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*The University of Montana*

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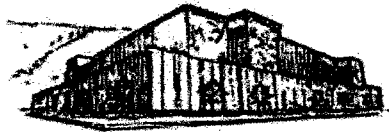
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Montana Agriculture:  
The Evolution of an Aging Industry

by

Jesse I. Zentz

B.A. University of Montana, Missoula, 1999

presented in partial fulfillment of the requirement

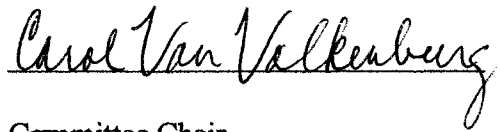
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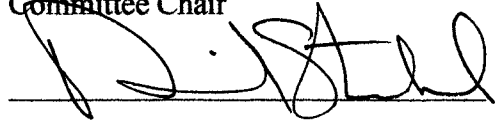
The University of Montana

May 2001

Approved by:



Committee Chair



Dean, Graduate School

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Montana Agriculture: The Evolution of an Aging Industry

Committee Chair: Carol Van Valkenburg *CV*

This series is an in-depth look at some of the problems and promises associated with one of Montana's oldest and most predominant industries, agriculture.

The stories examine the social, economic and emotional aspects of agriculture in a time when it appears the industry is losing its place of prominence in the economy and its role for farmers as the American ideal.

Thomas Jefferson based his vision of America on the yeoman farmer, but today, that type of agriculture doesn't seem to be a viable economic choice. It is an emotional issue for most of those involved, as many farmers and ranchers don't participate solely for economic reasons. For many, it is a respectable way of life, and they enjoy their connection with the earth that the new economy is so separated from.

Through my research, interviewing and writing, I discovered many things.

Agriculture in Montana is still thought of by many to be our leading industry. That, however, is only an assumption based on one statistic. The industry employs few people and those people make little money compared to people in many other occupations. But the industry still brings more cash receipts into the state than any other industry, and almost 95 percent of Montana's land is devoted to it.

Farmers and ranchers are concerned about their future. It is unclear how things will shape up in the near future. Efforts to save the flailing industry are common on the state and national front. For many farmers, their occupation is a way of life, not a job. For these people, they would be lose more than just an industry. Instead they would lose their sense of purpose.

Despite my being raised on a ranch near Billings, this project educated me greatly. Hopefully, it can educate others and contribute to the ongoing dialogue.

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### ***Growing Old on the Farm***

*The average age of a Montana farmer is rapidly approaching 60. What does this mean for the industry, and how can the trend be slowed?*



Ron Staley will turn 45 this summer, but how long he'll be able to keep farming and ranching he doesn't know. In an economy that fails to attract a younger generation because of the financial risk, he is still young for his occupation.

The average age of a farmer or rancher in Montana is rapidly nearing 60, and fewer young people are attracted to the industry for many reasons. Some dread the risk involved or want a more substantial return for their work. Farmers and ranchers often spend more than 40 hours each week tending their land, animals and equipment, but they earn less than many who wait tables and sell the food the farmers and ranchers produce.

What does this mean for the future of farming and ranching in Montana? There are about 28,000 operations in Montana, and 5 percent of Montana's 870,000 people are farmers or ranchers. The average net cash return for these operations in Montana was about \$14,000, according to a 1997 ag census.

Despite the low return, it remains and always has been a common way to make a living under the Big Sky. About 65 percent of the state's acreage is devoted to agricultural uses. Montana had 24,279 farms in a 1997 ag census. About three quarters of those farms are located in the more rural areas of Montana east of the Rocky Mountains.

If farmers become too old to bear the work required, who will supply the nation's food?

"We get so little for what we sell, it's no wonder why our kids aren't interested," Staley said. He owns a farm and ranch south of Billings that is home to 300 head of yearlings and 2,000 acres of winter wheat.

In 2000, Staley said his net income was only about \$5,000 because production costs were so high. A 1997 ag census indicated that the average net cash return for a farm like Staley's was about \$14,000 and production costs were reached an average of about \$62,000. Staley's costs, which included land payments, fertilizer, fuel, feed, supplies, a custom harvester and other expenses, reached about \$460,000 in 2000.

One Nebraska farmer told the New York Times a few years ago that turning the farm over to the next generation is equal to child abuse. Almost eight years ago, Staley gained complete control of the farm from his father.

Shawn Rettig, a 32-year-old, started farming and ranching five years ago near Rudyard. Rettig and his in-laws operate about 8,000 acres of cropland and pasture. On the land they run 350 head of cattle and have about 3,000 acres of wheat this year. He grew up in nearby Big Sandy, but wasn't raised on a farm. But Rettig did work on a farm from seventh grade through his junior year at Montana State University.

"A lot of people are discouraged around here," he said. "They tell their kids to get an education so they can find better jobs where there is more money. It was a huge challenge getting started in the business, and I see why people don't want to accept the risk."

Ravalli County Extension Agent Rob Johnson also is aware of the lack of young farmers. "I bet I could count every young farmer in Ravalli County on my own two hands," he said.

Johnson believes that the risk involved is what keeps young people away. He has

seen growth in Western Montana partly due to people leaving farms in Eastern Montana for jobs west of the Continental Divide.

“You really gotta be determined to make it in this business, and luck doesn’t hurt either,” he said. “That’s an old fashioned way of thinking, but that’s what has held so many of these farms together. It’s really amazing some of these farmers have lasted until their mid-50s.”

Many wonder if farming is on its way out.

“No way,” said Montana Director of Agriculture Ralph Peck. “Farming and ranching are too big of a piece of the pie here. So many people rely on it. Many small rural areas are based on agriculture.”

Peck said the state is currently trying to generate interest in agriculture among young folks through education, but first the industry must be revitalized. That, however, is a difficult task, and no one seems to have a perfect solution.

“If we can’t get farmers and ranchers back on their feet, who knows what will happen,” he said. “But I’m confident we can help stimulate the industry. In turn, more people would be interested in playing a part. That means young people and older people.”

Peck said that the use of Montana’s state university system and cooperative efforts with other state ag agencies will help educate Montanans about the industry. He said education is the key to revitalizing the industry. To stimulate the industry you have to have people interested in it and educated in it, he said.

There is some hope. Enrollment at the School of Agriculture at Montana State University is strong, signaling some interest. The National Future Farmers of America Organization reported record numbers last year, and 4-H also reported strong enlistment.

At Montana State, enrollment in most agriculture programs is slightly higher than it was ten years ago, and much of the rise in enrollment has been in agriculture business and economics, where students learn marketing skills. This could be a positive trend for Montana agriculture, but state leaders say the important thing is keeping the educated people here so they can continue Montana's long agriculture history.

By the numbers, agriculture is the leading industry in Montana in terms of gross sales. The wheat industry alone -- the largest segment of grains -- accounts for about \$600 million each year in cash receipts. Beef -- the largest overall segment -- accounts for nearly \$800 million.

The most recent numbers from the Montana Agricultural Statistics Service indicate that range and pasture account for about 65 percent of land in farms and ranches in Montana, while cropland makes up for 30 percent.

Staley grows wheat and raises some cattle. Yet, he is struggling to stay in the business as prices for both commodities are low. Beef prices are on their way up, however, Staley depends on wheat for the bulk of his income. But a net income of \$5,000 falls short of providing what he needs in order to live a comfortable life.

Instead, Staley, like many ranchers in Montana, often wonders how long he can keep doing it without destroying himself and his family's future.

“The tough part is that I don’t really know what I’d do without it,” he said. “I love the land and I think it’s a great way to raise kids, but when it’s this tough it seems pretty crazy.”

He said if he was forced to sell the land and pursue another career, he would likely go into construction.

“I have to use my hands and be outside, that’s why I still farm, I guess,” he said. “You don’t have many options when you don’t have a college degree, and that is something I’ll always regret not getting.”

Rettig not only is a young farmer, he is also educated. He earned a degree in bio-resource engineering from Montana State University and said he uses what he learned at MSU each day.

Recent state numbers aren’t available, but nationwide, farmers and ranchers appear less educated than people in other occupations. In March of 2000, the U.S. census department released data that indicated 79 percent of employed people in the agriculture, forestry or fishing industry between the ages of 25 and 64 have no college degree. The same statistic was 60 percent for all industries.

Of employed people, between the ages of 25 and 64, who labeled their occupation as farming, fishing or forestry, 83 percent listed graduating from high school as their top academic achievement. That number was 60 percent for all occupations. A college degree affords young Montanans more options – and, often, better pay.

Said Rettig: “Most people are old school around here and everyone laughed when

I moved home to farm when I had a tech degree. They said I could make better money if I used my degree, but I use my education anyway.”

Staley said the past three years have probably been the toughest of his life so far. That’s not uncommon for Montana’s wheat farmers. In 1995, wheat prices were reaching record highs in the \$4.60 range, but soon sharply declined to about \$2.90 in 1999. At nearly the same time, the 1996 Farm Bill allowed farmers to plant whatever they wished. So many planted large amounts of wheat because of the high market price.

Wheat prices took a beating in the late 1990s, and many farmers are hanging by a thread. Most other grains are bringing comparable prices, putting incredible stress on those farmers as well. But the government has been there to help keep their heads just above water by providing record crop subsidies, despite hoping to end support by 2002 with the 1996 Farm Bill.

The increasing age of Montana’s farmer is just a sign that the state needs to move quickly, said Peck.

“We don’t want all of these people to retire and sell their land and have it subdivided and permanently taken out of agricultural use,” he said. “We must create some sort of incentive to keep people in the business so they can sell to other younger farmers, or turn it over to their own family members.”

Said Staley: “Seeing this land subdivided would hurt me greatly. I always want to see grain in these fields and cows eating grass. But if I can’t make a living farming and no one will buy it for that purpose, it may come to that. Lets hope it doesn’t, but it may be

inevitable.”

Peck said passing the land from one generation to the next is often difficult because it usually carries a lot of debt. Not many people are willing to accept substantial debt just to keep the farm in the family. Many farmers and ranchers also view their land as their retirement, and passing it on to their sons and daughters may not give them the same return they would see if they sold it off into subdivided parcels. Peck said this possibility could change the landscape in Montana forever.

“People need to realize that these ranches and farms both provide the unmarked horizons Montanans take for granted,” he said. “If we can’t keep people on the land that may disappear.”

Richard Owen, executive vice president of the Montana Grain Growers Association, is a little more optimistic than some of his peers. He believes there will always be farmers. His concern is making the transition smoother for those who decide to take a chance on farming or ranching. Sometimes the investment may be too much for someone to handle when they are starting out, he said.

“I think there is a genuine interest to farm by many people,” he said. “But it’s a highly capital-intensive business. If you’re starting from scratch it’s tough, but it’s also tough for the guy who’s already farming the land. No matter what, it’s a tough business, but I think people will take on that challenge.”

Rettig said he was lucky to have in-laws already involved, which helped him and his wife, Tiffany, get past the initial cost of farming and ranching.

“If I’m willing to do it, I bet other people like me are also interested,” he said.

“But somehow, you need to find a way to get past the challenge of having the money to get started.”

Will Roehm, also 32 years old, farms near Great Falls. He looks at the age issue differently.

“I don’t see age as a problem,” he said. “Farming is not as labor intensive as it used to be. Farmers in their mid-sixties are as active as they want to be and can do as much as I can. Once these people decide to retire, I think there are others like me that will take over.”

Sharron Quisenberry, the dean of the College of Agriculture at Montana State University in Bozeman, said it is a question of whether Americans want a sustainable food system.

“If this age trend continues nationally and in Montana, there could potentially be the loss of a sustainable food system, and that wouldn’t be good,” she explained.

Her thoughts are similar to Peck’s, in terms of fighting the trend.

“We have to revitalize agriculture so that people can make a decent living at it,” she said. “Producers need to share more in the profit. It has to be a profitable occupation before you can get younger people interested in agriculture.”

To do that, Quisenberry and Peck suggest finding ways to add value to the products, much like Wheat Montana, whose motto is “We grow it, we sew it, we dough it.” That company has turned one family’s future in agriculture around. But both Peck



and Quisenberry caution that adding value doesn't just mean refining the commodity.

"People also need help finding niche markets, and quite simply marketing their product," Quisenberry said.

She also said the quality of Montana's agriculture products must be marketed along with finding ways to get information to the producers so they can take advantage of that quality.

"Our grain is high in protein and we have good animals," she said. "If we look at farming in a different way, we can revitalize the industry and keep it moving forward. There is a bright future if we look at it differently and use the strength of our education system. We need a good work force, good information and sound research working together."

Meanwhile, Staley will try to stay in the business and help his kids – Curtis, 18, and Eric, 16 – get the college degree he always wanted. Though his problems keep mounting, he isn't going to give up.

"Maybe I'm a glutton for punishment, but I like what I do, if I could just make some money doing it," he said.

Staley hopes he can make it to the farmers' average age in Yellowstone County, which was 52 in a 1997 census. The state average in 1997 was 54, equal to the national average. But according to Peck, the state's ag director, the average age in Montana is now between 57 and 60.

Staley said: "I would like to stay in it for another 15 years, but I am so in debt

with payments and everything, I could last only a couple more years. People laugh when I tell them what I make and how much I have invested. I'm almost forced to stay in because the return for my investment isn't there yet. Otherwise, there is no reason to stay involved."

He said federal support helps, but only a little.

"Even with government programs there is no way in the world I will survive too much longer," he said. "I hope they realize the situation we're in when they sit down to write the next farm bill."

Often, Staley wonders why he keeps farming, with all of the stress and depression he faces when he sees market prices. He hopes that his land will be valuable enough in the future so he has something to retire on. Being close to a growing city like Billings should help that cause, because a growing city needs land to expand, he said.

Only partly tongue-in-cheek – he said that he probably could fare better in Las Vegas.

"I gamble every year anyway, why not have some fun doing it," he said. "Farmers are always betting on the next year, hoping for better weather, better prices and crops. It's a gambling lifestyle, but for the risks we take, our take is terrible. And we don't get much respect from the people that eat our food for those risks. If I was young and educated, I would make take a different career path, no questions asked."

### ***Adding Value***

*Most of Montana's agriculture products are sold on the open market. But many have discovered the advantages of directly targeting consumers or refining their products.*

In 1900, farmers and ranchers received nearly 50 cents for each dollar spent on food. Today, it is estimated that farmers receive about 20 cents from each food dollar, a decrease from 37 cents only 20 years ago.

These numbers from the U.S. Department of Agriculture are evidence that producers must find a way to receive more money for their efforts in their fields and pastures. In Montana, farms and ranches have dealt recently with unstable and unpredictable markets. Montana producers primarily sell large commodities, like beef, wheat and barley.

Market wheat prices are in decline. Prices are nearing record lows when adjusted for inflation, and are nearly half what they were in the mid-1990s. Beef prices also are weak, but ranchers have seen relief recently, as beef demand has pushed prices from about \$60 per hundredweight in 1996 to about \$80 in 2000.

At the same time, consumer prices for a loaf of bread, a New York steak or even a pint of beer have all consistently increased. What people pay in the supermarket is primarily for manufacturing or processing. Some Montana producers have changed their entire approach to agriculture to take advantage of this trend by individually marketing or refining their product. However, most of Montana's crops and livestock are still shipped out of state and out of the country for processing.

Numbers from the Montana Agricultural Statistics book indicate that nearly 80 percent of the state's wheat is shipped to Asian markets. What the farmers get for their crop depends solely on the unstable world market. Most of the state's beef makes a

similar trip across state borders, where others benefit in refining the products. There are no major meat packing plants or flour mills in Montana.

To gain more from their work, some Montanans are changing their operations to get more of the dollar spent on food. Companies like Cream of the West, a Billings-based cereal company, have been adding value to state commodities for many years. But a recent crop of new farms has staked a claim in the business of food processing. There has also been a significant move to market products better.

Two examples of Montana farmers and ranchers adding value through manufacturing and marketing are Wheat Montana and Big Sky Beef – or Beef.com.

The words value and added could just be another way of saying manufacturing. However, some Montanans involved in the agriculture industry say better marketing or niche marketing also are ways to add value. Some also say just finding ways to increase a farm's output is adding value.

Jim Johnson, farm management specialist in the Montana State University agriculture economics department, believes farmers will be most successful increasing their net revenue by increasing output. By growing more, and doing it efficiently, Johnson argues that farmers can increase their revenue. He admits that while adding value through manufacturing is workable, he said that improving crop production is the best way to add value to a farm or ranch.

“If you watch most of our successful farmers, they take advantage of better grain varieties, use better technology to increase efficiency and, therefore, drive up their

revenues,” he said.

Johnson said the future of Montana's agriculture probably lies in the farmers' ability to market their product. By taking advantage of the best information and computer technology, he said farmers have become better marketers. However, he said a lot of work still must be done to help farmers and ranchers get the highest price possible for their product.

Agriculture economics department head Myles Watts agrees with Johnson. He said better genetics have added value to Montana's livestock. The best way to add value, Watts said, is to reduce the cost per unit of production and use the best varieties and genetics.

“That's what adding value is all about,” he said. “Farmers and ranchers are businessmen that want to make money just like everyone else. If they know what they're doing, they can get the best price for what they grow, but it takes a lot of work.”

In an effort to help farmers better market their products, Montana State University's College of Agriculture and the Montana Department of Agriculture have both taken steps to provide farmers and ranchers with the best information. The ag department has taken steps to make agriculture a bigger part of education in the state's schools. At MSU, professors consistently key farmers in on new market trends and strategies.

Will Roehm, who raises wheat and barley near Great Falls, recognizes the need for better marketing.

“Most farmers know how to produce the wheat, but marketing is where producers need to make improvements,” he said. “If you do a poor job of marketing you’ll probably end up losing a lot of money.”

Another marketing tool that is picking up steam comes from the Montana Grain Growers Association, the Montana Stockgrowers Association and the Montana Department of Agriculture. Together, they have developed the Internet-based Montana Market Manager to give producers the best information possible right on their computer.

Montana Grain Growers Association executive vice president Richard Owen helped put the program together a couple of years ago, and is happy with its success.

“Value added is anything that gets more profit out of your crops,” he said. “If you can better market your crops rather than just sell it at the local elevator, you are adding value. We started Montana Market Manager to provide information that includes ag news, market cycles and government news to help farmers get the most out of their product. We think it has been successful.”

Roehm and Shawn Rettig, a farmer from Rudyard, both use Montana Market Manager. Rettig said it allows him to see what’s happening all over the world.

“Farmers used to have to watch what happened to crops in Kansas and in the midwest to make marketing decisions, but now we live in a world market,” he said. “With Montana Market Manager and the Internet I can keep up to date on weather conditions and market trends each minute of the day.”

Owen said it would be nice to see more value-added businesses like Wheat

Montana Farms and Bakery to complement the better marketing. Companies like Wheat Montana, Owen said, take advantage of the Montana mystique and the quality of its agriculture products.

“Montana’s shining star is the high quality of our crops and beef,” he said. “The better we do promoting our crops for their quality, the more value our producers will get. This will also benefit production.”

Located near Three Forks, Wheat Montana is a family-run business that has turned a moderately successful farm into a thriving bread-making business.

Owner Dean Folkvord said that the farm once made about \$400,000 each year, excluding the costs involved in production. Today, with the vertically integrated business that uses wheat grown on the farm to make high quality breads, he estimates that the company makes about \$7 million before costs are figured in. Before they started making bread and milling wheat into flour, Folkvord said they relied heavily on federal subsidies to get by.

In the late 1980s, the Folkvords began looking at new options for their farm. They started by finding the best wheat varieties for bread flour, then got involved with a small bakery in Bozeman in 1988.

In 1990, they bought out their partners. Folkvord estimates that they were losing nearly \$5,000 each month for an entire year. But in 1991, he said the company started to turn a profit. In 1993, it moved from the small bakery in Bozeman to a larger facility in Three Forks. From the start, they marketed their product for its qualities.



“We started to push forward an effort in quality and told people more about conservation tillage, chemical-free grain and the sustainable family farming that we strived for,” he said.

That strategy, along with a solid business plan, has given the Folkvords a bright future in Montana and around the country. They own about 10 percent of the bread market in Montana, and their products are sold in grocery stores across the state. Their fresh breads also make it to North Dakota, South Dakota, Idaho and Wyoming. Their flour and wheat is sold nationwide.

Folkvord said the success of Wheat Montana Farms and Bakery is due to a lot of hard work and good ideas.

“First, you have to believe in yourself and you have to believe in your product and you have to stick with it,” he said. “You have to continually force it like Michael Jordan did in basketball. It’s very similar in the business world.”

To increase their market share in places where their bread wouldn’t make it due to the three-day shelf life, Wheat Montana has developed new strategies. Along with another company, the owners developed an in-store grinder that allows customers the chance to mill their own wheat. The development took time and was costly, but Folkvord insists that it was well worth it.

“We’re working really hard on utilizing our in-store flour grinders and specialty flours to increase our market share,” he said. “It’s been very fulfilling professionally and personally to conduct this business and find success doing it. A lot of people are

concerned about our success and failure, and that's pretty neat.”

Wheat Montana holds a record in the Guinness Book of World Records for taking standing wheat and turning it into a loaf of bread in 8 minutes, 30 seconds. The business employs about 80 people and turns out nearly 10,000 loaves of bread each day. Folkvord hopes his strategy continues to pay off. He said that new competitors are entering the marketplace, which forces him and his employees to stay on their toes and develop new and better ideas.

“People buy bread blindly, and that is what we want to change,” he said. “They have to vote every time they buy a loaf of bread and when they buy a loaf of our bread, they're voting for sustainability and value-added Montana products that promote local economic development and are chemical free.”

In Northeastern Montana, another family has found similar success, but with beef instead of wheat. Along with 11 other ranches, mostly situated near Malta, the Hammond family has turned a normal ranch into a nationwide beef distributor that uses the Internet as its primary sales vehicle.

Aimmee Hammond, its 22-year-old director of operations, helped develop the business. While attending college in Raleigh, N.C., she worked as a nanny for a local couple. Aimmee's parents, Howie and JoAnn, sent some of their beef to the Raleigh couple, who were so impressed they encouraged the Hammonds to market their product in the Raleigh area. The couple even helped market the beef.

In 1999, Big Sky Beef sold its first steaks, and today its products are sold all over

the country. Most orders come by way of the toll free phone number – 1-800-mt Angus – or on-line at [www.beef.com](http://www.beef.com). All of the beef sold is Angus from 12 different ranches including the Hammond's. Aimmee Hammond said the whole project was a collaborative effort.

“We had a group of ranchers that wanted to do something to get a better, more stable price for their beef,” she said. “All of the ranchers still sell a lot of their cattle in the fall on the open market, but they do a little better selling it through Big Sky Beef.”

Like Wheat Montana, Big Sky Beef has taken advantage of the Montana mystique and the state's reputation for good cattle.

“The fact that we know where our product goes, gives us great pride,” Hammond said. “We take great care in processing it, we know it's top quality and our customers are assured they're getting the best quality out there.”

The company has a packing plant in Malta that employs about 40 people. In North Carolina, they operate a freezer and a warehouse to distribute the beef. Hammond said the company offers its ranchers a stable market in an area where prices can be very unpredictable.

“We're definitely not the sole income for these ranches, but we give them a market that isn't as cyclical as most commodity markets are,” she said. “We can still get relatively high prices, even when beef is low in the market.”

Market prices for beef in Montana have been around \$80 per hundredweight this past year. Hammond said the ranchers get about a 10 to 15 cent premium on their beef

over that price through their company.

The meat has been a hit with most of its customers.

“People say it’s so much better tasting and higher quality than what they get at the store,” she said. “They say, ‘I feel good when I feed this to my kids.’”

Watts, of MSU, said businesses like Wheat Montana and Big Sky Beef, combined with better marketing and better technology use, are the best ways to add value in Montana agriculture.

The USDA recently announced that \$20 million would be made available this year for competitive value-added grants of no more than \$500,000. Montana Department of Agriculture Director Ralph Peck said these grants should be very helpful, and hopes Montanans have ideas that attract some money.

“This is a very excellent merger to what we are trying to do,” he said. “Once we grow the crops or the animals, marketing becomes key. With these grants a possibility and Vision 2005, I think we are on the road to improving Montana agriculture.”

Vision 2005 Task Force on Agriculture was developed in 1998, with support from former Gov. Marc Racicot. The program intends to provide assistance to businesses in Montana that want to add value to Montana farm and ranch products, as well as recruit businesses to come to Montana. Another purpose is the development of new markets and better marketing. The overall goal of Vision 2005 is to double the value of Montana agriculture by 2005.

“We are at a geographical disadvantage in Montana, and that is one of our primary

difficulties,” Watts said. Larger markets are physically distant from Montana, making marketing even more important.

Wheat Montana has dealt with this, realizing it couldn’t send bread too far away because of its shelf life, but used other strategies like its in-store mills to find a way around the problem.

The possibility of large mills or packing plants coming into the state to add value and jobs isn’t very realistic, Watts said.

“Those companies, like General Mills, go where the market is, not where the raw product is located,” he said. “No matter what, we won’t see them or any big meat packing plants here, but we can work on the margins, and that’s what places like Wheat Montana are doing very well.”

Watts said the state should play a role in assisting people who have good ideas, by helping with the start-up capital.

“There are a lot of great ideas out there, but the people that have them rarely have much money saved up because of the industry’s economic condition,” he said.

Montana has been fairly successful in recent years on the value-added front. In Ravalli County, Lifeline Dairy and Brothers Goat Dairy are producing cheeses. Wheat Montana is producing high quality bread and flour. Big Sky Beef is selling beef around the country. Many Montana microbreweries, like Bayern Brewing Company in Missoula, are using Montana malt barley to produce high quality beers. Some ranchers are marketing their livestock to specific restaurants and grocery stores, and grain growers in the Great

Falls area can see their wheat in noodle form at Pasta Montana.

Slowly, Montanans are getting more of each dollar spent on food. Direct marketing and refining are keeping more money in the farmer's hand, but the initial investment to change an operation must be overcome. Whether its marketing or refining, Wheat Montana and Big Sky Beef are proof that it takes one or the other, or a lot of both, to succeed in adding value.

### ***A New Breed of Wheat***

*Genetic engineering is changing the way we think about our food. What are the ramifications of introducing genetically modified wheat into Montana?*

Wheat is the most widely grown and marketed crop in Montana. The state's most recent numbers indicate that wheat generates about 30 percent of the state's overall cash receipts from the marketing of commodities. It is also the most widely eaten and traded food in the world.

Montana's 1999 wheat crop contributed \$465 million to the state's economy and as high as \$847 million in 1996 when prices and plantings were high.

Within three years, it is predicted that an entirely new breed of wheat produced through genetic engineering will be sown into fields around the country and in Montana. Throughout most of the crop's history, new varieties have been developed through decades of traditional cross-breeding and research at land-grant universities like Montana State University.

Now, through agreements with some of these universities – Oregon State University, the University of Minnesota, South Dakota State University and Washington State University – Monsanto Co. will attempt to develop a herbicide-tolerant strain of spring wheat referred to as Roundup Ready.

Roundup is one of the most common forms of herbicides, but wheat dies if it is sprayed. The new strain would resist the effects of the herbicide, allowing producers to spray their entire crop with the considerably benign herbicide. It uses glyphosates, which are less toxic and degrade more quickly than the most noxious weed killers.

Genetically modified crops involve a different kind of tinkering, which involves removing the desired gene from one organism and splicing it into another organism to



derive a desired trait. Scientists have already succeeded in making corn insect-resistant and herbicide-resistant. They have also succeeded with soybeans, canola and cotton.

This technology can move genes and the traits they dictate across natural boundaries – from one type of plant to another, from one type of animal to another, and even from a plant to an animal or an animal to a plant. Cells modified by these techniques pass the new genes and traits on to their offspring. Genetic engineering can apply to any kind of living organism from microorganisms to humans.

Although the technology is relatively young, there is hope that it will even produce drought resistant crops. There is also the possibility of developing wheat and other crops that produce vitamins, antibiotics and low fat oils. Though the possibility of GM foods causing allergic reactions is often discussed, many scientists hope they can actually remove allergens – through genetic engineering – from foods that often cause allergic reactions, like peanuts, for example.

Of the modified crops already developed, most benefit the producers, by helping them cut out certain costs. Studies have already shown that cotton farmers are using less herbicide with the resistant strains. However, just the opposite is true with corn.

A debate is raging worldwide, nationwide and even throughout Montana regarding the safety, ethics, costs and benefits of genetically modified crops and food. The accidental release of Starlink corn – certified only for animal consumption – into the human food supply, sparked many safety questions.

About 60 percent of the food on grocery store shelves contains ingredients that

have been genetically modified. The United States leads the charge in growing GM crops with about 70 percent of the acreage worldwide.

One of the most widely planted GM crops is Bt corn, which is resistant to the European corn borer. Montana grows relatively little corn and has no significant problem with that insect. Therefore, Bt corn is almost useless here. Other common GM crops are cotton, soybeans and canola. All three of these crops are a small piece of the larger pie in Montana.

With the possibility of GM wheat just over the horizon, many Montanans are concerned with its possible implications on an already shaky agriculture economy. Asians and Europeans are increasingly refusing to buy GM crops. Nearly 80 percent of Montana's wheat is exported into Asian markets. Japan, one of Montana's big wheat trading partners, strictly regulates or bans genetically modified products outright.

"This is a big deal in the eyes of the consumer and trade," said Montana Department of Agriculture Director Ralph Peck. "We need to make sure we'll have a market before we grow this stuff. It's a very emotional issue, and many of the discussions I hear aren't science-based."

Fans and skeptics of genetic modification are widespread.

Pam Langley, director of the Montana Agriculture Business Association, said that GM crops must be carefully studied, but said most of the criticism comes from a fear of the unknown.

The Starlink fiasco caused a lot of fear, because there were concerns that the corn

could possibly cause allergic reactions because of the protein used in modification.

However, not one allergic reaction was directly tied to the Starlink corn or of any other GM crop on the market.

Three regulating agencies control GM crops in the United States – the United States Department of Agriculture, the Food and Drug Administration and the Environmental Protection Agency. All crops introduced to producers must meet the three agencies' guidelines.

Dan Biggerstaff, vice president of research and development Western Plant Breeders in Bozeman, said that the regulating agencies obviously made a mistake allowing Starlink to be released for animal consumption only. That won't happen again, as all three agencies have agreed only to certify GM crops that pass specifications for both animal and human consumption.

Montana State University plant sciences professor Tom Blake said he is not convinced that the USDA and FDA do the best in terms of really investigating these crops before they hit the market.

“Genetics has the potential to do some really great stuff,” he said. “The question is. Who do you trust? The USDA does postdictive testing, not predictive testing, and the FDA gets involved only after they realized something has happened.”

But Blake is confident that with Roundup Ready products, the consumer will be safe.

“With Roundup Ready, there is no reason on earth that the consumer would

know that the product is in their food,” he said. “The Roundup construct has been used for six years now and we haven’t seen any problems.”

The first Roundup Ready crop of soybeans were introduced in the mid-nineties, and no significant hazards have yet been tied to that release or any subsequent Roundup Ready crops.

Another argument is that there is the possibility of Roundup Ready crops becoming super weeds that can’t be stopped. Sharron Quisenberry, dean of the MSU College of Agriculture, said this concern is real for many farmers in Montana.

“Most of Montana’s wheat is grown on dryland operations, where land is in fallow every other year,” she said. “The concern of volunteers (plants that grow in areas where the land is in rotation from that particular crop) scares some farmers, because they wouldn’t be able to kill them with Roundup.”

Biggerstaff said that the possible benefits of GM crops outweigh any known risks. He said most of the fear is caused by scientists’ inability to properly educate people on the subject.

“When facts become readily available, I predict that people will accept it,” he said. “The very basis of this whole issue is that we, as scientists and the industry, have done a poor job of presenting the facts and educating people so that many people are very fearful and mistrust it, because they misunderstand it. I sympathize, because it is very difficult to grasp the technology.

“It’s very complicated and the technology does give rise to fears. After carefully

studying it, we have much less concern but not zero; there will always be risks. It's not perfectly safe."

Biggerstaff said both sides are guilty of using dirty tactics, exaggerating both the benefits and the dangers. He said any argument must be based on scientific study rather than an opinion poll. He said organic growers have been especially outspoken, but said their food has risks as well. He said their fears are irrational, because the marketplace will eventually come into balance. Biggerstaff said once the market evolves with GM crops, niche markets will develop for organic foods and other specialties. People will always be afraid, and others will want chemical-free foods, he said.

Biggerstaff is confident that genetically modified foods already on the market are safe and predicts the same will be true in the future.

"The fact is, we eat DNA and genetic material every day," he said. "We consume all sorts of genetic material including viruses. Our digestive system breaks down almost all of it, but some may make it through no matter what you eat. There is a remote chance that material could be incorporated to bacterial organisms in your intestines, but there would be no higher incidence in genetically modified crops than there would be in regular crops or even in organic crops."

But what affect would GM wheat have on Montana's economy?

That is the most heavily debated issue. With so many Montana farmers relying on wheat for a primary source of income, the possible implications frighten many. But Montana farmers are also faced with rising costs of production, and Monsanto claims

Roundup Ready wheat will cut costs, as farmers will have to make fewer trips over their fields.

In the recent legislative session, concern about the possible dangers associated with the introduction of GM wheat into the market was evidenced in two resolutions and one bill dealing with GM wheat. Sen. Jon Tester, D-Big Sandy, and Rep. Butch Waddill, R-Florence, each introduced a resolution asking for a study on the economic impact of GM wheat on Montana's economy. Tester's went to the Senate Ag, Livestock and Irrigation Committee, but was tabled there.

Waddill's resolution passed the House, but died in the Senate Agriculture Committee. However, it drew a lot of attention along the way as proponents crowded the hearings, as did opponents. The emotional nature surrounding the issue captivated many people either involved with the science or the ag industry.

"This is a sensitive issue, but it will directly touch a huge segment of our economy," Waddill said. "Farmers already are producing in an unstable market, and the introduction of this wheat could make things even more unpredictable."

State Agriculture director Peck said: "They really got the debate rolling. These new varieties may not be wanted in our largest markets, so it could hurt our market share. But there are also so many possible benefits that GMOs could make happen."

Waddill also introduced a bill that would have placed a two-year moratorium on growing GM wheat in Montana. The bill was tabled in committee largely because opponents argued that it would put Montana two years behind other states and place

farmers at a disadvantage if markets develop.

Richard Owen, executive vice president of the Montana Grain Growers Association, predicted that farmers will likely adapt to whatever the market is calling for. He said that it would be hard to realistically assess the effects, before it's actually on the market.

"It's a real wild card," he said. "Farmers will deliver what the customer wants, and in Asia, many don't want it. If they don't want GMOs, our farmers will be there to provide them with whatever they desire."

Peck said that he is confident things will be just fine if there isn't a mess like the Starlink incident. He is confident that the regulating agencies and GM industries learned their lesson and won't release anything before it is safe and has a market.

Blake said the fears that many express are very real and frightening regarding marketing and trade.

"The Japanese market is worth \$170 million to Montana wheat producers," he said. "Half of Japan's bread wheat comes from Montana. We can't afford to lose that market, when we've worked so hard to gain that share. Our wheat is high quality and our producers cannot afford to lose that reputation."

Quisenberry said producers must be cautious when the product does arrive in a couple of years. She also is concerned with the Asians' reluctance to accept the technology.

"We must understand that our customer's willingness to accept the product is

what drives our economy,” she said. “It is a producer-driven and customer-driven economy, not product-driven.

“Much of our wheat reaches Asian markets, where concern over these products is high. If the Asians won’t accept GMO product and Montanans grow them, there would be severe implications. But I think Montana producers are smart, and won’t produce something that isn’t in demand.”

Many think that GM products could be the savior of farmers, as they continue to struggle with drought, bad prices, rising production costs, and an ever increasing demand for food.

“We must understand that this technology could also solve a lot of our problems, aside from all of the possible risks,” Peck said. “We must also consider the possible benefits.”

While some people argue that it is the answer to a possible future food shortage, others say food shortage isn’t a matter of production, but distribution. By the year 2050, some estimate the world population will reach 9 billion or more, an increase of 50 percent over the latest estimate. It is unlikely that GM crops will be the magic bullet that helps feed the world, but many hope they will contribute. Some proponents of the technology say that GM crops will boost production on less land.

It is still impossible to say whether GM crops will ruin, save or do little to change Montana’s agriculture economy. But it is safe to say the debate will continue.

“This issue regarding GM crops often reminds me of the first heart transplant,”



Peck said. “Are we violating the rules of nature? We need to use caution, but at the same time we don’t want to lose knowledge by ignoring the possibilities.”

### ***Farm Policy in Montana***

*The 1996 Farm Bill was viewed by many as a failure because it didn't end subsidies like it proposed. Now, with the rewrite due in 2002, what will change and what will remain the same?*

Many farmers have nearly put themselves out of business in the last few years , and if it weren't for record government bailouts, the majority would still be counting their losses. So as Congress convenes over the next two years and rewrites federal farm policy, concerned farmers across the country will be paying close attention.

### **Past Mistakes**

Over the past five years during which the 1996 bill has been in effect, farm economic conditions have hit all-time lows. Commodity prices have suffered, and production costs have escalated. When Congress wrote the 1996 legislation, members decided to phase out subsidies and end restrictions on what farmers could grow. Congress hoped global trade, increasing exports and high crop prices would offset the need for subsidies.

While trade and exports remained strong, plummeting prices and higher production costs dashed these hopes. At the time the 1996 bill was written, Montana wheat prices were at record highs. In 1995, Montana farmers received \$4.63 per bushel of wheat and in 1996 they averaged \$4.24. As soon as 1997, prices dropped slightly, and by August 2000 plunged to near record lows of \$2.61. Barley experienced a similar price slide, as did nearly all formerly subsidized crops.

Congress had expected farmers to respond to markets and plant for demand, but instead they planted whatever looked good in terms of price, and wheat topped the list. In 1996, Montanans planted 6.6 million acres of wheat and in 1997 planted almost 6.2 million acres. As supply increased, prices plunged. In 1998 and 1999, wheat plantings in

the state averaged about 5.6 million acres.

Farmers are in trouble in Montana.

Shawn Rettig, a farmer from Rudyard, said drought, low commodity prices and high production costs have made things extremely difficult for his family and many of his neighbors.

“We’ve tried to diversify by adding cattle to our wheat production, but we’re still reliant on some federal support,” he said. “Without it, I don’t think we could make it.”

Said Billings-area farmer Ron Staley: “The last three years have been the worst of my life, in terms of farming. My wheat isn’t worth what it costs to plant it, and the stress is unbearable. It’s not a healthy business to be in.”

While Montana farmers are learning from their mistake, Congress’ hope went unrealized and the government has been forced to subsidize farmers to keep them on the land.

Congress passed measures to bail out these farmers, and since the 1996 legislation, direct payments to American farmers have tripled. U.S. Department of Agriculture Chief Economist Keith Collins said states like Montana and North Dakota that rely on one commodity for a majority of their income were especially hit hard and needed considerable assistance. Many farmers would have lost money or their farm if it weren’t for federal subsidies.

“We’re lucky there were budget surpluses for farmers to draw from,” Collins said. “Montana’s agriculture is not as diverse as some other states, so they are hurt

considerably when there is a downturn in wheat or beef prices.”

Beef isn't a subsidized commodity, and prices have been rebounding recently for ranchers. Ranchers receive assistance in the form of cheap federal grazing fees rather than direct payments. But in Montana, federal grazing is limited compared to what exists in states.

In his book, *Lost Landscapes and Failed Economies*, Thomas Power demonstrates what the importance of federal grazing is to Montana. He notes that Montana gets only 7 percent of its livestock feed from federal land, compared to Nevada, which gets about 43 percent of its livestock feed from federal land. Arizona and Utah get about 24 percent of their livestock feed from federal land, and in Idaho the number is 14 percent.

Power also notes that less than half of Montana's ranchers are dependent on federal grazing, while in Utah, Idaho and Nevada, almost all ranches are dependent on federal grazing. Power is head of the economics department at the University of Montana.

The price that ranchers pay for the federal grazing is very low. The grazing fee for Western public lands administered by the Bureau of Land Management will be \$1.35 per animal unit month (AUM) in 2001, which is the same amount charged in 2000.

An animal unit month is the amount of forage needed to sustain one cow and her calf, one horse, or five sheep or goats for a month. Under the 1986 Presidential Executive Order, the grazing fee cannot fall below \$1.35 per AUM.

But wheat is subsidized, so much so that in Montana, subsidies have outpaced

farm income in recent years. In 1998, Montana farms and ranches reported \$357 million in net income and collected subsidies totaling \$358 million. The next year wasn't much different, as net income was \$482 million, and subsidies totalled \$488 million.

In 1995, the year before the 1996 Farm Bill, net income was \$408 million and payments reached only \$190 million.

Between 1995 and 1998, wheat was responsible for 36 percent of Montana's cash receipts from agriculture. In 1999, that number dropped to 27 percent as prices and plantings were both down.

With the next piece of major farm legislation on the horizon, commodity groups are searching for answers to their recent problems.

Skeptics of the government payments want to see farmers weaned from subsidies, saying that they are far too dependent on taxpayer money. Others say that farmers continue practicing bad business models, and learn to profit from federal handouts.

Big Sandy farmer Lochiel Edwards, 47, said farmers want to be independent, but with low prices for commodities, farmers still need support. He said part of it is tied to the incredibly cheap food Americans are privileged to have. Edwards has about 2,800 acres of wheat planted this year and said he depends on subsidies every year.

"Americans spend 10 cents out of every dollar on food," he said. "If they want to keep that low cost going, farmers will need support."

Collins concedes farmers eventually need to be weaned from assistance, but until then it's all that keeps them farming.

Edwards said the 1996 bill represented a philosophical hope of farmers to become more independent.

“The farm economy will not stand that,” he said. “We’re supposed to be independent, and we would love to be independent, but if Americans want cheap, safe food, it takes a farm program to make that possible.”

Many farmers argue that if it weren’t for subsidies, farms would fail and land would be subdivided and developed for other uses. Their argument is that they deserve some taxpayer support for reasons other than just economic ones, reasons like providing open space and wildlife habitat for hunting.

Dean Folkvord, owner and operator of Wheat Montana Farms and Bakery, said it’s too bad farmers need subsidies, but it’s all that keeps them working. More than 10 years ago he diversified his operation and began adding value to his products, which has resulted in a more stable and profitable business. But even with his thriving business near Three Forks, he still depends on the government for some money.

“We still sell a significant amount of our wheat in the open market and maintain some federal assistance,” he said. “There are a lot of critics out there that don’t like the farm bill or subsidies, but a lot of farmers have been kept in business because of it. There were good and bad things that came along with it. It will be very interesting to see what they come up with in the next couple of years, but it should create some sort of security for farms.”

Economists at the Montana State University Agriculture Economics Department

believe similar subsidies will be necessary this year and next year if new legislation doesn't change things.

“Like it or not, these payments don't make most farmers rich, although some larger operations do profit,” said Myles Watts, MSU agriculture economics department head. “Government payments are the reason for our ag economy being somewhat safe.”

Watts said counties like Chouteau and Garfield that rely almost entirely on wheat and barley are in the worst shape. But those like Gallatin and Yellowstone that have cattle, wheat, barley and other small crops fare somewhat better in Montana. Collins, of the USDA, said diversity in what a farmer grows is the key to making a profit.

Said Rettig: “I hear people say farmers are getting rich of subsidies, but I can say that I wouldn't even be able to do it without the support. There wouldn't be any farms up here near Big Sandy and Rudyard if we didn't have subsidies.”

Many farmers still favor the freedom to plant what they desire, because they have more control over their income. Watts said this provides them the opportunity to move with the market.

Will Roehm, a Great Falls area wheat farmer, said the freedom to plant what he wants, gives him the ability to move with markets and become more dependent and responsible.

“I don't want to see them go back to supply side subsidies that restrict what you plant,” he said. “The crops that grow here offer fewer alternatives, but when you have flexibility you can manage and improve your program.”



“We’re not doing the same thing we were under the old farm program. The freedom in the last bill has led to a reduction in our cropping. We used to seed 75 percent or over and now we seed about 50 percent of our land. Under the old program, I had to plant almost all of it if I wanted subsidies.”

As the 1996 legislation creeps closer to its expiration date, the focus has turned from its problems to what Congress should do in the 2002 bill.

### **Future Promises**

Most groups agree the last farm bill was a failure and Congress is hearing it. However, many want to keep the provisions that allow farmers to plant what they want, and ranking leaders in both the Senate and House Ag Committees agree that Freedom to Farm must remain in future legislation. The support is based on the assumption that farmers have learned from their mistake and they truly will plant more diversely. Most of the debate surrounds subsidies.

Conditions for farmers in the coming years are hard to predict, but that is part of USDA chief economist Keith Collins’s job. In a presentation earlier this year to the House Agriculture Committee – on which U.S. Rep. Dennis Rehberg, R-Mont., serves, Collins said a strong rebound is very unlikely, unless there is a major shortfall in global commodity production.

“Assuming no supplemental assistance for the 2001 crops, net cash farm income is projected to decline from \$56.4 billion last year to under \$51 billion in 2001, as production expenses continue to rise and government payments decline,” he noted. “In

2001, farmers' total cash production expenses are forecast to increase \$1.5 billion to a record \$179.5 billion.”

But Collins is confident that the ag economy will slowly recover in the next few years. He said until then, farmers need some sort of safety net. Maybe when the economy finally recovers can the government once again talk about limiting assistance, he said.

Rehberg said the House Ag Committee would like to write the commodity program language by August, so that farmers will know what to expect when the farm bill comes before Congress next year. The Senate Ag Committee, however, wants to wait until 2002 to assess the whole picture. Sen. Max Baucus said the next bill must be a long-term solution.

“I firmly believe that we must open up the 1996 Freedom to Farm Act and consider a variety of counter-cyclical payments, not limited in amount,” said Baucus, who serves on the Senate Ag Committee. “Another large disaster bill is always looming in the wings. A ‘fix-it’ check once a year is not going to solve the problem. We need solutions for the long term.”

Baucus announced at a special joint session of the Montana legislature in March, that he, Rehberg and Sen. Conrad Burns are all working together to ensure that concerns of Montana's farmers are addressed in the next bill.

The agriculture committee of the U.S. House has been busy in recent months listening to all commodity groups, experts and ag associations while it develops a plan for

the next farm bill.

Richard Owen, the Montana Grain Growers Association executive vice president, said he is confident something will come out of the House this summer.

“We would like to see something soon,” he said. “Rehberg and the rest of the House committee want to have some written by July, but the Senate will be slower and isn’t acting too urgently. The House wants to get commodity title programs and conservation programs in by this summer. That’s pretty aggressive, but I think its possible.”

But what will change, and what have groups been lobbying for?

What has come out of most of the House hearings with commodity groups is the addition of some sort of counter-cyclical payment. That means that when prices drop below a trigger price, farmers would get assistance, but in good years, they would rely on their own farm income.

Most commodity groups, like Montana Grain Growers Association, the National Association of Wheat Growers, the National Barley Growers Association and others agree that counter-cyclical payments would help.

Along with counter-cyclical payments, many groups also favor something similar to Agricultural Market Transition Act (AMTA) payments that are already in place.

AMTA payments in Montana accounted for \$128 million in 1999 and an estimated \$116 million in 2000. The Commission on 21st Century Production Agriculture – a product of the last farm bill – recommends a fixed AMTA payment with the additional counter-

cyclical payment.

“I support some kind of new safety net,” said Edwards, a member of the Montana Grain Growers Association. “The counter-cyclical idea is a new idea, and I think it is the fairest to taxpayers. No one wants to support farmers when they’re doing well, but when prices are down, they’ll need that support.”

The Montana Farm Bureau, American Farm Bureau and National Farmers Union also support a similar plan.

The idea is gaining support in Congress, as Baucus supports counter-cyclical payments in the Senate, and House Ag Committee Chairman Larry Combest of Texas supports it in the House.

“As it should have, Congress has stepped in with emergency economic assistance in each of the last three years, and many farmers are still in business today because of that help. But the need continues,” Combest said in a press release. “It is time to stop ad hoc assistance and move to a more permanent solution that producers, their bankers and their suppliers can count on. And this can be done in a way that provides more fiscal discipline that will benefit the taxpayer while providing more predictable support to the agricultural community.”

Said Collins: “Counter-cyclical payments have some advantages. They pay when prices are down and don’t make a payment when times are good. If they’re tied to specific commodities, they will insulate farms from low prices. But this could distort production and the WTO could discipline us for production distortion.”

The World Trade Organization regulates market-distorting subsidies, and if any subsidy is separated from current prices and yields for any specific commodity, the payment would likely be safe under WTO guidelines. A subsidy can't distort prices of a particular product. The government can't tie their subsidies directly to price and yield.

MSU's Watts said commodity groups and agriculture lobbying groups like the Farm Bureau have a lot of clout in Washington D.C. and usually end up with something pretty close to what they want. It is a good thing for the farmers and ranchers, he said, because they represent their constituents – member producers – fairly well.

“If the Farm Bureau aligns with commodity groups, and it looks as though they will, then they will probably end up with something like the counter-cyclical payments coupled with market transition payments on the eight major commodity crops,” he said.

Said Collins: “Eventually farmers need to move away from subsidies and become a little more independent, like ranchers.”

He said there would be a lot more stress, in an already stressed ag economy without subsidies.

Rettig, who runs his farm near Rudyard with his wife, mother-in-law and father-in-law, said it would be impossible to farm without subsidies.

Said Billings are farmer Ron Staley: “They better do something to get us through this,” he said. “I'd love it if I could make enough money not to need the subsidies, but I can't, and I wouldn't be able to make payments and take care of my equipment if it weren't for the federal help.”

Collins said the real question is how much Congress will have to spend.

“The question is,” he said, “how much money does Congress want to make available? Agriculture is part of a big pie and only so much is available. The next farm policy will be derived from looking at the money available and seeing what policy would work best with that money.”

That answer was partially answered by the House Budget Committee in March. Agriculture's funding needs for the coming year and the 10-year budget baseline were a guaranteed priority – with national defense – in securing a share of the 10-year \$500 billion strategic reserve fund that the committee approved. Noting the House Agriculture Committee's active pace with farmer groups in compiling a consensus policy on farm commodity programs, budget writers left funding available, rather than restricting forthcoming farm policy to any specific limits in the 2002 through 2011 agriculture budget projection.

What comes out of the next farm bill should be eagerly awaited in Montana, as farmers continue to struggle with poor commodity prices and rising costs. Collins said that agriculture is at a turning point, and the next few years will play a large part in determining the future of farm policy and farming.

“We've been side-tracked the last couple of years,” he said. “We're really at an interesting point now, where we need to try and reduce the role of government support, but farmers have come to expect this, and they need it now. Hopefully they won't need it for too long. There is hope that the market will rebound and farmers will climb out of this

mess with a little help.”

Said Edwards: “I’ll be watching what happens in Washington D.C. very closely. This is a very important issue, and it’s going to shape our future. I am very interested in politics and especially the welfare of our rural economies.

“A lot of farmers really like what their doing and there’s a lot of complaining. But the risk they take demands respect and they could be making more money in other lines of work that don’t require the same risk. It’s not about the money. It’s about enjoying what you do and surviving in the process. We’d like to be independent. It’s too bad we have to depend on a farm program, but the whole country benefits.”

### ***The Road Ahead***

*Production prices are bound to rise and commodity prices remain low. What does this mean for Montana producers? Will these trends continue, and if so, what can farmers do?*



Farmers all over Montana clawed their way into the 21st century in a depressed agricultural economy.

The number of farms in Montana went from 28,000 in 1910 to 57,700 in 1920. Since then, the number has declined to the same number that existed in 1910. Between 1993 and 1999, the average size of the Montana farm decreased from 2,396 acres to 2,036 acres. This is happening in an era where the common assumption is, to survive in agriculture, you must increase the size of your operation to make it cost-efficient.

What's left for those who made it this far and hope to continue farming into the future? And more important, what changes will either improve ag economic conditions or further depress them?

Agriculture has been a consistent and large part of Montana history since its statehood in 1886. Cattle were first driven into Montana in 1833 and now they constitute about 45 percent of agricultural cash receipts from marketing of commodities in Montana.

In 1883, the U.S. Department of Agriculture estimated that there were nearly 600,000 cattle and 500,000 sheep in the Montana territory. In 1999, the Montana Agricultural Statistics Service (MASS) counted 2.6 million cattle and only 370,000 sheep. Sheep and the products they generate now account for just over 1 percent of cash receipts from marketing commodities.

Up until the turn of the century, most of Montana was either logging, mining or cattle country. Not until just before the 20th century did people recognize the value of the soil in Eastern Montana for crop production. By 1909, nearly 1 million acres were

being farmed, and 250,000 acres were planted to wheat. By 1919, 3.5 million acres were planted to wheat.

In 1999, MASS counted 57 million acres of Montana land in farms and ranches. In 1996, a record 6.6 million acres of wheat were planted. Three years later, the number was down to about 5.6 million acres, and barley, the second largest crop, was planted on 1.3 million acres.

From the early days and into the 21st century, two commodities – beef and wheat – have dominated Montana agriculture. Along the way, poor weather and poor markets have caused problems, but agriculture is still the dominant industry in Montana in terms of cash receipts.

However, when considering jobs or average income the picture is quite different. Nearly every year, farm numbers decline. Mechanization, better techniques and advanced biology have all worked together to decrease the importance of each farmer. The technology has come at a cost, and those costs have caught up with many farmers and ranchers.

Equipment, maintenance, seed, fertilizer, labor and many other costs are increasing the price of production at a time when return on those investments is declining.

Big Sandy wheat farmer Lochiel Edwards said production costs could drive many farmers out of business.

“Production costs are frightening and continually rising,” he said. “Energy costs will hit farmers especially hard, because it takes a lot of energy to make food. Everything

from equipment, to diesel, to fertilizer get more expensive each year, but our grain prices don't."

Said Great Falls farmer Will Roehm: "The biggest challenge has been making up for the costs of production. Fuel, machinery and all other inputs have gone up and the prices we receive for our wheat keeps going down."

In terms of production costs, the near future looks no better than the past. High natural gas prices have already caused an increase in fertilizer prices. Fuel prices also continually rise, as do prices for equipment and living expenses. While those prices continually go up, commodity prices are still low and aren't climbing fast enough for farmers and ranchers to make a profit.

"We expect to see some recovery in terms of commodities," said USDA Chief Economist Keith Collins. "But if production costs out-pace those costs, you're going to see a lot of farmers under pressure and stressed."

Collins said Montana's lack of crop and animal diversity makes it even tougher for farmers.

"When you have only one crop to depend on, you're in real trouble if it fails or if prices are low," he said.

Rob Johnson, an extension agent for Ravalli County in Western Montana, said farmers need to increase the size of their operations to make money in agriculture.

"You need a lot of determination to make it anymore," he said. "I think we need to diversify our agriculture system in Montana, so we're not so dependent on one or two

commodities.”

Shawn Rettig, a 32-year-old farmer from Rudyard, is trying to diversify his farm’s income to manage his risk.

“We’ve tried to diversify by adding cattle to what was once just a wheat farm,” he said. “Now, we raise 350 head of beef and we do some custom hauling on the side. That way, if the market goes bad in one area, at least we have something else to bank on.”

Roehm considered diversifying and examined some options, but said either way he would be taking a huge risk.

“I looked into diversifying my wheat operation with canola and peas, but I decided not to do it,” he said. “After the cost analysis, I saw a similar risk with those products. For me it’s not worth the risk.

“The investment really isn’t the issue for me, it’s the bottom line. The canola market is cyclical just like wheat, and it faces problems just like wheat. With any commodity, if there is a lot of it, the price will drop.”

Montana Department of Agriculture Director Ralph Peck said he hopes the state’s Vision 2005 plan can provide some help to the ag economy.

Vision 2005 is a plan that was created by a task force that former Gov. Marc Racicot put together in his final two years in office. Vision 2005 is a broad package of agricultural development programs. The programs are: Business recruitment and assistance, infrastructure development, marketing and product development, professional

The optimistic goal of Vision 2005 is to double the value of the state's ag sector by 2005.

"We're where we want to be right now," Peck said. "We've got some seed provisions in place and received funding in last year's special session. We've filled a lot of positions and hope to really get going now."

A top priority of Vision 2005 is business recruitment and assistance. Peck said one of the best ways to revive Montana's ag economy is to add value to the things Montanans produce already.

"We've seen a lot of great ideas in the past, like Wheat Montana, Pasta Montana and High Country Beef Jerky," he said. "Now we're seeing more ideas, and we want to help those people get their plans off the ground."

Marketing is also a cornerstone of the plan. Montanans receive so little for their product in the open market, better marketing can help them get a little extra for their product, Peck said.

The plan also looks at ways to improve transportation, increase irrigation acreage, encourage diversification and provide research and technology. It is a lofty goal to double the value of agriculture, but Peck is confident that having something to work toward will bring them closer to that goal than many think is possible.

"Agriculture is so important to our state," Peck said. "We need to do something, and I think this is a great start. Hopefully we can make it an attractive lifestyle again."

Said Staley: "I hope the state can do anything, really. Any sort of help is

welcomed, but if they want us to diversify and add value, the infrastructure must be there.”

Agriculture economist Myles Watts said the state needs to work on providing the environment for growth rather than trying to guide economic development. The Montana State University professor said the state needs to find a way to overcome its geographical disadvantage.

“We’re so far from most markets that it’s more beneficial for food processors to locate their mills and packing plants closer to population centers,” he said. “There isn’t a big enough market in Montana to consume everything we produce, so we really need to find a way to get more money for what we already deliver. Marketing is key to the development of this industry, and most farmers aren’t that good at marketing their products.”

In terms of federal ag policy, the clock is running out on the last piece of major legislation, leaving room for legislators to correct some past mistakes. Many assumptions made when Congress wrote the 1996 Farm Bill never came to pass. Instead of phasing out farmer subsidies, payments have gone up, and commodity crop prices have gone down.

Over the next year or so, both the Senate and House will be busy drafting the 2002 Farm Bill. The House Agriculture Committee looks to have language regarding commodities drafted by August. Leadership from various groups that represent farmers support some form of subsidies, and the most common proposal is the addition of a counter-cyclical payment that supports farmer income in poor years and doesn’t pay

when prices are up.

Montana's 2001 legislature passed one significant ag bill. Sen. Ric Holden, R-Glendive, won approval for legislation that allows farmers and ranchers the option of keeping 5 percent, or up to \$20,000, in tax-exempt saving accounts to manage their own risk.

Holden said he hopes this will allow farmers to keep money from good years and save it for bad ones. The Farm and Ranch Risk Management (FARRM) legislation dovetails with similar legislation being discussed in Congress.

"That's important legislation," said Edwards. "It's good for farmers to have this option. It encourages better marketing. In the past, guys that could afford it held grain in their bins for insurance in bad years. But this allows us to do it with money. It frees you up to make more intelligent marketing decisions and encourages the ag community to self-insure."

But a bill that would have required grocery stores and meat counters to identify the country of origin for meat and produce was killed. From a rancher's or farmer's perspective, this bill could have helped increase the value of their product.

"They fight this country of origin food labeling, but don't you want to know where your food is coming from?" Staley asked. "Other countries don't have the same regulations we have here, and we have high quality, safe products. I think it's scary not knowing where your food is coming from."

Another issue that could profoundly affect the future of Montana's ag economy

is trade. Sen. Max Baucus has tried to improve trade relations in Asia, and his efforts have paid off, as most of Montana's grain and beef exports reach Asian markets.

Also, the inclusion of China in the WTO, and the establishment of permanent normal trade relations, presents a great opportunity for Montana producers, Baucus said.

"We want to open trade doors to Montanans so they can do business in Asia and find new markets for their goods and services, including wheat and beef," he said.

Richard Owen, Montana Grain Growers Association executive vice president, said trade will be essential if Montana wants to keep farmers in business.

"We already export so much, if we can increase that and get more for our products, we should be in good shape," he said. "It is one of the best ways to keep the grain business a viable one in Montana."

Montana farmers and ranchers also have other worries as well. Another drought is looming, leaving many farmers wondering if they'll even have a product to sell.

Staley said he has never seen it dry this early in places on his farm. He expects to be hauling water to his cattle this summer.

State Ag Director Ralph Peck said it will be tough to focus on other important issues like trade and Vision 2005 if the drought worsens.

"It seems like we finally have a chance to do something to change the economy and push things along, then we get no precipitation," he said. "It's hard to fix things when something else keeps stepping in and breaking them again."

Said Edwards: "I'd say its historically dry here. But I don't worry about the



weather, because I can't control it. I just try to do the best I can with what I have."

For Montana, the outlook is bright in some areas and gloomy in others. Beef prices are steadily climbing as world demand increases, and wheat prices remain fairly low. Many economists, including Watts and Collins expect wheat prices to go up a little this year, as plantings and stocks are down, while demand is slightly improving.

"Hopefully we'll see some improvement," said Collins. "But in Montana, you need to pray for rain and a good yield. Hopefully we can make up for some of the rising production costs, but I expect to see farmers to continue to rely on government support until something drastically changes."

Edwards, who has been farming 31 years on the land his grandfather homesteaded near Big Sandy, said he has seen these predictions every year from different experts.

"Experts are usually wrong, but there is a lot of support for idea that we'll see a modest up-trend for grain prices and jury is still out for farm program," he said. "Let's hope that something can make up for the costs."

Roehm has only been farming for eight years and said the quality of life is his primary motivation to remain in the industry. Like Edwards, he hopes the predictions come to pass, but said money isn't his only concern.

"There is more to life than just making money," he said. "Many people are willing to put a value on the quality of life, and I am one of them. I want my family to have the chance to live here and I want my kids to have a childhood like I did. For that reason I'll keep working in order to keep farming."

## Interviews

Baucus, Max

Biggerstaff, Dan

Blake, Tom

Collins, Keith

Cummins, Jake

Edward, Lochiel

Folkvord, Dean

Hammond, Aimmee

Holden, Ric

Johnson, Jim

Johnson, Rob

Langley, Pam

Owen, Richard

Peck, Ralph

Quisenberry, Sharron

Rehberg, Dennis

Rettig, Shawn

Roehm, Will

Staley, Ron

Waddill, Butch

Watts, Myles

## Publications

Toole, Kenneth Ross., *Montana: an uncommon land*. University of Oklahoma Press, 1st. Norman. 1959.

Montana Agricultural Statistics Service, *Montana Agricultural Statistics 2000: 1998-1999 County Estimates*. Montana Agricultural Statistics Service. Helena. 2000.

Montana Agricultural Statistics Service, *Montana Agricultural Statistics 1990: County Statistics 1988-1989*. Montana Agricultural Statistics Service. Helena. 1990.

National Agricultural Statistics Service, *1997 Census of Agriculture: Montana State and County Data*. National Agricultural Statistics Service. Helena. 1999.

Montana State University Trade Research Center, *Livestock and Grains: Trade Research Center Price and Revenue Outlook, Outlook Series No. 2*. Trade Research Center. Bozeman. 2000.

Commission on 21st Century Production Agriculture, *The Commission on 21st Century Production Agriculture, Final Report, Volume II*. Commission on 21st Century Production Agriculture. Washington, D.C. 2001.

San Diego Center For Molecular Agriculture, *Foods From Genetically Modified Crops*. San Diego Center for molecular Agriculture. San Diego. 2001.

Power, Thomas M. *Lost Landscapes and Failed Economies*. Island Press. Washington, D.C. 1996.

Wheelwright, Jeff, *Don't Eat Again Until You Read This*. Discover. March 2001.

Brown, Kathryn, *Seeds of Concern*. Scientific American. April 2001.

Hopkin, Karen, *The Risks on the Table*. Scientific American. April 2001.

## Web Sites

*U.S. Department of Agriculture.* <http://www.usda.gov/> (2001).

*Montana Department of Agriculture.* <http://agr.state.mt.us/> (2001).

*Montana Department of Commerce.* <http://commerce.state.mt.us/> (2001).

*Agbioworld.* <http://www.agbioworld.org/> (2001).

*Union of Concerned Scientists.* <http://www.ucsusa.org/> (2001).

*International Service for the Acquisition of Agri-biotech Applications.* <http://www.isaaa.org/> (2001).

*Montana Market Manager.* <http://www.montanamarketmanager.org/> (2001).

*Big Sky Beef.* <http://www.beef.com> (2001).

*Wheat Montana Farms and Bakery.* <http://www.wheatmontana.com/> (2001).

*Montana Grain Growers Association.* <http://www.mgga.org/> (2001).

*Monsanto Co.* <http://www.monsanto.com/> (2001).

*Montana Farm Bureau Federation.* <http://www.fb.org/mtfb/> (2001).

*Montana State Legislature.* <http://leg.state.mt.us/> (2001).

*Census 2000.* <http://www.census2000.gov/> (2001).

*House Agriculture Committee.* <http://agriculture.house.gov/> (2001).

*Senate Committee on Agriculture, Nutrition and Forestry.*  
<http://www.senate.gov/~agriculture> (2001).

*Biotechnology Industry Organization.* <http://www.bio.org/> (2001).