

[Main Page](#)[Features](#)[Index Page](#)[Contractor Profile](#)[Contractor Profile 2](#)[Ontario Sawmilling](#)[Dominant Producers](#)[Independent](#)[Sawmilling](#)[Industry Shows](#)[Sawmill Management](#)[Equipment Profile](#)[South American](#)[Sawmilling](#)[Mill Profile](#)[Quebec Forestry FAQ](#)[Small Sawmilling](#)[Guest Column](#)[Spotlight](#)[Departments](#)[Calendar of Events](#)[Supplier Newslines](#)[Reader Service](#)[Classified Ads](#)[Tech Update](#)[Site Information](#)[Contact List](#)[Past Issues Archive](#)[Join our Listserve](#)[Search Our Site](#)

Komatsu EX 475 part of the next trend

The Komatsu EX Series—including an EX 475 feller buncher with Gilbert head now working in Saskatchewan—is an example of the next trend in forestry harvesting equipment.

By Tony Kryzanowski

There is an amazing similarity between trends in the evolution of mechanized forestry equipment and population trends over the past 50 years. First there was the baby boom and an accompanying equipment boom, with all sorts of forestry equipment companies launching new carriers and attachments. Now we are experiencing Generation Next, where technologies from a variety of companies have been combined to produce more powerful and purpose-built offspring. One example of this trend is the combination of the Timbco concept with Valmet technologies in the new line of EX purpose-built carriers marketed by Komatsu Forest LLC.



Waterhen's EX 475 feller buncher has been put to work in just about every harvesting environment possible. The machine is expected to provide dependable performance since the operation works 24 hours a day, seven days a week, for nine months of the year.

Another example is the combination of Timberjack and John Deere technology into a new line of John Deere forest products. Finally, there is the acquisition of the Risley line of feller bunchers by Caterpillar, now marketed as Timberking. A major driving force behind this coming of age of Generation Next is the superior network of parts and service support that now exists. That was always the Achilles heel of innovators in the forestry equipment market prior to the investment by many of the major global players into tried and true forest equipment lines.

While many smaller companies are fully recognized and credited for important contributions to the industry, for years loggers complained about a lack of consistent parts and service support. With several equipment lines now integrated into the marketing and distribution network of some of the largest equipment companies going, there has been a downside for loggers of reducing competition—

but it has the upside of addressing the issue of parts and service support. As one of the newest offspring in the mechanized logging industry's evolution, the EX line is already presenting a formidable challenge to those older siblings of the Generation Next family.



Waterhen Forest Products manager William Hill and the Gilbert head on the Komatsu. The head is an excellent match with the carrier, says Hill, given the type of environment the company is working in.

Waterhen Forest Products, logging in north central Saskatchewan, has put over 3,000 hours on an EX 475 feller buncher equipped with a Gilbert head. The company annually harvests about 180,000 cubic metres of aspen, jackpine and spruce for Mistik Management, which is responsible for managing lands for a number of companies with mills located in the Meadow Lake area. For example, softwood from Waterhen's operations is transported to NorSask Forest Products, while hardwood goes to the Miller Western pulp mill, both located east of Meadow Lake.

Waterhen's EX feller buncher has been put to work in just about every harvesting environment possible, where it is expected above all to provide dependable performance, since the operation works 24 hours a day, seven days a week, for nine months of the year. "We've done everything from harvesting blowdown to fire kill to green wood," says company manager William Hill. He manages the company for the owners, Waterhen Lake First Nations, located about 80 kilometres north of Meadow Lake. He says the EX 475 is about 15 per cent more productive than an older feller buncher in the company's fleet primarily because of its longer reach, greater lift capacity, smooth performance, and overall cab comfort, which has resulted in reduced operator fatigue.



Waterhen Forest Products' most recent equipment purchases were two John Deere 748 skidders. The operation shopped around, but after the excellent performance demonstrated by the first 748, they decided to stay with the same brand and model.

The feller buncher comes with Timbco's groundbreaking setback boom geometry. The standard boom has a maximum reach without the attachment of 8.18 metres (26 feet 10 inches). Minimum reach is 2.29 metres (seven feet six inches). Lifting capacity at eight metres (26 feet four inches) without the attachment is 5443 kilograms (12,000 pounds). The swing torque with standard motors is 67,100 foot-pounds. There is a high swing torque option that delivers 80,500 foot-pounds. Standard on the EX 475 is the Komatsu OSC 300 hp engine, with a torque of 1,000 foot-pounds at 1,300 rpm. There is also an optional SisuDiesel 300 horsepower engine.

Fuel tank capacity is 1514 litres (400 gallons). Hill says Waterhen Forest Products' feller buncher burns about eight gallons per hour. "It's as efficient as any buncher I've had," he says. The width of the machine with standard 600 mm grousers is 3.15 metres (10 feet four inches). This delivers ground pressure of 9.63 psi. For extreme ground pressure challenges, the feller buncher can be equipped with optional 900 mm triple grousers at a width of 3.45 metres (11 feet four inches), and ground pressure of 6.62 psi. The Gilbert head was an excellent match with the carrier, says Hill, given the type of environment Waterhen Forest is working in. At the time that the feller buncher was purchased, the company was harvesting blowdown exclusively.

So it was desperately in need of a high rotation head. "The head's been super doing the blowdown, and when we are in standing wood, it's just that much easier," says Hill. "It has also stood up very well for what we've put it through. There's been very little breakage on it." This is actually the forest company's second experience with an EX feller buncher. Initially, it purchased a smaller EX 425, but found that it was just too small to handle the steady diet of wood and terrain that Waterhen Forest found itself in. Therefore, about a year ago, the company upgraded to the EX 475 with excellent results. Waterhen First Nations started the company in 1994 with just a single line skidder with the idea of creating more employment for the community.

It already had an excellent model to follow. The Meadow Lake Tribal Council (MLTC), a combination of First Nations communities that started out in logging and forest management in the late 1980s, has since expanded operations to include ownership of the NorSask sawmill and an interest in a new OSB plant managed by Tolko Industries. When MLTC moved its logging operations to Alberta, Waterhen Lake First Nations saw an opportunity to build a logging business of its own. From a single line skidder, the business has grown to include the EX 475 feller buncher, a John Deere 853 feller buncher, two Komatsu carriers with Lim-mit delimeter attachments, two nearly new John Deere 748 grapple skidders, a Timberjack 560 grapple skidder, a Komatsu D85 crawler dozer, a Komatsu 300 HD butt 'n top loader, a Cat grader, and two logging trucks.

There are now 30 employees on the payroll, and 95 per cent are aboriginal. Hill, who started working for the company as an operator before being promoted to manager in 1998, says he has seen a significant positive impact on the work ethic of employees, as well as economic spinoffs to the community. The logging business is now one of the major employers within the First Nations community. Waterhen

Forest Products' most recent purchase was the two John Deere 748 skidders. Hill says he shopped around, but after the excellent performance demonstrated by the first one he bought, he decided to stay with the same brand and model. "I know that there may be machines out there that are more productive," he says, "but I've had almost zero downtime with these skidders." That's important, since the skidders are where new operators at Waterhen Forest Products gain their first on-the-job experience.

Waterhen Forest's training practice has been to start employees as grapple skidder operators, then allow them to eventually graduate to operating a delimeter or feller buncher. "Because you can have such huge breakdowns on a delimeter or feller buncher, you don't really like turning green guys loose on them," says Hill. "The biggest part about training isn't so much teaching the guy how to run the machine. It's how to look after the machine." Waterhen typically keeps its equipment for between 12,000 to 15,000 hours before trading it in. After a couple of seasons watching how the feller buncher works from the seat of a skidder, the skidder operator has a sense of what is expected when operating the feller buncher in terms of production and machine maintenance. So the company has much more confidence in giving him a promotion if an opening should occur. Hill says most employees are working toward that opportunity.

He adds that what his operators appreciate about the EX 475 is that it has a comfortable, purpose-built cab, and an electronic system with the ability for up to three individual operators to preset how the machine will respond to them. They can set conditions like boom speed, tilt speed, and basically all hydraulic functions. The feller buncher has performed well in extreme temperatures, although the company shuts down logging below minus 35 degrees Celsius.

The only problem that Waterhen Forest has experienced with the EX 475 is with the boom. It cracked right where the boom assembly meets the cab, something the supplier had never witnessed before. The experience of fixing the problem turned out to be a demonstration of what type of service support a larger company can offer. Even though the feller buncher had already exceeded its warranty coverage, the boom was replaced and installed by the dealer, Terratech Equipment, at no charge. Hill says that the dealer has offered excellent parts and service support, with mechanics available to react quickly to any major service issues. Waterhen Forest has a mechanic on staff to look after regular maintenance, and operators have been trained to follow specific preventive maintenance procedures before and after their shifts. In terms of maintenance, Hill says the feller buncher's gull wing design provides easy access to engine components.

Waterhen Forest Products has built a strong business in 10 years, and with the amount of forestry expansion occurring in the Meadow Lake area, it now has the experience to take advantage of any other opportunities that may come its way as a means to create even more employment.



This service is temporarily unavailable

*This page and all contents ©1996-2005 Logging and Sawmilling Journal (L&S J) and TimberWest Journal.
For personal or non-commercial use only.
This site produced and maintained by: Lognet.net Inc
Any questions or comments on this site can be directed to Rob Stanhope, Principal (L&S J).
Site Address: <http://www.forestnet.com>.*

This page last modified on Sunday, April 24, 2005