

Thomas Jefferson's Poplar Forest

PRIVACY RESTORED

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“Here I have leisure,” wrote Thomas Jefferson in 1811 from Poplar Forest to his friend Benjamin Rush, a fellow signer of the Declaration of Independence. Then two years into his retirement, Jefferson relished the well-deserved serenity of his remote villa in Bedford County. He interrupted the peace and quiet only with necessary trips of three days’ travel time to Monticello, his primary residence. Poplar Forest represented Jefferson’s lifelong dream of a private retreat where he could pursue his own happiness. Accordingly, he created the octagonal house and integrated landscape on his Bedford County land in 1806. He used it until 1823, when his grandson Francis Eppes took up residence. Jefferson died in 1826, and Eppes sold Poplar Forest in 1828. The property changed hands again in 1841, 1946, 1980, and finally in 1984, when the Corporation for Jefferson’s Poplar Forest bought it and began study and restoration.

In “Poplar Forest: A Masterpiece Rediscovered,” which appeared in the Winter 1993 issue of *Virginia Cavalcade*, the author of this article described the historical insights and stories of investigation at Poplar Forest up to 1992. The restoration team had determined that substantial physical evidence from the Jefferson period equaled the rich documentary record. To that end, the corporation decided to restore the house to its appearance at the end of Jefferson’s life in 1826. Much has happened in the nine years since the first article. It is time again to share the most significant new information in almost 100 years about Thomas Jefferson as private citizen and architect. After a fire and reconstruction in 1845–1846, other occupants for 151 years, and modernization in the 1940s and 1950s, the house retained little more of its original Jeffersonian nature than the exterior octagonal

shape and traces of the connected landscape. Restoration has transformed the house dramatically. New stories at Poplar Forest contribute to the history of Jefferson’s evolving architectural development, to his use of local and imported materials, and to his employment of both enslaved and free workers.

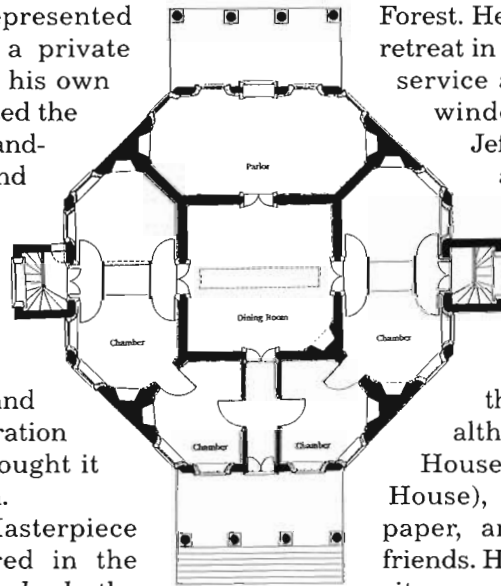
Thomas Jefferson spent the last twenty years of his life constructing and finishing Poplar Forest. He began his occasional visits to the retreat in 1809, when he retired from public service and as soon as the building had windows, exterior doors, and a roof.

Jefferson’s role as architect, contractor, and construction supervisor had become routine, occupying about two-thirds of his life from 1770 until his death. Monticello, the Virginia Capitol, Poplar Forest, and the University of Virginia compose

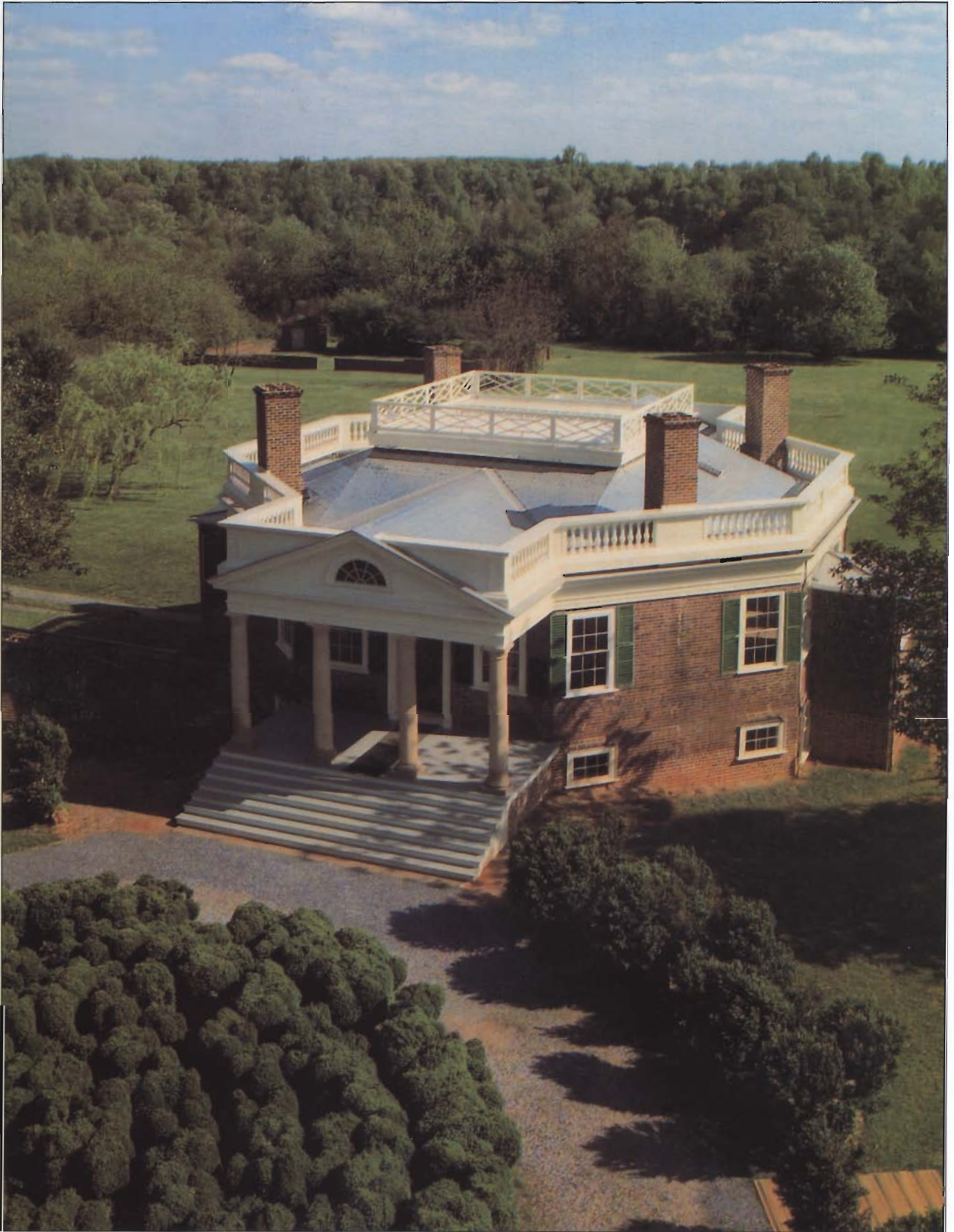
the principal built projects in his life, although he also added to the White House (then known as the President’s House), created many more designs on paper, and freely shared designs with friends. His own two houses and the university were more personal, and the remote location of Poplar Forest presented one of

his greatest challenges.

Constructing this idealistic house on the genteel edge of the frontier posed problems when then-President Jefferson, the designer and supervisor, resided in Washington, D.C., his hired or enslaved workers and workshops were in Charlottesville, and certain materials had to travel first by ship to



Above: First-floor plan of Poplar Forest (Mesick Cohen Wilson and Baker, Architects, 1992). Right: An overhead view of Poplar Forest, from the northwest, showing the front of the house and the reconstructed terrace roof with skylight (The Corporation for Jefferson’s Poplar Forest. Photograph by Les Shofer)



Richmond. Jefferson specified that fragile goods, such as glass and entablature ornaments, be sent by boat from Richmond or Monticello, so slaves poled shallow-draft bateaux up the James River, fighting currents in high water or rocks in low water. Durable goods, like tin shingles and wooden doors, came by wagon. Goods arriving via the James River at Lynchburg still faced a final ten-mile overland journey to Poplar Forest. The twenty-year process of constructing and finishing the house was by no means uncommon in Virginia, and Jefferson was certainly no stranger to living in partially completed houses. In fact, the forty-year building process at Monticello was just ending when the construction of Poplar Forest began.

Modern restoration work at Poplar Forest mirrors Jefferson's original building sequence. His workers built the octagonal brick walls, roof, and two octagonal privies in 1806–1808; parts of the interior were completed in 1809–1814; the 100-foot wing of four service rooms was added in 1814; exterior trim was completed in 1815; and interior trim was executed from 1816–1826. Restoration bricks-and-mortar work began in 1993 after the three-year investigation phase described in the 1993 *Cavalcade* article. Structural stabilization necessitated underpinning the exterior brick walls with concrete footings, correcting for a lack of original footings that had caused a long history of subsiding walls. Jefferson's desire to have the front of the house cut into a hill for aesthetic reasons resulted in wet basement walls and floors from his time onward. A drainage system, installed at the same time as the footings, solved an old problem that Jefferson had previously tried to fix with stone-lined trenches that directed water away from the buildings and toward the shrubs and garden.

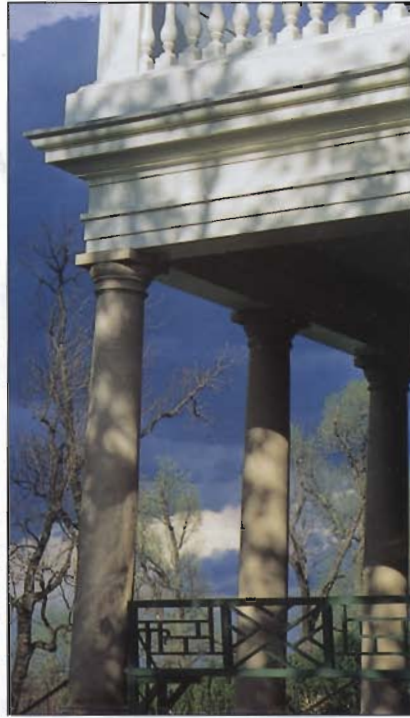
In 1994, restoration masonry work began at the lower-level walls and moved upward to the principal level, conserving original fabric and restoring features altered in the nineteenth and twentieth centuries. For example, the upper-level window openings had been bricked up or moved to a lower



position in the walls during the Cobbs-Hutter family's occupancy (1828–1946). Other masonry openings had been made larger for post-Jefferson Greek Revival features, like the entry doorway with its sidelights and transom. Still other openings contained 1940s Colonial Revival details from restoration and modernization during the Watts family's tenure (1946–1979). Further findings indicated that Jefferson did not use animal hair as a binder for rendering, mortar, and plaster, but instead an ancient ingredient for strengthening—loose fired clay, which dated back to ancient Rome itself. Indeed, traditional construction materials and techniques often proved superior to their modern imitations. Modern methods and materials typically had evolved because of labor and cost savings. Today, traditional methods usually mean the opposite in terms of time and money, but with a value-added educational result.

Pioneering efforts in restoration masonry work at Poplar Forest established the project as a leader in a back-to-lime movement for traditional lime mortars. The initial process used putty made from commercially produced lime, beaten together with sand using a large wooden maul. Eventually the process became even more authentic and traditional by burning limestone in a kiln with wood to produce putty for use in mortar, plaster, rendering, and limewash. Every sound, original brick or mortar joint was important and was saved at all costs. Conservation of brickwork required in-situ repairs with a special conservation patching material or by bonding the pieces back together. Handmade reproduction bricks in seven color-range batches matched the original bricks where needed. A stratification of brick colors in the

This elevation of the capital, shaft, and base of a Tuscan column, which Jefferson drew for the Lawn colonnade at the University of Virginia, is of the same order used in Poplar Forest's porticoes (Thomas Jefferson Papers, The Albert and Shirley Small Special Collections Library, University of Virginia Library, Charlottesville).



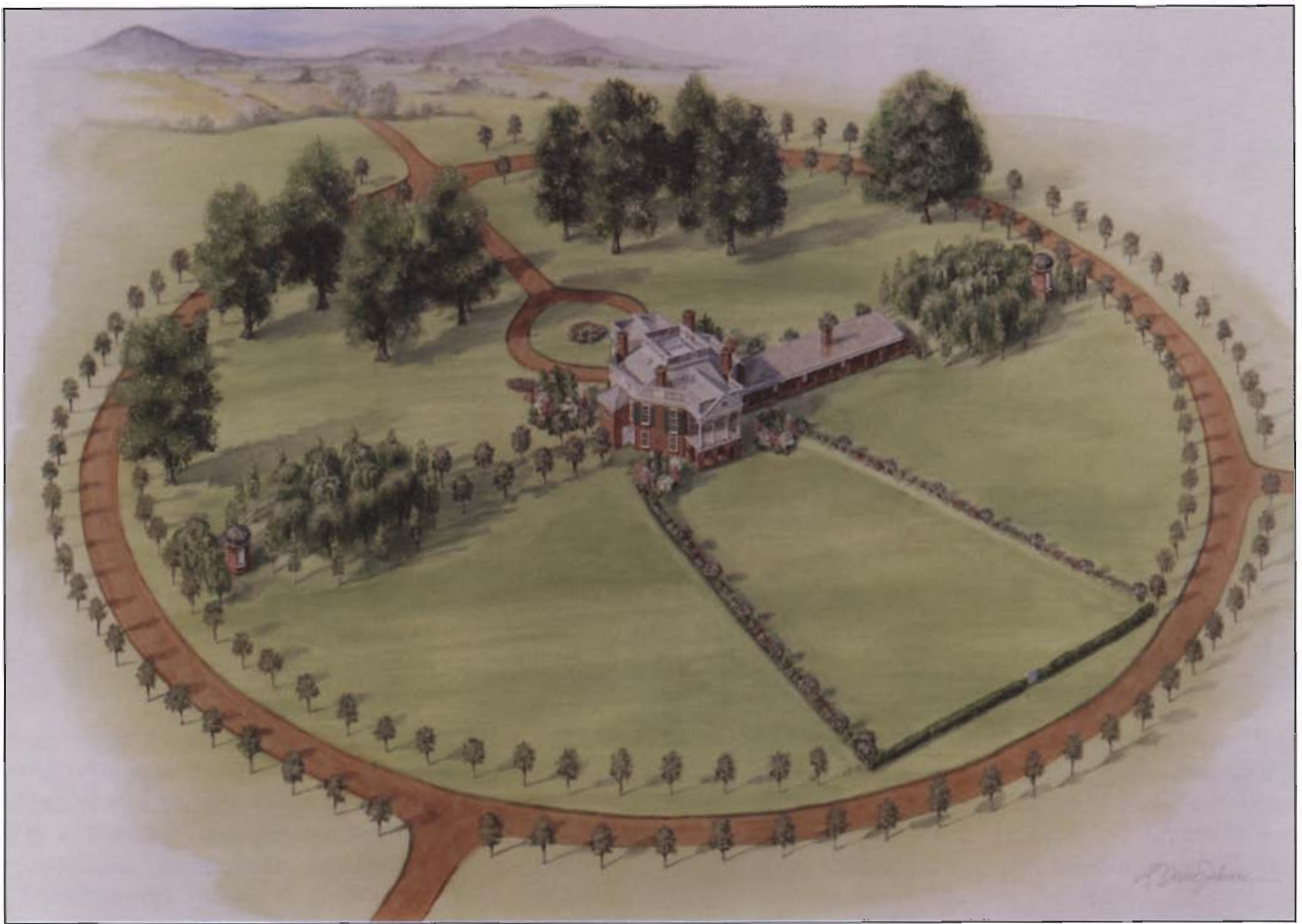
walls resulted from the fire-related colors of a traditional clamp and the sequence of dismantling and hauling them to the building site. Any necessary use of reproduction brick in the walls thus required that like colors be chosen for particular parts in the walls. Like Jefferson's process, new wooden molds created six special shapes for the restoration repairs: five-sided squint bricks for the corners of the octagon; pie-shaped bricks for the column shafts (with two different radii); and four special molding shapes for the bases and capitals of the Tuscan columns.

Restoring Jefferson's Tuscan-order columns on the front and rear porticos required learning the traditional art of rendering brick columns, bases, and capitals with a lime stucco to resemble a monolithic, carved, stone column. They resembled real stone due to carefully composed lime stucco that matched a natural stone finish and color. Jefferson also used this faux stone appearance on brick columns at Barboursville (the home of Governor James Barbour, which Jefferson designed), at the University of Virginia, and probably on the west portico at Monticello. Jefferson never meant his columns to be painted, but to remain a textured, tan stone color. His bricklayer, Hugh Chisolm, executed the vertical dimensions of the columns correctly according to the rules of sixteenth-century architect Andrea Palladio (1508–1580), but the resulting diameter thickness was too skinny, a mistake Jefferson lived with, although he went to great pains to achieve proper columns on other projects. Preoccupied with

Left: Poplar Forest craftsmen install the balustrade of mahogany and antique pine in 1997. *Center:* The north portico at Poplar Forest in 1998 with its Tuscan Order columns, Tuscan entablatures, Doric balustrade, and a bench designed by Jefferson and painted in Jefferson grass-green. *Right:* Jimmy Price, of Price Masonry Contractors in Monroe, Virginia, renders a Tuscan brick column capital with traditional lime stucco in 1998. Two years later, the Virginia Society of the American Institute of Architects honored Price for his masonry work at Poplar Forest (All: The Corporation for Jefferson's Poplar Forest).

presidential duties for the first two years of construction, Jefferson later asked Chisolm to return to Monticello, where he could work "under my own eye."

Another of Jefferson's craftsmen, house joiner James Dinsmore, originally crafted windows and doors in the Monticello shops. For Poplar Forest, Jefferson specified walnut for the upper-level sashes, finished with a varnish on the inside and paint on the outside, for a "richer look." History repeated itself 187 years later when reproduction windows and doors filled the restored masonry openings in 1995. Artisans in Charlottesville made the windows using donated antique walnut from Pantops, another Jefferson property in Albemarle County. Faux-grained front and back doors were based on the surviving work of Richard Barry, a painter and glazier from Washington, D.C., whom Jefferson brought to Monticello in 1805. Three pieces of circumstantial evidence indicate that Barry grained



the Poplar Forest doors: the doors were made at Monticello while he was staying there; he glazed the Poplar Forest window sashes while they were at Monticello; and Jefferson traditionally used faux graining on principal exterior doors. In this case, the rich body of Jefferson letters and documentation, together with prototypical Jefferson details, allowed the restoration team to make a well-informed decision on this restored feature.

The wood framing of Charlottesville carpenter John Perry provided another example of documentary evidence and physical evidence working together. Perry framed roofs and partitions for Jefferson at Monticello and Poplar Forest, and for the first pavilion at the University of Virginia, in that order. Modern workers used Perry's exact method of fastening those parts at Poplar Forest, for which there was no other evidence, from his consistent earlier and later work at the other sites. In some cases, only documentary evidence can confirm restored details, such as John Hemings's letter to Jefferson mentioning a Chinese rail on the roof. In still other cases, physical evidence gained solely through architectural archaeology brought sur-

This image of the original core area of the Poplar Forest property is based on an original painting by Diane Johnson, with features confirmed by archaeological research. The mounds with trees and the hyphens of trees form a Palladian architectural scheme using landscape features as architectural parts (The Corporation for Jefferson's Poplar Forest).

prising evidence to light, like the privy that Jefferson retrofitted into a tight corner under the west staircase.

In 1996–1997, restorers completed the roof framing with its tin-shingle covering, “terras” (terrace) roof with flat deck and skylight, two pedimented porticos, and the exterior trim, including balustrade, entablature, and Chinese rail. To reconstruct Jefferson's principal rafter roof, workers removed the 1846 attic floor and stairwell from the central room, and masons extended its brick walls from twelve to twenty feet. This dramatically returned the room to its twenty-by-twenty-by-twenty-foot cube dimensions, representing Jefferson's third attempt, and only success, at building a house with a central rotunda after Palladio's famous example, the Villa Rotonda. Most interesting,

however, was the roof framing over the central dining room. Jefferson's "terras roof" replaced a "rafter roof" in 1819.

This roof represents one example in a series of at least nine built versions, in five locations, of Jefferson's functional flat roof used to enhance the architectural design of his buildings. Zigzag or serrated shapes consisted of wooden shingles spanning high-ridge and low-gutter joists. Water passed through the deck, fell into the gutter valleys, and dropped to the main roof below. Three versions of the peculiar roof at Poplar Forest, used once over the dining room and twice on the wing (in 1814 and 1825), provide a good insight into Jefferson's construction technology and how it changed for better performance or greater longevity. All the painstaking exterior work reestablished for the first time since 1846 the true appearance and character of Jefferson's private masterpiece. Exterior louvered window blinds, painted a grass-green color after a louver found in the Monticello attic, completed the appearance in 1998.

Restoration during 1999–2000 moved back inside for structural repairs. Interior brick walls, especially at door openings, required careful stabilization. The fifteen modified Rumford fireplaces all had been altered in some way. Most became more shallow in 1847 with brick or stone infill to allow coal fires. Two had been bricked up, and five had been altered to accommodate modern dampers. All received conservation or restoration treatment save one intact fireplace, closed for 144 years and in a remarkably preserved state. Amazingly, all fifteen flues from these fireplaces retained their original lime coating to within a foot of the chimney opening.

Hearths were another matter. Physical evidence remained mute as to how Jefferson supported his

hearths in front of each fireplace. A lucky clue came from photographs in the Monticello archives that showed a second-story hearth exposed during a 1950s restoration. An iron lintel was mortised from trimmer to trimmer, on which sat curved iron bars

spanning the lintel and the brick water-table shelf. A shallow brick arch with a parged (coated with lime mortar) top rested on top of the bars, supporting sand-bedded hearthstones. This scheme was tested with reproduction, wrought lintels and bars, and bricks forming an arch. Typically, Jefferson had reinforced the structure for a fail-safe hearth.

One more hearth surprise remained. In the 1846 rebuilding of Poplar Forest, workers had mined a pile of 1845 fire debris for its broken-up plaster pieces, which they crushed further for sand to bed new hearthstones on parged wooden boards. In doing so, they had not bothered to remove the other debris, including glass, metal, wood, and other materials. The treasure trove yielded an amazing density of Jeffersonian and pre-1845 material. Analysis of the various plaster fragments revealed seven different wall colors in the house, all but one of which were pigmented limewashes.

Most significantly, two pieces of entablature frieze ornaments in the dining



Top: A 1992 drawing by Mesick Cohen Wilson Baker, Architects, shows what the Doric entablature frieze metope ornament might have looked like. The artifact on top of the drawing, made of terra cotta with a white lead paint finish, was found in the 1846 hearthstone bedding of the central room (Mesick Cohen Wilson Baker, Architects, and The Corporation for Jefferson's Poplar Forest). *Bottom:* Workers found these textile remnants, dating from 1846 to the 1950s, in the hollow plaster walls of the 1846 staircase leading to the attic (The Corporation for Jefferson's Poplar Forest).

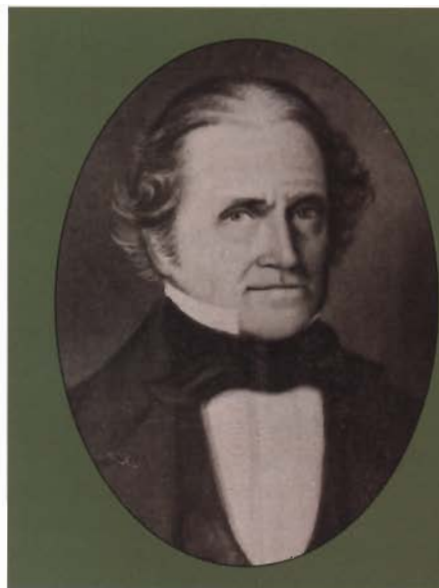
room and parlor were included in rich bedding. British sculptor William J. Coffee had made the custom-ordered ornaments in New York for Jefferson at the same time that he made those for the University of Virginia. Coffee mistakenly shipped the Poplar Forest ornaments to Charlottesville, where they were packed in straw for the risky wagon ride to Poplar Forest. Restoration staff discovered two pieces of this material and confirmed their composition at the laboratories of the Winterthur Museum, in Delaware, as baked clay with white lead paint. The discovery helped explain the 1822 exchange of letters between Jefferson and Coffee in which the sculptor referred to the material as “composition” and the client remarked that it looked like “potter’s ware.” One piece confirmed the design of the dining room’s Doric metope, featuring the face of the sun god Apollo, which had been assembled as a numbered piece with screws and glue. Coffee had questioned Jefferson on this same design, which mixed Roman bucrania, or ox skulls, with the typical faces from the Baths of Diocletian entablature in Rome. Jefferson humbly replied that this was “a fancy” which he could “indulge” in this private house. The small recovered piece represents a tangible link to a Roman-American order invented by Thomas Jefferson for the central private space in his eclectic New World villa.

Interior structural work concluded in 2001, including the floor system, two staircases, and the entry passage walls. Jefferson’s bed alcove will be framed in 2002. Poplar joists and pine floors from the 1846 rebuilding were removed and replaced with oak joists and floors. Jefferson’s letters to the workmen specify oak as the material and a herring-

bone pattern in one room, “as the hall floor at Monticello.” Physical evidence confirmed the size, placement, and finish of the joists and floor boards. George Flower, a rare guest at the house in 1816, described the “floors of polished oak.” Close investigation of the brick walls showed traces of a stain, later analyzed as oil, just above the finished floor level. This helped confirm the oil finish on the 1¹/₄-inch, quarter-sawn, white oak floors, also following Jefferson’s practice at Monticello of oiled pine floors polished with wax. Undoubtedly, his use of oak stemmed from his European experience. When instructing his workers at Poplar Forest to build the floor, he remarked that “all the floors in Europe are of oak.” More importantly, this was not only the first oak floor by Jefferson, it also was one of the earliest finished-oak floors in the country.

Two stairways, pushed to the exterior of the octagonal walls in separate pavilions, saved valuable space inside the house and allowed access between the upper and lower floors and to the exterior. The east staircase also provided access for food served to the central dining room. Both staircases provided exits to the two flanking octagonal privies, and the west staircase allowed Jefferson privacy in his personal indoor privy underneath. After 1814, an upper doorway in the east pavilion offered access to the 100-foot-long deck of the service wing where Jefferson and his granddaughters Cornelia and Ellen Randolph strolled in the evenings. This public access necessitated closing the eastern bed alcove in 1817, turning the southern half of the double room into a pantry so that traffic did not intrude on Cornelia and

George Flower (1780–1862) (Library of Virginia)



After visiting Jefferson and Poplar Forest in 1816, George Flower recalled: “His house was built after the fashion of a French chateau. Octagon rooms, floors of polished oak, lofty ceilings, large mirrors, betokened his French taste, acquired by his long residence in France.”

Ellen's room. Jefferson's own bed alcove on the west received an immediate nogging-and-plaster finish after construction, years before other spaces were plastered.

Whether dealing with bedrooms or privies, restoration of historic house museums implies a seriousness of undertaking and an authority of information and knowledge. The quality of research, whether documentary or physical, determines the quality of a restored product. Questions arise about how much research is enough, and to what degree and application "authenticity" should be used and measured. The range of answers and justifications are wide. Given the absence of restoration rules and standards, each project determines its own through a top-down philosophy. The board of directors of Poplar Forest, a private, nonprofit organization, felt a weighty responsibility and established a steadfast attitude and philosophy of "doing it right." To achieve that goal, they hired a permanent professional staff to define the meaning of that ambiguous phrase. Board and staff committed to an uncompromising stewardship, protecting historical resources of both house and site. Given the proper amount of investigative and analytical time, the restoration team of staff, advisers, and consultants carefully weighed the research and devised a restoration philosophy, plan, and process to guide the work.

The team's chief conception, and one the board readily adopted, was the emphasis on and enhancement of the process rather than on a quick end product. Interpreted tours for visitors, initially focused on Jefferson's life, were quickly partnered with the investigative or restoration work they could see all around them. In this way, the restoration became a shared educational process rather than simply an interpretation of end results. The medium was the message, and the visitors loved it. In unconscious ways, visitors' viewings of a Jeffersonian construction project became the most effective bridge between our own contemporary stories and those of the past.

At Poplar Forest, doing it right means that authentic techniques and materials are done for their own sake rather than wondering who will know the difference. The value of presenting the restoration work as a Jeffersonian experience relies on the assumptions that seeing is believing, and that

perception is historical reality to many visitors. Watching carpenters cut mortises into a twenty-two-foot-long piece of oak, scrape oak floors level with a small piece of metal, and attach chestnut shingles to the privy roof conveys differences of then and now, helping viewers connect with an ever-fleeting past. History thus melds with current heritage values, or as historian David Lowenthal puts it, "History also needs heritage to carry conviction."

By using Jefferson's original building sequence, the construction of individual parts slowly builds to a crescendo until the idealistic ensemble emerges, as it originally did, from the mind of Thomas Jefferson. Details were everything to the man. His patience seemed endless for acquiring ideal materials, luring the best workmen, and enduring transportation glitches. The staff of Poplar Forest learned a similar patience in a modern era that seldom rewards it: acquiring English brass pulleys continuously made since Jefferson's time; custom-ordering hemp cord from Holland for the window weights; having special or wrought hardware made by hand; using salvaged antique woods; and finding the suitable craftspersons. Patience can be translated into increased time and money, but every correct nuance enhances the quality of the total experience. Quality, however, is relative when discussing true restoration work.

The mistakes or sloppiness of nineteenth-century bricklayer Chisolm or carpenter Perry, as well as their competent idiosyncrasies, help define humanistic nuances of traditional building. Providing the restoration carpenters and masons with a documented range of options taken from the original workers' techniques, and encouraging them to make appropriate choices within that range, impart a desirable hand-crafted character.

The atmosphere of authenticity sets the tone for visitors' overall experiences. They can use their eyes as well as their ears and noses—open windows in the house convey a subconscious sense of reality. Jefferson read in Roman and Renaissance texts about such ancient techniques as ground-cooled air



A portrait of William J. Coffee, made in England by the silhouette artist Edward Foster, ca. 1811 (Courtesy of Brian Bricknell, Watford, England)

This view of Poplar Forest, showing the rear of the house from the southwest, reveals many newly restored features: the south pediment, entablature, balustrade, roof shape, Chinese rail, windows, columns, and blinds (The Corporation for Jefferson's Poplar Forest).

and heated floors. Accordingly, conservation of the house as an artifact led to an innovative ventilation-and-cooling system that avoids the use of ducts, grilles, or equipment in the historic spaces, thus avoiding visual intrusions and destruction of historic fabric. A computer regulates six modes of cooling, using natural, ground-cooled air and chilled, dehumidified air. Geothermal wells use nature in an

ecologically friendly way while adhering to Jefferson's innovative tendencies. The quiet, safe, and invisible radiant-heat system is hidden in the floors, with the primary equipment located underground, 350 feet from the house. Despite the twenty-first-century innovations, however, an old, low-tech device also controls sunlight and heat: blinds.

Restoration also has benefited from archaeology, which has been a permanent part of the project from the beginning. It has confirmed the location of missing rooms; the ornamental plantings of trees, shrubs, bushes, and flowers; and the location of fences, drains, roads, slave quarters, and possible outbuildings throughout the entire site. Beginning with forty-eight



acres in 1984, the corporation purchased surrounding land for a total holding in 2001 of over 500 acres. Jefferson inherited 4,819 acres through his wife in 1773, which were reduced to 1,074 acres before his death in 1826. An archaeological survey of the current property indicates many potential sites for future excavation and interpretation.

Based on this interdisciplinary approach, we can assign new meanings to our new knowledge of Jefferson and to the restored world of Poplar Forest. Jefferson scholars know the frustration of trying to fathom a complex and contradictory person who left so much written evidence and yet never enough autobiographical insights. Average visitors know and

understand Jefferson on less complex levels, but nevertheless need access to him. We can use new insights into Jefferson the architect and builder. We can interpret his relationship with his enslaved and free construction workers, his overseers, and field hands. We can study the slaves' private lives and the technology, techniques, and shortcomings of the original construction. We can ponder the idealistic nature of the site, its importance to his grandchildren, and its importance to Jefferson's peace of mind. The ultimate significance is that it has been saved and secured to continuously interpret and reinterpret Thomas Jefferson, what he means for us today, and what he might mean for future generations.

Poplar Forest will continue to change in the next decade. Artisans will complete the Palladian wing of service rooms with its Jeffersonian roof and deck, underneath which visitors can visit the kitchen and understand sophisticated cooking techniques uncommon for the time. Lime plaster once again will coat the ceilings and walls of the main house. Just as Jefferson's finest joiner, slave John Hemings, executed the classical trim in each room, so will Poplar Forest artisans do the same in each room using period tools to hand-mold and install restored trim using Jefferson-period lumber from the site. With time, the authentic experience in the house will extend like ripples in a pond to the ornamental grounds around the house, the sixty-one-acre enclosure, the cultivated fields, and the natural forests at the foot of the Blue Ridge Mountains. Experiencing Jefferson's impact on nature, and vice versa, will help convey Jefferson's aura of privacy at his villa retreat. Poplar Forest enables modern Americans to enrich their lives as they draw inspiration from an American who preferred visions of the future to dreams of the past. Discovering and restoring Poplar Forest as a place to get close to Thomas Jefferson helps achieve these goals. The journey to restore the Poplar Forest that he knew has begun and the destination seduces our imaginations. There are many more exciting stories to experience along the way. ☒

Travis McDonald moved to Lynchburg from Richmond in 1989 to become the director of architectural restoration at Poplar Forest, where he has guided the restoration work from its beginning. He received an M.A. in architectural history from the University of Virginia and has worked on museum restorations in Virginia for the past twenty years. Jefferson's Poplar Forest is open from 10 A.M. to 4:30 P.M., April through November. The phone number is 434/525-1806, and the website is www.poplarforest.org.

