

John Greenwalt Lee

Materials Conservator and Artisan

Selected Conservation Project Sites

Dumbarton Oaks, Washington, DC 1999-2000
Gunston Hall, Lorton, VA 1980,1991
Hammond Harwood, Annapolis 1974, 1995, 2001-2
Wickham-Valentine, Richmond, VA 1990
Miles Brewton House, Charleston, SC 1988
Octagon House, Washington, DC 1988
Stratford Hall, Westmoreland Co., V A 1994-5
Yale University, New Haven, CT 1994
Moody Mansion, Galveston, TX 1985

Grants

Getty Trust Architectural Conservation Grant:
Craft Training Program, City of Charleston,
South Carolina, 1989

Selected Lectures

Piney Point Lighthouse Repairs

Association for Preservation Technology,
Annual Conference, Portland, ME, 2003

In-situ Masonry Repairs

National Training Center, International Masonry Institute
(Union of Bricklayers & Allied Craftworkers) at Fort
Ritchie, Cascade, MD, 2000

Conservation Science for Historic Garden Artifacts

Southern Garden History Society at Mount Vernon, VA,
2000 (with James Adams, PhD)

Water and Masonry Failure:

Do you understand all you need to know?

Preservation and Revitalization Conference,
Frederick, MD, 2000 (with James Adams, PhD)

The Invisible Building: Design-driven Process vs. Discovering the Needs of Historic Buildings

University of Kentucky School of Architecture, 1999

Conservation Repair Techniques of Wood and Plaster: John Pope Villa and Miles Brewton House

Washington Conservation Guild and National Trust for
Historic Preservation, Washington DC, 1998

Common Problems with Historic Roofs: Owner, Architect and Contractor

APT Roofing Conference, Washington DC, 1993

Considerations and Case Studies in the Conservation of Wooden Architectural Artifacts

Conservation Training Program, 1990,
Smithsonian Conservation Analytical Laboratory

John Greenwalt Lee has been a craftsman and conservator of objects and buildings for over thirty years. He provides individuals and organizations with timely solutions to difficult problems and practical answers to seemingly unsolvable ones. His management and organizational skills, ability to help owners budget conservation projects into manageable phases, and understanding of a site's comprehensive needs have earned accolades from stewards at dozens of National Historic Register properties.

John's approach to conservation is comprehensive: he develops a conditions assessment, plans and manages the project, does hands-on work on the scaffold, and shares his techniques and experience with other craftworkers. He presents his recommendations with an eye toward educating the client about the underlying causes of deterioration. His reports are technical yet clear and understandable to the layperson.

In 1967, at the age of seventeen, John set out on a series of apprenticeships in such well-known shops as ProMusica, Arpad, and Theodore Potthast Co. He gained mastery as a cabinetmaker specializing in the restoration and reproduction of antique musical instruments and as a builder of period furniture. He opened his own business at age 24 and over the next 14 years developed it into a 12-person shop creating reproduction millwork, custom interiors, and unique furnishings for architectural firms Interspace, Robert A. M. Stern, and Index.

From the beginning of John's career people sought his expertise for architectural preservation projects. His respect for historic objects and admiration for the artisans who created them led him to investigate the nature of the materials and the physical and chemical process that make them work: why they behave the way they do, how they can be manipulated, and the complex forces that cause failure. His early conservation mentors included architect Orin Bullock and Chief Historical Architect for the National Park Service Hugh Miller. He began working with seminal architectural materials conservator Morgan Phillips in 1974 while he was at SPNEA and was fortunate to work with architectural historian Paul Buchanan on many projects. His on-going work with architect and conservator Charles Phillips has been a source of inspiration for more than two decades. Together they continue to push the limits of materials conservation understanding.

By 1988 John was devoting his time exclusively to the conservation of historic buildings. John's regular collaborations over the last decade on projects of masonry failure, including Dumbarton Oaks, Hammond Harwood House, the Federal Reserve Bank in NY, private residences in Georgia and North Carolina, and sculptures in Washington, DC, have greatly increased his understanding of stone and brick structures, lime mortar construction, and the causes of masonry deterioration.

John continues his education and training today by working with a number of chemists to answer questions that still lack creditable explanation within the conservation field. He has written extensively on project design and management for historic structures, "invisible" masonry repair techniques and the elements of successful work with lime mortars, as well as contributing to the 1988 Historic Windows Conference handbook on wooden sash conservation. His research collaborations and development of new techniques and materials is well known in the conservation field.

In addition to his focus on masonry issues during the last decade, John is working with a talented tinsmith to improve training in historic crafts and the non-invasive repair of aged metal roofing. His interest in low toxicity methods for stripping finishes combined with the increasing failures on historic finishes arising from changing paint chemistry has led to considerable work in finishes analysis, selective stripping back to sound paint layers, and finishes replication.

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Conditions Assessments:

"What a great report. We actually understand now what's going on with our building!"

*-Carol Hutchinson, President (ret.),
Hammond Harwood House Association, Annapolis, Maryland, 2000*

From his wide-ranging background, John combines artisan skills and the analytic approach of scientific observation to analyze building problems and devise minimally-invasive and material-appropriate repairs that inform the still infant American architectural conservation community.

He believes documentation alone is of limited use in educating the client or saving buildings. Analysis of the data must provide a clear explanation of the causes of deterioration so that practical solutions can be developed.

The alternative is treatments that are conducted without knowledge and mitigation of the underlying causes; a short-sighted, fiscally-irresponsible and often destructive approach.

Treatment Focus:

"Through your research and development efforts, you broke new ground in architectural finish conservation. We are extremely pleased with the final results.... [and] I must compliment you on the speed with which you provided me with your final project report."

*-Eryl Platzer, writing as director and restoration supervisor
at the Valentine Museum, now at Decatur House*

Comprehensive treatment of a project based on understanding the original building technology and the interactions with any new materials introduced. To successfully treat an object or building within the context of its site requires a conservator-craftsman-facilitator able to:

- Conduct "above-ground archaeology," or outline a construction and repair chronology using building evidence.
- Analyze and document building conditions in concise reports clearly detailing cause and effect.
- Research and develop conservation treatments and tools for deteriorated materials. No two projects are the same. Broad knowledge of materials and techniques is necessary to choose the right combination for each project or develop new processes where necessary across a range of building materials including wood, bricks and mortar, paint, clear finishes, stone, terracotta, plaster and metals.
- Provide planning and budget assistance, in addition to the organizational skills to supervise artisan-contractor-conservator-architect-engineer teams while continuing to provide useful feedback to the building owners.
- Train skilled craftsmen and contractors in traditional methods and materials, as well as newly developed building conservation techniques.
- Treat historic fabric using a combination of techniques that may include consolidation, stabilization and replication methods for deteriorated wood, plaster, finishes, and bricks and mortar.
- Replicate missing elements.

Many thanks for your presentation yesterday at the Board meeting. Everyone was very impressed and excited about the project. It is clear that you have done an incredible job and you should be very proud of the results.

Thank you so much for your dedication, for sharing your knowledge and for helping preserve HHH.

*-Susan Parker, President,
Hammond Harwood House Association President, 11/13/2001.*

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Artisan Qualifications:

- Antiques restoration
- Musical instrument restoration
- Reproduction furniture
- Cabinetmaking
- Boat building
- Pattern-making
- Tool making
- Prototype fabrication

ProMusica Instrument Co., Annapolis, MD

Restoration of rare antique musical instruments for museum collections (Winterthur, Independence Hall, Yale Collection) 1968-1969.

Arpad, Inc., Washington, DC

Restoration of fine antique furniture, using Chinese lacquer, ivory, 17th century Venetian painting, inlay, carving and ormolu, 1969-70.

Michael Thomas, London, England

Preparation and supervision of rare musical instrument collection for Sotheby's Auction, 1971.

Theodore Potthast Co., Baltimore, MD

Queen Anne and Chippendale hand-built reproductions of tables, chairs and sideboards, 1971-72.

Danko Arlington, Baltimore, MD

Close-tolerance pattern making, machining, foundry practices, and prototypes, 1973-74.

John Greenwalt Lee Co., Annapolis, MD

1974 – 1988: Twelve-person cabinet shop specializing in replication of 17th-19th century furniture and finishes, restoration of 18th century architectural wood ornamentation, and building unique furniture and millwork creations for architectural-design firms including Robert A.M. Stern, Index and Interspace for Houston, New York, Boston, Washington D.C., and Richmond VA projects.

1988 – current: An independent materials conservation business focused on passing the skills and knowledge of many trades to a new generation of artisans. This requires providing clear, thorough explanations of the deterioration processes at work on buildings and re-introducing modern construction personnel to the methods and materials used in the past to develop to ensure responsible and long-lasting repairs to historic structures.

Lecture Topics and Training Provided:

“John has devoted himself to research and job tested methods.... Unlike many craftsmen, he has shown an unusual desire to train others by sharing his knowledge....”

*-The late Orin Bullock, Jr., FALA, in 1978
referring to work at Hammond Harwood House*

- Stabilization & repair techniques for historic buildings
- Conservation treatments for wood, finishes and masonry
- Replication of missing wooden ornamentation
- Replication of historic clear and painted finishes
- Planning, organization, budgeting and supervising
- Documentation of deterioration processes & analysis

SELECT PROJECT HIGHLIGHTS

Dumbarton Oaks Gardens

(Owner: Harvard University)

Washington, DC – 1920

Ten acres of formal gardens designed by Beatrix Farrand surround the Dumbarton Oaks Library and Museum of Byzantine and Pre-Columbian Studies. Over two years, John and chemist Jim Adams studied the built environment including exterior woodwork, pools and stone monuments. Together they conserved and repaired a limestone bench in the Rose Garden in 2001.

Hammond Harwood House

(Owner: Hammond Harwood House Association)

Annapolis, MD – 1774

This masterpiece of renowned designer William Buckland is often considered one of the finest examples of five-part Georgian architecture in colonial America. John's work at the site has included preservation and replication of both interior and exterior wooden elements and finishes, stabilization of attic timbers in advance of his replacement of a slate roof and, at present, and development of techniques for invisibly repairing damaged exterior masonry as part of a 'drop' to estimate time, cost and techniques for the entire building.

Wyck House and Gardens

(Managed by Wyck Association)

Philadelphia, PA – 1690

A colonial era house remodeled by William Strickland in 1824 and owned by nine generations of one family. Projects to date have included documentation and assessment of original exterior building fabric, development of a phased conservation plan for the main house and outbuildings, stabilization and treatment of the exterior woodwork, preservation of the 18th-century lime stucco and reintroduction of wood shingle and slate roofs on the main house. The Wyck Exterior Conservation Project won state and national awards in 1998.

The James Brice House

(Owner: International Masonry Institute)

Annapolis, MD – 1766

This five-part Georgian is headquarters of the International Masonry Institute, the training arm of the bricklayer's union. Projects include extensive site grade changes, installation of an outdoor drainage plan and design of heated walkways to eliminate the need for de-icing salts, multiple exterior woodwork repairs and a grand new entrance stairway. Work on the West Wing has included removal of damaging salts, repairs to interior original masonry, and the creation of a new interior within the remains of the 18th century building fabric that highlights below-ground lime pit archaeology while creating a state-of-the-art conference and library facility.

PARTIAL LIST OF PROJECTS

Chrysler Building
New York, NY

Cosby House
New York City, NY

Darnall's Chance
Upper Marlboro, MD

Dumbarton Oaks
Washington, DC

Federal Reserve Bank
New York City, NY

Government House
St. Croix, Virgin Islands

Grasslands
Anne Arundel County, MD

Gunston Hall
Lorton, VA

Hall House
Salisbury, NC

Hammond Harwood
Annapolis, MD

Hancock's Resolution
Anne Arundel County, MD

Holly Hill
Friendship, MD

James Brice House
Annapolis, MD

John Pope Villa
Lexington, KY

Johnson House
Philadelphia, PA

London Towne Publik House
Edgewater, MD

Maymont
Richmond, VA

Miles Brewton House
Charleston, SC

Monticello
Charlottesville, VA

Moody Mansion
Galveston, TX

Nathanial Russell House
Charleston, SC

Octagon House
Washington, DC

Old Nacogdoches University
Nacogdoches, TX

Piney Point Lighthouse
Saint Mary's County, MD

805 and 809 Prince Street
Alexandria, VA

Ridout House
Annapolis, MD

Sands House
Annapolis, MD

Sheehan House
Duxbury, MA

Solitude
Philadelphia, PA

St. Pauls Church
Alexandria, VA

Stratford Hall
Westmoreland County, VA

Swedish Cottage
Central Park, NY

Tudor Place
Washington, DC

U.S. Naval Academy
Annapolis, MD

Wickham-Valentine House
Richmond, VA

William Paca House
Annapolis, MD

Wyck House & Gardens
Philadelphia, PA

Ximinez-Fatio House
St. Augustine, FL

Yale University
Silliman Library and The Great Hall
New Haven, CT

U.S. General Services Admin.
Washington, DC:

Federal Trade Commission
"Man Controlling Trade" sculpture

National Building Museum
Entrance stonework

Department of Justice
Terracotta Roof Antefixae

Ariel Rios EPA Building
Commissioners Corridor finishes

Department of Agriculture
Auditors' Building Masonry

Department of Commerce
Stone and Metal Cornice Failure

RECOMMENDATION LETTERS

"Your blend of craftsmanship and scientific knowledge I feel is a rare commodity and is ideally suited to historic houses which are trying to preserve their buildings but to also have them function as museums and places for educational experiences. So often during a complicated preservation project an historic house director finds himself caught between many members of the team all with seemingly valid points of view. That is why I have come to rely upon your advice and mediation to help find the best solution. It is also why Wyck keeps coming back to you for all of our projects."

--Jeff Groff, Director -Wyck House Assn., 2000

"I continue to be amazed at all you accomplished and grateful for your expertise and faithfulness to the job."

-- John Sheftall – private client, 2004

"Your emphasis on the people who actually do the work and on rethinking the standard processes that are routinely used has completely changed the way I look at buildings. It has also inspired me with a desire to make your approach central to the philosophy of our new graduate program in historic preservation [at the University of Kentucky].

You have consistently brought the best in preservation technology to our project, although you are anything but an uncritical consumer of new products. You worked with Morgan Phillips to develop unique consolidants and adhesives to conserve the most important plaster at the house at a time when no one in Kentucky was even thinking of conserving plaster, to say nothing of developing special products to do it.

Finally, you have been a superb manager, keeping together a team of some of the weirdest and most contentious human beings in the universe. As snafus appear, you are on the phone (or on email) to cajole, plead, joke, weep, and in all other ways do your best to keep our crazy ship on course. I can tell you that your human skills in working things out are as extraordinary as your technical skills on the scaffold."

--Daniel B. Rowland, University of Kentucky Gaines Center for the Humanities and previous director of the John Pope Villa Project, 2000