

CIVIL EATS



Farm Tools for Women, by Women

Green Heron Tools makes ergonomic shovels and other tools designed to reduce injuries and make farming more efficient for all women.

By [Stephanie Anderson Witmer](#) on [April 5, 2016](#)

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When Ann Adams and Liz Brensinger started a small heirloom vegetable farm in the early 1990s, they called their new venture Green Heron Farms, after the birds that nested in a copse of trees on their property in New Tripoli, Pennsylvania. The name would turn out to be a form of kismet, as green herons are some of the few [birds that use tools](#). Adams and Brensinger, with their backgrounds in nursing and public health, soon learned an important, albeit painful, lesson: Most of the farm tools they used often had been designed for men.

For starters, women are usually several inches shorter than men. Shovels and forks are often too long and require a great deal of upper-body strength to work effectively. And pruning shears don't often fit smaller hands. When women farmers and gardeners have to stoop, bend, or wrench their bodies just to use a tool, they can get hurt.

The link between tools and injury was apparent, says Brensinger, who has a master's degree in public health. "We knew that a tool should fit you," she says. "We made some connections that other tool companies hadn't made. Then we realized there's this huge niche that nobody's trying to fill in any kind of serious way."

Adams and Brensinger originally thought they'd create an online marketplace of farm tools and equipment made just for women. But they soon found that there weren't any. And there were no tools that were using true ergonomics backed by science.

"There are certainly companies making women's gloves, and there are some companies making what they call 'ladies' tools,'" says Brensinger. "In the worst-case scenario, they're pink, crappy, flimsy tools."

"Insulting tools," Adams adds.

Not content to just "make do," as Adams puts it, the two women decided to design their own tools, and Green Heron Farms evolved into [Green Heron Tools](#). In 2009, Adams and Brensinger were awarded an \$80,000 Phase I [Small Business Innovation Research](#) grant from the U.S. Department of Agriculture (USDA). Working with a team of engineers from the Pennsylvania State University, they researched and designed ergonomic tools to help make farming safer, healthier, and more productive for women. They've since received two more USDA grants, totaling nearly half a million dollars.

Green Heron Tools released their first tool, the [HERShovel](#), in 2011. The shovel-spade hybrid features a patented D-shaped grip, angled blade, and wide step. It's lighter in weight than most shovels and comes in three sizes to accommodate differing heights. Last year, they introduced the [HERSpadingfork](#), with the same ergonomic innovations as the shovel. Next on the docket is the patent-pending, battery-powered tiller, which Adams and Brensinger are hoping to license to a manufacturer interested in bringing it to market. They've also recently completed researching the needs of nearly 300 women livestock farmers, which could result in more products.

Aaron Yoder, who has a PhD in agricultural and biological engineering, worked as a member of Green Heron's Penn State design team. Yoder, who now teaches at the

University of Nebraska, focused his doctoral research on ergonomic tools and machinery for farmers with disabilities, and recognized Green Heron's scientific design approach as unique.

“Oftentimes, very little, if any, ergonomically-related research is conducted in the design of hand tools,” he says. “Most of the tools on the market have evolved over time with little thought put into the safety and health of the worker.”

Adams and Brensinger see what they do, in part, as a form of social justice. “Lots of women farmers want to farm alone,” Adams says. “They’re not married, they don’t have a support system right there. It was very obvious that women were at a disadvantage [when it came to tools].”

Liz Wagner runs [Crooked Row Farm](#) in New Tripoli with her mother, Donna Wagner. Donna bought a HERShovel before they even broke ground on their 3.5-acre farm after meeting Adams and Brensinger. Until then, Liz said, she had no idea any woman-specific farming tools existed—or that they’d be useful.

“Before, a shovel was a shovel, with a handle that was usually too tall for me to use with any real dexterity and a blade that often cut into the soles of my shoes over time as I dug,” says Liz.

She adds: “I’ve met people who feel like using a different tool expresses weakness, and I think when I first moved into this field, I felt similarly. It’s an ego thing, [but] not realistic when you look at the science and see the differences in our body structure.”

“The HERShovel has completely changed the way I use this type of tool,” says Danielle Marvit, a former organic grower and herdsman, who is currently the production manager for [Garden Dreams Urban Farm & Nursery](#) in Pittsburgh. “It has been great for my body, and it is the most efficient shovel I have ever used.”

Marvit also uses other tools sold on Green Heron's website, where they sell products from other companies that may not be explicitly made for women but still work well. Even though the new tools haven't eliminated her chronic knee, back, neck, and wrist pain—thanks to years of repetitive movements and stress—Marvit hasn't had any new injuries since making the shift. Adams and Brensinger taught her that caring for her body is as important as caring for her crops.

“I always wanted to get my job done quickly and efficiently, but I sacrificed my body in the process,” says Marvit. “Tools are meant to assist you in performing a task. They shouldn’t hurt you, and if they do, you are not using them correctly or they are not designed well.”