Case Study

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

USING BARCODE TECHNOLOGY TO TRACK COLLECTIONS DURING A RELOCATION MOVE

Rudy Calpo Photography, courtesy of California State Parks

The California Department of Parks and Recreation, otherwise known as California State Parks, has a mandate to preserve, protect, and interpret its museum collections which includes museum objects, natural history specimens, paleontological specimens, archaeological artifacts, and archive materials. The museum collections consist of millions of objects which are housed and stored throughout many of its 280 parks including the storage facilities of the Statewide Museum Collections Center (SMCC) located in the Sacramento area.

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- PETER HANCHETT, ASSOCIATE STATE ARCHEOLOGIST, CALIFORNIA STATE PARKS

CALIFORNIA STATE PARKS OVERVIEW

Over one million museum objects, two million archaeological specimens and three million archival documents

RETURN ON INVESTMENT

- Thousands of hours of labor saved
- Expedited relocation process
- Faster usability of new facility
- More efficient use of storage space

PRODUCTS

- The Museum System (TMS)
- TMS Barcode Manager
- Crystal Reports

CHALLENGE

In 2008, California State Parks staff at the SMCC, located at that time in West Sacramento, began planning for the relocation of State Parks' diverse museum collections to a decommissioned warehouse at the McClellan Air Force Base. It was in the process of being renovated to accommodate the storage and growth of museum collections, and would provide the collections a safe, secure, climate controlled environment, in a state of the art retrofitted facility. When moving any type of collection from one location to another, tracking each object at various location points throughout the move, and recording the new "home" location once properly stored, is central to good collections management. With large moves this can be a labor-intensive, time-consuming task.

SOLUTION

In planning for the move, staff investigated different ways electronic data tracking could efficiently expedite and streamline the process and determined that barcode technology was the best option. Although California State Parks strives for complete and standardized collections data, the move provided an opportunity to improve collections data in TMS. The archaeological collection from the State Archaeology Collections and Research Facility (SACRF) at SMCC were selected as the test-case since the collection was already well documented in TMS and most of the collections were already containerized. Barcode scanners, label printers, and Gallery Systems' Barcode Manager utility were purchased in order to synchronize the scanned data with TMS. Barcode Manager streamlined data collection, and California State Parks could scan each container as it was packed, moved and unpacked, and upload location and container information directly into TMS.

OUTCOMES

By 2013 the move of the archaeological collection was complete. Associate State Archaeologist Peter Hanchett played a key role in facilitating the move for the large archaeological collection. Peter noted, "I had tremendous success using Barcode Manager in an integrated approach with TMS's Crystal Reports to manage the collections by barcoding boxes, scanning them onto pallets, and using Crystal Reports to relocate them in pre-assigned home locations. Barcoding saved thousands of hours in labor and allowed for immediate start-up at the new Statewide Museum Collections Center (SMCC) since the collections were staged upon delivery. We were able to accomplish such a large relocation project because we came into the project fully prepared and understood how to use the data to our advantage."

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The barcoding process involved using Crystal Reports to design the label format, then printing and applying the automatically generated barcodes to each component, container, and location. Senior State Archaeologist Larry Felton was instrumental in preparing the groundwork for the move. He explained that, "while some large objects were stored directly on shelves or other locations, the vast majority of the archaeological collection were containerized with many small objects stored in one container so there was little need to create labels for individual objects."

The sequence in which barcodes were scanned was critical to accurately and efficiently track the archaeological collection locations. For example, to document the presence of a container in a location, the shelf label was scanned first, followed by the label on the container. The Barcode Manager software then read these scanned files and updated TMS with the new location data.

The team also tracked the pallets onto which the containers were loaded for transport, treating each pallet as a separate location, in spite of their mobility, and another Crystal Report was used to print pallet labels. According to Larry, "This approach permitted the archaeological collection managers to maintain inventory control at the pallet level. At any point during the move, they could look in TMS and accurately identify the pallet or pallets on which containers associated with any collection were stored."

Once it came time to unpack the containers, the team used the same barcoded location data used for tracking the collection during the move in re-organizing the collection and planning the use of the new space. "Related collections had generally been stored together when we first moved into the old facility in the late 1970s, but over the years material was moved in and out, and empty spaces filled with new accessions," said Larry. This move provided an opportunity to group related collections together again by Park Unit, Site and Accessions.

The team designed several Crystal Reports to group and count total number of containers from each park unit, and to print new location labels to tag assigned shelving. Another detailed report listing the containers on each pallet was used as an inventory tool to check off containers as they were moved to their final locations.

This planned approach allowed staff to determine how much storage space was required to house the collections from each park unit, and projected space for future growth of the museum collections.

Having the right technologies in place saved California State Parks time and money and ensured that each container arrived at its new storage facility safely. As Larry explained, "the positive experience we had using barcoding to facilitate the move has encouraged other departments to adopt similar practices."

Photographs, courtesy of California State Parks