

# BLACK GOLD COMPOST HITS PAY DIRT

WITH BLACK KOW® & KAWASAKI



## SECOND-GENERATION USING FIVE GENERATIONS OF KAWASAKI LOADERS

*“New machines are like puppies. Everybody loves a new machine. It’s clean and pristine when it first comes out. But when it gets to be an old dog, does anybody still love it?” — Steve Tuton, GS Equipment, Tampa, Florida*

That’s the question that haunts heavy-equipment users whenever they face the purchase of a new piece of machinery. With the roll-out of Tier 4 models, skittishness has been even more palpable, raising additional

questions about initial engine maintenance and performance.

Black Gold Compost Company, Inc., Oxford, Florida, was no different, even though they’ve been using Kawasaki wheel loaders for years, with most of them working in harsh conditions such as horse and dairy farms mucking out bedding and stalls. Although they had complete confidence in the brand, when they realized it was time to take the Tier 4 plunge, they wanted to know what they were getting into with the new Z7.

“I’m not comfortable with what I don’t know, because when something new comes out you just don’t know what to expect in the first year,” says Jody Futch, Operations Manager.

“I had to study up on the advantages of regeneration over urea — Steve Tuton helped with that. And I knew the Z7 was very different from anything Kawasaki had introduced before. We do our own maintenance, and I knew the 80Z7 would be a whole different ball game. But the change to Tier 4 wasn’t as bad as everyone made it out to be. The scariest thing was the first time the regeneration process kicked in. It didn’t cause any problems, but everybody was a bit freaked there for a minute. But we understand what’s going on and we’re good with it.

“One of the improvements we noticed was the fuel consumption in comparison to our

80ZV-2. We had been burning about 65 gallons a day because our machines are on the go constantly, but with the 80Z7, we're only using 50 a day. **That's a savings of about \$11,000 a year. That's significant.**

## BACK TO NATURE

Since the Z7, Black Gold Compost has also noticed an increase in production due to the faster cycle times, and it's a welcome addition. With consumer fears on the rise about toxic chemicals in foods, interest in organic home gardening is growing. As a result, business is very good and getting better — especially between the months of March and May. The company manufactures several popular lines of all-natural composts and soils in addition to its signature line of composted cow manure, Black Kow. Their 100-acre Florida location combined with D C Organics, a sister operation in Texas, ships to home-improvement centers in 12 states across the southeast and southern plains.

The process of making compost has changed since the mid 1980s when companies first started creating composting materials on a large scale. Now there is a greater reliance on the aerobic process — letting nature break things down naturally, while keeping moisture levels and heat conditions as ideal as possible.

It all starts, of course, with the raw material. Black Gold Compost works with both horse and dairy farms. Just three of the ten loaders are used at the Oxford facility; the rest are out at peat bogs and farms. The loaders scrape up horse muck, then it is hauled to dairies in Florida for use as cow bedding



**"We've found that seeing, feeling, and hand testing the material is key to a good quality compost. Crumpling a ball of material by hand works better than relying solely on a moisture meter. It is both art and science." – Jody Futch, Operations Manager.**

where saw dust or wood shavings are often added. After a time, the dairies scrape up the used bedding/cow manure mixture and haul it directly to Black Gold Compost's facility. The company also accepts the spent growing medium from mushroom farms.

Once a truck unloads raw material, one of the loaders will bucket-count the delivery to confirm the amount, which is then entered into a log book. If there's too much trash in the delivery, it's given back to the truck driver and they're docked on the delivery amount. Next a loader will push up the shavings into organized piles, and when it's time, scrape it up, ferry it out to one of the composting yards, and build the compost rows.

One would think that with all that manure on site, flies would be a real problem. But in fact, the site is quite clean, having no more

flies or mosquitoes than any typical place in Florida — maybe even less. "We buy special little wasps we place throughout the area," explains Jody. "They are wingless and eat the fly larvae. We also use mosquito dunk rings in our retention ponds to keep that problem down. We do everything we can to keep our facility clean and maintained to ensure a solid relationship with the community.

"When we lay out a row, it's typically 315 cubic yards. By the time it composts, breaks down, and compacts, it's about 250. We have special recipes and build the rows in layers. The dryer stuff will be on the bottom, fresh cow manure in the middle, and the wetter stuff will be on top. Our loaders do a lot of running back and forth at full speed, stopping just long enough to gather or dump material. We place the composting area as far away from our neighbors as we can, and sometimes we must put a special cap of shavings or peat to contain the odor, especially if we're dealing with the spent mushroom material. But as you can see, we run our loaders hard, averaging 50 hours a week. That's about 2,000–2,500 hours a year on each of our three here on property. Two work with the compost materials, the third loads hoppers at the processing plant."

## "THE MATURE MANURE"

Although heat, moisture, and microbes turn the odiferous raw material into compost, they need ideal conditions to do the job properly. That's where the windrow turner and careful monitoring of row conditions come into play. It takes a turner about 20 minutes to work a row, taking the center of the pile and flipping



Compost rows are placed on a 4-inch clay base with 9 inches of lime rock on top that is then packed down to about 6 inches. The windrow turner typically takes 20 minutes to do a row, longer if water needs to be added.



Typically 6,500 pallets of the company's famous Black Kow® are stored on site, but the addition of a new section will increase capacity to 10,000.



Like the 70ZIV and most of the other Kawasaki loaders owned by Black Gold Compost, this 80ZV is open ROPS. The 80 loads a hopper that feeds the bagging line.

it inside out. If water is needed, it's added at the same time. Typically a fresh row will be turned twice the first day, mixing up the recipe and killing even more of the smell. Then it will be turned once a day for a week, then 4 times a week, then less and less as the row continues to heat and materials break down. The raw-material supervisor does daily checks — monitoring of internal row temperature and moisture content is critical to maintain an even heating process and avoid the hazard of internal combustion.

"After six or seven weeks, we'll transfer these rows to another area in smaller piles for curing, typically another 4 weeks," says Jody. "There they are turned once a week with a loader. Then our loaders ferry the material over to the processing plant for final mixing and bagging."

"The Mature Manure' slogan line dates back to before we owned the company," explains Michael Lange, Owner. "My dad and his partner, Dorman Mizell, bought the company in 1985 from the founder who had moved from Ohio to Tampa in 1969 and saw the need for bagged cow manure. Everyone in the family — mother, brother, and four sisters — has worked here one time or another. Right now three of my sisters are working here, as is my brother-in-law Jody. It's nice having family in the operation. Plus, many of our workers have been here for years. We don't have a high turnover.

"When I started here the loaders turned the compost; did everything really. We didn't even have pallets to load the product on; we would hand-stack the bags on the trucks. This is our third location. We moved to this



**This 70ZIV with open ROPS has 14,000 hours on it. The bucket has been plated because of the corrosive nature of the materials with which it works.**

facility six years ago so our bagging and composting facilities could be in one place. Although Black Kow is our flagship product, we have several others and are currently developing more."

## TIME-TESTED QUALITY

Black Gold Compost started buying Kawasaki loaders in 1988, when the brand was still new to the North American market. For that first one they did a demo and compared it to others on the market, then made the purchase based on numbers and cost. Ever since then they've been buying a loader about every two years from GS Equipment, their local Kawasaki dealer. Currently they run 10 of them, spanning five generations of loaders ranging from a 70ZIII to their new 80Z7. Three of the Kawasaki loaders have hours exceeding 10,000, and five exceeding 15,000 — with one over 20,000 hours.

"When I came on board in 2009, I had zero experience with equipment," recalls Jody. "I had to learn about them really quick. The

company has always kept good maintenance records on paper but I got everything transferred over to computer. I learned that with Kawasaki, the repair and maintenance aspects of them were very good. I could almost judge at the number of hours when a specific repair was coming — like a hose at 3–4,000 hours. It makes it easy to calculate a maintenance budget. Kawasaki is very good equipment.

"Every morning we check the loaders out. We make sure they are greased and the fluid levels are proper; we keep them maintained. We send the oils off and check for heavy metals. We do preventive maintenance at 250 hours, no matter what the computer says. And we've installed auto-greasing on just about all of them. We run our equipment till they fall apart, then we use those for parts. Since I've been here, out of all those loaders, we've replaced one engine. That was a rental we bought from elsewhere, and we ran it 13,000 hours before the engine failed. I can say that it's been a pleasurable experience dealing with Kawasaki because there haven't been major malfunctions in the equipment. Sure we do as much of our own maintenance as we can, but Steve and GS Equipment help us out whenever we need it.

"We are very pro-active in our approach to equipment maintenance. Because our operation is so efficient, if something goes down it throws a kink into everything. I've determined that all our loaders will be Kawasaki. We stick with what works."

**Black Gold Compost Company, Inc. is serviced by GS Equipment, Tampa, Florida.**



The new 80Z7 is only one of two loaders the company owns with an enclosed cab. Black Gold Compost has been pleased with the fuel efficiency and quietness of their new Z7.