John Tikalsky and his son Mike invented the Burrow Blocker to close dangerous ground squirrel holes in their horse pasture.

“Burrow Blocker” Fills Gopher Tunnels With Sand

If you’ve got a problem with ground squirrels, gophers or other tunnel rodents, John and Mike Tikalsky have a solution. In 2011, this father and son duo invented a device they call the Burrow Blocker. It doesn’t use chemicals or explosives so it won’t endanger humans or other animals. A Burrow Blocker fills ground squirrel tunnels with a slurry of sand and water, burying the troublesome animals and their food supply at the same time.

The Tikalskys came up with the clever machine because ground squirrels were wreaking havoc on their horse pasture, creating a dangerous series of holes. John says he didn’t want to trap, poison or shoot the pesky rodents. Trapping was totally ineffective, as was chewing gum, dog hair, coyote urine and other “home” remedies. As he and his son pondered the problem one evening, they thought about pumping a slurry of sand and water into the holes. The water would seep into the ground and the sand would fill the holes, tunnels and burrows, eliminating the runs that could easily become territory for future pests.

John and Mike built a pump system that mixes water with sand and pumps it into the holes. The sand is stored in a gravity flow tank that holds about 1,000 lbs. Water is stored in a 450-gal. tank. The pump mixes sand and water and can fill a typical burrow in only a couple minutes.

After success with the prototype Burrow Blocker on their own ranch, the Tikalskys decided to market the product. Within a few months, they learned that sports fields and orchards had a similar need for ground squirrel control.

In Lakeport County, a ranch with walnuts and grapevines was being overrun with ground squirrels. “They were eating roots under the trees, green nuts in the trees and were being overtaken by those pests and had chewed the bark on grapevines,” says Lakeport Farms owner Peter Breen. “We were being overtaken by those pests and had tried everything we could think of before we found the Burrow Blocker.” They tested the machine, bought it on the spot and within a few weeks had eliminated 95 percent of the burrows.

The Burrow Blocker, which has a patent pending, is also used in military housing facilities, airports, schools, shopping centers and housing developments. Mike says the Burrow Blocker is a good money-making opportunity for a company that wants to use the machine to offer a pest control service. It costs just under $17,000, and an additional slurry tank adds $880 to the price. The company is developing a larger model that will be available sometime in 2013.

Contact: FARM SHOW Followup, Burrow Blocker, c/o Amerigreen Technology, Inc., P.O. Box 1540, Discovery Bay, Calif. 94505 (ph 925 634-9204; info@burrowblocker.com; www.burrowblocker.com).

Emptying his combine’s fuel tank at season’s end is a breeze for Jim Martin. He accidentally discovered that his field supply tank’s fuel pump can move fuel in or out of tanks.

“The first time it happened, I couldn’t figure out why the fuel wasn’t pumping into the tractor’s fuel tank,” says Martin. “I went over to check the supply tank and, as I approached, the cap blew off, and gas flew into the air.”

What Martin discovered was that the battery cables to the 12-volt pump had been switched so the polarity was reversed. Air was being pumped into the fuel tank, pressurizing it until the cap blew.

Since then, Martin has put the information to work, emptying fuel tanks. When selling a dozer with 70 gal. of diesel in it and a tractor with 80 gal., he was able to remove excess fuel. He pumps out a 275-gal. home heating fuel oil tank the same way.

12-Volt Fuel Pump Used To Empty Fuel Tanks

“I insert the hose to the bottom and then pull it up to 8 in. to avoid emptying out the water and sludge that can build up in a fuel tank over time,” says Martin. “If it’s going into an expensive tractor, I run it through a filter first. I also remove the fill cap on the tank. I am pumping into. That prevents pressure build up and lets me see when the tank is full.”

Martin says the two-way fuel pump was especially helpful in the field when one tractor is running out of fuel and another has plenty in it.

“When doing an emergency fill or emptying out a tank, it’s a lot easier than draining a fuel line into 5-gal. fuel cans,” says Martin.

Contact: FARM SHOW Followup, Jim Martin, 6095 Old Hanover Rd., Spring Grove, Penn. 17362 (ph 717 225-4511).

LeRoy Momper put together this small sprayer using a 55-gal. plastic barrel mounted on a trailer. Boomless spray nozzle at the rear sprays a 16-ft. wide pattern.

“Made It Myself” 55-Gal. Sprayer

When LeRoy Momper needed a small sprayer, he decided to try to put together something on his own.

“I checked the price on a 55-gal. sprayer at a local store. It was about $800. I decided I could build my own better and cheaper,” he says.

He used a 55-gal. plastic barrel mounted on a trailer that he built from pieces of scrap tubing, adding wheels from an old garden tractor that he already had. The 3/4-in. boomless spray nozzle at the rear sprays a 16-ft. wide pattern. The system is operated by a 12-volt pump that runs off the tractor battery and is wired to a toggle switch mounted on the dash.

He got the barrel from a local DeLaval dealer and installed an elbow-shaped PVC fitting at one end for filling. “I use it to apply Roundup before I plant my food plots and also to apply liquid fertilizer,” says Momper. “The boomless nozzle on back sprays a perfect 16-ft. wide pattern. I like it because there are no booms sticking out the sides that can catch on objects. The sprayer is well balanced, so I can easily move it around by hand even when the barrel is full.”

He used two 3/4 by 5-in. grade 8 bolts to make stub axles for each wheel, welding the bolts onto a metal frame that supports the trailer’s plywood floor. The barrell is strapped to metal brackets bolted onto both sides of the floor.

“Almost all purchased was the pump, a spray wand with 15 ft. of hose, and some fittings. My total cost was about $110,” says Momper.

Contact: FARM SHOW Followup, LeRoy Momper, 215 Lawrence St., Fredonia, Wis. 53021 (ph 262 692-2093; leemary66@gmail.com).

Spectrum Premium Genetics is investing in and promoting non-GMO corn hybrids.

Wisconsin, Minnesota and upper Michigan. Ceranse says regional companies like Legacy offer customers more variety than the big seed companies. Legacy has the only independent alfalfa breeding program in the country and works with 6 or 7 different breeding programs in other crops. They select the most competitive products for the area and then test them in more than 100 test plots in the geographic areas where they will be sold.

“We have 100 seed corn hybrids in the 95 day and under maturity,” says Ceranse. “The large companies are limited to their own breeding and may have half a dozen. They’ve walked away from a lot of these regional markets.”

Contact: FARM SHOW Followup, Legacy Seeds, Inc., 290 Depot St., P.O. Box 68, Scandinavia, Wis. 54977 (ph 715 467-2555; toll free 866 791-6390; www.legacyseeds.com).

Farmer Seed Companies Serve “Forgotten” Markets

The goal of two new farmer-founded seed companies is to provide a viable alternative to the big mega seed companies.

Spectrum Premium Genetics

Scott Odle helped found Spectrum Premium Genetics, Linden, Ind., several years ago.

“We’ve been told by the big companies that GMO’s are yield enhancing, but they’re not. They’re yield protecting,” says Odle, who still plants some GMO seed on his own farm.

“If you don’t have corn rootworm and corn borer, why pay for the traits? If you’re using conventional insecticides and herbicides, why not use conventional corn for $40 to $60 less per acre?”

Odle says Spectrum is doing what the big companies aren’t doing, investing in and promoting non-GMO corn hybrids. The company works with other seed corn companies, identifying top conventional lines and independent breeders.

“For the little amount of breeding that has gone into the conventional market, they are still very competitive with GMO’s,” he says. Odle estimates that about 9 percent of the current seed corn market is planted to non-GMO hybrids. He predicts it will be 20 percent in 5 years. That growth will keep Spectrum growing as well.

Contact: FARM SHOW Followup, Spectrum Premium Genetics, 220 S. Main St., P.O. Box 7, Linden, Ind. 47955 (ph 886 400-9468; www.spectrumseed.com).

Legacy Seeds

Bruce Ceranse helped found Legacy Seeds, Scandinavia, Wis., with varieties and hybrids selected for the northern two thirds of the country and works with 6 or 7 different breeding programs in other crops.

“We have 100 seed corn hybrids in the 95 day and under maturity,” says Ceranse. “The large companies are limited to their own breeding and may have half a dozen. They’ve walked away from a lot of these regional markets.”

Contact: FARM SHOW Followup, Legacy Seeds, Inc., 290 Depot St., P.O. Box 68, Scandinavia, Wis. 54977 (ph 715 467-2555; toll free 866 791-6390; www.legacyseeds.com).