Eight solar panels produce 295 watts each and the outer panels can be folded for transport.

Golf Cart Converted Into Solar Tender

"I converted a golf cart into a solar-powered vegetable and plant tender," says New York nurseryman Abram Schlabach. "It's so quiet and works so well that we can hold 'business meetings' while we do our cultural care work at a consistent speed. It's like working on an assembly line." Now, he and his two brothers can work in the shade while weeding, staking, pruning, suckering, and caring for young peach trees.

Schlabach got the idea for building the cart after seeing gas engine-powered equipment at other nurseries. "I went to a local golf cart dealer and told him I wanted to buy a cart, but only needed the rear axle, motor, battery, and controls," Schlabach says. "I told him he could have the rest for parts, so I think he gave me a good deal."

Schlabach built a frame to hold the solar panels out of 8-in. by 2-in. I-beams that he scavenged from an old mobile home. Solar panels attach to a wood floor on the frame.

His total investment of just over $4,000 produced a cart that the nursery has used for 4 years, running it all summer without the need for supplemental charging.

Schlabach says each of the eight solar panels produces 295 watts of power. The outer panels fold down for easy transport. The motor on the three-wheel tender drives a single 16.5 front wheel. Steering is done by limiting switches and solenoids.

"The self-steering works well," Schlabach says. "I used a right-angle steering box and set it up to steer like an old tractor. Ninety percent of the time, it won't need any correction."

The tender is geared to drive at 0.6 mph, which Schlabach says is just right for most of the work on their 5-acre nursery. "The rig isn't designed for hills, which is fine because our nursery is on flat land, so climbing isn't an issue. A climbing tender would probably need two-wheel drive and a different self-steering system," he adds.

The tender will carry up to 1,500 lbs. and allows three to four people to work on four rows at a time while sitting or kneeling on mats. The floor is only 4 in. above the ground.

Schlabach's father started the business in upstate New York near Lake Ontario 25 years ago. Today, the three sons run the business, providing well-cared-for plants to nearby customers and, occasionally, even inventing interesting equipment.

Contact: FARM SHOW Followup, Schlabach's Nursery, 2784 Murdock Rd., Medina, N.Y. 14103.

Newly designed 8-ft., 1-cu. yard bucket with a hardened cutting edge features a separate interior metal wall that pushes out and retracts by a pair of hydraulic cylinders.

Loader Bucket Works In Tight Spaces

Indiana-based turkey farmer Rob Ryan prides himself on always trying to imagine ways to do a job quicker and more efficiently. His father, John Ryan, is often on the receiving end of some of his more unique ideas.

The Hydra Kicker loader bucket, currently manufactured by Innovative Poultry Products of Olar, S.C., was the result of one of these ideas.

"I wanted to see if we could shove manure out of our bucket into our trailer rather than dumping it," says Rob. "I told my dad about it, and a week later, he pulled out a set of drawings and diagrams of how it might work. He's blessed with a genius mind for things like that."

From there, the Ryans patented the concept and took it to Innovative Poultry Products, who turned their plans into a reality for the family farm.

Rob says speed and low roofs in their barns were the driving force behind the idea. Since they only have 3 to 5 ft. of space between the top of their dump trailer and their ceiling, water, feed, and electrical lines, emptying a normally operated bucket was a challenge.

"The Hydra Kicker works fast in our limited headroom, and I don't have to worry about tearing up anything," Rob says.

The newly designed 8-ft., 1-cu. yard bucket with a hardened cutting edge features a separate interior metal wall that pushes out and retracts by a pair of hydraulic cylinders. The unit comes equipped with a universal skid loader attachment to fit all skid steers and some tractors.

Andy Korver, IPP Marketing Representative, says all sales are completed through a network of dealers, which can be found on their website.

The Hydra Kicker is manufactured in South Carolina and retails for around $6,400 plus S&H. Korver suggests customers allow a couple of weeks of lead time for production and transport to their nearest dealer.

Contact: FARM SHOW Followup, Innovative Poultry Products, 2192 Juniper Creek Rd., Olar, S.C. 29843 (ph 803-571-3345; info@innovativepoultryproducts.com; www.innovativepoultryproducts.com).

Wiśniewski explains collection depth, stone cleanliness, innovative controls, container size, and unloading height set their machine apart from their competition.

Stone Picker Clears Fields Fast

Almost 30 percent of Poland's cropland is covered with large amounts of fieldstones, making cultivating, seeding, and harvesting difficult.

To tackle this issue, Husarya, a Polish machinery company, developed the heavy-duty, single tractor-operated SCS 100 Stone Picker, which harvests the stones as valuable sales commodities for landscapers, gardeners, builders, and construction companies.

The massive picker, with a working width of 5 1/2 m (16 1/2 ft.), features unique components, including double-sided digging and gathering rotors, a stone carrying and cleaning system, and a large collection container, all capable of operating with direction from an intuitive control panel.

PTO-driven 30.7-in diameter rotors sporting 12.2-in. teeth run in front of the unit, gathering stones from 1 to 25 in. in size up to a depth of 7.8 in. Rocks are directed to a center conveyor, and a rotating drum sieve knocks the soil from them. The drum deposits the stones into a 3-cu. meter collection tank with a tipping height of 11 1/2 ft.

All other machine operations, including depth adjustment, conveyor, cleaning drum, and unloading, are hydraulically driven and protected against excessive load damage by automatic clutches.

"Most of our stone collection machines are assembled with all possible options, creating an effective solution," says Marcin Wiśniewski, Husarya co-creator. "Customers can deduct elements such as the control panel with a hydraulic distributor, brakes, two (not four) wheels, or a row of rotors, but after subtracting these options, the machine loses some efficiency."

The SCS 100 stone pickers have been manufactured since 2018 by a family company in Poland.

They're sold throughout Europe, but Husarya lacks a current North American contractor, although they're ready to open new markets.

"We're a young company, but the products we sell have received good opinions from customers," Wiśniewski says. "This has created a rapid expansion in Europe. Now, it's time for other continents."

Wiśniewski explains collection depth, stone cleanliness, innovative controls, container size, and unloading height set their machine apart from their competition.

A fully equipped SCS 100 costs between $140,000 and $150,000 USD.

Contact: FARM SHOW Followup, Husarya, Stare Gumino 10, Dzierzaznia, Masovian Voivodeship 09-164 Poland (ph + 48 606 722 426; usarya.polska@gmail.com; www.usarya.com).

Simple Fitting Protects Water From Freezes

Freeze Miser developed a simple product to help eliminate the risk of frozen pipes and hoses.

Its thread-on protector operates like a thermostat for a water source, sensing the internal water temperature instead of the external air temperature, releasing a small amount of water when it falls below 37 F.

"A thermal wax on the inside of the Freeze Miser works together with a spring to control the release," says David Baker, Freeze Miser owner. "When the temperature drops below 37 F, the wax loses some of its volume, causing it to unseat and let water through. When the water warms above 37 F, the wax expands enough to re-seat itself."

The Freeze Miser needs to be installed on each water source, hose, or pipe with the supply valve fully opened. They require at least 10 psi and protect up to 150 ft. of hose, no matter the temperature.

Baker says customers near the Canadian border use them successfully up to -30 F.

He explains what sets his product apart from its competitors is other companies use higher activation temperatures causing increased water loss.

The Freeze Miser is produced in Kingsbury, Texas, and sells through dealers across North America for $29.95 plus S&H.

Baker says customers near the Canadian border use them successfully up to -30 F.

Contact: FARM SHOW Followup, David Baker, Freeze Miser, P.O. Box 100, Kingsbury, Texas 78638 (ph 833-302-0147; info@freezemiser.com; www.freezemiser.com).