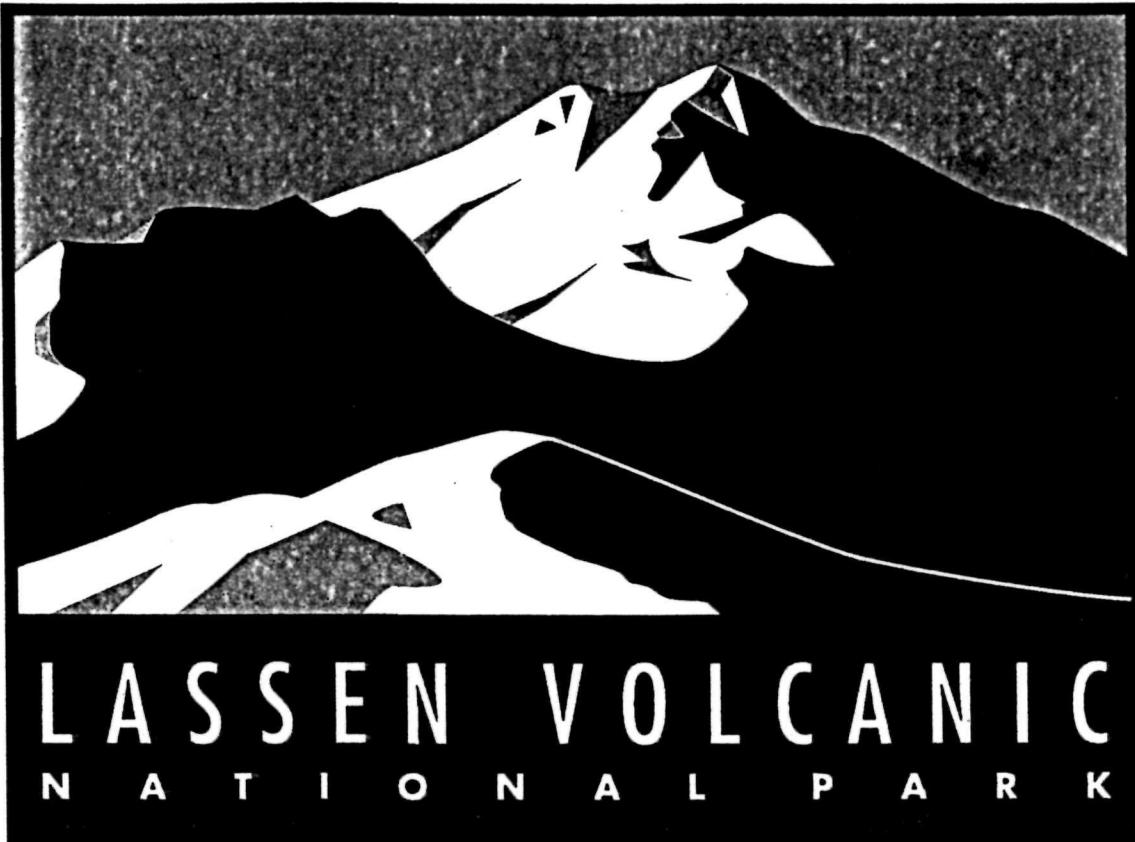


Museum Management Plan



Cultural Resources • Pacific West Region
National Park Service



LASSEN VOLCANIC NATIONAL PARK

MUSEUM MANAGEMENT PLAN

Recommended by:



11-20-2000

Date

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**Department of the Interior
National Park Service
Columbia Cascades Support Office
Seattle, Washington
2000**

Executive Summary

The Lassen Volcanic National Park Museum Management Plan defines a series of collection management issues facing the park and presents a corresponding series of recommendations to address these issues. A team of museum management professionals developed the plan in full cooperation with members of the park staff designated to deal with the park archives, museum collections, and library. This collaboration followed a survey of the complete park staff to determine current information and program support needs.

The park is presently curating an estimated 256,800 items of cultural significance that are part of its archives and museum collections. The documentation of these resources is extremely poor. The items have become disassociated intellectually and are currently dispersed throughout two park administrative divisions and at least two other locations outside the park boundaries. There is a critical shortage of work and storage space, while at the same time a large potential for collections growth. The lack of adequate work, storage, and study space hampers the proper administration, preservation, and utilization of the existing collections. As a result, these primary park resources are not contributing to park operations at their potential. The survey of park staff indicates a high level of need for the potential products of well-organized and documented resources, and a high level of support for the necessary actions to accomplish these ends.

There are a number of practical improvements the park can make within the existing staff, budget, and facilities limitations, as well as other changes that would require additional resources. The recommended improvements include the following:

- Retrofit portions of existing buildings as an interim measure to address the problem of inadequate physical storage and work spaces for museum, archives, and library collections until the park can build a modern facility.
- Continue development of a professional cultural resource management program and staff it at the professional level so that the park can address its mission to preserve cultural resources.
- Complete the necessary documentation of the archives and museum collections.
- Improve and implement information and image management systems necessary to utilize park archives, museum collections, and library resources in direct support of park programs and partnerships.

The Museum Management Plan team strongly recommends that the park initiate the steps listed above. Each major section and most of the appendices of this plan contain detailed recommendations and actions that the park should consider for the improvement of existing programs and the creation of new programmatic initiatives.

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Introduction

The Museum Management Plan (MMP) is a specialized planning document intended to assist in the administration and management of park museum collections and the programs associated with them. In this task the MMP fulfills all the requirements of the Collections Management Plan (CMP) outlined in the *NPS Museum Handbook* and *Director's Orders #28: Cultural Resource Management*. In addition, the MMP attempts to place museum collections in a more holistic context within park operations by focusing on how staff members use various collections to support mission goals. To that end, the recommendations made in this MMP for resource management, interpretation, and public use of the museum collections represent a new methodology in National Park Service (NPS) museum operations.

Lassen Volcanic National Park requested the MMP to assist in the redevelopment of a viable and multifaceted program that will support various internal and public programs of the park. Many elements of this MMP are developmental in nature and designed to guide the park through the initial steps in the creation of a workable system that will support all aspects of park operations.

Museum operations are generally not well understood by parks, and for that reason the potential benefits inherent in a well-developed Museum Management Program are often overlooked and under-supported. The goals of the program, stated in basic terms, are as follows:

The Museum Management Program should be designed to collect and preserve park-specific data and make that information available to park staff and the public in the most efficient manner possible.

Considered in this light, Museum Management Programs in different parks often administer many different types of resources. By definition museums *always* contain collections of specimens and objects. Most museums also administer their own archives and operate their own library since these functions are necessary to support the work of the organization as a whole. It is not unusual for all these resources--archives, collections and library--to be open for public use.

Prior to the on-site visit, the MMP team used a staff survey to collect baseline data concerning the use of park archives, collections, and library, the need for services, and suggestions for expanded services and use. The rate of response to this pre-visit survey was very good, and the information collected provided a valuable tool for this plan. The results of the survey are contained in Appendix A and referenced in the discussions of various issues.

This Museum Management Plan was developed over a 10-day period from October 18 to October 29, 1999. The team became familiar with park resources and operations, then developed, organized, and recorded the central issues as well as necessary supporting information. The MMP team conducted an out-brief with the Superintendent and interested staff on October 29, 1999.

The plan is the result of collaboration between the team and the park that included discussion and consensus on all issues and recommendations, but it was completed through individual assignments. The team gathered other appendices from a body of suggested methodologies and reference materials generated over time by various NPS Curators for other Museum Management Plans. The MMP team wishes to thank the staff of Lassen Volcanic National Park for the courtesy, consideration, and cooperation extended during this planning process. Team members have appreciated their time, effort, and involvement; they have made our job much easier.

Collections Management History

The function of a collection management history in a Museum Management Plan is to provide readers with an understanding of how a park has managed museum collections since its inception. Generally, this history provides a broad chronology of collection management activities and presents information about the origin and development of the collection, identifies the personnel involved, and describes their work with curatorial administration and museum object preservation.

Throughout the history of Lassen Volcanic National Park, the staff has considered the administration of the museum collection to be a collateral duty. The following discussion focuses on the development of the collection, its composition, and the evolution of accountability procedures, including accessioning and cataloguing systems.

Lassen Volcanic National Park was created in 1916, but no formal Museum Management Program began until 1958. At that time, the Assistant Chief Park Naturalist, R.G. Prasil, catalogued a large percentage of the collection, which consisted of herbarium specimens. His work included documenting and then creating official catalog record cards of park collections, copies of which were also sent to a repository in Harpers Ferry Center, West Virginia (HFC).

The park recorded its first accessions in the late 1920s and early 1930s. Paul Schulz, the Chief Park Naturalist, contributed some of the first rock, mammal, and bird specimens in the late 1930s. In the 1940s Dr. Carl Swartzlow, who was also a Lassen Park Naturalist, added some of the first projectile points to the collection, while another Park Naturalist, Joseph Burgess, provided many plant specimens. Also during this period Mrs. B.F. Loomis donated a significant collection of photographs, albums, and diaries from the Loomis family. Later Henry Lind, a Lassen employee, contributed a substantial collection of black and white photos that were taken in the 1950s. Mrs. B. F. Loomis and some Atsegewi neighbors sold a substantial Indian basket collection to the park during the same period.

A large number of natural and cultural resource management studies and other research projects and reports have been conducted in the park and could provide extensive additions to the official Lassen Volcanic National Park collections. Most of these materials have remained in the offices of the park staff members who wrote or collected them. In 1998 the park initiated a formal process to incorporate all of the available research materials and written reports into collection archives.

Some significant dates in the evolution of the Museum Collection Program at Lassen Volcanic National Park include the following:

- 1958 Park sends to HFC its first catalog record cards, # 1 to #2689.
- 1986 Park submits first Inspection Checklist of deficiencies with cost proposals identifying flooding potential in the current basement housing area.
- 1989 Park makes first formal inventory of all of the collections.
- 1993 Park produces first draft of a Scope of Collections Statement.
- 1995 Park moves entire collection from basement to upper story in Science Center building.
- 1997 Park commissions first on-site conservator to assess materials for future exhibition in Loomis.

- 1998 Park changes the collateral-duty Curator position to Cultural Resources Coordinator with added emphasis on cultural resource management, including museum collection management.
- 1999 Park completes first archival assessment identifying approximately 106,000 additional items to catalogue.

Lassen Volcanic National Park received the Automated National Catalog System (ANCS) in 1986. Office Clerk Nancy Bailey occasionally assisted in typing the triplicate data forms. To date, there are only 138 records entered on ANCS, catalog #2838 to #2975. The 1999 Collection Report identifies 147,713 total objects in the collection, 142,817 of which were added to the archives in 1999 as a result of an archival assessment.

The Automated National Catalog System + (ANCS+) came to the park in spring 1998. Under an interim park management organizational scheme, Russ Lesko, then Chief of Interpretation and Resource Management, assigned Interpretive Specialist Quinn Rankin to ANCS+ training in San Francisco in March 1998, although she was never expected to use the program. To date, Curator Scott Isaacson has not had any formal training in the ANCS+ program. He has participated in informal training at the Western Archeological and Conservation Center (WACC) with museum technician Khaleel Saba in order to use ANCS+ to catalog the backlog of park archives. In 1999 Isaacson recorded approximately 45 new accessions in the accession book, but these items have not yet been entered into ANCS+. Documentation, accountability, and computerizing park record collections are high priorities recognized by the Museum Management Planning team.

COLLECTION STORAGE

Past attempts to secure an adequate specialized collection storage facility at Lassen Volcanic National Park have been unsuccessful. Most efforts to maintain such a space fell far short in achieving the necessary conditions for museum objects described under National Park Service guidelines. The space available for park collections was often inaccessible or shared inappropriately with other park functions. The collections also have inadequate security, fire protection, and environmental controls.

At present, approximately 82 linear feet of archival materials are in storage at the Western Archeological and Conservation Center. Additional files are located at Park Headquarters waiting to be added to this collection. The current storage room is overcrowded and does not provide easy access and workspace for staff and researchers. The facility contains approximately 240 square feet. The park needs to develop an adequate storage space for the safety and accessibility of the museum collection and for further expansion. A conservative estimate indicates a need for a 1200 square foot facility. Increased emphasis on research and monitoring in resource management programs will greatly increase the quantity of materials and archives that will be added to the collection at Lassen Volcanic National Park.

The history of the park's efforts to maintain its museum collection originated in its response to a memorandum from the Washington office entitled "Inspection Checklist for Museum Storage and Exhibit Spaces." The park completed its initial response to the directive in 1986, and has over the last thirteen years corrected many of the deficiencies that the memorandum listed. The following deficiencies have been corrected since the current Park Curator, Scott Isaacson, arrived in March 1989:

1. The park completed an approved access plan for museum storage facilities to be used by non-curatorial staff and researchers and established a sign-in log in 1993.

2. The park moved the portion of the collection stored in the basement of the Science Center to another floor to avoid possible flooding in 1995. Flooding had occurred in previous years and resulted in minor damage. These problems led to the cleaning of the building's outside drains, but a tremendous amount of snow and rain in 1995 contributed to some additional flooding, and the park expedited the move upstairs.
3. The park placed insulation over two windows in the storage area in 1995.
4. The park secured all museum storage cabinets with sash locks to provide additional security in 1995.
5. The park equipped the entrance to the museum storage room with solid-core wood doors and a deadbolt lock in 1995.
6. The park consolidated the placement of artwork, which was previously displayed throughout the headquarters building, into the museum storage room where outside light does not fall directly on objects in January 1998.
7. The current collection storage space was insulated to maintain environmental conditions, and since 1998 the data loggers have indicated very little fluctuation in relative humidity and temperature.
8. Toby Raphael of the Harpers Ferry Center completed a partial Collection Condition Survey of the objects scheduled to be on display in the Loomis Museum by June 1998.
9. The park, which had used hygrothermographs since 1990, upgraded to data loggers in December 1998 to monitor and record levels of relative humidity and temperature.
10. A Museum Management Plan, formerly the Collections Management Plan, is in progress and will be completed by FY2000.
11. A component of the Museum Management Plan will address the collections storage issue and will address the absence of a Collections Storage Plan in FY2000.

The history of curation at Lassen Volcanic National Park has been one of benign neglect. Resource managers were not comfortable depositing their field notes, photographs, and studies with the park curation program. As mentioned above, museum curation duties were always collateral in nature and could only provide limited accountability, protection, and accessibility for the collection. Since the park has historically assigned collections management and care as a collateral duty to the Assistant Chief Park Naturalist, the collections have never had the close management attention required by National Park Service policy and federal law. The park recognized collection needs when it restructured the Assistant Chief Park Naturalist position in March 1998 to address the park's overall cultural resources management program. With the completion of this Museum Management Plan, the curation program at Lassen Volcanic National Park is moving forward.

LASSEN VOLCANIC NATIONAL PARK MUSEUM COLLECTION CONTRIBUTORS AND CURATORS

Norman Scherer	1932-1933
C. R. Swartzlow	1935-1946
H. B. Robinson	1942-1947
P. E. Schultz	1947-1955
R. G. Prasil	1957-1960
R. J. Badaracco	1959- 1961
R. L. Nelson	1961-1963
E. B. Baysinger	1961-1962
R. C. Milne	1963-1965
L. W. McKenzie	1966-1967
G. F. Kaye	1967-1968
H. C. Warren	1969-1973
G.O. Clark	1973-1975
G.W. Anderson	1975-1978
R. G. Warfield	1978-1981
E. E. Richard	1981-1988
S. W. Isaacson	1989-present

Sources: Museum Collection Data Base, catalog record cards / *Administrative History* by Dr. William K. Medlin

Archives, Museum, and Library Facilities

ISSUE A

ISSUE STATEMENT

The park will enhance its vision for long-term resource preservation and use by developing appropriate research and curatorial facilities to meet the needs of park staff, researchers, and the general public.

BACKGROUND

Lassen Volcanic National Park has developed and held collections since the 1930s. Currently, the collections consist of approximately 256,800 individual items. The vast majority of this material (252,000 items) is archival and primarily consists of park records. There are smaller collections in biology (2,090 items, mostly plant specimens), history (1,791 items), geology (495 items), and ethnography (317 items). The current archeological collection consists of 167 items. Other archeological items collected in the 1960s and 1970s were curated at the University of California, Davis (UC Davis). Unfortunately, a preliminary search at the university in the 1990s failed to locate them. Lassen staff who will conduct the park's Archeological Overview and Assessment in FY2000 plan to return to UC Davis and conduct a more extensive search for the missing collections.

For decades the park housed its museum collection in the basement of the Science Center, with the park library located on the first floor of the same building. The park stored its records and manuscript collections (archives) in the basement of the Administration Building. Both basements flooded in 1995, prompting the park to move these collections to safer ground.

The park relocated museum collections to the second floor of the Science Center, where they remain to date. The room size is approximately 214 square feet and contains 12 standard museum storage cabinets, four small herbarium cabinets, two insect cabinets, and a small worktable. While the collections are no longer in danger from flooding, high summer temperatures in the current location create preservation problems, and the area does not have the space necessary for use of the collections. The space also lacks fire suppression controls.

After the flood, the park first sent its main archival collection to San Francisco for basic data recovery and immediate preservation treatment. These materials were then returned to the park and placed in the same room as the museum collections. In 1999 the park shipped this segment of the archives (82 linear feet) to the Western Archeological and Conservation Center for archival processing, and these materials currently remain at that location. Other significant archival resources (about 40 linear feet) are known to exist at various sites in the park. The park should combine these additional resources with the material currently at WACC. Once the entire collection is processed, the park can manage it as a single unit.

The Lassen Volcanic National Park Library was a secondary cause of park reorganization. The library was originally located in the front room of the Science Center, but in February 1998 the Interpretive Division and the Resource Management Division divided the collections. Each division handled their

portion in a different manner: Interpretation maintained a central library organization, while Resource Management further divided the books and reports among various division offices and vertical files. As a result, all the benefits of central library organization were lost, and users could no longer go to one source to find what published resources the park held or where they were located.

DISCUSSION

The park library, archives, and museum collections do not exist in a vacuum. These unique assets are essential in documenting park resources, recording park history, supporting current park operations, and guiding future development, but they must be developed logically and managed in a user-friendly manner.

At Lassen Volcanic National Park the staff performed good collections work in the early years of the park. The geology collection is exceptional and provides good documentation for the park's geological resources. The park entomological collection, while somewhat limited in breadth, also provides excellent primary resource documentation. The development and annotation of the collections at the park's herbarium by eminent California botanists (Barbe, Gillett, et al) provide a unique historic perspective on the twentieth-century ecology of this park that is probably not duplicated at any other facility. The park has invested much hard work on these collections, and the potential value of these unique park-specific documents argues for an enlightened management policy. In their present state, however, these resources are not being utilized. The collections will have very little value to park management until the staff completes necessary documentation and makes these resources more readily available for use.

The results of the Museum, Archives, and Library Survey completed in advance of this Museum Management Plan in October 1999 (see Appendix A for the compiled survey results) support the observations above. Over 50% of the survey respondents indicated they did not know where the collections were located or what resources were available, and over 60% said they would benefit from a listing of the contents of the collections. Clearly park staff members want and need greater access to the information that they perceive is available in the park library, archives, and museum collections.

Currently, the park faces two barriers in providing the desired access. One barrier is the lack of basic documentation of the collections, such as an accessions list and catalog, which would make this information available in both electronic and paper media. At the present time there are fewer than 300 catalog entries in the electronic ANCS+ program and 3056 printed catalog cards to document the combined archival and museum collections of approximately 256,800 individual items. The park has begun to address this situation by initiating the organization and cataloguing of the park archives and increasing the level of documentation required for park investigative projects. A substantial backlog remains, and the collections will continue to have very limited use until the park completes basic documentation. These needs are more fully explored under Issue C, Information Management and Access.

The second barrier to access is the lack of adequate facilities for collections management and use. The development of adequate facilities involves more than just providing storage space, and consideration of a functional work/storage/study area requires some new approaches to the problems of how a particular park uses its collections and how the use of museum collections directly relates to the use of the library and archives. The park should base its planning for this type of facility on the recognition that archives, museum collections, and libraries share common goals--the collection, preservation, and dissemination of information. It makes little sense to have these functions housed and administered in separate locations. A space where the user could look at items in the collection, retrieve additional information concerning those

collections from the archives, and access related published materials in the library at the same location would be much more efficient. This type of approach is also validated by the responses in the Museums, Archives and Library Collections Survey. A significant percentage of the respondents indicated support for combining the library, archives, and museum collections.

In addition, the perception that walls and doors must separate archives, museum collections, and libraries needs to be changed. Walls and doors occupy space, and space is a scarce commodity in many parks. In point of fact, there is no reason why many collection types cannot share the same space, the same environmental controls, and the same systems for air handling and other functions. Because the library is, of necessity, a much more public place, with different requirements for access than other museum collections, physical security may be a concern. The types of collections involved (rocks, insects, and dried plants), and the fact that the clientele is largely from NPS rather than the public, suggest that locking cabinets would solve most security issues.

The Museum, Archives, and Library Collections Survey also indicated the staff's need for a collections work area with dry-lab facilities and space to prepare, organize, and use the collections. Specific requirements for specimen preparation and identification suggest the need for access to a sink and clean-up area, which could be housed in a modified kitchen or bathroom. There is also need for limited computer space, data lines, and access to a printer.

The park must also be prepared to provide the most efficient storage equipment and techniques possible in order to maximize the use of any available area. The park should replace most of the cabinets now in place and should carefully select any replacements to complement both current and projected needs. This process will involve projecting the type and size of collections expected over the next few years, and considering the possibility of an expanded facility in the future. The park should consider, for example, the future purchase of compactor storage units, which will directly affect the style and size of any new cabinets procured.

OPTIONS

The park must provide adequate facilities for the creation, storage, preservation, and use of the park library, archives, and museum collections, but only has a limited number of options.

The first option the park should consider is whether to maintain the current system in which the library, archives, and museum collections are dispersed, or whether to combine these resources into a single, multi-faceted unit. This question must be resolved before the park seriously considers any options related to location. The decision *not* to combine the resources would imply that the current archival resources at the Western Archeological and Conservation Center would probably not be re-united with the material still at the park, and alternative arrangements would have to be made for that resource. Also, the decision *not* to combine the library, archives, and museum collections would indicate that the current locations of these resources could serve for storage and access with some modifications. A decision *not* to combine these resources would also be counter to staff needs as expressed in the Museum, Archives and Library Collections Survey.

A second option involves the selection of possible locations for a consolidated, multi-use area. Currently no facility within the park contains the required amount of space in the appropriate configuration to fill this need. As a result, the park is limited to planning for future development, while at the same time adapting existing space to serve as a temporary, workable solution. One potential site for a temporary facility would

be the “living room” of the Interpretation and Cultural Resources Building, which contains approximately 280 square feet. This location has the open area necessary for working on the collections, good light, limited public access, and close proximity to the kitchen, which could function as a temporary preparation or preservation laboratory. This alternative has the drawback of requiring individuals to move offices, and the space will be fairly tight.

A second temporary site would be the attached garage of this same building, which contains about 220 square feet. It has the same benefits of location listed above, including direct access to the kitchen area. The park would have to retrofit the garage to accommodate museum storage by construction of an interior “envelope” that would provide adequate environmental controls and an acceptable work environment. The park should use the standard estimate of \$100.00 per square foot (about \$20,200.00) when considering funding. This project would be eligible for funds under the Museum Collection Protection and Preservation Program (MCPPP).

A third set of options that the park should consider involves possible locations for future development and/or construction. The three alternatives that have been mentioned include incorporation of a facility in the new Visitor Center, the rehabilitation of a garage in the Headquarters area, or new stand-alone construction in the Maintenance Compound. The park should also consider new construction within the Mineral Headquarters Area, which is easily accessible to all potential users.

The park should consult with architects and engineers who have experience in designing multi-use areas for archives, museum collections, and library functions when it considers a plan for a new facility. There are also several good reference works about the organization and design of multi-use areas cited in the bibliography of this plan, including *Managing the Modern Herbarium: An Interdisciplinary Approach* (Metsger and Byers 1999) and *Storage of Natural History Collections: Ideas & Practical Solutions* (Rose and de Torres 1992). The park should also provide individuals or teams planning future facilities with a copy of the MMP for reference.

The park should fully consider these options as part of the General Management Plan (GMP) development process. The Museum Management Plan team has made comments on the preliminary draft of the GMP that is currently in review, and the park should address these recommendations during the continuation of this planning process. The park should also feel comfortable asking any member of the MMP team to serve in an advisory capacity regarding library, archival, or museum collection requirements during the GMP process and beyond.

RECOMMENDATIONS

- Select an interim location for housing the combined park library, archives, and museum collections, retrofit the area, and move the collections.
- Improve storage cabinets, equipment, and furnishings as required by collection growth and as funding permits.

- Design any future collections area with experienced architects, engineers, and curators. The space should provide centralized access and use modern designs for moveable work surfaces/areas, adaptable ventilation systems, wet and dry laboratory areas, and computer hook-ups.

Museum Program Development

ISSUE B

ISSUE STATEMENT

Develop an aggressive and viable program to collect material that documents park resources and management activities and makes these resources available to all potential users.

BACKGROUND

Future development of the Lassen Volcanic National Park (LAVO) museum program will depend on successful completion of incremental steps designed to achieve established goals. The park must commit sufficient resources of time and money, but the park staff must also maintain a dedicated and directed approach. Issue B explores ways to achieve progress.

The LAVO museum collection has expanded in a slow, uneven manner over many decades. The collection contains some valuable resources, but the park has not followed a coherent and consistent approach to its growth and direction. Creating a vision for the future is an essential step towards developing a useful program to manage and protect these park resources. Such a vision for the growth, preservation, and use of the library, museum collections, and archives should be incorporated into all planning efforts, beginning with the park's General Management Plan.

Park planning documents now include only very brief references to the museum collection and program, generally reflecting its inactive status in the past. The current draft General Management Plan (GMP) and Resource Management Plan (RMP) both address museum collections and cultural resource programs.

The draft GMP (June 1999) cites the park's mission statement "to conserve, preserve, and protect Lassen Volcanic National Park and its geological, biological, and cultural resources for the enjoyment, education, and inspiration of present and future generations." Among the six goals associated with the park's mission are the following:

- Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context.
- The park contributes to knowledge about cultural and natural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.

The GMP identifies four decision points or questions that should be resolved in the plan, one of which asks, "To what extent should the park endeavor to preserve natural conditions and significant cultural resources?" In the discussion of cultural resources, the GMP clearly identifies the need for "provision of [a] collection storage facility meeting servicewide standards" because "current storage facilities are inadequate and do not meet standards for security and atmospheric controls." The plan also states "additional storage cabinets are needed but cannot fit into the available space."

The draft Resource Management Plan (1999) provides greater descriptive detail on museum resources and projects needed for the museum program. It includes the following project statements for the museum program:

- LAVO-C-012.000 Complete Collection Management Plan
- LAVO-C-013.000 Provide Museum Ethnographic Collection Study Overview
- LAVO-C-015.000 Construct Museum Storage Facility/Area
- LAVO-C-016.000 Manage ANCS Museum Database
- LAVO-C-020.000 Conduct Archeological Collection Analysis

The museum program should accomplish additional projects beyond this list. The park can obtain examples of appropriate Project Statements from the Columbia Cascades Staff Curator. These statements reflect the need to conduct research and education, to monitor and control the storage environment, to upgrade equipment, to direct the growth of the collections, and to address other program requirements and opportunities.

Museum collections amassed by Lassen Volcanic National Park include nearly 2,090 biological resource specimens, primarily consisting of plants, insects, birds, and mammals. The history collection has 1,755 objects with an emphasis on Loomis materials, which contain a photographic record of the Lassen eruption as well as glass plate negatives, ledgers, journals, and other photographs. A recent inventory of the park's archives, which include a variety of administrative, resource, and maintenance documents along with rare books, maps, and blueprints, has identified over 80 linear feet of records containing some 200,000 items. The small archeological collection contains 167 artifacts and the ethnographic collection contains 317 items including some fine Indian baskets. The library collection has approximately 1,000 volumes and assorted periodicals. The storage of this material is inadequate, as discussed in Issue A of this plan.

The LAVO museum collection is a primary park resource that must be preserved and protected. The park should develop a strong Cultural Resource Management (CRM) process to reinforce the vital links between the museum program and other CRM programs, including archeology, history, historic structures, ethnography, and cultural landscapes. Each cultural program has made significant progress in the development of inventories and surveys such as the Inventory of Cultural Affiliated Properties (ICAP), the Systematic Archeological Inventory Program (SAIP), and the List of Classified Structures (LCS). They have also made significant strides in preservation and protection, including the architectural rehabilitation of Loomis House, and in interpretation of park cultural resources through exhibits, cultural demonstrators, and a variety of other means. All of these functions are linked to the museum program through the creation and use of objects, archives, field documentation, and unpublished data.

The Natural Resource Management Program also has many links to the museum program through the biological and geological collections, and to the archive, which is the repository for field notes, reports, datasets, maps, photographs, and other records. The natural resource specialists in LAVO have both the expertise and knowledge essential for the proper creation and care of these collections and also have a clear interest in collections access, documentation, and use, as well as museum program development.

STAFFING

The park has always made staffing for the museum program a collateral-duty assignment (see Collections Management History). The Division of Interpretation has had primary responsibility for the museum

program, since natural resource specialists created and managed the biological collection. All park divisions contributed to the creation of the archives, although it was under the management of the Records Administrator. Both Interpretation and Natural Resources jointly created and managed the library, until the recent division of its collections (see Issue C). It is not possible to make an accurate assessment of the workload associated with the different parts of the collection, as the collateral-duty nature of the assignment meant that staff members did not devote large blocks of time to these duties and generated few written records of the work involved. Staff specialists in Natural Resources included collection-related tasks as part of their regular job duties. Seasonal botanists, volunteer academics, and others invested time and effort in the creation, care, and use of biologic and geologic collections. Recently, park management recognized the increased need for collection development and the workload involved, and so drafted a position description for the collateral-duty Curator, Scott Issacson, that increases his CRM duties to 60% of his time.

The park has recently begun to receive assistance from other NPS museum professionals in managing its collections. James O'Barr, Museum Curator at Redwood National and State Parks, has provided curatorial consultation and oversight. Lynn Mitchell, Archivist at the Western Archeological and Conservation Center (WACC) in Tucson, Arizona, has made an archival survey of the park and has just received the majority of park archives at WACC for archival inventory and processing. The park should encourage and support such links with other museum programs in the National Park Service.

The museum program and collections of Lassen Volcanic National Park are largely unknown outside the park, and few links with experts or partnerships with outside institutions exist at this time. There are numerous benefits to making contacts, sharing information, and partnering with institutions involved in the study, care, and use of natural and cultural collections related to LAVO resources. Some past partnerships have resulted in publications, such as the *Flora of Lassen Volcanic National Park* (Gillett et al 1995) or the *List of California Herbaria and Working Collections* (Barbe and Fuller 1987). Equally important are the working contacts and institutional information sharing that come from partnering efforts.

DISCUSSION

Lassen Volcanic National Park can best pursue its vision for the museum program at the same time it begins to make incremental progress and improvements in its physical layout, operational capabilities, and resource development activities. As the park builds a thoroughly professional program, it should hold a scoping session to develop a vision statement and goals for the Cultural Resource Management Program. If the funding necessary for such an approach is not available, the park can gradually refine the vision and goals for its museum program. Goals for the Lassen Volcanic Museum Program could contain many of the following concepts:

- Protect museum objects, specimens, and archives against both active and passive threats to their preservation, including fire, theft, flood, and environmental agents of deterioration.
- Document the identity, condition, and significance of collections and archives.
- Provide physical access for use and study of collections that is clean, safe, and contains adequate space and equipment for staff, researchers, and the public.
- Increase awareness and use of information management systems in LAVO and the NPS, which provide quick, accurate information on collections, archives, and library resources, and the associated data, images, and reports they contain.

- Provide and encourage the growth of the collections and archives in a manner that maximizes limited space and staff and captures the most significant objects, specimens, and records to document the park's natural and cultural resources and to provide a research tool for the future.
- Provide a seamless, integrated approach to supporting other CRM and NRM programs and develop resources for processing new archives and collections resulting from these programs.
- Establish and maintain partnerships with other agencies, institutions, and organizations that share an appreciation of the LAVO museum collection and a mission to advance knowledge for public benefit.

The General Management Plan supports these goals, although a master plan does not include specific levels of detail. Their inclusion in the Resource Management Plan is appropriate, and the park should consider adding such goals in future revisions of the RMP. Other park action plans define steps that are also important for a successful museum program, including an Emergency Operations Plan and an Integrated Pest Management Plan. The park should incorporate the museum program's needs into these plans when possible.

The museum program should place a high priority on enhancing the growth of the collection. The park should process and document new collections, but adequate storage space for growth is very limited. The museum program should take a proactive approach in developing collections with a high degree of value and significance. The adoption of this approach does not mean that the park should refuse or discard valuable collections, as storage space may be found in other parks or institutions when necessary. The park should seek the professional judgment necessary to make such evaluations from available sources. The assistance of the Redwood Curator fits the Pacific West Region's goal to develop working relationships in a sub-cluster of Northern California parks. A Memorandum of Understanding between Lassen Volcanic National Park and Redwood National and State Parks could delineate the assistance provided, sources of support, and responsibilities for both parks. Eventually, LAVO will have its own in-house professional capabilities to make a full assessment and evaluation of potential additions to its collections. At some time in the future, as LAVO gains experience and expands its museum program, the park may develop a formal Acquisition Plan.

The park has taken steps to centralize responsibility for cultural resource management programs within the Division of Interpretation, with supervision provided by the Chief of Interpretation and 60% of the duties of the collateral-duty Curator's position. The team assessed what staffing resources the park would need to achieve a fully staffed CRM program. An integrated CRM program would meet the majority of in-house requirements for expertise. The protection of historic structures may require the Maintenance Division to include staff familiar with building preservation techniques, supported by historic architects in Seattle and San Francisco. An Exhibit Specialist or other related job titles in Maintenance were not included under CRM in this plan, although the park may want to consider such staffing at some future date.

The MMP team anticipates that CRM staffing needs over the next five to ten years, may include the following positions:

- **CRM Manager:**
A GS-11 journeyman-level professional position for a person with expertise in a cultural discipline such as history or anthropology.

- **Collections/Archives/ Library Professional:**
An FTE at journeyman level for a GS-11 professional with expertise in museum resources and programs.
- **Anthropologist:**
An Archeologist or Ethnographer GS-11 position.

The park's use of seasonal and project specialists and technicians as temporary hires will provide necessary staff for completing numerous program goals of a one-time or long-term cyclic nature. Under the supervision of permanent professionals, such staffing arrangements are common in the NPS and will provide Lassen Volcanic National Park with a powerful capability to meet the changing needs of cultural resource management.

The current collateral-duty Curator has completed a few training courses in aspects of CRM. The park should consider an accelerated approach to skills enhancement through one of the longer four- to six-week curatorial training programs. This expanded training would enhance the ability of the program to provide professional management and staffing.

The park may need to assess the placement of Cultural Resources Management within the Division of Interpretation at some future date. While many parks continue to place CRM with Interpretation, this practice was more common in the past. Increasingly today, CRM is seen as a resource management function and closely aligned with Natural Resource Management. The park should decide whether CRM belongs with Interpretation, Resource Management, or an independent division during position management planning when it is assessing numerous operational considerations. In any case, the best program alignment is a matter for park management to decide when necessary. The small size of the current program reduces the need to address the alignment issue at this time.

The park must cultivate and secure program links with Natural Resources staff and expertise. The Chief of Natural Resources should be included in all decision-making that involves plans for protection and use of natural resource collections. The Natural Resource Management Assessment Program (NR-MAP) includes museum collections as part of its workload analysis, and the Natural Resource component of the Resource Management Plan should reflect this linkage. Natural Resource staff members, as both creators and users of the biological collections and archives, make important contributions to the success of the LAVO museum program. The museum program is already creating open accessions for all Natural Resource projects as a method of tracking archival materials. This approach should provide a very effective, proactive means to ensure that the park does not lose or discard information.

Partnerships and familiarity with other natural and cultural research, collecting, and educational institutions involved with similar resources is an essential part of the museum program development at Lassen Volcanic National Park. The production of finding aids and catalogs (see Issue C) can increase outside knowledge and use of park collections. The park can develop fact sheets and briefings on the program, such as those noted in Appendix F, which provide increased exposure and recognition. The U.S. Forest Service, whose lands are adjacent to the park, has already established a long-term relationship with LAVO. California state parks have a museum program that shares links with NPS museum programs. Ultimately, partnership activities, such as seeking joint grants for research and educational projects, are the hallmark of a professional program.

RECOMMENDATIONS

The following list of recommendations summarizes the findings presented above:

- Develop a vision statement and program goals that provide a strategic approach to development of the Lassen Volcanic National Park Museum Program. Incorporate these goals into other park planning documents, especially the Resource Management Plan and the General Management Plan, when appropriate.
- Develop Cooperative Agreements or General Agreements with other parks and centers to provide needed professional assistance and consultation. Delineate responsibilities and protocols for program areas.
- Expand the LAVO Position Management Plan to address CRM needs and seek additional staffing to provide core CRM skills and capabilities.
- Provide additional training support for the LAVO Cultural Resource Manager or collateral-duty Curator to increase skill levels at an accelerated pace. Consider four- to six-week courses for CRM, museum curation, and development of biological collections.
- Involve the Natural Resource Division in all aspects of integrated resource planning, especially concerning the biological and geological museum collections. Support inventory and monitoring efforts through careful planning for specimens and field records.
- Develop partnerships with outside institutions and organizations. Seek professional contacts and links with relevant agencies, repositories, and research institutions.

Information Management and Access

ISSUE C

ISSUE STATEMENT

Reliable information access is necessary for park management, researchers, and the public to understand and appreciate the park's resources and to make informed decisions concerning their management and preservation.

BACKGROUND

This issue explores Lassen Volcanic National Park's need to create access to information in library, archival, and museum collections, and, at the same time, to maintain professional standards for their management. Within units of the National Park Service these resources provide the framework for unique institutional memory. Park libraries contain published materials relating to local resources. Collections of cultural artifacts and natural history specimens provide three-dimensional records and baseline data for understanding and monitoring park resources. Archives reflect details about these collections and represent the entire body of original or unique documents relating to park management activities.

The Museum, Archives, and Library Collections Survey (see Appendix A) completed by 47 permanent and seasonal personnel at Lassen Volcanic National Park revealed that park staff use the historic archives, administrative records, photographic collections, and resource management records more than any other collections in the park. Of those responding to the survey, 62% wanted a listing of what is in the collections, another 38% wanted finding aids for the collections, and 29% thought that the archives should be combined with the museum collections.

Presently, LAVO archival materials represent the largest component of the park's museum collection. The 1998 Collections Management Report indicates that the park has catalogued five archival items, but that another 38,400 items remain to be catalogued. As a result of a park-wide archival survey conducted in April 1999, Archivist Lynn Marie Mitchell of the Western Archeological and Conservation Center has identified an additional 158 linear feet (or 252,800 items). These materials include administrative records, associated field records, and resource management records, which are represented in numerous material and type formats. Formats include original reports and manuscripts, site forms, field notes, drawings, maps, photographic slides, prints and negatives, films, video, oral histories, computer cards, tapes and diskettes, and artifact inventories. These materials are found in various locations throughout the park including Administration, Maintenance, Museum Collections, and Cultural and Natural Resource Management.

The park has completed very little cataloguing of archival materials. The small amount of inventorying and accessioning accomplished to date is of greater concern. These tasks represent the first level of accountability for archives and museum collections. Without the completion of accessioning activities, the park loses control of vital records and information. In addition, the accessioning of park records facilitates the development of funding needs as well as planning goals for park managers. A review of the park's

accession records reveals large gaps of time (March 18, 1992, to October 31, 1997) when the park engaged in no accessioning activities.

The park library has recently undergone a major reorganization, due in part to the establishment in 1997 of a separate Cultural Resource Management Division. The park should evaluate the material that has been removed from the original library and relocated to the Natural Resources Library. At one point in time the park stored all resource management materials together. Unfortunately, the dispersal of reports, manuscripts, and other materials appears to have been made without consideration of the power and ease of use that a consolidated library provides. This practice has resulted in serious fragmentation of significant resource management information.

DISCUSSION

The park has the opportunity to undertake a program that will make significant information available to park management, researchers, and the public. A project of this type must provide both physical and intellectual access to a variety of information sources, with the ultimate goal that all repositories retaining park-specific documentation would be easily accessible.

PHYSICAL ACCESS

The park has sent 82 linear feet of archival documentation to the Western Archeological and Conservation Center (WACC) for archival processing and cataloguing. The park transferred this material to WACC in June 1999, and it includes approximately one half of the park's present archival collection. These materials contain important park information dating from 1920 to the present and reflect a myriad of topics and activities relating to the park. Examples of the range of information include administrative records such as early Chief Park Ranger reports as well as the Superintendent's annual reports; Civilian Conservation Corps materials consisting of program documentation, notebooks, and blueprints and drawings; resource management information covering seventy years of park history; and pamphlets and rare books.

To proceed with processing and cataloguing park information, the park will need to explore several funding sources that are available for these particular types of archival activities. Recommendations include the following programs:

- 1) Backlog Cataloguing (BAC-CAT);
- 2) Cultural Resource Preservation and Protection (CRPP);
- 3) Cultural Cyclic Maintenance; and
- 4) Fee Demonstration Program.

In addition to the funding issue, storage of the large quantity of park material currently at WACC is another concern. The park has several options to consider because of the lack of appropriate storage space at Lassen. The park could use WACC as an interim repository until it has completed a new facility or building. The park could also decide to transfer all materials to the National Archives and Records Administration (NARA) repository in San Bruno, California. The preferred option would be to utilize WACC so that the park could appropriately complete other necessary archival projects, particularly the consolidation of resource management materials that are currently located in multiple locations.

The park has several additional tasks relative to physical access. The first is to begin inventorying and processing materials remaining at the park. This project should include areas such as Resource Management, Chief Ranger's Office (Fire Management Program), Administration, Maintenance, and the Library. The inventory process is a critical step in gaining control over park records and information. Secondly, the park should locate other institutions or repositories with park information, including universities and NARA. This project would benefit the park by providing inventories or finding aids for park materials located off-site.

The park also lacks required museum documentation. This type of documentation includes specific museum-related activities such as accessioning and cataloguing. Many accession folders are incomplete, and the park has printed very few catalog cards. An additional concern involves the lack of program documentation required by law, including information generated by archeological projects in the park. The park should place a high priority on locating this information.

Finally, access and use of the original park library is no longer feasible. This topic was discussed previously and also mentioned in Issue A. The original library contained approximately 1,000 volumes, including pamphlets, and a substantial amount of resource management information. The bulk of this documentation, which was primarily related to natural history, was removed from the library and is now located in file cabinets in the kitchen area of the Natural History Annex. The goal was to separate natural and cultural resource programs.

Another of the original goals of the park library was to support the interpretation program. The remaining materials that were included in the former park library are now located in the Interpretation and Cultural Resources Building. The result is that there is no longer one centralized location to utilize the diverse information resources that this program provided. Unfortunately, printed inventories or databases that list the original holdings or indicate the relocation of library and resource management materials are not available.

The park has two options to resolve the library access problem. The most desirable option would be to reassemble and integrate the library in one location and to make a single individual responsible for its administration. The second option would be to establish a number of dispersed branch libraries throughout the park. These satellite offices would have to function with the support of a joint or central catalog system.

INTELLECTUAL ACCESS

It is important for the park to develop a variety of means to access park information, whether that information exists in library holdings, museum collections, or archival documentation. The park should create options with a combination of resources and, at a minimum, should include a mixture of both physical and electronic information.

Intellectual access is the ability to locate the necessary information without physically inspecting it or going to a particular resource. This type of access would incorporate the use of museum records, indexes, inventories, catalogs, and finding aids. Intellectual access also includes electronic park databases such as Pro-cite and NR-BIB, and the utilization of additional park databases for information management purposes. LAVO can provide intellectual access to park information in other repositories by the acquisition of hard copies of existing lists, inventories, catalogs, and other types of indexes.

RECOMMENDATIONS

- Develop procedures to locate, assemble, and create critical museum documentation. Seek partnerships with other institutions such as Redwood National and State Parks, Chico State University, and the Western Archeological and Conservation Center.
- Survey and identify park-related archival and information resources located in the park as well as in other institutions and repositories. Complete archival processing and cataloguing as necessary.
- Develop a process to reassemble the original park library with assistance of outside archivists, curators, and librarians.
- Implement accessioning procedures for all museum documentation in conjunction with the inventory process.
- Develop Cooperative Agreements or General Agreements with various National Park units, universities, and institutions to promote accessibility and accountability for library, museum, and archival collections.
- Plan and develop a program to duplicate documentation that will provide intellectual access to park information. Include scanning or microfilming techniques.

Museum, Archives, and Library Survey Results

APPENDIX A

INTRODUCTION AND METHODOLOGY

This appendix details the results of the survey conducted in advance of the Museum Management Plan (MMP) prepared for Lassen Volcanic National Park in October 1999. The primary objectives of the survey were to determine:

- The number and percentage of the staff using the park archival, museum, and library collections.
- The primary areas or categories of collections and information use, and the reasons the information is required.
- The reasons why staff do not use these information resources, and the measures necessary to promote information availability and use.
- The general impressions held by the staff concerning the value and use of park archives, museum, and library collections.

In addition to these primary objectives, the survey collected some basic demographic information concerning length of service, prior employment in other parks, length of tenure in current position, and the division in which the respondent worked. The survey also noted whether the response was from a temporary or permanent staff member. The MMP team used part of the demographic information to monitor the responses and ensure they were well distributed across the entire pool of respondents. The team plans to use other demographic data as part of a larger study across the Service. For this particular survey, the response appears to be fairly representative across working divisions when compared to the park Table of Organization, even though a large segment of the potential respondents (28%) opted not to respond.

The target of the survey was the combined permanent and temporary staff of Lassen Volcanic National Park as of October 1, 1999. The park sent the survey to 75 individuals under a cover memorandum from the Superintendent, requesting that they complete the survey and return it to the Team Leader for the Museum Management Plan by a specific date. The team received a total of 47 responses, representing 63% of the possible survey universe.

A statistically valid survey requires at least a 12% response from the survey universe, and a 25% response is considered "good" for this type of survey. A large response from a large universe is considered more valid than the same percentage from a smaller universe. As such, the Lassen survey is at the higher end of total universe/response percentage required for survey work, and thus the results are considered highly predictive.

A 10% response of the responding population to any given question, statement, or selection is considered statistically valid. Thus, for the purpose of this survey, less than 5 responses were not considered statistically valid and were not assigned percentage ratings. For the sake of convenience, fractions were rounded off to the nearest whole number.

SURVEY RESULTS

Aside from the demographic queries, there were two different types of questions in the survey, each used to collect distinct kinds of information:

- **Checklist Questions:** designed to determine what types of services the respondents are using and what types of services they need.
- **Evaluative Questions:** designed to determine the respondents' attitudes toward the collection management programs offered.

Respondents were also given two opportunities to add comments: one was included in the "services used" and the other in the "services needed" section. Write-in responses are generally not used in surveys of this type because they often fail to elicit a statistically valid response, and the response that *is* generated is often difficult to quantify. In the Lassen survey, however, the respondents took the initiative to establish their own "memo fields" in additional areas of the survey form. While most of the written response is anecdotal and of limited use in the survey results, the responding staff members provided enough written comments (between 15% and 28%) to indicate considerable interest in how the park manages the library, archives, and museum collections. All write-in responses are included in bold-face type at the appropriate location on the survey form.

The questions in Section I help to determine the current patterns of use for the library, archives, and museum collections. The responses to questions 1 through 3 show that 40% of the respondents use the library an average of five times a year, and 43% of the respondents use the archives/museum collections an average of ten times per year.

An additional 21% of the respondents draw on non-Service resources an average of six times per year. It would be interesting to ascertain what services these staff members need that are not currently offered by the park, in order to determine if there might be a need for increased in-house services.

The responses to questions 4 and 5 show the types of collections used most often and the primary reasons given for that use. These responses are interesting; the geological specimens and the herbarium, which are the best-organized segments of the collections, received less use than some of the less-organized areas, including archives and resource management records. The limited documentation and lack of easy access may explain the less-frequent use of the geological specimens and the herbarium.

That logic is partly supported by some of the data in Section II, where the questions help to determine why the collections may not be used. In this section a large percentage of the respondents indicated that they did not know where the collections were located (51%), did not know what type of collections were available (68%), did not know how to find out about the collections (37%), and did not know where to go for access (41%). Other factors inhibiting use were the lack of physical access (19%) and the lack of electronic access (25%), both of which illustrate the need for adequate collections documentation mentioned in the previous paragraph.

The responses to the questions in Section III document what current and potential users think would make the resources more useable. Large percentages of the respondents indicated the need for a listing of what is in the collections (62%) and the need for collections finding aids (38%). A significant number of

respondents favored combining the collections with the archives and the library (29% and 21%). The need for collections organization (26%) and for computer access (21%) was again documented.

The responses to the evaluative statements in Section IV indicate that the staff has a good understanding of the value of maintaining park archives, collections, and library collections, and strongly supports these programs.

GENERAL CONCLUSIONS

- The survey indicates that the staff does not have a comprehensive understanding of what the collections contain, but they realize that there is currently no space to work on the collections and that the collections lack organization and documentation.
- The survey also documents some fairly definite ideas on how to improve management of the collections. In addition to providing lists and finding aids to the collections, suggestions include combining the collections with the library and archives, documenting the collections, and creating an adequate work/study area with computer access to park collections and on-line services in a central, accessible location.
- In the evaluative portion of the survey, the staff indicated strong support for the basic concepts of archives and museum collections as instruments for the documentation of park resources. Respondents also supported the staffing and funding of positions and programs that preserve those resources and make the resulting information easily available for park use.

SUMMARY

The LAVO Museum, Archives, and Library Survey accomplished the primary goals outlined in the introduction, provided valuable information to the MMP team in advance of the park visit, and substantiated the primary issues in the Museum Management Plan. The survey format provided the park staff with the opportunity to record candid individual impressions of the archival, museum, and library collections and to offer suggestions for improvement. The results of this survey should also provide park management with firm background data for its consideration of the alternatives and recommendations made by MMP team in this plan.

MUSEUM, ARCHIVES, AND LIBRARY SURVEY FORM

SECTION I

These first questions will help us determine use patterns for museum, archives, and library collections. For the purpose of this survey, a "visit" to the collections also includes verbal, telephone, and e-mail requests for information that would require the Collections Manager to find and communicate that information to you.

1. Do you use the park library? 26 No 19 Yes

If yes, about how many times in the past year? 98 (5.1 visits average)

2. Do you use the park collections/archives? 26 No 20 Yes

If yes, about how many times in the past year? 208 (10.4 visits average)

3. Do you use non-NPS collections or archives? 35 No 10 Yes

If yes, about how many times in the past year? 55 (5.5 visits average)

4. What parts of the collections/archives do you use (check as many as apply):

<input type="checkbox"/> Historic Archives	10 (21%)	<input type="checkbox"/> Administrative Records	7 (17%)
<input type="checkbox"/> Photo Collections	17 (36%)	<input type="checkbox"/> Historic Collection	6 (15%)
<input type="checkbox"/> Archeological Collection	5 (12%)	<input type="checkbox"/> Ethnological Collection	3 (7%)
<input type="checkbox"/> Herbarium	3	<input type="checkbox"/> Paleontological Collection	1
<input type="checkbox"/> Insect Collection	1	<input type="checkbox"/> Geological Collection	3
<input type="checkbox"/> Mammal Collection	1	<input type="checkbox"/> Bird Collection	1
<input type="checkbox"/> Resource Management Records (such as building files, natural resources studies, archeological excavation reports)			
11 (23%)			

5. What are the primary reasons you use the collections (check as many as apply):

<input type="checkbox"/> Administrative Research	7 (17%)	<input type="checkbox"/> Project Research	7 (17%)
<input type="checkbox"/> Develop Summer Programs	4 (10%)	<input type="checkbox"/> Comparative Studies	3
<input type="checkbox"/> Maintenance/Repair Information	1	<input type="checkbox"/> Historic Structure Information	9 (21%)
<input type="checkbox"/> Publication	1	<input type="checkbox"/> Information for visitors	12 (29%)
<input type="checkbox"/> Exhibit/Programs	5		
<input type="checkbox"/> Environmental Impact/Remediation Research	1		
<input type="checkbox"/> Other (please list):	4		

School. Personal knowledge.

Special programs.

SECTION II

We realize there might be many different reasons park staff do not make use of the museum, archives, or library collections in their work, and it may well be possible to fix some of the situations if we know what to look for. Your open and honest response to this question would be appreciated.

6. What are the primary reasons you **do not** use the collections (check as many as apply):

- | | |
|--|------------------------------|
| <input type="checkbox"/> Don't know where the collections/archives are located | 24 (51%) |
| <input type="checkbox"/> Don't know what types of collections are available | 32 (68%) |
| <input type="checkbox"/> Don't know how to find the collections I need | 15 (37%) |
| <input type="checkbox"/> Don't know who can get me into the collections | 17 (41%) |
| <input type="checkbox"/> There is no place to look at/study the collections/archives | 9 (19%) |
| <input type="checkbox"/> There are no supporting archives (reports, maps, photos) | 5 (11%) |
| <input type="checkbox"/> The collections don't have the items I need | 4 |
| <input type="checkbox"/> The collections are not relevant to my job | 15 (31%) |
| <input type="checkbox"/> There is no place to work | 5 (11%) |
| <input type="checkbox"/> The collections are not physically accessible | 9 (19%) |
| <input type="checkbox"/> The collections are not electronically accessible | 12 (25%) |
| <input type="checkbox"/> There is no supporting library | 5 (11%) |
| <input type="checkbox"/> There is no computer printer | 1 |
| <input type="checkbox"/> Collections are not organized | 5 (12%) |
| <input type="checkbox"/> Not open on a regular schedule | 5 (12%) |
| <input type="checkbox"/> There is no one to help me find things | 5 (12%) |
| <input type="checkbox"/> Collections are too far away from where I work. | 10 (24%) |
| | Distance <u>ca.</u> 50 miles |
| <input type="checkbox"/> Other (please list): | 7 (15%) |

Not a customer-oriented function. Don't need the collection to do research. I use prepared animals in my presentations—it is probably not appropriate to use the quality specimens in the collections.

Don't know anything about them. Now that I know it is there, how can I use it? If it gets set up, I would be interested in using it. My hours don't coincide w/open hours, and I don't have needed access.

SECTION III

There is always room for improvement. We are looking for some general trends and areas that may require innovation and shifts in the way museum, archives, and library collections are managed. Again, your open and honest response to this question would be appreciated.

7. What could the collections/archives do to be more useful to you (check as many as apply):

- Move collections/archives to a more central location 13 (28%)
Suggestions: 8 comments, or 19% Manzanita Lake. Where is it? Advertise where they are. Where is this place? Rotate some material back & forth to Manzanita Lake. Move to one facility. Designate a permanent space. Establish a storage facility with workspace & accessibility. Move to a spot specifically designed, rather than just stashing them. Set up booth at VC with changing exhibits.
- Open collections/archives different or longer days and hours 9 (19%)
Suggestions: 6 comments, or 13% What are the hours? Advertise what the hours are. Part of Seasonal training should include an overview of the collections. Begin a schedule of tours for the staff. There is no access for security reasons. Have a coordinator establish open hours.
- Provide a listing of what is in the collections 29 (62%)
- Provide a finding aid to the collections 18 (38%)
- Combine museum collections with archives 12 (29%)
- Combine museum collections with library 9 (21%)
- Provide a work area 7 (15%)
 - Wet lab 3 Dry lab 6 (14%) Other: 2 botanical dissecting area room w/work table
- Provide a computer hook up 9 (21%)
 - Printer 5 (12%) Copy machine 3 Other: 3 scanner
- Provide on-line services to support research 9 (19%)
- Provide professional staff to organize and work on collections 9 (19%)
- Organize existing collections 13 (26%)
- Organize existing collections in a different manner 2
- Provide professional staff to assist with access to collections 6 (13%)
- Provide remote computer access to collections/archives 10 (21%)
- Provide the type of collections I need 2
Suggestions: insects – more botanical information
- Other (please list): 9 comments, or 21% Tell new employees about the collections. Provide staff with a tour of the collections. Better slide viewer needed. Need to update library catalog. Display some more museum items. Did not know we had collections in the park. Provide time in training schedule for visit to collections. Tell Seasonals you have the stuff – I was unaware. Let employees know archives exist & hours.

SECTION IV

We are interested in your general and overall impressions regarding the value and use of museum, archives, and library collections within the NPS.

8. Please indicate the intensity of your opinion by circling one letter for each statement below.

A = Agree U = Uncertain D = Disagree

40	2	1	Museum collections and archives should be used to document park resources.
5	10	27	Park collections and archives are of no value to me in the completion of my job.
33	8	4	Park archives, collections and libraries need professional management and care.
29	14	0	Park collections and archives should be consulted prior to beginning resource management projects.
33	9	1	Park collections and archives should be more available for park staff use.
27	13	3	Park museum collections and archives are primary resources for the park.
25	17	2	The best use for park collections is reference and research.
22	17	2	Park collections would be more useable if combined with the archives and library.
8	31	4	There is not enough emphasis on natural materials in park collections.
4	5	33	Parks should not be expending staff, time and funding on museum collections.
33	7	2	Park archives should contain copies of all studies and reports done about the park.
11	31	3	There is not enough emphasis on cultural material in park collections.
1	4	40	There is no value in parks maintaining park museum collections or archives.
36	7	0	Park collections and archives serve as the "institutional memory" of the park.
36	7	0	Park Visitor Centers should exhibit more material from the park collections.
2	17	23	Funds spent on museum collections and archives would be better spent on preservation of other park resources.

SECTION V

In order to assure a well-represented response from a cross section of park staff, we would appreciate a minimum amount of demographic information.

Number of years in the NPS: 41 responses, 510 years total, 12 years average

Number of years at current park: 41 responses, 366 years total, 9 years average

Number of park units you have served in: 41 responses, 103 total, 2.5 average

Current position (optional): Administration: 3 Interpretation: 3 Maintenance: 8 Ranger: 6
Resource Management: 8 Not entered: 13

Number of years in current position: 33 response, 205 years total, 6.2 years average

Are you currently:

Permanent staff 23 Term/Seasonal/Temporary staff 18

Please estimate the time you spent responding to this survey: 33 responses, 12 min average

There were 75 surveys sent out, and 47 were returned, for a 63% response rate

Suggested Park Library Operating Policy

APPENDIX B

INTRODUCTION

The library at Lassen Volcanic National Park is an essential resource that assists staff at the site in carrying out the park's mandate. This document will establish guidelines and standards for the development and operation of the Lassen Volcanic National Park Library, and provide stability, continuity, and efficiency in its operation. The policy is intended to guide and support decisions of the librarian and to inform park staff and other library users of the library's objectives. The park staff will review and update this policy and the Superintendent will approve it every two years, unless policy changes require more immediate action.

OBJECTIVE

The primary objective of the Lassen Volcanic National Park Library is to select, preserve, and make available material that assists park staff and site-related researchers in their work. Its principal emphasis will be the support of interpretive services for park visitors.

RESPONSIBILITY

Implementation of this policy is the responsibility of the librarian. This employee will be designated by the Chief of Interpretation and Cultural Resource Management and will be responsible for compiling a list of desired acquisitions, promptly adding new library items to the collection, shelving materials, insuring that material is returned in proper condition, accounting for the collection, and maintaining catalog materials in computerized and physical form.

SCOPE OF COLLECTION

The collection consists of books, periodicals, microfilm, videotape, maps, photographs, and a vertical research file. These materials cover natural and cultural history topics, park mandate and development, and NPS material.

Materials in the library will pertain to the following:

1. Natural history topics with special emphasis upon vulcanology and recent eruptive events, geology, biology, and ecology.
2. Cultural history topics with special emphasis on Native American cultures, archeology, westward expansion, early conservation movement, park development, and current environmental issues.
3. Park management issues such as cultural and natural resource management, law enforcement, maintenance, and administration.

SELECTION GUIDELINES AND PROCEDURES

The Interpretation and Resources Management Divisions will use the following criteria in selecting materials for the library:

- Importance of the subject matter to the collection
- Authenticity and accuracy
- Permanent value and/or historic potential
- Author's reputation
- Publisher's reputation and standards
- Readability
- Price
- Availability in nearby libraries.

The librarian will compile a list of desired acquisitions in August of each year. Input from all staff (both paid and unpaid) will be considered. Copies will be forwarded to the Superintendent and Team Leaders for budget and reference purposes.

MICROFILM

The microfilm collection will include materials that are unavailable or prohibitively expensive in their original form.

PERIODICALS

In addition to general library selection criteria, the librarian will make periodical selections based on the following conditions:

- Periodicals must supplement the collection as an additional and current source of information.
- Periodicals must occasionally or regularly publish popular articles, historic materials, or research findings relating to the park.

OPERATING GUIDELINES

Loan Privileges

Borrowing privileges are extended to all NPS employees and volunteers at the park. There is a 30-day limit on individual loans. The 30-day loan period can be extended at the discretion of the librarian. The librarian is responsible for reviewing the card files no less than once a month and contacting staff with overdue materials. No more than three items may be checked out at one time.

At the discretion of the Park Librarian or Chief, library privileges may be extended to the following:

- NPS employees from other areas
- Contractors conducting research in the park
- Researchers with valid research needs at all levels
- Other users who will benefit the park and not interfere with normal operations.

Non-NPS library patrons will be restricted to on-site use. The Superintendent may make exceptions. Use of the library by non-park staff will be by appointment with the librarian. The librarian will supervise use; patrons will check in and check out. The library will maintain a log of non-park use.

Returned materials are to be placed in the "Return" box. The librarian is responsible for re-shelving and re-filing materials. No other person should re-shelf books. The librarian should re-shelf materials on a biweekly basis at a minimum.

Damage and Loss Policy

Borrowers will replace lost or seriously damaged materials, and if materials are not immediately available, reimburse the park with the cost of replacement. If the borrower does not replace or compensate the park for these materials within a period of 90 days, the library will issue a bill of collection for the estimated market value of the materials.

Abuse of library materials and privileges will result in the loss of library privileges.

VERTICAL FILE

The library will maintain a vertical file. This file will contain information about the park, photocopied material not suitable for cataloguing in the regular collection, pamphlets, articles, and personal accounts from diaries, journals, letters, and newspaper clippings. Materials in this file will be catalogued into a vertical file index that the librarian will maintain. The librarian will update this file yearly in January.

PAPERBACKS

The library will acquire paperbacks for the following reasons:

- Title is not available in hardcover.
- Subject is estimated to be of current interest only.
- Substantial price differences are noted.

DUPPLICATES

The library will acquire duplicate copies of heavily used materials when needed.

REPLACEMENT

After the library has made all reasonable efforts to recover lost or stolen books, it will attempt replacement if there is a demand and/or the item meets selection criteria. If possible, the individual who lost the book should purchase the replacement.

GIFTS

The library may accept gifts of materials that meet the selection criteria with the following understanding:

- The park retains the right to keep, use, or dispose of gifts as deemed appropriate by the Superintendent.
- The library will integrate the materials into the regular collection.
- Park staff will give no appraisals for tax purposes. The librarian may assist in the following ways:
 1. Suggest sources of such information, such as dealers' catalogs.
 2. Provide a receipt describing the donated items, but should not assign a value to them.

CONTROLLED-ACCESS COLLECTION

The park will maintain a locked cabinet in the library for rare and fragile materials. The basis for inclusion in this cabinet is as follows:

- The items are virtually irreplaceable.
- Monetary value of the items is over seventy-five (\$75.00) dollars.
- The items have particular historic interest to the park.
- The items have reference value.

- The items have unusual attractiveness or interest.
- The items are in fragile or delicate condition.

The library will only loan materials from this collection at the discretion of the Superintendent. The catalog will note that these titles are housed in the cabinet. The library will maintain a separate list of these materials in the cabinet.

EXHIBITED MATERIALS

The librarian will compile and maintain a list of all books, periodicals, and maps that are used as furnishings and are not part of the library. The list will be kept in the controlled access area.

INTERLIBRARY LOAN

Interlibrary loans will only be made through the Columbia Cascades Support Office Library. The library will only make loans of non-sensitive materials, and the concurrence of the librarian is required. The library will keep a log of loaned materials.

VERTICAL FILE POLICY

A borrower may check out items in the vertical file in the same manner as books unless they are specifically marked to the contrary. When borrowing a vertical file, the borrower must take the entire folder and return all materials to the re-shelving area.

PHOTOCOPYING

Photocopying of materials is permitted except in the following situations:

- Materials could be damaged due to flattening of the binding or exposure to light.
- Materials are marked "Do Not Copy."

Material photocopied for use outside the park must be labeled as follows:

NOTICE:
This material may be protected by copyright law found in
Title 17, U.S. Code.

ADDING NEW PUBLICATIONS

The Lassen Volcanic National Park uses the Dewey Decimal System. The library will adhere to the following steps when it adds new publications to the system:

1. The Administration Office will receive new books and attend to all invoice matters.
2. The new books will then go to the librarian.
3. The librarian will photocopy the title page and reverse page and forward the copy to the Columbia Cascades Support Office Library. The CCSO Library staff will catalogue the book, add it to the card catalog, and prepare labels for the book.
4. The librarian will prepare an accession record for the book consisting of date received, cost, source of acquisition, and condition.
5. While books are being added to the catalog, they will be placed in the controlled-access area, and can be used in the library only with the permission of the librarian.
6. The librarian will prepare a monthly memo to the park staff on the new additions, providing the title, author, and a short summary.
7. When cataloguing is completed and labels arrive, the librarian will affix labels, pocket, and checkout card to the publication.
8. Books will then be shelved according to their Dewey number.
9. Every four months the librarian will update the park's computerized catalog with the most current copy from the CCSO Library. At this time hard copies of the author, title, and subject listings will be added to the library reference area.

EXCLUDED PUBLICATIONS

With the exception of the categories listed below, the park library will accession and catalogue all books purchased with NPS or cooperating association funds in a timely manner. Excepted categories include the following:

- Dictionaries, thesauruses, word finders, usage guides, or similar reference guides.
- Other books regularly needed by employees to carry out their day-to-day duties, such as safety manuals, fire codes, regulations, laws, museum manuals, public health manuals, etc.
- Annual publications such as almanacs, price books, catalogs, zip code guides, etc.

- Publications purchased as part of an approved training program.
- Books in the excepted category may be included in the collection at the discretion of the librarian.

INVENTORIES

The library will conduct an annual inventory in October. The librarian will acquire an up-to-date shelf list from the CCSO Library and will match the shelf list with current holdings and account for all missing books. The librarian will list missing books in a memorandum that will be circulated to staff for input. If this process produces no results, the librarian will forward the memo to the CCSO Library so that the titles can be deleted from the catalog.

By the end of each fiscal year the librarian will compile a list of acquisitions of the past year, noting source and cost. The list will be forwarded to the Superintendent.

BINDING

The park will bind unbound or paperback material at the recommendation of the librarian when value, condition, or frequency of use justifies this step.

WEEDING

On a yearly basis the library will remove from the collection material that is judged to be of no use for research or documentary purposes. Weeding will take in November, and librarians will employ the same criteria used in the selection of new materials. Items considered for de-accession should exhibit the following characteristics:

- Information outside of the scope of collection
- Outdated information
- Inaccurate information
- Irreparably damaged or worn material.

The library should carefully assess all items, including those that exhibit the above characteristics, for possible historic value.

WEEDING PROCEDURE

1. The library includes selected material in a memo and circulates it to park staff. The Cultural Resources Coordinator makes the final approval of weeding.
2. The library prepares and circulates a Report of Survey (DI-103).
3. The library updates its records.

4. The library offers catalogued items to the following:

- a. Columbia Cascades Support Office Library
- b. Columbia Cascades Cluster Units
- c. Harpers Ferry
- d. Department of the Interior Library
- e. Library of Congress.

The library may dispose of materials to other institutions at the discretion of the librarian with the concurrence of the Chief of Interpretation and Cultural Resource Management.

Weeding of the library collections will take place in November.

Approved:

Superintendent: _____ Date: _____

Team Leader: _____ Date: _____

Librarian: _____ Date: _____

Suggested Procedures For Evaluation And Retention Of Park-Specific Records

APPENDIX C

The collection of park-specific records and manuscripts (commonly referred to as the park archives) is a specialized part of the park museum collection. Along with the museum collection of specimens and objects directly relating to the park mandate, the park library contains published information about park themes. The records and manuscript collection provides information on the inner workings of the park as a whole. Thus the archives may contain such diverse elements as records of land acquisition, maps and drawings of park improvements, records of resource management studies and activities, copies of park publications, park films and slide shows, and the personal files of former park employees.

For the creation of the park archives, it is necessary for the Park Records Manager and the Park Collection Manager to cooperate, and work toward a common objective: the retention of the institutional memory of the park as a whole. The team approach is most effective in accomplishing the logical and orderly movement of records and manuscripts from their point of origin, through processing, and into permanent locations for storage and use. From time to time this team should also include the services of a professional archivist, who will assist in developing the overall form, structure, and use parameters for the collection. In this particular case, it is suggested that the park request the services of the archivist working for of the Western Archeological and Conservation Center in Tucson, Arizona.

In the creation of the park archives, this team must be guided by three primary National Park Service documents:

- *NPS-19, The Records Management Guideline* (or its successor) identifies what types of records must be destroyed or transferred to a Federal Records Center, and the schedule for these activities;
- *Director's Order #28: Cultural Resource Management* outlines in broad terms the Service policy covering the creation, management, and use of park records and manuscripts as part of park museum collections; and
- *The NPS Museum Handbook, Park II* contains specific instructions on how to organize, manage, and use archival collections for the benefit of both staff and the general public.

While at the park the MMP team identified approximately 220 linear feet (about 264,000 individual items) of park records that need to be evaluated for retention in the park archives. This resource is considerable, and a professional archivist should evaluate the collection for organization, storage, and duplication needs.

In order to obtain the funding necessary to accomplish the desired work, the park should take the following steps:

- Accession the entire collection under one accession number initially. As the archivist organizes the collection, several more accession numbers may be added, depending upon the natural groupings of record types.
- Assure that the next annual Collection Management Report records and reports this accession transaction. This step will allow the park to request BAC-CAT funding to address the organization, cataloguing, and duplication of this resource.

- Survey, catalogue, and duplicate the collections. Provide the requisite number of media use points, including microfiche reader/printers or computers with printers, in designated use areas which are convenient to staff and public users.
- Develop an adequate "follow-on" program to update the archives with new material from the park's active files on a regular basis (three- to five-year cycle). Develop the necessary Cultural Cyclic Maintenance program with the funds to ensure that this necessary work takes place.

Adopting and following this methodology will allow the park to move the records and manuscripts that document park resources and management efforts from current files to an organized medium available for both Service and public use.

Suggested Accession Procedures for Resource Management Records

APPENDIX D

Attachment A shows the steps involved in processing resource arrangement materials for archival use. Further details about the archival process are found in *NPS Museum Handbook*, Part II, Appendix D. A copy is available from the Park Curator for review. An example of a finding aid for a park archival collection is also available upon request.

Checklist for Preparing Field Documentation:

- 1) Obtain an accession number from the Park Curator at the commencement of all new field projects.
- 2) Label ALL materials with the project accession number. Use a soft lead pencil for marking documents or files and a mylar marking pen for mylar enclosures such as slide, print, or negative sleeves.
- 3) Materials must be arranged by material type such as field notes, reports, maps, correspondence, photographs, etc. Each group of materials should be stored in individual folders or acceptable archival enclosures.
- 4) Resource Management staff is responsible for turning over all project documentation to the Curator upon the completion of a project.
- 5) When the archival documentation is transferred to the Curator, the form below should be provided. This form includes the project title, principal investigator, date of project, and history of the project. The name of the individual who obtained the accession number should also be listed. The type and quantity of documentation, such as maps (13), field notes (four notebooks), and correspondence (three files) should be included as well.

Use One Copy of the Attached PROJECT IDENTIFICATION SHEET for Each Project.

ARCHIVING RESOURCE MANAGEMENT FIELD RECORDS: LAVO

PROJECT IDENTIFICATION SHEET

Accession Number: LAVO - _____ (Assigned *Only* By Park Curator)

Your Name _____

Project Title _____

Principle Investigator and Position at LAVO during Project. Please list staff members who might have aided in the project implementation.

Researcher's Office Location and Extension or Current Address, Occupation, and Contact Number.

Type and Quantity of Materials in Collection(s) (ie specimens, papers, files, reports, data, maps, photo, prints/negatives/slides, computer media - format/software). Condition (ie infested, torn, broken, good)
Attach additional paper if necessary.

Scope of Project:

Research Goals or Project Purpose. List any published or in-house reports related to the collection.

Abstract of collection content. Indicate whether specimens were collected. Attach additional paper if necessary.

Guidelines for Care of Natural Science and History Collections

APPENDIX E

NATURAL SCIENCE COLLECTIONS

Naturalists at Lassen Volcanic National Park have collected geological, mammal, bird, and botanical specimens since the late 1920s. For the most part, the natural science material has not been the result of formal resource management activities or specific research projects and serves as a general reference collection for the park. Of all the biological collections, the herbarium has the highest level of documentation. The scientific value of many biological specimens is difficult to assess because in many cases there is inadequate supporting documentation.

With the exception of fire ecology specimens, there have been no recent additions to the natural science reference collection, and the park does not plan to collect random biological material.

BOTANY

The herbarium is housed in standard metal cabinets in the main storage room on the second floor of the Science Center. The quality of paper used in herbaria has varied considerably over time. The best choice is 100% rag paper, which was usually used in the oldest collections and is the most stable. Herbarium mounting sheets and folders available to parks for years through *Tools of the Trade* are made of acid-free, buffered paper stock of an unknown degree of alkalinity, and are probably present in the collections at LAVO. Adhesives traditionally used to mount specimens include wheat starch paste (sometimes referred to as "tin paste"), gelatin and hide glues, organic solvent-based adhesives such as Archer's Medium and, more recently, polyvinyl acetate (PVA) white glues. In addition to adhesives, herbarium specimens are also strapped to support cardstock with paper or linen tape splints or stitched with cotton or linen string. *Tools of the Trade* distributed PVA adhesive to parks for herbarium use.

Flooding in a previous storage location in the basement of the Science Center damaged portions of the herbarium, but no evidence of past or present mold growth was apparent during the October 1999 MMP site visit.

CONCERNS

Buffered paper used for mounting may interact with the plant specimens. The effect of alkaline reserves such as calcium or magnesium carbonate on the scientific integrity of the specimens is not known. Ideally, paper should be 100% cotton rag, free of sulfur and lignin, and pH neutral or mildly alkaline and not above pH 8.5.

PVA emulsions often have a low pH and become more acidic over time. Moreover, gluing plant specimens directly to the support paper can restrict movement due to hygroscopic expansion and contraction and can damage fragile plant material.

RECOMMENDATIONS

- Use only unbuffered or lightly buffered 100% cotton rag paper for future fire ecology specimens.
- As much as practical, attach specimens to paper supports by strapping or sewing methods, using paper or linen strips held in place with water-activated, acid-free linen tape or sturdy cotton or linen tape to sew specimens to the supporting paper stock.
- When adhesives are required, especially where leaves fall off when unglued, use a methylcellulose paste instead of PVA emulsion glue.
- Place any acidic paper labels in a Mylar sleeve with an alkaline-buffered paper backing sheet.

STUDY SKINS AND MOUNTS

The park stores study skins of both mammals and birds in standard museum specimen cabinets. The cabinets are old, and the gaskets are largely deteriorated.

Over the years, many different preparators ranging from university professors and students to volunteers and park staff have introduced material into the reference collection. The condition of the study skins and mounted specimens varies from poorly preserved to fairly good according to the preparation techniques employed by the individual collector. Unfortunately, there are no field logs describing the collection and preservation strategy, and the only information available exists on the specimen labels. Physical evidence on several specimens, including grease accumulation and staining, lack of flexibility, and odor, indicates that the preparation was poor. One mammal study skin was so badly preserved that it was removed from the collection storage room during the MMP site visit.

Despite the poor preparation of several of the specimens, the MMP team detected no evidence of insect infestation such as cast larval skins, frass, or a significant amount of detached fur or feathers at the time of their visit. They did not see any insects detrimental to proteinaceous material in sticky traps set in various locations within the storage room. The lack of insects may be due to past biocidal treatments that discourage insect infestation.

CONCERNS

Because of the age of the mammal and bird study skins, chances are high that they have been prepared with a variety of biocidal agents ranging from carbon disulfide to arsenic. In addition, felt gaskets on the older cases and the herbarium cases may have been treated with cyanide preparations. The past fumigation and topical biocide history of this collection, dating from the 1920s to the recent past, creates a handling hazard for collection users today.

RECOMMENDATIONS

- Test for the presence of arsenic on skins and mounted specimens (see "Arsenic Health and Safety Update" in *Conserv O Gram 2-3*), or assume that all have been treated with arsenical compounds. Because of the various ages of the specimens and the lack of field notes from preparators, the park may want to assume that *all* study skins and mounts are contaminated with poisonous biocidal

compounds. The park should restrict handling, and any staff member or researcher using the collection should wear personal protection, including gloves and a particle mask.

- Monitor the cabinet drawers for signs of insects, as some of the skin specimens may not have been professionally prepared. Isolate any specimens that may be infested. Freeze the specimen (see "An Insect Pest Control Procedure: The Freezing Process," *Conserv O Gram* 3-6; "Controlling Insect Pests: Alternatives to Pesticides, *Conserv O Gram* 3-8), or if the specimen is redundant or non-essential in the reference collection, remove it altogether.
- Hire a professional preparator or conservator to clean bird skins, since the cleaning solvent is very toxic. Several birds in the collections are quite greasy. Feathers and labels are stained with migrating lipids from fat reservoirs in the birds, primarily near the feet and in the chest region. This fatty exudate can attract insects as well as promote deterioration of the skin over time. The park may want to review its ornithological collection, and target the most valuable specimens for possible treatment.
- Upgrade storage case furniture through the Museum Collection Preservation and Protection one-year fund. The Columbia Cascades Curator can advise the park in preparing a strong submission to the one-year MCPP program for storage upgrade.

ENTOMOLOGY

The park houses the entomology collection of pinned insect specimens in standard, glass-topped wood viewing drawers. During the MMP site visit, this collection appeared to be appropriately stored and without problems.

CONCERNS

In the past many pinned insect collections were treated with biocidal solutions containing copper. Formations of copper oleate and copper stearate are sometimes found on insect specimens because of this treatment. If untreated, this verdigris formation may cause permanent visual and physical damage.

RECOMMENDATIONS

- Examine the pinned insect collection for the presence of a green waxy formation often concentrated near the mount pin. If noted on specimens of importance to the collection, contact a natural science conservator or professional preparator for guidance or treatment.

HISTORIC COLLECTIONS

Historic collections include ethnographic material such as baskets and tools; a small archeology collection, which contains metal, lithics, and ceramics, as well as a few organics; historical paper-based materials such as photograph and souvenir albums, books and prints, and, of course, the large B.F. Loomis collection of photographs, glass negatives, and associated archives.

Ethnographic Objects Conservator Toby Raphael of the Harpers Ferry Center Division of Conservation visited the park in 1997 to survey baskets and a few other objects selected for display at the new Loomis Visitor Center. Most of the baskets are fairly modern specimens acquired by the park in the 1960s and

1970s, but a few are old baskets of considerable value. His major conservation concern at that time was the exhibition of baskets and organic ethnographic material in the new Loomis Visitor Center, which has no climate control and is closed completely during the winter. Because of conservation and security issues, the park moves museum collections from the Loomis Museum to the Science Center collection storage area during the closed season. Storage of the baskets in the Science Center is appropriate.

CONCERNS

Interpreters use historic Atsegewi objects to explain basket construction, and staff and visitors regularly handled these objects.

Objects are intermixed in cabinet drawers with no regard for varying materials. Archeological items, metal goods, and objects made of paper, textiles, or composite construction are all stored together in the same drawers. There is also no consideration of different sizes and weights. Bulky or heavy items are stored with small fragile objects.

RECOMMENDATIONS

- Obtain and record Section 6 clearance for use of historic Atsegewi objects.
- Separate objects in storage by material and size for most efficient use of space and general safety of objects.

Suggested Program Briefs for Natural Resource Collections

APPENDIX F

The documents on the following pages are examples of program briefs that could be adapted for use by Lassen Volcanic National Park.

LASSEN VOLCANIC NATIONAL PARK Museum Program

LASSEN VOLCANIC NATIONAL PARK preserves and interprets the natural and cultural resources relevant to the 106,000 acres of park lands it manages in Northeastern California. Its themes include: geology, natural and cultural history, and prehistory.

STATEMENT OF PURPOSE: The park maintains a museum collection of archives, artifacts, and specimens related to the park's biology, geology, history, and archeology to provide documentation and information for staff, universities, agencies, and the public. While limited by storage and workspace, the park seeks to develop the highest quality collection that supports the park's mission. The values supported by the collection include scientific research, resource management projects, inventory and monitoring, voucher specimens, independent study, public exhibits, and publications for public benefit.

MUSEUM COLLECTIONS: The park library supports the Lassen Volcanic museum collection is supported with some 1,000 volumes. The park's archives and object collections include:

- 500 archeological and ethnographic objects
- Over 200,000 pages of archives on park projects, plans, studies, and administrative history
- Historic photographs and archives from Loomis and the 1914 eruption of Mount Lassen
- A collection of insects from the 1930s to the 1990s
- An herbarium of 1,000 pressed plants and 200 fungi from the park
- A small number of bird and mammal skins

ACCESS TO COLLECTIONS: Collections are available for use with prior arrangement and approval during normal business hours, 9:00 AM to 4:00 PM, Monday through Friday, excluding holidays. The collections are not available to the general public—security and appropriate use considerations require controlled, supervised access. Approval for access is granted on the basis of a legitimate use related to public benefit that is not harmful to the objects or documents. Loans of materials may be made to institutions and agencies upon written request of the nature of the need and the adequacy of facilities to care for the loans. For further information write: Park Curator, Lassen Volcanic National Park, Mineral, California 96063, or call 530-595-4444, extension 5131.

ACCESS TO INFORMATION: Information on archives and collections is limited at this time and some descriptions of artifacts and specimens are available. Finding aids for archival holdings are under development. Customized searches and reports may require additional time, if they are possible. Requesters may need to access databases on-site and be capable of generating their own reports if extensive database manipulations are required. Every effort will be made to accommodate appropriate uses of the collections and archives that support public benefit.

FIELD COLLECTIONS AND DONATIONS: Specimens, artifacts and their associated records collected from Lassen Volcanic National Park by staff, or under a valid collecting permit, or proposed for donation by the public, may be suitable for addition to the collection based upon their informational and documentary value, condition, and appropriateness to the park's museum collection. The museum acquisition team, which includes subject matter specialists, evaluates all potential acquisitions. Please allow 14 days for review and assessment of proposed additions to the park's museum collections and archives.

YOUR SUPPORT: Lassen Volcanic National Park intends to manage its museum collections as a tool to improve knowledge and education of park resources in a manner that preserves the collections for perpetuity. We encourage your concern and appreciation for these natural and cultural resources in the museum program. The park also encourages public and professional contributions, including donations of artifacts, specimens, or funding, and volunteer time or consultations by interested parties and experts.

Produced in 2000 by Lassen Volcanic National Park, Mineral, California 96063

HERBARIUM PROTOCOLS

LASSEN VOLCANIC NATIONAL PARK

2000

The Lassen Volcanic National Park Museum Program has established a set of protocols to guide researchers and collectors when developing herbarium specimens for inclusion in the park's collection.

COLLECTION PLANNING

During park projects, staff, contractors, or permitted collectors should address the preservation of specimens where collecting activities are involved or anticipated. Considerations include:

- ✓ Collectors must possess all necessary and applicable permits from federal, state, and local authorities.
- ✓ If permanent voucher specimens are to be generated, the estimated total number, taxonomic diversity, and project design criteria should be presented to the park Resource Manager for discussion and concurrence. A museum accession number for the project will be issued at this time.
- ✓ If no permanent collections are to be retained, then provision should be made for exceptional finds or inadvertent discoveries of important specimens.
- ✓ Determination of an appropriate repository for the collections may be made at this time, whether it is the park's collection, an outside institution, or some combination of both.

FIELD COLLECTING TECHNIQUES

The park encourages collectors to use state-of-the-art techniques during field collecting activities. Special attention should be given to the following considerations:

- ✓ All effort should be made to avoid gross errors involving the mixing of samples or mistakes in labeling and documenting basic collection information of location, date, and collector. Document any confusion.
- ✓ Specimens with flowers, fruits, and seeds are preferred over sterile specimens except where specific collecting criteria are established or finds are unusual. Multiple individual specimens on a single sheet should not exceed 100 feet (30 meters) difference in collection location unless specified.
- ✓ Collections of rare species or unusual occurrence must consider impacts to wild populations. Collections of single rare individuals or entire groups of unique occurrences are prohibited without written consent.

SPECIMEN PREPARATION

- ✓ LAVO standard for herbarium sheets is 20-pound acid-free paper 11 1/2 by 16 1/2 inches.
- ✓ Preferred attachment techniques include white glue, adhesive and sewn cloth straps and thread.
- ✓ For specimens intended for the Lassen Volcanic museum collection, the park favors attaching its own herbarium labels in the lower right corner of the sheet, with other labels in the lower left or center.
- ✓ Paper folding envelopes are preferred for seed and fragment packets.
- ✓ Wet specimens should be generated only after discussion with the park staff—the collection currently has little capacity to house fluid collections of alcohol or formalin specimens.

DATA STANDARDS

The National Park Service currently uses a Windows 95-based FoxPro museum database. Collectors should consider the extent that their computerized data may be transferable or convertible. Data elements that can be linked with specific fields are easiest to transfer. Collectors should plan for the following:

- ✓ Minimum acceptable data includes collection date, locality, and collector. Use one of the following locality measures: UTM, Latitude-Longitude, Township-Range, Metric or English distance to USGS topographic map reference, AND Metric or English elevation.
- ✓ Associated record should include proposals/designs and any analysis or publication resulting from the collection.

DELIVERING SPECIMENS

Please contact the park prior to arrival to arrange delivery and transfer of specimens, preferably weeks in advance. Provision may be made for special arrangements due to the parks remoteness and distances involved.

Planning and Programming

APPENDIX G

The park must take an aggressive approach to long-range planning for the effective development of the programs, budget, and staff necessary to preserve its resources and complete its missions. If the park does not undertake necessary planning and programming, its approach to task completion will be disorganized and inefficient, and park resources will suffer.

It is important to maintain perspective in planning for all resource preservation and to determine how resource management activities support the overall missions and goals of the park. The resources that make up the park archives, museum collections, and library constitute documentary evidence of park resource management activities and the administrative decisions affecting them. From the perspective of this planning team, the Museum Management Program should serve four distinct functions within this park:

- **Documentation:** Registration, or the documentation of what the individual items in the collections are, where they came from, and who owns them, is a primary function of archives and collections management. Good registration methods are essential to the other functions of the museum program, and the timely documentation of collections should be sacrosanct above all other museum operations.
- **Preservation:** Archives and museum collections cannot exist for any meaningful length of time without the application of good preservation methods. Conservation is an extreme measure of preservation and should only be used when less aggressive methods of preservation have failed. The park is fortunate to be in a temperate environment where the collections have limited exposure to agents of deterioration, but preservation efforts should be applied in a systematic and regular manner.
- **Research:** The park performs part of its research function during the course of collections documentation, as it is necessary to know something about materials to catalogue them adequately. The park also has the responsibility to make the information contained in the collections available to all legitimate researchers. This relationship is symbiotic, as the collections also benefit from periodic information updates and additional materials from these sources.
- **Public Programs:** The park has the responsibility to use its collections to provide public programs. Exhibits and publications are the traditional means of supplying this programming, but modern technology has led to other ways of reaching the public, including electronic access through websites and automated databases.

Staff members who are assigned responsibility for collections management have the primary responsibility for production of the planning, programming, and reporting documents necessary to ensure that the primary functions mentioned above are adequately staffed, funded, and performed. To achieve this goal, the staff must understand the interrelationships of the various reporting and planning documents such as the Collections Management Report, the Checklist for the Preservation of Museum Collections, the Resource Management Plan, the Project Management Information System, and various other program-specific documents. By understanding these relationships, the staff can produce effective programming documents that will enable them to secure funding from available sources.

Relationships to specific umbrella programs such as the NPS Strategic Plan and the Government Performance Results Act should be cited where appropriate.

The documentation of time and costs to the Collections Management Program for individual elements of the four primary functions mentioned above is an element of planning and programming that is currently not being completed. Increasingly, park managers are asked to show "value received for value given" in their operations. The response "to comply with regulations" is often not sufficient justification for funding in today's climate of lean budgets and reduced staff. Sometimes it is difficult for the non-specialist reviewing budget requests to perceive exactly what the "value received" to the park actually is, so illustrations of "value" in planning documents, budget requests and reports must be both overt and proactive.

Collections management staff must do cost analysis for both the current and projected activities of their division as a means to establish credibility for the management of park archives and museum collections. Some very basic time and cost analysis questions might include:

- How many accessions have been processed over the past three years?
- Is the rate of new accessions entering the collections increasing or decreasing?
- Are we keeping up with basic registration, or is material remaining unprocessed?
- What is the average time/cost to process an accession?
- What is the average time/cost to catalogue an object?
- What is the time/cost to provide storage/inventory per cubic foot of storage per year?
- What is the time/cost to provide Integrated Pest Management (IPM) and environmental monitoring per year?
- How many requests for research access to the collections are received each year from both staff and public, and what is the time/cost per request to provide that access?
- Have the requests for access increased or decreased over the past three years?

After the staff collects, analyzes, and formats this type of data for presentation, park management will begin to recognize the direct costs associated with various facets of collections management and to determine whether essential work is being accomplished in a timely manner. With this data park staff will be able to develop effective programs for integrated park needs. This data will also document where project or temporary staff may be necessary to accomplish backlogged work or to make the overall program more efficient.

As mentioned in several places within this plan, documentation of the park collections is almost non-existent. Good documentation of the collections, including accessioning and cataloguing, is essential to the organization and use of the information the collections contain. It is also apparent that the park could eliminate a large part of the backlog in the documentation of collections by the addition of professional or technical personnel trained to perform this work to Service standards. The park need not hire a Curator immediately to accomplish the necessary work, but a professional, trained Curator should supervise these endeavors. Probably the most workable solution at the present time is for Lassen to secure the services of a Curator from another park unit who can serve as a "Curator of Record."

In conclusion, a systematic approach to planning and programming for the management of the library, archives, and museum collections might contain the following steps:

- Develop a list of regularly scheduled activities such as environmental monitoring, replacement and recording of insect traps, and inventory of collections.
- Begin time/cost documentation and analysis for these individual activities.
- Determine which of the above activities require professional attention, and which are technical in nature.
- Prepare staffing and/or funding proposal for the necessary technical assistance required to provide adequate support for the library, archives, and museum collections.
- Revise the Resource Management Program. Remove redundant and repetitive project statements as well as those that are no longer valid.
- Revise the Project Management Information Program. Combine similar projects and remove overlapping or repetitive project statements. Check the validity of amounts requested for all projects.

Bibliography

Good museum management planning requires an understanding of the library, archives, and museum collections resources as they currently exist; how and why this resource was developed; and what is required to preserve the resource and make it available for use. In order to accomplish these goals effectively, the planners must first review park-specific documentation such as reports, checklists, and plans, and then make recommendations based upon sound professional theory and techniques as documented in the professional literature.

This bibliography brings together the references used in the development of the Museum Management Plan for Lassen Volcanic National Park. The first section is the reference list of park-specific documentation provided by the park and used by the team to understand the current status of the resource. The second section includes a list of recommended readings that will provide the park staff with a better understanding of the physical and intellectual nature of this unique resource and enable them to apply professionally accepted techniques and standards for preservation and use.

PARK REFERENCE LIST

- 1999 *Resource Management Plan* (draft)
- 1999 General Management Plan (preliminary draft)
- 1999 *Lassen Volcanic National Park Organization Chart*
- 1999 *Lassen Volcanic National Park Annual Performance Plan (GPRA)*
- 1998 *Checklist for Preservation and Protection of Museum Collections*
Scott Isaacson
- 1998 *Collection Management Report*
Scott Isaacson
- 1998 Briefing Statement: Lassen Volcanic National Park Museum Storage Needs
Scott Isaacson
- 1997 Trip Report: Site Visit by Conservator
Toby Raphael
- 1993 Scope of Collections Statement (draft)
Scott Isaacson
- 1986 Cultural Resources Management Plan (revised)
- various Park File D6215 Museum and Exhibit Activities
- various Park File H20 Collections Management and Preservation

- various Park File H20 Equipment and Building Needs
- various Park File H22 Cultural Resources Studies and Research
- various Park File H2623 Trip Reports
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Isaacson, Raphael, Quam, et al
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SUGGESTED READING LIST

The skills and craft necessary to perform adequate curatorial work have expanded exponentially over the past three decades. Fortunately, the literature in the field has also expanded to meet program needs. The current Service publications, *Museum Handbook*, the *Conserve O Gram* series, and *Tools of the Trade*, all provide basic guidelines. They inform the reader *how* to perform certain tasks such as accessioning and cataloguing, but they do not teach the neophyte *when* and/or *why* these tasks *should* be done. The proper application of the methodology presented in these documents requires a degree of intellectual preparation and practical experience that cannot be provided in procedural manuals or a two-week course.

The following references represent some of the best theory and practice in the fields of collections management, exhibits and programs, and archival management, available today within the professional community. The MMP team does not suggest that the park purchase a copy of each reference, but it is possible to acquire copies of these volumes on inter-library loan.

Park managers and supervisors are encouraged, however, to consider familiarity with the recognized literature in the field when considering prospective employees, or as an indication of continued professional growth when doing performance evaluations. This familiarity should be a determining factor for employment at the GS 1015/11 level and above. It should also serve as an indication of job interest, and commitment to professional standards when evaluating overall work standards.

COLLECTION MANAGEMENT REFERENCES

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