

Winding Stair Mill

By Greg Mullins

If you were to hike North-bound on the Appalachian Trail, after 109 miles you would reach Winding Stair Gap just outside Franklin, North Carolina. It is here where Stacy Bredendieck and I purchased a former campground intended for “thru-hikers” and converted it into Winding Stair Farm & Nursery and, now, Mill. It is rare these days to see a water-powered stone-burr grist mill built from the ground up, but this was our dream. After two years of negotiations with the local, state, and federal authorities, Stacy and I were granted permission to pull water from Trough Branch, a tributary to the Nantahala River. In exchange, they would build a fish ladder to raise the stream level to allow migrating fish and other marine life passage through road culverts, which were previously a dead end.

The next challenge was: where do you find expertise on water wheels and grist mills? As two novice grist mill enthusiasts our basic research led us to **The Water-**

wheel Factory, which was fortuitously right there in Franklin. After review of the site and available resources, Robert Vitale helped us with a wonderful wheel design and manufactured the 18-ft diameter metal wheel. Robert also referred us to John Lovett of **Falls Mill** and the **Museum of Power and Industry**. After a quick



introductory call, we knew we had found the person to help us raise the mill. John introduced us to SPOOM and all the organization's resources. We joined last year and attended the 2019 conference in Dalton, GA. Little did we know that John is one of the nation's premier experts on Mills. The deal was sealed after a wonderful visit to John's and his wife, Janie's museum. Stacy and I are still in awe that we had the luck and opportunity to have found John.

The building design started with the cantilever beam roof-- an inspiration from buildings in the area from pioneers of the past. The extended roof perimeter would provide shelter for the family's livestock without support posts. This way potential damage to the roof structure is eliminated if a support was pushed over. I fell in love with the design and decided to incorporate it in the mill design during the mill planning phase. More than 50% of the timber used in the construction were felled and milled on site. Various pulleys and gear sets were acquired over time as we were advised of their existence from word of mouth or internet searching.

Grain is delivered to the mill loading dock and then hoisted to the third floor and deposited in the specific grain bin. Gravity then delivers grain to the appropriate stone mill for processing. The 18-foot water wheel powers three stone-burr mills: a 24" Williams, a 16" Meadows

and a 12" Straub along with the building's belt-driven ceiling fans. The mill produces animal feed, wheat flour, grits, and cornmeal. Eventually, the couple plans to sell these products commercially, as well as to donate them to the local food bank pantry, Macon CareNet.

The idea of building the mill blended perfectly with our established farm and nursery. In the beginning, after purchase of the former campground, Stacy and I used the property for extended weekend trips. We had dreams of a small garden, maybe some chickens, but since we didn't live at the property full time there was little we could maintain. We started with bees.

Within a year we had chickens (in the campground bathhouse) and then our first sheep (on the septic field).

The original campground property is 10 acres; however, most of it is terraced with tree cover for the previous campsites and RV hook-ups which presented a problem when wanting to start a garden. In 2013, Stacy and I were able to purchase five adjacent acres of relatively flat ground. After more than a year of clearing the overgrown property we planted the first garden on what was to become Winding Stair Farm.

Greg and Stacy still thought of the farm as a way to

Waterford Foundation Mill Equipment Available for FREE!

Located in Waterford, VA

Item 1: Three Wolf, four roller stands 14" x 6" dia. rolls. First Break with Columbia Feed governor.

Item 2: One small Feed mixer for rolling system.

Item 3: One Bowsher Roller speed indicator with guide pulleys.

Item 4: One set Fairbanks Semi automatic scales, with supply hopper, spouts and controls.

Item 5: One Wolf, drop gear Barrel packer.

Item 6: One Wolf, Plansifter. Partially complete and in poor condition.

Item 7: One Eureka Receiving Separator. Complete with two fans and exhaust trunking.

Item 8: One Wolf Patented Intereleating Flour Dresser and item is complete.

Item 9: One S. Howes, Wheat Scourer and Cleaner with metal exhaust trunking.

Item 10: One set of elevator legs & heads for roller system and the incoming elevators, including heads.

Examples of Some Equipment that's Available!



Must be Willing to Arrange and Assist with Removal
Most Items are in Very Good Condition!

For More Info Please Email Paul McCray:
pmccray@waterfordfoundation.org



sustain themselves until, over time, an opportunity arose to transform the little farm into a sustainable business. The growth of the local food movement in both direct retail and restaurants created a market for the food they were already growing.

The company expanded even more when they discovered that the former Spring Valley Nursery, in Franklin,

was available to purchase. In November 2017, they became Winding Stair Farm and Nursery. The Nursery had a wonderful welcoming opening day in March of 2018.

"We've received tremendous approval from the residents, as well as from visiting shoppers. We've found ourselves a large base of landscapers who plan their gardening projects around the diverse inventory that we provide."

Last year they opened a Farm Shop at the Nursery, to sell farm produce, as well as spring and fall vegetable starts, and very soon, their grain products as well.

