

A Tiny North Dakota Community

NDSU 'Big Turtle' has brought more than economic development.



The road out of Dunseith, North Dakota looks like it goes to the end of the world — almost.

The city of Dunseith, North Dakota, population 625, lies just 14 miles south of the Canadian border, nestled in the foothills of the Turtle Mountains. Boundary Butte, highest of The Turtles, is only 2,545 feet above sea level, causing the mountains to look somewhat more like turtles than mountains.

It was appropriate, therefore, that when John Miller decided to start a manufacturing company on the Chippewa Reservation next door to Dunseith, it should be called the Turtle Mountain Corporation.

TMC now has its principal manufacturing plant in Dunseith, near the western edge of the reservation. The company employs 140 to 150 people full time, with an annual payroll in the \$1-1.5 million range. That monthly infusion of new dollars has had a very visible effect on the small community's economy.

There's a thriving "main drag," with functioning stores, gas stations, cafes and a bank. Late-model cars are much in evidence. Most of the houses have paint on them.

Conspicuously absent from Dunseith and its environs are the vacant storefronts and paintless, windowless, abandoned farmsteads that have come to characterize too much of the rural North Dakota landscape in its hundredth year of statehood.

Economists like to calculate the "multiplier effect" new dollars have on a community once they've been passed from hand-to-hand. But, as witnessed by Dunseith, there is much more to economic development than a transfusion of new money.

For example:

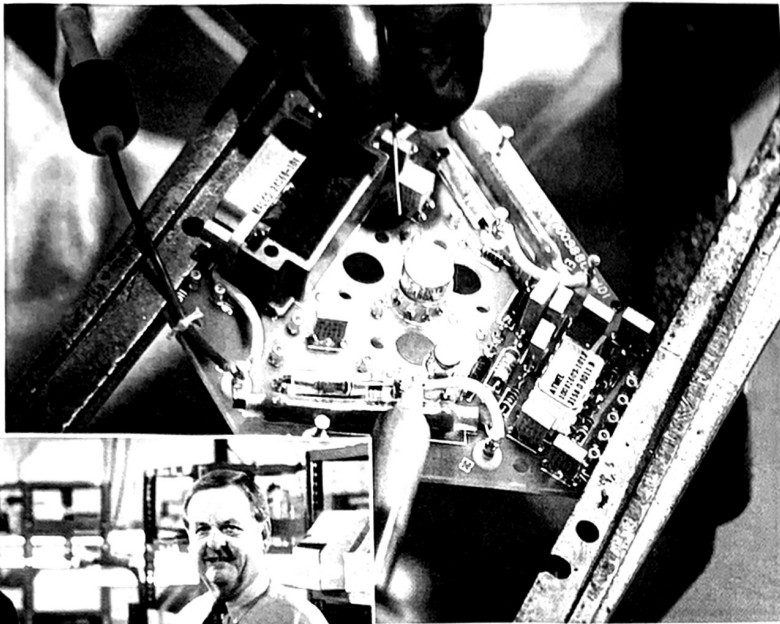
- There is simply the matter of having a job and the feeling of self-worth that comes with that.
- There is the pride people feel in knowing they're doing good work.
- There's having a place to go "where everybody knows your name."
- And, ironically perhaps, there is not having to experience the ignominy of being on welfare.

North Dakotans have been hearing a lot about economic development lately.

Almost 20 years ago, primarily in the interests of his personal economic development, John Miller decided to *do* something about it.

In 1958, following a stint with the military after graduation, as was the case with many of his classmates, Miller went to work for a large engineering firm (UNIVAC) in the Twin Cities. Eleven years with that organization convinced him he'd prefer being a bigger frog in a smaller pond to being a cog in a very large, impersonal machine.

At the age of 35, Miller quit his job at UNIVAC. Having grown up at Underwood he knew a little about rural North Dakota values and work ethic, and was intrigued with the possibility of working something out with its habitually underemployed Native American population. With his wife, Pat (Larsen, HEc.'57) as company treasurer, Miller embarked on a risky venture, starting a contract manufacturing plant "in the middle of nowhere," with mostly Native American employees.



In a small, drafty concrete-block building at Belcourt, on the Turtle Mountain Reservation, the ex-NDSU student body president started his own company, which would become the Turtle Mountain Corporation.

more difficult. But turtles, the big snappers in particular, are noted for tenacity. Miller has made it work.

Getting TMC up and running involved a considerable investment of shoe leather on Miller's part. From his home in St. Paul, he would make the rounds of major firms in the Twin Cities — Honeywell, 3M, General Mills, Control Data, etc. — and ask the receptionist to tell the boss, "The Big Turtle is here to see you." As an aside, Miller claims they occasionally looked back with incredulity and asked, "The Big Turkey?"

Meanwhile, he had hired present-day engineer/plant manager/partner Bob Wilmot fresh out of NDSU's College of Engineering. Wilmot had responded to a notice of a job opening Miller had posted on the college's bulletin board.

At one point, when the company was at its lowest ebb, Miller recalls that the Bureau of Indian Affairs sponsored a tour of the Belcourt plant for representatives of some of the big manufacturing firms — IBM, 3M, Honeywell, etc. — "Those fellows flew in with their briefcases and button-down shirts. It was well up in the 90s, with about a 55-mile-an-hour wind that scared the hell out of them when they tried to land. We were able to round up about 10 people to make us look busy, even though we were really hurting for work."

Luckily, an IBM representative Miller met as a result of that tour turned out to be a former student at NDSU. That led to a contract for sorting and inventorying a truckload of assorted tiny electronic parts, more than 1.5 million of them in all. "I'm not sure we made any money," Miller said. "But it gave us the boost we needed. It put a lot of people to work, and we proved we could do it."

What Miller ultimately did become was "The Big Turtle," CEO of one of America's most unlikely corporate entities.

TMC began its corporate life as an organization called ATRON, started by Miller and nine fellow spinoffs from UNIVAC. During its first year of operations at Belcourt, it generated encouraging gross sales of just over \$1 million. That helped pay off some of the start-up costs. Subsequent years, however, would have their ups and downs.

Initially, ATRON/TMC's manufacturing plant was a 7,000 square-foot tribal-owned building that could accommodate its 15 employees as comfortably as possible in a place where the temperature gets above 100° in midsummer and drops to minus 40° in the depths of a North Dakota winter.

The concept behind TMC is that very large companies often need to have small electronic devices manufactured for experimental purposes, prototypes, testing equipment or as components of larger machines. Given the comparatively low cost of his labor force and overhead, Miller was convinced he could manufacture such items at a competitive price. Convincing potential customers proved a bit

Bob Wilmot, left and John Miller are head honchos of the Turtle Mountain Corporation. Miller hired Wilmot fresh out of NDSU's College of Engineering and Architecture. As engineer/plant manager/partner, Wilmot runs the Dunseith manufacturing plant, while Miller, founder and president, minds the St. Paul store, making the 1,000-mile round-trip commute an average of once a month.

By the end of the 1970s TMC had outgrown its modest Belcourt facility. In 1980 a newer, tighter, and larger structure became available at nearby Dunseith, so The Big Turtle packed up his company and moved off the reservation.

"It was a tough decision," Miller recalls. "We weren't sure what would happen with our reservation workers. But it has turned out for the best. Many of them are able to commute from Belcourt and are still with us."

Because Dunseith is about midway between the larger communities of Bottineau and Rugby, TMC employees have a choice of communities in which to live. Most of its engineers live and send their kids to school in one of the larger towns and commute back and forth to the plant. Craig Miller, EEE'80, and Greg Berginski, EEE'87, are among eight company engineers who make the daily scenic drive with very little traffic.

TMC has undergone three physical expansions since the move to Dunseith. The plant now occupies a commodious 47,000 square feet.

Because of its location and involvement with Native Americans, people tend to leap to the assumption, according to Miller, that TMC is run by the federal government and gets big grants. It's not, and it doesn't. Any assistance of that sort has only come indirectly. The company's present facility is owned by the city of Dunseith, and leased to TMC. The city became eligible for an Urban Development Acceleration grant, with which to build offices in the basic shell and air condition it. TMC pays that money back through its lease, and Dunseith is allowed to use it for other community development projects.

TMC's success in employing Native Americans has been one of the most rewarding aspects of Miller's small enterprise.

"Some people have the misapprehension that an Indian-related business can't be as high-tech as others," Miller said. "We've proved that to be wrong. Our people have won numerous awards for the quality of their work from many of our customers — 12 months without a defect from IBM, quality awards from General Electric — our customers just want to do business with reliable suppliers.

"Our work force is made up of people who want to work and need to work," Miller said. "The company is very tightly run." Miller has been hoping one of these days he will be able to hire a Native American engineer, but NDSU engineering dean Joe Stanislaw said he has had trouble attracting Native Americans into the engineering curriculum. The two of them are working together to change that.

Frank X. Morin, former mayor of Dunseith, now retired as superintendent of the Turtle Mountain Reservation, has been immensely helpful to Miller in his relations with the Native American community. Morin attended the NDAC back in the late 1930s, then went off to war and returned to the Dakotas to finish a degree at South Dakota State. He feels TMC has meant a great deal to the Turtle Mountain Native American community.

"The young people are the key to this thing," Morin said. "They're earning income rather than getting it from the welfare office... by gad, they can be proud of it!"

These days, just over half of the TMC work force is made up of Native Americans. The others are a mixed assortment of seniors (including a husband and wife retiree couple), working mothers and area high school grads. Adequate training, Miller feels, is the key to the company's success and its quality control.

Responsibility for running TMC's in-house instructional programs rests with a 1980 NDSU ag education grad, Keith Knudson, who carries the title Director of Quality Assurance. His job is to assess employees' abilities and help them bring their skill levels up to meet job requirements. Continuous in-plant training and a sort of "buddy system" with supervisory personnel encourage the people to increase their value to the company and move up through the ranks.

Lucy Overby, a 16-year veteran with TMC, describes her job as being a "lead person" (supervisor). Miller says she is an excellent problem solver and work planner. "The sort of person we call on when we're confronted with something new."



Miller describes 16-year veteran Lucy Overby as "an excellent work planner and problem solver." For Overby, working at TMC "...sure beats working in a grocery store."



Theresa Gourneau has worked at TMC for 13 years at a variety of increasingly demanding operations. On the shy side, she prefers not to be called a Jill-of-all-trades, but likes the challenge and likes the work.

Theresa Gourneau, on the shy side, prefers not to be described as a Jack-(or Jill)-of-all-trades at TMC. Yet over the course of 13 years she has done a wide variety of different tasks. At the moment she's working on intricate printed circuit boards using a binocular microscope. She's only been at her new job for a few months, but likes it a lot.

Not surprisingly, fluctuations in TMC's business activity reflect what else is going on in the world at the moment. When multi-national corporations experience ups and downs, their suppliers ride that same rollercoaster. Defense contracts and events such as the Middle East crisis have a ripple effect. A customer in Kansas City, for example, recently placed a hurry-up order for military radios that would function well in the desert.

To compete effectively with the Japanese, American suppliers such as TMC must keep tooled up with state-of-the-art technology and be able to deliver products "just-in-time" for the larger company to use them.

"They don't want to carry an inventory," Miller said. "...nor have to inspect the product. They want it when they need it, in the quantity and quality they need."

TMC ships printed circuitry and testing equipment to IBM plant locations all across the country. It also produces three to four semi loads — 37 units to a load — of library theft detectors (tattletapes) each month, and manufactures such disparate items as an electronic sensor that allows rotating irrigation sprinklers to reach into the corners, and circuit boards for high-resolution cathode ray tubes.

Virtually all of the work must be done with exacting precision under almost operating-room conditions of cleanliness. Much of it involves the use of binocular microscopes, winding copper wire, thinner than strands of human hair, and soldering myriad tiny, jewel-like capacitors to circuit boards with scrupulous attention to detail. Each worker is charged with inspecting his or her work, which is double-checked by that individual's supervisor. Production goals of both quality and quantity are set and the workers are encouraged to surpass them.

On Pearl Harbor Day last December, the Turtle Mountain Corporation celebrated its 16th birthday. In a sense it's still a mom and pop company. As controller, Pat signs all the checks, including John's. Their son, Mike, a recent Wisconsin-River Falls graduate, is responsible for computer operations and procurement. But "The Big Turtle" deliberately downplays the idea that TMC is John Miller's company.

It now has a ten-person sales force working out of the company's suburban St. Paul headquarters, which is linked by computers to the manufacturing plant at Dunseith. Miller feels that TMC, operating at about 40 percent of capacity, is well-positioned for continuing growth. At its peak in 1988, when TMC began manufacturing a new product for IBM, its workforce grew to 225 and gross sales surpassed \$10 million. With the present core in place the company is in a position to grow to 2 1/2 times its present size. Miller has set a goal of \$20 million in sales by 1994.

Based on 20 years of experience, Miller has some thoughts of his own about economic development in North Dakota: "In the end, the responsibility really rests with the individual entrepreneur.

"In these small towns, a little bit of business can mean a lot," Miller said. "Five to ten new jobs in a small community can be really significant. It's very possible that NDSU grads can be encouraged to do that sort of thing. North Dakota graduates in big corporations can also be good customers if they know the capabilities of North Dakota manufacturers. We would like to connect with them."

Frank X. Morin, Lucy Overby and Theresa Gourneau would endorse those sentiments. "It sure beats working in a grocery store," Overby said. "If you like the job, the working conditions are really good."

Morin put it nicely when he told Miller, "I don't know what we'd have done without you."



Ex-Dunseith Mayor Frank X. Morin attended the NDAC back in the 1930s, went to war, and earned a degree from South Dakota State. Of TMC's impact on the small community, Morin said "We couldn't have done it without you."