National Center for Preservation Technology & Training Grants

Mission
NCPTT is a National Park Service Center for Innovation for the preservation community. Using the latest advances in science and technology, NCPTT provides the tools, training, and techniques to do preservation better.

Preservation Technology and Training Grants serve the public by bringing innovative research, training, and information to bear on historic preservation problems. Since 1994, the National Center has awarded grants in 43 states totaling more than $10.8 million in Federal funds. In the last five years, the PTT Grants program has awarded $1.9 million federal dollars that have leveraged and additional $1.1 million in non-federal dollars, resulting in more than $3 million value added research funds. NCPTT funds grants within several overlapping areas, including archeology, architecture, collections management, engineering, historic landscapes and materials conservation.

Masonry History Integrity: An Urban Conservation Primer
Abyssinian Development Corporation
Developed by Abyssinian Development Corporation with a 2010 PTT Grant, this primer provides guidance for classroom teaching and trades training sessions. It has already been adopted as a text in multiple preservation trades programs. The general overview of construction materials, methods, tools, and basic training activities allows learners to explore the building trades and discover ways to repair aging masonry structures.

A student makes a limestone repair, from An Urban Conservation Primer.

EXPERIENCE YOUR AMERICA™
The National Park Service cares for special places saved by the American people so that all may experience our heritage.
Removable Coatings for Outdoor Bronze Sculpture
North Dakota State University
NCPTT’s 2003 PTT Grant to researchers at North Dakota State University focused on developing new coatings for outdoor bronze sculpture that were protective yet easily removed without environmentally harmful solvents. Researchers used specialized techniques to create over 400 different compounds and test them for best performance. As a result, a new removable protective coating for outdoor bronze monuments and statues is on the market today. This coating is pH sensitive and can be removed with a water-based alkaline solution.

Cold Plasma Oxidation and “Nondestructive” Radiocarbon Sampling
Texas A&M University
Beginning in 2004, with partial funding from the NCPTT, Marvin Rowe and students at Texas A&M University developed a cold plasma oxidation method for “non-destructive” radiocarbon sampling of organic materials. This approach takes advantage of the AMS direct dating potential of samples as small as 100 micrograms, and since the sample is in the form of carbon dioxide, no further treatment is required at the AMS lab. A new and improved cold plasma device has been constructed at the Office of Archaeological Studies, resulting in a more efficient procedure using even lower temperatures. This technology offers virtually non-destructive dating of sensitive, and or fragile, artifacts.

Building Stones of America: 50 Years of the NIST Stone Exposure Test Wall
National Institute for Standards and Technology
NCPTT funded the development of a website documenting the NIST test exposure wall. The stone wall was constructed to study the performance of stone subjected to weathering. It contains 2352 individual samples of stone, of which 2032 are domestic stone from 47 states, and 320 are stones from 16 foreign countries. This site presents the existing data and pictures for each particular stone and is a valuable preservation teaching resource. http://stonewall.nist.gov/Default.htm

What’s Out There – An Interactive Catalog of Designed American Cultural Landscapes
The Cultural Landscape Foundation
What’s Out There is the only free, Wiki-style online database and mobile application focused on the nation’s landscapes and landscape features. It is designed for use by tourists, heritage travelers, landscape aficionados, historians, and the general public. It is user-friendly and is searchable by landscape name, type, style, landscape architect, designer, and location. What’s Out There was created by The Cultural Landscape Foundation with assistance from PTT Grants in 2009 and 2012. http://tclf.org/landscapes

Control of Subterranean Termite Infestations Using Baits Containing an Insect Growth Regulator in Cultural Heritage
University of Florida
In 1995, bait containing an insect growth regulator, hexaflumuron, was commercialized in the United States under the trade name of Sentricon® Termite Colony Elimination System (Dow AgroSciences, Indianapolis, IN) for subterranean termite control. Hexaflumuron inhibits the synthesis of chitin that is essential for the formation of insect exoskeletons, but is virtually harmless to vertebrates. With grants from NCPTT, researchers at the University of Florida used hexaflumuron for the first time to protect cultural heritage, including sites such as the Statue of Liberty National Monument, the Cabildo complex, New Orleans, Louisiana, the church of Santa Maria della Sanità in Naples, Italy, and San Juan National Historic Sites.

East at Main Street: Asian Pacific Islander Americans Mapping Project
Asian Americans Advancing Justice – Asian Law Caucus
Developed in collaboration with the location-driven web platform, Historypin, East at Main Street is a crowd-sourced project that identifies places across the United States that matter to diverse Asian American and Pacific Islander communities. Information gathered can be used to develop landmark designations, and create interpretive and educational projects, public programs, and travel itineraries. The mapping project was created with assistance from a 2013 PTT grant.

A Graphic Guide to Historic American Timber Joinery Series
Timber Framers Guild of North America
Over several grants beginning in 1999, The Timber Framers Guild of North America has created a series of articles on timber framing construction. These valuable monographs discuss and illustrate the joints in American traditional timber-framed buildings of the past, showing common examples with variations as well as a few interesting regional deviations.

Protective Glazing Study for Stained Glass
Inspired Partnerships
Inspired Partnerships, a non-profit organization in Chicago, investigated the virtues and liabilities of various protective glazing installations over stained glass. The 1994 study addressed energy, security, sound and light transmission as well as aesthetic and conservation issues surrounding the use of protective glazing in churches.