MAKING IT WORK IN NEW ZEALAND

By Paul Schuetz



Dale Ewers, who provided the Keynote luncheon address at the 76th Annual TLA Convention & Trade Show, demonstrated how over the course of three decades his company improved profitability as a side benefit of a desire to reduce workplace injuries by advancements in logging technology and mechanization.

"If you want change, first you have to change" was one of several informative adages imparted by Ewers, the managing director of New Zealand-based companies DC Equipment and Moutere Logging. Ewers said that in the 1990s, the New Zealand forest industry needed to improve its poor safety record, and in order to do this he realized they needed to change the way they logged first. During the course of a lengthy and ongoing career as a forestry logging contractor, Ewers subsequently made many innovative and strategic changes to his logging operations that not only greatly improved safety statistics, but productivity as well.

Ewers started his forestry career as a 14-year-old tree faller at a time when the industry was beset by near-misses, injuries and frequent fatalities. In 1989, at age 23, Ewers and his brothers started their own logging company, Moutere Logging based out of Nelson, in the north end of New Zealand's South Island.

It wasn't long after the start-up that Ewers suffered five broken vertebrae while falling a tree. Over the next decade and a half, his company would continue to experience numerous incidents-near-misses, injuries and fatalities-all related to forest operations on steep slopes. "Too many times we carried our people off the hill," Ewers explained, and it is the welfare of his workers that inspired him to seek out a solution to the safety problem that plagued his industry. The answer was slow in coming, however. In 2003 alone, Moutere Logging experienced nearly 240 incidents, 90 per cent of which involved either the men setting chokers on the hillside or working on the landings. Machine mechanization appeared to be the solution to reduce the number of workers placed in dangerous situations on the worksite.

In 2016, mechanized processors were incorporated to reduce injuries on landing sites, cutting the number of incidents by nearly 50 per cent. Despite the significant decrease in incidents, it didn't get rid of the problem. Men were still getting injured. During a 2010 meeting with his managers, Ewers realized that the one common theme of all incidents, whether on landings or on the hillside, was "every incident involved people." So, the simple solution to this was to get rid of the "people." Despite the folly in the statement, it was clear that people working in a cab were not getting injured, so full mechanization of the entire logging site became the ultimate goal.

Ewers and his managers then developed a long-term plan to help reduce injuries on his crews and to technologically advance his logging operations. The first goal was to develop a fully mechanized tower crew, which was achieved early with the introduction of the Falcon Claw grapple carriage and the winch assist.

In 2012, the Falcon Forestry Claw grapple carriages were implemented on all logging sites to replace the choker setters, which resulted in another marked reduction in incidents. In 2013, winchassist technology was introduced to replace the majority of manual tree-falling, lowering the number of incidents to less than 50 per year. As Ewers' crews become



accustomed to new techniques and properly trained in technology, they now experience less than 10 incidents per year, down from 240 just 15 years earlier.

And while safety was the driving force behind the changes to Moutere Logging's operations, the surprise benefit was a substantial increase in productivity realized through the implementation of these technological advancements.

The increases in productivity came with an increased profitability for his company. But in order to ensure a longer-term relationship, Ewers proposed a deal with the forest owner to split the increase in profits earned from the improved productivity while putting aside a portion for research and development. The intention was that these funds would lead to further innovations in logging technology. In response, the land owner allowed Ewers to keep the majority of the increased earnings and encouraged him to continue to innovate. They clearly recognized that increases in productivity helped their bottom line as well and they wanted to ensure this continued.

In the seven years since, innovations and new technological investments have paid for themselves many times over, creating a win-win situation that proved beneficial to both parties. The impacts of the new technology were also clear in numerous statistics that Ewers presented. The most striking of these statistics was the number of working hours of the grapple carriages and winch-assist machines—230,000 hours and 360,000 hours respectively—with an incident rate of zero. All of this while doubling their production.

By 2020, the goal is to achieve a fully integrated logging system with the use of Ewers' most recent innovation, the Felling Carriage that was being put into production for the first time back in New Zealand concurrent with Ewers' presentation. The Felling Carriage would enable a worker to harvest a tree from the safety of a cab on the landing site, with the use of cameras on the carriage and joystick controls in the cab. Also, by 2020, Ewers and his team are in the process of developing the technology to increase productivity by retrieving a tree from the hillside with the push of a button, and by 2022 to operate the Felling Carriage and harvest a tree with the push of a button. By 2025 the goal is to become completely push-button automated with the ability of completing all operations from afar. With no one on the hillside, no one will get hurt.

While Ewers' accomplishments in logging technology are truly remarkable, and the improvements to his company's safety record and productivity undeniable, his 2025 goal of harvesting from afar seems almost too unbelievable to fathom, to which Ewers simply replies "why can't we do that?" For Ewers, "if there is a will there is always a way" and if it involves new technologies that will inevitably make the job safer for his crew, then he is willing to make the effort.

The advice he gave during his closing statements was that contractors need to work together, to help each other out, and to share in new technologies to make the forest industry safer. Additionally, contractors need to work together with licensees and land owners and vice versa. As licensees are looking for savings, contractors are looking for profits, and the two parties need to communicate better to pool their resources in order to achieve both. "If you want change, first you have to change," and the loggers need to take the first step and be willing to change the way they are operating in favour of newer, safer options. They need to approach the licensees with their long-term plans and in turn, the licensees must offer longer contracts that would allow the logger to invest more in equipment, training and new technology. This forward thinking inevitably will result in a win-win situation for everybody, and most importantly workers will return home safe each day.4

