

Original Griphook has a soft foam handle and can carry anything, from a tire and rim to grocery bags.



These Hooks Make Handling Loads Easier

Rich Passarelli had a paper route back in the winter of 1982.

"During a blizzard, I was holding a trash bag full of newspapers for my route, and I wished I had a handle to make carrying all those papers easier."

As the architect of the Griphook family of products, Rich developed the current version of the Original Buckethook in 2006.

"We took this to a stock show, and people couldn't get enough of them. I was working full-time for FedEx and didn't have the time to fully make or market them. We now have new sizes and styles and are bringing them back to help everyone from families to farmers and ranchers," says Passarelli.

The Original Griphook is great for carrying several bags and other items, like a gallon jug. It has a soft foam handle that makes carrying easier and more comfortable. It can hold a tire and rim or even two twelve-packs of cans.

The Prohook (Gancho) can carry two fully loaded 5-gal. buckets or up to three potted plants at once.

The Buckethook holds a 5-gal. bucket on a rail or stable, preventing water, feed or anything else inside from spilling.

The Growhook can carry and hang potted plants on the same device. It holds a 5-gal.



Ultimate Gancho is a larger version of the Prohook and can carry up to an 80 lb. bale of alfalfa or hay.

potted plant out of the reach of squirrels and other pests that dig up freshly potted plants. Its solid steel design and soft foam grip help you carry more.

The Ultimate Gancho is a larger version of the Prohook and can carry up to an 80 lb. bale of alfalfa or hay.

Made in the U.S.A., Griphook products are available on the company's website for about \$15. Orders over \$50 ship free.

Contact: FARM SHOW Followup, Griphook (ph 720-327-7629 rich@griphook.com; www.griphook.com).

Kit Preserves In-Ground Posts

Ken McDonnell has been making in-ground posts last longer for 28 years. He credits a customer for inspiring him to start. McDonnell had just transitioned from home construction sales to pole barns.

"A customer asked me how long the in-ground posts would last," says McDonnell. "I didn't know, so I started looking for people who did."

He didn't settle for what the post vendors told him. Instead, he consulted researchers at the Drexel University Geosynthetics Institute and the Mississippi State University College of Forest Resources.

The people at Drexel explained how different soil types, moisture, concrete and, in livestock applications, animal waste impact posts after contact. McDonnell learned that it's soil organisms feeding on the wood, not moisture, that causes decay.

He also learned about the chemical preservatives that were used.

"They prescribed the material that is our Post Protector," says McDonnell. "It's a product barrier, a physical barrier against wood-destroying organisms."

McDonnell says MSU Forest Resources were at the forefront of decay protection.

"They educated me on how decay occurs and how to stop and prevent it," he adds.

McDonnell developed his post wall



Post Protector provides a physical barrier against wood-destroying organisms.

protector and skirt-board. It's made from the same material used in landfill liners and claims a 449-year lifespan for geo applications.

"You don't want soil contact or exposure to the environment," says McDonnell.

"The wood-destroying organisms are in the atmosphere, too. That's why posts sticking out of concrete will fail at grade level. That's where the moisture is."

McDonnell explains that decay needs

Researchers Transform Ag Waste Into Clothing

A Swedish university is making progress in turning agricultural waste into cellulose textiles. Currently, cellulose-based textiles come from wood pulp, but a study by researchers from Chalmers University of Technology highlights the potential of using agricultural waste from wheat and oats for the same final product. Not only does processing agricultural byproducts require fewer chemicals than forest-based cellulose, but it also uses material that would otherwise go to waste.

The team tested oat husks, wheat straw, potato pulp and sugar beet pulp, finding that oat and wheat are most effective for developing a dissolving pulp for clothing.

"We define dissolving pulp as a pulp that is produced to make textile fibers," says Diana Bernin, Associate Professor of Chemical Engineering at Chalmers University of Technology. "It has, for example, a different purity compared to the pulp that paper is made from."

The team uses soda pulping as part of the process, which involves boiling the raw material in lye. Lye doesn't contain toxins or substances that impact nature.

"Cellulose, the main part of textile fibers, needs to be separated from other components," Bernin says. "Lignin and hemicelluloses are examples from agricultural waste. This is done by pulping. There are different processes to pulp, for example, wood or other cellulose-based wastes."

Several other agricultural waste products can likely be used for textile production with this method.



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"As for which plants have the most potential, I don't have a good answer," Bernin says. "We've seen that soda-pulping seems to work well for pressed grass. There are many more agricultural wastes to try and many process variables that need to be optimized."

Still, the team sees good potential in using the pulp and paper industry, which already has technology in place, to make dissolving pulp from agricultural waste.

"I believe agricultural waste has great potential to increase in value if it can be used for textile production," Bernin says. "It would be lovely if customers could choose textiles produced from waste instead of a virgin material like trees."

Contact: FARM SHOW Followup, Diana Bernin, Associate Professor, Chemical Engineering, Chalmers University of Technology, 412 96 Gothenburg, Sweden (diana.bernin@chalmers.se).

oxygen, moisture and organisms.

"At grade is where the moisture is and where the organisms attack," he says. "Decay happens from at grade level to 18 in. in the ground because that's where the oxygen is. The deeper you go, you starve the organisms of oxygen."

While the Post Protector is designed for 4-ft. embedments, if the hole is deeper, he recommends cutting away the bottom of the Post Protector and sliding it up the post to ensure the top edge is about 4 in. above the finished floor grade.

The goal of the Post Protector is to create a barrier that prevents organisms from entering, spanning from the bottom of the post hole to the finished floor grade. It can be backfilled with soil, concrete or stone. Horizontal perimeter ribs on the protector, along with the provided hardware, also offer uplift protection. Holes drilled in the fabric help eliminate moisture.

Chemical preservatives in treated posts are pesticides. They're toxic to wood-decaying organisms. Over time, they leach out and lose their effectiveness. McDonnell explains that the Post Protector helps keep the chemicals in the posts.

For existing in-ground posts installed without a Post Protector, McDonnell offers a preservative life extender. He got the idea when watching a crew dig around a utility pole. When he asked them what they were doing, they explained that they re-treat utility poles every six to 10 years to replenish the pesticide levels in the posts.

The manufacturer of the product had been distributing it to the utility industry for 30 years, but never to the retail market. McDonnell negotiated the rights to that market and launched Post ProServative.

"It's a simple way to renew the chemical barrier to the wood-decaying organisms," says McDonnell. "It's a solid, copper-boron stick. Simply drill a 4-in. deep hole into the post at a 45-degree angle at ground level and



Made from the same material used in landfill liners, Post Protector claims a 449-year lifespan.

slide in the stick."

He explains that when the post reaches 25% moisture, the copper-boron dissolves and the liquid disperses throughout the wood fibers wherever a void exists. The more moisture there is, the farther the solution can reach.

"About every 10 years, you simply drill out the old stick and insert a new one," says McDonnell.

Post Protector is available in various sizes and shapes for residential, post-frame and grade guard applications. A skirt-board protector can also be purchased. Prices differ based on post size and the level of protection needed.

Post Protector and Post ProServative are available online from Tractor Supply, Lowe's and Home Depot. A 6 by 6 by 42-in. Post Protector costs \$35.99 at Tractor Supply. A 24-piece kit of Post ProServative sticks and caps is \$80.99 at Tractor Supply.

Contact: FARM SHOW Followup, Post Protector, P.O. Box 187, Pottsville, Penn. 17901 (ph 570-624-7030 or 877-966-8768; sales@postprotector.com; www.postprotector.com).