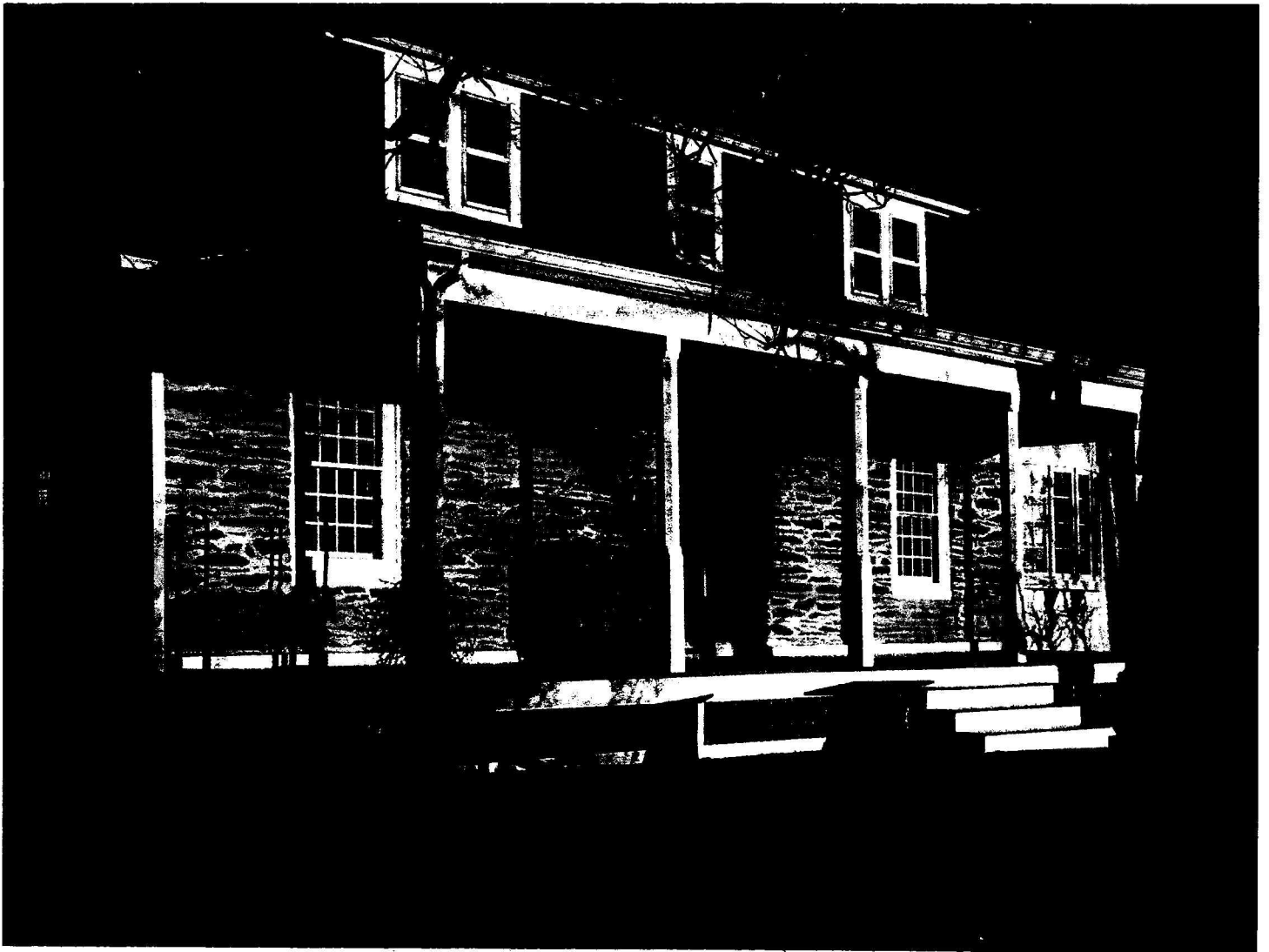


# The Petrus & Catharina Hoffman House in Tivoli

## *Another piece of the puzzle falls into place...*

by Donna M. Brown



In 2003 Neil Larson and Jill Fisher researched and wrote a report on the history of our house, the Petrus & Catharina Hoffman House. We had met Neil several years earlier when he drove up our driveway, looking for another address. On that occasion, Neil glanced at our house and asked if that was an old stone house. You know that special way we all say "old."

We had bought the house in 1980. It was a dump, literally. We took 19 pickup truck loads of junk to the local dump -- that was back when dumps still existed. Over time we worked on critical systems, such as redoing the kitchen and bathroom. Much more detail is available in the HVVA

newsletter for October-December 2014 at <http://hmvarch.org/news/2014-10-11-12-news.pdf>

So, when Neil asked if it was old, we said, yes, it was. Neil was determining the eastern boundary for the Hudson River National Historic Landmark District preparing for its official designation. Until that moment, no one was aware of its existence, disguised as it was by later additions. As it happens, the house was recorded in HABS, but it was marked NV (not visited). He gave us his card and in 2003, frustrated with our inability to research the house ourselves, we gave him a call.

In their report on our house, Larson/Fisher wrote:

There will probably always be ambiguity as to the identity of the builder and first occupant of the stone house, as the public records are inconclusive. Based on the fact that Jannetje Hoffman Grier, the only child of Petrus Hoffman and daughter-in-law of Martinus Hoffman by marriage to his son Zachariah, was owner of the property in 1800, there are three reasonable scenarios to consider:

1. The house was already present when Zachariah and Jannetje Hoffman set up a household there after their marriage in 1772. The property descended to Zachariah from his father Martinus Hoffman. In this scenario the house is estimated to have been constructed 1721-1750; or
2. The house was built by Petrus Hoffman around 1752 and inherited by his daughter Jannetje; or
3. The house was built by Zachariah Hoffman about 1772 when he and Jannetje were married."

The house could have been built as early as 1720, given the jambless fireplaces and basement kitchen, and those features also argue the unlikelihood of the house being built in the late 1700s. It seemed that the second scenario was most plausible, but we could not prove it. Petrus Hoffman had inherited land upon the death of his father, Nicolaes, in 1750, and he married Cathariena Van Alstyne shortly after; their daughter, Jannetje, was baptized January 23, 1753. Such circumstances could well have triggered the construction of the stone house in the local Dutch style of that time.

In 2020, under the sponsorship of Historic Red Hook, we applied for a Pomeroy Foundation grant for a historical marker for our house, and were turned down, because we couldn't prove a ca. 1750 construction date. Pomeroy suggested that we use dendrochronology to substantiate the date. In 2022, almost 20 years after the Larson/Fisher study, we engaged William J. Callahan and Dr. Edward R. Cook to undertake a dendrochronological analysis of the beams in our house to help confirm which scenario was valid.

After spending a day with Bill and Ed, we began to understand something of the science behind dendrochronology. We all learned in grade school that counting the rings tells you how old a tree is, but how could the number of rings identify the year it was cut? As we came to understand, the pattern of the width of annual tree rings corresponds to annual climate variations, establishing a pattern of dry seasons and wet seasons. Comparing wood cores to known profiles allows for precise dating of when the tree was growing. And having the bark edge in the sample identifies when the tree was cut.

Bill and Ed have been doing dendrochronology analysis together for 35 years and have built up "master chronologies" — profiles of trees of different species from different regions. The wood samples collected from the Petrus Hoffman House were processed in Dr. Cook's Tree-Ring Laboratory at the Lamont-Doherty Earth Observatory of Columbia University, following well-established dendrochronological methods. The core samples were carefully glued onto grooved mounts and were sanded to a high polish to reveal the annual tree rings clearly. The rings widths were measured under a microscope to a precision of  $\pm 0.001$  mm. The cross-dating of the obtained measurements utilized a revised and modernized COFECHA computer program, which employs a sliding correlation to identify probable cross-dates between tree-ring series. Experience has shown them that for trees growing in the northeastern United States, this method of cross-dating is greatly superior to the traditional techniques. It is also very similar to a highly successful program employed by Irish dendrochronologists to cross-date European tree-ring series.

As explained in the report, COFECHA is used to first establish internal, or relative, cross-dating amongst the individual timbers from the site itself. This step is critically important because it locks in the three relative positions of the timbers to each other and indicates whether or not the dates of those specimens with outer bark rings are consistent. Subsequently, one or more internally cross-dated series are compiled from the individual site samples, and these are compared in turn with independently established tree-ring master chronologies compiled from living trees and dated historical tree-ring material. All of the regional "master chronologies" are based on completely independent tree-ring samples. During study of our

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house, species specific, regional composite master chronologies from living trees and historic structures from Central New York state and other near-lying regions were referenced primarily.

Bill and Ed sampled all seven cellar beams, all white oak, and got good bark edges from four. Two were cut the winter of 1751/52, numbers 5 and 6, and are at the south end of the basement. Two were cut the winter of 1752/53, numbers 1 and 4, and are in the north end. Was the house built in multiple sections over multiple seasons? Looking at the basement, there is no indication of the house being built in more than one stage, although it may have taken that long to construct it.

Consulted on that question, Neil said not to make much of the beams being cut a year or so apart, that there are any number of plausible explanations. Perhaps, he said, the builder got them from two different sources or had been stockpiling them. We don't know how the supply chain worked. The one account book known to exist for building a stone house (one room) in 1751 has payments going to two men in the previous year for "rough cutting" and "squaring" beams. They were paid for their time doing the work. not by the beam or the foot, suggesting that Bevier owned the wood. Later in 1751 they would go out and rough cut wood for rafters and door cases; the door cases would not be squared until the carpenter arrived in May 1751. Workers didn't begin digging the cellar hole until six months after working on the beams.<sup>1</sup>

So, we can now say with some certainty that scenario two is confirmed, that the house was built ca. 1753. Petrus died August 15, 1754, at the age of 27. Was it a construction accident that killed him at such a young age? We'll probably never know.

The full dendrochronology report can be found at <http://hmvarch.org/dendro/ny-dutchess-petrushoffman-tivoli-dendro.pdf>.

## ENDNOTE

<sup>1</sup> Neil Larson, "Building a Stone House in Ulster County, New York, in 1751," HVA Newsletter, Vol.15 Nos.4-6 (April-June 2011), 5-11.

## SAVE THE DATE:

HMVA Annual Meeting and Elections

10 am, Saturday, January 14, 2023

Elmendorph Tavern

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