

This Old Mill

by Judy Grove, Chairperson of the Wallace-Cross Mill Friends

Old mills, like old houses, tend to show their age. Regular inspection and maintenance are required to prevent extensive repairs. A qualified mill inspector needs specialized training due to the unique structure and machinery involved. For that reason, Ben Hassett, a millwright with expertise in both windmill and watermill repair and restoration, was recently contacted to provide the initial assessment and also to prepare a maintenance manual for Wallace-Cross Mill so that the building and equipment can be maintained in working order for future generations.

Wallace-Cross Mill, located along the banks of Rambo Run, has survived nearly intact for almost 200 years. The mill ground grain for local customers from the 1820s to 1980s and, following restoration, has been open to visitors as a museum since 1999. Only minimal maintenance has been completed since then.

In his assessment, Ben identified sections of woodwork deteriorated by age, standing water and boring beetle activity. These include wall sills, window frames, waterwheel bearing block, and support beams for the vertical drive shaft. All gears and machinery require alignment and a program of regular lubrication with the appropriate “recipe” based on the location and use of the moving parts. A few gears need to be repaired or replaced. The 12-year old water pump is in need of rebuilding by the manufacturer and seasonal maintenance in the future. Both the vertical stones in the Lieberknecht portable mill and the main horizontal millstones require adjustments and sharpening to maximize productivity.

Ben’s advice is to save as much of the original construction as possible, replacing only what has to be using original techniques and materials whenever practical. Following his recommendations, the parks maintenance staff has begun work to repair the mill structure. A certified millwright will complete the remaining mechanical work in the near future



Ben Hassett, millwright from Lynchburg VA



The master gear train which transfers power from the water wheel to the interior mill machinery can now be viewed from the basement door.