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A competitor pulls a truck modified to be a sled at a tractor pull competition at BiZi Farms north of Vancouver, Washington. Tractor pull events have separate classes based on weight, as well as whether a tractor is a stock model or has been modified to improve its pulling capacity.

# Tractors pull generations together

By MATEUSZ PERKOWSKI  
Capital Press

VANCOUVER, Wash. — Tractor pulling is the rare motorsport whose competitors needn't worry about breaking the speed limit, even in a school zone.

But to complain about the maximum speed of 12 mph would be to miss the point.

When you're pulling thousands of pounds across a dirt track, "12 mph does not sound fast, but it takes an enormous amount of horsepower to go that fast," said Zack Peterson, secretary of the Oregon Tractor Pullers nonprofit.

Though success at tractor pulling is measured by distance and weight, it'd be an oversimplification to say the contest is only about raw power.

Harnessing that power takes knowledge that's often passed from generation to generation, like a family heirloom.

Many tractor pullers teach their children mechanical skills they themselves acquired while working alongside a parent.

"The most important thing is they're preserving a part of our agricultural heritage," said Paul Pfnister of Keizer, who officiates at the events. "It's not just an act of preservation, it's an act of training the next generation."

## Connection to ag

Not everyone who enjoys tractor pulling is a farmer, but fans tend to feel a connection to agriculture that's strengthened by the activity.

"It's usually someone from a farm background or who's been exposed to agriculture," Peterson said.

Growers remain well represented at tractor pulls, which originated as a way to compare new machines, he said.

Tractors began greatly increasing in power during the mid-20th century, sparking curiosity about their capabilities and rivalries among their admirers, he said. Competitive pulling became more formalized in the 1960s and 1970s in the Midwest, where the motorsport continues to enjoy the greatest popularity.

In the Northwest, the Sublimity Harvest Festival was among the earliest organized competitions when it started nearly 50 years ago. The festival, which is Sept. 9-11 this year, now includes monster trucks, truck pulls, ATV pulls and other activities, but it originated as solely a contest between farmers.

"The original event was the tractor pull," Peterson said.

Nowadays, stock tractors normally used for field work continue to participate in contests, though they're in a separate category from those modified for peak pulling performance.

## On-farm events

Bill Zimmerman, president of Oregon Tractor Pullers, regularly hosts events at his fruit and vegetable operation north of Vancouver.

"I don't get away for vacation much, so this is my enjoyable thing to do," he said.

For him, it's more interesting to find out what can be accomplished by ordinary machines than by 300-plus-horsepower "hot rod tractors" especially built for the task.

"I'm more into it from the point of view of how it came from the factory, and how did it perform," Zimmerman said.

Having worked at a tractor deal-



Mateusz Perkowski/Capital Press

Steve Gleason and his daughter, Cora, rebuilt a 1952 John Deere Model A tractor together, with which they compete in tractor pull events. The mechanical skill involved in tractor pulling is often passed down through the generations.



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A participant pulls a sled with his garden tractor.

ership in the past, he's nonetheless impressed with how far people take the alterations.

"They have tractors putting out horsepower that we never dreamed of with those engines," he said.

Modified tractors are solely intended for competition and no longer have much utility for regular farming, said Joe Shaver, the organization's vice president. They'd overheat or break down with continuous use.

"A car that's good on the drag strip, you don't want to drive to work every day," Shaver said. "It's the same with tractors."

Replacing steel parts with those made of aluminum reduces overall weight and adding special engine components increases horsepower.

Such changes can make the tractor more prone to stress damage, particularly when it's run hard during an event.

Boring the cylinders of an engine block to accommodate larger pistons, for example, comes with trade-offs, Peterson said.

"To make it fit, you're sacrificing some of the structural integrity and the cooling," he said.

## Winning combination

Horsepower alone won't necessarily guarantee a victory, though.

To achieve optimal traction, the tractor's weight must be properly balanced, and the operator must hit the right gear at the right speed.

"You want the front wheels barely off the ground" while pulling, Peterson said. "That's the perfect weight balance. You're maximizing downward force at the rear end of the tractor."

The tire pressure must be adjusted to fit the track, which in turn is affected by the weather,

soil type and site maintenance. Accounting for those factors can be more art than science.

"The conditions are never the same from day to day and pull to pull," he said.

Finding specialized parts for modified tractors can be difficult and expensive, Shaver said. If demand isn't big enough to warrant mass production, they may have to be individually machined.

"It's not like you're just going to go to the auto parts store and pick this up," he said.

## Restored tractors

In some cases, tractors have been lovingly restored for top dollar by collectors who wouldn't dream of an extreme mechanical overhaul. They usually compete against other stock tractors at weights and speeds that won't risk undue wear and tear.

"Hey, I can take it out and play with it," Shaver said.

"It's something to do with your old tractor," Peterson said.

A serious contender looking to compete at the highest weight and speed, on the other hand, may spend \$50,000 on a tractor.

Owners typically reduce expenses by modifying the machines themselves as much as possible, since paying someone else for labor "gets really expensive," he said.

## Special sleds

The weighted sleds that attach to tractors are also custom-built, since they're designed to increase friction with the ground as they're pulled.

As a sled is pulled down the track, heavy-duty chains draw the weight box closer to the front. With each passing foot, the sled's front pan presses harder against the

## UPCOMING TRACTOR PULLS

• Tractor pulling is predominantly a summertime spectacle that can often be enjoyed at county fairs and other community gatherings. The Oregon Tractor Pullers nonprofit also typically organizes several events throughout the season.

The group's Fall Barbecue Pull is Aug. 27 at BiZi Farms near Vancouver, Washington. Attendance for spectators is free but competitors are charged entree fees that vary for members and non-members. For more information about the organization's rules, costs, events and pull results, visit [www.oregontractorpullers.org](http://www.oregontractorpullers.org).

• Another opportunity to compete or watch tractor pulling will be at the Sublimity Harvest Festival, which is Sept. 9-11 in Sublimity. More information about the festival can be found online at [www.sublimityharvestfest.com](http://www.sublimityharvestfest.com) or by calling 503-769-3579.

ground, eventually forcing the tractor to stop.

Mark Valentine, a retired farmer who lives in Royal City, Washington, built two sleds to accommodate tractor pullers in the area.

"The demand for a sled was tremendous and there was no one to build it," he said.

Valentine saved money by doing the work himself and hunting for used parts at scrapyards, but the price of some components was still steep.

For his most recent project, he spent \$3,000 on the chain that pulls the weight box, which he considers an investment in reliability.

"The sled can't break down. The tractors can," he said. "If you bring a sled and break down at the beginning, everybody's looking at you like, 'Why did you even come?'"

Sled costs are a major consideration for tractor pull organizers. A sufficient number of competitors must pay "hook fees" to use the sled, or the event won't cover its rental fee.

The Oregon Tractor Pullers group bought its own sled five years ago to ensure the organization's financial stability.

## Raising money

Rather than focusing on remaining solvent, the nonprofit can now raise money for other causes, such as helping the people who lost their homes in the 2020 Labor Day fires.

"What we make at the pulls is pretty much pure profit," he said. Still, most tractor pulls aren't big-budget competitions whose top performers earn substantial cash prizes. Participants must content themselves with occasional trophies and ribbons instead.

"It is mostly bragging rights," Peterson said. "This is not a sport where you're going to make money, that's for sure."

Instead, the hobby naturally attracts people who know how to turn a wrench.

The vast majority are mechanically inclined, often having worked on farm equipment, automobiles and motorcycles since childhood, Peterson said.

"Knowing what bolts to what is a huge advantage," he said.

Even those who aren't farmers tend to have jobs related to building or operating machinery.

For example, Shaver is a machinist who specializes in medical implants, such as the plates and pins used to repair bone fractures.

Peterson has a background in mechanical engineering and runs a company that makes distance-measuring sensors.

Such expertise can prove useful in tractor pulling.

"People ask how I do so well and I tell them it's calculated success," he said.

Technical knowhow may give him a leg up, but Peterson isn't secretive about his methods

and theories. He's written three self-published books about different aspects of tractor pulling.

## Infectious pastime

Tractor pullers eagerly promote their passion for the hobby, which can prove infectious. As enthusiasts involve their children and other relatives, the number of tractors in the family commonly multiplies.

"If you've got one, you might as well have a dozen," Shaver said.

Steve Gleason and his 17-year-old daughter, Cora, have been participating in tractor pulls for over a decade. They compete with garden tractors as well as a 1952 John Deere Model A, which they rebuilt together.

"We completely tore it apart," she said.

Tinkering with machinery is a family tradition that Gleason's proud to share with his daughter. It's how he acquired his own mechanical knowledge.

"Most of it I learned from my dad growing up," he said. "Growing up, we did not have anything he did not fix."

Cora currently works as a harvester and farm hand for a Willamette Valley berry grower and plans to pursue agriculture as a long-term career.

Her mechanical experience will likely prove useful, but that's not the only benefit tractor pulling confers.

"I enjoy competing and I enjoy beating the guys," she said.

Apart from reinforcing intergenerational bonds, working on tractors can set a career trajectory.

"My son wants to work on this stuff because it's his tractor," Peterson said. "It really teaches kids skills they may not otherwise be exposed to."

## Garden tractors popular

Since many families can't afford to buy a farm-sized tractor for each member, they opt for garden tractors. The Oregon Tractor Pullers has seen this division "explode" in popularity over the past five years, which organizers consider a welcome development.

"We want the barriers to entry to be as low as possible," Peterson said.

Dick Roberts, a hay grower from Napavine, Washington, spent just \$140 on a Craftsman GT6000 garden tractor, which he upgraded with a \$200 motor.

Those expenses were dwarfed by the \$800 tires, which are designed to better grip the ground.

Despite the hefty price tag, Roberts doesn't regret the purchase.

"If you want this type of tire, you have to pay," he said. "If you have twice the power but piss-poor tires, you'd spin out right away."

The costs involved in tractor pulling are highly variable and depend on the preferences of the competitor.