

Chapter 4: Collections Environment

More institutions holding American art reported an urgent need for improved environmental controls than any other preservation need (27%). Indeed, 22% do not control temperature, 35% do not control humidity, and 21% do not control light in any areas that hold collections (figure 4.1). Considering all three types of controls, 11% of institutions holding American art provide no environmental controls for their collections. This is considerably lower than the Heritage Health Index finding for all institutions, which was 26%. Figure 4.2 shows that libraries and archaeological repositories/scientific research collections are much more likely to have no environmental controls. However, 8% of archives and museums, 9% of historical societies, and 10% of large institutions that hold American art are lacking environmental controls (figure 4.3).

At the institutions that hold the most art collections, 14% of art museums have no controls for temperature, 21% have no controls for relative humidity, and 16% have no controls for light. At independent research libraries, 67% have temperature and 67% have relative humidity controlled in all areas where collections are held; 47% control light in all areas where collections are held. Twenty-three percent of art museums and 8% of independent research libraries cite an urgent need for improved environmental controls.

Figure 4.4 shows some of the dangers to collections when collections environments are not controlled. Eight percent of institutions holding American art with collections currently in need of treatment attribute significant damage¹ to the harmful effects of light, and

Fig. 4.1 Institutions with American Art Holdings' Use of Environmental Controls Where Collections Are Held

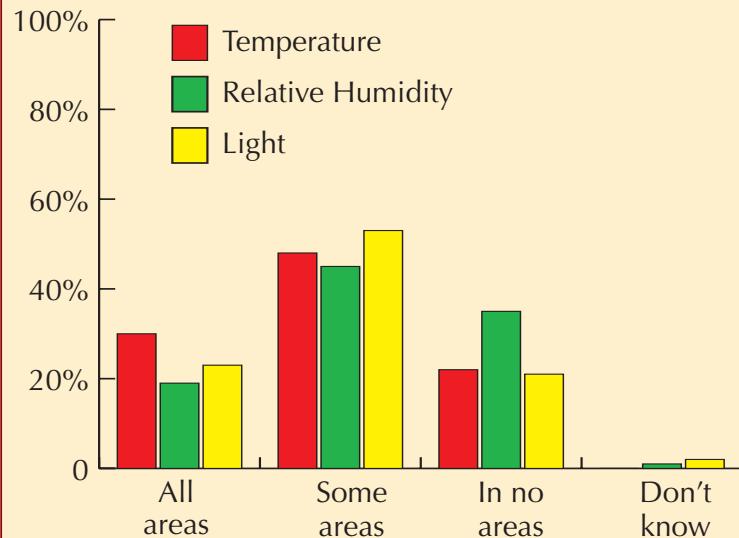
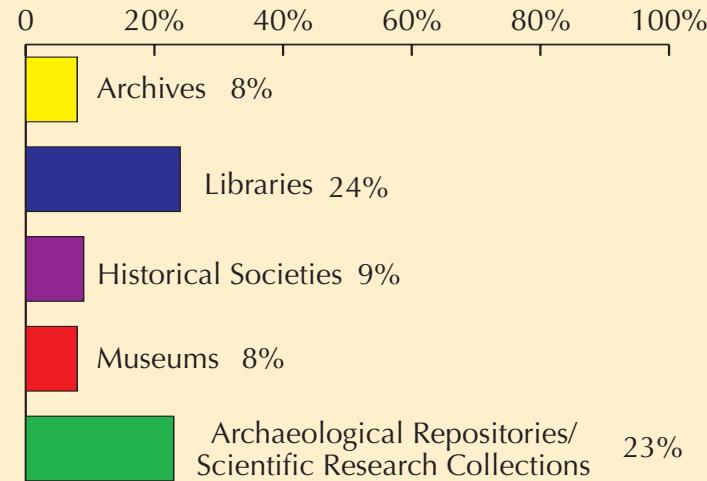


Fig. 4.2 Institutions with American Art Holdings' Use of Environmental Controls* Where Collections Are Held (by type)



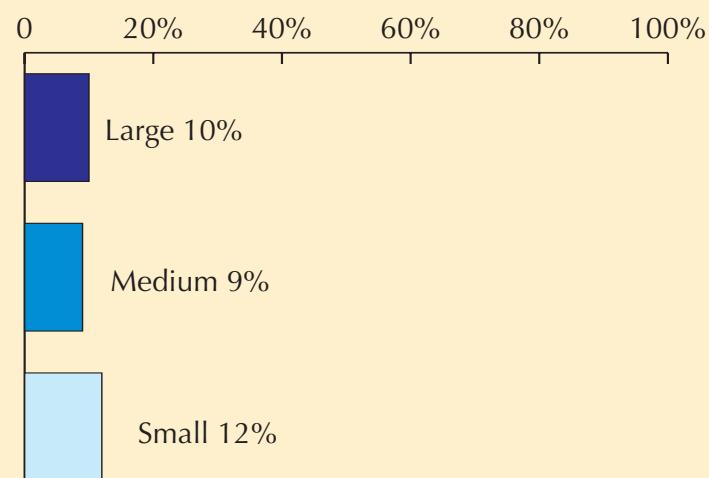
*including temperature, relative humidity, and light

1. Significant damage or loss: Change(s) in an item's physical or chemical state necessitating major treatment or reformatting or resulting in total loss of access. Some damage or loss: Change(s) in an item's physical or chemical state requiring minor treatment.

another 65% have had some damage. Nine percent of institutions with American art holdings have had significant damage and 58% have had some damage due to water or moisture. Some of this water damage could have been caused by leaking or flooding, but some could have been prevented by implementing relative humidity controls. Physical or chemical deterioration can also be caused by various agents, some inherent to the material itself; however, not keeping artifacts in properly controlled environments will hasten their decline: 15% of institutions have seen significant damage to their collections from physical or chemical deterioration and 72% have seen some damage. Airborne particulates or pollutants are another hazard that collections face whether on display or in storage: 4% of institutions have had significant damage and 55% have had some damage caused by them.

In a discussion of environmental controls, several members of the American art committee raised the issue that rapidly rising energy costs

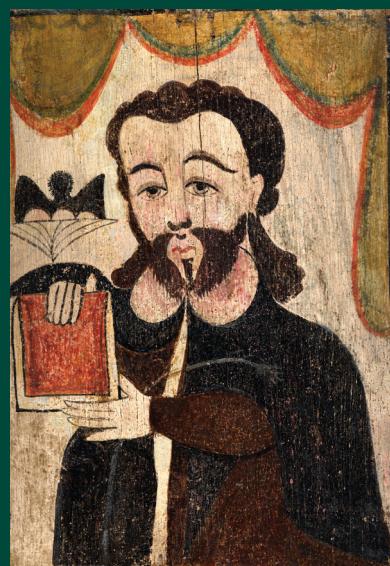
Fig. 4.3 Institutions with American Art Holdings' Use of Environmental Controls* Where Collections Are Held (by size)



*including temperature, relative humidity, and light

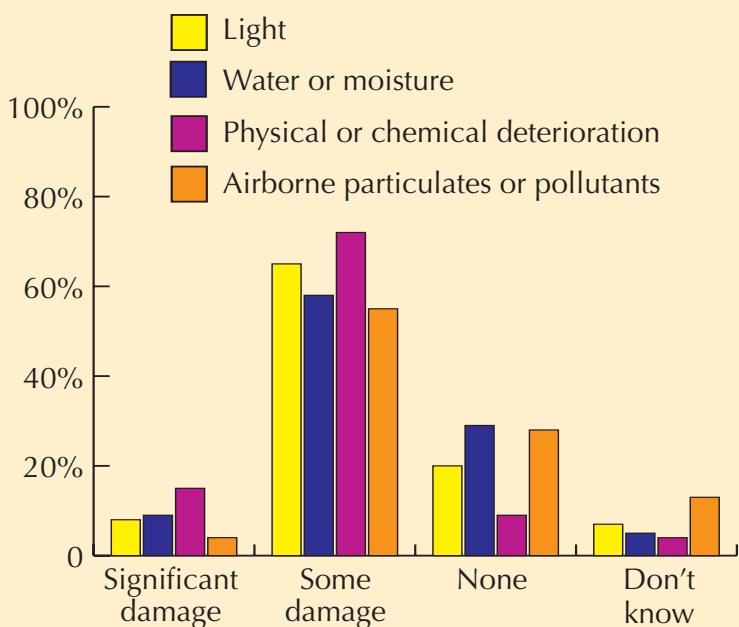
are making it challenging for institutions to provide the strict climate controls that collections demand. It was noted that in the energy crisis of the 1970s, museums were given exemptions from

The Regis Santo Collection at Regis University in Denver, Colorado, features over 700 Southwestern religious and cultural objects from the late eighteenth century to the present. A santo (Spanish for saint) is a painting on a wooden panel or a sculptural carving. The university has only a small budget for the care of the collection and no dedicated staff person devoted to its care. When not on display in the main library, the santos are stored in a climate-controlled archives vault, but the display conditions are what worry the collection's caretakers. The display space in the main library is not climate-controlled, so wooden objects that came into the collection with significant cracking due to the dry climate of the Southwest are compromised and subject to further deterioration. The university is currently seeking a long-term solution to these display problems in the form of a new study center that will provide proper environmental conditions and better access to the collection, allowing more research to take place on these important cultural objects.



The cracked wooden panel of the San Ignacio santo from Regis University's collection of New Mexican santos shows the cumulative effects of time, climate, and display in insufficiently climate-controlled spaces.

Fig. 4.4 Environmental Causes of Damage to Collections at Institutions with American Art Holdings



reducing their energy consumption because of the particular needs of collections. They noted that some institutions, both large and small, are housed in buildings operated by outside entities that essentially control the thermostats. In addition, collections may be in multi-purpose buildings and lack zoned climates. The committee encouraged Heritage Preservation and other groups to do more research on the issue of energy consumption and proper environmental controls for collections, given the fact that energy costs are unlikely to return to former levels. Increased concern about energy also provides an opportunity for collecting institutions to educate both their leadership and the public about how the correct temperature, relative humidity, and light control can dramatically increase the life expectancy of an artifact. ♦