

THE PLOWSHARE

News for John Deere Collectors



From Deere & Mansur to John Deere Seeding: Deere planters have a history of innovation

In 1877, the demand for an efficient, accurate corn planter was growing, and two Moline, Illinois, businessmen decided to help meet it. Charles Deere, John Deere's son, and Alvah Mansur, a business partner of the Deeres for nearly 20 years, established the Deere & Mansur Company to manufacture planters.

The business was organized with \$25,000 capital in a two-story brick building in Moline. According to a factory brochure published later, the original building was just 50 by 100 feet. Deere served as the first president and Mansur was vice president. Soon, J.W. Atkinson was named secretary and manager.

Deere was also vice president of Deere & Company at the time, but the new planter business operated separately from his father's plow company. Deere & Mansur planters would be carried by Deere & Company branch houses, but the division of the businesses would allow Deere & Mansur to focus on designing, building, and marketing planters while Deere & Company maintained its plow expertise.

The new company soon introduced the Deere Rotary Adjustable Corn Planter. The machine's innovative rotary planter mechanism made it an immediate success. In 1879, the company recorded a profit of \$10,000.

The business quickly outgrew its small home. In 1879, operations were moved into a three-story, 60-by-180-foot building in Moline known as the "quilt factory." A new warehouse, foundry, and blacksmith shop were soon added to accommodate the company's 220 employees.

Deere & Mansur's product line also expanded. By 1885, stalk cutters, drills, and a hay rake were added to the line. Disk harrows came in 1888 and hay loaders in 1890. While these products were successful, the bulk of Deere & Mansur's business continued to come from its popular planter line. Eventually the company produced machines or attachments to plant crops including corn, cotton, potatoes, cucumbers, and sorghum.

In 1887, the new Deere Center Lever Corn Planter was introduced. It featured several updates, including a center lever to raise or lower the runners. Recognizing a customer need that arose after the American Civil War, the lever could be operated by hand or foot to accommodate the many farmers who had lost a limb in battle.

Accuracy was still a problem across the industry. Corn was planted in small hills, and it seemed that sowing the same number of kernels in each hill would increase yields by 10 to 15 bushels per acre.

Above left: Charles Deere, cofounder of Deere & Mansur, served as the company's first president. **Above center:** By 1918 the Deere & Mansur Works operations had grown substantially. **Above right:** Alvah Mansur, a Moline businessman, joined Charles Deere to form Deere & Mansur Company, a planter manufacturer, in 1877.

Deere & Mansur tried to accomplish this in the mid-1890s with the new Accumulative Single-Kernel Drill Planter, which increased accuracy by about 15 percent.

Another advancement was made when the company introduced the Edge Drop Planter, which metered seeds out by thickness, rather than length. Since corn kernels tend to have a fairly consistent thickness and vary more by length, this system also increased accuracy. By 1899, Deere & Mansur was the largest producer of corn planters in the world.

Deere & Mansur introduced the No. 9 check-row corn planter in 1901. Thanks to accuracy and ease of use, sales of the No. 9 topped those of the top three competitive planters within a year. An article that appeared in *The Furrow* in the 1940s described this machine as “the foundation of John Deere planter leadership.”

While Deere & Mansur continued to turn out quality planters and tillage equipment, the business underwent a change in 1911. It was one of several companies acquired by Deere & Company during a consolidation that created a nearly full-line farm equipment manufacturer.

The immediate impact on Deere & Mansur operations was probably minimal. It had always been linked to Deere & Company – founder Charles Deere became Deere & Company president in 1886, and its products were sold through the Deere sales organization. The most visible difference was the change of the company’s name from Deere & Mansur Company to Deere & Mansur Works.

Deere & Mansur’s sales continued to grow as a subsidiary of Deere & Company, partially due to the popularity of the No. 999. The planter was introduced in 1913 and updated a number of times. According to an article that appeared in *The Furrow* in the 1940s, “Nearly every major improvement in planters has appeared first on the No. 999 – natural-drop seed plates, complete enclosure of both clutch and variable-drop gears, safety fertilizer attachment, tongue

truck, simple positive valve action, special plates to handle the various types of hybrid corn – these and many other features are John Deere contributions to better planting performance.”

Significant changes were made to other machines in 1917. The entire cotton planter and beet cultivator lines were updated. A new beet seeder and beet lifter were added to the product line.

The updated products and the continued popularity of the No. 999 contributed to the growth of Deere & Mansur Works, and by 1918 it was the oldest planter manufacturer operating in the United States.

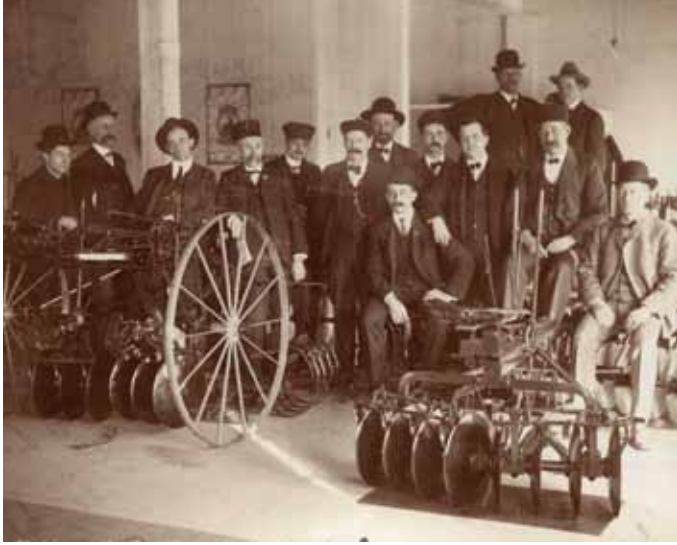
By 1935, tractors were becoming more widely used, and farmers needed a faster, more efficient planter. In response, Deere introduced the No. 450 tractor corn planter. The four-row unit was accurate – it used the same mechanism as the famous No. 999 – and coupled with a tractor it could cover 40 to 50 acres in a day.

In the 1940s, Deere & Mansur’s implement production slowed due to World War II. Like many manufacturers, the company began to produce items for the United States war effort. According to one account in the Deere & Company archives, “Deere & Mansur built literally hundreds of kinds of components for use by the Navy and Army.” Among these were manhole covers for ships, rollers for life rafts, and headlight guards for tanks.

After the war, Deere & Mansur went back to producing planters and other implements, but soon experienced another change. In 1947, the company was renamed the John Deere Planter Works, a name consistent with other Deere factories.

While its name changed, the factory continued its constant work to develop new machines to better meet customer needs. Advancements were being made in tractor design, and larger, faster planters were needed to match. In 1957, Deere introduced the four-row 494 and six-row 694 Planters, which could operate at up to 5 mph, and the four-row 495 and six-row 695 capable of planting at 7 mph.





Deere & Mansur employees with two of the company's products, a disk cultivator and a harrow.

According to a factory brochure from the era, "Engineering know-how, good materials, manufacturing skill, modern machines and methods, quality controls – these are the factors that keep the products of this factory at the head of the farm equipment parade. A good many of the outstanding improvements found in modern disk harrows and planters have been pioneered by this progressive John Deere factory."

The same brochure shows the breadth of Deere's planter line at that time: "Over 100 different seed plates are available for planting corn, beans, peas, sorghums, peanuts, beets, onions, cantaloupes, cucumbers, and many other crops."

A 1968 innovation had a big impact on accuracy, and John Deere introduced the 1200 and 1300 Series Plateless Planters. The machine did away with the seed-selection plates that had been used in planters for more than a century and replaced them with a "finger-pickup" mechanism that selected seeds one at a time in much the same way a farmer would by hand.

Around this time, the Planter Works was the world's largest manufacturer of corn, cotton, and sugar beet planting machinery. The facility covered almost 40 acres with more than 1,500,000 square feet under roof. The business continued to grow, but finding new ways to meet customer needs was still a priority. According to a factory brochure, "Our engineers combine slide-rule theory with actual experience in the field ... all of them travel to different parts of the country studying problems and working out new and better ways of improving our machinery."

During the next few years, land conservation became a concern around the world, and by the early 1970s, Deere was offering zero-till planters. These machines still employed the revolutionary finger-pickup metering, but were designed to handle heavy field residue.

In 1971, the business' organization changed again when Planter Works merged with Plow Works, Deere's oldest business. This merger formed John Deere Plow & Planter Works.

At one time John Deere Plow & Planter Works produced 97 different products. The 3,750,000-square-foot factory was divided into four basic departments: plows and tillage equipment production, planter production, foundry, and fastener department.

In 1974, John Deere took another big step in planting technology with the introduction of the 7000 and 7100 MaxEmerge™ Planters. The new planter line placed the seed in the field in a completely different way and at a more precise depth than ever before.

John Deere planting technology continued to evolve with the Tru-Vee™ opener system. The system employed pairs of angled disk blades to consistently cut well-formed seed trenches while minimizing soil disruption and moisture loss.

Both the MaxEmerge technology and the Tru-Vee system proved to be incredibly popular, and by the early 1980s, Deere dominated the planter field.

As the technology changed, so did Deere's Moline planting operation. In 1986, Plow & Planter merged with John Deere Harvester Works, and was renamed John Deere Harvester Works – Moline. The John Deere Seeding Group, as it's called today, was established in 1995.

Currently, the John Deere Seeding Group in Moline is the business center for John Deere planters, box drills, and air seeders. Planters are also assembled in the 20-acre state-of-the-art facility. Other items in Deere's planting and seeding line are produced in Des Moines, Iowa; Monterrey, Mexico; Orenburg, Russia; and Valley City, North Dakota.

This is the first in a series of articles about businesses that were acquired during Deere & Company's 1910–1912 consolidation. Throughout the year The Plowshare will mark the 100th anniversary of this Deere & Company milestone.

Deere holiday memories

Do you have a favorite John Deere holiday memory? Maybe it's from your childhood, when you saw the toy tractor you'd been longing for under the tree. Or, perhaps, depending on your climate, it's a new John Deere snowblower to help clear away that holiday snow.

Whatever place John Deere has in your holiday memories, we hope you'll share it with us and the rest of *The Plowshare* readers.

The final issue of *The Plowshare* for 2011 will be published in late November. We'd like to help everyone get into the holiday spirit by sharing a few special John Deere memories. You can share yours at www.JohnDeere.com/plowshareideas. All memories and photos are welcome.

Tractor show planned for John Deere Historic Site

More than 100 John Deere tractors and implements are expected to be displayed during Two-Cylinder Days, August 5–7, at the John Deere Historic Site in Grand Detour, Illinois.

During the event, members of four Midwestern tractor clubs will display a variety of John Deere products made before 1973.

Along with tractor displays and food vendors on hand for the event, visitors will also be able to enjoy the regular features of the John Deere Historic Site, including a working replica of John Deere's blacksmith shop, tours of John Deere's home, and a look at the very beginnings of Deere & Company in an archaeological exhibit hall.

For more information on the John Deere Historic Site, see page 4.



Above left: A working replica of John Deere's blacksmith shop gives visitors a firsthand look at Deere's early business. **Below left:** Tools and other artifacts from John Deere's Grand Detour operation were discovered at the John Deere Historic Site. **Center:** Rick Trahan, blacksmith at the John Deere Historic Site, works in a replica of the shop where John Deere created his famous steel plow. **Above right:** The kitchen in the Deere home as it might have looked during the family's time in Grand Detour. **Below right:** John Deere began building this home for his family after arriving in Grand Detour in 1836.

Take a look back at the John Deere Historic Site

In 1836, John Deere built a blacksmith shop in Grand Detour, Illinois. The next year he created the first commercially successful steel plow, and his business began to grow in this small frontier town.

Today, thousands of John Deere fans and history buffs visit Grand Detour each year to learn more about John Deere and his revolutionary plow at the John Deere Historic Site.

The site includes a working replica of John Deere's blacksmith shop, the house that Deere built for his family, and an archaeological exhibit that offers more information about his life and early work.

Information and artifacts discovered during a 1962 archaeological dig help make the site as historically accurate as possible.

The dig, conducted by a team from the University of Illinois, uncovered the exact location of the blacksmith shop where John Deere developed the first successful steel plow. The location has been preserved in an exhibit hall which also contains blacksmithing tools, plow pieces, and other artifacts found on the site.

A replica of Deere's shop, built near the archaeological exhibit hall, was designed using details gathered during the dig. Information about the original shop's dimensions, layout, and building material was vital to the effort to make the replica shop as authentic as possible.

Today, a blacksmith works in the replica shop during regular Historic Site hours. Visitors can see the sparks fly as he creates a variety of ironwork pieces for the onsite gift shop.

While the blacksmith shop gives visitors a look at Deere's trade, a tour of the home he built offers a glimpse into his personal life.

Deere began work on the home in 1836, when he arrived in Grand Detour from Vermont. Additional sections were added later to accommodate his growing family. Eventually, the home expanded to include four rooms on the main floor and two on the upper level, each with a separate stairway. It's believed that one of the second-floor rooms served as the Deere children's bedroom, while the other was for John Deere's apprentice.

Today, the rooms are furnished as the Deere family likely would have had them, with authentic household items from the period.

The site also includes several acres of picturesque grounds and a covered pavilion, perfect for picnics.

Visiting the John Deere Historic Site

The site is open Wednesday through Sunday from 9 a.m. to 5 p.m., May 1 to October 31. Admission is \$5 for visitors age 12 and older. For more information or to arrange a tour call 815-652-4551.

The site is located just off IL-2 in Grand Detour, Illinois, northeast of the town of Dixon. To reach the site, take I-88 to IL-26. Continue 1.7 miles north on IL-26, and turn right onto East River Road/IL-2. Continue approximately 6 miles to Grand Detour.

From us to you: Spring cleaning

We're in the middle of a great season at the John Deere Historic Site. The flowers have all been planted, and we're beginning to harvest a few vegetables from the garden there.

The radishes from the vegetable plot are always one of the first signs of spring to me, and I've enjoyed several of them recently during the site's first few weeks of business for the season.

They've been a nice reward after weeks of preparing for the site's opening day. We've spent days cleaning and making minor repairs to John Deere's home and the rest of the buildings that make up the Historic Site. Not to mention all the time we spent working in the garden.

Now, even though most of our springtime work is done, there are very few moments of leisure for us. There's almost always some sort of work being done at the Historic Site.

Our blacksmith keeps busy hammering out decorative ironwork, the summer will bring even more gardening, and – just like at home – there's an endless list of odd jobs. John Deere's house is 175 years old this year, and there's always a variety of painting, cleaning, hammering, and nailing to do to maintain it.

This summer we'll also be doing some planning. Next year marks Deere & Company's 175th anniversary, and we're hoping to make sure the company's birthplace is in great shape for this milestone.

We hope you'll stop by sometime. While the first radishes from the garden are nice, what really makes all this work worth it is getting to meet the fellow John Deere enthusiasts and history buffs who visit the site each summer.

Keep your hand on the throttle and your plow in the ground.

Brian

Brian Holst, John Deere Historic Site manager, with a Model 246 Planter. For more on the history of Deere's planters and planter business, see page 1.



THE PLOWSHARE

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On display at the John Deere Pavilion: 1949 Model "A"

A little scheming and a lot of help from family and friends helped one woman turn a 1949 John Deere Model "A" into a one-of-a-kind Valentine's Day surprise.

For 25 years James Howard, of Highland, Illinois, told his wife, Stacey, how much he would like to own the Model "A" that he grew up using on his family farm. Stacey knew that a family friend had bought the tractor,



but had to look harder for an opportunity to gauge his interest in selling the machine.

She finally had the chance to approach the tractor's owner when his daughter visited from out of town and arranged to have dinner with the Howards. Stacey doubted she'd be able to talk to her in private, so she hid a note explaining that she was interested in purchasing the tractor as a surprise for her husband in a tin of homemade cookies, which she gave to the tractor owner's daughter.

The message was received, and the owner agreed to sell the tractor. Next, Stacey began to plan, with the help of her husband's siblings, to get the tractor from Argyle, Iowa, to Highland, Illinois, 200 miles away. Eventually, "the tractor, along with all six of his siblings, spouses, and the family friends who owned the tractor, made the trip to surprise my husband with his gift," said Stacey.

"You can only imagine the surprise on his face when he saw everyone standing in the drive along with this old, rusted, but very-much-wanted John Deere tractor," said Stacey. "There were some tears of joy, lots of questions, and a fantastic family story in the making."

The tractor is now completely restored and can be seen at the John Deere Pavilion in Moline, Illinois. For more information or to plan your visit, see www.JohnDeereAttractions.com.