

B E T W E E N the BRANCHES

The Hodge Brothers By Paul Iarocci

Successful businessman and unconventional thinker, Eddie Hodge talks about Williston Timber's new low impact thinning concept and why, once upon a time, he and his brothers bought an unproven one-off machine from a bunch of Canadians.

Pulled off beside a north Florida highway in 1992 was a Mack truck hauling a strange looking feller buncher. Two guys stood armed and ready with a punch and die set and a ball-peen hammer: a truck driver called Don Snively and a tradesman named Jim Wood. Both worked for MacDonald Steel, a fabricating plant in Cambridge, Ontario.

Serial numbers and paper work were minor details that no one thought about

during the rush to get the prototype Tigercat 726 feller buncher designed and built, that is until the prospect of jail loomed.

When it came time to build the prototype Tigercat 726 in 1992, Wood was the obvious choice. As a licensed electrician, millwright and automotive mechanic, he had the skills and talent to deal with the vagaries, complications and uncertainties that were sure to accompany the assembly of a new machine in the back corner of a steel fabrication plant. (Wood subsequently trained, Tim Koniuch, Curt Martin, Stewart Maurer, Ross MacDonald and Denton Rerrie as the build schedule increased from one to 30 per year. Tigercat was also lucky to hire assembler Larry Almond who had extensive technical experience with construction and forestry machines.)

The clock was ticking and Wood recalls being questioned by Tigercat president Tony Iarocci regarding the machine's state of readiness. "We can ship it now or wait three more weeks. Tony said 'ship it tomorrow.' We had the batteries bungee corded into the belly pan."

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Tigercat district manager Don Snively with Eddie Hodge, owner of Williston Timber and veteran MacDonald Steel employee Jim Wood who built the prototype 726 feller buncher. Photographed at the Hodge's farm January 2006.

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The operator can reach to the second row and remove trees without disturbing the stand or the ground.

Snively loaded the machine and climbed into the old Mack truck bound for Expo Southeast in Tifton, Georgia and Wood followed in a pick-up truck. They worked on the machine at rest stops in the evening. By the time they reached Georgia, it was acceptably finished. After the show the two of them, often accompanied by Iarocci and company owner, Ken MacDonald toured the southeast with the machine.

In 1992 Williston Timber was a big Deere customer. Recalling the Expo Southeast show, Williston co-owner Eddie Hodge says, "[The Deere representatives] were rushing us through the show to get us to the new Deere machines and we wanted to stop and look at this new Tigercat. The damn engine was turned around the wrong way... Besides it was a catchy name."

Shortly after the show the Eddie and his operator flew to Louisiana where the machine was being demonstrated and met up with Iarocci, MacDonald, Snively and Wood. There were not many trees left on the site but they made due. "We cut some stumps and drove it around on some hills and found a few standing trees," explains Eddie. Then he proposed a one-month trial.

Eddie recalls, "I said to Tony, 'If you want to you can bring that thing to Florida. We don't know anything about it, so you'll have to leave the mechanic with it. If it stays together for a month, we'll buy it.' So that was the deal. It didn't even have a serial

number on it. Don gets stopped by the Florida DOT [Department of Transportation.] They're calling us. He calls Canada and he's down for like half a day. You know stolen equipment moves like that, you grind the serial numbers off... They're from Canada. They don't have any paper work. They've got a day cab truck. And

all they wanted was to get rid of that thing and go home." By the time Snively dropped the machine to the Hodges and headed for home, he had been away 40 days.

Based in Williston Florida, Eddie, Johnny and Billy Hodge worked hard for twenty-five years building Williston Timber to where it is today. They played to each other's strengths. Eddie was the businessman and Johnny, a self-taught mechanical designer and inventor of specialized forestry equip-



The well balanced 845 equipped with 36 in. triple grouser track pads leaves not a hint of a footprint.

The late Johnny Hodge.



ment. Of the youngest brother, Eddie says, "Billy is on the ground, getting things done." Together the three brothers kept operations running smoothly. Tragically, Johnny was killed in an accident. "Tragedy struck us hard on October the 5th, 2003, when we lost Johnny in a horrible truck accident," Eddie says. "We lost more than a brother, a loved one and best friend. Our loss of Johnny struck to the very heart and soul of this business as well."

For the record, the serial number started off as 726001. Snively and Wood stamped it with the punch and die, avoiding further brushes with the law. To head off any potential questions the finance company might have with purchasing a prototype, the serial number was subsequently changed to 7260101, "Like we've got 101 of them," jokes Eddie.

"When that 101 tractor came, you would have thought the county fair came to town. Every damn logger in central Florida came. Some saw it at the show but by word of mouth it spread pretty quick. They'd be out there watching it and they'd want to get up close."

"I remember that well," Wood cuts in. "On Sunday I'd be out there checking on the oil and greasing it and there would be ten guys to come out and look at it... on a Sunday."

As part of the deal, Wood stayed with the machine. "Jim's got the most boring job in the world," recalls Eddie. The machine ran day after day without incident. "He sat in the service truck with no AC for three weeks. The tractor never stopped working. He's still here on the weekend and he doesn't have anything to do. This goes on for three weeks and we haven't had a problem. He hadn't been home in two months. I talked to Don and Tony and told them that he's got to go home."

That was the beginning of a relationship that has lasted fourteen years. Williston Timber also purchased the first 720 feller buncher in Florida and the second 845 track feller buncher. They've owned at least seventeen Tigercats over the years, piling ten of thousands of hours on them.

Regardless of how well the machine worked in the first month, the 726 purchase was a big risk for Williston Timber. At the time, Tigercat had no dealer network. Parts were to be ordered directly from Canada. Eddie and Johnny had no idea if a second machine would ever be built.

But all this circumstance was somehow

"Tigercat was always going to come out with something opposite. Same as us. If someone tells us an idea won't work, we know we are on the right track."

The prototype 726.



reassuring to the brothers. "Tigercat was always going to come out with something opposite. Same as us. If someone tells us an idea won't work, we know we are on the

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right track," Eddie explains. Also the Hodge brothers liked the fact that Tigercat was a small upstart. To them, the new company brought its own unique advantages. The top people were accessible, hands-on and always listening to the end user. Eddie marvels at the fact that Ken MacDonald once flew parts to him in his own plane and that Iarocci regularly checked in on them and brought drawings for the new 720 thinning feller buncher for their comments and input.

Butch Garvin who ran the 101 tractor recalls, "That machine cut 36 loads a day in the first year. We changed one o-ring and no hoses." Eddie explains that to achieve that production, the machine would cut 30 loads in the daytime and an additional six in the evening.

Then he runs through a quick calculation of what the machine has produced over its lifetime. A meticulous record keeper, Eddie assures me he can prove that the machine has cut between 3,000 and 3,500 tons (2,720–3,175 t) per week between 1992 and 2005. His conservative estimate is somewhere between 1.5 and 2 million tons (1.36–1.8 mil. t) of timber.

Tigercat took the machine back after a year and a half to inspect it for wear. Williston used a loner in the meantime. Other than that, "We ran the machine from 1992 to 2005 straight through on one crew. We've never had a machine that could cut that many different sizes of wood," says Eddie.

The 620 runs 70 in. rubber to prevent soil disturbance even after heavy rain.



Retail packaging for the horse bedding. Eddie is proud of the mill Johnny built.

"The hydraulics ran so cool. We damn near wore out the hinges off the rear door, showing people how cool the hydraulics were. You could always hold your hand on the pumps and hoses. If it doesn't have any heat, it's not going to have any wear because it means it never has any friction. This is common sense."

Before Johnny's death the brothers decided to sell two of the five logging crews to long-time employees, although they still operate under the Williston Timber name. "We were getting too thin and we wanted to help them make a go of it," Eddie explains.

The remaining three crews employ 40 people, fourteen of which are Hodge family members. The Hodges' other businesses include a sod farm, a shaving mill that produces horse bedding, a sand mine and a site preparation crew that also doubles as a wildfire fighting crew when the need arises.

Eddie is especially proud of the shaving mill, which Johnny designed and built initially as a hobby. Eddie is quick to admit that

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during the mill's construction, he would come by every few days but mostly just tried to stay out of Johnny's way. Johnny was technically brilliant and Eddie marvels at his ability to figure out the inner workings of just about anything. These days the mill has 15 employees and often operates around the clock, seven days a week to supply the high quality bedding to farms and feed stores.

The site prep and logging crews work mostly for Plum Creek which bought out Georgia Pacific. Williston's relationship with G.P. and then Plum Creek has spanned over 25 years. In 1998, the brothers used their site prep equipment to help fight the devastating 1998 wildfires, working 28 days straight. Often it was only a few hours sleep that separated the exhaustingly long days.

The fires did a great deal of damage to Florida's swamps and ponds. Williston Timber was also involved in the salvage work, which released the new growth and brought the ponds back to life. The experience prompted Eddie and Johnny to

attain government certification for disaster relief and clean-up work for hurricanes, fires and other calamities.

Williston's newest concept is the low impact thinning crew. The idea stems from a number of realities affecting Florida's timber industry. Florida has a great deal of land that is due for first thinning. Over the last few years, the 'Sunshine State' has seen higher than average rainfall. Conventional wheel feller bunchers and skidders cannot operate on thinning sites when the soil is wet. Therefore rain causes shutdowns or forces thinning crews to seek higher and drier sites. Either way it upsets the contractor's production and wood flow to the mills.

Hodge's idea was to adapt one of his hardwood swamp crews to the more delicate task of pine plantation thinning. Industry pundits said the idea wouldn't work. Of course, that was just the encouragement that Hodge needed to pursue it.

Important considerations for any thinning application include removing the correct number and type of trees from the stand,

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Even at 15 ft. - 10 in. wide the machine can operate effectively in the thinning corridors.

preventing rutting which causes root damage and avoiding bark damage to standing trees. The overall goal is to minimize the shock to the remaining stand and promote healthy future growth. First thinning pine is usually 15-17 years old with 12 ft. (3.65 m) row spacing. 35-40% is removed from the stand and used for pulp or chip and saw.

The crew has been operating successfully since late 2005.

The equipment consists of four Tigercats: An 845 feller buncher with 36 in. (915 mm) triple grouser track pads, a 620 skidder with 70 in. (1,780 mm) wide non-aggressive flotation tires, a 235 subframe mounted loader and a T240 track loader. Each machine has at least 14,000 operating hours.

The 845, which has clocked about 15,000 hours with a single operator, (Hodge likes to partner operator and machine for the long term) cuts the fifth row and then plucks trees in the first and second rows on either side using the boom reach to get into the second row with minimal tracking and no disturbance to the ground, foliage or standing trees. At 15 ft.-10 in. (4.9 m) wide, the 620 easily operates in the 24 ft. (7.3 m) corridors where the 845 leaves the bunches. Skid distance averages one quarter to a half mile. Hodge estimates that two or three decks are required to thin a 125 acre (50 ha) tract.

Phil Parker,
Plum Creek

resource manager for Florida likes the low impact thinning system because it is more versatile in terms of when and where you can operate. It extends the window and provides a more constant flow of timber but he stresses that it has to be joint venture. "It's a higher cost system so there has to be buy-in from the landowners," explains Parker. "Another advantage is that they can readily switch to cypress with the same system."

Hodge says that the crew has been able to operate after up to five inches (127 mm) of rainfall. The night previous to our visit to the job site, one inch of rain fell and there was no evidence of soil disturbance in the stand.

With the three-machine system, the crew is producing twelve loads per day for 1,500 tons (1,360 t) per week. Hodge is hoping to boost that number to 16 loads and 2000 tons (1,800 t) with the addition of a second early model 620 and the '101 tractor.' The 30,000 hour buncher will cut corridors when weather permits, leaving the 845 to follow and thin the adjacent rows.

As Eddie surveys a newly thinned tract of pine that looks virtually untouched by mechanical harvesting equipment, he turns to me and says, "What we're trying to do here is carry on a legacy. Johnny was the best you ever met. We've got a responsibility to carry on those qualities and that determination. The best you ever met." ■

A stand recently thinned with Williston Timber's low impact thinning crew.



Wheels to TRACKS

By Paul Iarocci

Hudson Bay, Saskatchewan contractor Blair Lutz switches from drive-to-tree to track feller buncher.

Wading through waist deep powder snow in mixed boreal forest on the eastern edge of Saskatchewan is the last place one might expect to find a Tigercat drive-to-tree feller buncher. Contractor Blair Lutz, owner of Lutz Logging, has made the Tigercat 726B the cornerstone of his logging operation for the past three years.

Saskatchewan's actual annual cut averages five million cubic meters. (A cubic metre is approximately equal to one ton of timber.) Most of the harvesting activity takes place in the boreal plain, a region covering one quarter of the province. Predominant species include trembling aspen, jack pine, white spruce and black spruce.

The forestry industry in Saskatchewan roughly falls into three regions. In the west is the Meadow Lake area. The Prince Albert - Big River region in the centre of the province is currently facing some uncertainty with mill closures. In the east, the industry is focused around Hudson Bay. It is the Hudson Bay region where a handful of drive-to-tree feller bunchers are operating, with two 726B Tigercat machines among them.

A fur trading post established in 1757 evolved into a village that was named Hudson Bay Junction in 1909 by the Canadian Northern Railway Company. In the 1940s, 'Junction' was dropped, leaving the name Hudson Bay for a town 500 miles from the western coastline of Hudson Bay.

Forestry is deeply entrenched in the history and culture of the Hudson Bay area. Home to Canada's first plywood plant built in 1948, the Hamjea Plywood Company churned out up to 40 million sq.ft. (3.7 mil. m²) of plywood annually until 1958 when the plant was destroyed by fire.



The Wizewood aspenite plant opened in 1961, a joint venture between private sector investors and the provincial government. In 1965 Wizewood was sold to MacMillan Bloedel, which in turn sold the plant to Weyerhaeuser in 1999. Weyerhaeuser sold off the old aspenite OSB mill in pieces and built a new one in 2000.

Today Weyerhaeuser operates a plywood plant, the new OSB mill, as well as a saw mill in nearby Carrot River. When the company took over forestry operations in Hudson Bay, one of its efficiency measures was 'right sizing' the number of contractors feeding the mills from 34 to 11. It was left to the individual contractors to team up within three years or face the loss of their volume contracts. The magic number was 105,000 m³. At the time Lutz Logging was subcontract skidding for Biro Brothers which had an annual volume of 70,000 m³. Salmond Brothers, another local contractor, had a contract volume of 35,000 m³. Biro Brothers, Salmond Brothers and Lutz Logging joined forces to form Willow Logging.

Lutz purchased the 726B feller buncher three years ago. Prior to that the machine

(L-R) James Farquhar, Tigercat district manager; Chuck Miles, Redhead salesman; Keith Tiedjens and Lyle Fletcher, Lutz Logging operators; Ron Litton, Weyerhaeuser contract administrator; Frank Kovach, Lutz Logging crew foreman; Blair Lutz.

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Tough operating conditions for a wheel feller buncher.

was owned by Triple M Enterprises but even at that time the machine and its operator, Lyle Fletcher subcontracted for Biro Brothers. When Lutz bought the machine, Fletcher came with it and has been a Lutz Logging employee ever since.

In the 2004-2005 season, Willow Logging

produced 154,000 m³ of timber. Of that, 124,000 m³ was felled with the 726B. The terrain is often hilly, usually wet if not frozen and covered with snow for five months out of the year. The rough ground requires a great deal of maneuvering and machine travel to cut and lay the wood correctly for the skidders. Ambient operating temperatures range from -40 to 30°C (-40 to 86° F)

Double shifted for 24-hour day work cycles, the buncher has worked 13,000 hours with the original engine, main pump, saw pump and saw motor. Lutz is quick to point out, "The 726 never got cheated on service either. Lyle and Keith were good about that." Structurally, both the machine and the 5700 saw head are in excellent condition. "We were never in the centre section," says Lutz.

Keith Tiedjens who also operated the 726B is now running a brand new Tigercat 860C



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Tigercat forwarders powered by Mercedes-Benz engines.

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track feller buncher. The new machine is equipped with a Tigercat 5702 felling saw and 340 degree wrist and works five double shifts per week.

Before Lutz purchased the machine from Redhead Equipment in Saskatoon, he and Tiedjens went to visit the operation of Rick and Cheryl Watt, owners of Cherick Ventures. Cherick purchased the first 860C in the area in the summer of 2005. Rick and Cheryl spoke very highly of the machine. Operator Clayton Sheptak is so fond of the 860C that his own name adorns the cab window. Redhead salesman Chuck Miles had the decal made, surprising Sheptak with it one day.

Rick and Cheryl have been logging for fifteen years and are extremely dedicated to their enterprise. As Cheryl says, "We don't take vacations. I'm married to this business." Cheryl watches the production numbers very closely, analyzing every aspect of the operation. They can back up their opinions with data and facts.

According to Lutz, the Watts' recommendation coupled with the performance of the 726B contributed to an easy purchase decision. "Basically the wheel buncher sold it," states Lutz. "People buy into this product. If it stands up half as much as the wheel buncher with the money we spent on it and that many hours, then it will be a good machine." He adds, "The price was no hell

but I liked the machine. If the 340 degree wrist works, it will pay for itself. It will save life on the undercarriage."

Tiedjens agrees. "The 340 degree wrist is good because you don't have to track the machine nearly as much." The machine is equipped with 28 in. (710 mm) double grouser track shoes. "The 28 inch doubles make a big difference in the muskeg," says Tiedjens. "I also really like the HID lights for night. These lights don't seem to blind you like the other lights. They are less fatiguing."

Willow Logging operates and hauls 24 hours a day. Lutz operates one double shift and one single shift skidder. In addition, the Salmond side runs two skidders plus a spare. It is planned that the new 860C buncher will replace both the Tigercat 726B and the subcontract track feller

buncher and will be able to cut enough wood to feed all the skidders. One processor, one delimeter, two slashers and manual limbers work to process the wood before being delivered by one of six trucks. "Over 30 regular paychecks are coming out of this camp," Lutz says.

The low ground is predominantly forested with black spruce – one of few species that survives in the poorly drained, acidic muskeg. Generally,

The 860C bunching spruce. The rear air intake prevents clogging of ice and debris.



The 726B cutting poplar.



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Salvaging Katrina

Mississippi contractor purchases Tigercat T240B grapple saw equipped loader to aid in salvage efforts.

By Mike Ross

Over five million acres (2 mil. ha) of forest land in Mississippi, Alabama, and Louisiana were damaged by the extreme winds of Hurricane Katrina that ripped through the Gulf Coast states on August 29, 2005. Once-third of the damage occurred in southern Mississippi within 60 mi. (100 km) of the coast. The storm damage consisted of completely uprooted trees and partially broken trunks. Situated in the middle of the mayhem is O'Neal Timber based in Wiggins and owned by third generation logger, Len O'Neal.

Within one week of the storm, O'Neal had mobilized his crews to commence salvage efforts. It wasn't long after that he realized he required a track loader with a grapple saw to effectively untangle, cut and extract the fallen wood. A track buncher equipped with a high rotation saw would also have met the task but at a considerably higher cost. Also, O'Neal liked the fact that unlike the feller buncher option, a loader could be put to many additional uses.

The trees that snapped at a height under 12 ft. (3.65 m) but are still partially attached are cumbersome for a wheel buncher. The loader can easily finish cutting the top portion of these trees and bunch

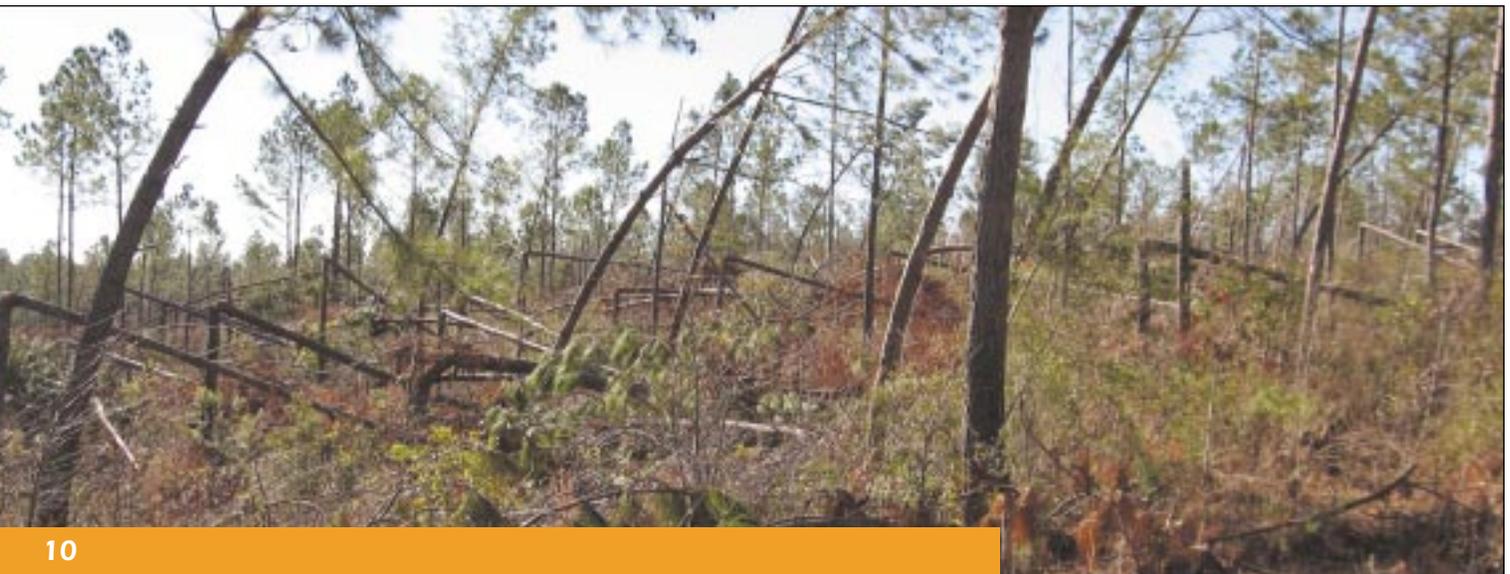
them for the skidder. Any trunks less than twelve feet high are left standing as they are no good to mills requiring tree-length wood. Furthermore, the short logs take up the same space as a full tree on a trailer but are considerably lesser in value. The mills pay by the weight of the load, therefore the logger is better off to fill up the trailer with full length trees instead of a mixture of random lengths.

Cleve Allman, salesman for B&G, Equipment in Hattiesburg, Mississippi learned that O'Neal was in the market for a track loader. A quick call to Tigercat headquarters and Allman had a T240B equipped with a Hultdins TL520 and 550S SuperSaw coming his way the following week.

When the machine arrived at the job site, it did not take long to utilize its full potential. The operator would finish cutting the broken trees and pile them in skidder bunches. When the T240B was not required in the woods, it was used to delimb and load trucks.

O'Neal's clear fell crew consists of a Tigercat 724D feller buncher, two skidders, two trailer mounted loaders, an Ardco forwarder and the Tigercat T240B. The Ardco forwarder is used primarily to carry

The Katrina aftermath.



the wood to roadside when it is too wet for the trucks to come to the landing. All the wood is bound for Weyerhaeuser chip and pulp mills. Average daily production ranges from ten to eighteen loads at 34 tons (31 t) per load in a nine hour shift. According to industry sources, it is estimated that logging productivity drops by as much as 50 percent in wind damaged timber stands.

O'Neal estimates that the salvage work will continue until April of this year at which point the wood will have decomposed too much to be of any commercial value. In 2005, O'Neal Timber harvested approximately 250,000 tons (227,000 t) of wood. With the storm damage, O'Neal finds it difficult to speculate what the company's volume will be in 2006.

Currently, O'Neal Timber employees 22 people. "Treat employees fair and they will stay. A successful logging company requires hardworking, honest employees, productive, reliable equipment and a dealer to back them up," says O'Neal. "Equipment is no better than the dealer. The dealer is



going to make you or break you." He also attributes the company's success to supervisor Jeff Baxter who has been with O'Neal Timber since 1993. ■

Len O'Neal and B&G salesman Cleve Allman.



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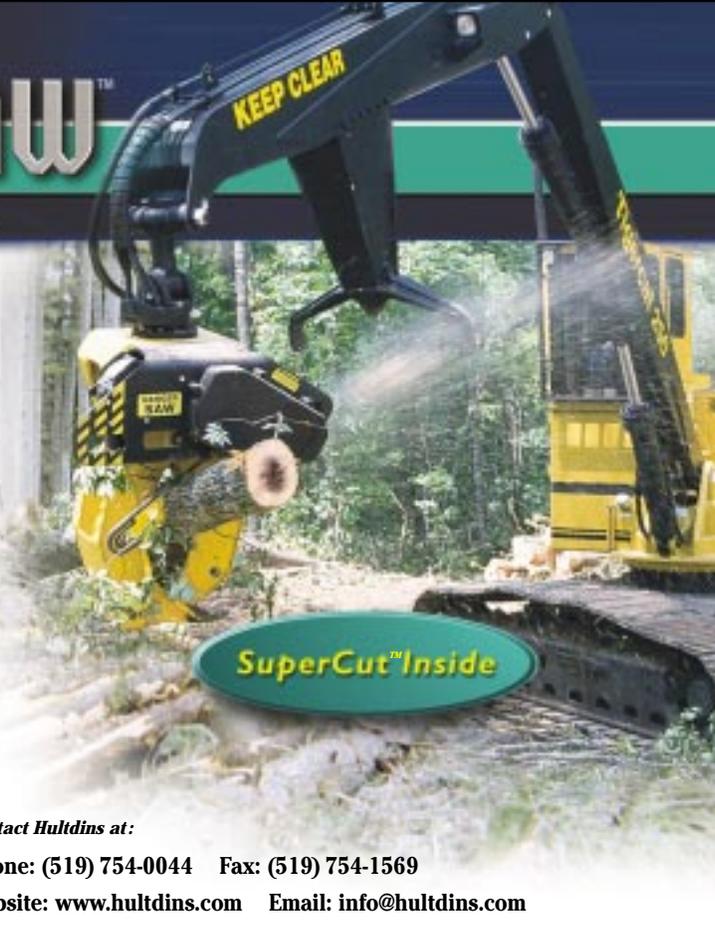
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Weyerhaeuser attempts to keep the contractors in this ground in the winter saving the higher, mixed hardwood forests for summer. This is not always possible though because much of the higher "summer ground" is only accessible in winter over the muskeg ice roads.

Breakup occurs in March, lasting until mid-May. It is often a rush to get all the wood out before the thaw. 2006 will be a particularly tough year because the early part of the winter was quite mild. The heavy snowfall that followed in January insulated the ground, preventing it from freezing up. So even though it was -10 to -20° C (14 to -4° F) at the time of

the BTB visit in mid-January, the ground was not frozen and in places water was running across the logging roads.

Wood size and quality are extremely varied from large .75 m³ forked poplar to .15 m³ heavily limbed spruce. There are two 8 ft. (2.4 m) poplar sorts for OSB and plywood peelers. The birch is sorted separately. Large spruce down to eight inches is cut to 102 in. (2.6 m) for plywood peelers. Eight to four inch is cut to 99 in. (2.5 m) and bound for the Carrot River sawmill. Anything under four inches goes to the OSB mill. "Our bottleneck is whacking everything into eight foot," says Lutz. "The more poplar we get, the better our volume gets." ■

EARTH'S THERMOSTAT

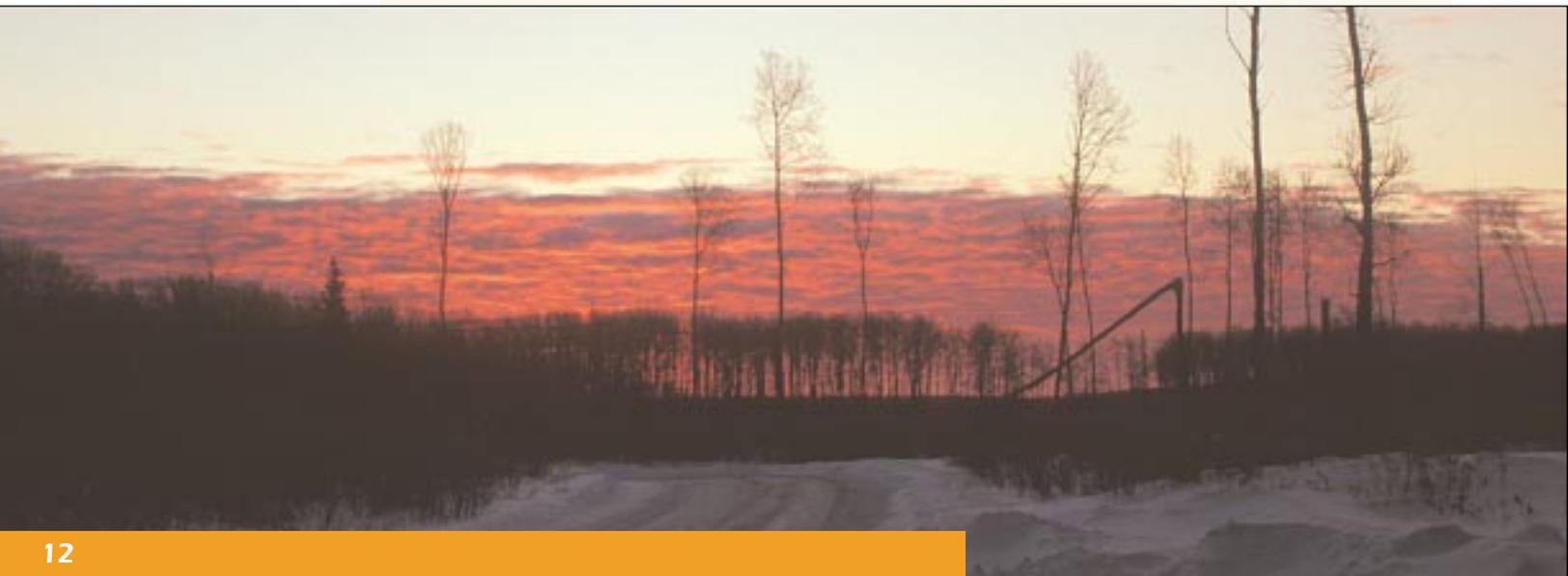
Named after Boreas, the Greek god of the north wind, the boreal forest encircles the world's northern hemisphere. Comprising over 75% of Canada's forests, it stretches across the country between the tundra of the north and the grasslands or mixed hardwood forests of the south.

Although it is hampered by a short growing season and poor quality soil, Canada's boreal forest is essential to the pulp and paper industry and renowned for the high quality softwood lumber it produces.

Even more important, the boreal forest plays a significant role in the environmental balance and climate control of the entire earth, creating oxygen while storing carbon dioxide.

The carbon is stored in a layer of plant material that accumulates to a thickness up to ten feet on the forest floor. A mere half inch can hold 2.5 tons of carbon per acre. Because the organic matter does not decompose, the greenhouse gas carbon dioxide is not released into the atmosphere.

Mixed boreal forest in Saskatchewan at day break.



T250 Wood Yard Application

By Mike Ross

30 miles (50 km) southeast of Hattiesburg, Mississippi is a wood yard equipped with two Tigercat T250 loaders. Jerry Miller, owner of JF Miller Timber Company purchased both of these machines in September 2005 to help handle the extra wood storage requirements resulting from the Hurricane Katrina salvage efforts.

One of the T250 machines is equipped with a 36 ft. (11 m) live heel boom, a Tigercat LG4053 grapple and a 66 in. (1,675 mm) 'mill yard' cab riser. Instead of the standard loader undercarriage, the machine sits on the F6155 shovel logger tri-track lower. The additional weight and length provide added stability. This machine allows the operator to stack full length trees up to 32 ft. (9.75 m) high.

Miller's other Tigercat T250 is equipped with a 32 ft. (9.75 m) live heel boom, the LG4053 grapple, the standard F6140 loader undercarriage and a 33 in. (840 mm) cab riser. This machine stacks wood to a height of about 28 ft. (8.53 m) while maintaining good stability.

Sprinklers which 'rain' at a rate of six inches (150 mm) per hour keep the wood moist to prevent rotting. Miller's yard holds 150,000 tons (136,000 t) of wood. Currently, the yard is accepting about 100 truck loads each day at just under 29 tons (26 t) per load. The loaders work roughly nine hours per day, five days per week to keep up with the volume. ■



The T250 'heavy duty' package with a 36 ft. (11 m) boom, super hi-rise cab and the massive shovel logger undercarriage with tri-track and 36 in. (915 mm) pads.



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Land Clearing Innovators By Paul Iarocci

Basic Environmental uses Tigercat mulchers for a wide variety of land clearing and enhancement projects.

"The M822 works well on banks and fill in areas that the M760 can't effectively reach."

The small municipal airport of Toccoa in northeast Georgia did not seem like a typical venue to watch Tigercat equipment at work, but land clearing company Basic Environmental was contracted for a runway expansion and compliance project and chose two Tigercat machines from its equipment fleet for the job.

FAA standards define the allowable distance between a runway and nearby trees – a potential hazard to a small plane in the event of heavy crosswinds. Basic Environmental was to remove pockets of trees growing too close to the runway as well as selected "elevation trees" – all those within the glide

The M822 felling a large hardwood tree.



path that are growing beyond the maximum allowable height.

Based in Calhoun, Georgia, Basic Environmental is one of relatively few companies that specialize in land clearing and property enhancement services. Involved in all manner of municipal and industrial applications such as right of way, sewer easement, road construction, fire breaks, storm clean-up and commercial development, the company also performs selective removal for private land owners and upscale housing development projects. Basic can create pasture land, open up water fronts or mountain views and remove understorey and brush to add aesthetic value to forested property. "We are in the business of land clearing and land improvement," says general manager, George Hutchinson.

The company cites many advantages to mulching: It eliminates burning and hauling costs. Ground disturbance is minimized and the remaining mulch helps provide erosion control and growth suppression. Desirable trees are left undamaged and undisturbed.

Basic purchases its Tigercat equipment from Keith Reems of Smith & Turner Equipment Company. Equipment purchases fall under the responsibility of equipment fleet manager, Tony Pickens. Upon his recommendation, the company purchased an M760 in late 2004. The decision makers were impressed by the forest duty construction and the fact that the machine can supply 400 hp (300 kW) to the BH350 Fecon head. Less than six months later, the company purchased a second M760.

"They are built for the woods," says Pickens, who has visited the Tigercat facilities and has a particular interest in the company's fabricating, machining and welding expertise. "I haven't seen anything on the market that compares," he says.

For Pickens and Hutchinson, horsepower is critical – a higher horsepower machine is more productive and allows the company to

bid more competitively. When estimating a job, Hutchinson looks at the tree size, species, density and terrain and makes a good guess at hourly production. More powerful machines mulch more trees per hour. Purchasing high horsepower machines is sound rationale for a specialized company like Basic Environmental; Hutchinson is constantly bidding on contracts within a wide geographical area to keep the large machines busy.

When Pickens asked Reems if Tigercat could supply a track-based mulcher carrier, branch manager Bobby Miller thought an 822 would be appropriate and contacted the factory to see if an 'M822 mulcher' could be developed. It turns out that Andy Hoshel, product manager for track machines, had already completed preliminary layouts as well as a proposal for the hydraulic system before shelving the project. Hoshel invited Pickens to the factory to have a look at the preliminary plans and to determine if the engineering group was on the right track.

Pickens required a track carrier to handle steeper terrain, banks and soft ground. A boom machine is also well suited to felling large trees. The long boom reach provides the operator with a great deal more control and the ability to direct the tree as it is being felled. This is an especially important advantage in confined or urban locations, such as municipal airstrips.

Pickens explains that mulching is tough on the carrier. When felling big trees, the operator uses the head to break and splinter the



(L-R) Dale Thomas, M760 operator; George Hutchinson, Basic Environmental; Brandon Thomas, M822 operator; Calvin Philpot and Keith Reems, Smith & Turner sales; Bobby Miller, Smith & Turner branch manager; Tony Pickens, Basic Environmental; Kevin Wright, Tigercat district manager for South Carolina and north Georgia.

tree, making it quicker and easier to mulch. Although excavators have been adapted for use in mulching applications, he was unimpressed with the offering. "I've seen excavator booms twist," he says. Again, Pickens' criteria were durability and horsepower.

Although the Cummins QSL9 equipped, 280 hp (208 kW) M822 is based on the 822 feller buncher, the hydraulic requirements are quite different. A 210 cc Linde pump is dedicated to the mulching head. The main pump supplies oil to the other machine functions and a small gear pump runs the cooling fan.

Because the machines are often working around standing trees and other obstacles, Tigercat modified the swing system to provide the operator with as much smooth, precise swing control as possible. Hoshel explains. "The swing drive system is equipped with a swing priority motor. The function of this motor is fundamentally different than motors used in feller bunchers in that the operator is controlling the amount of pressure applied to the motor, not the speed at which the motor operates. The valving in this motor allows the swing function to take priority over other functions on the load sense system. This means that the swing will do what the operator requests regardless of what the other functions on the main system are doing."

Interestingly, this system was initially developed for Tigercat track harvesters operating in the United Kingdom. Contractors in the UK found that the system significantly smoothed the swing function, especially when processing large timber.

The M822 works banks and hillsides with ease. The M760 in the background works the flat terrain.



cont. on pg. 16

cont. from pg. 15.

Acting on a request from Pickens, Tigercat worked with Fecon to develop a 30 degree wrist that would be appropriate for the Bull Hog BH80 mulching attachment. Hutchinson stresses that the wrist rotation improves production and reduces machine travel.

"The M822 works well on banks and fill in areas that the M760 can't effectively reach," explains Pickens. This new acquisition fits well with the company's overall strategy to maximize production in any conceivable

application while treading very carefully on the land.

The M822 rides on 28 in. double grouser track shoes which strike a balance between climbing ability and flotation. The M760 is equipped for low ground pressure with 73 x 44 flotation tires on the front axle. Both machines are capable of selectively removing trees and undergrowth without damaging the root systems of the desired trees.

The highly skilled operators, Dale and Brandon Thomas can get very close to obstacles like the radio tower at the airport or desired standing trees on a property improvement project without touching or damaging anything. By Hutchinson's estimation it takes a skilled heavy equipment operator about 40 hours to become adept on a mulcher. ■

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PREVENTATIVE MAINTENANCE:

Tigercat's New Advanced Oil Analysis Program

The Tigercat Advanced Oil Analysis Program allows Tigercat owners the opportunity to have the machine lubricating fluids laboratory analyzed for contamination, component wear and fluid degradation. This analysis applies to all major machine components including engines, hydraulic circuits, axles, final drives and gearboxes.

Studies have shown that it is possible to receive a ten to one payback when looking at the amount saved on repair costs compared to the amount invested in a scheduled oil analysis program.

Benefits of the sampling program include the ability to detect problems before they become major catastrophic failures as well as schedule downtime and forecast the cost of repairs. The sampling program helps the machine owner to monitor maintenance schedules and practices and confirm that required maintenance is being completed on

time. The program increases the value of used equipment by providing proof of proper maintenance.

The oil analysis program uses the most modern technology available. Most test results are available within 24 hours after receipt of the sample and are supplied in an easy to understand report which calls for specific action and makes detailed recommendations. The report is available by mail, fax or email and can be viewed over the internet.

Contact your Tigercat dealer parts department to order oil sampling kits and take advantage of this excellent preventative maintenance tool. ■



Tigercat supports Pediatric Department



Each Christmas, all gifts received from vendors and dealers are raffled off to employees.

Proceeds are donated to a local charity or foundation. This year, \$1,893 was donated to the Brantford General Hospital Pediatric Department. The Tigercat social committee also donated all the extra gifts from the Children's Christmas Party. These presents were given to children spending Christmas at the hospital. ■

Janet Vezina, database and development assistant with the Brantford General Hospital Foundation is presented with a cheque for \$1,893 by Mike Ross, sales administrator with Tigercat. These funds will be directed to the Pediatric Department at the Brantford General.

Poker Tournament for Charity



Tigercat's first annual charity poker tournament in January attracted 70 participants and raised \$1,400 for Camp Trillium. At Camp Trillium children affected by cancer and their families can relax and enjoy life again. This amount will allow three children with cancer to attend Camp Trillium for a week this coming summer. "The work this camp is doing for children stricken with cancer is truly noble and inspiring," says Tigercat designer Todd Marchand who organized this event.

Trillium assistant director of fund-raising Jeremy Zinger was very impressed with the amount raised. The social committee plans on making this an annual event. ■

Jeremy Zinger, Camp Trillium and Todd Marchand, loader designer.

2005/2006 Show schedule

SHOW	LOCATION	DATE
Atlantic Heavy Equipment Show	Moncton, NB	April 6-7, 2006
Northeastern Forest Products Equipment Expo	Essex Junction, VT	May 12-13, 2006
Expo Richmond	Richmond, VA	May 19-20, 2006
Forest Expo	Prince George, BC	June 1-3, 2006
Mid-South Forestry Equipment Show	Starkville, MS	June 2-3, 2006
Lake States Logging Congress	Green Bay, WI	Sept 7-9, 2006
Pacific Logging Congress	Clatskanie, OR	Sept 20-23, 2006
APF International	Alcester, UK	Sept 21-23, 2006

H860C harvester update

Tigercat has sold a number of H860C harvesters into Scotland, England and Ireland for specialized plantation clear fell applications. The main commercial species tend to be those that flourish in wet, boggy soil with poor drainage such as sitka spruce and contarth pine.

When Tigercat moved to the C-series track carriers, a new harvester boom was designed with a great deal of input from contractors in the UK who had purchased LH830 harvesters for steep terrain but also required a larger, more stable machine for big timber and wet ground.

The H860C harvesters have been equipped variously depending on the application. The standard harvester boom reaches 9.4 m (31 ft.) and can handle a 4,500 kg (9,900 lb) head for large timber applications.

The longest boom option is the 11.94 m

(39 ft.) telescopic for heads up to 1,600 kg (3,500 lb). This configuration minimizes travel on extremely wet terrain with growth stunted trees. One machine has been equipped with 36 in. (915 mm) track pads for maximum flotation.

The timber tends to have large low limbs which is challenging because there is not much room for the feed rollers to gain momentum before the knives hit the branches. Crooked trees add further difficulties to the processing job. ■

H860C with 36 in. tri-track undercarriage processing large, heavily limbed timber.

A large tree with autumn foliage is shown on the left side of the advertisement. The tree's trunk is thick and gnarled, and its branches are covered in leaves with shades of orange, yellow, and green. The background is a soft, hazy landscape. On the right side, there is a Linde hydraulic pump, which is a rectangular, metallic component with various ports and a central shaft.

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Cotton-Hutcheson Moves into New Facility

Cotton-Hutcheson Inc. located in Evergreen, Alabama took on the Tigercat line in 1996. "It was a good decision," says owner Bruce Hutcheson. In October 2004, Hurricane Ivan wreaked havoc on the facility, forcing Hutcheson to rebuild. Forecasters speculated that Hurricane Katrina might also hit Evergreen. Fortunately, predictions were incorrect and the new building, started in January 2005, opened for business last October.

The 18,000 sq.ft facility has an 8,000 sq.ft. (745 m²) shop floor, an 8,000 sq.ft. parts warehouse and 2,000 sq.ft. (185 m²) of office space. The shop has eight service bays laid out in two rows of four and two ten-ton (9 t) overhead cranes spanning the 80 ft. (24 m) width of the building. Cotton-Hutcheson employs ten service

technicians with seven service trucks. There are 22 employees in total.

Cotton-Hutcheson has increased Tigercat sales by 300% since the end of its first year representing the product line. "With Tigercat's good reputation, it makes you believe in the product," says Hutcheson. "When you believe in the product, you give it your all to sell it."

Johnny Boyd, district manager for Mississippi and Alabama attributes the dealership's success to Hutcheson's strong business sense and good, dependable employees. "A successful dealership has little or no employee turnover. When it comes to Bruce, he treats his employees good and fair so that they will stay," says Boyd. "I am proud of Cotton-Hutcheson's success." ■

Steady Expansion at Mississippi Based B&G Equipment

B&G Equipment Inc. in Magnolia, Mississippi became a Tigercat dealer in 1993. Joe Kemp has been branch manager throughout this period. In 1997, B&G expanded its operations into Hattiesburg, offering primarily Tigercat equipment. In October 1999, B&G owner W. J. Bates gave the go ahead to start selling Tigercat equipment out of the Philadelphia store.

In November 2000, Bates hired David Long for the position of branch manager in Hattiesburg. Long, former

service manager for Tigercat dealer Patrick Miller Tractor Co. in Many, Louisiana was excited at the thought of the new challenges.

In August 2003 a fourth B&G store opened in Iuka, Mississippi. Steve Ballard is branch manager.

To keep up with the increased sales at all of the B&G dealerships, many expansions and improvements have taken place over the years. The Hattiesburg store added overhead cranes and expanded the service area by 50%, creating over 7,200 sq.ft. (670 m²) of floor area. The Philadelphia store added a service bay for a total area of 9,000 sq.ft. (835 m²) and a third overhead crane with a ten-ton (9 t) capacity. Magnolia has improved its service capacity, adding 50% more floor space. The high clearance addition can accommodate a five and ten-ton overhead crane.

In January, 2005 W. J. Bates bought out partner, Donald Grantham. B&G Equipment is now 100% Bates family owned. ■



The Bates family: Back row (L-R) Doug Bates, sales; Jeff Lee, parts manager; Rodney Kelley, sales; Justin Webb, product support. Front (L-R) W. J. Bates, president; Debbie Bates Webb, vice president/controller.

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