

TeleFarmer targets pre- and post-harvest tasks such as weeding, spraying, mowing and transporting with their manual, remote-control or autonomous modes of function.

They Make Software For Electric Tractors

Tim Bucher, CEO and co-founder of Agtonomy, recently developed TeleFarmer, a software and services system designed to partner with existing electric tractors.

"We're a software and services agtech startup," says Brooke Brown, Director of Marketing. "We don't manufacture tractors but work with existing original equipment manufacturers (OEM) like Bobcat, to have them manufacture tractors with our software included."

The TeleFarmer targets pre- and post-harvest tasks such as weeding, spraying, mowing and transporting with their manual, remotecontrol or autonomous modes of function. All partner with electrically powered vehicles. Agtonomy is working with existing battery production companies and has developed a battery pack that can be autonomously swapped when required.

An app allows a work plan or mission to be programmed, outlining speed and implement capabilities. Mounted cameras and sensors monitor progress and performance plus send notifications if something is malfunctioning or obstacles block the path.

Brown explains Agtonomy has patented

"Trunk Vision," a navigation system that guides the tractor along rows within nearcentimeter precision by using the cameras and sensors to plot the plant's trunks and vines

"Our software and services aren't commercially available yet, but we are doing pre-commercial paid trials for customers and different wineries right now," Brown says. "They lease the reference tractor plus the software and services, and together we're assessing if what we're developing is meeting the farmer's needs. Getting feedback is essential."

Agtonomy is headquartered in south San Francisco where the software is being developed. Brown says their latest funding round is going well, and interest from high-value crop growers is higher than they can accommodate.

Costs will be dependent on further testing and progress with OEM.

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Richway's sub-compact articulating loader is a "little workhorse" around farms or commercial landscaping projects.

Compact Articulating Loader Fits Small Spaces

Owners of the Richway Industries SCL-210 Sub-Compact Articulating Loader often call the machine a "little workhorse" because it's versatile, smaller and more affordable than most skid steers. The company definitely agrees. The machine has a breakout tilt force of 2,450 lbs. and breakout lift capacity of 1,640 lbs. and can also navigate smoothly through confined spaces, a big benefit for building projects or working with livestock.

"Sub-compact and compact loaders have been very popular in Europe for several years," says Glen Parrett, business development manager at Richway. "In fact, they're more popular than skid steers. We identified that as a growth market in North America, and we've been filling that void with success."

Parrett says Richway's loader is compact and has articulated steering. It works well on building and landscaping projects around houses on smaller city lots and is also handy around buildings and livestock pens on farms, where it can move through smaller openings than a skid steer. It's powered by a 24.8-hp. Kubota diesel engine. The 12 gpm hydraulic drive train uses just 2 gals. of oil and operates at 2,500 psi. The 7 gal. fuel tank keeps the machine running all day.

The loader has a universal style attachment plate that's common to mini-skids, so working tools such as an auger, mower, brush cutter, and grapple bucket are available. Parrett says the machine has more lift capacity than a mini-skid, which is also a benefit. "Mini skids are useful, but when you need a little more capacity and still want something easy to run, our sub-compact loader fits well," Parrett says. "With added lift capacity, you're not necessarily compromising on the footprint of the unit itself. It's still fairly compact."

Parrett says, "I have a lot of experience with skid steers, and one of the issues I had was not being able to see the cutting edge of the bucket from the driver's seat. That's not the case with the Richway machine because the operator has clear visibility to the front of the bucket. Our machine also has a 2-in. receiver. The operator station is accessed from the side of the machine, and a suspension seat provides excellent comfort. Maintenance is easy because multiple hinge points have greaseless bearings."

Another benefit of the Richway loader is that its wheels and articulating steering tend to leave less ground damage than a traditional skid steer. The loader's total weight allows it to be transported on a heavy-duty utility trailer pulled by a half-ton pickup truck rather than a 3/4 or 1-ton pickup that most skid steers require.

Richway's sub-compact articulating loader's suggested retail price is \$48,000.

Contact: FARM SHOW Followup, Richway Industries, 504 N Maple St., Janesville, Iowa 50647 (www.richway.com).

Perch Popper Opens Nest Boxes

Keep your nest boxes clean and save yourself a trip opening them up with the Perch Popper from Best Nest Box.

"If chickens sleep in the nest box, there's an incredible manure mess," says Tammy Foose, which is why the Perch Popper is so beneficial. The Best Nest Box includes a hinged roost bar that's moved manually to block access to the nest boxes, and the Perch Popper opens it automatically.

A video on the website shows how the Perch Popper installs easily and is set to release the bar at a specific time before chickens start laying.

The Perch Popper is not an excluder that automatically closes, Foose emphasizes. That can harm birds or lock them in the nest box, and automation is expensive.

"People go out to collect eggs anyway," she notes, and it's simple to put up the roost bar then. Setting the opening time is a personal preference and depends on the size of the flock. It can be any time after the birds have roosted for the night but before they start laying in the early morning.

The video shows how to set the timer to open the Perch Popper. Plus, there's a quick set feature so that when you install the two AA batteries to power it, the opening time will automatically be an hour later. Foose says she set her Perch Popper up at 8:30 p.m.



One Perch Popper can open groupings of up to four nest boxes.

so the boxes open at 9:30 p.m., which works well year-round for her chickens in Ohio.

Though designed to work with the Best Nest Box boxes, handy DIYers often figure out ways to use it with homemade boxes. With extra springs and hardware and proper alignment, one Perch Popper can open groupings of up to four nest boxes.

The Perch Popper has a rugged agriculturegrade design and sells for \$160, including shipping. A battery indicator light warns when batteries need changing, but they last up to 16 mos. in Ohio, Foose notes.

Contact: FARM SHOW Followup, Best Nest Box, Ohio (ph 330-558-1120; bestnestbox@bestnestbox.com; www. bestnestbox.com).



Mower Mule poly tub add-on holds 12.5 cu. ft. and can be quickly attached or removed from mower.

"Mule" Turns Mower Into Powered Wheelbarrow

The Mower Mule is an attachment to transport and dump up to 300 lbs. of material using a commercial walk-behind or stand-up mower.

Made by SideKick Products LLC in Millersburg, Ohio, the 12.5 cu. ft. poly tub and powder-coated steel frame attaches quickly to most mower brands. With just one or two pins, depending on the model, putting it on or taking it off is quick and easy, with no tools required.

The Mower Mule has a manual dump featuring a latching lock to keep the tub in place while driving. Landscapers and homeowners use the Mower Mule to move and dump leaves, mulch, grass, compost, firewood, sawdust, etc. It comes with a mesh leaf shield that attaches to the back to prevent debris from falling onto the muffler.

Depending on the model of mower, the Mower Mule sells for \$530 to \$640. Contact SideKick to find dealers in your area.

Contact: FARM SHOW Followup, SideKick Products LLC, 4741 State Route 557, Millersburg, Ohio 44654 (ph 833-893-3254; sales@sidekickproducts.com; www. sidekickproducts.com).

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