

Spanning the Gap

ART AND ARCHITECTURE

A Village Mill

by Park Ranger Rab Cika



Not since Abraham Garris built the first mill here in 1832 has there been so much excitement in Millbrook. Having been without a mill for more than half a century, the village is now seeing

construction of a replacement at long last underway.

Armed with broad-axe and chisels, employees of the recreation are, together with volunteers from the Millbrook Village Society, are busy hewing timber beams the old-fashioned way -- through hard work and sweat. They have labored through the dog-day afternoons of late summer and into early fall in preparation for the approaching mill-raising.

Though historic artifacts prove that settlers even harnessed dogs to treadmills in order to churn butter and turn fireplace spits, dogs may be the only source of power that these industrious mill-builders have **not** yet tapped! Horsepower was used during this past winter to carry out logs from otherwise inaccessible wooded areas. And, if truth be known, gasoline driven machinery, too, has played a part in the reconstruction project.



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(Above) and (Left) In front of the mill at Millbrook Days, October 2002.

But when all is said and done, it will be the efforts of a strong few that deserve most of the credit for this reconstruction. The new building will utilize some recycled construction framing members from a mill which once stood in Bartonsville, Pennsylvania, and which was donated to the recreation area prior to its demolition several years ago.

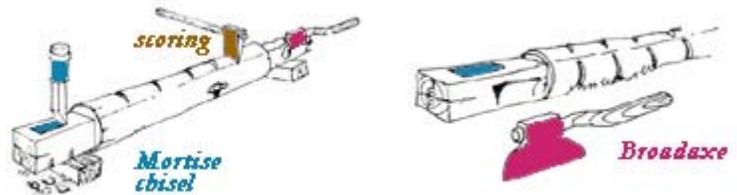
The new mill at Millbrook Village will use period construction techniques typical for structures like the original 1832 Garris grist mill, the nucleus around which the village formed in the 19th century. The buildings components -- from foundation to roof timbers -- will work together to form a sound and functional whole.

Something old, something new ... the mill combines craftsmanship of both past and present to fill a critical gap in Millbrook's inventory of buildings, and in the illustration of this village's way of life.



(Above) The mill in early 2002.

(Below) *Brown: An axe scores the beam. Red: A broad axe squares the timber. Blue: A mortise chisel forms the mortise. Green: A mortise axe forms the tenon. Yellow: A tree nail joins the mortise and tenon.* (NPS sketches by Rab Cika)



(Left) **How a log becomes a beam**

Construction will be of traditional *post and beam* (barn) framing with timbers that were hewed from logs according to standard 1800's practice, and using typical tools of the day.



The frame members will have *mortise & tenon* joints and be fastened with *tree nails* (pronounced, and sometimes spelled, TREN-nels), as were the originals.

GLOSSARY OF TRADITIONAL TOOLS

(from *Spanning the Gap* Spring 1991)

Broad axe: An axe with a wide, flat head and a short handle used in squaring logs.

Mortise: A cutout in a log or beam made to receive the tenon of another to which it is to be joined.

Post and beam framing: A type of framing in which horizontal members rest on a post.

Tenon: A projection in a log or beam made to fit into the mortise of another to form a joint.



Adze: An axe-like tool with an arched blade used to dress timbers.



(Far left) Summer 1992: the "villagers" aided move a log into place for the mill.

(Left) Millbrook Days, October 2002: guided by a "villager", a visitor tries her hand on a sample beam outside the new mill.



(Left, below) The millstone is moved inside, August of 2000.

Editor's note: The mill building has since been completed; the interior is still being worked on.