

Two experienced foresters and partners in a contract timber harvesting company have for a while considered undertaking thinnings as a profitable business opportunity but they felt it prudent to wait to find the correct tools for the job.

This they have now found after turning to Bell Equipment.

"We had operated as two independent timber harvesting contractors but in 2005 we joined forces and started working together as GDH Harvesting," says Dean du Plessis, the business partner of Geoff Good. "We established our head office in Sabie and have a satellite office in Ugie in the Eastern Cape."

GDH Harvesting specialises in the clear felling and extraction of pine with their largest operations around the Sabie and Ugie areas. The partners felt that with thinnings being a low volume and highrisk operation, they would prefer to run a semimechanised operation. "Lower volumes also mean less money; however, we're applying our same operational principles to thinnings as we do in clear fell operations to make working in thinnings financially viable."

Considered an important part of the bigger silviculture picture, thinnings is conducted in saw log plantation regimes by reducing the number of stems per hectare to stimulate the correct growth of the remaining standing trees thereby allowing them to increase in diameter with less taper. This allows the tree to grow in a cylindrical form for maximum timber recovery when processed in the sawmill.

"Our preferred approach to a thinnings operation is to take an optimum load and achieve fast cycle times but it's not as easy as it may seem," Dean explains. "You cannot get into a young pine compartment using a harvester that is too wide and when we researched the OEM market for a suitable harvester for thinnings, we came across the Matriarch FASTfell, which judging by its physical dimensions and width of only three metres, would be ideal for us."

The FASTfell is a hydrostatically driven machine with a low centre of gravity, a rubber mounted airconditioned operator cab with excellent all-round visibility and protection whilst in the operator workstation.

Both Dean and Geoff liked the look of the business end of the FASTfell, namely the free hanging felling head, a Matriarch MT50FH with its Indexator GV1245 rotator and Hultdins Supercut saw unit with a cutting capacity of 520mm.

To ensure they achieved the volumes to make a thinnings operation financially viable, the GDH Harvesting partners needed to extract the timber the Matriarch FASTfell cut and bunched and placed on the compartment floor. To ensure the viability, efficiency was a key factor and here they saw the Matriarch Skogger, which has the same width of three metres as the FASTfell. This meant



GDH Production Supervisor, Themba Jele, with GDH Harvesting Partner, Dean du Plessis, and Bell Equipment Sales Representative. Daniel van Huyssteen.



that these two machines could ideally work in tandem as a well balanced harvesting and extraction system.

The Matriarch Skogger was developed with versatility in mind and to be a flexible and cost-effective timber handler in extraction, felling and stacking operations. The machine's simple hydrostatic-mechanical drivetrain is efficient with good ground clearance and a low centre of gravity, which makes it extremely stable. As an articulated four-wheel drive machine the Skogger can climb and handle difficult terrain. The ROPS/FOPS rubber-mounted air-conditioned cab is built

with ergonomics in mind and ensures operator comfort and excellent visibility with a 180-degree swivelling seat. The swivelling seat allows the operator to extract on the same route without having to turn the machine around; he/she simply swivels the seat and reverses the machine whilst still facing forward.

"Since the two Matriarch machines were delivered to us in October 2019, we've been running them in a single daily shift and we're constantly achieving mechanical availabilities in the high 90%," Dean says. "The whole mechanical operation is so much more productive than manual felling and

extraction with tractors and we're comfortably maintaining a production rate in this pine compartment of 150 cubic metres of timber a day."

"Given the stability of both machines we feel there's potential for them to be used in full tree-length harvesting systems especially with the production of biomass material where you can leave the branches intact on roadside," Dean adds. "An additional machine we may consider in this operation is a small excavator with a harvesting head to process the tree lengths into the required products."

Dean is adamant that their gamble on adding thinnings as an extra service offering has paid off as there is enough work in the pipeline to justify their investment in the Matriarch FASTfell and Skogger.

GDH Harvesting runs an impressive fleet of Bell manufactured and licensed equipment. They have 10 Bell 225A Loggers, two John Deere 540 Cable Skidders and a John Deere 648L Grapple Skidder. Two Kobelco Excavator carriers have made their mark as well. One, a SK300LC-10 model is kitted out as a shovel-yarder and arrived in January 2020 and a two year old SK260LC-8 has been fitted with a third party harvesting head.

26 | BULLETIN Volume 2 2020

BULLETIN Volume 1 2021 | 27