

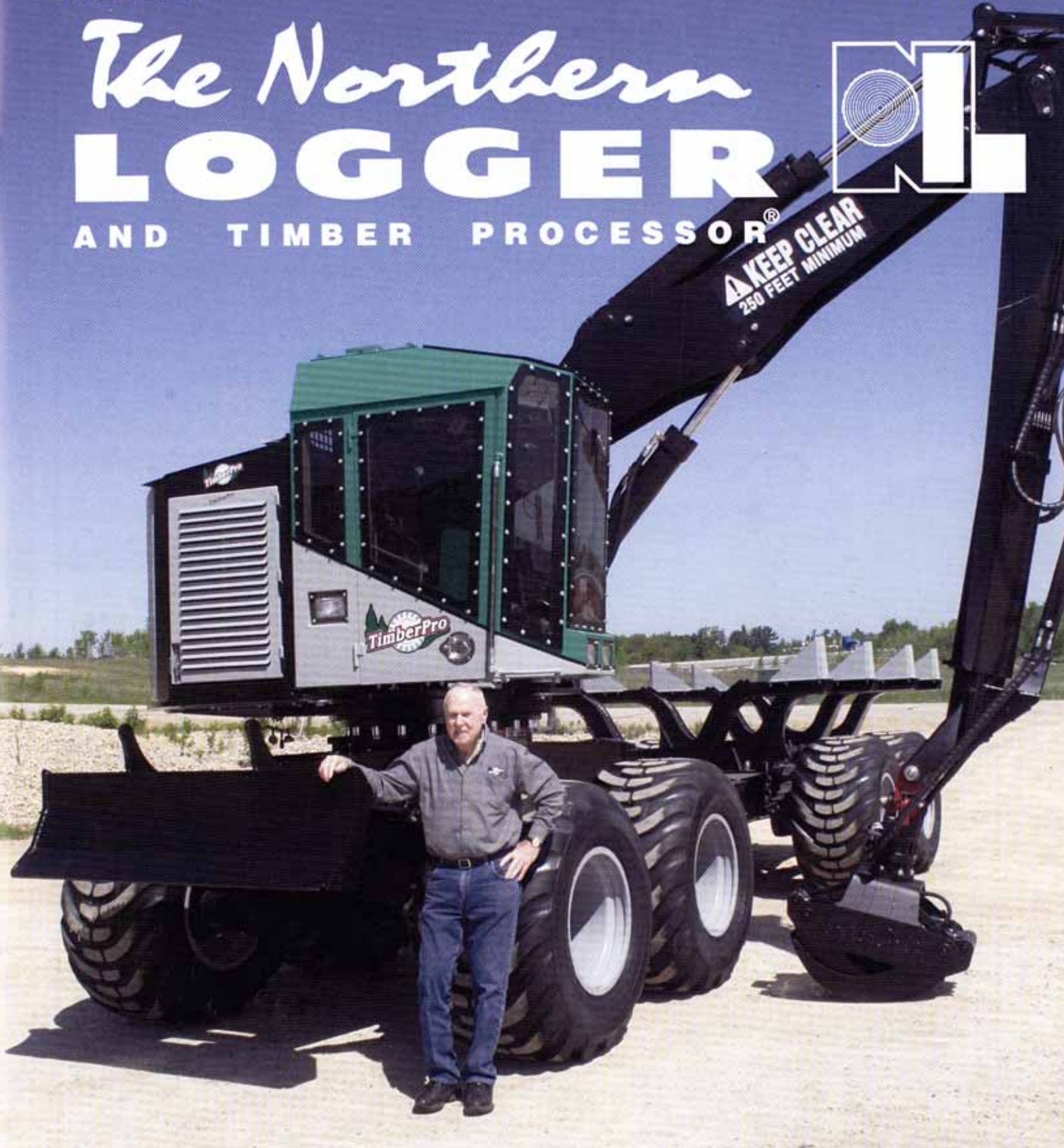
JUNE 2007

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**Pat Crawford's
Amazing Career**

PAT CRAWFORD'S AMAZING CAREER

**AT 81, THE INVENTOR OF THE TIMBCO
IS STILL DESIGNING & MANUFACTURING**

BY MIKE MONTE

Pat Crawford of Shawano, Wisconsin, has had a long, varied and successful career in the forest products industry. The 81 year-old entrepreneur was born into a logging family (in a logging camp, no less)

set out for Montana to log. He found that he liked the work. He had thought he would get a degree in forestry, but says there were no schools in Wisconsin, at the time, that offered a forestry degree.

near Winter, WI, in 1926. His grandfather came from Canada in the 1880s to log, and married a girl from Maine. Crawford's father followed his dad into the woods.

Crawford graduated from high school in the middle of World War II. After a year of college, he joined the Army Air Corps. He wanted to fly a B-17. The summer of 1944 found him waiting to get into flight school. Evidently, in the rush to train pilots, the Air Corps outdid itself, and with the end of the war in the not-too-distant future, Crawford languished on the ground. His potential skills as a pilot were never realized and when he left the military, he attended college at Eau Claire, at what is now the University of Wisconsin-Eau Claire. His goal was to be a physical education instructor. In the summer of 1949, Crawford and some college buddies



Crawford in his office with the model his first patent was based on.

Instead, Crawford's career path took another sharp turn and he became a professional baseball player. He played with a minor league team in Indiana in the summer of 1950. Before long, it became evident that there were other, more skilled players in the game, and he became convinced he wouldn't make it to the big leagues. In 1951 he married his wife, Ruth, and moved to Medford, Oregon to be a timber faller.

Crawford says that he got involved in logging some of the big trees being cut on the West Coast at that time, some nine feet in diameter and 200 feet tall. He says that a small tree on those jobs was four feet on the stump. He used a

McCullough two-man chain saw by himself. It was tough and dangerous work. Two of his friends were killed while he was in Oregon's big timber, and in 1952, he moved back to Winter

and started logging. They used horses, chain saws and a truck to haul hemlock and hardwood logs to market. It appeared that he had found his niche in life.

In 1959, Pat and his brother Dick started a sawmill in Hayward, WI. According to Crawford, this was the beginning of a learning experience that has tempered his way of doing business and thinking to this day. The brothers had taken over a defunct

building that wasn't an appropriate place to put a sawmill. In spite of all his hard work, Crawford had to file bankruptcy in 1962. He says it has made him a more thorough and conservative businessman, and he thinks he is probably better for the experience.

But with seven kids to feed, he needed to work. A friend loaned him the money to buy a saw, some horses and a truck with a Ramey loader. This may mark the start of the innovative thinking that was to define the rest of Crawford's career. The way everyone else mounted their

new-fangled log loaders in those days was behind the truck cab. Crawford decided that if it was mounted on the rear of the truck, he could double the capacity by pulling a pup-trailer. He believes he was the first one to do this, and it worked. Just look at any logging truck today!

In the spring of 1963, another change came along. The Menominee Indian Reservation was established in the



Crawford's early days as a pulp cutter, in 1956.

mid-1800s. The Wolf River flows the length of this beautiful piece of ground, and while the Wolf was the water highway for millions of board feet of pine logs from the late 1860s until the early 1900s, the timber had not been cut. The early lumber barons weren't allowed by the federal government to log the Menominee homeland. Neither were the Menominees! It was illegal for them to cut anything but down or dead trees. Their unjust role as second-class citizens may have hurt the tribe back then, but when they were eventually allowed to log their land, they had some of the best timber in the Midwest, and they tried to keep it that way.



The TimberPro factory in Shawano, Wisconsin

Crawford logged on, feeding the family and becoming a smarter logger.

Innovative thinkers are everywhere, but those who actually act on their thoughts in any significant way are often few and far between. Crawford was aware of the emergence of feller-bunchers in the early '70s, and he bought a Drott feller-buncher in 1975. He took a job in the Nicolet National

mid-1800s. The Wolf River flows the length of this beautiful piece of ground, and while the Wolf was the water highway for millions of board feet of pine logs from the late 1860s until the early 1900s, the timber had not been cut. The early lumber barons weren't allowed by the federal government to log the Menominee homeland. Neither were the Menominees! It was illegal for them to cut anything but down or dead trees. Their unjust role as second-class citizens may have hurt the tribe back then, but when they were eventually allowed to log their land, they had some of the best timber in the Midwest, and they tried to keep it that way.

Crawford was offered a deal by the Menominee Tribal Enterprises manager to harvest pulpwood stands on the Menominee lands. He started cutting hemlock pulpwood, and eventually, as markets changed, he also harvested aspen, along with some logs that were hauled to the big Menominee sawmill at Neopit.

Forest using the Drott, and it just didn't work. The machine had a long tail-swing and the boom didn't knuckle in. He thought he could do better, and he put some ideas down on paper. The next step was to build a scale model out of steel—a souvenir that he keeps in his office to this day. The model worked for his patent approval on a new boom style. The new boom design allowed the operator to boom in close, while the geometry of the boom kept the machine from being tippy. This was the start of the now well-known line of Timbco forestry machinery.

Crawford bought into a welding shop in the nearby town of Polar and built a prototype. His new partner didn't want to get into the manufacturing business, however, so Crawford sold his share back and built a shop in Shawano. Larry Clements did the welding and mechanic work. He bought a Detroit Diesel engine and a used set of Caterpillar tracks. He thinks the machine is still used occasionally by its current owner.

He had a prototype that worked. His logging operation was now high-tech, and soon enough, other loggers wanted the new feller-buncher. In 1980, the Timbco line of equipment was launched. The self-leveling cab feature was added to subsequent models, and the system was patented. Hills were not so tough to log anymore.

Eventually, the Timbco marketing rights were sold to Timberjack, the Canadian skidder manufacturer since acquired by John Deere. Crawford retained the rights to manufacture the machines and was paid a royalty. He remembers this as the start of his financial security.

In the late '80s, Crawford split with Timberjack. He had thought of ways to make the Timbco more efficient. The first Timbco machines had the engine in the frame with the cab, of course, rotating over the engine. Crawford calls this the "engine down" design. An alternative, the "engine up" design, put the engine on the rotating cab. He was off to another start in the machinery manufacturing business, and it was highly successful, especially in the West. Crawford recalls having up to 150 machine orders on the books at one time in the 1990s.

In the late 1990s, the Swedish logging equipment manufacturer Valmet purchased the Timbco tracked machine line, but Crawford and company kept the rights to wheel-mounted machines. This was fine with Valmet, because it already had a line of successful

wheel-mounted machines of its own. What the acquisition of the Timbco tracked line of machines did was expand the growing company's product line.

In 2002, the city of Shawano had a new manufacturing plant. Crawford's new company, TimberPro, was in the business of making a new line of rubber-tired timber harvesting equipment. Crawford had kept the rights for the boom geometry, and it was

just a matter of matting up the proven technology with the new ideas in his head.

At about this time, Crawford turned over his logging operation to his two older sons, Kenny and Mike, which they still run today.

Most Americans hate to hear that yet another company that has moved offshore to improve profits, but Crawford is swimming against the tide on that trend, as well.

He says that TimberPro is selling plenty of U.S.-manufactured equipment in other countries. He quickly named Australia and Russia as being good customers, and said the company is also doing very well in other parts of Europe, especially Germany. It is refreshing to hear a story about global markets that doesn't mean that the rest of the globe sells to us as we watch our trade deficit grow and our job base shrink.

Another plus for TimberPro is the many applications besides logging that the machines have been adapted to. Pipeline and highline construction companies are using TimberPro wheeled machines in their various applications, including setting and hauling the heavy mats that the other equipment works on. There are also TimberPro machines rigged with cement mixer units for bringing concrete to hard-to-get places. Crawford said they are used in hauling concrete up ski slopes in the west. The concrete is usually hauled up for building or remodeling ski lifts, and it replaces an expensive helicopter lift of wet concrete, cutting construction costs.

I interviewed Pat Crawford at his manufacturing facility in Shawano. Though he is recovering from a serious illness, he says he is on the mend. As we walked around what I thought was a big building, Crawford explained that the company has outgrown the plant. The 30 employees could definitely use more room. He pointed out two machines nearing completion, and informed me that in the near future they would be in Siberia harvesting timber.



These machines are probably already on their way to Siberia.



Crawford with a load of logs may pale in comparison to what he was used to cutting on the West Coast, but they still make up a nice load by mid '50s Wisconsin standards.

All of the TimberPro machines are powered by Cummins B or C engines, depending on the application. The models that start with the number six are six-wheeled machines and those beginning with eight are eight-wheeled units. He is quick to point out that just about any cutting head can be adapted to the harvesters, and the machines are big enough to handle the heavy head and the big timber they were designed to cut. The bogey axles come from Germany, and some of the parts used in the TimberPro line are outsourced to small shops in the area.

There are three different models, and the company has standardized the chassis for all three, but put bigger engines and bigger bogey axles in the heavier class machines. While most equipment manufacturers have adopted the Henry Ford approach, "you can have any color Model T you want, as long as it is black," TimberPro offers the buyer red, green or blue.

The combo on the 830 line of equipment is designed to do two functions for the logger who likes being a lone wolf. With a quick detach system on the end of the boom, the machine can be changed from a harvester to a forwarder when the processing head is replaced with a clam bucket in about ten minutes. Crawford says it isn't one of those "do-all" machines that does more than one operation but doesn't do any of them well. He says that it works as well as a harvester as any other harvester and as well as any forwarder when the work assignment is changed. Like all of the forwarders Crawford has developed, the operator is always looking directly at his work with the rotating cab. Another plus, he says, is the 360 degree rotation that allows the operator to pick up wood directly in

front of the machine.

Most people who reach the age of 81 spend time looking back on their life and career, but that isn't the case with Crawford. He says, "I don't like to hunt, fish, or golf. I grew up eating venison and like it well enough, but never cared if I killed it. I like to work. I like the people in the logging industry and like being around them. I plan on staying here as long as my brain works and I can still get to the plant."

Crawford's eight kids aren't far away either. As mentioned, the two oldest boys run the logging operation. A daughter, Cindy, does the bookkeeping for TimberPro. Lee and Sam work in the plant, and three married daughters are in Green Bay, Milwaukee and Appleton. He says they have a close knit family.

And, who knows what innovations will come from the mind of Pat Crawford in the future? Only time will tell!
