

# THE PLOWSHARE

News for John Deere Collectors



*Deere retiree Ron Leonard and his family with their Deere snowmobiles in the 1970s.*

## Nothing Runs Like a Deere: Famous phrase is part of snowmobile line legacy



*Ron Leonard*

He doesn't even drive snowmobiles now, but sometimes Ron Leonard of Galena, Illinois, gets sentimental about the days when he was chief engineer for the John Deere product line.

Then he goes looking through his old belt buckles, caps, and models, thinking about what he calls "an exciting and rewarding time" in his more than 40-year career with John Deere.

For the past three years, he and fellow Deere retiree Dick Teal of Horicon, Wisconsin, have been working together on a book, "John Deere Snowmobiles: Development, Production, Competition, and Evolution, 1971–1983," published recently by McFarland & Company of North Carolina.

The book tells what prompted Deere to start designing and selling snowmobiles, and covers the events that led the company to sell the business to Polaris about a decade later. It also sets out the case for something

Leonard firmly believes: Snowmobiles significantly strengthened Deere's consumer product line, especially its lawn and garden equipment sales.

"It was a powerful thing. Looking back, it was one of the most fortunate things that could have happened to Deere," Leonard said. "Without snowmobiles, I don't think we would have ever gotten so far, so fast, in the grounds-care business."

Leonard's engineering career with Deere spanned four decades, from 1956 to 1998. He spent the first 15 years or so of his Deere career at Des Moines Works, designing and testing cotton strippers and pickers. But in 1973, he transferred to a new job at Horicon Works in Wisconsin to work on Deere's newest product line.

Deere entered the snowmobile business during the snow-sport boom of the 1970s. Full production began in 1971. The company's first two models were the 400 and 500 (with 339 and 436 cc of power respectively).



*Dick Teal*



John Deere retiree Dick Teal, shown here in the 1970s, on a 1976 John Deere Liquifire snowmobile in the Idaho mountains.

An article in the September/October 1971 issue of *The Furrow* promoted the quality of the machines and “something else no other snowmobile offers: your hometown John Deere dealer with service, parts, and experience to keep you on the trail.” Dealers were enthusiastic about adding a line of machines to sell and service during the winter months, staff at the Deere archives said.

The 1971 snowmobile line also introduced a new trademarked advertising slogan, “Nothing Runs Like a Deere.”

No one knows exactly how many snowmobiles the dealers sold that first model year, but it was probably no more than a few thousand. Sales of the new 1972 models, called the 600, JDX4, and JDX8, totaled about 12,740 machines, according to company records.

Base price on the 400 model was \$1,195, and the 500 sold for a suggested retail price of \$1,325.

About this time, Leonard began working as manager of product engineering for homeowner products made at Horicon Works, the company’s main hub for lawn and garden tractors. He was the chief engineer, and later started managing production at Horicon Works, too.

He was working at Horicon when Deere offered its third JDX snowmobile model in

1973. Then came limited production of the 295/S, which was manufactured only in 1974. Deere introduced smaller models in 1978 with the popular Spitfire series.

With that came a big change inside the Horicon Works factory, where employees made seed drills and other agricultural products until 1970. Those products stayed the same for a long time.

But customers buying the company’s new lawn care products and snowmobiles expected new models every year, so Leonard and others working at the factory began to overhaul the engineering and manufacturing processes for rapid product development and assembly.

“The snowmobile business was never financially successful, but it was the driving force that got the Horicon factory to shed its old agricultural image and processes,” Leonard said.

Steve Johnson, factory manager at Horicon Works today, agrees. He said customers expected annual improvements in both performance and technology in the snowmobiles if they were to consider buying the John Deere sleds. The same goes nowadays in the riding lawn equipment and utility vehicle markets.

“What Horicon learned from the snowmobile business has served us well,” Johnson said.



#### AVAILABLE MODELS

MODEL YEAR	AVAILABLE MODELS
1972	400, 500
1973	400, 500, 600, JDX4, JDX8
1974	295/S, 300, 400, 500, 600, JDX4, JDX6
1975	300, 400, 800, JDX4, JDX6, JDX8
1976	300, 400, 340 Liquifire, 440 Liquifire, 340 Cyclone, 440 Cyclone, Liquidator
1977	300, 400, 340 Liquifire, 440 Liquifire, 340 Cyclone, 440 Cyclone
1978	Spitfire, 400, 340 Liquifire, 440 Liquifire, 340 Cyclone, 440 Cyclone
1979	Spitfire, 340 Trailfire, 440 Trailfire

# New international equipment on display at the John Deere Pavilion

Think you might enjoy climbing into the seat of John Deere’s new Chinese-made rice combine or watching one of our European autonomous lawn mowers in action? **Now you can.**

## Autonomous lawn mower

The John Deere Tango E5 autonomous lawn mower, available only in Europe, seems to cut grass all by itself.

And it mows just about all day at the pavilion in a high-tech exhibit, which shows a family moving about in their home, overlooking a well-manicured lawn. As the couple and their daughter stand in the front doorway or look out the window, their lawn mower is moving around their front lawn.

“This is the first time in the pavilion’s history we are offering a live product demonstration to our guests,” said Brigitte Tapscott, manager of the John Deere Pavilion. “We think most homeowners will find Tango fascinating whether they see lawn care as a hobby or a chore.”

Introduced in 2012, the battery-powered Tango E5 is energy efficient and environmentally friendly. When battery power runs low, the Tango returns to its charging station. Mowing times and days are set by the homeowner using a large onboard screen and touch controls.

“It’s been fun to see the reaction of visitors to the Tango,” Tapscott said. “They are really intrigued.”



## Did you know about Enduro Team Deere?

John Deere once had its own snowmobile-racing squad. The company started Enduro Team Deere after participating in the 1974–1975 snowmobile-racing season. The team included six drivers, eight mechanics, and the company’s newest snowmobile, the Liquidator. During the 1975–1976 season, Enduro Team Deere won five and finished second in three of the eight major races of the year. The team’s success continued in the next several years, but the end of Deere’s snowmobile line eventually ended its racing organization, too.

“It provided us the learning and the tools required to be a market leader and meet customer expectations in our core business today at Horicon.”

Although the business was successful in many respects, Deere left the snowmobile business because of limited sales and unpredictable production needs, as the company braced itself for the recession of the 1980s.

Leonard stayed at Horicon Works until 1986, a few years after Deere sold its snowmobile business to Polaris.

When exactly did production end? Deere archives records show it ended in 1982, but others say it happened in 1983. Sales continued through 1984.

“You can drive around the country and find farms with warehouses full of restored John Deere products of all kinds – including snowmobiles,” Leonard said. “John Deere is simply a legend. The name symbolizes so many things to people: quality of products, longevity, customer support. Those are the kinds of things that build confidence in the marketplace, and Deere has that today.”

### The archives needs your help

Do you have documentation that shows when Deere stopped making snowmobiles? If so, please email [HeritageMarketing@JohnDeere.com](mailto:HeritageMarketing@JohnDeere.com).

### AVAILABLE MODELS

MODEL YEAR	AVAILABLE MODELS
1980	Spitfire, 340 Trailfire, 440 Trailfire, Sportfire, Liquifire II
1981	Spitfire, 340 Trailfire, 440 Trailfire, Sportfire, Liquifire II
1982	Spitfire, Sportfire, 340 Trailfire, 440 Trailfire LX, Liquifire II
1983*	Snowfire, Sprintfire, Trailfire LX, Sportfire, Liquifire II
1984*	Snowfire, Sprintfire, Trailfire LX, Sportfire, Liquifire II

\*Production ended in either 1982 or 1983, but remaining inventory was sold until 1984. Model years preceded introductory years. For example, 1975 model year machines were sold in the winter of 1974–1975. Source: Deere & Company Archives.





## More about the R40 Small Track Combine

### Monitoring capacity

Windows in the side and front of the grain bin allow the operator to see how full it is without having to stop to check. A buzzer sounds when the grain bin is nearing its capacity and it's time to unload.

### Grain tank or sacker

The R40 is available with either a 39.7-bushel grain tank with an automatic unloading auger, or a 14-bushel, three-spout sacking unit for unloading the grain directly into bags. The grain tank is large enough to hold grain from nearly 30 minutes of harvesting before unloading.

### Tracks

The combination of small tracks and relatively high ground clearance of 11 inches improves the maneuverability of the R40 on rough roads and in muddy fields.

### An eye to productivity

The adjustable seat is positioned to allow the operator to see the cutter head and feederhouse to check productivity while remaining seated.

### Floating header

The cutting platform height can be raised as high as 33 inches to improve harvesting on the uneven terrain that is typical of small rice farms in China.

### 82.6-inch swath

The cutting head is narrow compared to the headers we typically see on combines in the U.S., but is ideal for working in small rice fields. The R40 can harvest almost 1-1/4 acres of rice an hour; without machines, a farmer can harvest a quarter of an acre in a day.

## Rice combine from China

One of John Deere's new China-made R40 Small Track Combines is now parked inside the pavilion in Moline, Illinois. Built at John Deere Ningbo Works in China as part of the company's growth strategy in Asia, this combine isn't sold in the United States.

The rice combine is an example of Deere's commitment to deep customer understanding and use of innovation to help feed, clothe, and shelter people around the world. That's why pavilion manager Brigitte Tapscott wanted to add the R40 model to the facility's equipment collection, she said.

As China's population continues to increase and people migrate to the cities, farm labor is harder to find. So, farmers there need to improve their productivity so they can grow and harvest enough rice and other crops to keep up with the demand for food.

Most rice is grown in paddies that are flooded for the growing season and drained for harvest, leaving the ground too wet for wheeled combines.

John Deere builds several models of combines in China designed to help farmers mechanize rice harvesting, but most are bigger machines meant for use on large farms. Deere wanted its new R40 Combine to work well in a variety of field conditions.

The company also wanted to provide an affordable option for small farm operations or the contractors who do the harvesting.

Deere dealers in China sell the R40 primarily to contractors hired by small-scale rice farmers in China, India, and Southeast Asia. It can be configured to harvest wheat and other small grains, too.

## More about the Tango E5

### Why is the mower called Tango?

Because of its movement, which can be likened to the dance.

### Will the Tango be offered in the U.S.?

John Deere has no specific plans at this time to market it outside Europe.

### How much yard can the Tango mow?

It can keep a nearly half-acre yard mowed if there are no steep hills.

### How does the mower mow all of the grass?

It uses a navigation system to cover the entire mowing area.

### Does it mow in any weather?

It can mow in the rain. If the temperature falls below 32 degrees Fahrenheit, the mower will stay docked in its charging station to protect the battery.

► *View a time-lapse video of the exhibit installation at [www.JohnDeereAttractions.com/tango](http://www.JohnDeereAttractions.com/tango).*



*Chris Boyens of John Deere Heritage Marketing stands next to a John Deere skid steer.*

## Vintage big-boy toys

I spend most of my time researching and obsessing about John Deere agricultural products.

But anytime I see a yellow-and-black Deere backhoe working along the road or a vintage industrial piece at a tractor show, I'm always intrigued.

So, I've been digging up some history on Deere industrial equipment, used to build roads, pump water, operate cranes, and tackle a host of other non-ag-related jobs for more than 100 years. It's an impressive past and an important part of Deere industrial innovations today.

The first time I laid eyes on a John Deere Model "DI" Tractor with that cool yellow-and-black paint scheme, I scanned it from hood to lugs. One thing just amazed me: that seat! How and why was it that the "DI" had a nice seat cushion and even a backrest? If you'd ever driven a tractor with a pan seat and crossed a ditch or dead furrow just a tad too fast, you'd be standing at the parts counter demanding one of these "industrial" seats!

I also wondered why this "DI" was the only yellow-and-black tractor at the show. Years later, I've learned Deere didn't make a lot of industrial versions of its tractors, and not as many of them were kept in show-quality condition as their green-and-yellow cousins.

Today, it seems like more people admire and want vintage industrial equipment than ever before. I've talked to a few collectors recently who are meticulously restoring old industrial pieces, including a John Deere Model 5010-I Tractor and an industrial yellow Deere Model "R" Tractor.

I understand the draw of taking a piece from the brink of the scrapyards to its former glory and getting the machine out working again. Maybe it's my childhood memories of riding in the back of my big yellow toy truck or pushing dirt with a bulldozer in my mom's flower garden, but the dream of operating those Deere machines is still appealing. There's just something about playing in the dirt that I've never outgrown.

Chris Boyens  
Senior Research Specialist, John Deere Heritage Marketing



## GATHERING OF THE GREEN

Want to hear more about the history of John Deere industrial equipment?

Chris Boyens will present a workshop on the topic at the "Gathering of the Green," a biennial national conference for Deere collectors, restorers, and enthusiasts. He and many other speakers are on the agenda for the event, scheduled for March 19–22, 2014, at the RiverCenter in Davenport, Iowa.

For more information, go online to [www.gatheringofthegreen.com](http://www.gatheringofthegreen.com) or email [info@gatheringofthegreen.com](mailto:info@gatheringofthegreen.com).

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## JOHN DEERE

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## John Deere's 1838 plow: One of "101 Objects that Made America"

Smithsonian Magazine has chosen John Deere's 1838 plow as one of the "101 Objects that Made America"

The plow is part of the collection of the Washington, D.C., institution, the world's largest museum and research complex, and was featured in the November 2013 issue of the magazine.

The magazine chose the plow from among 137 million artifacts held by the Smithsonian's 19 museums and research centers to include on a list that also features Abraham Lincoln's top hat. The article calls Deere's work "genius."

"To be recognized with the telephone, light bulb, and others as one of the 101 Objects that Made America, and on top of it to be called 'one of the Smithsonian's most prized objects,' is another reminder of the innovative origins of our company," says Neil Dahlstrom, manager of corporate history for Deere.

