

The use of museum collections is facilitated by proper preservation and protection, provided by more new and innovative methods, including the use of part of the collections themselves—the buildings. The following articles describe museum storage facilities.

Jonathan Bayless

Designing Critical Habitat for Collections Use

Critical habitat contains the space and resources needed for the long-term survival of populations. Museum space, whether for storage or exhibit, is a critical habitat essential for the survival of populations of museum objects. Without such habitats, museum objects suffer population losses and cannot survive over time. The space must provide a controlled environment for temperature, humidity, and light, and be as secure against human intrusions and natural forces as possible. In the struggle to create the most secure space, we have been regularly forgetting that museum objects must be accessible for public use. Why? Because human interactions with museum objects are a necessary activity contributing to their continued existence.

We generally speak of a fundamental difference between the storage and protection of collections and their use and enjoyment. We think of these two goals as happening in separate locations to different objects, such as a prehistoric Zuni bowl on exhibit and a historic Springfield rifle in storage. This perceived difference helps perpetuate the problem when we design new storage space. As funding becomes available for construction we tend only to think of larger, more protected ver-

sions of existing storage space, too often closed to all but the few staff with access. This view has led to the label “back-room curator,” as someone who spends all his time locked up and out of sight.

At Grand Canyon National Park, a large and diverse museum collection containing historic river boats, biological specimens, photographs, and historic and prehistoric artifacts are stored in a variety of locations whose quality

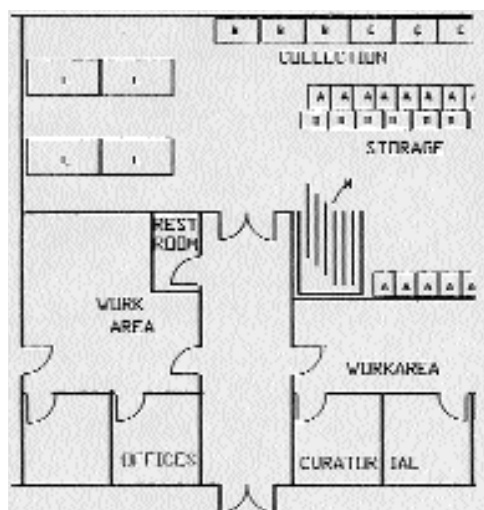
ranges from “acceptable” to down right “miserable.” In the late 1980s, a Collection Storage Plan was completed that laid out the design for a new 7,000-square-foot facility. As shown in the layout, the initial design for the building had a single hallway leading into storage areas and offices. The sole public use space envisioned was the hallway and restroom. Otherwise, the visitor would enter directly into the “inner sanctum” of the museum storage and work areas. As happens now in most park sites, this would lead to a conflict between providing the greatest security for the artifacts and encouraging research, tours, and other regular public access.

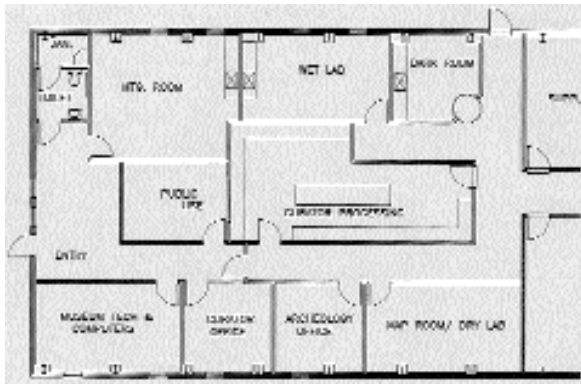
The solution is to incorporate the need for public access and use into museum storage facilities during the design process. While museum facilities in parks nationwide are designed to fit a variety of collection types, environments, and local conditions, most design criteria for access and use have widespread applicability.

One design element is perhaps obvious, or should be. Dedicated space must be set aside for public research use of the collections. This may be a separate room adjacent to museum storage, or a space within the storage room for a work station or simple table and chairs. This latter approach assumes that all the collections within storage can be securely locked up in cabinets or screened shelves. A separate room is the best solution, as it allows the visitor to have space designed and maintained for a specific purpose, and not be cluttered with other uses that may be conflicting. A dedicated room can contain work surfaces, area lighting, electrical outlets, and other equipment that enhance the user's experience and increase safety and object security. Extensive use of glass partitions in walls allows for visual observation of visitors by staff and meets the need to provide direct supervision of object use. Otherwise, this security concern is achievable only by remaining in the room or literally guarding the door.

Another important design criterion, often overlooked, is the first impression visitors receive upon entering the facility. First impressions may

Original layout for Grand Canyon Museum facility where the hallway was the sole public use space, leading into secured areas.





Revised Grand Canyon floorplan showing foyer, research room, and multi-use meeting room.

not be vital, but this decides where they will wait, even during short periods, and what kind of orientation they will receive. All too often, our visitors enter crowded and

narrow corridors without receiving any orientation as to the purpose or layout of the facility they've entered. Curators, often struggling with overcrowded storage spaces, may see entrance areas as the lowest priority for space, forgetting that a successful museum facility will be one that is more frequently visited. An entrance foyer with chairs, bulletin boards, signage for orientation, and a professional layout sets the tone for the facility's users and recognizes their importance. In addition, it contributes to the "zone" approach to security by providing the least secure area, which is open to everyone, as the outermost zone.

At Grand Canyon, a meeting room for 20 people was designed that doubles as a lunch room, emergency project room, and creates the ability to provide lectures, hold business meetings, and train staff. It also provides an orientation space for tour groups. Meeting rooms provide vital space for park managers to meet with their staffs and outside experts and planners, and a variety of park partners. Amazingly, many important discussions occur with limited- or non-participation by resource professionals because of the lack of simple meeting space in parks.

With the assistance of professional architects and engineers, the museum staff developed a completely new layout for the Grand Canyon museum facility. A large foyer, glass partitioned research room, and meeting room totaling 800-square-feet

have been incorporated. The rest room was expanded from the original design to provide for access for individuals with disabilities, an important component of access throughout any public facility. If additional space had been available, we would have added a "project room" that could have provided space for researchers working on major projects for months or even years. Of course, one must never forget that a general purpose room can serve many different purposes, whether as an office, a dry lab, or a research room. This knowledge can lead to an evolutionary understanding of building design, and how space can be adapted to new functions or needs over time. Thus, we should recognize a certain level of flexibility in our planning when we designate a room's uses.

Most parks will not be building a facility as large as that at Grand Canyon National Park, but the use criteria discussed here should still be relevant. Plan to dedicate at least 10% of the available space to visitor use. In a 250-square-foot building this may only amount to a 4'x5' work station by the door. But large or small, a museum facility without such space is creating a guaranteed conflict between preservation and use. As resource managers, we depend upon the backing of management and the support of an informed and concerned public. We know many of the physical needs of the critical habitat needed for the protection of our collections. The challenge is to provide for their use and enjoyment within this secure and controlled environment. Only careful design and planning, from the very beginning, can ensure that these potential conflicts are avoided and successful partnerships between protection and use are assured.

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Anna von Lunz

High Technology in Civil War Era Storage Facility

The 1864 Civil War Powder Magazine at Fort McHenry National Monument and Historic Shrine in Baltimore, Maryland houses important collections of both the Fort and Hampton National Historic Site (Towson, Md). This impressive rectangular structure has high vaulted ceilings and 6'-thick exterior brick walls, surrounded by a 8'x147' exterior courtyard wall.

In the early 1970s the park made the decision to use the structure as a storage facility for museum services. Shelving, cabinets, heating, air conditioning, and alarm systems were installed. For over 20 years this facility has accommodated thousands of artifacts from both sites. For the most part the collections are stored on separate sides of the building or on different aisles. Hampton's artifacts include books, furniture, por-