

OFFICIAL PUBLICATION OF TIGERCAT INDUSTRIES INC.

BETWEEN THE BRANCHES

ISSUE 59 OCTOBER 2023

STEEP SLOPE
innovation

EXPERIENCED
OPERATORS

HARVESTING
in **COLOMBIA**

DOZER
IMPRESSIONS

Sky High
COLORADO



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BETWEEN THE BRANCHES

ISSUE 59 OCTOBER 2023

IN THIS ISSUE

New TCi Dealer in France.....	4
End of an Era	5
Expoforest 2023	6
Machine Art	9
TCi 920 Feedback.....	10
Finite Element Analysis	12
Winter is Coming.....	15
Flying High in Colorado	16
A Seasoned Professional.....	22
Forestry in Colombia.....	28
Steep and Sustainable	34
A Life in the Woods.....	39
On the 1165.....	44
Tigercat Life	46

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FROM THE *Editor*

This past summer, I took an inspiring trip to Virginia and Maryland to visit two different logging operations with octogenarian feller buncher operators. To be over eighty years old and operating a rubber tire feller buncher day in and day out is astounding. To find out that these gentlemen not only pull their respective weights but also outproduce operators half or a quarter their age is even more impressive. To talk to them and discover just a sliver of their life stories and to tap into the wealth of hard-fought experience was truly a privilege.

To sustain the forest industry, of course it is a requirement to bring in new blood. But to ignore or underestimate the value of seasoned experience comes at our collective peril. Men like Frank Eure and Roland Murphy were forged in an age of struggle and adversity. The character, work ethic and love for forestry work that these guys developed over many decades should be admired and celebrated. We can all take something from it and hopefully instill these values in the generations that follow these men into the forests.

We also have some TCi dozer feedback from a South Carolina logging contractor, and a story about a unique harvesting operation in Colorado ski country.

Frequent contributor José Carlos Rocha Filho from Latin Equipment Norte writes about a socially beneficial greenfield harvesting operation in Colombia. First-time guest writer Ryer Becker contributes his thoughts on steep slope harvesting technologies in the US northwest. Ryer is a research assistant professor of forest operations at University of Idaho. Active in promoting the industry on social media, you may have come across Ryer's posts on Tigercat's Instagram feed.

Last point – winter and Christmas are coming. Make sure you, your family, and friends are stocked up on winter gear. Visit Tigercat Outfitters to see the latest wearable offerings.

– Paul Iarocci

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NEW TCi DEALER IN FRANCE



Cuoq Forest Diffusion to represent the TCi brand throughout France.

Tigercat Industries is pleased to announce that Cuoq Forest Diffusion (CFD) based in Saint-Pal-de-Mons is now representing the TCi equipment brand at the national level in France. Previous TCi dealer for France, Clohse Group, will continue to service the Benelux region and northwestern Germany.

Founder and CEO, Jean-Marie Cuoq has been involved in the French forest sector as a forester and contractor since 1984, and has used mechanized equipment in his harvesting operations since 1990. In 2005 Jean-Marie started an equipment repair business. In 2016 he expanded into equipment

sales, naming the new entity Cuoq Forest Diffusion. CFD has developed strong service capabilities and a focus on parts support and availability.

“I am grateful for the trust that Tigercat Industries has placed in me and my team,” says Jean-Marie. “We are ready to work diligently, promoting the TCi brand and establishing a strong presence throughout France.”

COO, Philippe Wion adds, “This partnership marks an important step for Cuoq Forest Diffusion. Tigercat Industries is renowned for its robust and high quality forestry

equipment. To be entrusted with such a renowned brand is of course a great satisfaction. The arrival of TCi products is consistent with our strategy of representing only premium quality brands.”

Matt Roberts, Tigercat Industries sales manager for Europe comments, “We are excited to work with such an exceptional organization as Cuoq Forest Diffusion to grow our population of TCi products in France. We are confident in the team’s abilities to support the forestry professionals of France. We look forward to a long and successful collaboration.” ■

The Cuoq Forest Diffusion team. (L-R) Adrien Leaute, Matthieu Rivière, Charlotte Ribeyron, Jean-Marie Cuoq, Bertrand Defarges, Florian Debard, Philippe Wion, Laure Rivière, Damien Portail.



The END *of an* ERA



The 575 prototype mounted on a Tigercat H860C carrier about halfway through its sixteen year, 50,000 hour life.



Marcel Chalifour believed in the Tigercat 575. Pictured here with the prototype back in 2014.

This email message came from Chuck Miles, Redhead forestry specialist and territory manager for northern Saskatchewan. He sent it to long-time Tigercat team member Duane Barlow, product manager for felling and harvesting heads. Chuck and Duane go way back, in part because Chuck was an early and vocal proponent

of the Tigercat harvesting head program. Over the years he has placed Tigercat 855 series machines equipped with Tigercat harvesting heads at the roadsides of many logging operations in the wilds of Saskatchewan's forests.

One standout is Almar Limbing, a contractor that has graced the

pages of *Between the Branches* in the past. With a mix of heavily limbed spruce and gnarly, large limbed aspen, roadside processing in Saskatchewan is a truly tough application. Almar purchased the prototype 575 – essentially the first harvesting head that Tigercat ever built. Here is Chuck's message to Duane:

It saddens me to inform you that harvesting head TH5750101 has officially reached its end of life and is retired. Over the last several years this was the training machine and this head saw a lot of abuse. As of the end of last season, the machine was fully operational and measuring. They estimate this head has around 50,000 hours on it.

Almar Limbing began a rental purchase on this machine on January 9, 2007 at 550 machine hours. They converted the rental to a final sale in July of 2007. Not bad for a prototype model Duane!!

EXPOFOREST 2023



Tigercat goes big with Tracbel at large-scale live forestry exhibition in Brazil.

– Gary Olsen, international sales manager southern hemisphere

Since the pandemic, opportunities to exhibit at southern hemisphere forestry equipment fairs have been lacking. As a result, Tracbel and Tigercat were excited to participate in Brazil's fifth Expoforest event. This world-class dynamic show was held in August for the second time near the city of Ribeirão Preto, São Paulo State. The focus was on silviculture, forest management and harvesting of eucalyptus pulpwood plantation forests.

The previous Expoforest was held over five years ago in April 2018. Many advances in technology and new product introductions have transpired in the meantime and Tigercat was ready to showcase

some of its latest products and developments.

The show site was sufficiently sized to allow Tigercat and Tracbel to present both their tree-length and cut-to-length systems. The proverbial 'go big or go home' was the approach taken by both entities in relation to the size of the site and the number of machines on display. In addition, 42 Tigercat team members travelled from Canada to attend and support the event. Consequently, attendees were left with no doubt as to the level of commitment to the Brazilian industry demonstrated by the Tigercat-Tracbel team.

The tree-length system included an 870D feller buncher fitted with

a 5300 bunching saw, followed by a 635H skidder. The impressive Tigercat 6500 chipper processed the tree-length timber into bio-fuel wood chips.

The cut-to-length system on show featured a Tigercat 534 harvesting head configured for eucalyptus debarking installed on a Volvo 20-tonne excavator. A 1075C forwarder equipped with a Tigercat FT195T85 crane loaded seven metre lengths. The forwarder featured Tigercat's payload scale system in combination with the F30 productivity monitoring system. Tigercat's smaller 1055C forwarder also made an appearance at the show where it was used to compete in the forwarder competition.



Tigercat 1075C forwarder loading seven metre lengths.

A Tigercat 1165 harvester with a six-wheel configuration was also fitted with a 534 head equipped for pine harvesting. The machine featured prominently at the main entrance and proved quite the attraction for visitors waiting to enter the show site. Back at the Tracbel-Tigercat booth were several static machines including a 720G drive-to-tree feller buncher

equipped with the 5600 bunching saw, a 630H skidder and a second 870D feller buncher.

Inside the booth, Tigercat had the very popular cut-to-length simulator station available for anyone to put themselves through the paces of either harvesting or forwarding without risk of damaging a real machine. In this

same space, Tigercat demonstrated the RemoteLog[®] telematics system projected on a large screen in real time. It gave interested attendees an idea of the capabilities of the system for machine health monitoring and production analysis, while demonstrating the seamless integration of the harvesting head production data generated by the Tigercat D7 control system.

The 635H skidder was part of the full-tree demonstrations.





Tigercat's new 6500 material processor producing fuel chips.

The dynamic harvesting systems operated for fifteen-minute intervals at four time slots throughout the day, drawing significant crowds. Our booth was inundated with customers from all over South America. Expoforest organizers confirmed 35,000 in attendance over the three-day event. Tigercat dealer Latin Equipment hosted customer groups from its divisions

in Argentina, Chile, Uruguay and Central America. Tracbel hosted a customer event on the first evening of the show with nearly 400 in attendance. It proved to be an excellent social gathering and networking opportunity.

These large-scale international trade shows represent a culmination of months and even

years of planning, consuming significant resources. However, the opportunity to connect intensively with industry professionals, share ideas, and register critically important feedback is invaluable. Expoforest 2023 was a worthy endeavour. ■

The Tigercat CTL simulator attracted a lot of attention during the event. The forest companies recognize it as a powerful tool for operator training.



MACHINE *Art*

Business administrator by day and painter by night, 23-year-old Ariana Franco has recently completed a painting of a Tigercat 720G feller buncher, commissioned by Latin Equipment Argentina.



Hailing from Corrientes, Argentina, Ariana took up painting five years ago as a hobby, but the growing demand for her work turned her hobby into a part-time job.

“In February I was commissioned to paint this Tigercat machine, which represented a big challenge for me as I had never painted heavy equipment before. I decided to take the job as it would allow me to learn more and expand the scope of my work.”

Ariana tells us that the painting took her two months to complete. She started with the background, then the sky and trees. The machine was painted last. “Every part of the machine was a challenge. I needed

to know how the machine worked.” Ariana comments that the help of her husband was important. “He knows Tigercat equipment well, so he explained to me how everything worked.”

Curious fact, Ariana says that the most difficult parts to paint were the wheels. After a few corrections, the last brushstrokes were used to add the sawdust. “From an artistic viewpoint, it is the sawdust that makes the painting come to life.” She adds that the contrast of the machine’s vibrant yellow against the green background is what she likes the most about the painting.

Ariana has already been commissioned to paint another Tigercat machine. “I’m really excited

about this opportunity, and I hope to learn more about Tigercat equipment so that the next painting turns out better than the previous one.” ■

Follow Ariana’s work on Instagram: @pinturasariana





FORESTRY DOZER

South Carolina contractor pulls the trigger on a TCi 920 dozer. His purchase decision is based in large part, on the strength and reputations of Tidewater Equipment and Tigercat Industries.

— Paul Iarocci

Mark Abercrombie is the owner of W D Abercrombie Logging LLC, located in Laurens in northwestern South Carolina. Mark owns a single-crew pine operation and has a close relationship with Tidewater Equipment Company's Newberry, South Carolina branch. He runs a three-machine Tigercat harvesting system consisting of a 720G feller buncher equipped with a 5600 bunching saw, a 610E skidder, and a 234B loader.

Mark speaks highly of Tidewater's support capabilities. In fact, he made a point to stress that his decision to purchase a very early production

TCi 920 dozer (Mark bought the fourth unit ever produced) was not just a result of his confidence in the design and support capabilities of Tigercat, but also, and perhaps more importantly, his confidence in Tidewater's Newberry team.

"IT PUNCHES ABOVE ITS WEIGHT."

Mark has owned three dozers in his lifetime. Cycling through these three machines, he has seen a lot of change, foremost in the areas of operator comfort and ergonomics.

For example, his first dozer had an open cab. Operating in between the Sandhills and the Piedmont geological regions, summers tend to be hot and humid. Without regular rain, the conditions can be extremely dusty.

Later on, Mark upgraded to a machine with an enclosed cab, marking a significant improvement in operator comfort. The TCi 920 is Mark's third dozer, providing a learned perspective on what makes a good forestry dozer. As he tells it, the step change improvements in comfort and ergonomics are almost as significant as the previous upgrade.



Mark Abercrombie confirms that the TCI 920 fits the bill as a forestry dozer.

Mark comments that the machine has good operator comfort and visibility. “It is easy to see blade edges and tracks. The front cab posts perfectly line up with the risers, so you don’t have to move your head from side to side to maintain visibility. And the rear post lines up with the exhaust.” He also points out the large touchscreen display front and centre in the cab that acts as a control system for machine parameters and switches to the rear

camera view when the machine is reversing.

Mark stresses that the TCI 920 is well balanced and powerful. “It punches above its weight,” he says, stating that it pushes a size class above its on-paper specs, weight, and capacity. In terms of performance, Mark says the machine is equally effective in tough stumping applications and final grading. “After they made some underlying adjustments to the three speed options for the various

function settings, the fine grading performance is perfect for me now.”

He comments that access for daily maintenance is well thought out and he highlights the neat hose routing to the blade. “There is nothing to catch on,” says Mark.

While Mark admits that the TCI 920 is underutilized in his own operations, he plans to contract his services to other loggers and landowners for road construction and maintenance work. ■

The machine is equally effective in tough stumping applications and final grading according to Mark.





Tigercat has a reputation in the marketplace for producing high-quality, durable, and well-designed products. Every employee who works on a machine from the research and development stage through to the after-sale support plays an important role in the process. This series will look at different roles within Tigercat, introducing the team members who perform specialized tasks.

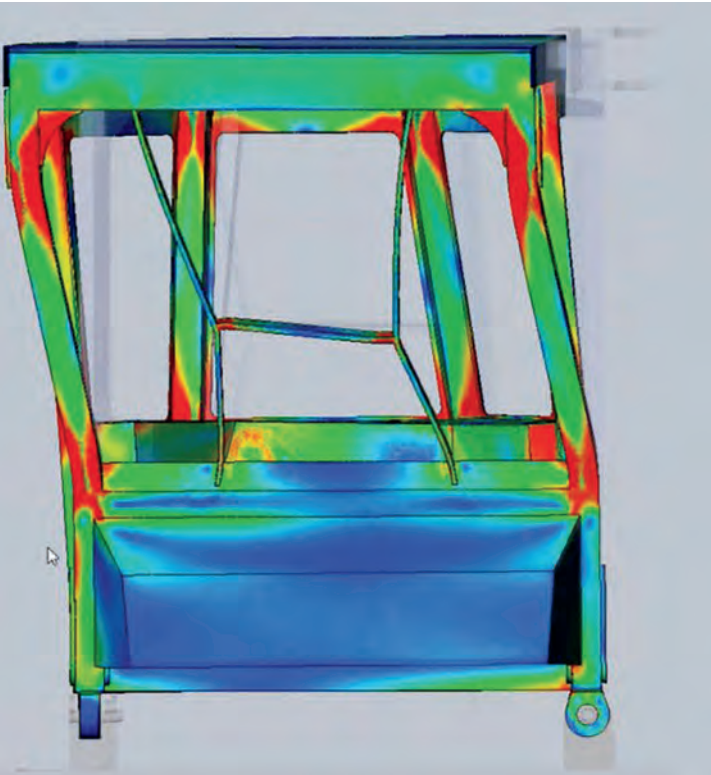
FINITE ELEMENT ANALYSIS

Li Quan

– Chris McMillan

Tigercat engineers and designers use solid modelling software to design machine parts and components. By doing this, they can generate a three-dimensional representation of a machine to verify fitment of parts and check for design issues that may not be obvious in a flat drawing. Another big advantage is the ability to run Finite Element Analysis (FEA) on structural components or entire machines.

FEA is the technique of simulating real-life machine applications in a virtual environment. Engineers are then able to evaluate the performance and reliability of the designs under various loading spectrums based on deformation, stress, strain and fatigue life calculations.



FEA simulation allows engineers to visualize how the cab will behave under the specified load.



Li Quan is an engineering specialist in FEA simulation at Tigercat with over 25 years of experience. Li's work in FEA began in 1997 working on forestry equipment at Timberjack. After working in other industries, including injection molding machinery and nuclear power, Li came full circle back to forestry equipment. He has been with Tigercat for over ten years.

Rather than working in a particular product group, Li works as a FEA specialist across all product groups. The scope of his duties can range from simulating cab structural tests to working on the main components for new products.

Cab safety

All operator cabs must pass ISO and other compliance standards for Protective Structure Certification

through actual lab tests. Testing is done by placing the cab in a large fixture and applying loads to different areas using a large hydraulic ram.

Since these lab tests are destructive and expensive, Li uses FEA to analyze each OPS/ROPS model (the cab plus the supporting structure) as per the standards the cab will be certified for. FEA simulation allows the engineers to visualize how the cab will behave under the specified load. Through design optimization, they can ensure that the cab's deformation, stress, and strain are all within the acceptable limits.

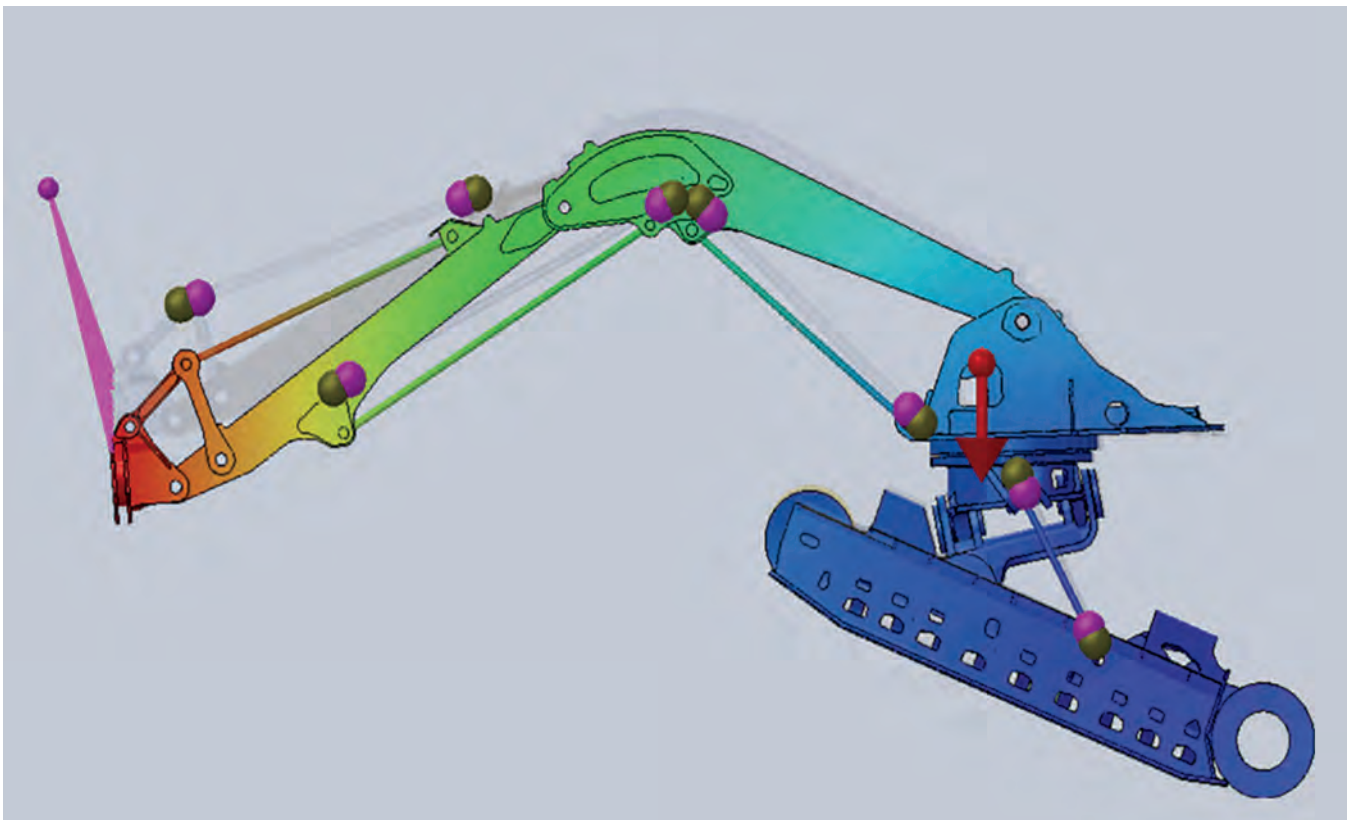
When the actual test is then performed on the cab, the result is remarkably similar to the simulation. The cost and time savings achieved by using this

method is substantial since the actual destructive test is performed only once. The risk of requiring a second cab to perform an additional test is almost eliminated.

Stress analysis

Stress analysis is performed on large components such as booms, chassis, and undercarriages. Li is responsible for running the FEA software on the models that are created by engineering to find areas that may be susceptible to failure under load. The designer can then use the data to strengthen the vulnerable areas.

Another important task for Li is to analyze components from the field that have encountered failure. In this case, Li uses the FEA technique to determine the root causes, so proper correction



FEA software is used to show the deformation of the leveling feller buncher by simulating a load on the end of the boom.

measures, including field kits and design modifications, can be applied to existing machines and future products to eliminate the issue.

Tigercat recently developed a Finite Element Analysis Technical Team with members representing each product group. The goal of

the team is to share knowledge, develop design guides, and improve administrative efficiencies. ■

WINTER *is Coming*



Winter is coming for us in the northern hemisphere and [tigercat.com](https://www.tigercat.com) has some resources available to help you prepare for the season.

ESPAR EASYSTART

A new video is available that demonstrates a few key set-up procedures for the Espar Coolant Heater EasyStart timer. Learn how to access the service menu, set the language and the undervoltage limit. The video also details how to determine if the programmed time is the desired heater start time or desired departure time – and how to change this setting. Go to [tigercat.com](https://www.tigercat.com) and search ‘espar’ to watch the video.



[www.tigercat.com/
video/espar-coolant-heater](https://www.tigercat.com/video/espar-coolant-heater)

WINTER MAINTENANCE TIPS

Tigercat machines work in some of the most extreme weather conditions on the planet – from hot and humid equatorial Brazil to punishing cold in the far reaches of northern Canada. In cold climates, contractors must maximize uptime and production in the short winter window when the ground is frozen. Search ‘winter care’ to read about machine maintenance tips for harsh winter conditions.



[www.tigercat.com/
service-tips/winter-care](https://www.tigercat.com/service-tips/winter-care)



Gear up for the cold season. Check out the Tigercat Outfitters winter collection here.



[www.tigercatoutfitters.com/
collections/winter-collection](https://www.tigercatoutfitters.com/collections/winter-collection)

Flying High in COLORADO

BTB visits a unique high elevation logging operation in Keystone, Colorado.

– Paul Iarocci



travelled to Keystone, Colorado with Tigercat district manager James Farquhar and Titan Machinery sales specialist Greg Doyle to have a look at a very unique logging operation. In June, Keystone Ski Resort was well into an expansion project that will add 550 acres (220 ha) of skiable terrain. In addition to a new lift

and the installation of snow-making equipment, an important part of the project is the timber harvesting required to accommodate the new runs. This is where the Gray family comes in. The operation is a joint effort between Todd Gray and Mountain Blade Runner (MBR) Helicopters, a company owned by Todd's son,

Bryson. The father-son team is looking after clearing timber and site preparation for the new runs. The Grays are not only marketing the timber to an area sawmill but also have a contract to chip the residuals, supplying a biomass power generation facility. It is a great example of maximizing fibre usage and eliminating waste.





Crew member Tyler Gray, Todd Gray, and LH855E operator, Brad Gray.

Todd's crew is using a combination of hand fallers and mechanized felling to harvest the timber. Todd has a Tigercat 620H skidder on site. However, due to the sensitive, often wet terrain, and the steep slopes, it is not the 620H that is delivering tree-length wood to the landing. Instead, a Kaman K-Max 1200 helicopter equipped with a grapple

is forwarding tree-length logs down the slopes to the company's new Tigercat LH855E harvester.

Todd explains that the terrain is wet. In fact, at an elevation of 11,000 ft (3 350 m), there are patches of snow still visible throughout the area in late June. With sections that are too wet

and unstable for the buncher, the operation relies on the ground crew for felling, as well as several other functions.

Incredibly, even at this elevation, the K-Max 1200 can lift a 5,000 lb (2 270 kg) payload. All the forest debris must be cleaned up and removed. At this stage, MBR swaps



The LH855E with a ski run in the background. Waste wood is stacked in a separate pile. It will be chipped and transported to Eagle Valley Clean Energy.

out the grapple for choker cables. The ground crew gathers and bundles all the logging residue. “All the trees come out with a helicopter and grapple, and then the ground crew goes back and picks up all the slash. It gets bundled with choker cables and taken out,” says Todd. The helicopter piles the residuals at the landing. Later, a chipper will be

brought in to process the material.

Another aspect of the post-harvest site preparation involves the stumps. After all the residual material is removed, every stump must be hand cut flush to the ground. The idea is to make the ski run surface as smooth and clean as possible. With the steep terrain,

that often means cutting the stumps at an angle so there is no protrusion on the down side of the slope.

Todd’s brother is Brad Gray, the LH855E operator. The company only recently purchased the machine, factory equipped with a Tigercat 568 processing head. Brad is impressed with the productivity



The 568 harvesting head readily handles the tall, heavily limbed timber. LH855E operator, Brad Gray, is impressed with the productivity of the machine. He is processing mature timber, averaging 20-24 inches (510-610 mm) at the butt. He says that limb removal performance is excellent. He also really appreciates having the top saw, commenting that it reduces waste and breakage.

and capacity of the head. He is processing mature timber with most of the stems measuring 20-24 inches (510-610 mm) at the butt end and some up to 30 inches (760 mm). For the most part, the limbs extend almost to ground level, making for challenging delimbing. Brad says that limb removal performance is excellent. He also really appreciates having the top saw, commenting that it reduces waste and breakage.

There is not a lot of decking real estate available and not a whole lot of flat ground to work on. The leveling undercarriage has been a saviour. Brad's previous processor was an excavator base. "You swing

up and you swing down. Swinging like that all day is no fun at all," he says. "By the end of the day, you are worn out." The leveling capability really improves comfort. Eliminating the need to swing uphill and fight gravity improves efficiency.

There are some challenges associated with high elevation aerial logging. First off, high winds often ground the helicopter. Second, rain or even excessive moisture in the air can cause static electricity build-up in the cables, also effectively grounding the aircraft.

Bryson's company, MBR, owns half a dozen helicopters. While the K-Max 1200 is the specialist for lifting, MBR has two other types of aircraft in the fleet – the Airbus AS350B3E and Enstrom 480B. The company has a wide range of service offerings. Just a few examples include transporting pipe, installing power poles, running power lines, heliskiing, avalanche mitigation, and firefighting services. According to Todd, "This summer, the choppers are on initial attack fire contracts, looking for small fires that they can land near and put out before they get big."

The K-Max 1200 hauling a large stem out of the cutting area. With snow melt persisting into summer, ground conditions are often too wet for mechanized equipment. All timber, residual brush, and stumps will be removed, leaving a clean ski run when the job is complete.

**THERE ARE SOME
CHALLENGES
ASSOCIATED WITH
HIGH ELEVATION
AERIAL LOGGING.**

80 miles (130 km) west of Keystone is the town of Gypsum, Colorado. Eagle Valley Clean Energy is a twelve-megawatt biomass project that has been operating there for about a decade. The power plant generates electricity from the combustion of waste wood and sells it to Holy Cross Energy, a not-for-profit Rural Electric Cooperative.

The residuals and non-merchantable timber stacked at the deck will be chipped and trucked to the Eagle Valley facility. The result is that all the fibre harvested from the Keystone site will be utilized. It is essentially a zero-waste logging operation. ■





A *Seasoned*
PROFESSIONAL

Maryland-based contractor, FD Eure Inc., is owned by Franklin Eure. His 83-year-old father, Frank, is on the job every day operating a Tigercat feller buncher. BTB visits to learn about his very long professional life and what keeps him motivated to crank up his machine before dawn each morning.

– Paul Iarocci

FD Eure Inc. is a harvesting contractor based in Hebron, Maryland, that has transitioned in recent years from traditional clear fell harvests to thinning. The company is owned by third generation logger Franklin Eure. Franklin and his father, Frank, work together every day. Frank is 83 years old. The company cuts state forests in both Maryland and Delaware and works in nature conservancies, as well as private tracts. The wood goes primarily to Eastern Shore Forest Products and Pixelle Specialty Solutions.

Some of the contracts are with the mills. At other times, the landowner, the Forest Service, or the land steward will contract FD Eure Inc. directly. “An interesting one that we did a few months ago was a specialized cut for a butterfly habitat restoration,” says Frank. In that case, the Maryland Forest Service contracted Eastern Shore Forest Products, which in turn subcontracted the harvesting work to FD Eure Inc.

“We used to do clear cuts years ago,” says Franklin. “But as that fell by the wayside, we started doing thinnings, and that is basically where we ended up now. Not that clear cuts are bad, but we actually enjoy doing something for nature. What we are doing now is leaving something for the future.”

Frank manned the Tigercat 720G feller buncher on the butterfly job. He explains that the habitat restoration project was aimed toward the mating season. “This was for the butterflies, a place for them to meet and mate.” Frank was targeting removal of most of the pine, while leaving all the hardwood species, essentially maintaining and managing a forest to bring it back to a more natural

**“WHEN WE FINALLY
GOT A POWER SAW,
GOOD LORD, YOU
COULD PROBABLY
HEAR IT ALL THE WAY
TO PENNSYLVANIA.”**

– Frank Eure

state of biodiversity. This in turn, better supports the species that are reliant on the habitat.

Frank’s father was also a logger, operating under Eure Logging Inc. Frank, his sister, mom, daughter, and son (Franklin) all worked in the family business. “When he passed away, we liquidated the company,” says Frank. “I drove truck for a food service company for about nine years.” In the meantime,

Franklin started up FD Eure Inc. in 1991 and enticed his father to come work for him.

Today, the company has two thinning crews and a chipping operation, employing nine in total. Frank explains that Eastern Shore supplies the chippers and chipper operators. “We cut it and drag it up to their chipper.” The total weekly volume for the three operations is 120-160 loads.

Frank started working in the woods during summer vacation when he was eleven years old. “My job was to mark the ends of the trees. They were cut in sixteen-foot lengths and taken to the railroad side. They unloaded them there and took them to Franklin, Virginia.” Back in those days, they didn’t weigh the loads. Board footage was calculated based on length and diameter, so Frank’s job was to measure the end diameter.

Every so often, if one of the fallers didn’t show up to work, Frank would do his best to pull a crosscut saw. Another early job for Frank was skidding logs. “We had mules. I used to drive those all the time. We moved up here from North Carolina and we brought the mules with us.” Frank explains that when they were working in North Carolina, they cut timber for JI Wells that was manufactured into utility poles.

"I THINK HIS FAITH HAS A LOT TO DO WITH KEEPING HIM FIT AND STRONG BECAUSE THAT GOES A LONG WAY."

– Franklin Eure

"We used to send them up from North Carolina by rail and then they wanted us to come up here and cut their land holdings. That's how we came to be here. We were pulling those great long pilings. They were 60 to 70 feet long. And with a mule pulling them, we had to cut little trees across the path so that they would slide on the trees. They would slide a lot easier on the trees than they would on the dirt."

The family progressed from the mules to an old dozer, and eventually a Franklin cable skidder. "I don't know how many new Franklins we went through. We would break them and weld them back together." The first hint of mechanized felling came in 1976 when Frank's dad bought a Caterpillar 920 tree cutter – a front end loader with a shear-type attachment. At one point, Eure Logging Inc. had three crews and was running thirteen log trucks.

"I remember one day we moved 32 loads. It was way different back then compared to how it is done now," Frank recalls. "The crews were working double shifts and loading at night as well. Chesapeake Corp operated a plywood plant in West Point. The timber was transported by barge. When Chesapeake Bay froze over, we had to take them up by truck."

Frank rises at 3:30 every morning and arrives at the jobsite by 5:00 am. He notes that his son usually has the machine fuelled, greased, and ready to go. He cuts nine to ten loads and leaves at around 2:30 in the afternoon. "And every morning or evening or both, I get a hug and a 'I love you' from Dad. He cuts with the best of them, and can out-cut most of them," says Franklin proudly. "And he shows up for work every day."

The 720G that Frank is running now is the company's fourth Tigercat drive-to-tree feller buncher. FD Eure Inc. also owns an 845 series track buncher. "The first one that Dad got was in 2013. A 718E. It was the very first machine we bought from Bullock Brothers. And Tommy Parks was the one that sold it to us." Tommy is a veteran forestry equipment salesman, and he has been selling Tigercat iron for 30 years. "There is a difference between a good salesperson and just a regular salesperson. Some of them are just out here for the sale. And some of them are good people. That is how I feel about Tommy," says Franklin, adding that he receives good service support from Bullock Brothers.

With 70 years' experience in the woods, Frank has seen it all. "When we finally got a power saw, good

Lord, you could probably hear it all the way to Pennsylvania." The first power saw took two men to operate, weighing over 100 pounds. "The chain would break and hit a man's hand – cut it all to pieces. The first one we got, I will never forget it. It set the woods on fire, and I had to fight fire at the camp all weekend. Maybe at the time I was 12 years old, but they paid me like I was a grown man to fight that fire."

That first mechanized felling machine in 1976 didn't even have a hydrostatic drive system, and since then, Frank has run just about every feller buncher brand, three-wheelers included. I ask him how the machines have changed and evolved over the decades. "There is so much. They are faster. They are stronger. They don't break in two like they used to. And they are much quieter."

Thinning is a demanding job for a buncher operator of any age, but Frank says that he doesn't really feel tired at the end of the day. He stresses that the modern cab ergonomics make a big difference, and he mentions that he makes good use of the rearVIEW camera system. When pressed, he can't think of any specific challenges in his job that are age-related. "I think his faith has a lot to do with keeping him fit and strong," says

Frank runs a new 720G equipped with a 5500 saw – perfect for the thinning work that he is engaged in daily.



The Tigercat 620H skidder is well matched to the thinning work performed by FD Eure Inc.



Franklin. “Because that goes a long way.”

When Frank is not working, he fishes a little and works on his boat. His wife, Elizabeth, is suffering from Alzheimer’s and resides in a nursing home. Frank visits her every day. He has no plans to retire. “I enjoy it. I even enjoyed driving the mules all those years ago. I have always liked working in the woods.”

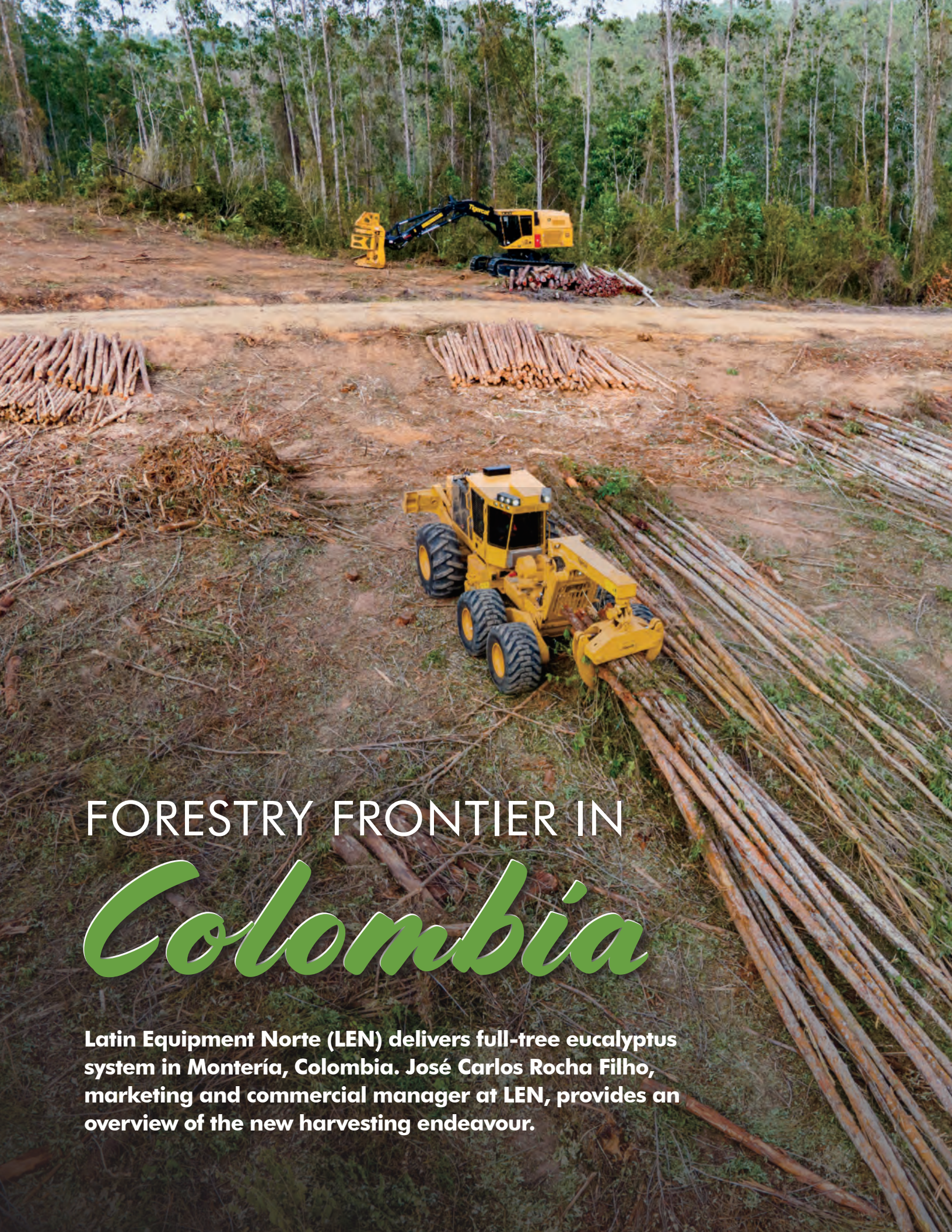
I get the impression that Frank also enjoys working alongside his son.

As for Franklin, he has the privilege of working with his father and on occasion, his wife. “Sometimes my wife Donna comes out and runs the skidder. She can run a skidder just as good as anybody can and she will take care of it better. When she used to work full time out here with us, she kept her rags, and cleaning supplies, and her grease gun in her machine. If she had everything completed, with a deck full of trees, she would get up and wash her windows. She kept busy.”

It’s a real family business with many long-term employees. For instance, Franklin and his dad point out a 74-year-old truck driver who has worked for the Eure clan for over 45 years. Franklin’s uncle, Steve Eure, and cousin, Tim Eure, also work for the company. Franklin stresses the importance of teamwork and harmony. “You’ve got to get along great in the woods to help one another. If not, you can’t get as much done. That is the main thing.” ■

Frank is 83 years old and shows up for work every day.





FORESTRY FRONTIER IN *Colombia*

Latin Equipment Norte (LEN) delivers full-tree eucalyptus system in Montería, Colombia. José Carlos Rocha Filho, marketing and commercial manager at LEN, provides an overview of the new harvesting endeavour.



Montería is located in northern Colombia and is the capital of the Department of Córdoba. Connected to the Caribbean Sea by the Sinú River, the city is locally known as La Perla del Sinú (The Pearl of the River Sinú).

Like many other regions in the country, Córdoba State in northern Colombia has a history of deforestation due to agricultural expansion, cattle ranching and illegal logging. The development of commercial plantations began twenty years ago when the Colombian government, in partnership with private companies, launched an action program to foster foreign investment in several industries, which in turn addressed reforestation and afforestation of many degraded lands. The primary species are fast-growing eucalyptus and high-value teak (*Tectona grandis*), high demand export products across Europe and Asia.

The program aimed to support a sustainable source of wood for domestic and international markets, creating employment opportunities and contributing to climate change mitigation. The plantations in Montería, Córdoba have emerged

as a promising solution to deforestation, while contributing to the local economy by generating approximately 300 jobs. The steady income for local agricultural workers replaces previously sporadic employment.

Growing forestry enterprise

Back in 2008, two Chileans, Luis Enei and Hector Villalobos, who are highly experienced and extremely passionate about the forestry industry, were eager to explore new opportunities beyond their borders. As key authorities at Orion Capital, a Chilean investment firm focused on timber harvest and silviculture projects, the two men set off on a mission seeking new prospects. Attracted by the Colombian government's action program and granting subsidies, Luis and Hector established Reforestadora del Sinú with financial backing from Megeve Investments. Well-positioned along the Caribbean coast, with

favourable climate conditions, Reforestadora del Sinú began to acquire land and commence activities in Montería in 2010.

Reforestadora del Sinú specializes in reforestation and sustainable forestry management. In addition, the company owns and operates a modern high-capacity nursery, producing over 3.5 million seedlings annually through vegetative propagation. Reforestadora del Sinú is actively involved in producing and establishing timber species, including hybrids of *Eucalyptus grandis* and *urophylla*. The nursery employs more than 40 people. Forestry manager, Dayana Paola Tobar, points out that 70% of the workforce is comprised of women who are heads of their households.

The company established a foundation benefiting more than 1,000 families from local communities by promoting inter-institutional actions. Scholarships,



The 625H skidding in Córdoba. The balanced weight distribution ensures low ground pressure, minimal soil compaction, and excellent traction and stability.

Robert Sandoval, harvesting crew manager, and Dayana Paola Tobar, forestry manager.



the development of water treatment plants, local road maintenance, sports sponsorships, and medical and sanitary education programs are some of the services and programs offered to the community.

Operations

Today, Reforestadora del Sinú manages over 13 000 hectares (32,000 acres) of hybrid *Eucalyptus urograndis* intended for roundwood and chip export to Europe and Asia. The stands are mostly set on gently sloping terrain with occasional steep inclines reaching up to 35 degrees.



Reforestadora del Sinú's harvesting team and LEN staff. Mechanization has had a transformative effect on the company's workforce, empowering them with valuable operational and managerial expertise.

Hector says that establishing a mechanized harvesting system was a significant advance for the Colombian operations, pointing out, "At this crucial juncture, achieving high output levels at competitive costs with the Tigercat harvesting systems is essential to ensure the success of our project."

Reforestadora del Sinú's plantations were originally planned to be clear-felled at seven years, but the initial harvest was delayed by a few years due to the pandemic. "Even starting the harvest during second quarter 2023, we expect to deliver over 50 000 cubic metres for our clients in Europe," says Luis. "For the following years, we expect to be able to export over 250 000 cubic metres per year."

With a wealth of expertise in steep slope harvesting developed over two decades, Chilean forestry

OVERHEARD: I SAW A REAL TIGERCAT MACHINE, LIKE THE ONES ON YOUTUBE.

professionals have honed their craft to perfection. With the advice of LEN's sister company, Latin Equipment Chile, a Tigercat full-tree eucalyptus harvesting system was proposed.

First impressions

In March 2023, the full-tree system, comprised of an L855E leveling track feller buncher and a 625H six-wheel skidder, made its way into the eucalyptus stands to start the harvesting season. Transported on a lowboy trailer, the skidder was the first machine to arrive in the community of Valencia, near to the eucalyptus stands. However, driving through the narrow streets posed quite a challenge for the truck driver. We had no choice but to unload the 625H and drive it to the company facility. As we made our way through the town, the sheer magnitude of the machine caught everyone's eye as it towered over the surrounding cars. It seemed to leave a lasting impression on the locals. Overheard, "I saw a real Tigercat machine, like the ones on YouTube."



The L855E cutting uphill. The ER boom technology, high productivity and excellent stability on challenging terrain made the L855E the best solution for this sloping terrain harvesting application.

The Tigercat six-wheel skidders have established a strong reputation for exceptional reliability and productivity in challenging terrain in Chile and Brazil. The machine balance and weight distribution provide low ground pressure, minimal soil compaction, and optimal traction and stability.

Despite being the operators' first experience driving a skidder, their initial impressions were very positive. The controls are simple, intuitive and user-friendly, which was especially noted by the operators. It supported a seamless learning process, rapidly boosting operator confidence with the new machine.

In addition, the clear visibility, comfortable air ride suspension,

and the Turnaround 220° rotating seat were seen as big advantages, minimizing fatigue during long shifts. "These remarkable features stand for unparalleled comfort and advanced ergonomics, contributing positively to the operators' first experiences and impressions," says Robert Sandoval, harvesting crew manager.

Edgar Zamarripa, LEN product support, explains that 625H daily maintenance has proven to be more than just convenient. "The H-series sets a new standard in daily service access, providing easier access from the ground. Quicker servicing contributes to reduced downtime, which in turn might boost production."

The L855E is equipped with a 5300 bunching saw, coupled with a 340° wrist. The high rotation wrist provides excellent control to lay trees parallel to the tracks alongside the machine and in any desirable position with the aim of optimizing the bunch size.

Felipe Gomez, Latin Equipment's technical expert, explains the advantages of L855E in challenging terrain. "The machine is highly responsive and delivers excellent stability, particularly when you are in the uphill cutting position. Precise boom action and long reach allows the machine to bunch up to six trees in a more advantageous drop spot for skidder operators to grab big bunches and go quickly."



(L-R) Hector Villalobos, Felipe Gomez and Luis Enei.

Ongoing performance, productivity, and cost assessments up to this point have indicated promising outcomes. The new system has effectively streamlined operations and improved efficiency and safety, resulting in the desired overall cost reduction. Moreover, the mechanization process has had a transformative effect on the

company's workforce, empowering them with valuable operational and managerial knowledge and skills. Notably, these advancements have also yielded substantial social and economic advantages for the local communities within the region.

At LEN, we consistently emphasize the importance of selecting

the appropriate equipment and preparing people to handle the systems effectively. At the end of the day, the project's success and outcomes are directly tied to the equipment and how it is managed. It makes all the difference between delivering an average performance or having outstanding results in any well-run enterprise. ■



ABOUT THE AUTHOR

José is a marketing and commercial manager at LEN. Having his finger on the pulse of the forestry industry all over Ecuador, Colombia, the Caribbean, Central America, and Mexico, he is responsible for driving business development and delivering innovative solutions to clients across the region.



SAFE, PRODUCTIVE, and **SUSTAINABLE**

Guest contributor, Ryer Becker, talks about timber harvesting in the northwestern US and how productivity, safety and sustainability have been positively impacted by advances in equipment and technology.



JEM Forestry's new LX830E opening up a new harvest unit outside of Elk River, Idaho.

Since the days of the axe and crosscut saw, innovation and ingenuity have defined the logging industry. From the earliest adaptations of the chainsaw to current development efforts around machine automation, the logging industry has embraced an innovation mindset to move the industry forward. While not all attempts have proven successful, it is this continued pursuit of improvement that has helped equip the logging industry with the tools necessary to address the many challenges facing the management of our forest resources.

Over the last ten to fifteen years, significant advancements in mechanization and technology have resulted in changes to logging

operations around the world. In many cases, these advances have provided improved solutions for steep slope operations and other environments which have historically proved challenging for mechanized, ground-based operations. Given the steep terrain encountered throughout much of the northwestern United States, many logging contractors in the region have quickly adopted these mechanized systems.

In addition to offering the potential for improved production, contemporary, mechanized harvesting equipment also supports safer timber harvests. Historically, two of the most hazardous tasks performed on logging operations have been

manual tree felling and hooking on cable operations. While these are important roles in many operations, the increased availability of mechanized alternatives has prompted contractors to pursue safer and more productive options when feasible. Mechanization places workers within reinforced, ergonomic, and conditioned equipment cabs, providing protection from falling debris, extreme heat and cold, and inclement weather. It also reduces fatigue and bodily wear and tear and minimizes the risk of injury associated with slips, trips and falls.

Leveling cabs and winch-assist systems are two technologies advancing ground-based timber harvest operations throughout the

northwestern United States. For many contractors without cable logging capabilities, these advances provide new opportunities to work in areas that previously would have been too challenging, unproductive, or unsafe for traditional ground-based equipment. Mechanization increases contractor competitiveness and access to timber harvest opportunities that were previously infeasible. Contractors running cable logging sides have also benefitted from many of these same advancements.

JEM Forestry

Over the last five years, Justin Everhart, owner of JEM Forestry in north-central Idaho, has worked to establish himself as

an industry innovator, adopting new technologies into his daily operations. For Justin and his five employees, this investment means future-proofing the operation and ensuring the crew can produce at a high level while simultaneously doing right by the land on which they work. Supported by Triad Machinery, JEM has operated a fully mechanized logging side since 2020, finding great success using several Tigercat machines. The core operation consists of two cutting machines, a processor, two shovels, a grapple skidder, and a winch machine. The system allows the crew to operate safely and productively on all but the steepest, most challenging terrain where cable operations become a necessity.

Justin first mechanized his felling operations in 2020 with the acquisition of a Tigercat LX830D feller buncher. He has since upgraded to the new LX830E. Long tracks with extended grousers provide additional traction and optimal weight distribution, which helps mitigate soil disturbance and track slippage when working in steep areas. When necessary, JEM operates the LX830E with a winch assist system to further increase the safe operating range, while maintaining high production and minimal ground disturbance.

While feller bunchers remain the primary felling option throughout the region, since 2014, shovel loggers have become a staple of

JEM Forestry testing out the steep slope capabilities of the Tigercat 635H swing boom.



many logging operations. Shovel loggers, like the Tigercat LS855E, offer contractors a productive felling and forwarding solution on both gentle and steep terrain. A shovel logger equipped with a directional felling head allows a single operator to both fell and shovel trees. The machine has been used as an effective alternative to some short line cable operations on marginal cable ground throughout the region.

Elsewhere in the region, winch assisted mechanized felling and pre-bunching ahead of a yarder has been shown to increase production versus manual felling operations,

**JEM HAS
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SINCE 2020,
FINDING GREAT
SUCCESS USING
SEVERAL TIGERCAT
MACHINES.**

while also capturing the added safety benefits.

In the northwestern US, most operations entail whole tree extraction to the landing or roadside using skidders, shovels or yarders. The integration of tethered systems has also resulted in the use of winch assisted grapple skidders. Some new equipment offerings have been purposely designed for these applications. For instance, the Tigercat 635H swing boom skidder combines the power, low ground pressure and functionality of a six-wheel drive skidder with the added versatility of a swing boom.

Tigercat 180 yarder owned and operated by Todd Cleveland based in Lewiston, Idaho. This harvest outside of Helmer required two-stage extraction. A Tigercat LX830D and 635H felled, skidded, and pre-bunched. Then, the logs were yarded using the grapple carriage-equipped 180 to avoid a stream within the harvest unit. The ability to fully suspend the loads made it possible to successfully yard across the sensitive area without disturbing the stream.



When working on steep, rugged terrain, it can be challenging to manoeuvre a skidder to the positions necessary to gather bunches. The swing boom allows the operator to easily access bunches along the skid trail with limited travel. The ability to keep the skidder correctly positioned on the slope improves stability and safety while decreasing the amount of ground traversed by the skidder for less site disturbance.

Despite the advances in ground-based logging equipment, various timber harvesting scenarios in the northwestern US still necessitate cable logging systems. New advances in equipment are increasing the safety and capabilities of these logging operations, and mechanized grapple

carriages are being increasingly integrated into yarding systems. The use of these new carriages reduces worker exposure to hazardous conditions as there is no requirement to send workers over the hill to set chokers. When combined with contemporary hydraulic yarders, like the Tigercat 180, contractors can conduct safe and productive operations in the most challenging conditions.

Ensuring the execution of safe, sustainable, and productive timber harvesting operations across all conditions is vital for promoting the continued health and resilience of forestlands and a successful logging industry. As mechanization and advanced technologies continue to transform timber harvesting operations throughout

the northwestern United States, contractors continue to learn how best to utilize the full capabilities of these systems.

Forest operations occur in dynamic environments with numerous operational and environmental factors in play. While a one-size-fits-all approach is not feasible, understanding the capabilities and limitations of the different available technologies allows contractors to identify how these different pieces of equipment can best serve their unique operational needs. The ingenuity of the expert contractors on the ground will continue to push the logging industry towards a safer, more sustainable, and productive future. ■



ABOUT THE AUTHOR

Ryer Becker is a research assistant professor of forest operations in University of Idaho's College of Natural Resources in the Department of Forest, Rangeland, and Fire Sciences. Ryer holds a Bachelor's degree in Ecological Forest Management and Forest Operations from Paul Smith's College and received his Master's and PhD degrees from the University of Idaho prior to joining the department as research faculty in 2022. His research focuses on the integration of mobile technologies, remote sensing, and GIS into the planning and execution of timber harvesting and forest operations. More recently, his work has focused on workforce development and education efforts. Ryer grew up exploring forests with his father and grandfather, which instilled an appreciation and respect for the natural world at a young age. This has since translated into a passion for supporting the continued health and resilience of forestlands.



A LIFE *in the* WOODS

Roland Murphy has spent a lifetime in the Virginia woods. His invaluable experience, strong work ethic, and passion for the job enrich his coworkers and contribute to a successful, high quality logging operation.

– Paul Iarocci

Jerry Rose, his son Davis, and daughter Stephanie Blythe, operate two logging businesses and a transport company out of Courtland, Virginia. Jerry started Jerry D. Rose Incorporated in 1983. Davis and Stephanie are third-generation loggers. “Before our father started the company, he was the foreman on our grandfather’s job, Ben E. Babb Logging,” Stephanie tells me. The siblings founded a second company, Southeast Fiber Supply, in 2013. “We started Southeast Fiber Supply to handle the chips going to Enviva. Dad also started a trucking business, Chip Transit Inc., that does all of the hauling for our logging operations,” Stephanie explains.

Today, two Jerry D. Rose Incorporated crews supply International Paper in Franklin, Virginia, with clean pine pulp chips. The third crew, working under Southeast Fiber Supply, markets fuel chips to an Enviva pellet manufacturing plant, as well as a Dominion Power facility. The main differences between the pulpwood crews and the fuel chip crew are in the tract type, and of course, the type of chip produced.

“The Southeast Fiber Supply crew cuts more mixed tracts with smaller hardwood,” Davis explains. “We try to target tracts with a lot of pulpwood but sometimes we will run into hardwood logs.” The company merchandises the saw timber, “It’s maybe about 5% of our weekly quota. We cut private tracts that we buy, and we cut a fair amount for the big timber holding companies, like Westervelt, John Hancock and Roseburg. A lot of the work we do for them is thinning work.”

Between the two companies, five

Tigercat 724G feller bunchers equipped with 5600 bunching heads are working full time, with three spares available. The machines were purchased from Bullock Brothers Equipment. There will usually be two feller bunchers deployed for a thinning crew and just one machine for a clear fell job. “For us, the 724G is perfect for thinning,” says Davis. “In a lot of the clearcut operations, we will run a 44-inch tire because it is best for our ground conditions. When we move to thinning, we will put a 30.5 tire on that same machine. It makes the machine more versatile.”

The company is meticulous on maintenance. A full-time mechanic cycles through the three crews, compiling service notes on every machine. The Roses tend to hang on to their Tigercat bunchers, trading them with up to 13,000 hours.

Jerry, Stephanie, and Davis have established strong relationships with their employees. “We employ 40 full time people across the

board at all three companies,” says Stephanie. “We run sixteen of our own trucks and anywhere between five to seven contract trucks daily. We are producing in the neighbourhood of 275 to 300 loads per week. Our record is 356 loads.”

We were invited to have a look at this first-class logging operation and to meet one particular employee, a man who stands out in many ways. Roland Murphy, who goes by Peter, is a feller buncher operator.

Lives and breathes it

Peter is 81 years old and has worked in the logging industry all his life. “Peter worked for Ben E. Babb Logging in the seventies,” says Stephanie. “At some point after that, around 1983, Peter came to work for our father at Jerry D. Rose Inc. Since then, he has worked with all three of our crews.”

Peter has driven a log truck and operated a chipper, and he is a highly accomplished feller buncher operator. “He is remarkable,” says

Roland (Peter) Murphy doing what he likes to do best.





(L-R) C.W. Jones, Davis Rose, Roland (Peter) Murphy, Stephanie Blythe, and Jerry Rose.

Stephanie. “At times, there is one cutter here and sometimes it should possibly be two, but Peter can do what two men can do, any day, at 81 years old.”

Davis adds, “I would say he has probably cut down more trees than anybody in the world. I mean, he has been doing this since he was fifteen years old. He has been working for high-production logging crews his whole life.”

Last year, Peter was forced to take time off work to recover from surgery. In his absence, the company made do, but Peter was sorely missed. “Everybody was happy the day he came back. Very happy,” says Stephanie. Peter, who is not one to miss even a single day of work, was happy too. “He doesn’t miss any time,” adds Stephanie. “He just lives and breathes it.”

In some ways his wealth of experience is difficult to quantify. For example, he knows how sites should be laid out and where to

build the deck. He has an intuition on how to log a tract. Stephanie recalls occasions when they would move into a new tract and the conditions were quite wet. “Davis and Dad would bring Peter to the

“IF YOU DON’T LOVE IT, YOU’LL NEVER DO A GOOD JOB. I KEEP WORKING BECAUSE I LOVE MY JOB AND I LOVE THE PEOPLE THAT I WORK WITH.”

site, like ‘tell me right now, is this going to work or is it not going to work’ because Peter just knows, immediately.”

Just as often, the benefits that his experience brings to the table are easy to measure. Peter’s steady,

unrushed style, and the efficiency of movement that characterizes his work keeps his production high. An added benefit is that he is easier on the machine.

A day in the life

The crew loads the first chip van at 5:00 am, and the chipper generally runs eleven hours per day. Peter also starts around 5:00 am, and he will cut until he feels he’s got enough wood on the ground, usually around seven hours. Then he parks the machine and goes home.

C.W. Jones is the site supervisor out here. “He and the rest of the crew take the best care of Peter,” says Stephanie. “If he pulls up, it is like a full-service fuel station. I mean, they hop out and fuel his machine. They just really cater to him.” I have a picture in my head of an F1 pitstop crew working in a forest. Peter is the driver. It leaves him to focus on what he does best – running the machine.

“If he pulls up here and it’s got mud on the windshield, these guys know what to look for because they take care of him. They know what he is doing when he is on the way. They are so used to tending to him. They respect him,” says Davis.

It is easily apparent that C.W. highly values the time he spends with Peter, describing the start to a typical early morning. “Normally he will stand around for fifteen minutes, talking,” says C.W. “We will talk about our day, what our plans are. He’ll tell me some cool stories now and then. They did a lot of felling manually with chainsaws. But they were cutting bigger timber. He said that a lot of the tracts that we have cut, he has cut before. When he first cut it, it was virgin timber. He said they left a lot of stuff. A lot of the stuff we are cutting now, they had left that.”

It is remarkable that Peter has cut the same sites two and even three times before, but even more noteworthy is that he remembers the details. “We have a map of the timber harvest area that we give to the operator, and a lot of the time Peter will tell us that he doesn’t need the map because he had cut it before,” says Stephanie.

I get the feeling from C.W. that it is the old stories that he appreciates most. The recounting gives clues and insights into the man. “Growing up in the depression instilled a work ethic in Peter that is difficult to replicate in younger workers. They don’t have that same drive and determination that comes with the struggles of his lifetime. And it shows in his work ethic.”

Technique and experience

Peter can cut. In good clear fell timber, he can cut three-and-a-half loads per hour, putting down 100 loads each week. He always has a very good idea as to how much wood is on the ground at any given time. He knows exactly when to park the machine and go home, calculating that there is enough wood to feed the chipper for the remainder of the day and the start of the following day. Peter doesn’t count bunches and doesn’t have any apparent system to back up his estimating accuracy. He can’t tell me how he knows; he just does.

Peter also ran a Tigercat track feller buncher for ten years. He says the track cutter is easier to operate because there is less travel and he doesn’t get bounced around nearly

Peter always knows how much wood is on the ground. He achieves high production and maintains a well-organized cut block by working at a steady pace.

A yellow Tigercat track feller buncher is shown in a forest, cutting a large tree. The machine is positioned on the left side of the frame, with its arm extended towards the center. A large, thin tree trunk is being cut, and the top of the tree is falling away. The background is a dense forest of tall, thin trees under a clear blue sky. The ground is covered in fallen branches and debris.

**“I DON’T LISTEN TO THE
RADIO. I JUST WANT TO HEAR
THE TREES FALL.”**

– Roland (Peter) Murphy

as much. “They are good machines. A whole lot easier to work in the woods with them too.” However, Peter has refined his operating techniques over many years. “If you cut the stump down, you won’t have to run over it. I cut them as low as I possibly can. It makes it easier on you. It won’t throw you around and bounce you up. If you don’t do it, it will wear you down,” he explains.

“Another thing, you’ve got to cut the wood and put it down so it’s not in the way. Because you can’t drive over top of it. You’ve got to learn how to cut the wood, back up, and throw the wood down where you have already cut.” Peter never looks at the rear camera view when clear felling and rarely turns to look. Instead, he maintains a spatial awareness. “When I back up, I know there isn’t anything left behind me. In thinning, the camera will help you a whole lot, but in clear cutting, I don’t pay it no matter, I don’t even look at the camera. I don’t want to lose any time.”

Peter says that he doesn’t have to move quickly to achieve high production. The important thing is to operate at a steady pace. “You go one speed, and you go all day at that speed. If you stop for fifteen or twenty minutes, look at what you don’t log,” he explains. “Another thing, by going steady and not so fast, you won’t break anything because you have more chance to see what you are doing. If you get going too fast, you can’t see what you are doing.”

C.W. explains it this way. “I could get into a feller buncher right beside him and I could probably keep up with him for about two days and after that, he is going to be pulling

away from me. It’s just amazing.” Peter doesn’t partake in any of the daily distractions that have become so prevalent in modern society. He is not checking his cell phone or scrolling social media. He is focused and completely immersed in the present until he decides he has put enough wood on the ground for the day. “He doesn’t even listen to the radio,” says C.W. “I asked him once if he wanted to turn the radio on. He said, ‘I don’t listen to the radio. I just want to hear the trees fall.’”

Having seen a lot of people come and go in the industry, Peter offers this advice to younger workers. “Someone new will come in and start doing the same work I do, and they get tired and broken down, because they break themselves down.” Peter stresses that pace is key. “If you move yourself at the right pace, it won’t make you tired; you can go all day and you won’t be tired. I learned that years ago. Don’t let the machine beat you, because it will beat you if you let it.” Passion is another critical element for Peter. “You’ve got to want to do it. If you don’t love it, you’ll never do a good job. I keep working because I love my job and I love the people that I work with. I love them.”

A life in the woods

Peter has been working in the woods since he was a teenager. He has seen a lot of change in the industry over those sixty-five years. In his earliest days in the logging industry, horses or mules, and later, rudimentary tractors were used to transport topped and limbed tree-length logs to an infield sawmill. When they packed everything up and left the site, great piles of sawdust remained. He started off

felling with a two-man crosscut saw and witnessed firsthand the technical advances that brought the early two-man power saws, and the advancements that led to lighter weight saws that one man could operate.

When the southern United States began to mechanize the felling function in the eighties, and people climbed into wheel feller bunchers for the first time, Peter was there. He says he has probably run every rubber tire feller buncher brand ever made and acknowledges a steady improvement in comfort and reliability over the years. The current 724G “is the best machine that I have been on. There is nothing better than this.”

He stresses that the performance and reliability of the 5600 bunching saw has been outstanding over the years. “You don’t have any trouble with cracks and breaks and all that. I have been running them about twenty years or more. I have never had a crack in one; never had an arm break or anything.”

Peter climbs up into his machine like a man half his age. He can focus on a physically and mentally challenging task day after day. He is still at the top of his game. For now, Jerry, Davis, and Stephanie will take a page from Peter’s playbook and take each day as it comes. “We know that it’s not going to last forever,” says Stephanie. “He said he will tell us when he is ready. I said don’t you worry, when it is time for you to retire or whatever, I want you to tell us and be honest. He said, ‘I am not ready,’ so I said, OK.” ■

On the 1165



Jon Cooper is VP engineering for CTL products at Tigercat. He explains some of the unique design features of the 1165 harvester and how these features are benefitting harvesting contractors.

The 1165 is a powerful, premium quality harvester targeted for large timber, high production harvesting applications, and tough terrain conditions. The 1165 is operating successfully in a wide variety of applications throughout the world – rocky terrain in Sweden, tough hardwood forests in Michigan, high production eucalyptus harvesting in Uruguay, and steep slopes in Scotland.

We've got a lot of slew torque, more than any competing class harvester. The tilt angles are 18 degrees forward, 24 degrees rearward, and 18 degrees side to

side. We biased the rearward angle to optimize downhill harvesting in winch assist applications. In most wheel harvester winch assisted applications, the connection point is at the rear. The 24-degree bias gives a more comfortable operator position, and more slewing functionality, as the slew system sits flatter compared to other harvesters. The 1165 also has more slew power than the other machines in its size class. This really improves productivity in large wood.

The entire crane and cab assembly is built on a rotating turntable. We made a point to design a rotary

manifold into the machine to provide 360-degree continuous rotation. This feature is unique among harvesters. Other rotating cab machines have hose bundles running from the chassis to the crane. The hoses wear excessively, requiring frequent service. The rotary manifold eliminates this hose wear. Continuous rotation also increases the working range of the machine.

When doing a large number of sorts, being able to swing further to reach specific sort piles reduces the need to move the machine. If the harvester operator is trying to



360-degree continuous cab and crane rotation is unique among harvesters.

increase the density of the piles for the forwarder, swinging further to the rear is a big advantage. When the machine is working over both sides and utilizing the larger slew range, being able to swing over the rear to access other piles or other

trees can be beneficial and increase efficiency of movement.

In select harvesting applications where a narrow cut trail winds through the standing trees, being able to drive in reverse with the

head hanging over the rear of the machine to exit the forest is a major advantage. When steering down a twisting trail, the head can be swung from side to side over the rear of the machine as the machine is steered through the forest. ■

IF THE HARVESTER OPERATOR IS TRYING TO INCREASE THE DENSITY OF THE PILES FOR THE FORWARDER, SWINGING FURTHER TO THE REAR IS A BIG ADVANTAGE.



#TIGERCAT *life*



WOMEN IN TRADES DAY

In April, Tigercat hosted a Women in Trades event at the track machine and loader fabrication and machining facility in Woodstock, Ontario. It was an exciting event where women from the community came out to try their hand at a variety of trades such as painting, welding and assembly. Participants also had the chance to meet and speak with experienced Tigercat team members. Tigercat would like to thank everyone who helped with and attended the event.



VIRTUAL OPERATOR TRAINING



THE TIGERCAT SIMULATOR PROVIDES A VIRTUAL CUT-TO-LENGTH OPERATOR TRAINING SOLUTION WITH AN ULTRA-REALISTIC OPERATING ENVIRONMENT.

THE ADVANCED SYSTEM IS CAPABLE OF SIMULATING THE CONTROLS AND OPERATION OF BOTH THE 1075C FORWARDER AND AN EIGHT-WHEEL DRIVE 1165 HARVESTER EQUIPPED WITH THE 534 HARVESTING HEAD.

Tigercat®

