Danczyk's e-trike uses an auger motor and three 36-volt batteries which charge from a solar panel and plug into a surge protector.



## He Built His Own Solar-Powered E-Trike

Charles Danczyk can't walk like he used to due to arthritis, so he made himself an e-trike. Not only can he get out to the mailbox more easily, but an old solar panel keeps the batteries charged.

"I bought two adult-sized trikes at a farm auction for \$5 and converted one to an e-trike," says Danczyk. "I used an auger motor and three 36-volt batteries from an old electric feed cart."

Rather than wire the motor to the batteries through an off/on switch, he used a surge protector with multiple outlets and a plug-in cable.

"To go in reverse, I just turn the plug 180 degrees," says Danczyk.

Initially, he mounted the motor behind the seat but moved it to the front to reduce the potential for flipping the trike over backward. For the same reason, he mounted a battery to each side of the seat and only one behind.

The only purchase needed was a new small pulley for the motor to reduce rpm's and increase torque. The small pulley drives a large pulley with a small sprocket to its side, also salvaged from the feed cart. No. 41 roller chain runs from it to the old pedal sprocket that he modified.

"I needed a heavy-duty drive sprocket to handle the torque and was going to buy one, but they cost a lot," says Danczyk. "I had a couple of old bike sprockets laying around, so I welded two together. I had to be careful, so I didn't warp them by overheating."

To further reduce speed, Danczyk mounted a small sprocket on the side of the drive sprocket. No. 41 roller chain runs from it to the rear axle.

Danczyk replaced the original seat with an old chair he had laying around. "It is more comfortable, and the way I mounted it, it lets me lean into a curve," he says.



Danczyk uses a 14 by 25-in. solar panel to charge the three 36-volt batteries that power his e-trike.

With the combination of pulleys and sprockets, Danczyk slowed the e-trike's speed to a little more than walking speed. For high speed, he uses power from three batteries. Cutting back to two batteries drops the e-trike into a lower speed.

Danczyk had originally purchased his 14 by 25-in. solar panel to keep tractor batteries charged. It has proven more than sufficient for the e-trike.

"It's like finding free gas," he says.

With a total investment of only \$12, Danczyk's e-trike is better than free gas. "A new electric trike would have cost me around \$30,000," he says. "My idea was to see how cheaply I could make it."

Contact: FARM SHOW Followup, Charles Danczyk, Box 159727 Cty. Rd. C, Mosinee, Wis. 54455 (ph 715-693-4386).

## Many Uses For T-Post Platform

Iowa inventor and engineer Charles Aldrich created a T-Post platform designed to mount on top of metal T-posts. The platform makes it possible to securely attach sprinklers, birdhouses, birdfeeders, outdoor lights, cameras, solar panels and more to the top of a post.

"I came up with the design because my brother has a garden with a sprinkler which watered sideways, so he wanted to raise the sprinkler," explains Aldrich. "He had a fence to keep out the rabbits with T-Post fence posts, so I designed a platform that could hold the sprinkler as well as lots of other items."

This platform is made from durable powder-coated sheet steel and should withstand the elements for years. It measures 4 by 4 in., with 5/16 holes in the corners and center that will accommodate 1/4-in. bolts, screws, hooks, wires and rope to secure it to the top of your post.

The T-Post platform sells for \$14.95. It's available for purchase from Amazon and Walmart, as well as through Aldrich's website.



Platform mounts on top of a standard Tpost to hold lights, bird houses, cameras, and more.

Contact: FARM SHOW Followup, Aldrich Engineer, 202 7th Ave. SE Clarion, Iowa 50525 (ph 256-620-8021; www. aldrichengineer.com).

## **Easy-On Shoe Spikes Stop Slips**

When Keith Michalak saw his daughter-inlaw putting screws in her running shoes, he knew there was a better way. With the help of a brother-in-law who was an engineer, he designed a shoe spike that works. In a little more than 10 years, he has sold his Icespikes throughout Canada and as far afield as the U.K. and Ireland. Michalak reports that the entire National Hockey League uses Icespikes.

"We have 400 traveling nurses in Canada using our spikes," says Michalak. "They reduced their worker's compensation claims by 60 percent last year. They are just an allaround good product, whether used in waders and mud boots or running and hiking shoes."

The low-profile spikes make it easy to drive or run machinery while wearing them. Icespikes are designed to be installed on the outside edge of shoes or boots. As a result, while the spike goes into the ice or snowpack, the boot or shoe provides the rest of the traction.

"Installing on the edges keeps the foot from slipping in any direction," says Michalak. "We sell a lot to farmers who are in and out of barns and other slippery areas."

The spikes themselves are small, only 3/8in. (9.5mm) long in the shoe version or 1/2-in. (13mm) long in the boot version.

"The 1/2-in. size is only one more thread entering the boot, but it gives Icespikes an extra bite in heavier soled boots and shoes," says Michalak. "Remove them from a shoe or boot and the hole quickly closes up. After 5 min., you can't see where it was."

Both sizes of Icespikes are priced at \$29.99 for 32 spikes and an installation tool. Without the tool, the price drops to \$19.99. They are



Icespikes thread into the sole of a shoe or boot to provide traction and can easily be removed.

available at more than 125 stores in Canada as well as online.

"We don't have as many stores in the U.S., but online you'll have your product within 3 days or so."

Michalak emphasizes that Icespikes are not just for winter. They provide control and stability in all types of inconsistent conditions, from water, mud and muck to root-bound and uneven terrain, as well as slimy leaf debris and mossy surfaces.

Contact: FARM SHOW Followup, Icespike, 56 Robbe Farm Rd., Peterborough, N.H. 03458 (ph 877-677-3567; info@ icespike.com; www.icespike.com).

## Fly Monster Makes Quick Work Of Pests

The Fly Monster pest catcher combines a galvanized stainless-steel net with a UVprotected poly housing. It's equally effective indoors or out.

You can hang the flycatcher almost anywhere or stand it on the ground on its legs.

Captured flies - up to 300,000 per trap - stay separate from the bait to avoid unpleasant odors. Emptying the trap is a quick and easy process - just tip it over a trash can.

Shield suggests using the included fly bait, which is proven to attract all kinds of flying insects for up to three weeks after application. The bait dissolves and activates when mixed with 1 gal. of water, instantly drawing flies in. Each 125-gram bait bag is eco-friendly and made from a non-toxic, pesticide-free blend of food and feed additives.

You can buy the Fly Monster and refill bait directly from Shield or other retailers for about \$85. It measures 20 7/8 in. by 14 1/2 in.

Contact: FARM SHOW Followup, Last Shield, 303 Merrick Road Suite 201, Lynbrook N.Y. 11563 (ph 516-234-6899; sales@last-shield.com; www.last-shield-usa. com).



Fly Monster can trap as many as 300,000 flies at a time using eco-friendly bait mixed with water and works indoors or outdoors.



We've rescanned all the back issues of FARM SHOW. They're all available at our website and on our DVD-Rom or USB, along with a comprehensive database of the more than 35,000 "made it myself" ideas we've featured over the past 45 years. Go to www.farmshow.com and check them out!