In rural New Tripoli, Pennsylvania, there’s a quiet revolution underway. It is led by two women who, tired of the status quo, said “enough.” The weapon of resistance is a garden shovel. But the war isn’t against The Man. The war is against The Man’s tools.

The leaders of the movement are Ann Adams, a nurse, and Liz Brensinger, a public health educator. When they couldn’t find garden tools designed for women, they invented one. It is a combination garden spade/shovel called the HERShovel™.

It all began in 2008. Adams and Brensinger had been moonlighting as market gardeners for 13 years. Both knew the principles of ergonomics and recognized that most gardening tools weren’t designed to accommodate their bodies. They were inefficient, and using them caused pain. The tools were big, designed for tall people with wide shoulders and big hands. In short, they were sized for men.

So Brensinger and Adams founded Green Heron Tools, an online store that would offer products scaled to the female body. But when they looked for tools to stock, they didn’t find any designed specifically for women. Those marketed “for women” were either shorter versions of large tools, or worse, merely painted a condescending shade of pink.

The pair saw an unmet need. They asked female farmers and gardeners the tool they’d most like to see redesigned. The answer was the shovel.

How hard could it be to redesign a shovel? What followed was years of research and testing, supported by a grant from the U.S. Department of Agriculture. “The complexity of making a tool from scratch is mind-boggling,” Brensinger says.

First they had to identify how a female body moves when shoveling: which muscles work hardest, which are weaker, which are vulnerable to injury. The goal was a shovel that would capitalize on lower-body strength and relieve pressure and strain in weaker areas, such as the upper body and hands.

The result is a shovel with a large step on the blade so women can use the full power of their lower bodies to drive the blade into the ground. The handle has an ergonomic, oversized D-grip for greater control and hand comfort. The shovel comes in three sizes and is made entirely in the United States, mostly in Pennsylvania. The blades are made of recycled steel, and the ash handles are harvested sustainably from Appalachian hardwood forests.

In 2011, the HERShovel™ — the pair held a contest to decide the name — debuted. “The response from women has been fantastic,” Adams says. “Some days we wonder: Why do we do this? Then someone writes, ‘We love it, my husband even uses it.’”

With thousands of shovels sold, customers are now requesting a women’s digging fork. But Brensinger and Adams must first finish another USDA-supported project: designing a substitute for the walk-behind rototiller, a machine women farmers say is frustrating to use.

In 2012, Green Heron Tools was awarded a $12,500 grant for women entrepreneurs from the clothing company Eileen Fisher. It allowed them to complete the patent application for the tiller, which they expect to be available for sale in 2014.