Interview with Edward A. Gudmundson

For the Heritage Education Commission

To many in the Red River Valley, sugar beets mainly mean an endless procession of trucks. There are the pickup trucks in May, as migrant workers come to the towns, seeking work in the beet fields. There are the growers's trucks on every county road in September and October, hauling newly harvested beets to the huge piling stations. Then the even larger semis, with even more beets, moving to and from the processing plants on both sides of the Red River. Few who see all these vehicles realize they are only the most visible part of an intricate system that has made sugar beets one of the nation's most successful farming industries.

This complex and profitable industry grew from modest beginnings. Sugar beet growing began in the Valley when a few families in Polk County, Minnesota, experimented with small plots of beets on their family farms. Carl Wigand, a Crookston area farmer, grew in 1918 and 1919 about five acres of test sugar beets for the Minnesota Sugar Company of Chaska. When these proved to be of decent size and sugar content, company officers talked to other Polk County farmers about growing small plots of beets for shipment to Chaska. Within a couple years, area business men were pushing forward a scheme to build a local sugar processing plant.

The plant was not built locally, however, but by American Beet Sugar Company. Established in the 1890s, American Beet Sugar was headquartered in the west, mainly in California and Colorado. Its board of directors identified the Red River Valley as a good prospect for expansion and decided to take action. After a series of intricate negotiations, American Beet purchased Minnesota Sugar in 1924. Within two years, American Beet had constructed a new sugar refinery at East Grand Forks, Minnesota, and signed up several hundred farmers on both sides of the river to grow sugar beets for them under contract.

Each grower's contract with American Beet was straightforward. The grower agreed to grow the beet crop for the company, and to follow certain stipulations concerning land use, weeding, and harvest. In return, American Beet agreed to provide advice in growing through its field agents, and arrange for seasonal labor as needed to help with the weeding and harvest. The company also agreed to accept delivery of the crop and pay the growers in cash. By 1926, when the East Grand Forks plant opened, 4000 acres of beets were in cultivation on some 250 different farms. That gave each grower an average of less than 20 acres. It was rare for one grower to have as much as 40 acres.

The major reason for such small acreage allotments was the limited technology available to growers. Until the mid-1940s, most of the work was performed either by horses or by hand. Sugar beets received almost individual care. "Prior to the widespread use of machinery,

every single sugar beet was handled by someone once or twice before being processed into sugar," noted Stewart Bass, who for years was the main contact between grower and company.

Edward Reitmeier, son of one of the earliest farmers to grow beets around Crookston, vividly remembers the work involved in nurturing the crop. "I helped my father seed. We had to use two beet drills then, horse-drawn. We would both go down a field together, he'd go ahead and I'd follow with my team. You know, I suppose that's the way he kept us from getting the rows too crooked." Reitmeier was just ten years old when he planted a field with a horse-drawn drill.

Once the plants began to emerge, they appeared as a thick stand of several seedlings, which meant someone had to thin each stand down to a single hardy plant. That usually was the job of migrant workers, hired for this kind of hand labor. "They almost always used a short-handled hoe," Reitmeier remembers, "and they'd bend down and go down the row." Later, the same workers would weed the fields with longer hoes, at least twice during the summer. All of this was difficult, back-breaking work.

The fall harvest was equally draining. It took a long time to lift the beets by horse team, top them by hand, fork them into wagons or a small truck and deliver them to railroad sidings for shipment to the factory. At the sidings, men shoveled tons of beets into open cars by hand. But first they had to wait for the cars to arrive. "Many times I've sat all day waiting to unload one load," grower Hugh Trowbridge told his children.

As with any crop, the harvest of sugar beets was an all day affair. Growers and workers would take meals in the fields, delivered by farm wives, whose memories of fall generally consist of "cooking meals, packing meals in blankets and boxes to keep them warm, taking them to the fields, then going back and starting all over again." It generally took five or six weeks to harvest 40 to 50 acres of beets, and if the weather failed to cooperate, it could take ten weeks or more, the last fields often being harvested in cold and snow. Looking back on those hard years, John Fiandaca, who started growing beets with his father on 12 acres of land near Dilworth, wondered: "why we ever stayed in the business, starting out like that, I'll never know."

But most early growers did stay with sugar beets, and the reason was money. The 1920s and 1930s were horrible years for most American farmers, but the American Beet contract usually meant some cash profit to a grower, because the

company handled shipment and storage, and guaranteed payment in regular installments on the volume of beets delivered to the factory.

Sugar beets also proved to be hardy. Once stands were established and weeded, the grower could generally count on getting a crop. Beets stood up to wet conditions or dry conditions, and even if delays in harvest led to frost, most beets could still be saved and delivered. And

that, with the assurance of payment, meant beets were a cash crop, the farmer's dream. Thus by the time American Beet Sugar changed its name to American Crystal Sugar, in the mid-1930s, many farmers were not only willing to endure the intensive work in growing, many of them wanted to get larger contracts.

The Ross family is a good example of a sugar beet success story. Ferdinand Ross, who was a friend of Carl Wigand, saw the potential of sugar beets early. Everyone knew Ferd Ross and respected his judgment. By the time the plant opened in East Grand Forks, Ross was working for American Beet to recruit more farmers. He advised his friends to take as much acreage as they could handle. He recruited many of the farmers around Fisher and Crookston, including his father, his brothers, and most other relatives. He and his son Walter were growing 75 acres of their own, well above the

average holding. By the time Ferd died in 1932, the Ross family had well-established beet farms.

The Ross family also joined with several other early growers to establish the Red River Valley Sugar Beet Growers Association. Ed Reitmeier remembers when the Association formed. "The idea was for everyone to chip in and take a little bit [of income] out of our beet crop" for membership in a growers group that could deal with American Crystal as a unit, seeking more acreage and better contract conditions. The Reitmeiers joined and so did most of the other early growers. As American Crystal expanded in other parts of the Valley, the Association spread as well.

The Growers Association was just one of several groups formed for expanding domestic beet sugar, but, with good organization and leadership, it became the most successful such organization in the western states. Since the United States Department of Agriculture regulated the domestic sugar industry by determining how many acres of sugar cane or sugar beets could be grown in the nation, farmers who wanted to grow beets had to press the Federal government to increase acreage allotments. Hugh Trowbridge, president of the Growers Association for many years, remembered spending "many, many hours" in the 1940s talking to congressmen about increasing sugar beet acreage allotments in the Valley.

The efforts of Trowbridge and other growers were not in vain. Sugar beet acreage allotments were increased slightly, mainly because World War II cut off many overseas sources of sugar. The war also gave a boost to the development of machines for cultivationg and harvesting beets. Labor was in short supply during the war years, so much so that during the 1944 growing season, many Valley farmers employed German prisoners of war to work their beet fields. Meanwhile, other growers were applying their own experiences in the field, working with agents from International Harvester and other companies to design new equipment.

Just as the history of migrant labor in the sugar beet industry is a story that would require much more space, so the evolution of sugar beet equipment is too long and detailed to fully

relate here. Suffice to say that by the early 1950s, there were small harvesters being used in every part of Valley. These machines could lift and top the individual plants, then windrow them where mechanical loaders could then fill the trucks for delivery, thus eliminating some of the most difficult field work. The machines sped up the entire harvest, eliminated hand labor, lowered costs, and enabled the grower to handle more acres.

Sugar beets had entered the technological age. Soon, seed developments, crop thinning, fertilizing, and better

planting shortened the distance between rows, and increased tonnage per acre. Chemical herbicides and pesticides were becoming available in greater numbers, and local colleges began researching their application. Engineers were studying and modifying equipment based on experiences in the field, and the field agents themselves were going back to school to keep abreast of the rapid changes.

Hand in hand with all this technical change were major alterations in beet economics. New machines would speed the work and, in the long run, make a better product for conversion to sugar. But machines cost money, and even though the payments to the grower were rising in line with the rising price of sugar, the acreage per grower was not advancing so well.

The Federal government had altered its regulations, permitting sugar companies, under certain circumstances, to expand their operations and compete for a larger segment of the American market. American Crystal had indeed expanded its operations in the Valley, with processing plants added at Moorhead in 1948, Crookston in 1954, and Drayton, North Dakota, in 1965. But by the mid-1960s increased acreage and demands for new acreage were greater than these plants could sustain. The directors of Crystal were reluctant to keep pace with new technology to increase factory capacity. The existing plants were wearing out and this worried growers.

In 1965, a grower in Wilkin County, Minnesota, surveyed beet production costs and concluded that "economies of size," cost of labor, seed, machinery, everything involved in bringing up and delivering a crop now dictated that a grower needed "a minimum 90 acres" of sugar beets to obtain the best profit. At the time, barely half of the Valley growers had contracts for as much as 90 acres. Some members of the Red River Valley Sugar Beet Growers had been growing for 40 years, but they feared that in the future Crystal would increase acreage per family by simply reducing the number of growers. Others were afraid that the Company would close down its operations altogether.

From the mid-1960s into the early 1970s the Red River Valley Sugar Beet Growers Association leaders and Crystal's managers engaged in a series of negotiations. The Growers Association's executive director, Al Bloomquist, put forward a number of suggestions, but became convinced that the problems could not be solved entirely unless the growers bought the company. This idea was greeted with much skepticism at first, but after intricate financial and legal arrangements, the growers did indeed buy the company in 1973.

Pat Benedict, a grower whose father and uncle had been growing sugar beets thirty years before, still remembers that, as the financing for the deal was being assembled,

most people "really didn't think we were going to be able to do it." But the deal was concluded, and the company was then reorganized as a growers cooperative. Bendict and most other growers credit Bloomquist's leadership and vision for the success of this venture, in which many of them risked the futures of their farms. The number of acres for sugar beets was expanded almost immediately, and within two years a fifth factory, at Hillsboro, North Dakota, was added to the operations. After half a century, the growers, in effect, became the company.

In the 20 years since the emergence of the new American Crystal, sugar beet farming has become a billion dollar industry in the Valley, an agribusiness to be reckoned with. As such, it is a vastly different business from the one that started with one factory and a few growers in the early 1920s. Now five factories process up to seven million tons of beets into sugar annually. The vastly improved delivery system -- all those trucks going to all those piling stations -- have reduced harvest time from upwards of ten weeks to some two weeks for the average grower.

The harvest yields higher tonnage per acre and better quality sugar beets than the first growers ever dreamed of growing. American Crystal, together with the Growers Association and the local universities, supports research for everything from improving seed varieties to finding

means to combat the latest plant diseases. And American Crystal sugar is marketed all over the nation, not just in five pound bags, but in bulk sales to food companies and other industries.

Much has changed for the single contract holder as well. The grower today plants his crop with a 12-row or 24-row planter and cultivates it with a cultivator of the matching size. When it comes time to bring in the crop, he may employ multi-row harvesters that can harvest in a day what took field hands several weeks. But the price of this technological advancement is considerable. Just three pieces of equipment (planter, cultivator, harvester) can cost as much as \$200,000. Jim Ross, whose great-grandfather Ferd did so much to get farmers to even try growing beets, knows how important careful business practices are to today's farmer. "You have to carefully study every piece of equipment; what it will cost to buy, insure and repair; will it make the job less expensive; with it could you add more acres of the crop, or actually lose money? You have to think it through, because even a truck is a big investment at current prices." With considerations like this, it is not surprising that the computer is becoming as much a part of farming as the tractor.

Still, the challenge remains the same. Each spring, the grower does his planting and then waits for the plants to

emerge to full stand. Thinning and cultivation, once exclusively hand work, is increasingly performed with machines and chemicals. But if the weather does not cooperate -- if it's too

dry, for example -- then there is no choice but to hire workers to do some work with long-handled hoes, the same way as it was done in the beginning. Next come the long weeks of checking for diseases or pests and fretting over the amount of rainfall. And, finally, the tense, hurrying days of harvest arrive, with machines running day and night and everyone in the family involved in delivering the beets to the piling stations and factory yards. And, then what? "We start planning for next year."

Manvel Green, a grower in the north end of the Valley, where very dry conditions in 1990 and 1991 resulted in disappointing beet crops, believes that, even with the changes in technology and markets, "the basic elements of growing don't change. Each year is a new challenge. What will the weather do -- will it be dry or too wet? Will I have to spray for leaf spot? In the end you put the seeds in the ground and hope, and so far beets have been a pretty dependable crop."

Jim Ross, who will be planting the family's 74th sugar beet crop this year, said, "Ask a grower which beet crop was his best, and he'll usually say, 'next year's crop, I hope."