LAGC
Lawn and Garden Collector Magazine
Volume 5 Issue 4
July/August 2011
$5.99

FEATURED COLLECTOR:
BERNIE SCOTT & his Family of Jacobsen-Built Tractors

1970 Allis-Chalmers B210
Ary's Exquisite Mini Deeres
Planet Gravely
In our last issue, we introduced George Beckett of Lyles, Tennessee, who has managed to collect examples of all but one of the entire line of G.E. Elec-Trak tractors, as well as a large quantity of impressive attachments. Since appearing in our May/June issue, two readers offered to sell him the rare model “E16” he was missing. Today, he now can boast he has them all! In this issue we will examine each model type and explore the differences in this unique brand of all electric, full-scale garden tractors.

For starters, G.E. manufactured a walk-behind 120V mower dubbed the “E1” that they branded with the “Elec-Trak” logo. Its short 18” blade meant that more than a few passes were needed for a large lawn, but it was quite well suited for small city lots.

The next in line, “GE’s entry level ER8-36 rider is pretty rare,” claims George. This model first came off the assembly line on February 4, 1974. By the summer of that year the entire product line had been sold to Wheel Horse. “They didn’t sell a whole lot of them in just six months.” The ER8-36 had the equivalent of an 8hp gasoline powered engine and ran on three 12V deep cycle batteries and could cut about an acre of grass on a charge. The only attachment available was a 36” mower deck.

GE’s low-end offerings in the market were their “small-framed tractors”, which included the E8M, E8HM and E10M models. These were made for medium-type work and larger lawns, but weren’t really designed for heavy snow plowing or throwing. They were perfect for regions with mild winters. (Here’s a tip: if the model designation has an “M” in it, the mower was mounted under the middle of the tractor.) The E8M was equipped with the same size motor and number of batteries as the ER8-36, and thus had similar performance. The E8HM was a “heavy duty” version of the E8M which really only meant that three more 12V batteries had been added in an effort to extend its mowing range. The E10M replaced the 12V batteries with 6V batteries extending its range even further and had a more powerful 10hp
motor as well. The small-framed tractors were short and narrow and had tires smaller than those on their larger siblings.

GE's "large-framed tractors" included the E12M, E12, E12S, E14, E15, E16, and E20. The large-framed tractors were standard size and had power equal to and greater than their ICE based competitors. All of these, with the exception of the E12M, had the mowing deck mounted on the front of the tractor. The E12 family was very popular and was a good, solid tractor capable of doing almost any job the average homeowner might have. The E12M and E12 carried a 12hp motor and the E12 was the first in the line to have a standard electric front lift for attachments. The E12S was a cross between the popular E12 and the E15. It sported a more powerful E15 motor and electronics in an E12 body, offering consumers the best of both worlds.

The E15 was the first of GE's powerhouse tractors with a 15hp electric motor and was designed for the heaviest workloads such as garden plowing, sickle mowing, front-end loading, and more. In a historic move, GE utilized some of the first integrated circuit boards in these tractors, and like other early users of the technology discovered that the boards were prone to problems. The E12S in particular experienced problems with this technology and GE initially had a great deal of trouble stabilizing the product.

The E14 and E16 are somewhat rare, because they came out late in 1973 within months of GE's disposal of their tractor business. At that point, GE had reverted back to their original electro-magnet relays and ceased using the unreliable integrated circuit boards. These models are considered to be some of the best tractors GE produced as they benefitted from all the lessons learned from this early technology.

The E20 was the top of the Elec-Trak line with an 18hp motor. Veteran collectors say they have seen these out pull 25hp gas tractors, as there is so much more torque in electric motors. Another is the weight of the battery pack. In an electric car, battery weight is an enemy, but it's an advantage in a tractor. "My E20 weighs almost 1000 pounds. Put a weight box on the back and a loader on the front end, add a 230 pound driver, and you have a lot of weight there and lots of traction." An electric motor for lifting attachments on the front of the large-framed tractors was actually a car window motor from the 1970s. It's hard to believe, but it will easily lift a couple of hundred pounds. There was also an electric rear lift available. Brantly made a 250-pound electric rototiller that GE branded and the rear electric lift had no problem with it. The Elec-Trak tiller, set at 4' depth, would turn a 100' x 200' garden on a single charge.
At a 6" depth it would turn approximately half that area. They are real beasts!

Although the signature color was a creamy yellow, in 1972 GE came out with an industrial model of their tractor that was painted orange. It was sturdier than the original Elec-Trak and was equivalent to an E20. It boasted reinforced fenders and 4-ply shop tires instead of the 2-ply turf tires. It is commonly found with the forklift attachment. Forklifts for the Elec-Trak were made in 48", 72", and 92" models.

“Five of my tractors were NOS when I got them, they were still in their crates or had been unpacked, but never used. I was the first owner. For instance, my ER8-36 was still strapped to the skid in its original cardboard box when I bought it. I took it out, shined it up, changed some of the connections, and within two hours it was running and rock solid.”

So, why didn’t the Elec-Trak catch on? “One thing GE struggled with is that they were not known in the lawn and garden world,” explained George. “They weren’t a big name like John Deere. Consequently in 1973, they started manufacturing OEM electric tractors under the New Idea brand on the same assembly lines along with their own GE tractors.” The New Idea tractors were a different color (red and cream) and had slightly different technology in them. Later, they had an agreement to produce Wheel Horse equipment with its signature red paint and well-recognized logo. In 1974 GE decided to leave the market completely and sold the entire line to Wheel Horse. Production continued for a few more years during which Wheel Horse introduced three more models, but the project was finally abandoned in 1983.

The theory most people have as to why they never caught on is simply the lack of a competent repair and maintenance service. GE had a fairly large dealer network, but many of the people involved were gas guys. “Bring an electric tractor in, with Apollo era electronics, primitive computer boards, resistors, capacitors, and electromagnetic relays and many dealers tended to struggle with service and warranty. Really, some of the most successful dealers were guys who sold appliances, televisions, and radios because they understood the electronics. Little went wrong with the mechanical parts and they never really broke down. They used Peerless transmissions which seemed to go and go. When something goes wrong with a gas mower, the do-it-yourselfer who grew up working on gas engines in cars, would have some idea of the problem and how to repair it. If something went wrong with an Elec-Trak, you had a 1000-pound machine stuck on the lawn and you did not know where to start. Today, owners with an interest in modern electronics have taken out the old electronics and installed golf cart controllers that can be programmed with their laptops. Computerized electronics today are much more reliable and easily diagnosed.”

The technology is there to bring back the electric tractors, but will it happen? Cost is one factor. Basically, you have to buy 10 years of fuel the day you buy your tractor. Batteries are over $100 each, so you have over $600 invested before you even pay for the tractor. George believes that if a big name got into electric tractor manufacture there would be a good market for them considering today’s gas prices. (hmm…call it an iTri...maybe people will buy it!)

Don’t forget to check out George’s Elec-Trak website at www.myelec-traks.com. In the next issue we will take a look at some of the unique attachments created for these machines. ❄️