota just broke ground on a 40-milliongallon ethanol plant owned by a cooperative of corn

growers, who believe that consumption of corn to produce ethanol will help boost prices for their crop. National Corn Growers Association President Lynn Jensen, one of the plant owners, says he will send as many as 25,000 bushels — about 25 percent of his total crop — to the plant. South Dakota is are part of a growing trend as farmers and their cooperatives all across the nation are investing in ethanol facilities as a way to add much-needed value to

their crop (see related story, page 8). Jensen believes that committing 600 million bushels of corn nationally for ethanol will add 35 cents to each bushel of corn U.S. farmers market.

Jensen foresees a bright future for ethanol. Another ethanol plant in that state will begin its fundraising campaign in July.

"These farmer-owned enterprises turning our crops into value-added products create a great opportunity for rural development," says Jensen on a spring day as he readies his equipment for another planting season. "And I'm not just talking about ethanol, but all value-added investments.

"Once the start-up costs have been

covered and the investments start generating returns for the investors, that money comes back into the community," he continues. "These investors are more likely to use that money to improve their standard of living, pay down debt and invest in equipment to make their work easier."

Add those capital reinvestments to the benefits a community realizes in new job opportunities and the security of a local ownership of local business, and it's easy to see why there's increased optimism throughout agriculture and rural development circles for bio-based fuels. The bio-fuel movement is also being backed by those who want to make the United States less dependent





on foreign oil-producing countries, which currently dictate fuel availability and prices. Consumers are becoming more interested in bio-fuels, especially with recent concerns about the impact of methyl tertiary butyl ether (MTBE).

MTBE phase-out boosts ethanol

MTBE is an oxygen-bearing additive the petroleum industry added to gasoline to make it burn cleaner to meet the 1990 clean air requirements. Now the additive that helped clean the air is suspected of contaminating groundwater.

To counteract the spreading threat of MTBE to the groundwater supply, MTBE has been banned in places such



: [1] [1] Pipeline flowing with new generation ethanol: acops

By Pameta J. Karg Field Editor

From sea to shiring sea. farmers and their cooperatives are eyeing new ethanol production plants as a way to add value to their crops and build a stronger rural economy. Market studies indicate farmers should build new ethanol plants to provide more value-added opportunities in rural America. For many farmers, new-generation co-ops are the preferred model for gaining a share of the ethanol market.

In New Jersey, the Farm Bureau is encouraging its members to consider building an ethanol plant. In Washington, farmers are hoping a facility that would turn barley and wheat into ethanol would buoy sagging grain markets. In Illinois, memberships are being marketed for a new ethanol plant, and a Minnesota ethanol facility is being expanded to meet surging demand.

In early June, USDA Rural Development agreed to provide funding for a feasibility study for a possible ethanol plant in western Kentucky. That project is being eyed by the Hopkinville Grain Elevator, a 2,200-member grain producers' co-

op looking for ways to add value to members crops.

"While commodity prices remain at historically low levels and changes in tobacco production present additional downward pressures in our rural economy, it is essential that we look together at new and innovative ways to add value to our traditional farm products," Kentucky Gov. Paul Patton said at an event marking the USDA award.

Earlier this year, the Environmental Protection Agency announced its decision to phase out the use of methyl tertiary butyl ether (MTBE). The fuel additive helped reduce air pollution but now has been linked to drinking water contamination and cancer in animals. The EPA and USDA are working to find "safe bio-fuel" additions, or oxygenates, which add oxygen to fuel and reduce pollution in exhaust.

New Jersey grain growers look to ethanol

With MTBE on the way out, ethanol is the only commercially available alternative, says John Urbanchuk, executive

as Iowa. In California, gasoline suppliers have until Dec. 31, 2002, to eliminate MTBE. The response to these bans has been a call for the end of the reformulated gasoline program's oxygen requirement.

This also opens new doors for biofuels, such as ethanol. Ethanol can add the needed oxygen to make fuel burn cleaner. It's also organic, non-toxic and reduces the amount of toxic substances in the fuel. The ethanol solution could protect groundwater, clean the air, and lessen dependence on foreign oil, and it is good for engines and gives a muchneeded boost to farmer income. It can also add economic vitality to rural communities where ethanol is produced, various proponents point out.

Ethanol sounds like the solution to a host of challenges. Why has there been strong resistance to its use in the past?

Some people suggest that there is not enough ethanol produced to replace all the MTBE used in the United States. The American Coalition for Ethanol (ACE), an organization of ethanol producers, technical experts

and supporters, tries to dispel that fear. ACE points out that there is a large amount of unused capacity in its member ethanol plants. If ethanol demand increases, new plants can be built rapidly, notes the Governors' Ethanol Coalition (GEC).

Governors see ethanol value

There are 58 ethanol plants in 19 states and six new plants in five states nearly ready to begin production. Twenty more plants in 16 states are in the planning stages. These plants are all grain-to-ethanol facilities. There are also 12 plants in the planning stages that would use organic material left after products such as sweet potatoes, rice straw or forest waste are processed.

Another proponent trying to educate the public and Congress about ethanol is the GEC. Governors from 22 states and Puerto Rico plus representatives from Canada, Mexico, Sweden and Brazil comprise the GEC membership. Its goal is "to increase the use of ethanol-based fuels, to decrease the nation's dependence on imported energy resources, improve the environment and stimulate the national economy."

A coalition study estimates the ethanol industry in the United States could produce 3.5 billion gallons of ethanol per year by 2004. In his remarks to the National Conference on Ethanol Policy and Marketing in San Francisco, GEC chair and Iowa Governor Tom Vilsack said that when ethanol production reaches that volume, 47,800 jobs will have been created, many in areas where job creation is difficult.

Bob Slaughter, general counsel for the National Petrochemical and Refiners Association, cautioned the ethanol industry not to promise too much regarding the extra volume it can deliver quickly.

"Supplying American consumers' transportation needs is a tough business," Slaughter said during the USDA Agricultural Outlook Forum 2000. "Consumers want adequate supplies, affordable prices and they expect to see environmental improvements in facilities and products at the same time." Some of the biggest assets the ethanol

ied president de AUA Consultants Arleidrestown S.T. He v hired last year by the New Jersey Parin Bureau (INTE) to do an economic feasibility study on building an ethanol distillery. — Orbanchuc says that farmers looking for options to increas

their income must consider ethanol production. Corn is the largest grain crop in New Jersey. Normally, Garden State farmers produce about 9 million bushels of grain, enough to make a New Jersey ethanol plant a viable option, he reports.

Currently, New Jersey corn is shipped mainly to Maryland and Delaware for chicken feed, according John Rigolizzo, a farmer and president of the NJFB. He says that Farm Bureau's preliminary evaluation shows this ethanol option to be a timely alternative and that it could lead to a larger effort toward renewable fuel projects in New Jersey.

Farmers currently pay 25 to 50 cents a bushel in transportation costs for corn that fetches only \$1.25 a bushel. Sales for ethanol would bring in about 15 to 25 cents more per bushel, according to the AUA study. With those economics in mind, the possibility of building an ethanol plant has a growing number of farmers willing to commit a percentage of their corn crop to cash in on the fuel additive.

The Farm Bureau is looking for investments from about 400 farmers, who would form a cooperative to produce ethanol. A share in the plant would cost \$12,500, and farmers od te keli etera te she pian Stanker

Liven the most skeptical fathers are assing to shares and they re excited by the prospect of tapping into the bio-buck. frend. Rigolizzo says. What got him to endorse the idea was two years of investigation into the making of ethanol fuel from grains and visits to ethanol plants.

Rigolizzo also paid attention to the economic study by AUA: completed last December, and to the comments between Farm Bureau representatives and the New Jersey Petroleum Council earlier this year. The NJFB directors then toured dry mill and wet mill ethanol plants - both owned by Archer-Daniels-Midland – in Decatur, Ill., and Peoria, Ill., before beginning a series of farmer information meetings this past spring.

In addition to creating a new market, local ethanol production would mean corn farmers would not plant tomatoes and garden crops. Giving grain farmers an alternative to tomatoes and other truck-crop markets will help keep prices for these other New Jersey-grown crops from being driven down by an increase in supplies, Rigolizzo says.

Washington co-op to invest \$122 million

Plans were recently unveiled to build a barley-wheat ethanol plant in Moses Lake, Wash. Pacific Rim Ethanol LLC Continued on page 10 industry has are its enthusiasm, the need for a safe fuel additive, public support and political support, he says.

Jensen believes demand for ethanol will rise. At the USDA Agricultural Outlook Forum, he said, "Today, there are no fewer than 22 farmerowned cooperatives with more than 800,000 members producing in excess of 450 million gallons of ethanol annually. The total farmer investment in these facilities exceeds \$1 billion. Farmer-owned cooperatives have been the fastest growing segment of the fuel ethanol industry."



In addition to increasing job opportunities in rural areas, ACE says ethanol production can result in cleaner air, increased energy security through domestic production and bet-

ter prices for corn and other farm commodities.

Impact on food supply

But some wonder how much better crop prices would be with a strong ethanol industry, and at what cost to the food supply.

Currently, the ethanol industry uses about 5 percent of the nation's corn crop. This would increase if ethanol production and sales increase. Still, in nearly every year the corn supply outstrips demand. Whether or not the corn necessary for increased produc-

-Gontinued from page 9

would use fermented barrey and wheat is produce 40 million gallons of ethicus a year. Ritzville Warehouse Co. 2.1, 100 member farmed a year Ritzville Warehouse Co. 2.1, 100 member farmed cooperative will invest in the \$122 million. Yenture being led by Doug MacKenzie, who helped set up Commercial Alcohols. Canada's leading ethanol producer.

MacKenzie. Pacific Rims President and CEO, heads up the effort to secure funds from corporations and individuals throughout the western United States via a public offering of shares in the plant. According to MacKenzie. "the offering is receiving a very high degree of interest," including an initial \$1 million grant for a low-interest loan from the Community Economic Revitalization Board for the City of Moses Lake

"This commitment to our project at the local community level makes clear just how important this plant will be to the region." The loan will provide for infrastructure development to support the ethanol plant.

"In addition to creating an enhanced market for local grain growers, ethanol is a non-polluting renewable fuel source that can significantly increase the burning efficiency of gasoline, effectively reducing the emission of greenhouse gasses. There really isn't a downside to ethanol," says MacKenzie.

The plant could use up to 60 percent of Washington's barley crop, about 4 million bushels of wheat per year. Adding to the positive outlook for success, the Pacific Rim plant will act as a giant distillery. "We'll produce alcohol for spirits such as vodka and gin, industrial-grade alcohol, vital wheat gluten, a grain protein used in baking, and a high-grade component for cattle feed, in addition to ethanol, says MacKenzie. "Basically, 99.9 percent of what goes into this plant will come out in usable consumer products. That means no waste, and no pollution."

Moses Lake was the site chosen for the plant, based upon a unique combination of factors. "This location is basically equi-distant from the key markets for ethanol distribution," says Mackenzie. "Seattle, Portland and Spokane are all poten-

tially important markers for the consumption of ethaniol and many of the other products the plant will produce. That will reduce costs for consumers because freight costs will be minimized simply because we're closer to the point of purchase. MacKenzie also cites the availability of grain, inexpensive

MacKenzie also cites the availability of grain, inexpensive energy and a good interstate highway, plus the availability of land, all as key reasons for selecting the site. "Moses Lake may be the best place in North America for a project like this to succeed."

Pacific Rim Ethanol LLC is continuing to hold meetings around the state to build interest and support for the project. Agreements with suppliers and business partners are also in the works, with details to be released in the near future.

In 1985, Washington produced 1.2 million acres of barley. But demand, especially from overseas buyers, has dropped, leading to decreased production. Last year, only 490,000 acres of Washington barley were harvested.

A new ethanol plant brings hope to the shrinking barley industry. The rural economy of the area would benefit from 500 construction jobs, the plant would employ at least 70 and there would be new markets for locally grown grain.

Most of the ethanol consumed in the region currently comes from the Midwest or overseas. Corn from the Midwest is used to produce 850 million gallons of ethanol per year. Yet ethanol plants in other regions are not deterring Midwestern farmers from expanding their operations.

Minnesota ethanol plant expanding

In Minnesota, Ethanol2000 began adding to its capacity last year. The limited liability partnership was formed by Southwest Minnesota Agrifuels Cooperative (SMAC) and Broin Enterprises, Inc. It owns and operates a dry mill ethanol plant.

The initial plant construction cost \$19 million. Twentyeight new jobs were created and the economic impact genertion of ethanol would use more than the surplus portion of the crop is hard to predict. Many factors, including the amount of land in production and increased yields, will affect the answer.

Some people worry that the increased production of ethanol could hurt the nation's food supply or limit the supply of corn available to feed the hungry around the world. Last year, American farmers produced 9.4 billion bushels of corn, yet only about 525 million bushels were used for ethanol production. That's only about 5 percent, and ethanol proponents explain

that only the starch portion of the corn is converted to ethanol. The by-products are still available for other uses, such as distiller's dried grain, a highprotein animal feed.

Higher corn prices paid to farmers as a result of demand from ethanol plants will vary depending on climate, acres in production and yields. During the most recent Commodity Classic (the combined convention of the National Corn Growers Association and the American Soybean Association), Jensen told the media that, "USDA indicates that ethanol could

successfully replace MTBE nationwide by 2004 with negligible effect on gasoline prices and no disruption in supply. This would more than double the size of the ethanol market, consuming an additional 600 million bushels of corn annually and adding approximately 35 cents to the value of every bushel grown in the United States."

Two milling processes

Two types of milling processes can be used to produce ethanol: dry milling or wet milling. The wet milling process produces by-products that include



ated was estimated at \$7.5

ondlich annually.

Drough the combine efforts of Broin Manage ment and the Ethanol2000 operations team, the plant exceeded expectations. Corn use is up to about 5.5 million bushels per year and ethanol produc tion is at about 135 percent of design capacity. Initial production began on June 20, 1997, and the first break-even month was July 1997. The first six months of operation in 1997 yielded a value added (net profit) of 62 cents per bushel of corn delivered to the plant.

Following a detailed

feasibility study a year ago, the decision was made to expand the existing ethanol plant to a capacity of 27.5 million gallons per year. Current production is 15 million gallons per year, even though the plant was designed with an 11-million-gallon capacity. The expanded facility should come on line by August, even though the contractor has had trouble finding construction workers due to the strong economy and low unemployment across most of the Upper Midwest.

When expanded, Ethanol2000 will employ about 35 people. The direct economic benefit to rural southwest Minnesota should increase to \$15 million annually, co-op leaders report.

Those kinds of results are fueling more attention by other Corn Belt farmers and their cooperatives. Farmers have lived

hirough 18 months of violatile price swings for just about everything except beef cattle and organic products

Amid those swings, 442 northern Illinois and southern Wisconsin farmers invested \$9 million in equity to form. the Adkins Energy Cooperative. However, organizers had hoped to raise \$16 million, so the new-generation cooper ative took on five partners in a limited liability corporation. Those partners include Pearl City, Ill. Elevator Cooperative; Nicor Energy Solutions, Naperville, Ill.; Williams Energy, Decatur, Ill.; PSI, Memphis, Tenn.; and Delta-T, Williamsburg, Va.:

According to Jim Graham of Nicor, everyone is getting anxious over construction of the new ethanol plant slated for a yet-unnamed site. At one point, the co-op board wanted to explore sites in Wisconsin after that state's legislature passed an ethanol subsidy and communities offered economic devel opment incentives. But Graham believes the board and its partners will end up staying with their original plans to build a dry mill ethanol plant in northern Illinois.

Plans call for the plant to make 30 million gallons of ethanol, process more than 11.5 million bushels of corn and cost approximately \$68 million dollars to build. Already Adkins Energy has talked with Northern Illinois Gas to construct a co-generation facility that will supply all the energy needs of the ethanol plant, saving an estimated \$1.7 million per year.

"Securing financing has been a big issue for us over the past two years," Graham explains. "Farmers have been very receptive to forming a new-generation cooperative and they've stuck by our plans during some pretty tough times in the agricultural community. We're just all anxious to get started, and I think we'll be able to start digging soon because we've found a financial institution that will back us."

sweeteners, corn oil and gluten feed and gluten meal. The dry milling process produces dried distillers grains and corn meal as by-products.

Gluten meal, gluten feed and dried distillers grains are rich in protein, nutrients, fat and minerals with readily available sugars, lactic acid and other short-chain fatty acids. They are in demand as livestock feed and their availability could free up unprocessed corn for other uses. Corn meal, sweeteners, oil and other by-products are also in high demand by food processors.

Ethanol production would not withdraw these products from the market. Rather, it would add value to the rest of the corn. Many ethanol producers even capture the carbon dioxide emissions from processing and sell them to the beverage industry. Ethanol production is a showcase for efficient use of a raw product, proponents say. They believe that turning corn into ethanol takes a \$2 bushel of corn and turns it into \$3 worth of fuel and \$1 worth of feed.

Environmental impacts

But wouldn't putting more land into corn have negative effects on soil and water conservation?

Corn is not the only raw material that can be used to produce ethanol. In fact, there are ethanol-producing plants using by-products from other processes. Sugar beets, potatoes, brewing wastes and cheese whey are examples of by-products that have been successfully used in ethanol production. Cellulose materials including grasses, trees and waste paper have been used to produce ethanol. While these processes were too expensive to be profitable in the past, new technologies and research

into cellulose-based materials are increasing their viability.

Switchgrass is also being studied as a fuel source. The tall, fibrous grass once covered the American prairies. It held the soil in fierce winds and created the rich land pioneers turned into America's breadbasket. Switchgrass can be grown on marginal land in many weather conditions.

The grasses live for 20 years or more and, because they are harvested with dry matter and not nutrition as the goal, harvesting takes place only once a year. This yearly harvest saves on labor, fuel and machinery costs. The machinery is the same used to harvest feed forages. Yields vary, but Alabama test plots yielded 15 tons of dry matter per acre.

Despite these advantages, the cost of converting switchgrass into an alternative to coal- fire energy production has

Missouri's first ethanol plants will have major impact on region's rural economy

Fred Stemme, Director of Communications Missouri Com Merchandising Council

For the first time, Missouri corn groups will be able to ship their grop to an ethanol plant in their own state. The new ethanol plant in Macon is owned and operated as Northeast Missouri Grain Processors (NEMOGP), a new-general

tion farmer cooperative. It will process approximately 6 million bushels of corn annually to produce 15 million gallons of ethanol. In addition, the plant will produce over 100 million pounds of dry distiller's grain, a high-quality livestock feed.

The ethanol plant will benefit not only its members, but the economy of the entire area. The plant will generate an estimated \$31 million in annual economic activity and create 28 full-time jobs.

The co-op's 311 farmer-owners invested \$5.6 million in the project, which cost \$23.5 million to build. Seed money to start NEMOGP was provided by the Missouri Corn Merchandising Council, Missouri rural electric cooperatives and others. USDA Rural Development provided technical assistance to help in forming the cooperative.

The initial co-op organizational meeting was held in Shel-

effor to open the plant. The membership drive was held from June 1997 to November 1999. Groundbreaking was held in Macon Ivio : during April 1999, with the grand-opening April 29, 2000.

At press time for this magazine. USDA Rural Development had just approved a \$10 million loan guarantee to buy

machinery for what will be Missouri's second ethanol plant, being built in Craig by a subsidiary of the Golden Triangle Energy Cooperative Inc. This dry-mill plant will produce 14 million gallons of ethanol and consume 5 million bushels of corn each year. The plant will also produce dried distillers grains soluble (a livestock feed supplement).



Co-op members are required to deliver 400 bushels of corn for each \$1,000 of membership interest (the minimum investment for membership is 5,000 bushels). Additional corn will be purchased on the open market.

The grand opening events for the Macon plant were the first in Missouri not only for an ethanol plant, but also for a new-generation, farmer-owned, value-added cooperative. Approximately 1,500 people attended the events held at the NEMOGP ethanol plant east of Macon.

not been price-competitive. However, if the switchgrass is first converted to ethanol and the by-product then burned to produce electricity, the future for switchgrass as a bio-based fuel source brightens, some Alabama researchers say.

Switchgrass has other qualities as an alternative to row crops. The root system extends almost as far down into the subsoil as the stems reach to the air. Switchgrass traps carbon in its roots, drawing it out of the air and restoring it to the soil. This has some switchgrass enthusiasts declaring it as a fuel that can also clean the air.

Switchgrass is very adaptable and researchers are working to develop strains that need very little chemical fertilizer and will produce the most cellulose. Wildlife ecologists are pleased at the prospect of seeing row crop

fields converted to switchgrass. Despite it's still being a monoculture, a field of switchgrass benefits wildlife, especially birds. If cutting and harvesting are left until August, the fields can provide excellent nesting and chick-rearing environments.

The success of switchgrass and other bio-based fuel sources will depend on how policymakers see the future.

President Clinton has called for a three-fold increase in the use of biofuels and bio-based products by 2010. Combined with Congress' interest in promoting value-added industries, expansion of the bio-based fuel industry looks promising. Still, bio-based fuels are more expensive than fossil fuels to produce. The keys will be what government incentives are available to keep the new industry growing and whether the public is committed to

environmentally friendly forms of fuel after gasoline prices drop.

Tax incentives necessary

The move to eliminate MTBE from fuels has spurred some lobbyists to call for the end to oxygenated fuels rather than a switch to the more environmentally friendly ethanol. This call has friends among those who see the lower taxed ethanol as a threat to transportation programs.

In his remarks at the Outlook Forum, Slaughter touched on the idea that draining hundreds of millions of dollars out of the highway trust fund is not a way to make friends in the rest of the fuel industry. Ethanol has a federal gasoline excise tax exemption of \$0.054 per gallon. The exemption was to expire this year. While movement is afoot to extend it to 2007, the future is

This is a gigantic step forward for Missouri agriculture. The importance of this ethanol plant to Missouri com farm: ers is highlighted by the list of special guests joining us for the event. I said Gary Marshalf, Missouri Corn Growers Association CEO Guests included Senator Kit Bond Sena tor John Ashcroft, Governor Mel Carnahan, House Speaker Steve Gaw, House Agriculture Chairman Sam Leake and House Environment and Energy Chairman Gary Wiggins

"We're tremendously excited about this opportunity for Missouri farmers to capture value from their corn production," Marshall said. "The hard work of many visionary leaders has brought us to this point. It's the farmers - the board of directors and member-investors of Northeast Missouri Grain Processors - that deserve the most credit. It was their hard work and dedication that built an ethanol plant."

John Eggleston, NEMOGP chairman and a farmer from Memphis, Mo., concurred. "Thanks to the dedication of many farmers, public officials and others we've turned the dream of an ethanol plant in Northeast Missouri into a reality," he said. "The farmers of Northeast Missouri Grain Processors are very proud of our new ethanol plant. We're even more excited that we'll soon be able to sell ethanol. It's going to be a win-win-win for everyone. Farmers benefit by adding value to their corn production through selling ethanol. Consumers benefit because ethanol fuel is cleaner-burning. The rural economy benefits through the creation of additional jobs. The American economy and envi-ronment benefit because we rely less on imported oil and vater-polluting MTBE.

Senator Kit Bond said. "Our nation and state require a renewable environmentally friendly alternative for energy Ethanol helps create local jobs, good markets which add to the value of farmers' products, and moves us away from a sit uation of being energy hostages. America is becoming more and more reliant on foreign oil producers - we're at the mercy of foreign oil cartels. Over 57 percent of our oil comes from foreign sources and we're being held hostage to that situation. Promoting renewable energy that is domestically produced, especially ethanol, is critical to gaining our independence from the foreign oil cartels."

Senator John Ashcroft, who toured the plant earlier in the day, commented, "It is great to see farmers get together in a cooperative way, not only to produce corn, but process it into ethanol, which will become part of a cleaner environment and self-reliant fuel capacity for America. It's a tremendous achievement. The real effort was made by farmers, who decided they would add value to the corn that they grow."

NEMOGP is directed by a 13-member board made up of Missouri corn producers. The plant is owned by Northeast Missouri Grain, LLC, directed by a seven-member board, with five farmer members and two non-producer members.

uncertain. Without that exemption, ethanol will have a tougher time being a competitively priced fuel additive.

The petroleum industry has called this a huge special interest subsidy, but ethanol proponents point out that the oil depletion allowance and the money spent each year to protect access to Middle Eastern oil more than make up for the gas excise tax exemption. Two-thirds of the world's known oil reserves are located in the Persian Gulf. By 2010, analysts believe that more than 75 percent of the world's petroleum needs will be met by Middle Eastern nations that make up the world's most politically volatile region.

In a 1998 poll and article about the future of ethanol published by ACE, 83 percent of American voters said they fear the United States remains extremely vulnerable to an energy crisis at the behest of foreign oil suppliers. Eight out of 10 voters believe the nation's dependence on foreign oil is a serious threat to the economy, jobs and standards of living. Seven out of 10 polled were equally concerned about environmental threats. And eight out of 10 voters favored increasing the use of renewable transportation fuels such as ethanol to reduce oil dependency.

Research and development in the bio-based fuel field is growing and the results are exciting. The Renewable Fuels Association, the trade association of the domestic ethanol industry, published a report outlining some areas of research using ethanol not as a fuel additive, but as the main source of fuel.

The E85 alternative

In order to comply with the Energy Policy Act of 1992 (EP Act), many operators of vehicle fleets are choosing flexible fuel vehicles (FFVs) that can operate on 85 percent ethanol (E85), gasoline, or any combination of the two fuels in the same tank. The Chippewa Valley Ethanol Co. (CVEC) and Swift Co-op Oil have opened Minnesota's first E85 pump in the Benson Cenex station. John Curruth, chairman of the CVEC board is driving a flexible-fuel Ford Ranger

pick-up truck that allows him to use E85, a 10 percent ethanol blend or a mix of the two. Oxygen sensors and computer chips sense what is in the tank and adjust the combustion system to fit the fuel blend. The technology for this may have come from university students who take part in the E85 Challenge.

Each year, Argonne National Labo-



Ethanol plants, such as this AGP facility, could see increased demand as MTBE is replaced with ethanol. Photo courtesy AGP

ratory Transportation and Technology Research and Development Center sponsors the "Ethanol Vehicle Challenge." The laboratory and General Motors make a vehicle available to interested universities around the country. Student teams then modify the vehicle to run on E85. The teams are judged on factors such as on-road fuel economy, cold-start performance, driveability, sound, acceleration, and hill climb/trailer pull performance. In May, the student teams and their advisors meet at the General Motors Corporation's Milford Proving Grounds in Michigan to test their vehicles.

Today, there are a variety of flexible fuel vehicles available both to fleet managers and the public, at either the same cost or less than the cost of a conventionally fueled vehicle. The U.S. Postal Service recently purchased 10,000 FFVs. Coordinating the distribution of FFVs and fueling stations to make E85 available is tricky, but will be well worth the effort. E85 has possibilities beyond FFVs and one of them is the fuel cell designed vehicle.

A fuel cell vehicle is an alternative to the internal combustion engine. Epyx Corporation, working with the U.S. Department of Energy, has designed a fuel cell reformer capable of converting ethanol on-board the vehicle into hydrogen, which is used to power a fuel cell and generate electricity.

"Ethanol provides higher efficiencies, fewer emissions and better performance than other fuel sources, including gasoline," said Jeffrey Bentley, chief operating officer of Epyx. These vehicles could radically redesign the shape of automobiles since they will not need room for an engine and the fuel cells take up nominal room.

OxyDiesel

Research is aimed at finding a perfect blend of ethanol and diesel fuel that will reduce exhaust. If a blend can be formulated that provides a market equal to the 12 percent market penetration ethanol currently has in the gasoline market, there would be a need for an additional 485 million gallons of ethanol a year. Work is also ongoing to develop ethanol fuels and fuel additives for the aviation industry.

Slaughter encouraged members of the ethanol industry to trust market indicators and feels the future for ethanol is good. In Wisconsin, this perspective resulted in legislation being considered that will open the door to an ethanol production facility. Jensen's South Dakota facility has strong support among banks and the Farm Credit System.

Research into new fuel sources and improved methods of refining, formulating and transporting these new fuels is on-going at universities, governmental laboratories and trade associations. Automobile manufacturers are introducing vehicles ready to accept the new fuels

There is great opportunity for farmer co-ops to get involved. Jensen adds, "The 20th century was the century of oil. Who knows what the 21st century will be? It will look different. We want to make sure that farmerowned, fuel-producing businesses are a part of the new century."

Editor's note: Mary Farrell-Stieve is an Upper Midwest agricultural writer and public relations professional.



Cal/West Seeds

Woodland, California

Co-op service: Cal/West Seeds has built a reputation on professional research, production and marketing enhancing its position as a leader in the forage seed industry. It supplies the highest quality seeds to customers around the world. It's proud to have been one of the first in the seed industry to establish a private forage research program in 1959.

Co-op leadership: Paul Frey was recently appointed president and chief executive officer after serving for the past eight years as vice president of marketing.

Co-op's history and changes: Cal/West Seeds was formed in 1969 from the merger of Calapproved Seed Growers, Modesto, and Caladino Farm Seeds. Inc., Artois. It was said that, "The two were virtually stepping over each other in seed production, sales and in the recruitment of seed growing members." Today, Cal/West has 550 membergrowers in California, Washington, Oregon, Idaho and Nevada. It ranks as the largest member-owned seed production cooperative in the United States. It is headed up by a nine-member board of directors, composed of member-growers and four operating officers.

Services members expect: Whether its alfalfa (over 70 varieties), any number of clovers or sudangrasses, Cal/West produces and markets a full line of forage seed. The company's major research efforts center on the development and production of proprietary alfalfa varieties for marketing to customers throughout the world. Each product has been developed or adapted to fit the specific geographic needs of farmers. Research and marketing efforts are freestanding programs independent of any

partnership or joint ventures. The research objective is to remain committed to meeting customer needs for improved germplasm and to continue positioning for future growth. Aggressive, cutting-edge breeding programs are focused on developing varieties that have the genetic potential to maximize farm profitability. Investment in biotechnology research will position Cal/West Seeds to develop transgenic varieties with enhancements in yield, quality, pest resistance and herbicide resistance.

How does the co-op operate? It markets products throughout the world via seed companies that sell directly to farmers. Cal/West's products are sold in nearly every state and around the globe, to customers who understand, appreciate and demand the highest standards of seed quality. The marketing rights for proprietary products developed by Cal/West research are licensed to companies that sell them under their own brand name within their marketing region. Publicly developed varieties are sold to wholesale customers on a containerlot, trucklot or carlot basis. In addition, Cal/West provides contract production of varieties for customers around the world. Whatever the market. the goal remains the same: provide the very finest in seed quality, packaged with care and delivered according to each customer's exact specifications.

Where its facilities are located: California seed conditioning facilities are located in Artois, Galt, Tranquillity and Woodland, Calif. Two other conditioning facilities are located in Othello and Touchet. Wash. In addition to its seed conditioning facility, Woodland includes



and then supply the seed to customers



the cooperative's headquarters, research headquarters, an oil seed conditioning and storage plant, and a 21,400-ton bulk safflower elevator complex. The cooperative maintains an extensive greenhouse, trial grounds and office in West Salem. Wis. Cal/West's research and conditioning facilities are rated among the best in the forage seed industry.

A co-op fact: The success of Cal/West's quality control program rests on its ability to make everyone in the organization - from the grower and the agronomist, to the registered seed technologist - feel responsible for the quality of the seed shipped to customers. Grower-members maintain an ownership position in the cooperative. Quality means more to growers as they have an important stake in the success and reputation of the organization. To growers, producing quality seed in the field helps guarantee Cal/West's leadership role in the forage seed industry.

To learn more: Cal/West Seeds, P.O. Box 1428, Woodland, CA 95776; 530-666-3331; fax 530-666-5317; or www.calwestseeds.com.

Making its mark

Agri-Mark, New England's largest dairy cooperative, is building markets for producers

By Patrick Duffey

USDA Rural Development

here's a hard working Bantam rooster strutting around the New England dairy market these days, flapping and fluffing its brightly colored wings, and crowing with delight about the Cabot delicacies being introduced to new audiences along the East Coast and California.

The rooster personifies Agri-Mark Inc., a dairy marketing cooperative representing 1,500 dairy producers in New England and New York. In less than a decade, Agri-Mark has patiently and methodically stretched to build a value-added market that is beginning to pay dividends to its dairy farmer-owners as they try to carve out a living in a beleaguered industry. Agri-Mark is a cooperative that has done what many experts advise farmers to do: it purchased a popular consumer brand of food products, and is now marketing that brand to the hilt.

Agri-Mark handles 40 percent of New England's raw milk supplies. Thirty percent of that comes from New York state, where the cooperative's membership is growing the fastest. New York producers are attracted by the premium price paid for milk under the six-state Northeast Dairy Compact, the only over-order pricing mechanism of its type in the nation.

New England provides only 3 percent of the nation's milk supply vs. 16 percent from Wisconsin, the second largest milk-producing state. The Northeast is locked in by Canada to the north and the Atlantic Ocean to the east. The region's rocky terrain puts a damper

on the corn acreage needed to support larger dairy herds. Milk production is also curbed by a short growing season and wide temperature swings. Just outside New England, neighboring New York state and Pennsylvania are major dairy-producing states.

Although some 300- to 500-cow herds exist here, the Northeast herd size averages 75 milking cows. By comparison, 1,000-cow herds are common in California, the country's leading milkproducing state. In 1983, Agri-Mark's 4,500 members provided 2.8 billion pounds of milk, or about 40 percent of the New England supply. Today, it takes only 1,500 Agri-Mark members to provide 2.3 billion pounds of the total 3 billion it markets annually. The average member produced 1.54 million pounds in 1999. Extra volume comes from milk Agri-Mark markets for other cooperatives.

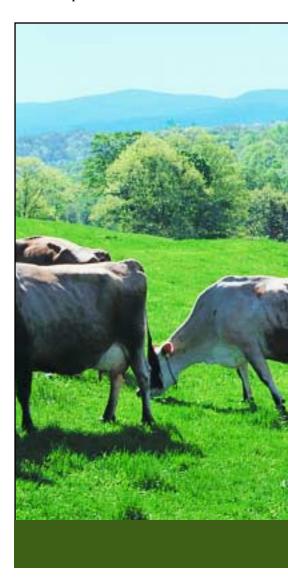
While small compared to its competitors, Agri-Mark is the largest New England-based dairy cooperative. It has 500 employees and is headquartered on Milk Street in Methuen, Mass., just outside Boston, a major destination for many of its products.

Birth of Cabot

The Northeast was the site of the nation's first dairy cooperative in 1807 at Goshen, Conn., when James Madison was serving as president. The national population was only 7 million, less than today's combined population of Massachusetts and Connecticut.

For perspective, in 1919, Cabot Creamery's 94 Vermont farmers invested \$3,700 on the basis of \$5 per cow, plus one cord of wood each to fire the boiler in the building that became the home of the new cooperative. Cabot's early forte was the quality butter it produced for nearby neighbors. It added a cheesemaker in 1930 and began making Vermont Cheddar.

The 1920s and 1930s marked a mass population migration from rural areas to the cities of the Northeast, so Cabot moved its products to meet them. In



time, it began marketing milk to packagers across southern New England and manufacturing butter, Cheddar and cottage cheese.

By 1990, Cabot had built a \$30 million business based on a volume of 330 million pounds of milk. But two years later, the small Vermont dairy cooperative of 400 members was losing money. Although it was producing high-quality dairy products, its corporate and membership size could not adequately support the brand. A decade earlier, participation in the U.S. Department of Agriculture's whole-herd-buyout program was heavier in the Northeast than any other region of the country due to low prices, heavy oversupply of milk and the demand among developers for farmland. Between 1985 and 1999, dairy farm numbers dropped more than 40 percent.

Merger with Agri-Mark

Although Agri-Mark is a youngster in the market, its origins stretch back to the New England Milk Producers Association (NEMPA) formed in 1917. Like Cabot, it had been adapting to a changing consumer marketplace for decades.

Agri-Mark was formed in 1980 by the acquisition of the business and assets of Yankee Milk Producers and the acquisition of H.P. Hood processing plants, which were then leased back to Hood, then a wholly owned subsidiary of Agway.

Fluid milk packager Suiza replaced H.P. Hood, Agri-Mark's former jointventure partner during the 1980s, as the new major processor in New England. In 1989, the changing environment prompted Agri-Mark to withdraw from its venture with Hood and caused the

cooperative to take a hard look at itself. Cabot Creamery was doing the same.

In 1992, Cabot merged with Agri-Mark to gain marketing expertise and financial strength. At the time, about 10 percent of the milk supply was feeding the Cabot brand, compared with nearly 30 percent today. For Agri-Mark, the merger was an opportunity to couple Cabot's retail brands with Agri-Mark's wholesale operations, build more valueadded business, and increase profits for dairy farmer-members.

Agri-Mark's wholesale milk business, which supplies 75 customers, and its reputation as one of the leading butter and nonfat dry milk manufacturers, proved a natural link with Cabot's retail brand business of Cheddar cheese and butter. Promotions for the Cabot brand now play up its farmer-owned roots. Cabot



Agri-Mark and Cabot Creamery joined forces in 1992 so the cooperative could build more value-added business and put more money back into the pockets of family dairy farmers. Photo courtesy Agri-Mark

Cheddar has also won first place ratings in two national contests in the past two years.

Today, Cabot contributes \$150 million to Agri-Mark's \$575 million in annual sales. Agri-Mark members fell in love with the idea owning the Cabot consumer brand. The combined cooperative now operates three milk processing facilities, two in Vermont and one in Massachusetts from which it produces a wide array of products, most notably its traditional white Cheddar cheese.

The white Cheddar is extremely popular throughout the Northeast – especially when it carries the "Vermont" title in its name. Last year, though, the cooperative ran into a snag selling the white Cheddar in the Southeast. Customers were more accustomed to seeing a yellow-colored Cheddar, so the natural annatto coloring used to make cheeses yellow was added.

Other new products introduced after the Cabot-Agri-Mark merger include Cheddar cheese slices, flavored cheeses and a refrigerated macaroni and cheese product. The New York/New Jersey market was targeted for expanding the Cabot brand. And the co-op's cheese plants are operating near capacity.

Balancing the market

At West Springfield, Mass., Agri-Mark owns New England's only balancing plant, the largest quality control lab and the only large butter manufacturing plant in the region. The plant converts surplus milk – milk not needed to fill customer demands for other products – into condensed blends of milk and cream, used by the ice cream industry and nonfat milk powder for the bakery and food industries.

To take full advantage of the Cabot acquisition, Agri-Mark began modernizing facilities to support the expanded demand for its branded products. In 1994, it purchased a plant at Middlebury, Vt., and converted it to Cheddar cheese production. Last year, it added a 54,000-square-foot warehouse at Middlebury to store and cool up to 12 million pounds of Cheddar before the 640-pound blocks are shipped to Cabot's updated cut-and-wrap operation. As a



The Cabot brand of dairy foods is among the most popular in the Northeast, and accounts for about \$150 million of Agri-Mark's \$575 million in annual sales. Photo courtesy Agri-Mark

result of these capital investments, the Cabot facilities are a major New England tourist destination, attracting 50,000 visitors a year.

It takes 10 pounds (or 10 pints) of milk to make one pound of cheese. That leaves nine pounds of whey, rich in protein, lactose (milk sugar) and other nutrients. This fall, Agri-Mark will open a \$19 million whey protein processing plant at Middlebury to extract further profits from the whey. The facility was needed because whey processors in Vermont and neighboring states closed. In addition, Cabot-branded product sales have tripled. Specifically, the new equipment will more efficiently trap lactoferin, an iron-binding whey protein Agri-Mark has been marketing for the past two years.

When USDA changed its rules in 1997 to allow yogurt as a protein component in school lunches, Agri-Mark wasted no time in responding. Sales of Cabot-branded yogurt increased nearly 25 percent since the program began.

Communicating with members

With three successful years leading up to 1999, Agri-Mark built up profits of \$16 million. But like other dairy manufacturers, it got caught with high butter inventory values after milk prices hit a record in 1998. Fiscal 1998 sales reached \$575 million, from which the coopera-

tive generated a record \$7.8 million in profits and returned \$3.7 million to members in market premiums. However, the cooperative lost \$4 million in fiscal 1999 due to poor markets. But Agri-Mark continues to invest in the future.

The cooperative invested \$2 million to update to a faster, more efficient mainframe computer system and expanded internal communications at all facilities. New software was added for production, sales and inventory control, and improved member and hauler payroll systems – much of it aimed at implementing federal milk marketing order changes and to prepare for the new millennium.

Agri-Mark follows the more conventional tenets of cooperatives. There are no outside directors. For specialized expertise, the board turns to consultants. It has a 15-member board of directors, all of them dairy farmers. Each of its 15 regions has between 85 and 100 member-farms. There is one voting delegate for every 15 member-farms. Carl Peterson from Delanson, N.Y., is in his eighth term as Agri-Mark's chairman.

The cooperative believes its success stems in part from an educated membership. There are informational meetings, a newsletter published nine times a year, a letter sent with twice-monthly milk checks, a 1-800 number voice messaging service members can call

every Friday for price updates, and a website updated weekly. To broaden the horizons of employees, members and guests, Agri-Mark invites other cooperative or industry leaders to speak at its annual meeting.

Last year's speaker was Don Storhoff, chief executive officer of Foremost Farms USA, a Wisconsinbased diversified dairy cooperative. Johnston said the exchange "bridged regional differences and increased understanding." Gary Hanmann, CEO for DFA, appeared earlier. All three CEOs also serve on the board of the National Milk Producers Federation, the trade association for most of the nation's dairy cooperatives.

Northeast Compact supporters

Both Agri-Mark and neighboring St. Albans Cooperative Creamery in Vermont were strong proponents of the compact when legislation was passed in individual states and later by Congress in 1997. The compact was extended last year by Congress until September 30, 2001. It regulates Class I fluid milk only. Participating producers have earned \$100 million since the compact began. To Agri-Mark members, that meant \$30 million, or about \$20,000 per member.

Paul Johnston has been Agri-Mark's first and only chief executive officer and president for the past 24 years. He says the compact is "quite an accomplishment. It continues to have the support of consumers who consider it beneficial to keep farmers in business in this area and less subject to the whims of the federal government or milk production in other parts of the country. That support is critical to the compact's success and future, a factor ignored or downplayed by those who would like to see the compact eliminated."

Compact regulations kick in whenever Class I prices decline below a predetermined level. The higher price has been a boon to many producers, who have suffered from a sharp decline in basic milk prices throughout the Northeast.

Looking to the future

Looking ahead, the cooperative conducts a Young Cooperator (YC) program for members age 18 to 40. They must either be members or work on a member's farm. They get acquainted with how their cooperative operates, its structure and its objectives to help them better understand its actions. They are chosen from each of the cooperative's 15 regions and mirror the Agri-Mark board in all respects. They prepare an annual budget and present it to the senior board for approval. Two-day training seminars are conducted for new YC members and officers in conjunction with the Agri-Mark board meeting. Chairman Peterson, other directors, CEO Johnston and his staff are involved. On occasion, outside speakers also appear.

Two YC officers attend the cooperative's board meeting each month to see how it operates and how it develops policies. The YC annual meeting is conducted in conjunction with Agri-Mark's annual meeting.



Cabot butter rolls through a processing plant. The co-op's cheese plant in New England is a major tourist attraction, drawing 50,000 visitors per year.

Through an essay contest and interviews, several YC members are selected to attend the annual National Institute on Cooperative Education. As proof of how effective the program is in building future cooperative leaders, eight of the present 15 Agri-Mark directors were once YC members.

Meanwhile, the cooperative is always searching for ways to develop new markets. It quit selling products to the Commodity Credit Corp. a decade ago. Now

the search is on for international markets, especially for nonfat dry milk. The cooperative's award-winning Cabot Cheddar cheese was exported to England, where Cheddar cheese was first invented. While it was popular, import restrictions and tariffs added to the price and effectively blocked any sizeable export program.

That reality squared with CEO Johnston's observations to members last year. "The rosy prospects accompanying the 1996 Freedom to Farm Act (Farm Bill) were based on predictions that world trade talks would open up new markets for U.S. agricultural products, including dairy. For the most part, this has not happened and it will be a long time before the opening of world markets will create the 'utopian' level playing field. But," he cautioned, "this does not mean that we should abandon efforts to open up new and existing markets."

So, where does the future lie for a small dairy marketing cooperative that operates in a highly competitive industry where the four largest U.S.

> fluid milk packagers control 75 percent of the New England market? Speaking at the cooperative's 20th anniversary meeting last year, Chairman Peterson found the challenging answer right in his own back yard.

"Our best option to address the new millennium is in more fully using the opportunities given to farmers by the Capper-Volstead Act enacted more than 60 years ago. It enables our farmers to join in cooperatives like Agri-Mark to achieve goals that are not possible individually. Unfortu-

nately, there are many farmers who are unwilling to work cooperatively with their neighbors. And it is unfortunate that our achievements are of less a magnitude because of that.

"We're focusing on adding value to our farmers' milk, whether it is on the wholesale or retail end of the business. If farmers want long-term profitability, cooperatives like Agri-Mark have to capture more of the consumer's dollar in the marketplace." ■



Wally Beyer

Retired Administrator USDA Rural Development Rural Utilities Service

At the end of 1999, North Dakota native and life-long cooperative leader Wally Beyer announced he was retiring from his post as administrator of the Rural Utilities Service (RUS) of USDA Rural Development. He was the first rural electric cooperative borrower-manager to head up the system. But after six years of service, Beyer and his wife, Patsy, decided it was time to head back home to the Northern Plains to begin a new chapter in their lives.

Beyer, 69, stays active with personal and business trips, work on statewide political campaigns, volunteer work, and family activities in North Dakota. It's hard to catch him at home in Bismarck, but we did, and on the following pages he discusses the state of rural electric coops in the United States.

RC: How did you begin your career in the cooperative business world?

Beyer: It's all a matter of timing. I began my career with a consulting engineering firm. I worked with rural electric cooperative (REC) associations and municipal electrical systems throughout the Upper Midwest, until Verendrye Electric Cooperative needed help.

Verendrye Electric — the REC that served our family's farm in central North Dakota — was advertising for two people. They needed a member services manager and an engineer. I wanted to work for the rural electric co-op because I wanted to serve my community, serve the people in North Dakota, in some capacity.

Three years after I joined the local REC as an engineer, the board let the existing manager go and hired me. I had no idea I was going to work in management when I joined the cooperative in 1963. But I stayed for 30 years before I was named administrator of the Rural Electrification Administration (now the Rural Utilities Service).

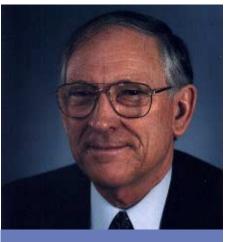
How did you go from being an REC manager to RUS administrator?

North Dakota is a small state, and everyone knows everyone. There's only about 640,000 of us here. I was involved with state rural water and rural development activities and with Democratic Party politics. With a change in the administration in Washington, D.C., I guess my name kept popping up. I got a call asking if I'd be interested in working as administrator of the Rural Electrification Administration. Patsy and I talked about it, and we decided it was a once-in-a-lifetime opportunity to participate in some needed and far-reaching changes in government.

What observations and changes did you make during your tenure there?

One of my first days in the office, three women came in with these shopping carts full of loan documents that I needed to sign — a two-hour session with their help! Then came my secretary, who wanted me to sign what I called a "paper-clip purchase order." I decided then that we needed to take care of business differently. I started to talk to my people to find out what they thought about the system in place and how it could be changed to make RUS more "user-friendly" and agency-efficient.

We implemented a major change in



Wally Beyer

the agency delegation of authority. For example, now program people can sign loan documents up to \$50 million after a due diligence process and committee reviews. I think that sent a good message to RUS employees that "I trust you." The benchmark of all human relationships is trust.

As a user of the system for 30 years and somewhat familiar with how REA worked, being suddenly responsible as administrator to implement changes to help the agency streamline its operations was an interesting process. Congressional reorganization called for major changes at the Department of Agriculture. USDA has gone from 43 agencies down to 29, cutting the work force by some 11,000 full-time employees, and is in the process of closing 1,100 field offices. This will save taxpayers \$3.6 billion. In RUS, we were able to reduce the regulation and oversight by 40 percent.

What advice would you have for leaders in such positions?

Delegate, delegate, delegate! Trust people. Provide constant communications! I was constantly counseling my staff to ensure that the agency was providing timely, reliable assistance to rural electric, telecommunications and water/wastewater systems.

What is important to safeguarding our nation's rural electric infrastructure?

Rural electrification is one of the

greatest engineering, financial and human endeavors of the American experience. Critical in the future will be to maintain an adequate supply of capital to finance growth and technology changes.

RECs have a network of generating and transmission (G&T) systems that are owned and controlled by the member-owners. These G&Ts are invaluable in providing the rural electric energy delivery system with reliable, reasonably priced energy into the 21st century. These G&T systems are energy treasures for rural America.

I'm proud to say that America's REC systems are in very good shape. As America's electric systems enter the future of electric restructuring, open access and customer choice, they must stay together and work together for strength in leveraging. RECs' collective strength in working in the democratic process at every level of our democratic society is critical to continued success.

What threats lie on the horizon for rural America's electric power co-ops?

The rural electric infrastructure sustains and develops quality of life in rural America. Available financing at reasonable interest rates for rural infrastructure

is a critical issue. In fact, in the beginning in the mid-1930s, securing financing to serve high-cost rural areas was the principal issue. There would not have been an electric power infrastructure in rural America without the investments made by the federal government. Availability of reasonably priced capital into the future of the "infrastructure revolution" is probably the most critical issue we face, with our aging systems and the need to reinvest in these changing times.

These last few years have been the "golden age of financing" for electric and telecommunications cooperatives. Cooperatives today have good ratings on Wall Street. Federal credit support necessary to leverage private investments for a rural infrastructure will remain critical into the future

Restructuring of the electric and telecommunications systems are also of grave concern. There will always be high costs to serve areas in rural America, requiring the federal partnership.

The administration's support for the REC family is demonstrated by a budget that proposed more than \$1 billion in loans and loan guarantees for our electric program. That federal investment was also used in new ways to support and

leverage private capital.

For every federal dollar RUS contributes to rural electric infrastructure, three additional private-sector dollars are leveraged. On average, over the past five years, the public/private partnership has resulted in some \$4 billion invested annually in rural electric infrastructure — one-third of this investment being government loans and loan guarantees. The federal program is now the minority lender.

President Clinton, Vice President Gore and Secretary Glickman understand the importance of quality infrastructure in the rural American economy. A strong nation is built on an abundant supply of food and energy. Investments in basic infrastructure, transportation, energy, telecommunications, water, education and health care are critical to modern societies.

Rural America must be connected to the information superhighway. Private investors are not going to put the money into high-cost rural areas. Public support will be critical to rural systems to make investments so that rural America is connected with quality, high-tech infrastructure.

While we are proud of our accom-



plishments, we know that our work is not done. Rural systems are simply more expensive to operate and maintain. Plant improvements remain expensive. Capital investment will always be more expensive on a per-consumer basis for rural systems than for high-density urban areas. As we look to the future, we know that the public/private partnership must continue. In a competitive marketplace, the RUS credit support and leveraging of critical investment capital will be more valuable than ever.

What advice would you have for helping rural areas compete in a global marketplace?

Certainly we live in rapidly changing times — the information age, global trade and commerce, E-commerce, deregulation and restructuring of basic infrastructures and industries. The forces of technology are driving national and international competition for the consumer dollar. Legislative and social actions are providing consumer flexibility and purchasing options. Everyone is demanding more for less.

For rural America to compete in this global marketplace, we need to develop niche markets, diversify our economies and create new wealth at every opportunity.

Basic to all growth creating new wealth and new jobs is an abundant supply of reasonably priced, reliable energy and state-of-the-art telecommunications that erases time and space. Rural America must be connected to the information superhighway. RECs and RTCs must provide active local leadership in new wealth and job creation.

We need to embrace change, work together, stay together to manage the systems of the future!

It seems the Dakotas have especially embraced new-generation cooperative development. What is it about the spirit of Dakotans and the economic realities of that region that make the people more willing to consider so many different and creative possibilities?

I think Dakotans are driven by need. When there's a need, people respond, they're willing to try things, willing to invest

During the 1980s, we lost 25 percent of our farm families in my home county in North Dakota. Out of that experience came a need to grow new wealth and take advantage of new opportunities. A lot of people are struggling out here again, and that breeds innovations.

North Dakotans have always been willing to try alternatives in creating new wealth. Value-added cooperative processing activities have been ongoing for a couple of decades — sugar-beet plants, pasta plants, slaughter plants, potato processing, to name a few. From the producers to the supermarket, adding value benefits the local folks on the land.

Some people question the ongoing need for USDA's Rural Utilities Service. Based on your experiences, how important is the service?

The rural America local/federal partnership is the envy of the world. People around the globe are studying this partnership model for infrastructure development.

Rural America would be a very different place without the USDA/RUS federal/local partnership. Together, it provides the necessary infrastructure investment capital needed to serve rural areas. A safe, affordable, modern utility infrastructure is a key component of economic competitiveness and a fundamental building block of economic development.

The 65-year-old federal/local partnership must continue providing critical credit support and direct loan funds for America's rural systems serving in high-cost rural areas. All Americans have benefited from this partnership between the federal government and the rural electric and telecommunications families.

The needs of rural electric and telecommunications systems are very different today from what they were in 1935. Simply put, RUS is not your father's REA!

RUS must continue accommodating system efficiency activities, mergers, consolidations and aggregation of electric plants. RUS is working with local cooperatives, providing assistance as they prepare for open access, competition and customer choice. The reformed RUS has become a partner to local activities, not a parent and certainly not a policeman.

Local people must continue to determine the value of RUS and the role they want the federal government to play to benefit rural America's future. In his book "Mister Speaker," Tip O'Neill stressed that all politics are local. From my rural experience, I'm convinced that "all development is local." State and federal governments can and should assist in basic infrastructure and rural development, particularly in high-cost rural areas. However, local folks must decide what's best for them in providing quality infrastructure, new wealth and job creation. RUS needed to move from the "one size fits all" policy to recognizing regional and local differences in rural America.

What new roles do you believe rural utility cooperatives should take on?

Many local RECs are very active in local development activities, creating new wealth and much-needed jobs in their local communities. Many rural development programs are available from USDA's rural development mission area. At every opportunity, I have encouraged, and continue to encourage, local RECs to actively involve their cooperative organizations in local development activities. But much more needs to be done.

Even though you're officially retired from USDA, no one ever really retires. What projects are you planning to remain involved in?

Patsy's parents (Grandpa is 90 years young and Grandma is 85) and my mother (who's 88) are still around and need our help from time to time. And we have three children — in Minnesota, North Dakota and Colorado — whom we like to visit.

The richest blessing in life is the gift of contribution to others. Our family has been richly blessed with many opportunities to contribute. We love the Great Plains and are thankful for the opportunity to serve rural America.



Sunkist cheers opening of China

The first shipment of California oranges to Shanghai and Beijing in 20 years were sent to China this spring after the Chinese government issued long-awaited rules opening its market to U.S. citrus fruit. The rules mark the last step in implementing an agreement reached between the United States and China almost a year ago that allowed citrus, meat and wheat into that country, a major step toward cementing U.S.-China trade relations.

Sunkist Growers, a cooperative of 6,500 growers in California and Arizona, estimated the deal will mean almost \$500 million in new business for its growers over the next five years. "China has all the potential to be a huge market for us, as citrus is very popular with Chinese consumers," said Vincent Lupinacci, the cooperative's president.

U.S. Agriculture Secretary Dan Glickman and U.S. Trade Representative Charlene Barshefsky hailed the action in a joint statement, saying it gives U.S. farmers and ranchers a "tremendous opportunity to significantly increase export sales to the world's most populous country."

It was the first time California growers shipped to China since 1980, when their fruit was quarantined because of Mediterranean fruit fly infestations. It's welcome news for California citrus growers, who have struggled with lower prices and increased competition from imports in recent years.

USDA, NFU spur Michigan co-ops

The Michigan state office of USDA Rural Development has signed an agreement to work with the National Farmers Union (NFU) and Michigan



USDA Secretary Dan Glickman hails the first shipment of California oranges to China in 20 years. At left is Bill Lyons, secretary of the California Department of Food and Agriculture. At right are Charlene Barshefsky, ambassador/U.S. trade representative, and Sunkist President Vince Lupinacci. Photo courtesy Sunkist

Farmers Union (MFU) to promote and use programs aimed at starting new agricultural cooperatives and developing rural businesses.

"By working cooperatively with USDA Rural Development state and area offices, we are further equipped to assist producer groups in the preparation of various projects involving agricultural cooperatives, value-added processing, rural business development, and in launching a variety of innovative co-ops," says NFU President Leland Swenson.

"These agreements unite the shared missions of our organizations to serve rural America and help family farmers and rural citizens succeed through the promotion of economic and cooperative development, particularly the formation of value-added processing and marketing cooperatives," adds Carl McIlvain, MFU president.

lowalegg co-op, Nuzum awarded

The Iowa Area Development Group (IADG), West Des Moines, awarded the "Outstanding Business of the Year Venture Award" to Southwest Iowa Egg Cooperative, Massena, Iowa. The IADG is the economic development office for Iowa's member-owned rural and municipal electric utilities. Its Venture Award program honors businesses that contribute to Iowa's economic base through investment, expansion and job creation. The cooperative began operations in 1999 and expects to produce 14 million dozen eggs annually.

Meanwhile, Bruce Nuzum, IADG vice president of finance, was recently named the National Rural Electric Development Association (NREDA) "Economic Developer of the Year." His role is to assist member rural electric cooperatives, municipalities and rural communities with USDA development

loan and grant applications. He also strategically assembles many players to work as a team in securing funding for rural development projects. Those players include federal, state, local and private funding sources. Bruce's hard work and accomplishments with USDA emphasize how important that organization and its programs are to revitalize rural America.

Over the past 15 years, Iowa has realized over \$2.2 billion in capital investment and 26,000 new jobs through over 800 IADG projects. According to national statistics, Iowa's electric cooperatives now lead their counterparts throughout the nation in average commercial and industrial monthly electric utilization. The IADG includes Iowa's rural electric cooperatives, Iowa Farm Bureau Federation, Iowa Department of Economic Development, and USDA Rural Development.

Spring Wheat Bakers loads first train

Earlier this year, Spring Wheat Bakers cooperative shipped its first 26-car unit train of identity- preserved wheat from an AGP elevator in Valley City, N.D., bound for a Cargill flour mill in Chattanooga, Tenn. Flour milled from this wheat was then trucked to a Spring Wheat Bakers plant outside Atlanta, Ga., to make partially baked frozen bread and roll products. Last year the cooperative



announced the selection of McDonough, Ga. for its first production facility. Feasibility studies indicated placement of the plant there would give Northern Plains farmer's superior distribution logistics to regional customers.

Mike Hardy, director of grain operations for Spring Wheat Bakers, said about 24 farmer members provided grain for the first train, averaging about 3,600 bushels each. "We bid it out to shareholders on a first-come, firstserved basis and limited it so that more people could be involved," Hardy said. "Some people came quite a ways out of their trade area just to be involved in this first identity-preserved wheat shipment." The co-op has since shipped grain out of five other locations to Chattanooga while developing additional spring wheat shipments for domestic and export markets. All grain shipped is identity preserved.

Dakota ranchers opening feedlots

A new group of cattle feeders — North Dakota Barley Feeders — is asking North Dakotans to invest in cattle that can be custom-fed in existing feedlots around the state.

The Agricultural Products Utilization Commission gave \$12,500 to the project in 1999. The North Dakota Barley Council kicked in \$5,000 and another \$2,500 each came from the Carrington, N.D., Development Corp. and the Carrington Jobs Development Authority. The program, structured as a limited liability limited partnership, asked a minimum of \$5,000 per person with a goal of \$2 million. The group expects to borrow another \$4 million to buy and feed out 8,000 to 10,000 cattle annually. Initially, the group may feed cattle in existing larger feedlots in the region, including Butts Feedlot of Carrington; Polries of Sykeston, N.D.; Larson in Carrington; and Amundson in Jamestown, N.D.

lowa pork producers endorse co-op

Delegates to the Iowa Pork Producers Association annual meeting endorsed the formation of a producerowned cooperative that would help hog producers capture more of the consumer pork dollar. Heavy financial losses suffered by Iowa hog producers last year led to the formation of a task force to create a cooperative enterprise. The task force launched Iowa Premium Pork Co. as an entity separate from the producers association.

5 in Co-op Hall of Fame

Five people earned the highest honors when they were inducted into the Cooperative Hall of Fame this spring in Washington, D.C. The inductees were (from left) Edgar Callahan, Dave and Erma Angevine, Richard Magnuson and Glenn Webb. Established in 1974 by the National Cooperative Business Association (NCBA), the Hall honors distinguished individuals whose contributions to cooperatives have been genuinely heroic.

Callahan is president and CEO of Patelco Credit Union, San Francisco. He also served as chairman of the National Credit Union Association in the early 1980s. The Angevines, from Virginia, began their careers at the Consumers Co-op Association, now Farmland Industries. They then worked for the Cooperative League of the USA, now NCBA. Their contributions include service to the National Rural Electric Cooperative Association, the Farmers Cooperative Service and the start-up of a worldwide volunteer program for co-op development. Magnuson, an attorney at



Doherty, Rumble & Butler in St. Paul, Minn., has provided legal assistance to cooperatives for more than four decades. He is only the second attorney to be named to the Hall. A Tunnell, Ill., farmer, Webb is chairman and president of GROWMARK. He also has been a leader at CF Industries, CoBank and the Federal Farm Credit Banks Funding Corporation.

Photo courtesy NCFC

Corn co-op rebounds, but no dividends

The Golden Growers Cooperative, Fargo, N.D. is gaining strength despite a \$5 million loss this past fiscal year, Board Chairman Pat Benedict reported at its annual meeting. "If there's good news about those losses, it's that (they) are behind us," he said.

His faith did not extend to some growers who had held out hope the cooperative might pay out small dividends this year. But Benedict said continued losses at the ProGold corn processing plant in Wahpeton, in which Golden Growers is a partner, prevented any return to producers. "No, you will not receive a dividend check this year," Benedict told growers. "Believe me, my dearest wish would be to tell you otherwise."

In its fiscal year ending in August 1998, Golden Growers recorded losses of \$5.1 million, down considerably from the \$11.7 million lost in 1997. As in 1997, a large part of the loss was attributed to Golden Growers' investment in ProGold. The \$261 million corn sweetener plant opened nearly three years ago as a partnership among Golden Growers, American Crystal Sugar Co. and Minn-Dak Farmers Cooperative.

Golden Growers owns 49 percent of the plant. ProGold has not made a profit since opening, and officials have blamed a slump in the high-fructose corn syrup market. The partners decided last year to lease the plant to Cargill for 10 years, believing the arrangement with the large corporation would reduce losses.

Brian Ingulsrud, assistant treasurer, said the deal paid off. Golden Growers' share of losses at the plant fell from \$14.8 million in 1997 to \$4.3 million last year. He said the cooperative is confident it will not have lost money on the ProGold plant in fiscal 1999. However, he said the 1,900 members of Golden Growers should not expect significant profits, either. Mark Dillon, the cooperative's executive vice president, understands some members are frustrated at the losses. But he said patience will eventually pay off.

Prairie Farms sales top \$1 billion

For the first time in its history, sales at Prairie Farms Dairy Inc., Carlinville, Ill., topped \$1 billion, reports Leonard J. Southwell, executive vice president and chief executive officer. Southwell reported that 1999 total earnings for the cooperative, which were slightly over year-earlier earnings, were \$50.2 million. Sales totaled \$1.045 billion.

"Of course, this does not include the various joint ventures which we are involved in," Southwell said. Earnings and sales were at all-time highs in 1999, and the board of directors voted to distribute 60 percent of the 1999 patronage refunds in cash. This marks the 16th year the cooperative pays members cash for 50 percent of more of its patronage income. Total patronage paid to members for the past five years is \$110.4 million.

Southwell reported that Prairie Farms is debt free, financing all operations from earnings. "It is highly significant that a cooperative engaged in fluid milk distribution is able to essentially operate from earnings," says Randall Torgerson, deputy administrator for the Rural Business-Cooperative Service of USDA Rural Development. "Further, this cooperative returns retained equity to members on a seven-year basis — a very quick turnaround."

TVG regaining profitability

With his plans firmly in place and a new software system halfway there, Tri Valley Growers is on pace to return to profitability in 2001, Chief Executive Officer Jeff Shaw says. The cooperative is addressing the internal problems and the inventory buildup that led to losses of \$165.2 million during the past two years. Shaw says the more doubters question Tri Valley's financial stability, the more determined he gets about turning the cooperative around.

"There's not a day when I come to work when somebody doesn't call and say, 'I hear you're going out of business,"' Shaw said. By rebuilding the company, he thinks he can convert the naysayers.

Shaw said the co-op has rebuilt the financial and marketing departments, secured new loans, and launched a sales and operating plan. It is halfway into installing its new computer software program. By reducing inventory through big sell-offs, the company eliminated \$100 million in debt, he said. "All that cash was being stored in

our warehouses." At one TVG plant, \$8.6 million in cost savings were realized.

Associated gins one-millionth bale

Associated Cotton Growers, a 26year-old co-op north of Crosbyton, Texas, has ginned its one-millionth bale. "I think it's quite an accomplishment," says Donny Wheeless, assistant manager for the past 14 years. He believes customer loyalty contributed to the gin's accomplishment.

Manager Randy Arnold agrees. "We have lots of long-term customers who are here with us through the thick and the thin," says Arnold, who has headed the co-op for five years.

The record-setting bale was produced on the C.R. Marsh farm. Marsh, a farmer for about 30 years, was informed of the event after it happened. The co-op, which has ginned an average of 53,000 bales per year the last five years, was only 1,300 bales shy of the record when its 1998 season ended.

Termed a "super-gin," ACG began in 1973 as Crosbyton, Wake and

McAdoo co-op gins consolidated to enhance the grower's ability to make a profit by increasing volume. This mission was enhanced by the co-op working with the Plains Cotton Cooperative Association, Lubbock, Texas, to create its own marketing pool and to test what later became the common practice of moduling cotton to separate the harvesting and ginning functions. When ACG opened, it was the largest cotton gin in the world. Still one of the largest gins on the South Plains, ACG has the ability to gin up to a thousand bales per day.

Corry new Amalgamated CEO

After the announcement that Amalgamated Sugar Co. Chief Executive Officer Allan M. Lipman would step down, it was announced that Larry Corry, president of Amalgamated Sugar, was named CEO of Amalgamated and president of the Snake River Sugar Cooperative, positions previously held by Lipman.

Corry joined Amalgamated in 1968



Larry Corry, president of Amalgamated Sugar, and now also its CEO as well as president of Snake River Sugar Cooperative.

and served in various positions. The coop owns Amalgamated. Lipman was part of Idaho's sugar beet industry for 25 years. Under his leadership, Amalgamated became the second-largest sugar beet processor in

the nation. It won the Arthur Anderson 1998 international best practices award for "unleashing the power of technology."

"Allan's leadership has made an extraordinary impact on Amalgamated and on the nation's sugar policy," Terry Ketterling, Amalgamated board chair, said at Snake River's annual meeting. Amalgamated supplies almost 14 percent of the nation's beet sugar production.



This new hog research facility has been opened by Cooperative Research Farms in Iowa to conduct trials to breed healthier livestock. Photo courtesy CRF

CRF opens new hog research facility

Cooperative Research Farms recently completed a new state-of-the-art 1,000-head swine research nursery. The facility – built at the Land O'Lakes Answer Farm near Fort Dodge, Iowa – is designed to conduct trials on high-health-status pigs and provide CRF membership with proprietary swine starter nutritional and management-related information.

CRF is an innovative, multinational organization of eight regional cooperatives from the United States, Canada, and France. CRF members have worked together for more than 45 years conducting livestock and poultry nutrition- and management-related research for the benefit of their farmer-owners. CRF's members are Agway, Syracuse, N.Y.; Co-op Atlantic, Moncton, New Brunswick, Canada; Cooperative FederÈe de Quebec, Montreal, Quebec, Canada; Federated Co-operatives Limited, Saskatoon, Saskatchewan, Canada; Land O'Lakes, St. Paul, Minn.; Southern States Cooperative, Richmond, Va.; Tennessee Farmers Cooperative, LaVergne, Tenn.; and UNCAA Division Productions Animales UCAAB, Chateau Thierry, France.

Farmland sells hog plant, introduces branded bread

Farmland Industries, Kansas City, Mo., the nation's largest farmer-owned cooperative, sold its Dubuque, Iowa, pork processing plant to Virginia-based Smithfield Foods, the world's largest hog producer and packer. Terms of the cash purchase were not disclosed. The plant was part of Farmland's refrigerated foods group, headed by Bill Fielding, who said the sale was "the first step in an overall plan to strengthen our pork operations. After a detailed analysis of the needs of our producer-owners, we have determined that, as a cooperative, our limited capital would be better spent on improvements and expansion at other Farmland facilities."

The deal will result in the elimination of 1,000 jobs when slaughter operations cease. Hog producers also must scramble because they no longer have a local buyer.

Meanwhile, Farmland is testing its transferability to grain-based products with the introduction of its own branded bread line. "Bread is the perfect item for us to see how the brand will work on new food products," said Ken Thomas, director of the co-op's grain processing division. "Think about what you eat with meat. Some type of bread is always involved. We're going to

leverage the brand recognition that Farmland has in another part of the supermarket. If marketing Farmlandbranded bread works, it well tell us a lot about the potential market power of the brand."

Farmland's bread venture is the result of a partnership with Gerard's, a Longmont, Colo., bakery owned by Mountain View Harvest Cooperative. The farmer-owned cooperative got into the bakery business to link its producers - mainly eastern Colorado wheat growers - to consumers.

Canadian, U.S. potato farmers work together

U.S. and Canadian potato growers have voted to create an alliance designed to help them survive an unsettled agriculture market and get the best possible prices for their product. Representatives from major production areas in the United States and Canada met recently in Boise and voted unanimously to unite.

"The main reason we all got together is that the contracts are just so low," said John Thompson, the communications director and acting president of the Potato Growers of Idaho. "Everybody is right at breakeven or just hanging in there," he said. "The average grower return right now is probably \$5.25 to \$5.75. We see all the increases with fuel and interest rates, seed prices were more this year. All that says it will cost more to produce potatoes in the next two years than it ever has." Thompson said the growers agreed to work together and share knowledge instead of competing and trying to undercut each other.

The Potato Marketing Association of North America, Potato Growers of Idaho bargaining associations, bargaining cooperatives, and state and provincial grower associations agreed to create a communications network and share information, help each other in contract negotiations, hold regular meetings and actively support the efforts of the Potato Marketing Association of North America. The organizations also agreed to have each growing

USDA co-op resources on the Web

Looking for quick information, rural economic development resources or details about how USDA can help cooperatives? Contact these Internet websites:

Homepage: http://www.rurdev.usda.gov/rbs/coops/csdir.htm

What we do: http://www.rurdev.usda.gov/rbs/coops/cswhat.htm

Organizational structure: http://www.rurdev.usda.gov/rbs/coops/csorg.htm

Special initiatives: http://www.rurdev.usda.gov/rbs/coops/csspec.htm

Rural Cooperative Development Grant Program: http://www.rurdev.usda.gov/rbs/coops/rcdg.htm

National Sheep Industry Improvement Center: http://www.rurdev.usda.gov/rbs/coops/cssheep.htm

Appropriate Technology Transfer for Rural Areas (ATTRA): http://www.rurdev.usda.gov/rbs/coops/attra.htm

Research on Rural Cooperative Opportunities and Problems via Cooperative Agreements: http://www.rurdev.usda.gov/rbs/coops/rrcop.htm

Publications: http://www.rurdev.usda.gov/rbs/pub/newpub.htm

Rural Cooperatives Magazine:

http://www.rurdev.usda.gov/rbs/pub/openmag.htm

Cooperative Information Reports:

http://www.rurdev.usda.gov/rbs/pub/cooprpts.htm

Research reports: http://www.rurdev.usda.gov/rbs/pub/research.htm

Service reports: http://www.rurdev.usda.gov/rbs/pub/service.htm

Miscellaneous reports: http://www.rurdev.usda.gov/rbs/pub/miscell.htm

Contact index for State Office Cooperative Specialists: http://www.rurdev.usda.gov/rbs/coops/cscontac.htm

There is a large selection of USDA Rural Business-Cooperative Service co-op information, research and service reports.

"Direct Marketing Today: Challenges and Opportunities" is now available on the Web in PDF format at http://www.ams.usda.gov/directmarketing/ DirectMar2.pdf. This publication, in cooperation with Cornell University Extension, discusses the results of focus groups (with producers and facilitators) about direct marketing hosted by USDA. A print publication will be available soon and can be ordered in advance from Velma Lakins at velma.lakins@usda.gov

"Small Farmer Success Story" are four bulletins that describe a project through which a group of limited-resource growers in the northern Florida area formed a co-op to market fresh produce to local school districts. The bulletins outline the experiences of the New North Florida Cooperative, now in its third school year of operation. They are available in PDF format at http://www.ams.usda.gov/tmd/mta/publications.htm

region determine its production costs and the impact increased oil prices have on production expenses, then meet and evaluate the information. It will be used when negotiating the 2001 potato processing contracts. Organizations involved in the agreement are Potato Growers of Alberta, Potato Growers of Washington, Malheur Potato Bargaining Association, Red River Valley Potato Growers Association and Wisconsin Potato and Vegetable Growers, among others.

Judge says permit properly granted to Golden Oval

District Court Judge Artis I. Reis ruled that a state construction permit was properly granted to Golden Oval Eggs' new laying and processing facility in Winnebago County, Iowa, the Renville, Minn., company announced. A citizen group had filed a lawsuit in August 1999 seeking to block the egg facility. It challenged the permit grant-

ed by the Iowa Department of Natural Resources (DNR). The judge dismissed the case and assessed costs to the citizens group, Citizens Against Golden Oval. Cooperative officials said construction continues at the Winnebago site. The operation eventually will use 7 million chickens, making it the largest animal confinement facility in the state. Golden Oval is a farmerowned cooperative. Its production site in Renville has about 2 million hens and produces about 55 million pounds of eggs annually.

Co-op communicator Reuwee dies

Dan Reuwee, 56, director of cooperative communications and media relations at Dairy Farmers of America (DFA), Kansas City, Mo., died April 2 due to complications after a recent surgery.

Reuwee earned a Bronze Star while serving in the Army in Vietnam. In 1969, he earned a master's degree



Dan Reuwee

State University. Before the formation of DFA, Reuwee was director of communications for Mid-America Dairymen, Springfield,

from Ohio

Mo. He also had worked with the American Soybean Association and Future Farmers of America. He was an active member of the Cooperative Communicators Association and the communications committee of the National Milk Producers Federation. Reuwee is survived by his wife, Barbara, Liberty, Mo.; and two children: Laura, New York City; and Brian, a junior at the University of Missouri, Columbia; as well as his mother and sister, both in his native Ohio.

Delta-Montrose installs first propane fuel cell

The Delta-Montrose Electric Association made history this spring with the startup of a 10-kilowatt propane-powered fuel cell system at DMEA's headquarters in Montrose, Colo. This prototype, built by H Power of Clifton, N.J., is reputedly the first in the nation outside of a laboratory that runs on propane, a fuel readily available in areas served by rural electric cooperatives.

"We're proud to be in the vanguard of fuel cell installations nationally," said Dan McClendon, DMEA's general manager. "Sixty-two years ago our cooperative was formed to bring electric power to rural areas at a time when forprofit utilities were not interested in providing electric service to our communities. Fuel cells – particularly propane-powered fuel cells – represent an exciting way to continue our mission of providing power to areas not currently served through traditional means."

DMEA's propane fuel cell is the first of a series of units which will be installed by rural electric cooperatives working with Energy Co-Opportunities (ECO), a national cooperative created to assist electric distribution cooperatives in diversifying into new energy services. ECO recently entered into a partnership with H Power, a world leader in fuel cell technology, to bring residential and small commercial fuel cells to rural elec-



Rural cooperatives such as Delta-Montrose in Colorado are leading the way with the installation of a 10 kilowatt propane-powered fuel cell system. Photo courtesy DMEA

tric cooperatives and their members.

"The installation at DMEA's building will help sharpen the cutting edge of this technology and hasten the time when ECO fuel cells will be available to members of DMEA and other cooperatives across the nation," said Bill Cetti, ECO's vice-president of distributed generation solutions. "We appreciate DMEA's leadership and hard work in making this historic event possible."



Foremost farms traces its name to J.C. Penney

Pamela J. Karg

Field Editor

ike well-pedigreed cattle, Foremost Farms USA cooperative, can trace its lineage back to the birth of a Guernsey bull that eventually found its way into the hands of one of America's best-known businessmen: James Cash Penney Jr, founder of J.C. Penny Co. department stores. The Baraboo, Wis., dairy cooperative takes its name from the Guernsey bull named Langwater Foremost, owned by Penney. How fate brought a dairy cooperative, a Guernsey bull and a man who lived by the golden rule together is a tall tale of twists.

After his April 1915 birth, Foremost sired several animals that "became remarkable examples of type and milk inheritance through line-breeding," according to historical records kept at the Dallas, Texas, headquarters of J.C. Penney. In fact, the bull was voted the fourth most influential in his breed, and he sired 68 registered daughters and 87 registered sons.

Meanwhile, Penney was building a chain of retail stores.

Penney opens Golden Rule Store

Penney was born in Hamilton, Mo., in 1875. He maintained that his career in business began at the age of eight, when he was told by his father that he was old enough to assume responsibility for paying for his clothes. Penney ran errands and worked in the fields to earn the money to buy the pair of shoes he needed.

After apprenticing with a local storekeeper, Penney moved to Denver and worked briefly as a store clerk before opening a butcher shop in Longmont. After it failed — largely due to the loss of the local hotel's business when he refused the cook's demand of a payoff in the form of whiskey - Penney accepted a job with the Colorado firm of Johnson and Callahan, operators of drygoods stores in small towns throughout the region.

In 1900, Penney was sent to Evanston, Wyo., to manage the firm's branch mercantile store. Johnson and Callahan recognized Penney's ability and helped him open his own store in Kemmerer, Wyo.



J.C. Penney would probably like the fact that his beloved Foremost bull is the namesake of a dairy cooperative, an organization that shares its profits with its owners, just as Penney did.

"When the sun rose over Kemmerer, Wyo., April 14, 1902, it gilded a sign reading, Golden Rule Store, and I was in business as a full partner," Penney wrote. "In setting up a business under the name and meaning of Golden Rule, I was publicly binding myself, in my business relations, to a principle which had been a real intimate part of my family upbringing. To me, the sign on the store was much more than a trade name. We took our slogan 'Golden Rule Store' with strict literalness. Our idea was to make money and business through serving the community with fair dealing and honest value, and did business cash-and-carry."

Two revolutionary ideas — cash only and do unto others as you would have them do unto you — were the basis for Penney's new business venture. In fact, he was a lifelong advocate of what he referred to as "Christian principles" in business, which included preparation, hard work and, above all, the Golden Rule. Penney also frowned on smoking and drinking by his employees.

By 1914, there were 71 stores. In 1917 when he accepted the position of chairman, there were 197 stores. In an effort to make it easier for the company to obtain the financial credit essential to any successful retail operation, the organization became a corporation. Shares were listed on the New York Stock Exchange in October 1929, just a few days before Black Thursday. While the crash caused sales to shrink, the number of stores continued to grow because of their affordable merchandise.

Creating a Sense of Heritage

As his personal fortune grew, Penney began donating significant amounts of money to his favorite charities, which included the Christian Herald and a home for retired clergymen. He borrowed against his store stock and accumulated in excess of \$7 million in personal debts.

At the same time, this son of a Missouri farmer and preacher made two observations. First, he was concerned about "the low quality of beef and dairy animals found on a large percentage of farms." Second, Penney felt the great U.S. herds were being broken up after the owner died, contrary to what he saw in England and Scotland, where herds remained in families for generations.

Penney purchased Emmadine Farm at Hopewell Junction, N.Y. On the advice of leading Guernsey breeders, Penney also bought Langwater Foremost for the then record price of \$20,000. He then endowed the herd because he decided that "a lifetime was too short a period to develop a great herd of cattle."

World's longest milk route

Between 1932 and 1944, Foremost Dairies doubled the communities served and increased sales 10-fold. The company's major growth started in 1945 with the acquisition of Southwest Dairy Products Co. "It's better than good, it's Foremost" became a household slogan.



With creameries closing during the Great Depression,
Missouri-born businessman J.C. Penney bought a

Jacksonville, Fla., creamery and named it after his prized
Guernsey bull — Foremost — which grew into the
longest milk route in the world and is now the choice
name used by a Midwestern-based farmer cooperative.

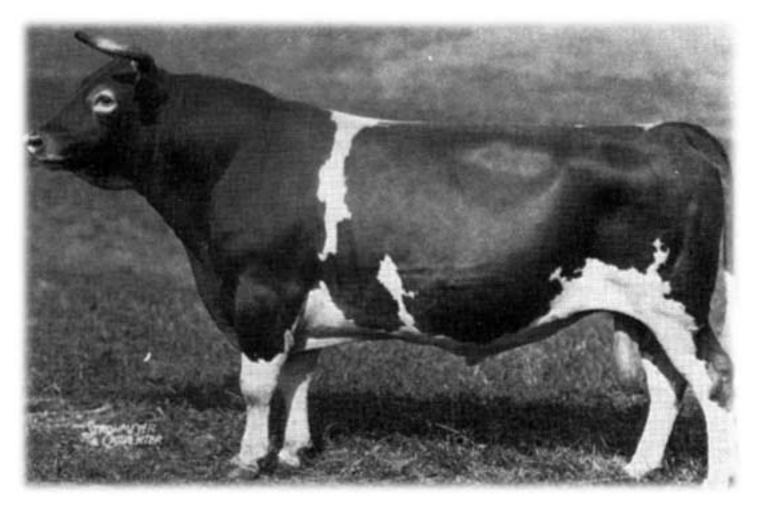
In 1952, the herd was moved to the College of Agriculture, University of Missouri-Columbia. There are still a few Guernsey cows in the herd, though most of the cows are now Holsteins. Each Guernsey, however, can trace her lineage back to Langwater Foremost.

With creameries closing during the Great Depression and with extensive holdings in Florida, including City National Bank, Penney bought a Jacksonville creamery. He named it Foremost Dairies after his prized bull. It originally operated in 12 southern communities and its net sales totaled \$1 million the first year. By 1932, Penney had lost his personal fortune and was subject to unfounded charges that he had profited at the expense of fellow shareholders in the collapse of the Florida bank in which he was a major investor. After a brief stay in a sanitarium, Penney returned to the post of chairman of the company and rebuilt his fortune. He resigned as chairman in 1958, and died in New York City in 1971 at age 95.

During World War II, the U.S. military sparked Foremost's international growth and the creamery opened additional plants nationwide. Foremost Dairies became known as "the longest milk route in the world." Foremost Dairies was the third largest dairy company in the world by 1951. With the 1954 acquisition of Golden State Co. — the largest dairy business in California — Foremost had operations in 23 states across the South and North as well as in Japan, the Philippines, Guam and Hawaii. Foremost established its headquarters in San Francisco, and it still lived by the golden rule established by Penney. Wherever it set up a facility, the organization wanted to teach local people how to operate it and then share in its success.

The business continued to grow. In 1956, it made the key acquisition of Western Condensing Co. In Appleton, Wis., that would eventually lead the Foremost name to Upper Midwest dairy producers.

But troubled times hit in 1962,



Langwater Foremost was voted the fourth most influential bull of the Guernsey breed.

when the Federal Trade Commission said that Foremost's "dominant presence" could affect competition. The company was ordered to release ownership of its 10 most recent acquisitions. Foremost also sold all of its milk and ice cream plants east of the Mississippi River.

In 1967, Foremost and McKesson merged. At the time, Foremost-McKesson included chemical, liquor and pharmaceutical companies as well as Foremost Foods Co. It also included the Wisconsin whey processing plants formerly operated under Western Condensing.

Wisconsin Dairies Acquires Foremost

The dairy industry was changing, and Wisconsin Dairies Cooperative, Baraboo, Wis., realized that there were ways to capture more money for its members by further processing of

whey. After all, it took 10 pounds of milk to make one pound of cheese, leaving nine pounds of whey that was packed with proteins, lactose (milk sugar), other nutrients and trace minerals.

In 1984, the cooperative acquired the whey operations, research library, patents and rights to the Foremost name in the United States and Canada from McKesson. In addition to marketing whey-based products through its Foremost Ingredient Group division, the cooperative licensed the Foremost name for use by companies in the western United States, Hawaii, Alaska and Mexico.

In January 1995, the member-owners of Wisconsin Dairies and Golden Guernsey Dairy Cooperative consolidated their operations. At the time, the consolidation of Wisconsin Dairies and Golden Guernsey into Foremost Farms USA was unique in the dairy industry. Both cooperatives

were financially sound, with effective member-owner programs. They had efficient operations and marketing programs, along with complementary product lines and service and procurement areas. Foremost Farms acquired the Morning Glory Farms Region of Associated Milk Producers, Inc. in December 1995.

Today, Foremost Farms ranks among the top five largest U.S. dairy cooperatives for milk volume. As a cooperative, it's only fitting that Penney is part of the history. When he opened stores, created his Guernsey legacy or developed a superb purebred Aberdeen Angus herd, Penney always shared his profits with his business partners. And the profits from Foremost Farms USA go back to the business partners — some 7,000 dairy farmers in Wisconsin, Iowa, Minnesota, Illinois, Indiana, Michigan and Ohio.

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