

JCB Skid Steer shovels chicken litter for Jeras Boerdery

It's a well-known fact in agricultural circles, where input costs are concerned, the price of chemical fertiliser has increased dramatically over the last year or two but a progressive-thinking farmer in the North West Province's Derby district, has a workable plan to counter this.

Johan Erasmus has been a farmer all his life and started farming on his land near Derby in 1997. Derby lies roughly in the centre of a triangle formed by Rustenburg in the north, Ventersdorp to the west, and Krugersdorp to the southeast.

The Erasmus farm is aptly called Jeras Boerdery, derived from Johan's name and surname, and Johan is known as a leading Boran cattle breeder. The Boran breed looks a bit like the humped Brahman cattle and hails from East Africa, making it a true African breed. In addition to this, Johan grows maize and soya and this is where the organic fertiliser conundrum comes into play.

"In 2021, chemical fertiliser (NPK 30/22/30) cost around R5 400,00 per hectare and organic fertiliser (NPK 80/80/60) cost R1 400,00 per hectare," Johan says. "Because of the difference in both the nutrition obtained from these two methods of fertilising, and the cost per hectare, this is a no-brainer."

According to Johan, the difference in pricing in the 2022/23 season was even higher than in the previous season.

About 75km to the east of Johan's farm lies the agricultural hub of Skeerpoort, in a fertile valley flanked by the Magaliesberg. Here we find what is said to be the largest production unit of free-

range eggs in the entire world. The company concerned had removed the previous high-rise pens to allow the poultry to roam free within demarcated areas, with more than adequate shelter shielding them at night and in rain, cold, and extreme heat.

The free-ranging chickens typically spend 16 weeks being reared and then enter a monitored period of 60 to 70 weeks laying eggs. Small chickens lay small eggs and more mature ones, larger eggs, and these are sent to various markets. All eggs are coded, and by being familiar with the code a customer or consumer can tell exactly where and when the egg originated from.



Johan Erasmus, owner of Jeras Boerdery (left), with Bell Sales Representative, Jan Barnard.



As Johan explains it, the manure needs to be removed as soon as the laying cycle of 70 weeks has been completed. Time is of the essence as the pens need to be sterilised to prepare them for the next laying cycle. Removing the manure directly from the pens aids in the prevention of avian flu. As the columns supporting the former high-rise pens in the chicken houses have been left in place, a special loading tool was needed to work in extremely confined spaces.

"We were fortunate enough to have an existing contract at this poultry farm to remove the wet chicken manure from the chicken houses after each cycle," Johan says. "With the confined working space, we needed a specialised loading tool to do this quickly and efficiently and we were delighted to find that at Bell Equipment's impressive exhibition at the 2022 NAMPO Harvest Day near Bothaville."

What Johan found was a JCB 135HD Skid Steer with its compact design and enough grunt from its 34kW motor that pushes out 143Nm. "Having researched the wider market thoroughly and

realising the benefits of JCB products, now being distributed and backed throughout South Africa by a stalwart local company such as Bell Equipment, I had no hesitation in buying the JCB 135HD Skid Steer right there and then at NAMPO and the special show price was, of course, a welcome incentive too."

As the chicken manure is not very dense, especially when dry, Johan had the standard 1 524mm wide bucket swapped out for a larger one from a third-party supplier. This can hold at least one cubic metre and has a deflector plate at the top to stop the wet manure from landing on or near the JCB 135HD Skid Steer's radiator. A reversible half-arrow cutting edge on the bottom of the bucket assists in getting full bucket loads.

"The JCB 135HD Skid Steer is used for around six hours a day in daylight hours only," Johan adds. "Some manual sweeping of the manure also takes place around the support columns, and this is also hauled away by the JCB Skid Steer."

Once the manure has dried, it is loaded on trucks and conveyed to

Johan's farm, Jeras Boerdery, where it is blended with lime and then applied as fertiliser with four-cubic metres used per hectare.

"This is our way of circumventing the high chemical fertiliser price and with the 6 000 cubic metres of dried manure we haul to the farm each season, including the cost of transporting it, it comes in at a cost of only R1 400,00 per hectare, which to my mind makes good economic sense."

Johan mentions that the purchasing experience with Bell Equipment has been a pleasant one and he welcomes the fact that the Bell Sales Representative for his area, Jan Barnard, makes a courtesy call each month. The JCB 135HD Skid Steer is serviced by Bell Rustenburg while under warranty.

"The true value of the JCB 135HD Skid Steer lies in the fact that with its capital and running costs being low, we can absorb those into the general farming operations, while the existence of the machine itself delivers an almost passive income," he says.