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OFFICIAL PUBLICATION OF TIGERCAT INDUSTRIES INC.

INSIDE

PRIME TIME SHOVEL LOGGING



Bobby Goodson, Goodson's All-Terrain Logging Company

From the swamps of North Carolina, a star is born.

— Judy Brooks

A timely article written about North Carolina contractor, Goodson's All-Terrain Logging Company, in the July 2008 issue of Southern Loggin' Times put Los Angeles based Pilgrim Films on the trail of Bobby Goodson. The Discovery Channel was angling to produce a reality show to compete with rival, History Channel's *Axe Men* series. When Pilgrim Films first contacted Goodson, he thought it was a prank but was gradually convinced that they were legitimate and serious in their desire to film his operations.

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Bobby has become quite comfortable in front of the camera.

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Bobby, Lori and Justin 'on the set'

“Filming the first show, *Extreme Loggers*, I didn’t know what to expect. I thought one guy would come, talk to us, film the job and that would be it. Instead, four carloads of people pulled up. Ten or twelve people got out with cameras everywhere and set up big bright lights, like you see on a movie set. I thought, what have I got myself into?”

With the completion of the episode for *Extreme Loggers*, Bobby was thrilled to have his logging job professionally filmed. He thought it was great that his grandchildren would be able to see what their grandfather and dad (Bobby’s son, Justin) did for a living. So when Pilgrim Films approached him with the idea of an entire television series focused on his operations, he was amazed.

Two and a half years later, Pilgrim Films and Goodson’s All-Terrain Logging Company continue a successful working relationship. By September 2010,



Justin Goodson stands in front of a Tigercat 240 loader.

Pilgrim will have filmed the next ten episodes in the *Swamp Loggers* series, for a total of twenty-four episodes.

When asked how Bobby’s employees felt about having a camera crew around, Bobby replies that at first everyone was scared that they were going to do something wrong. Time has allowed his crew to relax and appear more natural on camera. “Filming does slow the crew down, but once we are set up on a tract and working, it’s not too bad,” he explains. It takes ten days and about 150–200 hours of raw footage to create one 44-minute episode.

Goodson attributes the success of his company to his crew. “It’s not just the equipment or managing skills, it’s your people. I’ve been logging 24 years and it has taken a large portion of that time to get a group of guys that will work together. I do everything I can to hang onto them. We’re not without troubles – just like a family, we squabble and fight. Once everybody becomes level headed, we sort it out and everything is good again.”

Bobby has a long-standing relationship with Tigercat. In 1996, after another manufacturer failed to address his skidder axle breakage issues, Bobby and his brother Michael were introduced to Tigercat equipment at the Atlanta Expo. They were impressed with the machine quality and hydrostatic drive. With the amount of steel in the logging equipment, they joked that Tigercat manufactured ten-year machines and purchased three Tigercat 630 skidders between them.



At 400 hours Bobby had an axle failure on one of the machines. “Tigercat sent a new tractor from the factory to our woods and said we were to use it until they figured out the cause and made the corrections. We kept the loaner and put about 800 hours on the tractor before the return of our repaired machine. [Tony Iarocci, Tigercat president] told us to keep the loaner until he was comfortable that the problem was solved. Nobody had ever done this for us. Most of the time after the sale, you aren’t thought of anymore but Tigercat has always been good to me. They make the best equipment on the market. I still have two of those tractors. They pull wood everyday. One tractor has 22,000 hours on it. Tigercat is a great company to deal with. I can still call Tony and talk to him.”

With a global audience watching the Discovery Channel’s *Swamp Loggers*, Bobby has gained celebrity status. “I’m still Bobby, I don’t think I act any different,” he says. Bobby doesn’t consider himself a public speaker but he enjoys talking about his logging operation when asked.

“I am working, earning a living, the film crew is doing their job and we are touching the lives of others.” Bobby and his wife Lori have received letters and e-mails from people around the world. Fans write in to share stories of health problems and employment issues and often comment that they are encouraged

watching Bobby cope with the job and everyday problems on the logging site. Many empathize with his struggles and comment that they had no idea how much is involved in the business of logging.

Bobby believes his largest fan demographic is 4–9 years olds and he appreciates their interest and enthusiasm. One special young fan with serious health issues has figured out when Bobby is in the office doing payroll and will call to say hello. Bobby mailed a job application form to a young boy who wrote in a fan letter, “I want to work for Mr. Bobby when I grow up.”

The Goodsons get a number of goodwill requests and help where they can. Bobby and Lori are saving all of the correspondence and have talked about writing a book about how people have touched their lives through this experience.

One of Bobby’s intentions is to show the public that his operations are not destroying the forest. “I tell people I am a fourth generation logger. Why would I want to go out there and destroy something that has fed my family for four generations? We are stewards of the land and we try not to waste anything.”

To illustrate, Bobby describes a hardwood tract near to where he is currently logging. A storm hit the area twelve years ago, toppling many of the trees and his



The crew of Goodson’s All-Terrain Logging Company. “It’s not just the equipment or managing skills, it’s your people. I’ve been logging 24 years and it has taken a large portion of that time to get a group of guys that will work together. I do everything I can to hang onto them.”

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crew was contracted to clean up the blowdown. The hardwood forest has since renewed itself. The rich clay soil has produced new 10 m (30 ft) tall trees in a relatively short time.

“Wood is a renewable resource God gave us to use, not to abuse,” explains Bobby. “Everything we cut down is going to make furniture, paper, greeting cards, even the filler for disposable diapers. Recently it was reported that the reason the market for pulpwood has gone up is because India has started using disposable diapers.”

An episode was filmed around Bobby hand falling a large cypress tree that was left standing when the area was clear-cut in the thirties. It was 180 cm (72 in) across the butt. Bobby says, “That one made me run!”

After the episode aired, Bobby received a letter asking if he had salvaged any sinkers. Premium prices are paid for cypress trees pulled from the bottom of rivers. Bobby explains that in the thirties they would have pulled half the wood down to the riverbank, floating

the logs to the mill. “Today, if I threw logs into the river they would lock me up and throw away the key,” he jokes. “The other half would have been transported by railroad up a sand hill to the truck scale. The steam donkey, steam train and old tracks are still hidden in the woods today.”

Bobby is humbled by his celebrity status. “I see a total stranger and they will say, ‘Hey there is Bobby Goodson’ and I think, am I suppose to know them? Then I realize that I don’t – that they know me from the show. I just smile and wave.” The Goodsons are looking forward to a well-deserved break from the *Swamp Loggers* filming in the fall, but says there are hints that another series of shows may be filmed in the future.

Bobby Goodson is scheduled to appear at the Woodsmen’s Field Days in Boonville, NY and the Mid-South Forestry Equipment Show in Starkville, MS. Please visit the www.tigercat.com for more details. ■



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FOCUS ON ARKANSAS

— Paul Iarocci

A little over a year ago in April 2009, Jonathan Davis completed a deal that would see Davis Tractor and Equipment, LLC become the authorized Tigercat dealer for the state of Arkansas. The company purchased Tidewater Equipment's interests and assets in the state, acquiring full service facilities in Warren and Hope and a territory covering Arkansas and north Louisiana, an important forestry region in the southern United States.

Tigercat had maintained a degree of loyalty and credibility with area loggers when in 2007 former Tigercat dealer Wilson Equipment became insolvent and Tigercat took over day to day operations, servicing the customer base until such time that an arrangement could be made with Tidewater Equipment to take over the territory on a more permanent basis.

Davis is very well known, highly regarded among the contractors and serious about the after sale service aspect of the business. Since Davis Tractor has taken over the territory, Tigercat machine sales in Arkansas have exploded to levels never seen before.



Mark Burt (Franklin Burt Logging) recently purchased an H845C, seen here processing near perfect pine.



A Tigercat H855C on the deck of Mill Creek Logging.

Land ownership has changed in recent years with Plum Creek Timber Co. purchasing timberland throughout the state. Plum Creek, the Seattle-based real estate investment trust and the second-largest private timberland owner in the United States, is now the biggest player in Arkansas with some 360 000 ha (900,000 acres). Georgia-Pacific is a big consumer of timber in Arkansas and northern Louisiana with its large mill complex in Crossett, Arkansas where it produces both pulp and paper and plywood. The operations in Crossett have a 100-year history; past and present the forest industry is very important to Arkansas. In total it is estimated that forestry represents \$3-4 billion annually to the state economy, employing 43,000 people.

Currently a great deal of mature pine is being harvested in Arkansas where 1-3 m³ (1-3 ton) per stem is common. Although impressive to see the acres of mature pine forest, the industry is at the cusp of major change as the annual harvested volume of this mature pine decreases while at the same time more first thinning operations are coming on stream. As these two factors converge, average harvested stem size will decline over the coming years.

Interestingly, as important as pine is to the Arkansas economy, the vast majority of the state's forests are hardwood and mixed pine and hardwood. Monoculture pine plantations only make up about 10% of the total timberland.

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Tigercat track loaders are versatile machines, doing double duty on the deck and infield where they work in a shovel logging capacity, building bunches for the skidders.

Single grip processing

Unique to Arkansas among the southern wood basket states is the extensive use of roadside processors. Davis explains that the processors were initially brought on as a solution to the extremely tight tolerances demanded by the plywood mills. Contractors are getting excellent utilization rates and in turn are being somewhat compensated for their efforts; the mills have long recognized the value of the additional quality and utilization that single grip processors provide.

Of course the high value mature timber makes this system all the more feasible. With an average of five to seven sorts including as couple grades of saw logs, ply logs, hardwood and pine pulp, the single grip harvester is practically indispensable. The question is whether the roadside processing model will continue as contractors switch to a combination of thinning and smaller timber clear felling.

With the majority of the contractors wavering between the slightly undersized 622 and the often oversized 624 Waratah heads, the Tigercat TH575 seems to be great fit for the majority of the stem profiles. Contractor Jackie Lauhon was the first to jump in, purchasing the harvesting head on a Tigercat H250B processor. Lauhon states that the new package is definitely faster than his previous machines, including a 624 equipped Tigercat H845B as well as excavator-based machines. For Lauhon's typical wood profile, the size and capacity of the TH575 is ideal.

Many contractors see the value of a purpose built Tigercat carrier. Tigercat harvesters in the state include a Log Max 7000 equipped H250B owned by Richard Vines, R&B Logging, a 622B Waratah equipped H250B purchased from Tidewater by Dale Rogers Logging Inc, an H845C purchased by Mark Burt, Franklin Burt Logging and an H855C purchased



A 630D skidder just coming off the log mat and approaching the deck. With the typically long skid distances, payload capacity becomes more important.

by John Hunter, owner of Mill Creek Logging. Both the H845C and H855C are 624C equipped.

In addition, there are a number of older H845B harvesters in the state but the productivity and especially the fuel efficiency of the latest generation machines are truly outstanding by all accounts.

Wet weather harvesting

BTB visited Arkansas in March at the tail end of a very cold and wet winter, seeing first hand how area contractors adapt to the wet conditions using a combination of conventional logging and shovel logging techniques.

Although drive-to-tree feller bunchers are the standard with the 720D and 724D being two of the most popular and highest market share models, most of the larger contractors keep a spare track feller buncher for wet winter conditions. The Tigercat 822 series buncher is a popular choice and a sought after used machine.

T245, T250 and T250B track loaders are ever present, moving around to multiple piles on the decks, sorting the processed logs and loading trucks. With full forest duty undercarriages, these highly mobile machines are always ready and capable to be dispatched into the cut block to shovel wood to skidders traveling on a log

mat, necessitated by the soft ground during the winter season.

Other operations might alternatively be equipped with two smaller trailer mounted or truck mounted loaders at roadside with the processor traveling between them, so that one machine can sort logs while the other loads short wood on to the trucks.

The 630D skidder is quite popular and optimally sized for the large logs and longer skid distances but Davis is pushing contractors to try the 635D, which he considers to be a far lower cost machine for the application in spite of the purchase price premium over a four-wheel machine. He recently convinced first mover Jackie Lauhon who took delivery of a 635D in late April.

The skidders must run a dual tire configuration in winter and Davis estimates that the six-wheel drive 635D will further improve flotation in the wet terrain and considerably increase the payload especially important in the often long distance skidding applications. Another advantage of the Tigercat skidders in log mat applications is the ability to turn the seat around and drive comfortably in reverse when returning empty.

Davis has since reported that Dale Rogers plans to take delivery of the second 635D sold in Arkansas in late July. ■



Dealer principal Jonathan Davis standing in front of Arkansas' most famous tree, the giant 275 year old Morris pine.



Jackie Lauhon's H250B/TH575 working through large pine. Lauhon is impressed with the speed and productivity of the package.

NEW FROM INTERNATIONAL PAPER IN BRAZIL

As reported in IP Notícias Florestal, a publication of International Paper

New equipment targeting comfort and health

As you know, IP is always looking for improvement on its procedures and for its people. For this reason the forestry unit worked in conjunction with forestry equipment manufacturers on a project to change the existing mechanized fleet, with the intent to improve the comfort and health of IP employees.

Our professionals on the forestry side and the Canadian manufacturer Tigercat, worked on some ergonomic studies within the skidding process to improve aspects like seat position, maneuverability and operator ergonomics.

Today, every skidding operation at International Paper has incorporated the improvements identified by the study resulting in increased operator satisfaction as well as improved average productivity.



The IP forestry team with the most modern equipment on the market.

Forestry Unit receives latest generation equipment

International Paper gets one more piece of high-tech equipment for its harvesting operation. The Tigercat 860C feller buncher, the most modern and refined machine in its category, is capable of cutting and accumulating up to thirteen trees per swing cycle. IP already has three 860C machines working in its plantations.

Besides generating an increase in production of 15 to 20 percent compared with previous equipment, the machines are easier to operate. In addition the 860C has better service accessibility, simplifying and reducing the time required for inspection and repairs, says Erico Picinatto Junior, Forestry Supervisor.

The latest Tigercat 860C is twin swing equipped and will be working and producing in the region of Brotas. IP is continuously investing to improve production, reduce cost per tonne and improve on the quality of the products and the well being of the employees. Soon, the forestry unit will be buying two more 860C units. One of the machines is an experimental model being developed exclusively for our operation, says Erico. It will be equipped with a Slingshot delimeter-slasher. ■

PICKING YOUR POISON IN ANGOLA

Guerilla factions, killer bugs, fast driving or old Fokkers and why it is better to take doxycycline now, rather than quinine later when you commission a machine in the jungle.

— Gary Olsen, district manager Africa

For the past fourteen years (eleven with Tigercat) I have had the good fortune of traveling to many different countries to market forest harvesting equipment. As one can imagine, forestry regions are not always the most accommodating places. Extreme climates, dodgy airlines, wars and skirmishes, nasty critters and poor hotels with no ice for gin and tonic are all very real possibilities.

Excepting six years spent in Canada, I have lived my entire life in South Africa. Most people would assume that as a South African who has traveled to numerous tropical and sub-tropical countries, I should A) have had many bouts of malaria or B) practice diligence by taking medication, wearing proper clothing and applying insect repellent.



At least the beach isn't crowded...The Luanda waterfront.

I can accurately report that neither assumption is correct. In my 45 years, I have never contracted malaria and have never taken any medication – one might almost believe I was immune to the dreaded virus that kills more than two million people in Africa every year. Latin Equipment (Brasil) and the legendary Antonio Paulo put this theory to the test, setting the wheels in motion for a near death experience that rivals riding as a passenger in Antonio's car or partaking in his infamous Carnival drink from Recife.

I could sense our driver was never at ease. As he rounded a bend and spotted yet another patrol in the distance, he seemed to be quickly calculating whether it was Angolan military or one of the other less savory possibilities.

You see in 2009 Antonio, through a Brazilian contact, managed to sell a Tigercat 620C skidder to Safra Trade LTDA. The machine was destined for Necuto, Cabinda Province, Angola. This distant place is pinched between the Congo to the north and Democratic Republic of Congo (DRC) to the east, separated by the Chilungo River, which turned out to be just a stone's throw from our logging camp.

I don't mean to take away from Antonio's achievement but selling a machine in such a remote place as Necuto is the easy part. The support and service back up is where the going gets tough. South Africa based Tigercat service technician Jeff Cave and I agreed to make the journey to Necuto to perform final assembly, PDI, commissioning training and some technical training.

Containerized, the 620C skidder journeyed for some six months from the Tigercat factory in Ontario, across the ocean, through the Congo and finally into Angola. Once on the job site, our travel arrangements were made. We flew to

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The skidder emerges as we work late into the evening (feeding time).

Angola's capital, the very run down and dirty city of Luanda. After an overnight stay, we were set to fly north to the city of Cabinda.

Each time I board an aircraft, I have a strange habit that has become ritual. I must find the aircraft manufacture date, located on a plate on the inside of the door. The aircraft we boarded for Cabinda, a Fokker F27 Friendship, beat all my previous records with the year of manufacture being 1957.

We survived and arrived in Cabinda, the controversial oil province of Angola that is actually not even physically attached to the rest of the country. For obvious oily reasons it is very much a part of Angola despite a bloodstained history rife with various attempts at independence. And you don't have to travel far back in time to find carnage in Cabinda. Remember the Togo national football team bus that was sprayed with gunfire in January, resulting in three deaths and several injuries?

The next part of our journey involved a 250 km (150 mi) drive to the logging camp in Necuto. It was immediately apparent that our driver must have attended the Antonio Paulo School of Driving as we tore down the narrow roads at 180 km/h (110 mph) and life became a blur. In my broken Portuguese I managed to negotiate a slower speed, allowing us to take in something of the countryside. It did not take long to realize that most people populating the area are Angolan

military. Their purpose is simply to occupy vast areas that might otherwise fall into the hands of guerillas from the DRC or FLEC (the militant organization seeking independence and responsible for sporadic attacks.) The drive became somewhat of a gauntlet; I could sense our driver was never at ease. As he rounded a bend and spotted yet another patrol in the distance, he seemed to be quickly calculating whether it was Angolan military or one of the other, less savory possibilities.

The sparsely equipped logging camp comprised of a few 6 m (20 ft) containers, a fireplace and a fence. No surprise that right next to us was yet another military outpost; soldiers regularly drifted in and out of our camp. Other than a gentleman from Brazil who spoke some English, my broken Portuguese was the best bet for communication. This made for interesting times ahead.

We immediately set to the task at hand – extracting the skidder from the container and mounting of the cab, wheels and blade extensions. This would be followed by final inspection and finally service and maintenance training for the operator and technician. At our disposal were a wheeled loader, an excavator, some basic tools and handful of willing helpers. By the time we retired for the day it was dark and we wondered about our accommodations.



Jeff Cave standing in front of our caravan. It offered little protection against the mosquitoes.



The food was good...

Our hosts led us behind the old Perkins generator to a caravan, handed over some clean linen and left us to make ourselves comfortable. Covering the stale mattresses with fresh bedding, we set about unpacking. The humid, hot conditions dictated that we keep the windows open. This invited a strong diesel aroma into the caravan as well as legions of mosquitoes, unhindered by the broken bug screens and free to attack at will. Our last line of defence, the



...and we had cold beer

insect repellent, did little to perturb the multitudes that feasted on us that night. (For full disclosure I must note at this point that while I had not taken any prophylactic medication for malaria, my friend and colleague Jeff, being a soft New Zealander, had.)

We struggled to fall asleep with the noise and smell of the generator only to be awoken by a deathly silence as the Perkins ran out of diesel at four am. This became routine each morning; the silence was our

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alarm clock. By our second morning, we were covered top to toe in what seemed like bed bug bites. Our mosquito encounters paled in comparison. Luckily these disappeared by day three; we also stopped worrying about the mosquitoes and were filled with a strange sense of calm. Things were looking up. Our job was almost complete, the food while rudimentary was good and we had cold beer.

As always with export machines the batteries were flat. After a jumpstart and lengthy running period, we were good to commence training.

This proved to be a tad tricky in that we had little in the way of translation capacity. Thank goodness for Portuguese 101 at University of

Toronto. This and plenty of hand movements allowed us to transfer knowledge and understanding of how to operate and maintain a skidder. We thought we would get a chance to observe the machine infield but were told that this would not be possible as our safety could not be guaranteed outside the camp. Fair enough.

Machine owner, Jose Viera arrived just prior to our departure and we officially handed over the machine. Aside from being stopped and questioned by a military patrol, the journey back to Cabinda was relatively uneventful.

After a good night's sleep, we were raring to get to the airport early to ensure we had no chance of missing our outbound flight. This plan backfired.

The humid, hot conditions dictated that we keep the windows open. This invited a strong diesel aroma into the caravan as well as legions of mosquitoes, unhindered by the broken bug screens and free to attack at will.

After clearing security we sat in the departure hall for five hours with no place to buy food or drinks. Meanwhile, a steady stream of oil workers arrived by helicopter, immediately ushered into a luxury lounge to quaff back bucketfuls of cold beer and heaping plates of food before boarding new Dash Q400s for private charters to Luanda. Envious you ask, never!

We returned on a 1971 BN-2A Norman Islander, definitely a step up in air traffic safety. After an hour in holding pattern we landed at the domestic

terminal, entered the chaotic public streets of Luanda and reached the international terminal. The international departure hall (a massive tent) was jam packed with the very same oilrig workers we had seen earlier. They had a

distinct head start at the bar and it showed as we sat and waited to go home.

As per my routine when visiting a malarial region, seven days after my return I visited the clinic for blood tests – which thankfully came up negative.

Then along came October 24, the birthday of my wife, Debbie. I had planned a weekend getaway – a rail journey. While sipping champagne during the 28-hour train ride I began to feel the early symptoms. I managed to mask my condition for a brief period but my swinging states of extreme fever and icy cold soon got Debbie asking questions. I spent the remainder of our special train trip sleeping and vomiting while Debbie read a book.



Mounting the tires.



Finishing touches.



Gary and Jeff pose with Angolan military.

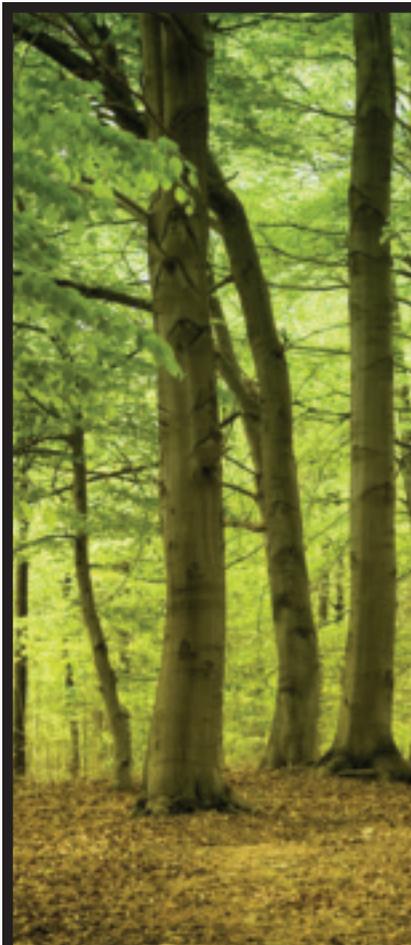


Off to work after a successful startup.

Upon disembarking, it was straight to the hospital. Within 45 minutes I was in intensive care with a quinine drip, the standard treatment. The unsettling side effect of quinine is that it renders the patient 80% deaf but I was not really trying to listen to anyone anyway. The next five days I hardly remember save for regular visits with my drip in tow to the porcelain bowl.

My hospital stay lasted just over two weeks. The doctors did manage to save my arm from septicemia caused by the drip seeping into my muscle tissue. When I was discharged I had lost 11 kg (25 lb) in all the wrong places but was otherwise intact.

Jeff Cave may have proved that the pills do work – he has not had any problems. ■



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FORESTRY AND THE FIRST WORLD WAR

— Andrew Iarocci

Modern warfare demands massive input of material resources to feed and equip military forces. It is not difficult to imagine the huge requirements in textiles, steel and agricultural produce necessary to sustain the gigantic armies of the First and Second World Wars. The armies of the First World War consumed millions of rounds of small arms and artillery ammunition in the siege battles (trench warfare) fought on the Western Front in northern France and Belgium between early 1915 and early 1918. Trench warfare, however, was also heavily dependent on forestry. Wood products were essential to the construction of front line fortifications on the surface of the battlefield, including trenches, breastworks and redoubts. Timber was also crucially important metres below the ground, where engineers used large quantities to prop up dugouts, subway tunnels and mining galleries all across the 725 km (450 mi) front

line stretching from the English Channel in the north to the Swiss border in the south.¹

The applications of wood products were not limited to fortifications and field works. Logs and timbers were also necessary to maintain the fragile road and rail network that supplied ammunition, food and other vital materials to the front line areas. Most of the key battles on the Western Front occurred in rural parts of France and Belgium with very poor road infrastructure. It was extremely challenging to keep road surfaces in good repair under endless convoys of the three-ton lorries (motor trucks) and heavily laden horse-drawn supply wagons moving back and forth between rear supply dumps and the front lines. Military engineers relied on timber to create floating corduroy surfaces on top of unpaved roads and to shore up the metal surface of paved roads. Wood was an effective material for tactical road building because it was highly durable during wet weather and changes in season. In areas where the ground was especially soft due to high precipitation and a shallow water table, artillery guns and howitzers were emplaced on top of log platforms to save them from sinking into the mud under the powerful forces of recoil when the guns were fired for hours and days on end. Most of the sleepers used to build broad and narrow gauge railways were made of wood, as were some of the rails themselves.

Imperial War
Museum, Q.5092

British soldiers carry timbers along a communications trench. These heavy beams will likely serve as overhead reinforcement for a dugout or observation post. Note also the wooden duckboards on the trench floor and the poles used to keep the expanded steel mesh revetting in place on the trench walls. Given that thousands upon thousands of yards of trenches across the Western Front were built in a similar fashion to this one, it is easy to understand why demand for wood products was so high among military forces.



Wood products served countless other military purposes, including saw boards for building temporary housing for troops in the rear areas, carriage and wagon construction and duckboards and sidewalks that helped to keep the feet of soldiers and horses out of the muck and mire.

Where did all of this wood come from? Some was imported from the British Isles or overseas, but due to scarcity of shipping and cost of transport of such bulky material over long distances, it was necessary to harvest much of the wood in the forested regions of France. Canadian soldiers who had been employed as lumberman before the war played a central role in British military forestry operations. As of late 1916, about halfway into the war, the size of the Canadian Forestry Corps (CFC) in France was still relatively limited, but by the end of hostilities, the CFC comprised some 56 companies, including 13 companies of German prisoners-of-war; in late 1918 this translated into a total CFC strength just shy of 20,000 men. To appreciate the significance of this number, it is instructive to consider that each of Canada's four combat divisions on the Western Front was about 20,000-strong. So it is fair to say that Canada's forestry contribution in France was equal to about one-quarter of its combat functions during the final stages of the war.

Canadian loggers transferred many of the techniques



Imperial War Museum, Q. 8511

British troops hitch a ride on a wagon near Ypres, Belgium, in 1918. The wagon is travelling along a typical double-width plank road. The shallow water table in Belgium made it difficult to maintain road surfaces under heavy military traffic in the forward areas. Plank and corduroy roads offered good weather-resistant solutions to this problem.

they had used at home to the new challenges they confronted in France. However, not all Canadian methods worked very well overseas. Before the First World War, logs harvested in Canadian forests were transported primarily by water. In France, however, there was limited capacity to ship logs on inland waterways. Consequently, the CFC designed and built a sophisticated series of broad and narrow gauge railways to move wood products from the felling site to military sawmills to the front line areas where engineers could never get enough timber to fill their requirements.

While some of the CFC units in France operated as far afield as the Franco-Spanish or Franco-Swiss borders - hundreds of miles away from the combat zone - others worked within earshot of the guns. This forward harvesting and milling was especially dangerous work, as the lumbermen were directly exposed to enemy fire and it was often necessary to knock down portable

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Imperial War Museum, Q.2349

Troops from the Canadian Forestry Corps lay what appears to be a metre-gauge light railway track through the Conchy Forest in France. The line will probably be used to transport logs to the mill site. The log trucks would be pulled either by mules, steam locomotives, or petrol-electric tractors, depending upon availability. It is likely that these Canadians were already veteran lumbermen before the war.

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saw mills once they had been spotted by the enemy and move them to new sites. Despite these dangers, it was imperative for some CFC units to operate close to the battlefield if the supply of wood products to military engineers was to be constant and reliable.

This preliminary article, which has outlined the general applications of forest products on the Western Front and the scope of Canadian Forestry Corps in France will be continued in an upcoming issue of *Between the Branches*, where we will consider specific techniques and operations of the CFC. ■

Andrew Iarocci (PhD, Wilfrid Laurier University) is a history professor and author. He recently completed a two-year research fellowship at the Canadian War Museum, Ottawa, where he also managed the Transportation & Artillery collection and restoration workshop for one year. His latest book is Shoestring Soldiers: The 1st Canadian Division at War (University of Toronto Press, 2008). He is currently writing a new book on mechanization and logistics during the First World War.

¹ Mine warfare involved digging extensive tunnels and galleries up to 10 m (32 ft) under ground and beneath enemy positions. The galleries were then filled with explosives, which were detonated at opportune moments, obliterating enemy trenches and everyone in them.

NEW 480 MULCHER HELPS DRIVE TEXAS-SIZED ROW SUCCESS

Company finds niche, becomes go-to source in oil/gas clearing projects.

— Larry Trojak

While ClearTrac's company tagline: "*Right of Way... Rightaway!*" does a great job of describing its area of expertise, it doesn't even touch on the most impressive part of its story. The Iola, Texas-based company has gone from a startup company a mere two years ago, to one of eastern Texas/western Louisiana's most in-demand land clearing specialists for oil/gas pipeline work. The company credits a combination of hard

work and innovative equipment – including a trio of Tigercat's new 480 mulchers – with a level of success most can only dream of.

Roots in clearing

As is often the case, ClearTrac's beginnings are far from traditional. In this case, what is today a 50+ employee firm, sought after by almost all of the major area oil and gas utility pipeline companies, was an outgrowth of company owner Kent Moore's personal ranch-clearing efforts.

"Our first ranch was a 3,200 acre [1 300 ha] spread that had never been cleared for cultivation," says Moore. "In this part of the state, that means the acreage is generally covered with a thick, pesky vegetation called yaupon. We wanted to remove that undergrowth and open up the ranch for raising cattle and deer, as well as to create a better habitat for other animals. So we purchased our first piece of machinery to begin clearing and immediately learned a lesson about equipment built for a specific function."



One of ClearTrac's three Tigercat 480 mulchers.



The 480 mulchers work in conjunction with other equipment, including Tigercat 620C skidders and both 724E and 860C feller bunchers.

Moore says that first machine was a modified farm tractor which was little more than an attempt by a tractor dealer to provide something to do this type of job. “It worked – sort of –but was mostly aggravating and broke down regularly. After fighting that a while, we tried another unit, this time a piece of forestry equipment – essentially a feller buncher with a mulching head on it. It was better, but still not what we needed.”

By this time, Moore had purchased a second 4,000 acre (1 600 ha) ranch that had, in addition to the yaupon, piles of stumps, treetops and logs from a previous clear-cutting effort. He says they started acquiring bigger equipment such as a track-mounted 500 hp (372 kW) mulcher and began to see land clearing as a viable business. ClearTrac was born.

“We eventually caught the attention of regional oil and gas companies who contracted with us to do clearing for seismic work, pipelines, and so on. Our first real job was an eight square-mile seismic job in Arkansas and we haven’t looked back since.”

“Unlike some of the other machines we’ve had, the 480 was designed to be a mulcher – and it shows.”
— Kent Moore

The search is over

Despite their success and exponential growth over the last two years, ClearTrac has continued to look for ways to improve both performance rates and efficiencies in their land clearing operation. According to James Dixon, the company’s operations manager, the introduction of a new product from Tigercat, the 480 mulcher, caught their attention.

“We’d heard through Jay Kenneson, the sales representative for Tejas Equipment, that Tigercat had been prototyping a new mulcher. Based on our satisfaction with other Tigercat equipment we already had, we wanted to see what it was all about,” he says.

“Turns out the prototype unit was snatched up quickly but we took the second production model and backed that up with the purchase of two others.”

Dixon says the 480s – working in conjunction with other equipment, including Tigercat 620C skidders and both 724E and 860C feller bunchers – have redefined the way they do business. “Without the equipment we have today, we couldn’t be doing what we do; that’s a fact. In the

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A mobile chipper follows the traditional logging equipment, chipping trees that have been felled and bunched.

past, we'd be lucky to get 400-500 feet [120-150 m] of right of way done per day. On the project in which we are currently involved, a 100-foot [30 m] wide, 48-mile [77 km] long ROW for gas pipeline in east-central Texas, we are getting ten times that – about a mile [1,6 km] per day.”

A perfect fit

In a business like ClearTrac's, clearing rarely involves a flat parcel of land in a remote location. There are almost always challenges presented by uneven terrain, power lines, existing structures and so forth. In such cases, says Dixon, the value of the Tigercat equipment comes to bear.

“The 724s and 860s allow us to clear quickly and safely in almost any situation,” he says. “Some of the areas we work offer multiple challenges and we can now meet those, shearing the trees, chipping them and if they are too large for the chipper, split apart and then chipped. The 480 mulchers have proven to be a perfect fit to come in afterwards. They are excellent – even in wet, rough or rolling terrain – and have been ideal at tackling everything from trees that are too large for the chipper, to cleaning up in areas that have already been logged. Loggers sometimes leave an area looking like a bomb went off in it, and at 500 hp [372 kW], the 480 has the power to eat any stumps or tops left behind and get the area ready for an inspector's approval. We've had other mulchers in our fleet – and still do – but the 480s have really been outstanding performers for us.”

Purpose-built satisfaction

While Kent Moore's level of satisfaction with the 480 mulcher is also predicated upon its performance, he says the fact that it was built to be a mulcher – rather than modified to be one – sold him immediately.

“Unlike some of the other machines we've had, the 480 was designed to be a mulcher and it shows. It has more than enough hydraulic flow to power the head and a cooling capacity up to the task of operating in trees and heavy brush. This is an extremely dusty environment so the fans, air cleaners and filters are designed to handle that as well. And it's obvious that they've provided oil and water cooling systems that will stand up, even in our hot Texas summers.”

Moore adds that he was initially skeptical about any equipment built in a northern climate but since dealing with Tigercat he has changed his mind. “I've run machines in which you just had to quit and get out of it; the air conditioning unit simply couldn't keep the cab at a tolerable temperature. You need to have a heck of a unit when it's 100 degrees [38°C] with 90% humidity and a machine that's running at 220° [104°C]. It's obvious that they put a great deal of thought into every aspect of the design and it shows. All of our Tigercat units are literally built to take the heat.”

Great support team

As any land clearing or forestry professional will tell you, a company's equipment is only as good as the support behind it and in that regard says Moore, they could not be more satisfied.

“We have gotten excellent support from everyone at Tigercat as well as from the team at Tejas Equipment,”



“The 480 has the power to eat any stumps or tops left behind,” says James Dixon, ClearTrac's operations manager.



Cleared, clean and ready for inspection.

he says. “They have been committed to us from the start. He follows up when we have questions and has done a great job of making sure we have what we need, when we need it. I appreciate that because, in all honesty, I haven’t had that same experience with some of our other suppliers.”

As to what the future holds for ClearTrac, Moore says he sees their growth tapering off a bit, both because such a continued increase would be difficult to sustain and because of what they’ve done to this point.

“When we were in our main building phase, we actually ‘overbought,’ if you will, in anticipation of where we were headed. Now, we can sort of grow into that and move forward. We have really made a name for ourselves with the oil and gas companies and I suspect that will always be our primary focus, given our location and all. However, because the work we are doing is giving us a decent volume of trees that are very marketable, we are also starting to look at the overall logging process as part of our offering. So we may add some other Tigercat equipment – perhaps a loader or processor – to take more of the good part of the tree and send it to the mill. Then we will use the 480 mulchers to do the cleanup and grind the stumps. In the course of a 40 mile [64 km] project down here, some of the wetlands we clear through hold virgin trees which, until now, had been impossible to go in and get. There are some remarkable trees in those areas; we might as well be the ones to get them.”

Larry Trojak is a freelance writer based in Ham Lake, Minnesota.

letterslettersletters

I would like to extend my gratitude to the people at Tigercat for truly providing product support. “Product Support” has become a catch phrase in business that merely means that we will be there when something fails and then we will charge you to correct the fault.

Tigercat product support is actual support for the product that is manufactured. Reputation is a priority in your business as it is in ours.

Recently we experienced the failure of a swing drive during the heart of our logging season. The parts were in Italy and Chuck Miles [Redhead] and in particular, James Farquhar [Tigercat] went above and beyond any expectations that we may have had for the delivery of the parts. When the parts were off the boat, and on the plane, James had already determined that they should be sent to Edmonton where he would pick them up and deliver them to us rather than them landing in Winnipeg and being sent by land to Saskatoon where we would have had to pick them up.

When you consider that this machine is very low houred, the failure was not anticipated, but Tigercat identified the weakness and was preparing to service

the machines they manufactured by being proactive and having the parts in stock.

We were unlucky in that ours failed before the parts arrived, but due to the commitment of Tigercat, we were up and running within six days.

This means the world to us as we struggle through the devastation of the forest industry. We as business people are now wondering whether we are stubborn or stupid, but the one thing that we are sure of is that we are committed. It is incredible to know that Tigercat is also committed to providing their customers with a sense of security by providing products to service the equipment that they manufacture.

My recommendations to others have been nothing but positive since we purchased this machine and when we get through this awful economic correction, we will be looking to Tigercat to meet our equipment needs.

Thank you from the bottom of our hearts.

— Rick and Cheryl Watt and staff
Cherick Ventures Ltd. Hudson Bay, Saskatchewan

EXPO RICHMOND 2010

A celebrity visits the Tigercat stand.

Tigercat management, engineers and district managers were on hand as Expo Richmond 2010 opened on Friday, May 21st.

Along with staff from the factory, numerous Tigercat dealer personnel attended, visiting with current and future customers. Representing dealers included A.G.

Lassiter Equipment, Bullock Brothers Equipment, C J Logging Equipment, Davis Tractor and Equipment, Ricer Equipment and Tidewater Equipment.

Washed and polished, the following machines were on display: 234 log loader, 620D and

Everybody wants to see Bobby. Expo Richmond visitors line up in the Tigercat stand for autographs.



630D skidders, 718E and 724E feller bunchers, 480 mulcher and the new S610C sprayer.

Around 2:00 p.m., Saturday afternoon, television celebrity and longtime Tigercat customer Bobby Goodson who stars in the reality show *Swamp Loggers* arrived in the Tigercat show booth, explaining that it took him over 45 minutes to walk in from the parking lot as so many people recognized him and stopped to say hello.

Armed with Sharpie pens, Bobby greeted excited fans of all ages. One of the first autographs was signed on a Tigercat 620C die cast skidder model that two young brothers had purchased to share. It was impressive how Bobby took his time with each fan, acknowledging their compliments and answering questions.

— reported by Judy Brooks



Bobby Goodson engaged in serious conversation in the Tigercat hut.

S610C SPRAYER

Tigercat has added a new machine to the off road industrial product line with the completion and sale of two S610C sprayers. The S610C is easily equipped with a fertilizer hopper/broadcaster or herbicide tank and sprayers for fertilizer and herbicide applications in young plantations.

Based on the 610C platform, the purpose built machine has a number of special design elements. A load sensing hydraulic system reduces fuel consumption. An automatic variable speed/reverse pitch fan and additional air intake screens prevent debris build-up, a significant issue when operating in juvenile plantations.

product news

The overall width is significantly reduced to allow passage through the tightly spaced rows of heavily limbed trees.

Donald Robbins, who was instrumental in the development of this model has taken delivery of both units. He has contracts in Georgia and Florida to improve timber stand health and control understorey in pine plantations.. ■



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