Climate Control in Museums: Saving collections while saving money
A presentation supported by MCI, the National Collections Program, and the Collections Space Steering Committee

Dialog and Process: Collections care and Energy Efficiency at the Colonial Williamsburg Foundation
Patricia Silence
Conservator of Museum Exhibitions and Historic Interiors
Neil Ellwein
Director of Architecture and Engineering

This presentation will describe how Colonial Williamsburg has reduced energy use while maintaining or improving the collections environment. Our projects vary in scale and complexity, and for the most part have cost very little to implement.

An overview of specific projects, energy use, assessment of results and budgetary considerations will be offered. We will describe re-lamping a gallery with LED lights, implementation of a routine HVAC system shutdown, achieving energy savings through VAV system airflow reductions, and equipment used to support sustainability in our modern and historic buildings. Emergency preparedness will also be discussed, as the information gained from understanding our buildings and systems helps in planning for necessary and unplanned shutdowns.

Protecting Collections and Saving Energy at the National Gallery of Art
Part 1: Strategic Sustainability Performance Plan from Recycling Cardboard to Reducing Green House Gas Emissions
Cecily M. Grzywacz, Facilities Scientist
Part 2: Retro-commissioning to reduce energy consumption
David Matthews, Energy Manager

We are reminded daily of global climate change and the high cost of energy. Within the conservation field we struggle to maintain the perceived optimum set points of 70°F and 50% RH. How do we determine what the climatic set points and the appropriate range; is it ± 2%, ±5% or ± 10%? Who decides? There are many stakeholders in the preservation of cultural heritage: conservators, scientists, curators, museum directors, building owners, trustees, engineers, facilities managers, and architects. Successful collections preservation requires an inter-disciplinary approach, i.e., an integrated project. One of the greatest challenges of any team is effective communication. For collections preservation this is complicated by the diverse backgrounds and professional vocabularies of the members. Because there is an inherent fear of failure, we demand very strict control, which is expensive. As energy costs soar, we all must work together more and accept compromise without sacrificing preservation of collections.

These presentations will describe the National Gallery of Art’s (NGA’s) reduction in energy consumption, findings of the NGA’s Strategic Sustainability Performance Plan, and successful integrated projects. Resources available through ASHRAE for museum professionals, engineers and facilities managers will be identified that can be useful to discuss indoor air quality, set points, sustainability and energy conservation.

A panel discussion will be held after the presentations.

A live webcast will be available for those who are unable to attend in person at https://collab.si.edu/sites/OUSFA/NCP/ClimateControl/default.aspx. Please submit any questions for the presenters to MCIweb@si.edu.