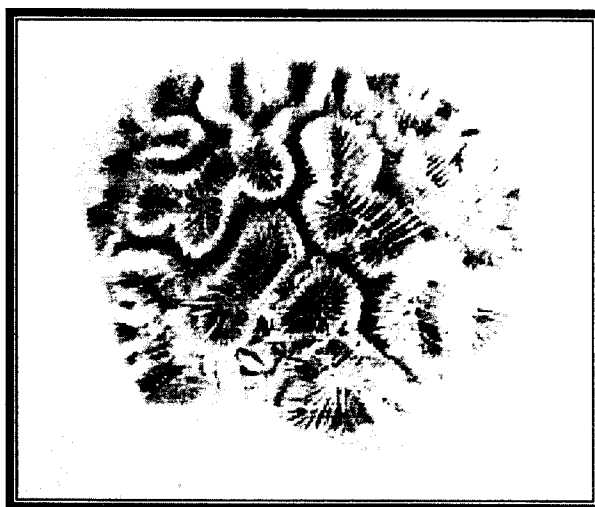


MUSEUM COLLECTION MANAGEMENT PLAN

VIRGIN ISLANDS NATIONAL PARK



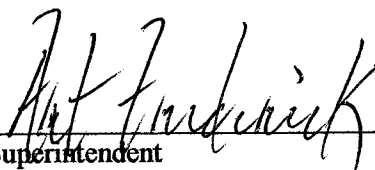
Southeast Regional Office
Cultural Resource Division
Museum Services Program

September 2004



Virgin Islands National Park Collection Management Plan

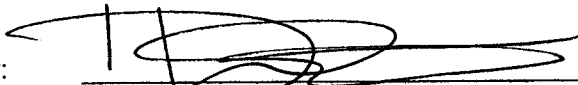
Approved by:



Superintendent
Virgin Islands National Park

8/30/04
Date

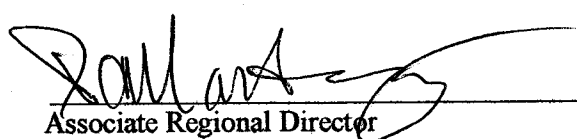
Recommended by:



Chief of Cultural Resources
SERO

9-7-04
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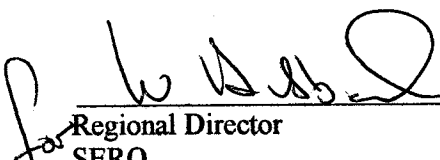
Recommended by:



Associate Regional Director
SERO

9-8-04
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Concurred by:



for Regional Director
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9-15-04
Date

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Introduction

This museum Collection Management Plan is the result of a May 5 – 16, 2003, site visit by an interdisciplinary project team. The project was approved by the park and funded with Fiscal Year 2003 Cultural Resource Preservation – Base funds. A Project Agreement (PA) was signed by the Park Superintendent, the Southeast Region Acting Chief of Cultural Resources, and the Regional Director prior to the site visit. The PA (Appendix A) outlines the project background, agreed upon scope of work, responsibilities, and expected results.

This project will result in the preparation of an approved museum Collection Management Plan (CMP). A CMP is one of the basic planning documents for parks. As such, it will provide programmatic museum management guidance for Virgin Islands National Park (VIIS); it serves as support for additional funding. The CMP project provides for a comprehensive review of a park's museum management program. The plan typically includes both observations of current conditions and actions recommended to improve the program.

The park has a functioning Automated National Catalog System (ANCS+) database. An outdated Scope of Collection Statement (SOCS) is in place though apparently was not approved. Limited museum management planning or programmatic support has been afforded the park in the past. A collection management plan was last completed for VIIS in 1993 (drafted in 1988). A Collection Condition Survey (CCS) was completed in 2001. VIIS has a museum collection comprised of archival, historic, and archeological artifacts. The park's collection is currently reported at approximately 157,000 objects. This number does not reflect a substantial collection of archeological artifacts or resource management archival collections.

It should also be noted that the park was designated a Man and Biosphere Reserve in 1976. With the continuing emphasis on natural history and archeological research, archival collection development, documenting park events, and historic research, these and related collection areas will undoubtedly increase in size and importance.

At the time of the CMP site visit questions concerning the ownership and control of lands encompassed by Virgin Islands Coral Reef National Monument (VICR) were being resolved. VICR was established by presidential proclamation on January 17, 2001. VIIS and VICR will be managed seamlessly. I did not have a Scope of Collection Statement or a documented and reported museum collection. Resource management and research documentation, planning documents, and other collections exist; these will become VIIS collections as progress is made with the VICR resource management, research and other activities.

As noted above, a team has been assembled to make on-site observations and to complete a draft plan by the end of the on-site work. Team members, selected with expertise appropriate to the nature and anticipated needs of the park's museum collection management program, along with their respective areas of responsibility include:

Allen Bohnert – Project Lead, Questionnaire Summation, Fire, Security

Steve Harrison – Resource Management (Natural) Museum Collection Management Interface

Kathleen Jenkins – Museum Record Keeping, ANCS+ database

Paul Rogers – Museum Archival Collections, Current Project Documentation

Virginia Salazar-Halfmoon – Museum Collection Planning/Programming, Scope of Collection Statement

Brigid Sullivan-Lopez – Collection Preservation (Storage and Exhibits) and Environment

Richard Vernon – Archeological Collection Management, Current Projects, Emergency Preparedness

Executive Summary

This CMP is designed to serve as both a guide for and review of the park's museum collection management program. The park has taken several steps to realign and further integrate its museum collection management program with overall resources management program activities. Park staff has identified both broad areas and specific topics of concern and begun to systematically request support through available PMIS funding avenues to address these concerns. This CMP will serve to further justify receiving support already requested; it will also address certain topics not previously thoroughly documented or for which additional assistance should be requested.

The VIIS faces fundamental program guidance and accountability challenges, substantial facility and infrastructure needs, and basic conservation and other protection-related needs. An aggressive multi-faceted approach, concurrently addressing both short-term and long-term goals, is needed to ensure success and to ensure today's action do not continue to add to the backlog of work needing to be accomplished. The following are those most pressing issues facing the park's museum management program, with additional issues and more specific recommendations located at the end of each subsequent chapter.

Scope of Museum Collection

A Scope of Collection Statement (SOCS) is one of the principle documents guiding a park's museum collection, and according to NPS Management Policies, the proper content of a park's museum collection must be defined in an approved SOCS. VIIS does not have an officially approved SOCS; the draft was appropriate at the time it was prepared. It is clearly outdated and inadequately guides the park's current museum collection management program. For example, the current SOCS does not adequately address ethnography, natural history collections or placing park resource management and other pertinent documents in the museum collection as archival collections. The SOCS requires full revision to remain consistent with and reflect changes in park interpretive emphases, additional resource management objectives, and recent park planning documents. The updated VIIS SOCS must also take VICR resource management into consideration. Future SOCS reviews should conform to the NPS's 2-year (+/-) schedule per the Museum Handbook.

Archeological Collections

The following recommendations are intended to enhance and improve upon the strides that have been made in the archeological and collection management area during the last five years. The low-cost, high public involvement approach used on the Cinnamon Bay project can be improved upon by adding slightly more balance to the staffing of the projects. In the future, one or two term positions to oversee fieldwork and laboratory work would provide the necessary professional curatorial oversight to operate these projects smoothly. Memorandum of Understandings (MOUs) developed with Syracuse University and East Carolina University provide an excellent framework for universities working with the park's cultural resources. The Syracuse MOU should be amended to include the GIS mapping they will be doing in 2003. Including the costs for cataloging and proper storage of artifacts and project documents in every archeology project research design and PMIS statement, per NPS policy, will also assist the park's museum program. This also applies to Section 106 compliance projects. Management of and access to the archeological collections will be made easier if a consistent

set of procedures for bagging, boxing, and labeling are developed and enforced on all universities and other cooperators contributing to park archeological projects.

Museum Archival Collection Management

The museum archive collections at the park are in serious jeopardy of irreparable loss. Museum storage contains only a minimal amount of the total park archives. Much of the park archives is stored in decentralized locations throughout the park, all in substandard storage. Due to the disjointed handling of these collections they are not easily accessible. There is a large amount of potential archives, namely resource management records, with minimal park facilities to house them. The extreme environment along with insect and rodent infestation is dramatically reducing the lifespan of these records. Many records including microfilm, documents, and photos have already been lost or permanently damaged. There is a very short window of opportunity before these collections are lost due to the environment and infestation or are mistakenly discarded from the park due to a lack of identification and organization. It is critical to systematically survey, appraise, consolidate, catalog, and properly store all existing archival materials, including rare books as they are officially included in each park's museum collection. Such projects must be coordinated and guided by a professional archivist well versed in NPS records management and the nuances of cataloging resource management project records into the NPS's automated cataloging program. Additionally, it has already become incumbent upon the park's staff to ensure archival, including copyright, and museum cataloging considerations are included in all on-going research and resource management projects.

Collection Documentation and Museum Recordkeeping

Fundamental museum acquisition documentation such as deeds of gift, receiving reports, and loan records covering existing transactions must be assembled to comply with NPS standards. Museum records are a vital part of park operations because they provide the park's proof of legal ownership of its collections, intellectual and physical access to the collections, and valuable interpretive and research data about the collections. The CMP team's inability to locate the park's original accession folders and content is a very serious matter requiring immediate attention. The NPS sets forth very detailed instructions about museum record keeping policies and procedures. As a park-based resource, parks are responsible to see that they are carried out. The park has undergone more than forty years of active research and resource management in both cultural and natural history without consistent staffing for the museum program staffing, although some park staff and some student interns have made noble periodic efforts at establishing order. Much needs to be done to integrate the scattered natural and cultural research project products into the NPS museum record keeping system, and to move forward with improved policies and operations. Consistent park management support, along with museum management trained staff, will bring this about.

The existing museum records for VIIS require immediate attention.. Where required documentation is either inadequate or missing, it must either be assembled or reconstructed to the extent possible. Accurate and complete accession and catalog data needs to be added to Re:discovery (ANCS+) to accurately report a collection to the National Catalog, to receiving special project funding, to eliminate the existing backlog, and to make a collection both physically and intellectually accessible. Park management and staff must ensure required documentation is completed for all new transactions involving future VIIS (and VICR) acquisitions.

Planning, Programming and Staffing

Through recent efforts, there has been good representation of museum management program planning in the park's PMIS statements. This will provide project support for identified collection storage, cataloging, and preservations projects. Equally as import, museum management considerations will need to be continually included in basic park planning documents such as the upcoming General Management Plan, revisions to Long Range Interpretive Plans, and upcoming revisions to the Resource Management Plan. It is critical to coordinate museum management projects such as furnishing plans and conservation surveys/treatment with historic structure and interpretive projects.

Less than 25% FTE has historically been and is presently devoted to museum management tasks, with primary curatorial responsibilities currently resting with the Chief, Resources Management. This collateral duty approach has not been successful in the past, does not adequately support the existing museum management program, and will not be sufficient in the future. Considering the existing museum management workload, on-going daily housekeeping and future exhibition requirements, and the ever-expanding museum management workload due to acquisitions of cultural and natural collections, staff dedicated to museum management are required. The overall complexity and magnitude of the park's collection warrant establishing a full performance curator position (GS-9/II, with a suitable scientific background), supported by one or more seasonal and project funded Archivist and Museum Technician positions simply to eliminate the backlog of work to be accomplished (within the next 5 years) and further augmented by non-permanent staff, contracts or agreements for special projects.

Preservation of Collections and Storage

The chapter on preservation supports the recommendations found in the 2002 Collection Condition Survey and further examines the on-going environmental challenges and related preservation challenges facing on-going cultural and natural history field research. While the installation of a functioning air conditioner and a dehumidifier are excellent steps, the linking of the Museum Collection Storage Building's electrical power to an emergency backup power generator is also a critical step to have taken. The presence of mold, foxing, and corrosion on museum objects and storage materials clearly illustrate unacceptable historic conditions. Improving collection storage for preservation and accessibility purposes continues to be a high priority for park management. This plan both describes facility and infrastructure needs and supports this approach. The acquisition and installation of new storage furniture, such as compactor shelving, suitable shelving and cabinetry for natural history, archeological and archival collections, are needs that can be addressed now in preparation for meeting the long-term goal of a suitable facility. A stable and pest-free environment is absolutely necessary to ensure the long-term preservation of many of the materials in storage at VIIS. In the short-term, the CMP calls for using additional space within VIIS's Museum Collection Storage Building more efficiently and carefully designing another facility in the area of and possibly adjacent to the Museum Collection Storage Building at the MAB Reserve Center.

Fire Protection and Security

The park has made substantial progress with the installation of new fire detection, fire suppression and security systems for the VIIS visitor center. At the time of the CMP site visit a local security system was being considered and investigated for the MAB Complex, including the Museum Collection Storage Building (Bally building). It is advisable to provide unauthorized intrusion

detection and fire detection for all facilities holding museum collections. A Museum Collection Fire and Security Survey is recommended to ensure museum assets are fully protected and to assist the park in its efforts to plan and execute an integrated fire protection and physical security program. The subsequent report will call for the installation of a fully integrated park-wide fire/security system, improvements to the existing fire suppression capabilities, and installation of additional security devices (i.e., system panel tamper alarms, surge protectors, back up signaling capabilities, wireless panic duress units).

It is essential the park prepare an museum Emergency Operations Plan (EOP) that covers preparedness for all applicable museum emergencies and disasters as well as post-disaster recovery. The EOP should be referenced in the park's approved Hurricane Plan, address staff responsibilities, and include all locations holding museum collections. The plan should be coordinated with Group C (Interior Facility Preparedness) and Group B (Exterior Facility Preparedness) in the park's Incident Command organizational structure.

CHAPTER 1 COLLECTION HISTORY

Overview and History of Museum Collections

The museum collection overview provides a brief description of the history of the park's museum collections and major acquisitions.

As a result of a land donation to the federal government by Lawrence Rockefeller and the Jackson Hole Preserve Corporation, Congress established the Virgin Islands National Park on December 1, 1956. Mr. Rockefeller kept Caneel Bay through a deed reservation (1983) within the park and has developed and maintained it as an exclusive resort.

The legislation passed by Congress did three things: it established a new National Park Service unit, defined a boundary and described the reason for establishing the new park. As delineated by Congress, the legislation outlined a boundary that surrounded 3840 hectares (9,485 acres) of land. Park enabling legislation said "... that a portion of the Virgin Islands of the United States, containing outstanding scenic and other features of national significance, shall be established ..." (70 Stat. 940). Thus, the primary mandate for the park is to protect the outstanding scenic values and features of national significance. In 1976, the park was designated a Man and Biosphere Reserve.

Specific mention was made in the enabling legislation that the administration of the park must also include the broader Organic Act which established the National Park Service and the Redwood Amendments. "... the fundamental purpose ... is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." (1916 Organic Act establishing National Park Service)

On January 17, 2001, by Presidential Proclamation 7399 the Virgin Islands Coral Reef National Monument was established. In 2003, the legal questions concerning the ownership and control of the land were resolved and the administration of the property was brought under the management of the Virgin Islands National Park staff. The designation of this new National Monument provides additional protection not only to the resources in the Monument but also to the scientific materials of the Virgin Islands National Park. The National Park and the National Monument will be managed by a single staff unit as will the collections from these properties.

The park collection contained approximately 28,500 objects in 1994. The Southeast Archeological Center in Tallahassee, Florida stores a total of 105,994 items from the park of these 86,627 are archeological items and 19,367 are archive items. A few artifacts are displayed in the Visitor Center at Cruz Bay and in the Cinnamon Bay Warehouse museum exhibit. Museum specimens, mostly 7,200 natural history specimens, have been housed in the newly constructed Bally Building next to the Biosphere Reserve.

Museum objects from the park are varied in nature from wet and dry natural history specimens to historic and prehistoric objects:

- 1) The St. John Herbarium, 1,200 pressed plants, is a nearly complete collection of plants growing on St. John collected and identified by premier botanists. The bulk of the collection was made by Roy Woodbury in 1987 and Pedro Acevedo from 1990 to 1992. The herbarium is well used by researchers. Nearly 100 plants collected in the mid 1990s are still in need of mounting and cataloging. Monitoring and control of pests is an ongoing curatorial duty.

- 2) The Randall, and Beets and Lewand Fish Collections, approximately 850 specimens are another important part of the St. John natural history collection. They were collected during early inventory efforts and establish a baseline for fish species. Liquid levels in jars containing fish and marine invertebrates need to be maintained. Some of the collection has deteriorated due to improper care and needs deaccessioning. Most of this collection has recently been transferred to the Natural History Museum at the University of Florida at Gainesville. This museum also houses the Robbins collection and is considered to have the foremost Caribbean natural history collection. This decision means that the collection will receive better care, will be available to a greater number of researchers and will alleviate some of the space limitations at VIIS.
- 3) The Insect Collection, 1,200 specimens, was also developed as part of the initial inventory of St. John. Approximately one-third of the collection needs to be deaccessioned due to insect pest damage. The collection is still valuable and should be completed through field collection of missing specimens.
- 4) The rest of the St. John Natural History Collection contains incomplete examples of dry corals and mollusks (190), wet marine invertebrates (260), birds and mammals (50 – 60), and geological specimens (120). This collection may grow as specialists and researchers work in the park. A recent addition of fungi resides is on loan to the Kew Royal Botanical garden.
- 5) The St. John Historic Collection is large and continues to grow. Included in this collection are architectural objects systematically collected as evidence of details of historic structures, and artifacts salvaged from monitoring park sites undergoing excavation for modifications to park infrastructure or historic structure stabilization. Some of this collection is in the Southeastern Archeological Center (SEAC) for analysis, cataloging, conservation and storage.
- 6) The park's Prehistoric Collection has expanded from being the smallest collection in the park to the largest. Prior to 1987 the park maintained a small collection of items donated to the park which the park still maintains. The collection has grown over the last ten years as a result of 106 compliance requirements that have brought about data recovery mitigation that has resulted in efforts to salvage the historic and prehistoric record of sites that are eroding along the beaches of the park. SEAC maintains the majority of the materials recovered prior to 1995. The majority of this collection is housed by the park. In 1959 the National Park Service's Regional Archeologist John W. Griffin requested that the Bryant Foundation complete an appraisal of the prehistoric archeological resources of St. John under Contract No. 14-10-131-619. The work was conducted in 1960 by Ripley P. Bullen and Frederick W. Sleight. A collection recovered by this survey is housed by the University of Florida within the Bullen Collection.

The museum collections are to be used as permanent documentation, for exhibit, to encourage scholarly research and analysis, and to foster greater understanding and appreciation for the park's resources. They have restricted access. Introduction of agents of deterioration (food, drink, tobacco, plant seeds, dirt ...) should not occur as long as the collections are stored in a building or buildings dedicated solely to proper museum storage.

Any researcher wanting to collect natural history specimens must obtain a collection permit from the park (36 CFR 2.5). The collection permit, signed by the Superintendent, allows representatives of reputable scientific or educational institutions or agencies to collect natural history specimens for the purpose of research, baseline inventories, monitoring, impact analysis, group studies or museum display. It must be necessary for stated management concerns. Collection cannot be detrimental to the values or purposes for which the park was established or cause damage to park resources. All specimens collected belong to the National Park Service and are accessioned into the park museum. Specimens must have official NPS labels and catalog numbers. Archeological objects can only be

collected by archaeologists under permitting by the park's Resource Management Division and the approval of the park's Superintendent. All data are part of the museum collection.

Curatorial needs include proper dedicated storage and display, timely accessioning and cataloging, systematic routine housekeeping and maintenance, and pest control. The responsible individual is the Cultural Resource Manager of the Resource Management Division. There is no staffing to routinely conduct these duties. Conservation of museum objects is dealt with as time permits as "ancillary duties." In order to give the collections the care they deserve and require to meet NPS standards, a museum curator is needed.

CHAPTER 2 VIIS MUSEUM COLLECTIONS USE SURVEY RESULTS SUMMARY

A survey of park staff was conducted as part of this museum Collection Management Plan (CMP). The questionnaire is designed to address several areas, including the following:

Does the staff use the park's museum collection, archives or library?

Which information categories were used and what were the reasons for their use?

Why does the staff not use the collections and its associated data, and how can use become institutionalized?

What are the staff's general impressions of the value and use of the museum collection and archives?

The survey also collected data concerning the respondent's length of NPS service, number of different NPS units in which service took place, and years of service in the current park.

The park's collection management staff was given the questionnaire and then distributed it to select additional staff members. Eighteen of the questionnaires given to park staff were returned to the SERO CMP coordinator; all but one of the responses were from permanent employees. The survey was completed and returned by ca. 25% of the park staff.

In summary, several observations can be made from the survey data. In terms of demographics, the average number of years of service was 13.6 years. Six respondents have been at the park from over 11 years to 28 years; five have been at the park from 4 to 7 years. Seven of the respondents worked at more than one NPS unit.

Seven (ca. 39%) of the responding staff used the museum collection/archives during the year prior to the CMP site visit. Respondents reported a range of collection use from an unknown number of times to as many as ca. 30 times. When used, the collections were mostly accessed to assist with visitor information, project research, publication, environmental impact/remediation research, exhibit/programs, comparative studies, administrative research, and historic structure information.

The most common reason for not using the collections was because the staff does not know where the collections/archives are located. 33% of the respondents did not know what types of collections are available and the collections were not relevant to their job. Additional reasons included: there was no place to look at/study the collection/archives; the collections were not physically or electronically accessible; there was no one available to help find things or open the collections for research on a regular schedule; staff did not know how to find the collections needed; the collections were not organized.

Staff felt that the collections would be more useful if there was: a listing of what was in the collections; the collections were organized; professional staff was available to organize, work on, and assist with access; the collections/archives were open for longer days and different hours.

100% of the respondents felt that park archives should contain copies of all studies and reports done about the park.

At least 80% of the respondents were of the following viewpoint(s):

- park museum collections and archives serve as primary resources for the park;
- museum collections and archives should be used to document park resources;
- park collections and archives serve as the institutional memory of the park;
- park archives and collections should be more available for park staff use;
- park archives, collections and libraries need professional management;
- park visitor centers should exhibit more material from park collections.

At least 70 % of the respondents disagreed with the following statements:

- there was no value in parks maintaining park museum collections or archives;
- parks should not be expending staff time and funding on museum collections;
- park collections are of no value to me in the completion of my job.

Conclusions:

The survey offered park staff an opportunity to candidly express their personal impressions of the park's museum and archival collections, along with suggestions for improvement. It is interesting to note that six respondents from the park's permanent staff noted that the collections "were not relevant to my job." A park's museum collection is relevant, in some manner, to every staff member's job. Park staff overwhelmingly believe the museum collections, including museum collection archival materials, are of value, want to know more about them, and see collections requiring professional management and adequate space to be accessible. A copy of the checklist, with tabulated responses, is included in Appendix B.

CHAPTER 3 SCOPE OF MUSEUM COLLECTIONS

Introduction

Virgin Islands National Park (VIIS) museum collections serve as essential documentation of research accomplished and provide materials for future studies that are important to park management, interpretation, and resources management and research. The natural history and cultural collections relate directly to the enabling legislation of the park which states, "to preserve the scenic and other features of national significance (Establishment Act, August 2, 1956) and the significant coral gardens, marine life and seascapes," (Boundary Revised, October 5, 1962). Related legislation extends the responsibility of the park to protect prehistoric and historic remains within park lands and emphasizes restoration and rehabilitation of historic structures (Historic Preservation Act, August 18, 1978). In addition, the newly established Virgin Islands Coral Reef National Monument (Presidential Proclamation 7399 of January 17, 2001) states that "This designation furthers the protection of the scientific objects included in the Virgin Islands National Park, created in 1956." Due to the very close link between the national park and the national monument, it is recommended that the two parks be considered a single unit for the purposes of management of natural resource collections (specimens and associated records).

The Scope of Collection Statement (SOCS) defines the present and future holdings of Virgin Islands National Park. This document should be written in context with other park planning documents and in consultation with park cultural resources, natural resources, interpretation, maintenance and management staff. The SOCS is the initial effort in defining the museum management program. The SOCS ensures that the museum collection is clearly relevant to the park. Park collections directly contribute to the understanding and interpretation of the park's purpose, themes and resources, as well as serve to guide the park on those objects that the National Park Service is legally mandated to preserve. Refer to the NPS Museum Handbook, Part I: Museum Collections, Chapter 2 for guidance in preparing the SOCS.

Observations

Three designations determine the park resources; the enabling legislation refers to the natural scene, the boundary increase specifies the marine life and seascapes and the protection of prehistoric and historic remains and the restoration and rehabilitation of historic structures is required by the Historic Act of 1978. One SOCS will guide the park in museum collection management reflective of each of these designations for VIIS and VICR.

The park currently does not have the responsibility of curation written into any staff member's position description. This situation needs to be corrected with the hiring of a trained curator that could see to all the necessary museum management issues, and serve to coordinate among all the divisions in the park and provide access to the collections for use by park staff and researchers.

A draft Comprehensive Interpretive Plan (CIP) was started in 2002. It has not been finalized; the park is awaiting Harpers Ferry's completion of the document. The preliminary draft CIP identifies the following primary interpretive themes as follows:

- Protection and preservation of sensitive species and habitats at VIIS are part of global efforts to promote biodiversity, maintain healthy ecosystems, prevent species extinction, and require the understanding and participation of both present and future generations to be successful.

- Protecting and promoting VIIS significant historic, cultural, natural and aesthetic resources ensure that a variety of active and passive recreational, educational, and spiritual opportunities will be available for residents and visitors today and in the future.
- The VIIS/International Biosphere Reserve's western Atlantic tropical marine and terrestrial ecosystems, which include endangered coral reefs and recovering dry tropical forests, provide opportunities to understand the interconnectedness and ecological importance of the those habitats and the natural processes they support.
- The cultural and historic resources of the VIIS provide unique insights into and opportunities to learn from a variety and diversity of cultures and periods – including the Taino/pre-Columbian era, European colonial plantation era, and past and current African-Caribbean culture and history – and illustrate how people have adapted to specific environments, utilized resources, developed cultural identity, and interacted with other cultural groups.

Scope of Collection Statement

A Scope of Collection Statement was prepared by Resource Management Specialist, John Miller in September 1985 and submitted to the Regional Curator with signatures of the Supervisory Park Interpreter and the Superintendent. The Regional Curator did not sign this version but reviewed it and requested modification to the SOCS. A revised SOCS exists with one signature from the Superintendent, dated April 1986. A 1990's Addendum including the Native American Graves Protection and Repatriation Act to the SOCS exists in the files. The 1986 version of the SOCS with the addendum appears to be the most current although it is unofficial due to missing signatures of concurrence by the Regional Curator and the missing approval from the Regional Director.

A new SOCS is needed that reflects the new standards (see Museum Handbook, Appendix C for "Checklist for Evaluating Scope of Collection Statements". According to the FY 2002 Collection Management Report (CMR), the park museum collection (including archeology, archives, history and natural history objects) currently numbers 157,223 items. This figure will increase significantly once all pertinent archives are identified and added to the park collection. Each discipline represented in the collection is important in contributing to the knowledge of the park resources and adds unique information for consideration in the management decisions of the park.

Archives are, more likely than not, the least documented of all the park collections and are at significant risk of being lost due to lack of proper care and accountability. Archive collections exist in each division of the park, for each resource-related project that has been completed. Administrative files serve to document decisions and activities of the park, including concession permits, since the park was established. The maintenance division maintains maps and documents of utilities, roads and other important modifications to parklands. The interpretation division develops programs through research and oral history documentation, as well as the cultural demonstrator programs, all of which could contribute towards future exhibit or research development. And both natural history and archeology have on-going projects and research that need to be preserved in the archives of the park. Only a systematic approach of managing the archives will ensure that they are preserved and accessible for future use.

The VIIS collection includes an extremely important natural history collection containing a reference herbarium, entomology collection and ichthyology (fish) collection. The documentation for the projects that result in natural history collections need to be identified and included in the museum collection archives for the park. Also, collections that have been placed in other institutions need to

be cataloged and placed on loan to those institutions unless the park determines they should be returned to the park or placed on loan to another institution. The archeology collection, also highly significant, documents the lifeways of the first inhabitants of the island now called St. John. The preservation of these collections and the documentation of the research are significant in that the material culture is apparently all that physically remains of the Taino and Carib peoples. On-going compliance archeology, erosion of Taino sites and planned excavations will continue to increase the archeological collections. Documentation of all projects needs to be identified, curation programmed for, and included in the collection of the park, even if reports have not been completed.

The historic object collection is the least in number but has a potential to significantly increase. There is a large number of historic structures and locations of historic activities such as plantation operations, cemeteries, etc., which exists throughout the park lands. Each site, approximately 500 in number, is important and significant in telling the history of European settlement of the West Indies, growth and development of agriculture, commerce and governmental systems under colonial rule in the Caribbean and impacts of slavery on a people, over time. Submerged cultural resources are also important to the history of St. John Island. The maritime collections are a separate category to consider due to their submerged status and specialized care and treatment required if the objects are brought to the surface. The best recommendation is to document these collections in place, through maps, video and photographs and field documentation. This will create a record of the resources that exist and provide the ability to manage and monitor the sites and aid in determining the future use of the locations containing maritime resources.

The SOCS should be revised per the Checklist in Appendix C and the editorial comments made on the current draft given to the Chief of Resources Management. In addition, it is recommended that the following be included:

- A collecting category for "associated records" should be included under each discipline.
- Under "History" representative architectural samples removed from park historic structures during preservation work should be included. These efforts should be coordinated with architects and possibly the archeologist. Through the compliance process, these samples will be tied to the documentation for the project by the museum accessioning process.
- Currently, the park SOCS states that they will not be collecting any natural resource collections, only water samples. However research and resource management needs of the park serve as one of the fundamental basis for determining the content of a park museum collection. Park researchers are currently monitoring a variety of park resources (sea turtles, pelicans, seagrass beds, coral, etc.) and in the process generating records (field notes, maps, photographs, charts, computer data and all relevant documentation) that must be permanently retained. Outside researchers, whether from other government agencies (USGS, NMFS, etc.) or universities are conducting research in the park that may involve the collection of specimens but certainly the creation of records. Similarly, the on-going Inventory and Monitoring initiative will produce specimens and archives. The SOCS should also acknowledge the presence and value of the various collections, many of them baseline, that are already in the museum collection. These existing specimens and their associated records are an important reference and scientific collection.
- Every research or collecting project conducted in the park should obtain a permit. Each permit for a project that will generate any records or specimens should be assigned an accession number. This provides a critical link between research and the museum collection for future reference.

- The collecting of endangered, threatened or rare species should be addressed in the SOCS. Consultation with natural resource management staff and possibly Fish and Wildlife Service should be held to be certain that existing laws, such as the Endangered Species Act and Migratory Bird Protection Act, are complied with. (These important concerns will be easier to address with the integration of the research/collecting permit process and the museum management program.)
- Although the Virgin Islands are not subject to the requirements of the Native American Graves Protection and Repatriation Act (NAGPRA), it is recommended that NAGPRA provisions, whenever appropriate, be included in the SOCS. By NPS Management Policies much of the spirit of the law, especially consultation and exhibition considerations, is maintained for all park areas.

It is very important that the SOCS be developed with input and collaboration with all park divisions, resources management, interpretation, maintenance and management staff. It is also highly recommended that the South Florida/Caribbean Network coordinator be included in this process as well.

Deaccessioning

Many of the park collections are the result of visitor finds, these objects should be evaluated for the value that they contribute to the park information base. By removing inappropriate items from the museum collection, the limited collection storage space could be better utilized and limited staff time could be focused on important and relevant collections that contribute knowledge about the park. However, sound professional decisions must be made based on the various disciplines represented in the museum collection. The condition of an object, artifact or specimen is seldom the sole basis for the decision to deaccession a museum object. Deaccessioning is tedious and requires careful thought and consideration before the process is completed. However, the deaccessioning process provides good documentation of the decision the park makes and removes any doubt of accountability for the deaccessioned object. The Regional Chief of Museum Services and the Museum Management Program Registrar in Harpers Ferry can assist in the process along with park management and staff.

Reproductions

NPS policy (Museum Handbook, Part II: Museum Collections, Chapter 4, Section IV, pages 4:19-20) currently states that reproductions placed on exhibit should be cataloged into the museum collection. The park currently has two baskets on exhibit that were made by a cultural demonstrator. Neither basket is accessioned or cataloged into the park collection. Consideration should be given toward the maker and the variety and type of basketry items being produced by the cultural demonstrator and a determination should be made if specific basket types should be collected. Basketry typically does not preserve well, so few, if any, original basketry items exist. Also, only a few basketry crafts people still exist in the community and this may be an opportunity for the park to document and preserve the craft. The park could design a project to recreate specific types of basketry and document the collecting and processing of materials and the weaving of the basketry and then purchase the basketry example for the park collection. A determination will have to be made about how to classify such objects.

Collections Advisory Committee

Although not required for accessioning, a Collections Advisory Committee (Museum Handbook, Part I, chapter 2, "Scope of Museum Collections", page 3) is required for deaccessioning (Museum Handbook, Part II, Chapter 6, "Deaccessioning", page 8-9). Given the many issues at the park and the recommendations in this CMP, it would be useful for the park to establish such a committee. The collections advisory committee should be involved in the revision of the SOCS, to discuss issues and park policy, assist in review of the collection to identify what should be kept and what should be disposed of and participate in the deaccessioning process. This committee should be chaired by the Chief of Resources Management and include the Archeologist, the Chief of Interpretation, the Regional Chief of Museum Services and other regional support staff (e.g., historical architect), the South Florida/Caribbean Network Inventory and Monitoring program manager and other staff the superintendent may appoint. Composition will depend on the work to be completed, e.g., for revising the SOCS, it is recommended that the broadest group be involved; for reviewing the collection and deaccessioning, the group can be smaller depending on the types of materials involved.

Recommendations

Establish a Collections Advisory Committee to advise on accessioning, deaccessioning and writing of various guidance documents (1 year).

Revise the current SOCS to meet the park needs based on the information contained in this plan. It is very important that the SOCS be written in a collaborative manner with park staff to include resources management, interpretation, maintenance and management staff in addition to the archeologist tasked with museum responsibilities. It is also highly recommended that the South Florida/Caribbean Network coordinator be included in this process, as well (1 year).

The SOCS must address the collecting of endangered, threatened or rare species.

Locate and determine the condition of the three accessions; accession number 24, collected in 1961, accession number 110, collected between 1976 – 1983 and accession number 113, collected in 1984 of fish, marine invertebrates and plant specimen collections. Determine the extent of preservation, clarify status, and place on loan to the University of Florida (1 – 2 years).

Survey other institutions and known researchers for prior scientific and archeological investigations that have occurred on the park. Currently, the known facilities holding VIIS collections include Southeast Archeological Center, the University of Florida, the Smithsonian Institution, Virgin Islands Environmental Resource Station and the Florida Museum of Natural History. Acquire copies of reports, field records and data. Inventory all artifacts, specimens and associated records located at other institutions. If materials were collected after the park was established (1956), they remain the property of the government and current laws, regulations and policies are in effect. (1 – 2 years).

Under Management Actions, a listing of all collections located elsewhere should be included. The information can be formatted as a table and information should include accession number, brief description of the materials, number of items or specimens, and location. This is particularly important since research is on-going and much knowledge and understanding can occur from work already performed on park resources (2 – 5 years).

Numerous maritime resources as well as other underwater cultural resources, exist in park waters. They include five known shipwreck sites, five historic anchor sites and historic documents indicate the park should have at least 27 shipwreck sites. They should be documented in the Archeology

section and the relevant legal citations be included in the Introduction section, i.e., Abandoned Shipwreck Act (2 – 5 years).

After revising the SOCS, deaccession or remove from collection areas all items not to be placed in the museum collections (2 – 5 years).

Review SOCS on the two-year schedule as prescribed by the Museum Handbook, Part I. (on-going).

CHAPTER 4 NATURAL RESOURCE COLLECTIONS

Introduction

Virgin Islands National Park has a rich, diverse, and unusual wealth of natural resources. To properly preserve, protect, and interpret these resources requires park staff who know what resources are in the park (via inventory and scientific study) to be able to monitor them over time and make accumulated data specimens available for the future.

In 1976 the international significance of these resources was recognized when the park was designated as a Biosphere Reserve by the United Nations Educational, Scientific and Cultural Organization (UNESCO) through its Man and the Biosphere (MAB) program.

One of the management objectives identified in park's General Management Plan (September 1983) is "to perpetuate and enhance the park's nationally significant natural and cultural resources ..." (page iii)

The GMP also states that the park will:

"Monitor, study, and manage marine resources, including fisheries, coral reefs, seagrass beds, and water quality. Inventory terrestrial vegetation, native wildlife and feral animals, and soils; and conduct research to improve management of natural resources." (page vi)

"Establish baselines of resource information and then monitor changes as a basis for pollution abatement, visitor use allocations, revolving visitor use of resources, and restorative programs." (page 7)

"Manage the park as an international biosphere reserve; actively participate in the Man and the Biosphere program; and provide appropriate research opportunities to the national, international, and Caribbean scientific communities." (page 7)

"... maintain a park research staff and will continue to contract or permit appropriate research by qualified institutions." (page 49)

In addition, the newly established Virgin Islands Coral Reef National Monument (Presidential Proclamation 7399 of January 17, 2001) states that "This designation furthers the protection of the scientific objects included in the Virgin Islands National Park, created in 1956." Due to the very close link between the national park and the national monument, it is recommended that the two parks be considered a single unit for the purposes of management of natural resource collections (specimens and associated records).

There are federally listed species (six marine mammals, five birds, three reptiles, two plants) in and near the park. Additionally, there are Territorially listed species that may be different.

Research and the park's museum collections have an integral relationship. As research on both natural and cultural resources is conducted, important project documentation and in some cases museum specimens are collected. These are required to become part of the park's museum collection (see Appendix D) and are an important resource for future park staff and outside researchers when properly managed. As stated in GPRM Mission Goal Ib, "... management decisions about resources and visitors are based on adequate scholarly and scientific research." When the records from research projects are properly maintained (organized, documented, preserved, and accessible) as part of the park's museum collection, this goal is reached.

Research and its products originate in part from planned park-funded resource management projects. They may also result from research projects initiated and funded by outside researchers who seek natural science collecting or research permits from the park. Regardless of the origin of the research, resulting documentation and museum specimens are to be accessioned into the park's museum collections within the limitations of the Scope of Collection statement, following applicable laws, regulations, and policies (see Appendix D).

Natural History Research Collections

Natural history specimens include several disciplines: biology, paleontology, and geology. The specimens in the collection must always be accompanied by the associated project or specimen (if not project related) documentation (data, records, reports including field notes, maps, drawings, photographs, etc.)

These specimens are important to the documentation of existing species and the future management of the park's natural resources. The scientific community strongly recommends the retention of voucher specimens collected as part of a research project. These specimens serve as documentation of the project, provide reference for future projects that may need to validate the results of previous studies, and function as proof of a species' existence at a specific location at a given point in time. It is critical that when specimens are collected, the following information also be collected and deposited with the park: taxon, locality, habitat, collection information, preservative and/or pest fumigation information, and copies of all permits. Even if the specimens are housed at a non-park repository, these data must be recorded and copies kept with the specimens as well as deposited in the park's museum collection. Further, the park should request that all researchers, park staff included, use the current professionally accepted fluids when "fixing" and preserving wet specimens, giving consideration to future research potential.

Natural history collections must be considered or included in all phases of the park's scientific research planning process. This is especially important when collecting permits are issued (see section on permits below).

The superintendent is responsible for the accountability, preservation, protection, and use of the park's museum collections. Therefore, the superintendent must ensure that all research projects generating museum specimens and/or documents include funding to catalog, initially preserve and store the specimens, as required by Director's Order 24, NPS Museum Collections Management (see Appendix D).

Existing Natural History Research Collections

The park has numerous reports in its research and reference files that document past collecting activities at the park. Based on these research reports, and information in NPSpecies, there is reason to believe that collections from the park may be in various universities and other institutions.

The park should contact documented institutions to determine if specimens from VIIS are in their collections. If specimens are present, the park should obtain information about the collection including at a minimum when the collecting was done and by whom and a listing of specimens.

Collections made after the park was established are government property, whether or not a research or collecting permit was issued. The park should work with institutions holding these collections to accession the collection (one accession for each project), catalog the specimens and record them into

the park collection, and obtain copies of all the associated records from the project. If the decision is made to leave the specimens and records at the institution, the park should ultimately prepare an outgoing loan agreement for the collection and indicate on the catalog record that the specimens and archives are on loan.

Type specimens may be retained at the park as long as they are properly cared for.

There is an excellent report from October 1986, "Collection of Common Organisms within the Virgin Islands National Park/Biosphere Reserve" (Biosphere Reserve Research Report No. 3) that provides a history of the collection and a list of specimens collected to enhance the existing collection. The emphasis was on marine macrofauna and macroflora. Following evaluation of the existing collection, over 500 specimens were collected, prepared, accessioned and cataloged using NPS guidelines. The report makes six important recommends that have apparently not been routinely carried out during the past 17 years:

1. Make "comprehensive and systematic collections" of a large group of marine specimens (see report for list).
2. "Collections and inventories following the methods used during the investigation should be completed in all Areas of Particular Concern and control areas."
3. "Effort should be made to utilize visiting educational groups in the establishment and continuation of long-term monitoring."
4. "A serious attempt should be made to establish adequate curation for the Virgin Islands National Park Service Collection."
5. "Specimens in formalin or a mixture should be washed and placed in correct preservative."
6. "Most specimens need to be relabeled, especially those with two or more labels, with correct information and preservative type."

Recommendations 4 - 6 are most pertinent to museum collections. Had these recommendations been implemented near the time they were made, many of the problems with the preservation, documentation and accessibility of the VIIS collection would not exist today.

Botany/Herbarium

The flora of St. John consists of 747 species of vascular plants (native and naturalized), of which 642 are native to the island.

An excellent report on the herbarium is Biosphere Reserve Report No. 18A, "Herbarium of the Virgin Islands National park: Consolidation and Curation of a Reference Collection", 1987. This report documents the establishment of a reference collection of vascular plants indigenous to or naturalized on St. John, based on collections made by Roy O. Woodbury and associates, largely in 1983 and 1984. The Woodbury collection (accession 114) consists of at least 600 species distributed among 99 families, represented by some 1156 mounted specimens. Of the 12 rare and endangered species found during Woodbury and Weaver's (1984) survey all but two are in the reference collection.

The 1988 investigators annual report from Pedro Acevedo-Rodríguez states that "specimens have been collected and distributed to the VIIS, Institute of Tropical Forestry, The New York Botanical Garden and the University of the Virgin Islands herbaria.

There are three full-height herbarium cabinets ("Lane"). Two of the cabinets contain specimens and the other contains supplies. One of the cabinets, marked "Herbarium Cab. / Shelf Nos. 1-26", contains accessions 114, 138, and 149. Roy Woodbury made the collections in accession 114 and Pedro Acevedo-

Rodriguez who prepared *Flora of St. John* (The New York Botanical Garden, 1996) made Accessions 138 and 149. In the "Botanical History" section of *Flora of St. John* (page 6) is a detailed and interesting listing of previous botanical work on St. John. Acevedo-Rodriguez says this about the Woodbury collection: "His collections are very important because, in many instances, they constitute records of the first specimens collected in this century from many earlier records. His collections also contain new records and new species. His work represents the starting point for the present flora of St. John."

The other herbarium cabinet contains about 100 – 200 specimens and several uncataloged specimens collected by Acevedo-Rodriguez.

The arrangement of the herbarium specimens does not follow standard systematic herbarium practice. It appears that some collections are kept together and others are interfiled. Uncataloged specimens should be kept separate in a clearly marked section of the herbarium cabinet. As they are cataloged, they should be interfiled with the other cataloged specimens, regardless of source (accession number). Herbarium specimens are usually arranged by scientific classification (family, genus, and species). They must not be rearranged by NPS management designation such as catalog or accession number. Arrangement by classification makes the collection more useful to researchers. Park management searches of the collection, such as for the annual inventory, may be simplified by finding the family name for each plant specimen on the annual inventory. The scientific name (genus and species) is already printed on the annual inventory. Using a reference such as Museum Handbook Part II, Appendix H, it should be easy to determine the family for each specimen listed on the annual inventory.

None of the random herbarium sheets examined has an NPS label on it. The Code of Federal Regulations requires specimens to "bear official National Park Service museum labels" (see Appendix D). Labels are generated by the ANCS+ program.

The herbarium contains specimens of several plants that although not listed as threatened or endangered, "deserve attention and the prompt assessment of their populations" according to Acevedo-Rodriguez. Among them are *Calyptranthes thomasiana* (6928, 7070, 7258), an endemic that is not "common on St. John or elsewhere in the Virgin Island." There are also specimens of *Erthrina eggersii* (6839) and *Malpighia woodburyana* (7284) that have "very few individuals remaining on St. John."

The park has two 12-drawer cabinets ("Visi-Shelf File") that contain a few seed collections from 1989 – 1990. One cabinet is marked "dry forest seed collection." The only bag in the cabinet is marked "*Zanthoxylum thomasianum*". There is no indication that these fifteen seeds have been accessioned or cataloged despite the fact that this plant is endangered and only a reported 20 individuals remain on St. John. Documentation such as collecting permits and field records should be located for these specimens.

There is documentation (Smithsonian Institution shipping invoice) in the records for 172 mounted plant specimens shipped in September 1991 and two additional specimens shipped in March 1992. Pedro Acevedo-Rodriguez collected these specimens and the park shipped them to the Smithsonian. The shipping invoice says they are "an open long-term exchange." It is unclear what that terminology means. It is also unclear if these are specimens intended for the park collection or if they were duplicates collected with the intention of placing them at the Smithsonian.

The Resource Management Plan (1999) cites "a recent addition of fungi [that] resides on loan in the Kew Royal Botanical Garden." Again, this is an excellent example that without accessioning, cataloging, and documentation through the out-going museum loan process, how will future park staff or researchers even know this specimen exists, let alone that it is in England?

Entomology

Catherine Curry made a checklist from insect species represented in the park museum collection in 1970 when ten families were represented and 52 species identified. William Muchmore identified 232 species representing 124 families in 1987. More recently, Michael Ivie has been studying beetles in the Virgin Islands. He has documented 1,500 species and expects to find over 2,000 by the conclusion of his research.

The park has two 12-drawer entomology cabinets ("Lane"). Nearly all of the specimens are individually identified with scientific names, and most appear to be cataloged in ANCS+. The entomology collection was accessioned (number 115) in 1989.

In addition, museum cabinet #3 has a few pinned scorpions and spiders. These specimens are cataloged and in ANCS+.

Mammals

The only mammal native to St. John is the bat. Three of the six native species of bats are protected under the V.I. Endangered and Indigenous Species Act of 1990 (Act No. 5665). There is one bat specimen in the museum collection. Additional specimens may be added as a result of the I&M program (see permit # VIIS-2003-SCI-0004).

Museum cabinet #4 has several rodent skins and skulls. These specimens are not cataloged.

Marine Vertebrates

Early research in the park emphasized marine sciences. John Randall, an internationally recognized ichthyologist, inventoried fish from 1958 to 1961. A second fish inventory was conducted by Beets & Lewand in 1985. By 1988, the park had 850 fish specimens in the museum collection, although 250 were not cataloged. (For a discussion of the recent disposition of the Randall fish collection and other wet specimens, see "Other Institutions and Repositories" below.)

Museum cabinets 1 - 3 contain corals and shells. Cabinet #1 has five drawers with specimens. There are six empty drawers. Cabinet #2 has five drawers with specimens and five empty drawers. Cabinet #3 has six drawers with specimens. The drawers in cabinet #3 are overloaded with too much weight. Some of the specimens should be removed and redistributed in cabinet #2. The weight in each drawer should not exceed 50 pounds.

Invertebrates

Accession 116 is the mollusca collection (42 specimens of shells and vials of wet specimens) collected by William Muchmore during 1979 - 1984. The 1993 Collection Management Plan also identifies the park's collection of about 260 wet specimens of reptiles, amphibians and non-insect invertebrates. However, these are apparently among the specimens "transferred" to the University of Florida (see "Other Institutions and Repositories" below.) Museum cabinet #3 has two small boxes of index cards with detailed specimen-specific information. Although this information appears to have been entered into ANCS+ as part of cataloging, the documentation should be cataloged and retained as it appears to have been created by the collector.

Birds

Museum cabinet #4 has several uncataloged bird specimens in it. In 1960, William Robertson, Jr. prepared a report, *Observations on the Birds of St. John, Virgin Islands*. This report gives a history of some collecting prior to park establishment. Some of the specimens (birds and eggs) collected are at the United States National Museum (Smithsonian), the Academy of Natural Sciences of Philadelphia, and the Chicago Natural History Museum. A number of bird specimens collected during the summer of 1957, after the park was established in 1956, may be at the University of Kansas, which conducted the fieldwork.

Geology

Museum cabinet #1 has geology specimens. There are at least 72 catalog numbers assigned to geology specimens. Because rocks tend to be heavy, check the drawers in the museum cabinet to be certain they do not exceed the fifty-pound weight limit per drawer.

The Resource Management Plan (1999) makes recommendations that damaged specimens (wet specimens and insects) be deaccessioned and replaced with new specimens. New specimens may certainly be collected and added to the collection. However, the decision to deaccession is not based on condition alone. Even a damaged specimen may still have scientific value and therefore should be retained. Subject matter experts should be consulted when determining the scientific value of a specimen.

Future Natural History Research Collections

The NPS Inventory and Monitoring Program (I&M) will result in the collection of voucher specimens and associated records for the VIIS museum collection. The 2000 Study Plan for the South Florida / Caribbean Network has these objectives for VIIS:

Virgin Islands National Park has relatively complete checklists for all major taxons covered by this study plan. However, distribution and status information for bats (the only native terrestrial mammal in Virgin Islands National Park), herpetofauna, freshwater fauna, marine vascular plants, exotic plant and animal species, native and migratory birds, and bait fish are needed. Park priorities also include an inventory of marine benthic habitat types. Population-level inventories are needed for adult fish, juvenile fish, and baitfish. Higher level inventories are necessary for park managers to make informed resource management decisions when dealing with sensitive multiple use questions.

The Study Plan also identifies voucher guidelines for vertebrate taxa (Table 4).

The I&M network hired a museum technician (GS-7) in May 2003. They work under the supervision of the museum curator (GS-12) at Everglades National Park. This will provide a level of museum management for specimens and records generated by the I&M program at VIIS. Park resource management staff will need to assist in getting the voucher specimens and documentation cataloged. If the park decides not to manage these collections on site, then an appropriate repository must be identified that will comply with NPS requirements for collection management and is willing to manage the collection as a loan from VIIS (see Appendix E).

The NPS Inventory and Monitoring Guidelines for Biological Inventories (1999; Sec. VII, p.5) includes the following requirements for Inventory Full Study Plans: "Voucher specimens are to be collected for all species that are identified through the inventory, except where park vouchers already exist or

for species that are readily identified through photographs or other documentation... This section of the Full Study Plan must describe how these specimens will be cataloged in NPSpecies and ANCS+ and made available for future reference and use." More inventories of park resources will inevitably follow as the I&M Program continues in the coming years. The same issues will occur with each inventory. Since the I&M Program is being managed from the Southeast Region, park staff will have to work with regional staff to include cataloging costs in future inventories and to work out the details for storage and proper management of voucher specimens and associated records within each Full Study Plan.

Research and Collecting Permits

In February of 2001 "Administration of Scientific Research and Collecting Permits" was released by the NPS. A servicewide permit and reporting system called RPRS (Research Permit and Reporting System) has also been implemented. The RPRS is located on the NPS Intranet. This site also includes the "Administrative Guide for Park Research Coordinators: Scientific Research and Collecting Permit." With these tools, the park creates and issues permits and receives annual reports from researchers. These permits and reports should be printed out and, along with any other project data, accessioned into the park's museum collection as a permanent record of resource management activity in the park.

Permitted researchers are directed to a NPS web site for submission of their Investigator's Annual Reports (IAR) and park simply verifies the submission. It is recommended that staff print hard copies of all electronically submitted reports for inclusion in the park archives for reference purposes. The printed report should be archived along with copies of field notes, photographic images, maps, etc., as per NPS-77. It is the responsibility of the park to ensure these reports are archived in perpetuity for future park researcher use.

The park should integrate the issuance of research and collecting permits with the museum management program. Even if the issued permit does not authorize the collecting of specimens, there should still be field data and a report that will be obtained from the researcher at the conclusion of their work. These materials should be added to the park museum archival collection and cataloged into ANCS+. Disposition of project documentation and collected objects/specimens should be carefully considered in the stipulations of each permit. Decisions should be made prior to issuing the permit as to who will be responsible for cataloging, preserving, and storing the specimens and archives.

Appendix E has an outline of suggested procedures to follow to integrate the research and collecting permitting process with the museum management program.

Permit and Investigators Annual Report (IAR) files going back to 1988 are in the office of the Chief of Resource Management. During the team visit, the most recent research permits issued were reviewed as a sample of current practices. The following is a discussion of some of the permits:

Permit# VIIS-2003-SCI-0015 was issued to Dr. Michael Gannon (PI), Penn State, for a bat survey requested by USFWS. The application requested a maximum of five males and five females of each species as voucher specimens and states they will be "housed in an accredited scientific collection." The specific conditions in the signed permit state that "collection of voucher specimens will not exceed one male and one female of each species of bat for all study sites combined within Virgin Islands National Park" and identifies Penn State as the repository. There is not a permit condition that the specimens and associated records be cataloged to NPS standards.

Permit # VIIS-2003-SCI-0013 was issued to Ms. Virginia Garrison, USGS, for a study of African dust. The permit does not authorize the collection of specimens but air, water, and mucus from coral colonies will be sampled. The data from the collection and analysis of these samples should become part of the park archives. There is not a permit condition that the records from this research be cataloged to NPS standards.

Permit # VIIS-2003-SCI-0012 was issued to Jeff Miller, VIIS staff to do epoxy treatments on diseased coral colonies. Although not required by WASO, the park is requiring park staff to obtain research permits. The RPRS is an excellent and appropriate vehicle to ensure the tracking of research, specimens and documentation.

Permit # VIIS-2003-SCI-0010 was issued to Dr. John Brock, USGS, for airborne remote sensing through aircraft overflights. As with the previous permit (#0012), there is no requirement for permitting overflights. The fact that the park issued this permit reflects on the value that resource management places on research for future research, science and park management.

Permit # VIIS-2003-SCI-0007 was issued to Dr. Robert Steneck, University of Maine (Orono) for trophic cascades and the role of coralline algae in coral recruitment. The permit allows approximately 20 coralline specimens to be collected at each study location with specimens to be housed at the Darling Marine Center, University of Maine. There is not a permit condition that the specimens and associated records be cataloged to NPS standards.

Permit # VIIS-2003-SCI-0004 was issued to Ms. Laura S. Finn to conduct a bat survey as a contractor doing work for the NPS I&M program in the south Florida and Caribbean parks. The permit states that fur and tissue samples (standard wing punch) will be collected from each captured bat and submitted to researchers at Texas A&M for future DNA analysis. Any bat carcasses found during roost surveys will be retained as vouchers. There is not a permit condition that the specimens and associated records be cataloged to NPS standards. Thus, how will a future researcher know that fur and tissue samples may still exist at Texas A&M? Will a researcher requesting a permit ten years from now be granted a permit because the park staff does not recall that previous samples exist? Will the vouchers, if any, be cataloged and where will they be housed?

Permit # VIIS-2002-SCI-0026 was issued to Dr. Thomas Minello, National Marine Fisheries Service to study fish species and habitats. All specimens will be collected, identified, measured, and released. There is no determination in the permit about the project documentation and whether or not the park will obtain a copy of it or catalog it.

Compliance

The park has a "Project Review Form" for NEPA. The Chief of Resource Management has CY2002 – 2003 NEPA files in his office. The permanent retention of NEPA files, as well as NHPA files, are critical as part of the administrative record. NEPA files should be incorporated into the park archives (museum collection) where they can be properly documented and preserved for future use.

A good example may be the Environmental Assessment (final dated March 2002) that the park prepared for the sustained reduction of non-native rats, cats and mongooses from the park. If the park's decision based on this EA is ever challenged, as it well could be by animal-rights organizations, a lawsuit would require the park to prepare an administrative history of the decision making process.

Permanent retention of complete files that document the planning and decision-making process will be essential to a court decision that is favorable to the park.

Also critical to the success of this critical non-native species reduction program is the indefinite monitoring of target populations to determine if they are staying below the thresholds established in the EA. Again, formal and perpetual retention of this documentation for an "indefinite" program is critical if park managers five or 25 years from now are to make informed decisions and continue approved management actions.

VIIS Natural Resource Project Collections

The *Resource Management Plan* (October 1999) contains a very good overview and background on the park's resources and resource management program. The natural resource baseline information section includes: geology and soils, meteorological data and rainfall, hydrological resources, shoreline, terrestrial vegetation, native animals, endangered/threatened species, introduced animals and plants, marine inventories and studies, marine water quality, air quality and scenic values.

In order to establish a "corporate" memory of previous projects, it is vital for the park to use the museum collection as a permanent repository for both specimens and project/collecting documentation. A good example is the recent paper, *A tale of two reefs: Comparison of coral cover and sample design on reefs around Virgin Islands National Park*. The paper states that "some of the longest data sets on Caribbean coral reefs come from Virgin Islands National Park." One of the three main points of the paper is that "repeated sampling of permanently located random samples provides more statistical power and can reduce sample size by half when compared to non-permanent random sampling." Among the conclusions of the paper is that "managers need solid data from statistically rigorous sampling to help them reverse these declines [in coral] from natural and human stresses."

If this is a long-term management challenge, then current researchers need to ensure that the documentation they create today (the location of the random samples, the data derived from those samples, and the analysis of the data) is available in a formal archive (NPS museum collection) to assist future managers with their critical preservation task. The paper also concludes that the reduction in sample size by half provides savings from data collection and analysis. Those savings may off-set the cost of permanently managing the resulting data and documentation for future generations rather than supporting decisions for additional field work.

Other Institutions and Repositories

The care and condition of the wet specimens (vertebrate and invertebrate) in the park collection has long been an issue for the park. The specimens were reportedly stored "at a substandard facility at Lameshure Bay" (1993 Collection Management Plan) before being moved to the museum collections storage building on Lind Point. In 1995, the Acting Chief of Resource Management wrote a memorandum to the Superintendent regarding the curation of the marine specimens. While acknowledging that "the collection is an important scientific resource," he also points out that it "will require a great deal of time and money to save and then maintain." The care of the collection also required a trained individual. To bolster the justification, the University of Miami was planning to send its 65,000 specimen fish collection to the Florida Museum of Natural History at the University of Florida (UF). In addition, Dr. Burgess, curator of the museum expressed an interest in the VIIS fish collection. It was pointed out that "The move will cost VIIS nothing" and that "UF will pay for curation costs, and funds are available for the packing and moving of the specimens." What is unclear from the record is whether or not the park ever requested funding or professional assistance to care

for the collection or even sought recommendations on the methodology and materials to use for preserving these specimens.

In 1999, the park transferred ownership of nearly all the wet specimens on repose at VIIS to the Florida Museum of Natural History. On March 22, 1999, Superintendent Russell Berry wrote to Dr. Roger Portell, Florida Museum of Natural History, University of Florida, that "Virgin Islands National Park hereby transfers ownership of the invertebrate and vertebrate collections to the University of Florida Museum of Natural History. All invertebrate and vertebrate specimens and copies of all records will be sent to you at the museum." There is no authority for the superintendent to transfer ownership of museum property except under very specific circumstances. The park should contact the Florida Museum of Natural History to acknowledge the error, clarify the arrangement, and make arrangement for an out-going loan of specimens and documentation that will remain at UF.

This is an excellent opportunity for the park to reconsider the 1999 action and evaluate it based on objective criteria. Why is a loan being made? (Aid scientific and scholarly research, preservation of specimens, convenience of the park staff.) What specimens will be loaned? (Based on scientific classification, based on level of reference use.) Where will materials be placed on loan? (Another park such as Everglades that has similar specimens and professional staff, a museum with similar collections and the ability and willingness to care for the VIIS collections.)

Recommendations

Immediate

The park should integrate the issuance of research and collecting permits with the museum management program.

The park should request that all researchers, park staff included, use the current professionally accepted fluids when "fixing" and preserving wet specimens. (This should be included as a condition of the collecting permit.)

Ensure that all research projects generating museum specimens and/or records include funding to catalog, initially preserve and store the specimens and/or records.

The park should contact the Florida Museum of Natural History to acknowledge the error made when wet specimens were permanently transferred there, clarify the arrangement, and make arrangements for an out-going loan of specimens and documentation that will remain at the UF.

The park should then update the museum catalog records in ANCS+ to be certain that the correct location is in the database (many, if not all, currently have Florida Museum of Natural History). For those that remain on loan, the status must be changed to out-going loan and the status year changed to reflect the year the loan became effective.

One-year

Accession and catalog the seed collections and associated documents in the two cabinets, including the bag marked "*Zanthoxylum Thomasianum*", an endangered plant.

Redistribute coral and shell specimens from overloaded drawers in museum cabinet #3 to empty drawers in museum cabinet #2. Also check the weight of the drawers in museum cabinet #1 that

contain geology specimens. The weight in each drawer should not exceed 50 pounds. Change specimen location on museum catalog records in ANCS+.

Three-year

Have a botanist, or someone familiar with botanical classification, arrange the cataloged specimens according to family, genus, and species.

Add NPS labels, printed from ANCS+, to the herbarium sheets.

The park should contact documented institutions to determine if specimens from VIIS are in their collections. If specimens are present, the park should obtain information about the collection including at a minimum when the collecting was done and by whom and a listing of specimens.

Five-year

The park should work with institutions holding undocumented park collections to accession the collection (one accession for each project), catalog the specimens and record them into the park collection, and obtain copies of all the associated records from the project. If the decision is made to leave the specimens and records at the institution, the park should prepare an outgoing loan agreement for the collection and indicate on the catalog record that the specimens and archives are on loan.

CHAPTER 5 ARCHEOLOGY COLLECTIONS

Archeological collections are a major component of the park's museum collection, making up 85 percent of the total collection and 88 percent of the park's cultural collection. Before the current park archeologist position was created in 1998, the majority of the park's archeological collections were loaned to the NPS Southeast Archeological Center (SEAC) in Tallahassee, Florida for collection management. SEAC serves as the repository for most of the region's archeological collections, including both artifacts and project records. SEAC currently manages an estimated 86,627 archeological objects and 19,367 archives items (archeological project documents) from the VIIS museum collection. Of these, 19,422 archeology objects and 16,924 archives items are cataloged. This leaves a backlog of uncataloged archeology objects numbering over 67,000 objects at SEAC.

Since 1998, collections produced by archeological projects conducted in the park have been retained in the park's on-site collection. These projects include both Section 106 compliance work and research projects. In addition, a substantial collection (over 7,000 objects) made on a SEAC archeological project at Trunk Bay in 1992 (VIIS-187) was returned to the park from SEAC for further research and cataloging by the park archeologist. According to the VIIS park Collection Management Report, the park now has over 35,000 archeological objects and about three linear feet of archeological project documentation in storage in the collection storage building (Museum Collection Storage Building) or in active use in the park archeologist's office at the Biosphere Reserve Station or at the Cinnamon Bay Archeology Laboratory. The vast majority of this material is from the Trunk Bay excavation (VIIS-187) and the ongoing Cinnamon Bay project (VIIS-191).

The Cinnamon Bay Project

The largest and most extensive example of a park-based archeological project is the current Cinnamon Bay project (VIIS-191). This is primarily a research project although portions of the site are threatened and periodically impacted by storm related beach erosion. The project was begun in 1998 and the research design called for a variety of outside specialists and partnerships with universities to accomplish the work. The project was begun with a private donation to the Friends of Virgin Islands National Park, Inc. and continued with additional private donations and university-funded research by Southern Maine University and Syracuse University. Since May 2001, the contributions of the Syracuse University Department of Anthropology have been accomplished through a Memorandum of Understanding with VIIS. Contributions of the Southern Maine University Department of Anthropology have been reduced to an occasional supply of volunteer labor to the park archeologist. Excavations in the prehistoric component of the site were conducted through this university's archeological field schools during the early part of the Cinnamon Bay Project but no Memorandum of Understanding was established.

This project has been conducted largely through volunteer efforts overseen in general by the park archeologist. The park archeologist has been assisted by student interns paid and housed through the Friends of Virgin Islands National Park using donated funds and those raised through the sale of T-shirts, jewelry reproductions of objects found at the site, etc. These student interns have been recruited largely from graduate students who participated in the university field schools that formed a part of the project. The park archeologist has relied on these student interns to provide day-to-day oversight and supervision of volunteers performing both excavation-related tasks and laboratory tasks. Volunteers are accepted from among Virgin Islands residents, local school groups and park visitors who are either camping or visiting Cinnamon Bay for the day. Additionally, Elderhostel groups and AmeriCorps volunteers provide volunteer labor for the project. During periods of active

large-scale excavation, experienced volunteers were relied upon in much the same capacity as the student interns to oversee the work of numerous volunteers who were accepted on an ad-hoc basis.

In January of 2001, park management asked the Southeast Archeological Center (SEAC) to send a team to review the status and goals of the Cinnamon Bay project. The Regional Archeologist and the SEAC Collection Manager comprised the team. Pertinent recommendations made during this review and any responses or changes made by the park staff in response will be discussed as appropriate in the following section.

Laboratory Procedures

Current archeological laboratory procedures for the Cinnamon Bay project (except for material excavated and processed by Syracuse University) are described below. These procedures have also been used recently to process collections that resulted from a 1992 mitigative excavation at Trunk Bay (VIIS-187).

Excavated material is generally dry screened through ¼" mesh screens and the resulting artifacts, shell, bone, etc. are bagged and given a Field Specimen number that relates to the excavated provenience. Certain features and soil samples are retained for water screening through 1/16" mesh screen or sieved through a series of screen sizes for recovery of botanical remains. The ¼" screened material is taken to the Cinnamon Bay laboratory for processing. At the laboratory, these materials are washed in tap water and cleaned with toothbrushes by student interns and volunteers. Washing instructions for volunteers are provided by the Park Archeologist when he is present or by the student interns. Overall supervision is provided by the student interns. According to the Park Archeologist, special instructions are provided to avoid removing decorative finishes from certain types of historic ceramics such as Imari porcelain which has very delicate overglaze painted designs. It is assumed that student interns help volunteers to recognize these objects before they are inadvertently damaged.

Washed artifacts are placed in an indoor drying rack and are allowed to dry slowly. Field bags are replaced by clean, reclosable 4-mil polyethylene bags and all provenience information including the Field Specimen number are written on the new bag with a Sharpie marker. The artifacts are then sorted into basic categories by the student interns and volunteers. If the expertise is present, ceramics are sorted according to types. Historic types are determined through the knowledge of the Park Archeologist and through reference to published sources. Prehistoric pottery types for the island have been developed for the Park Archeologist by Dr. Emily Lundberg, an expert on regional prehistoric ceramics. A written set of procedures, based on Dr. Lundberg's research, was prepared by Park Archeologist Ken Wild and Dr. Lundberg in October, 2001. This detailed and illustrated guide, titled "Prehistoric Ceramic Vessel Analysis – Basic Form: Data Fields, Explanatory Notes, and Instructions" also explains data entry procedures for this class of artifacts into the park's Microsoft Access artifact analysis database. When the expertise is not present in the laboratory, artifacts are sorted only by material, i.e. ceramics, stone, glass, iron, shell, and bone. The lots created during this sorting process are bagged separately and the Park Archeologist proofs the sorts. The objects in each lot are then counted and weighed. Tyvek tags labeled with the Field Specimen number, pertinent provenience information, count, weight, and description are placed in each bag. These artifact lots have not yet been assigned a catalog number at this point. Information is written on the tags with a Sharpie marker. Concerns about the ANCS+ cataloging of objects from the prehistoric component of the site, expressed in the 2001 SEAC review of the project, are being appropriately addressed. It is suggested that an archival ink Pigma pen be used for marking the tags. Alternatively, a bag tag report is available from SEAC that will print tags directly from the ANCS+ database and these should be printed onto acid-free paper. Use of these tags can provide a useful means of proofing the database against the objects as the tags are placed in the bags. At this point, the contents of each lot can be compared to the

data in the ANCS+ database and the catalog number can be written on the bag and the objects numbered before the ANCS+ database is finalized for submission to the National Catalog.

Soil samples from previous years' work at Cinnamon Bay are now being sieved through a series of four graduated screen sizes. The park archeologist has made arrangements with Paleoethnobotanist Lee Newsome at Penn State University to analyze and identify the plant remains in these samples. In previous years, Zooarcheologist Irvy Quitmeyer of the Florida Museum of Natural History has analyzed, sorted, and helped train student interns to sort shell recovered in the excavations. A loan of shell specimens has been made to Quitmeyer for more detailed analysis. Most of the shell excavated from the prehistoric component of the Cinnamon Bay site was identified, counted, weighed, bagged, boxed and reburied in the excavation units where it was excavated. The shell that had not been processed at the time when the excavation units were backfilled in 2001 has been bagged, boxed and retained either in the collection storage (Bally) building or at the Cinnamon Bay laboratory. The park archeologist intends to retain all the shell from the excavation and believes that the buried shell in the excavation units can be recovered intact if need be. [NOTE: the buried shell was recovered at the request of Superintendent Frederick in early 2004.]

While the prehistoric shell collection is relatively large, it more likely than not has significant unrealized interdisciplinary (i.e., biological/ecological/archeological) research potential. There is a strong likelihood that research studies, possibly comparing harvested molluscan populations some 1000 years ago to present-day populations will be undertaken in the near future. Similarly it may be possible to enlist scientists to research tool use and technological or behavioral changes over time in the near term.

A Microsoft Access database was developed for data entry and analysis of the Cinnamon Bay artifact data by former student intern Steve Lenik after consultation with Southeast Archeological Center database management staff. Data from this database can be imported into the NPS Automated National Catalog System (ANCS+). It is not known at this point whether these data are compatible with the new version of ANCS+ issued in 2002. The park archeologist has retained a copy of the previous version of ANCS+ in the event that the Access data must be imported into it before being converted to the new version of ANCS+. A laptop computer is now available for data entry at the Cinnamon Bay laboratory but this has not yet been attempted. Catalog numbers are assigned to each lot by the park archeologist during the data entry process. Most of the objects collected during the Cinnamon Bay project to date have not been numbered. The park archeologist intends to rely on student interns and volunteers to accomplish this task. Bagged artifacts are then packed into white corrulite plastic records boxes as recommended by SEAC collection management staff. Some boxes are equipped with acid-free cardboard artifact tray inserts, which keep the objects from damaging one another and help the box retain its shape and structure. These inserts have not been used extensively to date.

Considerable work remains to be done in terms of cataloging the artifacts from the Cinnamon Bay project. Additional material is currently being excavated as part of a Section 106 clearance just south of the Archeology Lab for a planned fee collection station. Currently, uncataloged material is being processed only as student interns and volunteers are available. These individuals rarely have the expertise for cataloging objects and entering data into ANCS+. Funding should be sought for an Archeology or Museum Technician to complete this cataloging work and oversee interns and volunteers at the Cinnamon Bay laboratory. This workload was noted in the SEAC 2001 review of the project and has continued to grow.

The Syracuse University Department of Anthropology has been involved in excavation of the historic plantation component of the Cinnamon Bay site since its inception in 1998. Since May 2001, this work is being completed under a Memorandum of Understanding with Virgin Islands National Park. Under the agreement, Syracuse University students will complete the analysis and cataloging

(including entry into ANCS+) for all the artifacts they have excavated under the direction of principal investigator Dr. Douglas Armstrong. Under their procedures, almost every artifact is lotted separately based on its attributes and each lot will be cataloged separately. During the Collection Management Plan team visit, the following observations were made concerning material that had been processed at Syracuse University:

Ceramic artifacts from a single excavation unit are contained within one large reclosable polyethylene bag. This bag is labeled only with the site name and excavation unit. Contained within this bag are smaller bags (although these bags were far too large for the amount of material contained in them) each containing the ceramics from one Field Specimen (typically a level within the excavation unit). These bags are labeled with the Field Specimen number and provenience information and each contain a blue paper tag. These tags are believed to be made from non-archival card stock but were not tested for acidity. The blue tags have preprinted spaces for information including one space labeled "NPS Cat. #". This has been filled out with the Field Specimen number rather than the catalog number. This practice is very misleading and was noted in the 2001 SEAC review of the project. These tags have not been replaced since that review. It is not known whether Syracuse faculty and students are still using these same tags in their field bags. It was also noted that these tags are probably not acid-free. Each Field Specimen bag contains one or more smaller bags containing the individual lots of artifacts created in the analysis and sorting process. These contain white paper preprinted tags but the bags themselves were not labeled. These tags had been prepared after VIIS catalog numbers had been assigned to these lots. However, the format for the accession number lacks the hyphen between the park acronym and the number. The catalog number is printed as "Cat: 31269", lacking the park acronym. It is clear that the Syracuse participants in the project have not been made aware of proper formats for NPS accession and catalog numbers. The remaining information on the tags is clear and apparently accurate.

Other problems were noted in the small sample of material processed by Syracuse University. Three bags tags were found in a single bag with three artifacts. Since the artifacts were too small to be numbered, it would require an expert to determine which artifact belonged with which tag. Another small bag in the same Field Specimen contained no bag tag and was not labeled on the exterior. The provenience of this object would be lost if it were separated from its parent bag. None of the artifacts observed in this small sample had been numbered. The park Archeologist informed me that Syracuse students would be numbering these objects, and correcting any bag labeling problems during their next field school scheduled for summer 2003. Artifact boxes were also not labeled appropriately or consistently for the Syracuse material. Adhesive labels and tape are difficult to remove. As was recommended during the 2001 SEAC review of the project, the ends of the boxes should be labeled directly by use of a Sharpie marker with the VIIS accession number (using the proper format) and any other appropriate information such as site name and box number. *As of summer 2003, the park Archeologist stated that the park was now labeling the boxes and had updated the blue tags with acid free ones.*

Other recommendations made by the SEAC review team in 2001 are listed as follows, with a discussion of whether park staff have addressed them:

- Make acid-free copies of the two field books that contain the unmodified shell data. This has not been done.
- Conduct laboratory work in a climate-controlled setting. No appropriate location has been found. Work is continuing in the Cinnamon Bay laboratory.
- Remove taped-on labels from artifact storage boxes. This has not been done.
- Make bag labeling, bag tags and box labeling consistent for the project. The materials processed by Syracuse University have not been made consistent.
- Metal objects should be evaluated for conservation treatment. This has not been accomplished.

- Re-house field documentation into acid-free folders and containers. These materials are now stored in appropriate acid-free containers but have not been placed in acid-free folders.
- Seek assistance and training in efficient catalog data entry methods. Student intern Steve Lenik visited SEAC and subsequently developed a Microsoft Access database format that is compatible with ANCS+.

Relationships with Outside Institutions

One of the recommendations made during the 2001 SEAC review of the Cinnamon Bay Project called for formalizing the relationship between the park and any institutions participating in the project. During 2001, a Memorandum of Understanding (MOU) was completed with Syracuse University that details the responsibilities of the University and the park. This MOU pertains strictly to the University's role in investigating the historic component at the Cinnamon Bay site. According to the park archeologist, Syracuse University will be conducting a GIS mapping project for archeological sites in the park under this MOU in 2003. The MOU should be amended to include other projects aside from the Cinnamon Bay project to cover this planned activity.

Another Memorandum of Understanding was completed in 2001 with East Carolina University detailing marine archeology survey work to be carried out in the park's waters. A formal instrument has not been completed detailing the park's relationship with Southern Maine University. The Park Archeologist indicates that the role of this institution is now reduced to providing student labor for relatively short periods for any ongoing park archeological project.

The MOU with Syracuse University requires the university to perform the following collections related tasks for the collections they generate on a project:

Analysis of all material culture and ecofacts recovered from survey and archeological excavation linking to and integrating with the NPS/ANCS program.

Cataloging all material culture and ecofacts according to NPS standards.

Assigning an NPS museum catalog number to each artifact lot.

Labeling artifacts and containers following NPS procedures.

Bagging and boxing artifact lots following NPS procedures.

Proofreading and editing analysis forms and computer data files to ensure data consistency and accuracy.

Completion of final report summarizing the results of the project and including a statistical summary of the accessions, numbers and types of artifacts cataloged, and number of data records produced.

The MOU with East Carolina University includes similar requirements. These MOUs provide very effective control over the procedures used by participating institutions and are well conceived and written. With additional direction and examples provided by the Park Archeologist, properly cataloged, numbered and housed archeological object collections can be produced through relationships with universities. With the current MOUs, virtually all the cost is borne by the universities, making them very advantageous for the park.

The MOU with East Carolina University was created to provide an archeological survey of submerged resources in both Virgin Islands National Park and the newly created Virgin Islands Coral Reef National Monument. This project was begun in early 2002 with a Section 106 compliance project involving planned installation of a hurricane mooring system. The project continued with a partial survey of submerged resources later the same year. Continued survey and investigation of these resources by faculty and students of East Carolina University are expected to continue as university resources permit until 2007. This is a well-conceived project that will add greatly to the park's knowledge of its submerged cultural resources. Since there is no funding provided by the park for this project, the park should program funds through PMIS for cataloging and curation of project documentation and for any anticipated conservation treatment costs for artifacts recovered.

Future Archeological Projects

Park resource management staff have begun planning for a comprehensive inventory and assessment of land-based archeological resources (PMIS 55256). This project is intended to locate, inventory, and assess site significance for terrestrial archeological sites in the park. It will also result in National Register nominations for appropriate sites and is planned for a five year period. Funding for this project is requested for FY 2005. The PMIS statement does not include or mention the cost of cataloging and proper storage and care of the artifacts that will be collected or the project documentation that will be created on this project. Any related conservation treatment of objects is likewise omitted. The PMIS statement should be revised to reflect these costs.

This survey project, as with the Cinnamon Bay project, is "designed for cost efficiency using University field school research programs, Ph.D. candidates, volunteers, and volunteer groups to eliminate the locality costs that include a high rate of per diem, very high lodging expenses and high travel costs associated with airfare." This statement is included in the Justification section of the PMIS statement. It describes the basic philosophy of the park archeologist when approaching archeological projects in the park. The first phase of this project will begin in 2003 through the MOU with Syracuse University and will consist of locating existing sites with GPS equipment and preparing cultural GIS maps for the terrestrial portions of the park. This approach has produced remarkable results with the Cinnamon Bay project and has resulted in much acclaim for its high degree of public involvement.

All archeological projects should have cataloging and preparation for proper curatorial storage built in to the research design. This principle should apply to projects funded through the NPS PMIS system (including Section 106 compliance projects for ground or seafloor disturbing projects and research projects), the Friends of Virgin Islands National Park, or unfunded work donated by cooperating institutions. Park resource management staff should pay particular attention to programming for cataloging, arranging, and preparation for storage of objects and project documents in the PMIS statements they prepare for cultural resource projects.

Field Collection Policy

The park resource management staff should develop a field collection policy that will cover field collection of archeological objects by park staff and visitors. The policy should stipulate that visitors should be discouraged from collecting archeological objects from terrestrial or submerged areas in the park. Signs should be posted in areas where visitors congregate (such as Trunk Bay, Cinnamon Bay, Annaberg, and the park Visitor Center) discouraging collection of artifacts and explaining the importance of leaving objects in their context. If a visitor collects an object and brings it to park staff, every attempt should be made to determine the location where the object was found. This information, along with the object, should be immediately delivered to the Park Archeologist. The

Park Archeologist should, as soon as is practicable, visit this locality and assess the site, recording data as necessary for inventory of park resources.

Park staff who observe artifacts on the surface or in exposed locations should report this information to the Park Archeologist. Park staff should be discouraged from collecting these objects. The Park Archeologist can determine whether these objects should be collected, keeping in mind that if they are collected they must be accessioned into the park museum collection and cataloged into ANCS+. Metal objects that will clearly require conservation treatment in order to preserve them in the museum collection should be considered particularly carefully, given the park's very limited resources in this area. Submerged objects exposed on the sea floor should only be considered for collection if they are diagnostic artifacts from a known site. Otherwise, the Park Archeologist should assess the site before any collection is made. Particular caution should be exercised in considering any collection of metal objects from submerged sites. These objects will deteriorate rapidly when removed from their environment and the park has no facilities or provision for their conservation treatment.

Uncataloged Archeological Collections

As noted previously, uncataloged archeological collections exist both at SEAC and at the park. Cataloging of these collections requires programming and preparation of PMIS project statements. SEAC has recently made a new assessment of uncataloged VIIS archeological artifact collections and found that the previous estimate reflected in the Center Collection Management Report for VIIS was over 50,000 items too low. This backlog includes both pre-1987 collections eligible for Backlog Cataloging funds and those collected afterward. SEAC Collections Management staff will prepare PMIS statements to request funds to catalog this material in the coming years. SEAC will also include the remaining archives (archeological project documents) that are not cataloged (consisting of oversize documents and photographic negatives in multi-park archives cataloging projects. These projects have already been programmed into the PMIS system.

The archeology backlog present at the park is almost exclusively material that has been excavated as part of the Cinnamon Bay project. The historic component artifacts are being cataloged by students from Syracuse University. Artifacts from other site components are being cataloged by project student interns when they are available. The park archeologist also hopes to train volunteers to perform portions of this work, particularly artifact numbering. Programming for completion of the project cataloging would speed this process. The park currently has no provision for arranging and cataloging the project documents from archeological projects being conducted in the park.

Collections at Outside Institutions

One archeological collection made just after the park was created is important to the park and its management of cultural resources. This was a survey project conducted by Ripley P. Bullen and Frederick Sleight in 1960 under the auspices of the Florida State Museum (now the Florida Museum of Natural History), an institution of the University of Florida in Gainesville, Florida. The collection is currently housed at that institution. Some of the sites investigated were outside the park boundaries so the collection would also be of interest to the office of the Territorial Historic Preservation Officer for the Virgin Islands. The Park Archeologist has expressed interest in obtaining copies of the project field documentation and possibly the collection of artifacts itself. Research must be done to determine whether the National Park Service funded the project. If so, it should be possible to bring the collection into the park's museum collection.

CHAPTER 6 ARCHIVES AND RESOURCE MANAGEMENT DOCUMENTATION

The park archives serves both as a repository for historic records, created outside of the park (non-NPS), which are relevant to the park, and as the source for park created records pertaining to the history of resource management within the park. The latter refers to "resource management records" which includes research project reports and associated records such as field notes, administrative materials, the history of planning, park interpretation and the history of cultural and natural resource decisions. This includes records that document land acquisition and management, planning and development, the changing image of the park resources, materials reflecting a condition, and use or modification of natural and cultural resources. All archives retained by the park are part of the museum collection, and as such, must be preserved, cataloged into the Automated National Catalog System (ANCS+), and made accessible to staff and public reference requests. A park archive is an invaluable resource that when properly cared for and preserved, embodies the institutional history of the resources and the decision making process at the park.

This chapter will focus on the identification, preservation and management of archival records for VIIS and VICR. As records are currently dispersed throughout the park, a survey was made of all divisions (Administration, Interpretation, Resource Management, Maintenance, etc.) involving several different physical locations. The survey included active and inactive records, accessioned and non-accessioned items, and both official (i.e. Central Files) and non-official (created outside of the park such as newspapers, donated items, etc.). Park records are analyzed on a location by location basis.

Legislation

Legislative authority for park archival and records management work is as follows: Records Disposal Act of July 7, 1943, as amended (44 USC 366-376, 378-380); Federal Property and Administrative Services Act of 1949, as amended (44 USC 391-401); Federal Property Management Regulations, Subchapter B, Archives and Records, Part 101-II, Records Management; Department of Interior Manual, Parts 390-384, Records Creation and Disposition; and the Federal Property Management Regulation, Subchapter B, Archives and Records. NPS guidance includes the following: Director's Order #19: Records Management; Director's Order #28: Cultural Resource Management, Chapter 9; Director's Order #24: NPS Museum Collections Management, the Museum Handbook, Part II, Appendix D, and NPS-77, Natural Resources Management. All personnel related materials are to be retired to the National Personnel Records Center (Civilian) in St. Louis, MO.

Record keeping for National Environmental Protection Act (NEPA) compliance actions are as follows: Council on Environmental Quality regulations for compiling a Record of Decision are in 40 CFR 1505.2 and 40 CFR 1505.3; guidance regarding creation of an Administrative Record is in the National Parks Omnibus Management Act (Public Law 105-291, 16 USC 5936). As there is no statute of limitations for compliance actions taken by the NPS, all NEPA and related compliance records are to be considered permanent and to be archived. NPS guidance includes the following: Director's Order #2: Park Planning, and Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision Making.

NPS Archives

Archives differ from object collections in that archival work does not focus on the item level or individual object, but rather examines the collection as a whole. It is extremely important that manuscript collections or projects are kept together when they are received in the museum collection archives until they can be processed. "Processing" archival material involves preparing an initial inventory of all files, maps, photographs, etc. in the order that they are currently placed in. This should be done for each box/filing drawer that forms the collection. This inventory then provides an initial context to begin to identify the potential series of each individual collection. The term "series" refers to a group of documents arranged or maintained as a unit because of their shared history of creation, receipt, or use. An example of a series list would be: Series 1 Maps; Series 2 Photographs; Series 3 Field Notes; and Series 4 Legal Documents.

The processing phase also involves reviewing the collection a second time and making notes about the condition of the collection, eminent figures or organizations associated with the collection, the range of dates for the material, why the collection was created (especially for projects), the size and/or quantity of the collection, the different material types represented in the collection (reports, drawings, slides, etc). This important information will be used to write the collection history. A copy of the original inventory and the processing notes can be placed in the accession folder.

Another archival activity that is completed during processing is storage upgrade or rehousing. This involves replacing old acidic file folders, placing photographic items in archival envelopes or mylar enclosures, placing oversize documents or maps/drawings in map folders, etc. During this phase it is appropriate to label all the enclosures in pencil with the accession number that was assigned to the collection. It is not necessary to place one item per file folder. It is appropriate to place field notes together, correspondence relating to a project can be filed together, etc.

Once processing has been completed, the next phase of archival cataloging is the arrangement of the collection into series. There is not a set rule on the number of series that may be assigned—it is totally dependent on the size or various materials/documents located within the collection. It is also important to assign a number to each series such as "Series 1: Maps", "Series 2: Negatives."

After the arrangement of materials has been finished the description of the collection needs to be written. This information will constitute the finding aid that is the tool that is used to access the collection. A finding aid should include the following components: Collection history; scope and content note; arrangement and series descriptions; file level descriptions; and if necessary, item level descriptions. A table of contents and an index should be included if possible. If copyright restrictions apply they should be noted.

Detailed instructions for establishing a park archives are delineated in the Museum Handbook, Part II, Appendix D, "Museum Archival and Manuscript Collections." Archival materials are to be evaluated against the park's Scope of Collection Statement (SOCS) and in following with NPS museum and records mandates. General guidelines for processing, describing, and providing access to archival collections are presented here and in Conserve O Grams 19/15, "Storing Archival Paper-Based Materials," and 19/16, "Housing Archival Paper-Based Materials."

Occasionally, it is not clear whether materials belong in the park archives or its library. Publications that are not original to the site (not NPS generated) belong in the library. Rare books and original reports or manuscripts should be cataloged into the museum collection. For a definition of a rare book, see Conserve O Grams 19/2, "Care and Security of Rare Books," and 19/3, "Use and Handling of Rare Books." Published resource management report copies may appear in both the museum (archives) and library collections. The NPS recommendation per Appendix D is that a park archives

retain a copy of every publication produced in the park, including those by concessionaires and cooperating associations, and copies of publications resulting from research utilizing park collections and resources since park libraries rarely have sufficient security (as well as being in keeping with DO-28 and NPS-77).

A number of guidelines, Standard Operating Procedures (SOPs), and finding aids for the general public will need to be produced once the park archives is established. These include a Guideline for Researchers SOP, an Access and Use policy, duplication policy, Copyright Statement, and a publication request policy. Refer to the Museum Handbook, Part II, Appendix D, for guidance on formulating an Access and Use policy. Park staff and archival contractor(s) need to be versed in copyright issues that may apply to the park, so that the appropriate copyright statements will be included in a collection's description and catalog record. It is recommended that the park use the Copyright Statement included in ANCS+.

Include the park access rules at the time the researcher checks in at the visitor log. The researcher's signature then documents his/her awareness of the regulations and agreement to abide by them. Access and supervision procedures should be discussed with all park staff who assist and supervise researchers. Prepare a research room SOP addressing duplication requests, requests for research assistance, requests for permission to publish, reference questions, monitoring procedures, as well as general security measures. Prepare a security plan so that staff members know what to do in the event of an attempted theft. Do not leave collections unattended or overnight in an unsecured room. Park staff should be familiar with the applicable federal and state laws regarding theft of archival materials. A sample "Access Policies and Rules Governing Use" statement for archival collections is provided in Appendix D, p. D: 93. Also refer to the Museum Handbook, Part III, Chapter 1 "Evaluating and Documenting Use," and Chapter 2 "Legal Issues."

As public institutions, NPS archival repositories are open to the public without qualification as to academic or professional status. Materials that have been published or made available to any individuals (including park staff) for research must be equally available to all outside researchers. But the park is also charged with the responsibility of preserving these collections. The aim is to establish and implement policies that substantially reduce the risk of damage or loss to the collection while providing access. Records which reveal sensitive site locations, or records for which the park does not have copyright or legal custody, must be identified by park staff and access to such material must be restricted.

Archival materials cannot be "checked out" like library items and should never leave the park except when the collections must be taken off-site, (by NPS personnel or a trusted professional archivist) to preserve or catalog the collections. Even park staff are restricted from removing archival records, but they can and should make use copies needed for carrying out their work. Any archive collections which are forced to leave the park, must be placed on loan and a receipt of property must be signed by the person(s) taking the records off-site. In addition, all access to the archives must be restricted, and researchers using the materials need to be supervised. Do not provide written permission to publish materials to researchers unless absolutely certain that NPS holds the copyright. In addition, use NPS permission forms when granting permission, rather than signing forms provided by requestors. Never grant "all copyrights," "all rights in perpetuity," "all international rights" or similar statements allowing endless usage. Also, do not provide high quality photographic copies or allow electronic, photographic, or other mechanical copying by the researcher of any materials which have publication restrictions. A sample "Copyright and Privacy Restrictions" statement for researchers to sign is provided in ANCS+ and a sample Researcher Registration Form is provided in Appendix D on p. D: 97. It is recommended in the Museum Handbook, Part III, Chapter 2, "Legal Issues," that a researcher sign these forms before park staff authorizes use.

Records Management

Records are essential for successful park operations and decisions. Since records have the potential to become archival, it is critical that they be managed and controlled long before they reach the archives, so that they will be preserved and accessible. The process of organizing, managing and controlling records is referred to as “intellectual control.” It is imperative that active records used in the park retain intellectual control. Not only does this assist in determining what records have archival value, but it also helps retain provenance and original order of these collections. Provenance is an archival word that translates into “an unbroken chain of custody.” The value of a record is determined by the quality of informational and evidential value it contains, and is also judged by its correlation to other records (i.e. the overall collection) as well.

Records that are created as part of park operations are to be managed as specified in NPS-19 (DO-19). The term “record” can include several different mediums such as paper forms, memos, correspondence, photographic prints, slides, negatives, maps, drawings, email, electronic files and databases created or received by a park employee or volunteer. For the NPS, these records reflect and trace official NPS business and decisions. However, not all records generated and received by a park contain “mission-critical” value. The majority of records created and used at the park constitute “official” government records. As such, these records must be managed and accounted for as described in NPS-19 Appendix B, Records Disposition Schedule. Once official records have finished their active life cycle they are to be placed in the archives, or destroyed according to the value given to the record in DO-19. The decision to destroy or archive a record can often be determined by the documents central file code, which is placed on a document when it is created. This decision is called “appraisal” and is done by developing a file plan and appraising records using NPS-19, as well as NPS-28 (Cultural Resource Management Guidelines). Certain file codes such as “D”, “H”, “L”, “N” and “Y” are generally considered to be permanent records. When in doubt consult with an archivist or contact the Regional Office.

By utilizing a file plan, permanent park records can be systematically identified and transferred to the museum collection archives. This could be done for example, every three years, or by using the file plan/schedule determined by the park. A receipt for property and a file-level inventory should be prepared each time a group of records is transferred. The museum collection archives should create a new accession each time they receive records — they should not be adding to previous years or collections. This will also allow records to be processed and cataloged as individual collections, such as “Administrative Park Records: 1999 – 2003.”

A record’s primary importance, or value, is determined by the information it contains and conveys. This process divides records into “permanent” and “temporary” categories. Permanent records have continuing value to resource management. Temporary records have a limited use in the operations of a park. Temporary (non-mission critical) records include fiscal, routine administrative, law enforcement and other daily operational materials. Permanent official-records, or “resource management records” are to be retained at the park if they are actively needed and preserved according to NARA’s guidelines. Otherwise, they should be transferred to a more appropriate facility to maintain them.

NPS records managers have devised strategies to assist park staff in improving their own park records management system. These include the avoidance of prong folders; the creation of new folders for every fiscal year for all NPS file code files in active use; the proper labeling of folders with file code, title, year and disposition schedule; the creation of permanent records on acid-free paper from the outset to ensure the document’s longevity (not recycled paper); the minimal use of rubber bands, metal fasteners and “Post-it Notes;” ensuring file folders and filing cabinets are not overfilled leading to mechanical damage to papers; the elimination of folder labels (which can fall off) by instead writing

directly on the folder tab; and encouraging the use of high quality folders that are half or full cut for permanent records files. Records managers strongly recommend documenting every disposition action in writing and filing it under A7227. Information that needs to be recorded includes date, person, disposition action, disposition authority/authorities, comprehensive listing of disposed files, and the signature of a witness. Disposition actions must be defensible in a court of law.

Records managers also recommend that parks establish comprehensive, stand-alone "project files" for resource management, special events, park infrastructure and research projects, and that these project files not be assigned NPS file codes. These files should contain copies of all substantive documents and correspondence created or received during the course of a project. Types of documents to be incorporated includes copies of all compliance documentation, finalized contract documents including substantive change orders and specifications, DI-1's, "as-builts" for finished construction projects, project planning documents, copies of all researcher field notes, laboratory notes and results, a copy of the final report and report drafts, and all documents illustrating all decisions made and why. Thus, staff are assured that a full set of documents covering an entire project are gathered, in order of creation and project evolution, in one place. It also averts problems when some fiscal records are filed separately from other project materials, thus potentially losing critical data from a project's life history. These project files, upon completion of the project, are then retired as archives to the park's museum collection for long-term reference.

The creation of project files emphasizes the standard archival practice of preserving the integrity of records created together. Groups of records kept intact provide much more accurate information to researchers, and enhance understanding of project issues and accomplishments from the viewpoint of the staff who made those decisions. If these files are broken up, rearranged or items are removed, the historical context for understanding decisions and sequence of events is lost. The informational value is complete only when the records are left as much as possible in the order in which they were originally created.

It is important to note that per DO-28 and NPS-77, project documents are to be accessioned and cataloged into a park's museum collection regardless of who conducted a project – park staff, contractor, cooperator, or non-park NPS staff at regional offices or service centers. While project managers may wish to retain project files for their own reference, originals or acid-free copies must be placed in the museum collection. The archiving of originals or duplicates may be decided between park staff and the project researcher. In addition, copyright release information should be included in contract and cooperative agreement documents to ensure the park owns all copyrights to documentary materials produced by contractors and cooperators. For copyright information, refer to the Museum Handbook, Part III, Chapter 2, "Legal Issues."

The park should consider requiring all park staff in charge of park records/files to take basic records management training. The park should consider establishing park-wide guidance on records handling and records disposition, Privacy Act compliance with personal data subject to identity theft and personnel file materials for VIPs and all other park staff.

Appendix F contains project file index checklists which are included for staff reference and use. These checklists have been developed from NPS-77, DO-28, DO-12, and DO-2 policies. These checklists were developed to assist staff in identifying and archiving permanent project records as stipulated in these NPS regulations.

Proposed Resource Management Plan

At the time of the site visit, resource management records were not systematically identified for retiring as archives to the park museum collection(s). Based upon review of park records and general park operations, it was ascertained such a model was needed.

The park needs to develop a proactive process to identify mission critical documents for archiving at the inception of a park project, not retroactively at the project's completion. This needs to include natural and cultural resource management, land management, compliance review and park planning materials. This will facilitate resource management records management/data management as a critical "business process" for park resource management. The parameters for such mission critical documents are set out in Director's Order #28: Cultural Resource Management, NPS-77, "Natural Resources Management Guideline," Director's Order #2: Park Planning, Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision Making, and Director's Order #19: Records Management. All pertinent documents and related materials to be placed in a project file need to be clearly specified. This will ensure the appropriate documentation is preserved and described for long-term access and use by all interested park staff and outside researchers. A possible methodology is presented here for park consideration.

A protocol is suggested here for linking compliance with implementation project files between the Resource Management Division and all other divisions implementing work, in particular Maintenance and Administration. The recommendation is for these other Divisions to create comprehensive project files, carrying a NEPA Compliance or PMIS project number for identification purposes. For those projects funded through PMIS, it is recommended that the PMIS project files created by the Administrative Officer serve as the node for the resulting compliance and implementation project files. Upon closeout of a project file (either compliance or implementation), a checklist should be completed and submitted along with the project file to the PMIS file. Once the overall project file is no longer needed for active reference (e.g., one year), the project file should be retired to the park archives, bearing the PMIS project number. This will facilitate cataloging and description, per Museum Handbook, Part II, Appendix D. (Assigning one accession and catalog number per project file will make cataloging simpler should project clearance entail archeology or natural resource specimen collection or Section 106 mitigation work.)

For compliance action documentation files generated by review of non-park projects (projects within Park boundaries but not on NPS lands), it is suggested that a tracking system be implemented. In-house compliance project numbers may be assigned and utilized with the project summary sheets. These may then be accessioned into the museum collection on a project by project basis, or on an annual basis.

To this end, project file checklists developed for park staff are provided here in Appendix F. The checklists were developed to enable staff to track what documents have been generated and gathered for a compliance project file. Different checklists were created for each program area usually involved in compliance, either in terms of requiring compliance to be done in advance of approval or in executing compliance actions for project clearance. The various documents created by routine compliance actions may then be solicited for and checked off when copies are submitted by program staff. The NEPA Compliance file should note when a Maintenance project Completion Report is sent to DSC-TIC as per NPS regulations / NPS-19, and date copy sent to SERO Division of Facility Management and Engineering to comply with their recently issued SOP. The checklists may be used to ensure the receipt of all pertinent documentation for both the compliance/pre-implementation end of the project as well as the implementation/project execution phase.

For project implementation materials, the checklists may be utilized to track what documents were created by the implementation of the project as well as to solicit for typical records created during projects. Once the implementation project file is completed and no longer needed for active use, it may be retired to the park archives or to the PMIS project file. Again, the checklist for the program may be utilized by the Chief of Resource Management for a document inventory (for tracking purposes) and as a preliminary finding aid for collection access by the Chief of Resource Management and other park staff. These would then serve as prompts and be readily available for staff use. At some point, the project file checklist(s) could be incorporated into a park-wide database/finding aid for staff reference.

These project files are designed to stand independently of official records (including correspondence) generated during the course of a project – it is expected that copies will be placed in the compliance project file and the originals will be filed in the Central files as appropriate. Disposition actions may then be taken as per NPS-19, Appendix B, without fear of important documents being potentially destroyed or sent to the National Archives and thus not retrievable by park staff.

It is possible the compliance project file would be retired separately from the project implementation project file. Thus, it is suggested that the in-house project number be used as a “linking field” to tie the two project files together, both in terms of staff communications and for the Chief of Resource Management to ensure both sets of project files are retired as warranted to the park archives.

It is recommended the Administrative Officer establish a records review committee. When reviewing all materials in the current park files for appropriate disposition, the park resource management, maintenance and interpretation staff, in addition to the Administrative Officer, should be involved. These staff members should form the nucleus of a records disposition board, to review all records before formal disposition by the Administrative Officer. This affords the opportunity to ensure retention of important documents pertaining to resource management, the history of interpretation in the park and approved research projects. It will also ensure that ineligible records, such as personnel related documents containing personal data protected under the Privacy Act, will not be incorporated into the park archives. This committee needs to also review any formal Division or Program files formally established and maintained by staff, and thoroughly document any disposition actions taken. If staff are unwilling to meet records management criteria for Division or Program files, the files need to be relocated to the Central files.

Virgin Islands National Park Archive Survey

VIIS became a National Park in 1956. As of this juncture in 2003, little has been done to develop and organize the archival holdings. Previous archival surveys, namely the 1993 CMP, provided only a cursory examination of the archival collections. Currently, there are only a few archive accessions for VIIS and one of these was listed as missing during a previous inventory. The majority of cataloged archival collections are at SEAC. The VIIS 2002 CMR lists 20,279 archive items cataloged, for a total collection of 22,754. This figure represents work done at SEAC and not at the park. The current CMR archive figures for VIIS are extremely low.

In order to cultivate and expand the use of the park's museum archive collections, including historic documents, photographs, and resource management records, the completion of a park-wide archival survey is needed. Professional archival surveys facilitate records management activities, and care of museum archival collections, for parks with limited experience in these areas. This type of analysis represents the initial step for a park in establishing control over its records. The survey also provides an opportunity to appraise collections and review them in the context of the park's Scope of Collection Statement before they are accessioned into the museum collection archives. Accession the

identified collections into museum collection/archives as discrete individual collections. Each collection should receive one accession number and one catalog number. In addition, the survey can gather information about the actual quantity of existing material located throughout the park and provide significant data that facilitates planning for both staffing and funding needs.

Once the survey has been completed, the park will need to conduct a backlog-cataloging project to preserve and make accessible the archive collections identified in the survey. Processing and cataloging of the collections may be accomplished by a professional archivist following NPS standards. These standards are explained in the Conserve O Gram series and the Museum Handbook Parts II Appendix D.

As part of the processing phase of the backlog-cataloging, the archives will need to be rehoused and processed. This involves removing staples, paperclips, etc. and placing the documents in acid free folders. Photographic prints need to be housed in polyester sleeves, negatives in acid free sleeves, maps and oversized materials need to be flattened and placed in map cabinet drawers (avoid overfilling map drawers). Rehouse items so they are in uniform envelopes and boxes, to prevent sliding and possible damage. Purchase high quality archival boxes such as Holinger products. Label all boxes and folders with accession number, catalog number or number range, collection title, box number, and folder number. A folder title should be added, and an annotated folder title added as warranted. This information is to allow a folder to be returned to its exact box location if removed for research purposes and to be used as part of the finding aid. For specific guidance refer to the Museum Handbook, Part II, Appendix D, and Conserve O Grams 19/16, "Housing Archival Paper-Based Materials." Any finding aids generated should then be placed in the front of the box to assist in locating an object and for performing the NPS Annual Inventory.

Once the archive collections have been cataloged, the park will still need to care for, and preserve these records, so that they do not become disorganized, lost or infested. The park will also need to monitor and control future records as they are produced. Future records will undoubtedly include electronic records and databases. Due to the extreme nature of the environment on St. John and the various biological agents of destruction (Museum Handbook I), the best alternative to having paper collections at the park would be to microfilm the archive collections. Reformatting the information will be the only realistic way of preserving these collections over the long term. The original paper documentation can remain at the park, once it has been microfilmed, but the possibility for storing the paper collections in a more stable environment will be possible. The microfilm will ensure that the park has access to needed resource management records on-site. Duplicating the microfilm and storing back-ups off-site is recommended to guard against catastrophic loss, which could be caused by hurricanes or flooding.

In conjunction with an archives cataloging project, park staff need to establish a number of SOPs as well as a park records review committee for reviewing the disposition of inactive park records. Policies needed include archival Access and Use Policies, Guidelines for Researchers, Researcher Registration Form, copyright and privacy statements, duplication forms, and computer data migration policy. A number of these may be completed by the Cultural Resource Specialist, utilizing examples within ANCS+ and the Museum Handbook, Part II, Appendix D, as appropriate. Use the updated Statement of Copyright form incorporated into ANCS+ (not the one in Appendix D). Establish an SOP and checklist form for checking in/establishing project files for depositing in archives/museum collection. Upon the creation of a park archives, an access and use policy will be needed to guide use of the project files by park staff.

Museum Collection Storage (Bally Building)

Currently, the Museum Collection Storage Building houses important components of archival collections and important museum management records. Overall, the environment, temperature and relative humidity are exceptionally good given the difficult climate. Many of the archival collections, including paper documentation, maps, prints, negatives, microfilm and aerials show signs of wear, infestation and damage from the environment prior to the placement into the collection storage building. In the future, it is imperative that archival collections be identified early and moved to the Museum Collection Storage Building in order to curb this unnecessary deterioration. Paper documentation is made of cellulose which is a prime food for roaches and silverfish. There is no other identified park storage beside the Museum Collection Storage Building which can adequately protect against this biological infestation. It will be critical to ensure that the Museum Collection Storage Building does not become infested with newly transferred or acquired collections. The building could also be resituated to make better use of the available space. Compact shelving would also be beneficial in this regard. The cabinets and shelves in the Museum Collection Storage Building need to be identified/numbered in order to properly identify locations.

There are two flat file/map cabinets in the Museum Collection Storage Building. The first flat file is in the east corner, right of the main door upon entering. The cabinet contains ten drawers. There are two very significant collections in this cabinet. The first is the "Glover Thompson Architectural Collection 1987," situated in the bottom five drawers of the cabinet. There are sixty-one individual matted drawings, which have been colored in pencil, and have polaroids and color prints adhered to the drawings and matting. The colored pencil and paper is fading and brittle, and the drawers have been overfilled. These will need to be thinned, placed in archival oversized folders and interleaved with unbuffered paper. The prints and polaroids have bent corners and edges, and are peeling away from the dried adhesive. From this survey there does not appear to be negatives of these prints. As a result, they will need to be treated as the only surviving documentation and preserved as such. In addition, there were diazotypes, topographics, legal sized letters and original correspondence in these drawers. It must be determined if this is part of the collection, and if so, it will need to be kept together intellectually. While working on the CMP, a map tube arrived in the mail with forty-two mylar originals of the "Glover Thompson Architectural Collection." The forty-two mylars do not replace these hand-colored, matted prints, but should be added to this collection. These mylars are currently in a tube on the top of the flat file/map cabinet.

The second major collection in this flat file cabinet is the aerial print collection located in the second and fifth drawers (down). The aerials are black and white prints; several are quite large, some over 2x2'. Dates of the aerials include 1962, 1983, 1991 and 1994. In addition, there are more aerials in the Museum Collection Storage Building. The first gray, double-door cabinet next to the entrance contains spools of negative transparencies, and the two-drawer combination cabinet and the other map cabinet have more aerial prints as well. These items do not necessarily need to be physically located together, as long as there is intellectual control over the collection (which currently there is not). The aerial photograph collection is an extremely valuable collection to the park. The Technical Information Center (TIC) in Denver is now in the process of microfilming aerials to help ensure their preservation and the longevity of the information. This is normally a free service to the park, and due to the value of this collection, these services should be employed.

The rest of the flat file/map cabinet contains standard park maps and drawings. These include diazotypes (hereafter referred to as diazos), topographic charts (hereafter referred to as topos), original tracing paper, original ink and paper, original pencil and paper, original tissue paper drawings and prints. The diazos are an unstable medium which, as a result of their creation process, off-gas ammonia. This off-gassing degrades and burns other materials in close proximity. For this reason, diazos are not considered a long-term medium and will need to be sequestered from other original

materials. This should be done as part of an archive backlog-cataloging project. Diazos are normally copies of original maps/drawings, however some of the copies contain original information not contained on the original. They should not be discarded, but can and should be grouped together with other diazos and away from original materials. While diazos are copies, they should not be discarded until the original is located. In many instances the original no longer exists.

Located on top of this flat file/map cabinet are an additional thirty rolled maps, drawings and prints. In the future avoid rolling photographic prints as unrolling the print will weaken or tear the medium. These maps, drawings and prints will need to be flattened (by a museum professional to determine if they require hydration first) and placed in flat file drawers.

Also on top of the flat file cabinet is a .5 gray Hollinger box (set inside a cardboard box lid). Inside the box is a bag of 35mm color slides (Kodachrome) and 4x5" color prints in developing bags, which need to be rehoused in polyester sleeves.

To the right of the flat file/map cabinet is a combination lock safe (gray) with two drawers. The top drawer has forty-plus black and white prints of illustrations, aerial prints and folded diazos (.5 LF). The bottom drawer contains one binder of 35mm negatives with proof sheets. These will need to be rehoused, but keep all associated documentation from manila envelopes (there are a total of forty-one manila envelopes). Information has been adhered, and the labels are now coming off. Handling of these items will require caution. Also in the drawer is a box of 8x10" b/w prints, numbering over fifty items. One binder in the drawer contains three-hole punched proof sheets (b/w 8x10"). There are also 2x2" adhered prints, which have begun peeling as the adhesive has dried out. Negatives were not located. Copyright and documentation information were not immediately evident. These collections do not have any accession/catalog numbers. There was also a park dedication form, 2x2" loose prints from the 1950's, and 4x5" b/w negatives from the 1960's. The prints are silvering (a sign of deterioration). All of these prints and negatives will need to be rehoused in polyester mylar. The loose prints and negatives were in Kraft envelopes with catalog numbers and were moved in with the rest of the park photo collection (i.e. the photo collection was in drawers which were lying out on the table). Numbers on the envelopes are out of sequence. Total of one LF in the bottom drawer.

There are two herbarium cabinets. The herbarium cabinet on the right contains a small cardboard box of color 4x5" color prints entitled "Plant Pix and Negs." No negatives were located in the box. There are plant specimens on the backside of several sleeved prints, totaling over one-hundred prints. These will need to be taken out of the box and placed in polyester sleeves.

The second flat file/map cabinet is located on the west side of the Museum Collection Storage Building, to the left of the entrance. There are eight oversized drawers. The drawers contain rolled original drawings, rolled color prints, topos, diazos, originals, GIS maps, aerial prints, and 10x10" aerial transparencies dating from the 1960's.

Also in the west corner of the building is an unlabeled, tan filing cabinet containing four drawers. The first drawer is empty and is difficult to open due to mechanical failure. Second drawer contains .5 tan Hollinger box entitled: "VIIS ACC 191 Cinnamon Bay Finished Forms." There are also relocated Natural Resource materials, originally located in an unlabeled box on a shelf, which are part of the collection in the third drawer. The third drawer contains three LF of Natural Resource Use Reports, 1984 - 1987. These files were heavily infested with silverfish and several pieces of paper have visible signs of damage. There was also sand and dirt in the files, and the dessicated remains of a lizard which was removed. In the future, archive collections will need to be sequestered before entering the Museum Collection Storage Building so as not to infect other collections. The Natural Resource collection needs to be rehoused and processed. The bottom, fourth drawer, contains museum collection documentation, CMR reports, and conservation reports, totaling two LF. These materials need to be rehoused in acid free folders. There is also one LF in a cardboard box entitled "Windspirit

Law Suit Materials." Inside the box are 4x5" color prints, 35mm negatives, folders, and newspaper clippings dating from 1993. This collection needs to be kept together as it currently is, but will need to be rehoused and processed.

In the west corner of the building is a tan filing cabinet with four drawers. The first drawer has "Historic" labeled on it. Filing cabinet includes:

- Drawer 1: Historic structures in park; site registration; 8x10" b/w prints; nomination/registration forms and site history (1.5 LF).
- Drawer 2: Reference material, reports, some material more appropriate in the library.
- Drawer 3: Microfilm, some of which has been severely damaged from mold. The damaged reel is from NARA and is entitled: "St. Croix Gov't Structures 1815 - 1943." Total of 15 rolls, most of which are still useable. Additional materials in drawer include .5 LF of National Register of Historic Structures.
- Drawer 4: Rolled maps and diazos which need to be flattened.

By the entrance is an unlabeled gray, double-wide cabinet. The cabinet contains six canisters of color positive aerials of the park, on spools dating from 1993. There are also loose 4x5" b/w prints adhered onto acidic scrapbook sheets with typed captions below the image. These were severely water damaged and as a result they have wrinkled and loosened adhesives. Most of the photos are loose from the sheets. Care should be taken so that the image and caption remain together. These will need to be rehoused in polyester sleeves. There is also a tube/canister of color aerials, date unknown. In the bottom corner of the cabinet is a bag of eight rolled maps, all with frayed ends from use.

The museum filing cabinet by the desk contains four drawers (two LF per drawer). Contents include:

- Drawer 1: seven stacks of Museum Catalog Records, accession folders, memos, and back-up discs.
- Drawer 2: more accession files, museum catalog records, forms.
- Drawer 3: 5x7" color prints, 35mm color negatives, log book, correspondence, shoebox of reference/index cards as part of research/bibliography. Reports, Historic Structure Site information and pens used for signing the enactment of the park. Oversized b/w prints in poor shape, with silvering. Archival material.
- Drawer 4: catalog worksheets, and photocopies.

The office desk in the Museum Collection Storage Building has two drawers of important, historic museum files. These drawers include three LF of reference, reports, and history, which is museum collection related material.

The only bookshelf in the Museum Collection Storage Building contains reference books and manuals such as the Museum Handbooks. There are four, green periodical holders with journals labeled: "Sea Frontiers" 1965 - 1977. These four periodical boxes need to be placed in the library. The bottom shelf of the bookcase has archival material (2 LF).

Photographic Collection

The majority of the photographic collection is located in the museum storage room, in unlabeled drawers. The four drawers are only partially filled and contain Museum Catalog Record reference cards, in addition to prints and negatives. The reference collection is grouped by subject on title cards. Some of the reference cards are out of alphabetical order.

The negatives are housed in glassine, which are then placed inside yellow Kraft envelopes. These are acidic and will need to be rehoused in polyester sleeves. Most of the negatives are 4x5" black and whites. The prints are also 4x5" b/w's currently labeled in the old NPS classification system. The adhesive on several prints has dried and the prints are peeling off of the classification card. There are a few prints which have come completely loose from the card. Care will need to be taken that they do not become separated, as the card contains the catalog number and associated documentation regarding the print. There is mold and water damage apparent on some of the prints and cards. A few of the classification cards are missing prints. Most prints are 4x5" b/w and any are out of sequence. No nitrates were found. It is imperative that project images be kept together as a collection, and that copyright be established for any donated or non-park created images. There were several images of BUIS/CHRI which should be transferred to those parks.

Maintenance

Maintenance has many important resource management and archive files. A large amount of the park's contract files are located in the Civil Engineer's office (Walter Keys). The contract files are grouped in one four-drawer filing cabinet, (2 LF per drawer) and date back fifteen years. Contract files are potentially archival because of the specifications, products, decisions and actions they contain regarding historic and modern park structures and land. For that reason, the disposition action called for in NPS-19 should be ignored and these should be retained until they are reviewed as part of a park-wide, archival survey.

Upstairs in the far-east maintenance bay are eighteen LF of potential archives. Originally, there was an additional ten feet of outdated fiscal material such as time and attendance, old manuals, and third party drafts. In addition, there were two linear feet of personnel files dating back to the 1970's which I shredded. Ina Dunkin's office (maintenance secretary) contains fifteen LF of non-archival fiscal year (FY), DI-r's, 3rd party drafts, etc. Also, the Water System Compliance Office, which houses water sample results, has one LF of potential archival material that will need to be reviewed.

The majority of resource management and historic archive files are located in the main offices of the Maintenance Department. By the flat files are two gray filing cabinets, each with two LF per drawer. The cabinet on the left (unlabeled) contains four drawers:

- Drawer 1: contract files; "D" central files; there are archival materials present.
- Drawer 2: brochures, product information, products in use, warranties, with some archival materials.
- Drawer 3: computer data/supply, contract files, with some archive materials.
- Drawer 4: contract files, archival.

The second filing cabinet contains five drawers:

- Drawer 1: contract files, archival.
- Drawer 2: contract files, central files "A, D, F, N, P," Time and Attendance, Payroll (both of the last two mentioned are not archival). Other materials in drawer are potentially archival.
- Drawer 3: YCC, vehicle files, FY material, not archival.
- Drawer 4: forms (not archival).
- Drawer 5: historic files, appliance information, etc. Some files are archival, some are not.

The Maintenance flat files are located next to the above mentioned filing cabinets. The flat files have a total of fifteen drawers and date back as far as the park's inception and a few prior to that. The contents include:

- Drawer 1: overfilled, original information written on some of the diazos, originals, sixty plus maps/drawings, several archival items.
- Drawer 2: Topographic, diazos, a few originals, many with TIC numbers. Potentially archival.
- Drawer 3: 1930's - 1950's, seriously poor condition, rolled/folded, need to be flattened. Archival.
- Drawer 4: "Land Plats" diazos, topographic, some archival.
- Drawer 5: "Zoning Maps" original information on diazos, some archival materials.
- Drawer 6: "Park Wide Sign Inventory and Entrance Signs" many originals, several ½ size use copies. Originals are archival.
- Drawer 7: "#9 Hawksnest ..." Original information, water damage. Archival materials.
- Drawer 8: "10 Red Hook ..." Some originals which are archival.
- Drawer 9: "#8 Miscellaneous ..." diazos, copy of master plan. Need to determine if originals exist.
- Drawer 10: "#7 Employee Quarters ..." some originals, diazos. Originals are archival.
- Drawer 11: "#3 Cruz Bay VC ..." originals, diazos. Potential archival materials.
- Drawer 12: "#4 Cinnamon bay ..." originals, diazos. Potentially archival materials.
- Drawer 13: "#5 Cruz Bay ..." originals, diazos. Potentially archival materials.
- Drawer 14: "#2 Drawing under contract or ..." Active files, mostly originals, potentially archival.
- Drawer 15: "#1 Cover Sheets" Active, mostly originals. Potentially archival.

The above quotations contain the title labeled on each map drawer. Apparently, the drawers have been re-filed out of sequence. The overall condition of these maps, drawings and plans is poor. The majority of the maps suffer from high use, overfilling of the drawers, extreme environmental conditions such as high daily fluctuations in heat and relative humidity, and unabated infestation. As a result the maps contained rips, tears, and were often folded or rolled. The extreme heat has turned some maps yellow/brown and made the paper brittle; it has also lightened the blueprints and there are indications of previous water damaged/dampstaining. The overfilled drawers need to be thinned of items, placed inside oversized archival folders and interleaved with non-buffered, acid-free paper.

Maintenance is now employing a digital camera to document work. I discussed with Walt Keys preferred ways of preserving digital data, or the alternative of printing permanently needed images to hard copy.

Interpretation

The Interpretation offices, located in the Headquarters/Visitor Center building, contains resource management and historic park archive records. In the back of the Interpretation offices is a gray, double-door filing cabinet. On the top shelf are rare books and slides. Next to this are three gray filing cabinets, each with five drawers that hold two linear feet. The first cabinet, starting on the left, contains reference materials and vertical files; each item has been numbered sequentially. The number is visible on the folder or on the actual report, journal or pamphlet. In the bottom drawer of first cabinet are maps and original archival material. Contents are mostly from the 1970s through the 1990s.

The middle cabinet contains park history, some newspaper clippings and original archival documentation (although most are photocopies). The second drawer contains oral history transcripts (archival), the third drawer climatological data from 1980's and 1990's. The majority of climatological data is published journals, although there is some original documentation which will need to be

preserved permanently. The bottom drawer contains an assortment of black and white negatives, prints and 35mm proof sheets from the 1970's and 1980's. This includes some aerials and a few color images. There are several hundred images in the drawer, many of which are not in the photo collection in the Museum Collection Storage Building and are therefore archival. There are also images of BUIS/CHRI. Copies of these images, or the originals themselves, should be offered to the corresponding park.

The third cabinet is on the far right and is also unmarked/unlabeled. The first drawer contains historic original material, which is archival. The drawer is badly infested, with live insects and mold. The second drawer marks the beginning of Interpretive central files, A – H. Many of these are archival and will need to be appraised. The third drawer continues with central files K – N. There are resource management/archival materials. Fourth drawer down contains original data, which is archival. The bottom drawer contains the rest of central files P – W, and newspaper clippings and journals. This drawer also contains resource management collections and is badly infested with several live roaches and silverfish. Files in these cabinets also showed signs of previous water damage, mold, and lacked clear organization.

Library

The library is currently filed in the Dewey Decimal system. Ideally, the library should be re-catalogued in the Library of Congress numbering system and entered into a ProCite database, as this is the current NPS mandated standard. The library has a semi-stable environment, although there is infestation. Damage to books caused by silverfish was evident. Dampstaining, mold, dirt and foxing was visible as well. Many books also show signs of severe wear and spine damage, which can and should be remedied by a student or intern as part of a small conservation or preservation project. Care should be taken to avoid further infesting the library with mold or insects.

The current situation in the library is to be expected for such an extreme environment. However the continued preservation of the collection is in jeopardy. The books in the library will continue to degrade if they are not treated. Insects, especially silverfish, have already severely damaged some of the older books. They have left damage on the pages, eroded the adhesive binding, and have degraded the spines of several books. Insects, including cockroaches and silverfish, are attracted to the glue used in the binding of the books, as well as the cellulose paper. For this reason, staff will need to be extremely vigilant in safeguarding the collections. Chief of Interpretation Paul Thomas stated that the library had been open to the public, but that some books had been checked out and not returned. The library is no longer open to the public.

The slide collection is housed in the library, with roughly 700 original slides and an unknown amount of duplicates. The bulk of the slides are color 35mm Kodachrome. Above the slide cases are additional books, journals, flat files including some potentially archival materials. In particular, there are some positives of exhibit material and original drawings, including the plan "Parking at Trunk Bay." The slides and flat files may have potentially archival materials and will need to be surveyed.

On top of one section of the bookshelves are matted framed drawings/prints, negative transparencies and framed natural specimens. These original drawings and transparencies will need to be considered for inclusion in the park archives.

Inside the bottom case of the TV-stand, were forty-plus VHS videotapes for training and education purposes as well as a case of floppy discs, some of which were obsolescent 5 ¼" floppies.

Sitting on the floor in the library was a cardboard box of 16mm films in canisters. The film is acetate base and has a light off-gas odor which could indicate vinegar syndrome. These will need to be further

examined and appraised as to value. They appear to be for educational purposes but several are not labeled. In the box were five reel-to-reel audio triacetates, 3 ¾ IPS (inches per second), ¼ inch. These reels have mold and heat damage from improper storage. They were moved to archives/Museum Collection Storage Building to await migration.

Resource Management

Building 1

The Chief of Resource Management's office contained a sizeable amount of resource management records which need to remain accessible, but will need to be transferred to the archives for preservation at some point. These include data sets, research permits from 1988 – 1999 (2000 – 2003 which are in another drawer) for a total of 8LF. NEPA compliance is in drawer of desk, feral animals in binder on bookshelf, research and collection permits for the last three years are located in the left desk drawer

Administrative Assistant Jackie Smith's office contains filing cabinets with central files going back the last twenty years. Personnel files were kept locked, as mandated. Cabinets also contained files on the park Hog and Donkey project. These project files are potentially archival, but are currently still in active use. Out of fifteen total linear feet, two feet is disposable once no longer active, and ten feet is potentially archival. Cabinets also contain other important files on oil spills, turtles, commercial use license, buoys and contracts.

Archeologist Ken Wild's office

There are two filing cabinets with resource management/archival files. Each cabinet has five drawers, encompassing two LF per drawer. The left cabinet contains:

- Drawer 1: 106 Compliance, Historic Site Files (2 LF archival but needs continued access).
- Drawer 2: 106 Compliance = (2 LF archival, but needs access).
- Drawer 3: reference 2 LF.
- Drawer 4: .4 LF of blank site forms, stabilization .4 LF will need to go to Museum Collection Storage Building.
- Drawer 5: personal/reference.

The second cabinet on the right is mostly reference, but still has some archive materials:

- Drawer 1: historic site files, maps, 1.5 LF.
- Drawer 2: research, reference of sites.
- Drawer 3: slide carousel, slides, prehistoric site files .4 LF (mostly reference). Some of these materials are outside the park SOCS. Also Natural Register, ASMIS, and the 2002 park checklist.
- Drawer 4: prehistoric site files, slides .8 LF, these are doubles of box with same title (which have also been scanned), need to be checked for inclusion in archives.

By Ken's desk is a gray Holinger box with .5 LF of archeological documentation entitled: "VIIS ACC 1027 SEAC." This box needs to be returned to SEAC. There are three boxes of ongoing archeological documentation for Trunk Bay and Cinnamon Bay at Danish Customs House. Totals include one .5 LF box of Cinnamon Bay and two .5 LF boxes of Trunk Bay. Syracuse University was involved in the project and may have additional documentation. One of the slide boxes on the top level of the bookcase contains Cinnamon/Trunk Bay project slides. These will need to be kept with the project and transferred to the archives upon completion.

Three bookcases contain reference/vertical files and personal books.

San Juan Collection NHS (archives, five separate projects). San Juan Documentation, slides, maps, field notebooks. Five flat file boxes, five different projects. Documentation needs to be returned to San Juan.

Building 2 USGS

As of this juncture, it is unclear whether the USGS records and data will stay with the park in perpetuity. There is no doubt that the data should stay with the park. Caroline Rogers also has raw data in building four, and the data is also built into her published reports. The research library in building four is in ProCite software (as it should be), although there is a backlog of materials to be cataloged. Currently, Jackie Smith is cataloging reference materials when possible. Caroline is about to enter into a contract/agreement with the Virgin Islands Community College (on St. Croix) to handle the database for USGS projects at VIIS. There was very little raw data/field notes in building two, most of the material is in building four, or in the database. Another source of potential resource management/archive records is the Island Resources Foundation, in Washington D.C. They have been contracted to work on projects in the past and most likely have the original documentation. One of the visible obstacles is the need for a better synthesis with Natural and Cultural Resources, USGS and I&M at the park. Many of the projects are collaborative.

Building 3

Potential archival and resource management records in this building include the records in the black filing cabinet, four drawers (total of sixteen LF) containing data, field notebooks, floppies and reports. This building also has a slide collection (approximately four hundred), and several slide carousels. Slides are 35mm, color Kodachrome. The other potential source of resource management files is in the tan four-drawer filing cabinet (first drawer is missing and has supplies stacked in it), and contains CD's, reference materials, newspaper clippings, with eight LF of potential archives. The data for the I&M project is in this office in an Access database.

Building 4 Buoy Management

The Natural Resource research library is located in this building and is labeled: "VI NP Research Library." There are four bookcases on the east wall, each with six shelves. The bookcases are labeled (A, B, C, D), as are each shelf (A1, A2, etc). Grouped by subject, much of the reference materials has been entered in ProCite software (currently there is a backlog of materials to be added). In addition, there is another bookcase (to the left or west) with six shelves (4 LF per shelf), with blue periodical boxes and journal articles, arranged alphabetically. On the bottom shelf there is three LF of color 35mm slides, "I&M, 1996 - 1997." There is another, smaller bookcase to the right, with only four shelves (4 LF per shelf). Some potential archives are in blue periodical containers (mixed in original documentation).

In the area around the research library are cardboard boxes of additional reference and resource management/archive collections. These include four brown boxes on top of the bookcase (1.5 LF each), which contain reports and reference files. There are also Reef manual plates (originals) .7 LF, archival. In an unlabeled brown cardboard box beside these plates, are archival files on commercial fishing, (archival 1 LF). On the right side of the bookcase shelves is a box with 1.7 LF of binders (seven binders, containing Virgin Islands Resource Management Cooperative (VIRMC) 1988 - 1989). These are potentially archival materials and need to be appraised. Above the back closet are also eighteen tubed/rolled maps, drawings, and topographics, a few of which are originals. Across from the bookshelves are three 1.5 LF cardboard boxes sitting on the floor, which have been brought back from the old park administrative office at Red Hook. These three boxes are archival and contain historic

reference documents, reports, color prints, "Hasell Island Oil Spill," request for permits and contract files.

To the left of the main entrance are three filing cabinets. The far left cabinet is unlabeled and contains four drawers (2 LF per drawer):

- Drawer 1: Empty
- Drawer 2: Supplies, photocopies, hogs/goats.
- Drawer 3: "Historical Natural Records" D, L, N 1.5 LF archival.
- Drawer 4: Mostly reference on bird/air quality management.

Black four drawer filing cabinet, four LF per drawer. This is perhaps the most important resource management filing cabinet in regards to the large amount, and importance of, the resource management/archival material.

- Drawer 1: Unlabeled, reports, I&M, studies, effects, damage, archival.
- Drawer 2: "Fish Study, 1992 - 1993, coral, archival.
- Drawer 3: "St. John Data" temperature, archival.
- Drawer 4: Budget/time sheets (not archival).

Far right, tan filing cabinet with five drawers.

- Drawer 1: "Historical Cultural" H, archival (From Red Hook), 1.5 LF.
- Drawer 2: Articles, reference, no archival materials.
- Drawer 3: Vertical files, 1.5 LF.
- Drawer 4: Supplies, no archival materials.
- Drawer 5: Empty.

Administrative

The park Headquarters building contains the active central files. Located on the top floor are two cabinets with four drawers each (four LF per drawer). There are resource management records in these files which will become part of the park archives. The park's secretary is working on understanding NPS-19 and central file coding, and will require some training as offered throughout the year by NARA. Currently, central files are loosely organized and while the files are mostly recent (i.e. circa 2003), several of the files go back two decades. As these records are better identified and filed, retrieval and identification of resource management records will become much easier. As part of the administrative files, Personnel Officer Nancy Wilson has the park administrative history. Beulah Dalmi Da-Smith is responsible for Land Records/Deeds. There is one filing cabinet in her office with four drawers for a total of sixteen LF. The majority of the Land Records/Deeds files are original correspondence. These records are permanent and will need to be preserved and kept where they are accessible.

Red Hook

The old park administration office/Headquarters is located at Red Hook, on St. Thomas. The building still houses numerous files, filing cabinets, supplies and bookcases. The Superintendent's old office was locked, and as a result was not surveyed. During the survey the following files were identified:

The upstairs office contains twenty-one boxes, two filing cabinets, three bookcases, and forty boxes of supplies (envelopes with the previous park address on them, computer paper, etc). The twenty-one boxes are administrative; thirteen contain purchase orders, the rest house Time and Attendance, Third Party Drafts, Imprest, Budget, etc. The filing cabinet is also full of purchase orders, but the

second drawer in the gray cabinet also contains "Property Report/Inventory," "Transfer of Property," and "Receipt for Property" files. The bookcases contain TPD's, ANCS+ Manual, Regulations, Imprest Funds, Document Register, Departmental Manuals, Travel Vouchers and Manuals. There were five boxes of archival materials in this room (including papers in one drawer of the small brown filing cabinet), which have been moved to Building Three at the Biosphere complex.

Next to the stairs leading to the upstairs office is a small room with three filing cabinets. These cabinets still have materials in them. The two five-drawer brown filing cabinets each contain purchase orders. The tan filing cabinet with four drawers is largely empty but does contain purchase orders. There were no archival materials present in this room. There are supplies in this room as well, including several reams of paper.

In the central room of the building (hidden behind a large amount of USGS furniture) are several sets of shelves. On these shelves were sixty-four boxes. Of these sixty-four boxes, eight were archival and brought back and placed in the Bally Building (museum storage) in the Biosphere complex. There are an additional twenty-eight boxes of central files (which include several boxes of contract files), hurricane files, historic and reference file boxes, which have been labeled "Potential Museum Archive Collections, Please Consult with Archeologist/Cultural Resource Specialist before Discarding Accession # 203, May 13, 2003." There is also a small amount of BUIS/CHRI/SARI material in this section. All marked boxes have been grouped to the east/right end of the shelves for easy identification. The remaining boxes were moved to the left/west end of the shelves. The west-end materials contain Vehicle logs, "Real Property," several boxes of supplies, Imprest, TPD, Budget, Travel Vouchers, and T&A. Many of the administrative files have reached their allotted time for retention and can be disposed. An administrative officer should double-check the remaining boxes here, in the upstairs office and the purchase orders in the small room, before they are destroyed. There is also some old computer equipment left on the shelves. The twenty-eight potentially archival boxes can remain at the Red Hook facility, or if possible, can be stored upstairs at the Maintenance facility. Not all of the materials in the twenty-eight boxes are archival, but they will need to be surveyed and appraised by an archivist before any material is discarded.

Summary

There are major obstacles that need to be overcome if the park archive collections for VIIS and VICR are to be preserved and made accessible. The most pressing concern is proper storage. Archival materials are fragile and require good control of temperature and relative humidity (low or little daily fluctuations). They must also be in secured storage and remain free from mold and pest infestation. To this end, the archive collections will need to be moved to a permanent location which can best sustain this environment. Ideally, the archives should be stored with the museum collection in the Bally building. However, there currently is not enough space in the Bally building to accommodate all of the archives. The park will need to better organize the museum storage to allow for more storage of archives, and will also need to identify temporary storage in the park. The temporary storage will need to have a stable environment (temperature and relative humidity), be secure, and provide some protection against infestation.

The large majority of archives have not yet been accessioned or cataloged. This is overdue. (Each archival collection should receive one unique accession number and one unique catalog number). In order to accomplish this task, PMIS statements should be submitted to process and catalog this archival backlog. Records and collections created prior to 1987 can receive Backlog Cataloging funding. Another funding source would be Cultural Cyclic. A draft, five-year archival backlog-cataloging PMIS statement has been submitted to obtain funding for the park to process and catalog these collections.

Another difficult task will be discerning the origins of the several different photograph, slide and negative collections. It is imperative that the legal ownership of each collection/group/item be determined in order to decipher copyright and intellectual property rights. Images that were created by park employees as part of work will fall into "public domain" and as such can be used without restrictions. Images which are donated to the park, or which were created as part of a contract project must stipulate in the deed of gift that copyright was transferred to the park. For future projects, this must be stipulated in the contract. When future photos are donated to the park, the donor must sign a deed of gift which states that the copyright is being transferred to the park. Images without this release, or images of unknown origins must be restricted from publication and any other use except basic research.

It was evident from this evaluation that components of projects are being broken-up and decentralized between divisions with an accompanying loss of intellectual control. There was very little control over records created electronically, or for records created and produced by contractors.

Another critical aspect is the lack of staffing available to process, catalog, maintain, preserve and provide access and reference to the collections. One method to help alleviate this difficulty would be to build in funding from projects. Projects which create resource management and archival collections need to be responsible for at least the processing and cataloging of these collections into the museum collection. This work could be done by a seasonal or term museum specialist. The monitoring and access/reference could then be performed as part of a collateral responsibility by park personnel.

Future projects will need to clearly specify that the park will be given copyright to all images created as part of the project. Also, the contract should specify that the park will receive all original documentation/data created from the project and clearly indicate what type of electronic databases, electronic files/floppy discs and digital image formats are acceptable.

Estimated total of park potential archives by office/location:

Museum Collection Storage Building: 27.7 LF, 30 LF of maps.

Maintenance: 35 LF, 20 LF of maps.

Interpretation: 19 LF

Natural Resources: Building 1 = 29.2 LF, Building 3 = 24 LF, Building 4 = 41 LF

Administrative: 48 LF

Red Hook: 42 LF at Red Hook (28 boxes), 20 LF at Building 3/Biosphere complex (13 boxes).

Total: 335.9 LF

Recommendations

Short Term

With the assistance of an archivist, complete a park-wide archival survey. Label and identify the cabinets and shelves in the Museum Collection Storage Building with distinct numbers for easy identification. **Within one year.**

The park needs additional storage space for archive and resource management collections and controlled access to these materials. **One year.**

Send BUIS and CHRI documents and images to CHRI. **One year.**

The decentralized nature of records in each park division needs to be re-examined. Projects need to be created and kept together, regardless of the different divisions and personnel involved. **One year.**

Park records and archive collections are seriously infested with mold, silverfish, cockroaches and other insects. Left unabated this will seriously jeopardize the life-span of these records. The IPM program needs to increase monitoring and safeguarding of the collections against infestation and mold. Do not place contaminated or infested materials in the library or museum storage room as this will contaminate clean collections. **As soon as possible.**

The park needs a historian or cultural resource person to care for the archives, act as the point person for park and outside research requests and conduct other work such as oral histories. This can be a volunteer or a collateral duty position. **Within one year.**

Intermediate Term

The park Administrative Assistant needs records management training. There are several courses offered each year at a variety of locations, through NARA. Check www.nara.gov for current training dates. **One to two years.**

Submit a PMIS request for backlog-cataloging of park archives. Hire a term archivist to complete the work. **One to two years.**

To avoid catastrophic data loss, store back-up of electronic resource management data off-site. **Two years.**

Establish and implement SOP's for park archives. **Two to three years.**

Send aerial prints to TIC in Denver for microfilming. **Two to three years.**

Rehouse the oversized maps, plans and aerial photographs in archival unbuffered paper enclosures. Flatten all rolled or folded maps/drawings. Ensure diazotypes are physically segregated from all other processes in separate drawers, and if possible in a separate map case. Those items not already on file at DSC-TIC should be sent and bond paper copies returned to the park. **Two years.**

Migrate the five reel-to-reel magnetic audio reels to CD or audiocassette. The originals have mold and environmental damage and are currently not accessible. **Two years.**

Long Term

Catalog the library holdings into Pro-Cite, and submit all Pro-Cite catalog records to the NPS Combined Library Catalog. Staff should pursue obtaining an internship for a graduate student in a Library and Information Science program and have a trained graduate student catalog the park Library collection into Pro-Cite following the Library of Congress system. **Three to five years.**

Migrate the park resource management records and archives onto microfilm or microfiche for long-term preservation. **Four to five years.**

CHAPTER 7 COLLECTION DOCUMENTATION AND RECORD KEEPING

Museum records are a vital part of park operations because they provide the park's proof of legal ownership of its collections, intellectual and physical access to the collections, and valuable interpretive and research data about the collections. The NPS sets forth very detailed instructions about museum record keeping policies and procedures, and park superintendents are responsible to see that they are carried out. Relying on the institutional memories of staff or oral traditions is not an effective method of museum record keeping.

According to the *NPS Museum Handbook*, Part II: "The museum record system establishes Federal ownership of museum objects, records their value, provides a mechanism for periodic inventories, documents the appearance and condition of an object, as well as its history, provides ready access to information about the object, and facilitates retrieval of the object for exhibits, research or loan."

NPS museum property is accountable property, and the accountable officer for museum property is the park superintendent who holds overall responsibility for museum collections and museum records. The superintendent is responsible for verifying and signing the Annual Inventory of museum property (AIP) and the annual Collections Management Report (CMR). DO-28 (*Cultural Resources Management Guideline*) mandates that every museum object be accessioned as soon as it is in NPS custody and cataloged promptly thereafter, with paper museum records and ANCS+ magnetic media kept in secure fire-resistant storage.

NPS museum record keeping standards and procedures are provided in the *NPS Museum Handbook*, Part II and the *Automated National Catalog System User Manual* (ANCS+). Additional guidelines and standards for record keeping are listed in *NPS Museum Handbook*, Part I; *NPS Museum Handbook*, Part III; *NPS Management Policies*; NPS-19, *Records Disposition*; DO-28, *Cultural Resources Management Guideline*; NPS-77, *Natural Resources Management Guideline*; 36 CFR 2.5g; and 36 CFR Part 79.

Summary of Previous Activity

VIIS has never had a full-time staff position dedicated to oversight of the park's museum collection. In previous years this duty has fallen under the oversight of cultural resource or museum staff such as Jonathan Bayless at Everglades National Park or Bill Cissel at Christiansted National Historical Park. In a subsequent 1994 memo summarizing the state of record keeping at the VIIS, Cissel outlined what he described as a "museum fiasco" where accountability had been lost and mass confusion created as museum accession and catalog number systems were changed or recreated by untrained staff, resulting in duplicates or overlapping accessions.

In the mid 1980s, John E. Miller served as Resource Manager for VIIS with oversight over the park's museum collections, followed by Jennifer Bjork and Keith Watson. Tom Kelley then served as interim Resource Manager, until the arrival of Rafe Boulon in April 1999 who currently holds the position. Ken Wild joined the park staff as park archeologist in 2000.

Bill Cissell of CHRI served a curatorial detail of one day per week in 1986 – 1987. He reports consolidating collections from three or four locations, including natural history material moved by sea from Lameshur Bay and other materials removed from the maintenance facility. Cissel then served

as Cultural Resource Manager for the Virgin Islands park group from 1995 until the end of FY 1999. In a phone conversation, he stated that he first found museum records in several piles scattered around the Museum Collection Storage Building at Lind Point and gathered them into the safe. He found two conflicting accession books – neither up to date – but did not succeed in straightening out the records quagmire. Regarding the transfer of wet specimens to the University of Florida, Cissel stated that he recommended only a loan of the material.

The lack of park staff trained in museum record keeping in the past has contributed to unwitting staff actions which violate NPS policy, such as recopying an entire accession book or assigning one accession number per cataloged object rather than per collection. These kinds of actions have necessitated a recent concerted attempt on the part of the park to sort out some of the accumulated messes.

VIIS park archeologist Ken Wild currently oversees the park's museum record keeping by default. Wild's position is primarily devoted to the archeological component of historic preservation compliance at the park. In that capacity, he oversees a number of student interns and volunteers carrying out archeological cataloging. During 2000 – 2002, Steve Lenick, a student intern from Syracuse University working under Wild's direction, assembled the ANCS+ database at the park, typed in all accession information and ran the annual reports such as the AIP and CMR.

Since 1999, Ken Wild has been working with staff at the Southeast Archeological Center (SEAC) to clean up the park's database and fill park record keeping gaps. To compensate for the lack of accession information at VIIS, in 2002 Bob Wilson sent the park copies of all the archeological accession information from the files at SEAC.

Prior to the CMP team site visit at VIIS, Bridget Beers of SEAC also worked with Wild to eliminate duplicate catalog or accession numbers between the park and the center and to provide a clear picture of which museum catalog numbers at VIIS were available for use by SEAC in the cataloging of park archeological and accompanying archival material.

The complexity of the museum collection at VIIS requires at least one dedicated trained staff person at the park with responsibility for NPS museum record keeping. Only thoughtful and consistent oversight will complete the laudable process of cleaning up the park's museum records that has begun and will prevent a repetition of the problems. For consistency and simplicity, objects in the park's cultural resource and natural history components of the museum collection and their accompanying records should be managed as seamlessly as possible by one staff person who is able to understand the importance of maintaining and preserving the park's legacy of research and interpretation. This seamless management of the park's one museum database should be continued when collections develop in association with Coral Reef.

Accession Records

Accessioning is the process of officially accepting items into National Park Service museum collections. Accessioning establishes legal custody and ownership and provides information on how the NPS acquired the items. All items that are part of the park's permanent museum collection and all incoming loans must be accessioned according to NPS standards. Information on the accessioning process is found in the *NPS Museum Handbook*, Part II, "Museum Records," Chapter 2, "Accessioning." Accession records are generated within the ANCS+ software and should be printed on acid-free paper for storage inside acid-free folders in the park's locking fire-resistive file cabinet.

A museum accession generally refers to a single object or group of objects received into the museum collection from one source, under one type of transaction, on one date. Objects collected on park property by park staff and researchers constitute field collections. Archeological artifacts and natural materials collected in the service of scientific research constitute the principal kinds of specimens obtained by field collecting at VIIS. Architectural odds and ends that are removed from a structure may also become museum objects to be accessioned into the museum collection. All museum collections of artifacts and documents resulting from field studies conducted within a park's boundaries remain the property of the government. Reports, research, and studies prepared for VIIS by NPS or non-NPS staff become resource management archival collections to be accessioned. These projects generate such items as reports, field notes, correspondence, contracts, financial agreements, lab results, etc. and might also contain photographs and artifacts. Other museum accession types found at VIIS include loans and donations.

Park staff at VIIS have entered the park's accession information into ANCS+ and have kept the database current.

Accession Book

The Accession Book, Form 10-256, documents the source for every object in the park's museum collection. It contains the sequential log of transactions that prove NPS ownership of museum collections and temporary custody for incoming loans. All material in the park's museum collection must be part of an accession in the accession book. It is a legal document that may be used in a court of law. The value of the book as a legal document lies in the uninterrupted sequence of entries, without missing pages or erasures. An archival photocopy should be kept of the original accession book, stored in a different location from the original.

At the time of the CMP team site visit, the accession book in use was the standard NPS book, and it was stored in the top drawer of the 4-drawer fire-resistive, locking curatorial file cabinet in the Museum Collection Storage Building. The current range is from VIIS-1 (1958) to VIIS-2000 (1/24/2003). Currently this drawer cannot be fully closed because the park has lost the key to this cabinet. Park Cultural Resource Manager Ken Wild has created an Excel spreadsheet on his office desktop computer that records the information from the park's accession book. Because of the large number of accessions comprised of archeological material collected by or stored at the Southeast Archeological Center (SEAC), it is important to maintain accurate means of cross-referencing accessions between the center and the park. VIIS staff have done a good job of that by entering the SEAC accession number in the "Remarks" column of the park accession book.

CMP staff members created three additional accessions for the park during the site visit (VIIS-201 and VIIS-202 as requested by SEAC, and VIIS-203 as a bulk accession of park archival materials).

The 1993 CMP noted that "the accession book was recopied from Randall's fish list (a study) and an accession book that has not been found." A photocopy of two pages from an otherwise unlocated accession book was found mixed with catalog worksheets in the bottom drawer of the 4-drawer curatorial file cabinet in the Museum Collection Storage Building. It provides information for accessions VIIS-77 (December 1972) through VIIS-105 (no date). These seem to correspond to the accession numbers in the current accession book. The *NPS Museum Handbook*, Part II, Chapter 2: "Accessions," is very clear about the prohibition of recopying entire Accession books except under the most dire circumstances – and then only with written permission from the Chief Curator, Museum Management Program, National Center for Cultural Resources after consulting with the Regional Curator. A series of loose pages from a previous accession book was located in a drawer in Ken Wild's office by the CMP team and placed in an acid-free folder in the top drawer of the 4-

drawer file cabinet in the Museum Collection Storage Building, where the current accession book is housed.

A number of irregularities have occurred in the current VIIS accession book:

- Accession numbers VIIS-1 through VIIS-220 in the front of the book have been stricken through with a single line. A number of fish specimens collected by different scientists during the period 1964 – 1968 (VIIS-110 through VIIS-217) were then condensed into one accession (VIIS-110) and the accessions re-numbered from that point on (old VIIS-218 through VIIS-221 became new VIIS-111 through VIIS-113). The entire listing of accessions was then recopied further back in the same book, following this written note:

17 NOV 1988: Decided, in conjunction with catalog contract for VIIS, to restore accession records at VIIS, by Jonathan Bayless (Museum Tech, EVER), with consultation with Dale Durham, SERO Regional Curator. Older Accessions will be corrected to extent possible. This book, hence, contains Accession Records for Museum Collections at Virgin Islands National Park, which are a copy (pages before this one) of original Accession Book [At this time cut-out of original Book minus first-half of Page 1 (Acc 1 – 18), exists in loose insert to this book]. At this time no accession records have been found in park. Recataloging will assign new catalog numbers to most objects.

When an accession entry contains a mistake, a single line should be drawn through the incorrect information, with the correct information written above or below on a single line. The correction should be initialed and dated by the person making the correction, with a clear signature entered in the Remarks column.

- The accession book has blank spaces for these VIIS accession numbers: VIIS-94 (marked as “unused accession number”), VIIS-152, VIIS-154, and VIIS-155. VIIS-59 has no description but does have a date assigned of 19 May 1967 and is marked as a “gift” (as does the previous accession, VIIS-58, a shell donated by an NPS employee). In consultation with regional curator Allen Bohnert and chief curator Ann Hitchcock, it is recommended that these blanks be left in the database, provided a written (signed and dated) notation is created that explains why each number has been skipped. In the future, care must be taken not to add data in the corresponding blank accession number in ANCS+.
- The accession book contains a number of blanks or question marks in terms of dates of accession or source of accession. These seem to date back to the 1970s. Attempts should be made and documented to fill in missing information. Applicable accessions are VIIS-105, VIIS-106, VIIS-109, VIIS-111, and VIIS-113.
- There are no addresses or phone numbers listed after names in the “Received From” column. This is essential for accessions received from anyone who is not NPS staff. For NPS staff, the person’s title should be included.
- An inventory of the Glover Thompson Collection of architectural drawings of Danish Colonial architecture on St. John made in 1986 – 1987 has an annotation of “Accession VIIS-184” in the upper right corner, but this collection does not correspond to any accession in the current VIIS accession book. Accession VIIS-184 in the park’s current accession book is for 1996 archeological investigations on South Shore, Grootpan, and Salt Pond.

Accession Folders

The CMP team was unable to locate the park's original accession folders, or their contents, at the time of the site visit. This is a serious museum record keeping problem. Locating these files and securing them in the fire-resistive cabinet in the Museum Collection Storage Building should be the park's #1 record keeping priority. This is of utmost importance since the accessioning process provides the park with the legal documentation of ownership for the museum collection. On May 14, 2003, Ken Wild and volunteer Tara Stewart conducted a thorough inventory of cabinets and boxes in the Museum Collection Storage Building and were unsuccessful in locating the original accession folders. Phone calls to Bill Cissel at CHRI and Kathy Lang at JELA were unsuccessful in establishing any leads as to who moved the original accession folders or where they have gone. Rafe Boulon had no knowledge of the movement of these files, and CMP staff were unable to reach Keith Watson or Jennifer Bjork by phone. Caroline Rogers had already left for the remainder of the week.

The top drawer of the 4-drawer curatorial fire-resistive file cabinet in the Museum Collection Storage Building contained these newly created accession files all relating to archeology: 27, 34, 84, 142-143, 150-151, 153, 156-180, 182-183, 185-186, 188, 192, 194. This drawer also contained folders labeled "SEAC-519," "SEAC-519 (voided)," "SEAC-520," SEAC-560 (voided)," "SEAC-566," and "SEAC-847 (deaccessioned)" that had no corresponding VIIS accession. These files, generated by Bob Wilson at SEAC in 2000, contained only copies of materials housed in the SEAC accession files relating to VIIS. The second drawer contained these newly created VIIS accession folders: 1,9-15, 21-27, 46-49, 53, 55-57, 64, 67, 68, 73, 75, 76, 78, 81, 82, 92, 96, 99, 100-104, 109, 114-117, and 125. These folders were all created by student intern Steve Lenik in 2000 after the arrival of the SEAC copies, and none contain any official accession information. Rather, they contain catalog worksheets and copies of printed 10-254 records.

The Collection Management Plan finalized by Kathy Lang in 1993 stated that "An accession folder exists for all but accessions VIIS 114-116. The research and completion of accession file folders was included in the contracted cataloging project [Jandebeur, 1988]. Some documentation within the folders is lacking." Lang further stated that "The material in the accession folders include correspondence, articles, and research." Per phone interview, Lang stated that in 1992 the accession folders were located in the two-drawer fire-resistive cabinet in the Museum Collection Storage Building with a combination lock.

In addition to legal documentation of ownership, NPS policies mandate that park accession folders include an Accession Receiving Report, Form 10-95, for all accessions after 1985. Completing an accession receiving report for accessions prior to 1985 is optional. For Field Collections, the Accession Receiving Report provides a place to record the permit number, project title and dates, name and address of the principal investigator, and precise locations of the collecting activity, as well as information about releases, restrictions, or sensitivities. A list of objects must be included within or attached to the Accession Receiving Report. This may take the form of a field level inventory, field specimen, or provenience log. Paper field records that are preserved in accession folders should be copied onto archival paper. A receipt for property (form DI-105) is not issued for unauthorized field collecting, and the park should have a Standard Operating Procedure that discourages such unauthorized surface collecting.

Incoming Loans

Incoming loans are another form of park accessions. Parks may request incoming loans of materials for exhibition or research purposes. Parks may not loan out materials received on loan (a "third-party" loan). Incoming loans at parks must be returned or renewed after three years, and materials included in incoming loans must be cataloged as controlled property.

The following park accessions are noted as incoming loans in the VIIS accession book: VIIS-2, VIIS-4, VIIS-31, and VIIS-55. It is unclear why these loans were taken in at the time. NPS policy does not permit long-term or indefinite incoming loans. The park should make an attempt to contact the source for these loans and return the material or convert them to donations. The NPS Museum Handbook, Part II, Chapter 2: "Accessions" provides guidance for clearing up old loans.

The incoming loan for accession VIIS-31, is for a 1963 accession of archeological materials loaned to the park by Julia Condit but collected at Caneel Bay by Henry Fafalla. This is immediately followed in the accession book by a field collection of materials from Caneel Bay by Julia Condit (park accession VIIS-32). Both accessions are currently undergoing cataloging at SEAC, and at this time SEAC is unable to sort out which material belongs to which collection. One question is why the park is having material cataloged which it does not own? Ken Wild stated that the material was picked up on park property, so it could not have been a legal loan to begin with. Ms. Condit lives in North Carolina and has sent him photographs of artifacts she collected on park property. According to Wild she has offered to send them back, but it hasn't happened yet.

Ken Wild has acquired materials from several VIIS collections housed at SEAC for research purposes. Returning loaned materials from a center back to a park constitutes termination of the park's outgoing loan and should be documented as such. Particular attention should be paid to documenting the material's current location in accession or catalog records.

Finally, the new park visitor center exhibits contain a pale gray ceramic plate on loan from CHRI. According to Bill Cissel, CHRI generated an outgoing loan for the plate to VIIS. VIIS should accession the object as an incoming loan and catalog it as museum property. VIIS park staff should investigate the termination date of this loan.

Unaccessioned Material

The backlog of unaccessioned material destined for the museum collection is likely to grow with the revision of the park's Scope of Collection Statement recommended by this plan. The greatest component of unaccessioned material likely to enter the museum collection is the park's resource management files. These are addressed in detail in Chapter 6.

Another potential source of currently unaccessioned material at the park lies in the area of architectural remnants and samples. A 1990 memo regarding the creation of a working list of architectural study collections in the US by Emogene A. Bevitt of the NPS notes that Dale Durham (SERO Regional Curator) had identified at VIIS an architectural study collection comprised of "architectural artifacts from Reef Bay, Annaburg [sic], American house, etc." No evidence of this material or its assembly into a collection has been discovered during the CMP team site visit. Neither Ken Wild nor Bill Cissel had any knowledge of any architectural material that had been collected at the park.

Currently there are boxes of materials relating to projects at other parks such as SAJU and BISC stacked in Ken Wild's office awaiting the writing of archeological reports. This material is museum property from other parks and as such should be treated as an incoming loan (an outgoing loan from the other park) and accessioned into the VIIS collection (and provided adequate care and security) for the duration of its stay.

Uncataloged Material Within Accessions

VIIS has a backlog of accessions which have never been cataloged, dating back in some instances to the very early days of the park. VIIS-28 through VIIS-30, which have had no cataloging completed, are biological and geological specimens that date from 1958 – 1963. Archeological material in VIIS-33 and VIIS-34 date to 1964, as does the shell collection in VIIS-38 and the legless lizard in VIIS-41. The uncataloged brass donkey bit in VIIS-77 dates to 1972, as do the donkey shoes and axe head in VIIS-79 and VIIS-80. The broken clay vessel in VIIS-83 dates to 1973, the bowl fragment in VIIS-95 to 1974, and the small gin bottle in VIIS-108 to 1976.

Until a higher level of park accountability for the catalog status of current accessions can be established – by conducting a 100% inventory of artifacts, specimens, and museum records in the park Museum Collection Storage Building – identifying uncataloged material within some accessions on-site at VIIS will be difficult. Some materials such as the photograph and negative collection that is sitting out in drawers in the center of the Museum Collection Storage Building (VIIS-141) are partially cataloged, having catalog worksheets filled out for them (located in the front of the bottom drawer of the 4-drawer, fire-resistive file cabinet in the Museum Collection Storage Building) but lacking data entry into ANCS+. This material was part of the 1990 Jandebour backlog catalog contract. If this data has been entered into ANCS+, it cannot currently be located in electronic form.

Other large accessions such as VIIS-110, VIIS-113, and VIIS-114 have utilized their reserved block of catalog numbers in such a spotty fashion that the database seems to have many, many unused numbers scattered throughout. These seemingly unused numbers should not be assigned to any other accession until a complete inventory of artifacts, specimens, and museum records in the Museum Collection Storage Building proves without a doubt that there are no more uncataloged materials within these accessions. Two catalog numbers included in a recent annual random sample inventory (VIIS 7094 and 7113) seemed to be unused numbers within the block reserved for accession VIIS-114, yet in 2002 Steve Lenik found the herbarium specimens within a cabinet in the Museum Collection Storage Building and accompanying worksheets in the bottom drawer of the 4-drawer, fire-resistive file cabinet. He entered the catalog worksheet information into ANCS+ at that time for the two objects.

The FY 2002 Collections Management Report (CMR) from SEAC for VIIS identified a backlog of 13,759 uncataloged VIIS artifacts, plus another 2,443 archival items. SEAC will be revising those figures upward for FY 03 because of a recount that showed higher numbers of artifacts packed within boxes than originally estimated. The new estimate of backlog cataloging at SEAC for VIIS will be 53,446 artifacts. Having received verification of these figures from Bob Wilson at SEAC, CMP team staff will make adjustments to the artifact and archival estimates in the park's accession records in ANCS+ to reflect these numbers.

Catalog Records

For NPS museum collections, cataloging into the ANCS+ software program is the process of recording detailed information about individual items or groups of related items. ANCS+ cataloging also includes assigning a unique identifying number to the item or group of items. A museum catalog record that is as complete as possible must be created in the ANCS+ software for all objects, specimens, and archival/manuscript collections in the park's museum collection. The information on the ANCS+ catalog records may be as important as the items themselves. Detailed information on the cataloging process can be found in the *NPS Museum Handbook*, Part II, "Museum Records," Chapter 3, "Cataloging." At this point, the submittal of electronic park museum catalog records for each fiscal year is due by November 30th, two months after the end of the fiscal year.

As part of the CMP, a sequential log of all VIIS catalog numbers has been created and is attached to this plan as Appendix G. Any additional information regarding blank spaces on the form should be input as it becomes available. From this point on, the park's designated curatorial staff member should use this form (or a similar one) to track the assigning of museum catalog numbers. Relying on numbers written in the "Remarks" column of the park's accession book, as this park has in the past and as many parks do, will only lead to further confusion. The form will be left in electronic version on a computer in Ken Wild's office.

Copies of Catalog Records

All hardcopies of the curatorial records should be stored in a lockable cabinet. The 4-drawer fire-resistive safe in the park's Museum Collection Storage Building houses a number of 10-254 "blue" catalog records. Some are in boxes stacked on top of the file cabinet; some are bound into books in the top two drawers; stacks of unseparated sheets from the National Catalog are also stored in the top two drawers, along with stacks of loose individual 10-254's. The replacement accession folders created in 2000 by Steve Lenik also contain copies of 10-254's for objects. There are also two metal drawers sitting out on the table and desk in the Museum Collection Storage Building that contain copies of museum catalog cards. The contents of these cards should be evaluated against the park's data in ANCS+ to determine whether they contain catalog record information that may not yet be entered into the electronic database.

The replacement accession folders in the fire-resistive cabinet also contained completed catalog worksheets. More are found in the bottom drawer of the file cabinet. A separate box sits on the table filled with worksheets from the Tom Jandebour contract cataloging project. A new project must be undertaken to collect all these catalog worksheets, place them in numerical order, and compare them against the park's ANCS+ database to identify material that is not completely cataloged. These sheets should be segregated from the records of already-cataloged objects. The information on the sheets should be physically verified against the object before data is typed into ANCS+. Once cataloging is completed, the worksheets should all be stored (in numerical order) in archival boxes with tabbed dividers at 100-page intervals.

A stack of photocopied 10-254 records was found in the bottom drawer of the 4-drawer file cabinet. These were compared against the contents of one of the bound books by Ken Wild and volunteer Tara Stewart and were found to be duplicates. They will then be compared against the data in ANCS+. If they prove to be duplicates of information in the database, they may be discarded.

Catalog Data in ANCS+

ANCS+ was first installed on a computer in Ken Wild's office in June 2000 by student intern Steve Lenik. He input catalog data that he found at VIIS on diskettes and worked closely with tech support staff at Re:Discovery. The upgrade to 6.3 was performed by SERO archivist Paul Rogers during the CMP team site visit.

The park maintains its ANCS+ database on a second computer in Ken Wild's office. At the time of the CMP visit, the park's ANCS+ database contained catalog records for 1,644 natural resource specimens (1,572 biology & 72 geology) as well as 10,325 records for cultural resource objects or artifacts (10,205 archeology & 120 history).

A regular schedule of making backup disks of ANCS+ databases should be implemented both for the computer in Ken Wild's office and for the computer at the Cinnamon Bay archeology lab. The regular

electronic backups of ongoing cataloging efforts should be mandated in all MOU's for the analysis and cataloging of artifacts or specimens. Store the backup disks in a fire-resistive media safe (some media safes are small enough to fit into a drawer in a fire-resistive filing cabinet). The Museum Collection Storage Building contains a media safe, though it is not currently in use. Periodically, an additional copy should be stored in a safe at the visitor center away from the Biosphere site or in another secure location off-site. The Checklist (ACP) contains the requirements for appropriate equipment and *Tools of the Trade* provides information on how to obtain it.

Retrievability of objects and information

The retrievability of objects and information is at the heart of museum record keeping. Easy access to this material is only possible for those museum objects which have been properly accessioned, cataloged, and entered into the ANCS+ database with locations kept current.

According to the location field in the park's current ANCS+ data, two cultural resource records (#21086-21087) have no location entered; 3,380 records are for material at the Cinnamon Bay archeology lab, two (#45-46) are listed as destroyed; one (#40) as discarded; six (#30-32, 37, 42-43) as not found 9/15/2000; 5,616 records are for material at SEAC; and 1,318 records are for material in the VIBRC Collections Building. This last group includes objects listed as in the building, in specific cabinets, or in specific drawers within cabinets.

Natural resource data lists 514 records for objects at the Florida Museum of Natural History; five as lost (#4, 7, 12, 27, 28); twenty as not found 9/12/2000 (#17-21, 23-26, 47-55, 22, 29); one as unknown (#29), and 1,105 at various locations within the VIBRC Collections Building.

A handwritten list in the second drawer of the fire-resistive file cabinet in the Museum Collection Storage Building is an inventory of natural history objects at VIERS on Lameshur Bay (the Virgin Islands Environmental Research Station, a subsidiary of the University of the Virgin Islands). According to park natural resource manager Sheri Caseau, she led an effort to remove VIIS herbarium specimens from VIERS in winter 2002/2003. They were frozen, then combined with materials being sent off to the Fairchild Botanical Gardens to be re-mounted. Neither a physical location at VIERS, nor the shipment out for remounting is noted on any catalog records in the park's ANCS+ database.

Though most of the objects observed utilized the proper method of marking, with the 4-letter acronym followed by the catalog number, the geological specimens housed in cabinet 1 in the Museum Collection Storage Building were lacking the 4-letter "VIIS" acronym.

Catalog folders or ANCS+ supplemental records

No individual catalog folders or supplemental records in ANCS+ exist at this time.

Catalog photos

No individual catalog photos of museum objects were discovered at the time of the CMP team site visit. The park should store any photo logs and the documentation generated by curatorial projects in the curatorial lockable files. This file cabinet is the place to consolidate and protect all of the park's curatorial files.

General cataloging issues

In 1988 the Southeast Region issued a contract for a major backlog cataloging effort of both cultural objects and natural history specimens at Chattahoochee NRA, Cumberland Island NS, and Virgin Islands NP. The contract was awarded to Tom Jandebeur of Athens State College in Madison, AL (RFP 5000-88-17, contract CX500-8-0062) with the provision that he generate museum catalog worksheets for the material. In a separate arrangement, funding was provided by the Southeast Region to the Everglades Regional Collections Center (ERCC), at EVER. Jandebeur met with Jonathan Bayless, then museum technician at EVER, prior to the start of the contract. According to Lang's 1993 CMP, Jandebeur was issued these lots of catalog numbers for the project: VIIS 87-433, 437-515, 2103-2495, 2501-2693, 7351-7721, 8801-9996, 10052-10100, and 10201-22500. The contract specified that all work be performed at the identified parks to preclude packing, shipping, and possible loss or damage to artifacts or specimens.

The backlog cataloging project's Statement of Work states that the contractor was to catalog by discipline on the appropriate worksheets 5,400 objects (400 historical artifacts, 2500 archival documents, and 2500 biological specimens). Lang further states that "the contractor submitted his final report in August of 1991. In April 1992 the original worksheets were sent to Everglades NP (EVER) where the data was to be entered into ANCS, the records edited, printed, and placed in binders." EVER was then to send to the park the binders with blue copies of the catalog records, binders with the white copies of the catalog records, and the computer backups of the data. The park would then be responsible for submitting the white copies to the National Catalog. At the time of Lang's April 1992 CMP trip report, she noted that "the contractor continues to submit worksheets and other data."

During the CMP team site visit, Kathleen Jenkins, Museum Curator at Natchez National Historical Park, entered into "EVER" directories in the park's ANCS+ database catalog records from a back cataloging project of 116 cultural resource and 1607 natural history records by Tom Jandebeur. For comparison with the VIIS records submitted to the National Catalog as of FY 2002 (entered into "NCo2" directories in ANCS+). There were problems with the way the EVER data had been compressed and the fact that it had been burned onto a compact disk that had marked some files as "read-only," but Scott Stone at Re:Discovery tech support straightened out the files for downloading onto the park computer. The comparison showed no data in the "EVER" files that had not already been submitted to the national catalog. These files consisted of 116 CR records within the range of 116-11,482 and 1,607 NH records within the range of 1-10,151.

Natural History

The park has no ongoing cataloging of natural resource specimens, through current resource projects will generate records to be accessioned archivally. Resource Manager Rafe Boulon estimates that one dozen current natural history projects will generate records but no museum specimens. For more detailed information on natural history cataloging, see chapter 3 of this report.

Archeology

A singular problem that occurred with VIIS archeological material curated at SEAC in 1976 - 1977 was the use of "bogus" catalog numbers placed on the objects and on the 10-254's. Contrary to NPS policy, these catalog numbers began with the year, followed by a number. These records were not submitted to the National Catalog, but the issue has not yet been entirely corrected.

Archeological cataloging at VIIS is currently ongoing at both SEAC and at the park under the oversight of Ken Wild. According to Wild, he supervises student interns who carry out the cataloging of materials, and volunteers who place numbers on the artifacts. With Ken Wild on staff at VIIS, it is

unlikely that SEAC will have further involvement with the cataloging of materials for the park in the future. Wild has further expressed a desire to return additional uncataloged material from SEAC to the park so that it might be cataloged by students and volunteers under his supervision.

The Spring 2003 issue of *Common Ground: Preserving Our Nation's Heritage* featured an article about Ken Wild and the ongoing volunteer-based archeological work and accompanying cataloging efforts at Cinnamon Bay (accession VIIS-191). According to the article, "Since the excavation began in 1998, an average of 1,000 volunteers per year donated between 12,000 and 14,000 hours to the project." The hands-on involvement of the public with cultural resource preservation is a very effective interpretive tool, but the park must take precautions to ensure that a high level of professionalism is maintained in the handling and cataloging of materials by students and volunteers. Intense oversight and systematic training by permanent NPS staff on a daily basis is essential to guarantee the quality of such work.

Other portions of VIIS-191 are being cataloged outside the park. According to Wild, since 2001 Judy Patterson at the University of Tennessee has been analyzing faunal material from the historic section of the site. Another portion of VIIS-191 has been loaned to Doug Armstrong at Syracuse University who returns to the Virgin Islands each year and only takes away as much as he can analyze in a year. Finally, Irv Quitmeyer at the Florida Museum of Natural History also has two 50-cm column samples of faunal material from VIIS-191. Wild explained that hand-written loan forms are made out for each researcher who removes material from the park. In this case, the loan forms are housed in the accession folder at Cinnamon Bay.

Another ongoing project away from the park is accession VIIS-196 relating to the slave village at Annaberg Plantation, being cataloged under contract by Lori Lee she is a former Syracuse University student who had worked under Ken Wild as an intern at VIIS but is now working at Poplar Forest in Virginia. She estimates needing 2,000 catalog numbers but has not yet been assigned numbers.

For more detailed information on archeological cataloging, see chapter 4 of this report.

Archives

To this point, the primary cataloging of archival collections has been that of field notes that accompany archeological collections being curated at SEAC. Field notes that accompany archeological collections cataloged at the park receive a museum catalog number but are not receiving detailed archival cataloging. For more detailed information on archival cataloging, see chapter 5 of this report.

History

Very little cataloging of history objects is currently taking place at VIIS. As per a re-write of the park's Scope of Collections Statement recommended by this report, the park should implement a consistent program of accessioning historic architectural material into its museum collection to provide the kind of material culture database for historical structures that it is currently compiling for archeology and natural history.

Outgoing Loans

Outgoing loans of museum collections further the NPS mission of preservation, education, and research. Parks also make outgoing loans to repositories (such as SEAC) for the purposes of long-term collections management and storage. Outgoing loans give borrowers temporary custody, not legal ownership, of museum objects. Specific instructions found in the *NPS Museum Handbook*, Part II, "Museum Records," Chapter 5: "Outgoing Loans" should be followed regarding outgoing loan

policies as well as the required museum record keeping procedures. Information on outgoing loans may be placed in the accession folder, or a separate system of acid-free files for outgoing loans may be created as needed similar to those required for museum accessions. This would provide an easier way of tracking loans by number and of scheduling the necessary renewals. Also like accessions, the documentation for outgoing loans should be printed on acid-free paper. A separate ledger book, similar to the park's museum accession book, would provide an easily accessible format for tracking incoming and outgoing loans, deadlines for loan renewals, loan terminations, etc.

The overwhelming recipient of outgoing loan materials from VIIS has been SEAC. Park loans of museum objects to NPS centers must be documented with an outgoing loan form that must be renewed every ten years.

In the 1993 CMP, Lang noted only one current outgoing loan, to the Smithsonian Institution. A memo written in January 1992 documented the temporary loan of five herbarium specimens to Pedro Acevedo:

- *Nectandra antellana*, catalog # 224/690, sole specimen
- *Heliotropium procumbens*, catalog # 664/7110a
- *Azadviachta indica*, catalog # 284/6751a
- *Schaepfia schreberi*, catalog # 617/7065c
- *Celtis trinervia*, catalog # 833/7264b

Of these specimens, only the last two correspond to current records in the park's ANCS+ database (VIIS 7065 and 7264). The first number (VIIS 690) is assigned to a geology specimen. The second and third numbers (VIIS 7110 and 6751) do not currently appear in the park database but fall within a range of herbarium species.

Only one outgoing loan has been created in the VIIS ANCS+ database: L.2000.001 to SEAC, with a note from Ken Wild that it is not a real loan number, only one made up for the park's FY2000 CMR in an attempt to account for loan material at the center. One outgoing loan form (#L.2002.06) was found in a folder in the bottom drawer of the lateral file cabinet in the Museum Collection Storage Building entitled "Loan Forms," but it had been generated by Richard Vernon at SEAC to cover the return of VIIS material from accessions SEAC-782, 798, 842, and 902 to Ken Wild at the park. This transaction should have been handled as the return of materials loaned to SEAC from VIIS and not as a loan from the center back to the park.

- At the time of the CMP team visit, SEAC was waiting for loan renewals for thirty-nine accessions of materials housed at SEAC. If acid-free paper can be obtained, these will be generated by the CMP team.
- An outgoing loan should have been created when herbarium specimens recovered from VIERS were sent off to the Fairchild Botanical Gardens to be re-mounted.
- Outgoing loan forms should be generated as per NPS policy, within the ANCS+ database, whenever archeological material leaves the park for analysis.

In March 1995 the acting chief of resource management at VIIS, Tom Kelley, recommended to the park superintendent that the park's deteriorated collection of marine vertebrate (fish and turtle) wet specimens be loaned to the University of Florida because of the university's "extensive Caribbean and Southeastern US fish collection." Kelly specified that "VIIS would still own the collection. The move will cost VIIS nothing. UF will pay for curation costs, and funds are available for the packing and moving of the specimens. I believe this is an excellent opportunity for VIIS and particularly for the collection, which deteriorates daily." Kelley further recommended transferring the park's

invertebrate collections to the University of Miami, which “has a collection of marine invertebrate specimens from St. John, from a decade of scientific collecting trips in the 1950s.” A similar memo from Caroline Rogers described sending off the fish collection as “probably much more of an issue – Jack Randall’s original collection!” However she strongly recommendeds sending the invertebrate collection to the University of Miami “if they would be willing to curate it.”

Deaccessioning

The park’s current chief of resource management, Rafe Boulon, stated that the previously mentioned transfer of wet specimens to the University of Florida took place in March 1999 and included salvageable specimens from accessions VIIS-24, VIIS-110, and VIIS-113. Those specimens that were deemed too deteriorated were thrown out. At the time of the CMP team site visit, documentation could not be located regarding which specimens were sent to the university and which were destroyed. Additional research will be required to locate the actual disposition documents in the park’s central files or at the university to determine, in consultation with the NPS curator, whether ownership of the collections has legally been transferred away from the park.

Deaccessioning is the process of permanently removing NPS museum collections from an NPS unit’s legal ownership and physical custody. It should be a rare action and requires the approval of the park superintendent. Consultation with the Regional Curator is recommended, but not required, for all deaccessions. NPS deaccession actions must meet the highest professional, legal, and ethical standards for accountability of museum collections, withstand close public scrutiny, maintain the public’s trust, and protect park personnel or their relatives from allegations of unethical conduct, partiality, or conflict of interest. Specific policies and procedures relating to deaccessioning can be found in the *NPS Museum Handbook*, Part II, “Museum Records,” Chapter 6: “Deaccessioning.” These include the directions to track and generate appropriate paperwork for the action through the ANCS+ Deaccessions associated module, as well as specific actions needed to properly update the park’s official museum records such as ANCS+ accession and catalog records as part of a deaccession procedure.

The actions taken to return temporary incoming loans are different from deaccessioning and are found in Chapter 2: “Accessions.” It is not necessary to use a formal deaccessioning procedure to deaccession non-museum property such as exhibit cases, exhibit mounts, and non-rare library books that have been accessioned in error. The museum Accession numbers and/or ANCS+ catalog numbers for deaccessioned museum objects are never re-used.

Other dispositions of museum property at VIIS have included:

- In 1989, Bill Cissel recommended the transfer from VIIS to CHRI of “significant Danish West Indian reference books and archival material housed in several locations at Red Hook and Cruz Bay” – originally “collected for Christiansted.” This material was never actually accessioned at VIIS and was described as “not being cared for.” Cissel notes that the material subsequently would be accessioned at CHRI.
- Notes in the park’s accession book indicate that object 40 was discarded, and objects 45-46 destroyed during analysis.

Six deaccession files have been created to date in the VIIS ANCS+ database. All are listed as status pending. No additional paperwork has been found. They are listed as P.001 (catalog #4), P.002 (catalog #7), P.003 – all “loss,” followed by three records for voluntary destruction/abandonment: P.004 (catalog #40 – 1 object), P.005 (catalog # 46 – 25 objects), and P.006 (catalog # 45 – 9 objects).

These were generated by student interns, but other documentation was not found at the time of the CMP team site visit.

Deaccession forms must be printed on acid-free paper, with one signed copy filed in separate deaccession files or in the objects accession folder.

Automated Inventory (AIP)

The required NPS Annual Inventory of Museum Property checks the physical location, condition, and documentation for objects in the museum collection. The annual inventory identifies object-specific and systematic accountability and collections management problems. The park superintendent is responsible for ensuring that park staff conduct the inventory. Instructions for completing and submitting the annual inventory of museum property are found in the *NPS Museum Handbook*, Part II, "Museum Records," Chapter 4, "Inventory and other Special Instructions." The controlled property, random sample, and accessions inventories are all generated within the ANCS+ software. See the *ANCS+ User's Manual*, Appendix F, "The Automated Inventory Program." At this time, the annual inventories are due by September 1st of each year.

Annual random sample and accessions inventories have been carried out at VIIS by student intern Steve Lenik for FY 2000, FY 2001, and FY 2002. Park cultural resource manager Ken Wild and student intern Tara Stewart began work on the FY 2003 inventory during the CMP team site visit.

Because the ANCS+ Inventory Module presents the listing of museum catalog numbers sorted by location, the annual inventories provide a good opportunity to check the accuracy of the data in the location fields, as well as the consistency of how that data is typed into the field. Museum objects housed in the same place will not be grouped together if some are described as located at "VIBRC COLLECTIONS BLDG" while others refer to cabinet numbers or even cabinet and drawer numbers. All the shelving units, cabinets, and their drawers and shelves should be numbered and labeled with locations added to the object's catalog record to facilitate more precise accountability for each object's location. This would simplify the annual inventory process immensely.

Museum records for the following objects indicate that they have been lost, or were not located during an annual inventory: 4, 7, 12, 17-30, 42-43, 47-55. A 100 % inventory of all museum objects housed at VIIS is recommended before any additional museum objects are deaccessioned, following a board of survey, if they cannot be located during an inventory.

Accession Inventory

The Accession Inventory is intended to survey accessions of museum objects that have not yet been individually cataloged into the park's ANCS+ database. It represents a substandard of property accountability but provides an opportunity to report on cataloging progress in the accessions. Steve Lenik conducted the Accession Inventory for FY 2002 and reported 192 of 196 accession numbers in use; 83 accessions were reported as not yet cataloged, 51 were partially cataloged, 59 were fully cataloged, and 3 had been deaccessioned. The weakened level of accountability is demonstrated by the fact that objects could be found in only 72 out of 196 accessions.

Random Sample Inventory

The mandatory annual Random Sample Inventory surveys ANCS+ museum collections that may be in storage or on exhibit, controlled property or not. Steve Lenik conducted the Random Sample

Inventory for FY 2002 and reported that 88 out of 202 catalog records were in use; 49 out of 202 objects were found; and 62 out of 202 records were found. The massive backlog of cataloging to be done at VIIS, catalog numbers that have been assigned to accessions but not yet put onto objects, is one of the primary reasons for the inability to find objects on this inventory. Lenik did a good job of making notations in the "Remarks/Condition" column when a location needed to be corrected, however the locations have not yet been corrected in the park's ANCS+ database.

Controlled Property Inventory

Although the designation "controlled property" is formally used for museum objects valued at higher than \$1,000 and for all firearms, many parks use the "controlled property" designation more broadly to include all museum collections included in exhibits and therefore subject to higher risk of damage or theft. It also might be used for particularly fragile objects whose condition should be monitored on an annual basis. A 100% inventory of all controlled property is required every year.

- All items on incoming loans to the park should be cataloged as controlled property and inventoried every year.
- One example of objects to be considered for classification as controlled property are the collection of prehistoric zemis that Ken Wild uses in public demonstrations. They are fragile and valuable, and are exposed to some level of loss or deterioration because of their usage.
- Also, the accessioned material in the visitor center exhibits should be considered controlled property and their condition monitored every year.

VIIS has no museum objects currently classified as controlled property. It has not submitted a controlled property inventory. However, as mentioned above, all objects on incoming loan must be cataloged as controlled property and inventoried every year. Objects placed on exhibit should also be evaluated for potential classification as controlled property to guarantee their condition is evaluated once a year.

Access and Use

Researchers

VIIS has no written access to collections policy. Ken Wild estimates that a couple of researchers per year request access to the park's museum collections stored in the Museum Collection Storage Building. He stated that students doing research would normally be accompanied while in the building, but that reputable scholars might be left alone to do work in the storage area. As per the Memorandum of Understanding with each scholar, the park receives a copy of any report or publication based on their research in the park collection. Wild estimates that he takes museum objects out of the park for about 30 public presentations per year, and that Caroline Rogers might do the same a couple of times per year. Other than by MOU or Permits, research requests are not currently tracked by any formal method.

Exhibits

The exhibits in the park visitor center at Cruz Bay were recently fabricated and installed under the direction of Harpers Ferry Center and include sealed Plexiglas cases containing the following objects:

- “Marine Ecology” has examples of brain coral, staghorn coral, and elkhorn coral
- “Expressions of Spirit” has a carved stone axe, three adornos, two shell ornaments, two stone beads, and three zemis
- “Clues to the Past” has a plate, a cane knife, and a hoe head
- “The Art of Work” has a calabash bowl, a fish trap, and a hoop basket

Park Archeologist Ken Wild photographed eleven of the cultural resource objects before they were placed in the exhibit cases and recorded any known information about them. These digital photos are in his office desktop computer. The catalog number written on the labels in the photographs does not correspond to an ANCS+ catalog number. There seems to be an inconsistency with both an adorno and a shell ornament designated as FS #8 within accession VIIS-191, and two zemis both designated as FS #15 within that accession.

- Carved stone axe (Bally Bldg, Cabinet 14, Drawer 3)
- Three adornos from accession VIIS-191 (FS # 8, 11, 118), plus collection location and weight
- Two shell ornaments from accession VIIS-191 (FS #8 & 9)
- Two stone beads (Bally Bldg., Cabinet 14, Drawer 2) – one with visible #1279; the other with #1280
- Three zemis (larger one from Bally Bldg., Cabinet 7, Drawer 1, cat. #1294; two smaller ones from accession VIIS-191, FS # 15)

Materials in the “Marine Ecology” and “The Art of Work” cases have not been cataloged into the museum collection and are apparently considered exhibit props. A phone conversation with Paul Thomas, chief of interpretation, revealed no additional information about the exhibit planning process.

Although the park’s ANCS+ database at the time of the CMP team site visit recorded no objects with “exhibit” status, the park has maintained a longtime “exhibit” of materials at the Cinnamon Bay archeological laboratory in the Danish Warehouse. The status of these materials (and their identity and provenience) needs to be clarified and accurately reflected in ANCS+.

The park refers to materials in Cornell boxes at the Cinnamon Bay archeology lab as on “exhibit”, though the objects have not been given that status in the ANCS+ database. The actual status of the objects, on museum exhibition or interpretive/living history type materials needs to be further clarified given the ramifications. The park utilizes up to one thousand volunteers per year at Cinnamon Bay, and a total of about five thousand might walk through the “exhibit” of ongoing archeological cataloging.

Conservation

The Collection Condition Survey prepared by Barbara Cumberland for VIIS in 2002 included conservation treatment worksheets for two metal objects, a cane knife and a hoe head, that were treated at Harpers Ferry Center in 1974. These are probably the two metal objects included in the new VIIS visitor center exhibits, but the treatment reports contain no mention of park catalog numbers.

Collection Management Report (CMR)

The required NPS annual Collection Management Report (CMR) gives information on the size of the park’s museum collection and collection activity during the fiscal year. The report tracks accessions, deaccessions, cataloging, and use of collections. It allows the park to see changes in the collection from year to year, and it assists the regions and the Washington office in measuring program activity and managing collections. Instructions for completing and submitting the CMR are found in the NPS

Museum Handbook, Part II, "Museum Records," Chapter 4, "Inventory and other Special Instructions." The CMR is generated within the ANCS+ software. See the *ANCS+ User's Manual*, Appendix E, "Collections Management Report." At this point, the CMR update for each fiscal year is due by November 1st, one month after the end of the fiscal year.

The VIIS CMR for FY 2002 was completed by Ken Wild on January 27, 2003. It showed the following totals: archeology cataloged 30,563, archeology backlog 94,613; history cataloged 1,034, history backlog 460; archives cataloged 20,279, archives backlog 2,475; biology cataloged 2,790; biology backlog 4,825; geology cataloged 89, geology backlog 95. The total number of objects cataloged was 54,755; the total backlog is 102,468; the total collection is 157,223. The CMR shows no objects in outgoing loans. An adjustment needs to be made in the FY2003 report to account for the number of artifacts and documents at SEAC. Corrections also need to be made for the number of items actually on exhibit at the park. When the object status is corrected in the ANCS+ database to "exhibit," this data will be pulled automatically. There has been no attempt to track research requests for the museum collection from within or outside the park. A log book should be set up for this purpose, or a separate log book within both CR and NH divisions at the park.

The summary CMR for FY 2002, including SEAC activity, were e-mailed to Ken Wild from Brian Biegler in April 2003 and downloaded by the CMP team. The summary CMR showed 2,065 artifacts and archives items accessioned at SEAC for the year, 9,971 archeology artifacts and 3,200 archives items cataloged, and one research request within the park.

Recommendations

Note: items marked with an asterisk (*) could be carried out by student interns or trustworthy volunteers under the supervision of park resource management staff.

Urgent (within 3 months)

1. Designate one staff member with the official responsibility to serve as the curatorial contact for the park. The park should always have someone specific designated/entrusted with the curatorial duties.
2. The VIIS designated curatorial staff contact must initiate a concerted investigation through all file cabinets or boxes that might contain files at the park in search of the park's missing accession folders (113 total).
3. If the park's original accession files are not located, park management should contact all possible knowledgeable parties regarding the matter: Keith Watson, Jennifer Bjork, Jonathan Bayless, Caroline Rogers, Nancy Russell.
4. The park's designated curatorial staff contact must initiate a consistent practice of using the VIIS Catalog Number Log attached to this CMP as Appendix F to assign museum catalog numbers. The form will be left in electronic version on a computer in Ken Wild's office.
5. The park's designated curatorial staff contact must initiate a practice of saving regular back-ups of the electronic museum data in ANCS+ both for the computer in Ken Wild's office and for the computer at the Cinnamon Bay archeology lab. The regular electronic backups of ongoing cataloging efforts should be mandated in all MOU's for the analysis and cataloging of artifacts or specimens. The park's backup disks should be stored in the media safe inside a file cabinet in the

Museum Collection Storage Building. They should be rotated periodically with disks stored off site.

6. Purchase acid-free printer paper for printing official museum accession and outgoing loan forms.
7. Purchase acid-free folders to hold accession and outgoing loan records (100 acid-free folders have been donated to the park by CAHA).
8. Generate the outgoing loan forms requested by SEAC.
9. The park's designated curatorial contact should gather information about the material exhibited at the visitor center, catalog uncataloged objects fitting the park's Scope of Collections Statement, and change the status for each cataloged object to "exhibit" with the location corrected to "Visitor Center."

Immediate (within 1 year)

1. In consultation with the regional curator, park management should establish a museum committee of both cultural and natural resource staff to ensure that record keeping for the park's museum collection is managed in a seamless fashion. The records manager for the park should also serve on this committee.
2. The park curatorial contact should consult with the Museum Management Program in Washington to make sure that the park has up-to-date chapters in the *NPS Museum Handbook*. The park curatorial contact should also be familiar with how to access NPS museum materials on-line.
3. Park resource management should work with SEAC to resolve the issue of which archeological accessions will be curated at SEAC and which will be curated at the park so that the responsible parties can write PMIS statements to cover backlog cataloging of the material.
4. The park museum committee should resolve the questions of whether any VIIS museum material remains at VIERS, and return any applicable material to the Museum Collection Storage Building.
5. The park museum committee should develop SOP's for access to collections and any other necessary procedures to ensure they address both cultural and natural issues.
6. Park management should prepare an OFS statement for a full-performance museum curator that might be shared with another nearby park and a museum technician with primary responsibility for museum record keeping at VIIS.
7. Park management should write a PMIS statement requesting funding for cataloging and rehousing of the photographic collection, accession VIIS-141.
8. Park management should write a PMIS statement requesting funding for a term or detailed full-performance museum curator to oversee a 100% inventory of the Museum Collection Storage Building artifact, specimen, and archival contents.
9. The designated park curatorial contact must research the old incoming loans currently recorded in the park's accession book. These loans should be returned or converted to donations if possible.

10. The designated park curatorial contact must begin using the ANCS+ outgoing loan system and NPS policy regarding outgoing loan of museum material to catalogers.
11. The cabinets, shelves and drawers in the Museum Collection Storage Building should all be physically marked with numbers.
12. Following this cabinet, shelf, and drawer numbering project, locations in the ANCS+ database should be corrected as necessary.
13. The blue 10-254's (and any other copies of museum catalog records) in and on the 4-drawer file cabinet in the Museum Collection Storage Building (including those placed into accession files by Steve Lenik) should be separated and sorted into numerical catalog order with any exact duplicates discarded.*
14. The park should purchase enough covers and binding stems to rehouse the blue 10-254's stored in the Museum Collection Storage Building (seek assistance from the regional curator if necessary).
15. The blue 10-254's to be kept should be bound and filed.*
16. The museum catalog records stored in two metal drawers on the table and drawer in the Museum Collection Storage Building should be evaluated against the bound 10-254's and discarded if they are exact duplicates.*
17. All blue 10-254's should be evaluated against the contents of museum records in the park's ANCS+ database.
18. Old museum catalog records that do not exist electronically should be entered into the ANCS+ database.
19. The park should purchase two acid-free "Hollinger" type records boxes and 300 tabbed file dividers.
20. All museum catalog worksheets should be gathered from the various drawers of the 4-drawer cabinet (including those placed into accession files by Steve Lenik), sorted into numerical catalog order, and housed in the "Hollinger" boxes with tabbed dividers indicating the subsequent number span inserted every 100 records.*
21. The contents of the museum catalog worksheets should be compared against the contents of the park's ANCS+ database to identify those worksheets whose content has not been input into the database electronically.
22. Park management should then consult with the regional curator to write a PMIS request covering the cost of backlog cataloging as necessary.
23. If the park's original accession folders are not found, the park must create acid-free accession folders for those accessions which do not yet have folders. Replace the existing dark brown accession folders that are not acid-free. Use a permanent black marking pen to write the VIIS accession number on the top of each folder. Print out the folder cover on acid-free paper.*
24. The materials from other parks currently housed in Ken Wild's office should either be returned to their park of origin or incoming loans should be generated for them by VIIS.

25. The designated park curatorial contact should draw a line through "blank" entries in the accession book as noted above to prevent their re-use. The action should be signed and dated, with an explanatory memo placed in the accession folder for those numbers.
26. The park should re-core and insert a new lock in the 4-drawer, fire-resistive cabinet in the Museum Collection Storage Building that holds museum records so that all drawers can be closed and the cabinet locked.

Short-Term (within 1-3 years)

1. All VIIS staff with museum record keeping responsibilities need to receive training in basic curatorial record keeping. This can be obtained formally or through details at regional parks, SEAC, or SERO.
2. In consultation with the regional curator, the park's Scope of Collection statement should be revised.
3. If the original park accession folders are not found, park staff should work to recreate as much of the missing documentation as possible.
4. A 100% inventory of all contents of the Museum Collection Storage Building should be carried out. All unaccessioned artifacts, specimens, and archival materials should be evaluated against the park's Scope of Collection Statement and either accessioned or discarded. All museum records should be evaluated for retention.
5. Following the inventory, the location for all cataloged materials should be corrected in ANCS+ database, or if the electronic record has not been created, on the blue 10-254.
6. Following the inventory, all accessioned but uncataloged material should be consolidated as much as possible to provide better accountability. It should not be scattered throughout cataloged material.
7. After the 100% inventory is complete, Park management should write a PMIS statement to request backlog cataloging for all accessioned but uncataloged materials not already covered by such requests.
8. After the 100% inventory is complete, the park curatorial contact should consolidate all museum record keeping files out of Ken Wild's office and the Museum Collection Storage Building lateral file, 4-drawer file, and desk drawers. The contents of each folder should be evaluated, like contents systematically consolidated between files, and files renamed as necessary. These should all be gathered into one locking file cabinet.
9. The park should develop a project for the systematic gathering of oral histories and other information regarding oversight of the museum collection from previous park resource managers. When complete, accession the material archivally into the museum collection.

Intermediate (within 3-5 years)

- I. After all efforts to track down uncataloged material within accessions have been exhausted, the designated park curatorial contact may begin to assign blank (i.e. unassigned) catalog numbers on the VIIS catalog number log to new cataloging projects.

CHAPTER 8 PLANNING, PROGRAMMING, AND STAFFING

Introduction

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. The museum collection represents each aspect of the park. Every project performed on parklands produces collections whether they are objects or archives of the project. Curation of those collections need to be a cost element factored into each project to avoid creating a backlog. Taking this approach toward necessary planning and programming will allow the staff to complete work that will help preserve park resources and educate the public.

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 record include museum collections, archival materials and documentary evidence of park resource management activities, maintenance activities and the administrative decisions affecting them. Park museum collections ARE primary resources and comprise the park's institutional memory. From the perspective of this planning team, the Museum Management Program should serve four distinct functions within this park:

Documentation: Basic registration of documents or individual objects is essential. This documentation begins by assigning each project an accession number and cataloging the archives and/or objects once they are brought into the collections. As a primary function of museum collection management, all objects and archives housed in the collections storage space should be accessioned and cataloged. Good registration methods are essential to the other functions of the museum program, and the timely documentation of collections should be first above all other museum operations.

Preservation: Both remedial and preventive conservation require an accurate identification of the causes of deterioration. An object's condition depends on its past and present exposure to the environmental factors that have promoted, encouraged or caused material degradation. Preventive conservation should be the area of focus for the park, which implies that actions are taken to remove the environmental cause of deterioration before treatment intervention is necessary. The remedial conservation, or the physical treatment of an object should be conducted by a trained conservator with specialized training.

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 catalog 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.

Education and 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. Museum collections should also be used in the development of curriculum-based and outreach education programs as well as appropriately used in the actual programs.

Staff members who are assigned responsibility for collections management have the primary responsibility for producing 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 and Protection of Museum Collections, the Resources Management Plan, the Project Management Information System (PMIS), 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.

The documentation of time and costs to the Museum Management Program for individual elements of the four primary functions mentioned above is an essential element of planning and programming. 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.

Museum 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 museum collections (including archives and artifacts). 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 a backlog being created?
- What is the average time/cost to process an accession?
- What is the average time/cost to catalog 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?
- Have collections and/or documentation been used for educational purposes?

After the staff collects, analyzes, and formats these types 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 these data park staff will be able to develop effective, integrated programs to identify, program for, and meet 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.

Good documentation of the collections, including accessioning and cataloguing, is essential to the organization and use of the information the collections contain. A park can 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 National Park Service standards.

Observations

This Collection Management Plan address the three major units administered under Virgin Islands National Park, which includes the Coral Reef National Monument and Hassel Island. Besides the natural scenic features, the park now includes the coral gardens, marine life and seascapes and has also increased the numbers and types of historic structures to be restored or rehabilitated. All units are part of VIIS and more than doubled the size of the park. Planning and budgeting is for the entire VIIS from one base budget.

In 1978 Congress authorized the addition of Hassel Island, 135 acres, to Virgin Islands National Park. All of Hassel Island has been placed on the National Register of Historic Places because of the historic ruins of colonial and maritime history. In 2001, President Clinton added Coral Reef National Monument, 13,000 acres of water and submerged lands, without additional funds, to inventory and manage the marine and submerged cultural resources.

Planning

Virgin Islands National Park, General Management Plan/Environmental Impact Statement, 1983 mentions that park collections will be guided by an updated scope of collections statement based on the park themes. In addition, it states that collection preservation guidelines will be updated and adequate curatorial storage and workspace will be identified in consultation with the NPS Regional Curator. The GMP/EIS identifies numerous natural and cultural resource projects to be inventoried, surveyed, monitored and protected.

The Virgin Islands National Park, General Management Plan/Environmental Impact Statement, 1983 – This document is twenty years old and is very out of date. It no longer addresses all park issues due to the additional land and resources added recently. In January 2001, the park was more than doubled in size by President Clinton designating Coral Reef as a National Monument and placing it under VIIS. In addition, a substantial increase to research has resulted due to increased funding of the natural resource initiative. The museum collections need to be addressed in a new GMP in light of the recommended resource management actions and the extremely important science program that is on-going at the park.

Strategic Plan fiscal year 2003 – The parks' PMDS plan adequately addresses the two main goals that are associated with museum collections: 1a6 states that 73.4% of preservation and protection standards for park museum collection are met by 2005. Museum collections at VIIS are located in the Bally building and Cinnamon Bay warehouse. The Bally Building meets environmental control standards but most of the standards not met are in this facility and many are due to space and the lack of personnel to perform the tasks. By 2005, goal 1b2D states that museum objects cataloged will be increased by 35.9%. The number of VIIS museum objects cataloged into the Automated National Catalog System (ANCS+) and submitted to the National Catalog is increased from 28,581 in FY'99 to 32,868, a 15% increase.

Resource Management Plan (RMP) – is dated 12/9/99. This is an important planning document for the management and preservation of park resources including museum collections. It recommends a number of projects to conduct surveys and inventories of natural resources, as well as archeological, historic and submerged resources. Museum collections are an integral part in the sections on park resources. The RMP identifies the need for appropriate museum curator staffing and proper work space and storage for the collections.

Interpretive Prospectus/Comprehensive Interpretation Plan, 1984 – this document is very dated and the park is in the draft process of developing a Comprehensive Interpretive Plan. The primary interpretive themes are based on the park's purposes, significance, and primary resources. It will adequately discuss the extensive and important scientific research on-going in the park and address significant cultural and historic resources of the Virgin Islands. Development of the SOCS will include the interpretive themes to help define the museum collections.

Checklist for Preservation and Protection of Museum Collections (Checklist), 4/2002 – the park submitted the Checklist for four facilities in VIIS; the Virgin Islands unit; two storage areas; the Bally Building and the Cinnamon Bay; and one exhibit space, the Visitor Center. Almost all planning documents are identified as a need to help guide the park in museum collection management efforts. Of major need is a museum facility appropriately sized to provide workspace and collection storage area to handle the current collection plus additional space to accommodate additional collections. Once the plans are developed, it will require the dedication of a curator to implement the plans.

Collection Management Report (CMR), 2002 – it reports that 9,971 archeology objects and 3,200 archives were cataloged in FY'01. It is important that these figures are correct, especially the backlog collections remaining to be cataloged. The Backlog Catalog Program fund distribution is based on this report so it is critical that it accurately reflects the total park collection, especially with regard to uncataloged backlog. The reallocation of Backlog Catalog Program funds will take place next fiscal year and the distribution of funds, per Region, will be based on the backlog reported on the CMR. The Backlog archives collection will significantly increase once an

Collections Management Plan (CMP), 1993 – As noted in the Museum Handbook, Part I: Museum Collections (Chapter 3, page 10), a CMP "...is a review of your park's collection management program to identify problems and make recommendations on the management and care of the collections". The current CMP planning effort is building on the CMP completed in 1988 by Wendy Jessup and revised by SERO staff curator, Kathryn Lang in 1993. Professionals have been brought together to review all aspects of the museum program and provide a plan for park management.

Other Planning Documents – There are several other planning documents that pertain to museum collections but which require integration with other park staff and operations. These are discussed further in other sections of this plan and outlined in the Museum Handbook, Part I: Museum Collections:

Integrated Pest Management Plan (IPM) [Chapter 5]
Emergency Operations Plan (EOP) [Chapter 10]
Museum Housekeeping Plan (MHP) [Chapter 13]

While these documents must include guidance specific to park museum collections, they must be completed in the context of the park. For example, the museum IPM plan must be part of the parkwide IPM program and conform to NPS guidance on integrated pest management. Preservation and protection of the museum collection is a park concern and requires the collaboration of staff from all areas of the park. Thus, they will require the cooperation of other division and park staff to make them work for the park.

Programming

The three units, as noted above, are managed by VIIS with one base account. This budget is supplemented by project funds of various sorts. At the present time the park is not receiving any

dedicated museum project funding (with the exception of the funds for this plan) although some base funding has been used for the needed museum projects.

In FY 2003, the park base budget is as follows:

VIIS

\$4,746,200

The park staff, with assistance from the Regional Curator and CMP team, has added a number of PMIS project statements for the 2004 budget call. In addition, other project statements should be generated by the staff, based on this plan. Searching through the PMIS database can also assist the park staff with language for use in the project statements. It is expected that some of these projects would be funded beginning in FY 2005. Although highly unlikely, if there is a major change in other park programs in FY 2004 emergency funding from BACCAT or MCPPP might be available. The Cultural Cyclic Maintenance program has not been set for FY 2004 so there is a possibility that some funding could be allocated from that fund. In addition, although specific fund sources have been identified in the statements, the park could fund projects out of base funds if these become available.

The park desperately needs additional quality space in which to locate its Museum Management Program. Such spaces in operations as complex as the VIIS resource management program typically cover functions of museum collection storage, collection processing and work areas, collection research and administrative support. Such interrelated functions should continue to be considered in all phases of planning and ultimately programming for upgrades to park infrastructure. It may be possible to reduce the amount of duplication of facilities, maintenance, and other life-cycle cost considerations by partnering with parks who have similar needs (such as CHRI, SARI, and BUIS).

Planning and Programming Recommendations

Ensure that the Collection Management Report and the Checklist for the Preservation and Protection of Museum Collections accurately reflect the current status of the needs of the park. These documents determine the distribution of the national funds to the regions and the distribution is recalculated every four years. (6 months).

Coordinate PMIS project statements with needs identified throughout this CMP, the 2002 Conservation Condition Survey, the Collection Management Report (CMR), and the Museum Checklist (ACP). (6 months).

Update the existing PMIS Project statement for another Bally Building, reflecting revised Museum Checklist data and recommendations of this CMP. (1 year).

Develop a museum management program by following the steps below (1 year):

1. Develop a list of essential museum management activities (such as accessioning collections, cataloging collections, inventorying, cleaning the Bally building, cleaning museum storage cabinets, recording insect traps) and begin a time/cost documentation and analysis for each activity.
2. Determine which of the activities above require professional attention and which are technical in nature.
3. Prepare staffing and/or funding proposals for the technical assistance required to provide adequate support for the professional program.
4. Develop a list of regularly scheduled collateral duties not directly associated with the museum program and begin a time/cost documentation and analysis for each duty.

5. From the above exercise, determine whether the completion of collateral duties adversely affects the completion of primary museum management functions such as basic registration. The data may support the addition of technical staff as mentioned above or moving collateral duties to other staff members.
6. Determine which jobs should be performed by NPS positions (full-time permanent versus term or temporary) and which could be contracted, etc.

Revise the park organization chart to reflect a professional level curator, GS-1015-II. Submit a new position description for a biological (or other discipline-appropriate) curator at the II level for classification. (6 months)

Complete an annual workplan for the museum program that should be included in the park's annual workplan. Note that much of museum work lies outside the PMDS categories for museum collections (Ia6 and Ib2d) and should be subsumed under another, seemingly unrelated goals. (1 year)

Continue to update PMIS and OFS statements to meet the needs of the program as well as add new ones based on this plan (On-going)

Ensure that museum collections are adequately addressed in all park-planning documents of the park. (As plans are revised)

Once the NPS issues new guidance on Resource Management Plan, write plans for the park. Include the museum and archival collections in the narrative about the resources. (1 year after issuance of new guidance)

Ensure that appropriate staff receives current preservation training in essential duty areas, i.e., emergency/disaster preparedness, handling of archival and object collections, IPM, etc. (1-3 years)

Working with other divisions in the park, ensure inclusion of museum needs and standards in housekeeping plans (for all spaces where museum collections are exhibited, stored, or used), Integrated Pest Management plan(s), security plans, emergency operations plans, etc. (1 year)

Working with the Southeast Region Curatorial staff, the WASO Museum Management Program, and/or the HFC Division of Conservation, establish an internship program and contact graduate programs for candidates. (3-5 years)

Museum Management Staffing

Museum management is a complex, interdisciplinary park function that interfaces with most park activities, especially maintenance (architectural fragments and records from treatment of historic structures), resource management (specimens and associated records from research), and interpretation (education and museum exhibits). A properly run museum program at a large and complex park such as VIIS requires a full performance museum curator. But even that person cannot do all the range of necessary tasks. Although the full performance museum curator will know about museum documentation and record keeping, preservation, and protection, they probably will not have the professional expertise for all the disciplines in the collection. For example, if you hire someone with a cultural background, they will need the assistance of natural resource experts. If you hire someone with a biology background, they would need the assistance of a geologist if they were trying to identify mineral specimens. The key component for success is understanding the professional nature of museum management, coordination, cooperation and communication with park staff and obtaining appropriate professional assistance from outside the park.

VIIS is currently organized into five divisions. The management of museum collections and cultural resources is in the Division of Resource Management. The approved organization chart does not include a museum position. However, the chart does have an Archeologist (GS-11) who is assigned museum responsibility as a collateral duty. This interdisciplinary position was established in 2000 using the NPS benchmark position description for Cultural Resources Program Manager, Interdisciplinary. (The incumbent archeologist, Ken Wild, had been on the park staff previously primarily to do compliance archeology work. As the duties expanded, the park recognized the need for a new position description.) The park selected archeologist out of the discipline list that also includes historian, cultural anthropologist, landscape architect, architect, and museum curator. Although the position description does state that the incumbent "May manage the museum collection" [emphasis added], it is unlikely that anyone trained in one of these disciplines could adequately perform the duties of the disciplines. For example, a landscape architect would not have the training or skills to do archeology. Nor would a museum curator have the training and skills to be an architect.

In May 2003, the Chief of Resource Management proposed to the Superintendent to upgrade the position to a GS-12 again using the NPS benchmark position description for Cultural Resources Program Manager, Interdisciplinary.

There is currently no staff member directly working on the collections on a day-to-day basis. The park has not submitted an OFS statement for a base increase to cover museum management.

The park really does not have a current museum program. It is clear that the collateral duty approach has not given this rich natural and cultural collection the level of care required for proper documentation, preservation, protection, and accessibility (intellectual and physical). The needs of the collections have been documented in this plan. Current NPS policy identifies the journeyman level for independent professional work to be the GS-11 level unless there is day-to-day technical supervision. A full professional curator (GS-1015-11) is felt to be the needed position to create and manage the museum program for VIIS and VICR. Although there are certainly highly significant cultural collections at the parks, the growing number and importance of the biological collections program would suggest that a curator with a biological background be the choice to manage the program.

There are a number of the projects that are identified in this plan, from updating the accession files to museum housekeeping to upgrading the museum collection storage. These projects require professional curatorial staff on site to supervise contractors or actually accomplish the work.

The management of the associated records for the natural history collections requires professional archival training. Although there may not be a need for a full-time archivist at this time, the services of an archivist are urgently needed. Those services may be obtained by contract or hiring term or temporary staff.

The I&M network hired a museum technician (GS-7) in May 2003. They work under the supervision of the museum curator (GS-12) at Everglades National Park. This will provide a level of museum management for specimens and records generated by the I&M program at VIIS.

A shared approach, similar to the I&M network, may be considered for the Caribbean parks (VIIS, CHRI, BUIS, SAJU). Perhaps the full performance museum curator could provide oversight to museum technicians (contractors, permanent, or seasonal staff) working on specific projects at other parks. A creative approach to sharing limited human resources may be a very successful way to ensure the preservation of our precious park resources in the parks' museum collections.

Once the professional staff is on-board, there are a number of graduate programs that may provide interns to do professional level museum project work under the direction of other professionals. The American Association of Museums has a list of such accredited programs. The NPS has a cooperative agreement with the National Council for Preservation Education that provides a clearinghouse for interns from appropriate college and university programs for parks. Finally, the American Institute for Conservation has a list of conservation programs. If the park can provide housing without charging the program, it might be possible to find free or nearly free staff with professional training to work on specific projects at the park. It is recommended that these sources be reviewed for possible assistance. The Southeast Region Curatorial staff, the Museum Management Program in WASO, and the Division of Conservation at Harpers Ferry Center may provide assistance, recommendations, and additional oversight, if needed. Stipends can be funded through project money or even through support from the park's cooperating association.

Museum Management Staffing Recommendations

Immediate

Prepare an OFS statement for a base increase to cover museum management. To anticipate and fully meet the park's need, this should include salary and support cost for a full performance museum curator (GS-II), at a minimum. It could also include costs for various reoccurring staffing assistance such as museum and/or archival technician(s). Also, one might consider approaching CHRI management about a joint position.

One-year

Determine which of the activities above require professional attention and which are technical in nature. Determine which jobs should be performed by NPS positions (full-time permanent versus term or temporary) and which could be contracted, etc.

Revise the park organization chart to reflect a professional level curator, GS-1015-II, and technician based upon the assessment noted above.

Submit a new position description for a biological (or other discipline-appropriate) curator at the II level for classification (or use the benchmark position description if appropriate).

Continue to update PMIS and OFS statements to meet the needs of the program as well as add new ones based on this plan. (On-going)

Three-year

Ensure that appropriate staff receives current preservation training in essential duty areas, i.e., emergency/disaster preparedness, handling of archival and object collections, IPM. (1 - 3 years)

When a full professional museum curator is hired and available to supervise work, contact the Southeast Region Curatorial staff, the WASO Museum Management Program, and/or the HFC Division of Conservation, to establish an internship program and contact graduate programs for candidates. (3 - 5 years)

CHAPTER 9 PRESERVATION AND STORAGE OF COLLECTIONS

Introduction

Conservation planning is fundamental to museum collection management. This chapter identifies preventive and remedial conservation concerns and provides strategies for collections preservation that can be implemented now and in the future.

Both remedial and preventive conservation require first and foremost, an accurate identification of the causes of deterioration. An object's condition depends on its past and present exposure to environmental factors that have promoted, encouraged or caused material degradation. Remedial conservation generally involves physical treatment of individual objects to rectify structural, chemical and visual damage whereas preventive conservation implies actions taken to remove the environmental cause of deterioration before treatment intervention is necessary.

A very thorough Collection Condition Survey was prepared by Harpers Ferry Center Conservator Barbara Cumberland and submitted to the park in March 2003. In general, this report provides appropriate guidance for upgrading collections care at the park and several recommendations made by Ms. Cumberland have since been addressed by the VIIS Archeologist Ken Wild. Additional survey work is required for archival materials.

In developing this current CMP, the following documents were also reviewed to understand the collections management history at the park:

- *Collection Management Plan*, Ralph Lewis (Harpers Ferry Center), 1977.
- *Old Danish Warehouse Museum Security Plan*, John Hunter (MWRO), 1988
- *Collections Management Plan*, Wendy Jessup (contract, 1988) revised by Kathryn Lang (SERO), 1993
- *Collection Condition Survey*, Jennifer Bjork (VIIS) and William Cissel (SARI), 1994.
- *Peer Review of the Cinnamon Bay Archeological Project*, Bennie Keel and Richard Vernon (SEAC), 2001.

Environmental Concerns for Preservation of VIIS Collections

Cultural Material

With very few exceptions, the cultural material present in the VIIS museum collections is inorganic historical and pre-Columbian archeological material and surface finds. The stone, shell, fired ceramic and glass objects in the collection are not significantly climate-sensitive particularly in terms of temperature alone, but porous materials such as stone and ceramics can be damaged by hydration cycles of soluble salts (chlorides, nitrates, sulfates) if present in the fabric of the object through burial or contact with sea water. In humid conditions, the salts will solubilize and travel through fabric pores through capillary action. In drier conditions, the salts will migrate to the surface and subsurface of the object and crystallize causing visible efflorescence. In conditions of fluctuating RH, the movement of salts through porous materials causes spalling and possible disintegration of the material fabric.

In high humidity, salts also act as an electrolyte solution for galvanic corrosion of metal. Even without the presence of salts, high humidity promotes corrosion of metal, particularly of iron.

These materials are not light sensitive or subject to structural damage by insect attack although they can be disfigured by insect and rodent scat. Like all materials, they may be disfigured to the point of surface damage by mold.

Recommended standards for long-term preservation:

Temperature: Moderate range of human comfort, 65 to 75 degrees Fahrenheit.

Relative Humidity: Below mold threshold of 65% RH.

Special needs:

- Unstable iron: 30% RH and below. This climate is achievable by microclimate storage techniques.
- Unstable salt infused porous objects: Negligible fluctuations of RH. This climate is achievable by microclimate storage techniques.

Most significant environmental threats:

- High humidity
- Salt contamination

Natural Science Collections

The natural science collections consist of an herbarium, a forest seed collection, several mammal and bird specimens, entomological specimens, and coral, shell and geological specimens. One large fish specimen and a few smaller specimens remain from the large fish collection that was transferred to the University of Florida.

Even though the herbarium material and taxidermic mammals and birds are organic and nominally hygroscopic, conditions of fluctuating RH within a moderate range (>10% daily) are not damaging if the specimens are properly mounted and prepared. These materials are light sensitive, but are seldom subjected to ambient light levels in storage. Mold and insect infestation are the most prominent threat to the preservation of these materials.

Recommended standards for long-term preservation:

Temperature: Moderate range of human comfort, 65 to 75 degrees Fahrenheit, ideally within the cooler side of this range.

Relative Humidity: Below mold threshold of 65% RH.

Most significant environmental threats:

- Low humidity / wide fluctuations of humidity
- Insects / mold
- Prolonged exposure to high light levels

Archival collections

Archives currently in the museum storage room consist of maps, scaled drawings, oversized prints, plans, blueprints, and photographs including large aerial formats and negatives. A substantial amount of material was located by the CMP team, in a variety of park locations, and targeted for further review, archival appraisal, and potentially cataloging into the park's museum collections. Chemical deterioration of paper-based material accelerates as temperature rises. Ideal temperature conditions for exhibiting and storing paper and photographs should be as cool as achievable. This means conditions below human comfort temperature range for long term storage. Humidity also encourages deterioration of cellulose, sizes and photographic emulsions. With an increasingly sophisticated notion of the content of museum archival collections (compliance and resource management records for example), the challenges resulting from poor environmental conditions are readily evident.

Recommended standards for long-term preservation:

Temperature: Cool range of human comfort, ideally below 65 degrees Fahrenheit

Relative humidity: 35 – 45%

Most significant environmental threats:

- High temperatures
- High humidity
- Insects / mold
- Prolonged exposure to high light levels

Conservation History

Very few objects have undergone professional conservation treatment. Several objects were treated by HFC in 1976 for exhibit in the Danish Warehouse at Cinnamon Bay.

During the 1970's, metal objects were treated in-house by the Park Historian following techniques prescribed by the HFC conservators as was the common practice in many parks at that time.

Processing of archeological material excavated from the Cinnamon Bay historic and pre-Columbian sites since 1989 often includes refitting fragmentary ceramics and consolidation of friable archeological features with Acryloid B72 acrylic resin. The work takes place in the Danish Warehouse which is now serves as the Archeology Laboratory for the Cinnamon Bay archeological project.

None of the natural science collections or archival collections has been conserved in any way. As a matter of fact, through neglect the deteriorated condition of a large scientifically significant collection of wet fish specimens led to the decision to actually give the collection to a Florida University rather than address the maintenance and storage requirements necessary for its preservation.

Assessment of Current Museum Conditions

Museum Collection Storage Building; MAB Resource Center

In 1989, a prefabricated insulated structure (Bally building) was erected at the lower terrace level of the biosphere complex at Lind Point to house the museum collection, which had been stored in the Danish Warehouse at Cinnamon Bay since the late 1970's. Prior to that, the collections were stored in three locations within the park: VIERS (primarily the natural science collection and documentation); the Park Historian's residence (cultural material) and the former Park Headquarters building at Redhook (primarily archives). The move to the dedicated storage building was completed in 1991 and represents the first time in the park's history that collections were stored in a location approaching professional museum standards. Climate is controlled in the Bally building with a wall-mounted air-conditioner and a portable dehumidifier both of which have been replaced once since installation. It should be noted that the park hooked up the power for the Museum Collection Storage Building to the MAB's emergency generator within the past year, a very significant action.

The poor condition of the natural science and paper-based collection is largely attributable to past storage conditions in canvas tents at VIERS in the 1960's and 1970's and hot and humid conditions in buildings with no climate control in Cinnamon Bay and Redhook. The state of the archival material in the storage room and specific preservation concerns are addressed in the archives collection chapter (# 6) of this CMP. The natural science collections are discussed in Chapter 4.

Present environment

The interior climate is monitored with a Weathertronics battery-operated hygrothermograph set at a 31 day recording span. Review of past charts indicates conditions ranging from 70 – 76 degrees F with relative humidity around 45% – 55%. Considering that exterior conditions are usually in the upper 70's to low 80's with relative humidity frequently as high as 90%, the insulated structure is very successful in maintaining climate conditions within the material range of tolerance of the majority of museum collection housed within.

Although the ambient relative humidity within the building is below the mold threshold, active mold was noticed within a cabinet containing human remains and on the cloth board cover of a book stored on the bookcase. The presence of mold in these instances is probably attributable to two different mechanisms:

- Books: Failure of the dehumidifier in 2002 for a month caused a widespread mold infection within the building. Although the dehumidifier was replaced, bringing conditions back to museum standard, packed books create self-buffering microclimate conditions conducive to mold growth, particularly on cloth-board covers rich in nutrients. Although mold was noticed on only one book, chances are high that it exists elsewhere in microclimate pockets. Moreover, mold conidia that have been hydrated in the past are susceptible to fruiting at lower levels of relative humidity than non-hydrated conidia. A thorough cleaning of the interior of the structure and storage furniture is necessary to correct the problem. Guidance for treating mold infestation is available in the Conserv O Gram series available from the SERO, on the NPS Web site, and from the Museum Management Program, WASO.
- Human remains: Naturally eroding human skeletal remains from Cinnamon Bay are gathered, washed, air dried, wrapped in tissue or cheesecloth and frequently bagged in polyethylene Ziploc bags. This occurs when remains are found along the beach eroding from an African slave cemetery first exposed by a recent hurricane(s). These remains are now stored within closed

museum cabinets in the storage building awaiting reburial through cooperation and agreement with local churches. Bone is porous material and air-drying after washing in ambient conditions of high relative humidity and wrapping in hygroscopic tissue and cloth creates microclimate conditions even before placing the remains in an enclosed museum cabinet. This CMP recognizes the culturally sensitive motive of the decision to treat the skeletal material in this manner, but the procedure promotes mold and the remains would be less susceptible if stored unwrapped, while still cushioned, for air circulation.

IPM issues

Both insects and mold were treated in the past by vapor fumigation in enclosed cabinets with moth balls and crystals (paradichlorobenzene and/or naphthalene) to the extent that the herbarium cabinets are saturated to the point of recrystallization of these hydrocarbon fumigants. Review of past collections related documents indicate that Thymol may have also been used as space fumigant for insects as well as for mold.

Thymol (5-methyl-2-isopropyl-1-phenol) has been used for decades as a fungicidal treatment for paper in archives and libraries, and by extension, for books with leather, and finally, by further extension, for leather (proteinaceous) based ethnographic and historical objects. Long considered non-toxic to humans, Thymol, a naturally occurring phenol or essential oil, has been used as a fungicidal ingredient in toothpaste, mouthwash, and white library paste. Today, however, along with other phenols such as ortho-phenyl phenol (the former active ingredient in Lysol®), turpentine, camphor and naphthol, it is suspected of being a carcinogen and is considered moderately toxic in elevated concentrations.

The saturated atmosphere within fumigated cabinets, as well as the specimens within, presents a health hazard to workers using these resources. Of all cabinets treated with vapor fumigation, the most toxic appears to be the newest Interior Steel cabinet that contains supplies but virtually no collection material. This cabinet should be moved out of the structure, thoroughly cleaned with soap and water and aerated for several days before moving back into the storage room.

Aside from the natural science collections, evidence of both cockroaches and silverfish were found in boxes and drawers containing paper-based collections. It is likely that the collections were moved to the building without preliminary inspection and insect removal. It is imperative that all material, especially archival, be de-infested before being placed in the storage room. As archival collections are identified throughout the park and consolidated in museum storage, this precaution is critical for preservation of all stored organic material.

In response to recommendations made in the 2002 Collection Condition Survey, insect sticky traps have been purchased and are now placed in various areas within the storage room, but there is no strategic IPM Plan written for museum areas. IPM is now a collateral duty newly assigned to a park biologist. Apparently, an active and resource-integrated park wide IPM Program has not been established. IPM concerns and recommendations presented in the 2002 Collection Condition Survey should be addressed and implemented.

Light issues

Because collections are stored in cabinets and boxes for the most part, light levels in the storage room are not an issue. Problems with moderately light sensitive objects such as the large fish trap now stored on top of cabinets directly below the florescent light fixtures can be solved by reorganization of the storage room.

Storage configuration issues

At this point in collections care history at the park, inefficient use of available premier climate-controlled space within the storage room is the most significant problem regarding preservation of collections in storage. Many of the cabinets are compromised by rust and structural damage and should be replaced. Since the storage room was erected in 1989, non-collection items such as old computers and even personal belongings were placed in the room along with the museum collection material. After a massive resorting and clean-up of the room several years ago by Ken Wild and Rafe Boulon, far less extraneous material is stored in the room, but it is still very crowded with underused storage furniture, obsolete packing and preparation materials and new boxes of curatorial supplies. A large wood packing box labeled "hydrochloric acid solution" is stored beneath the dehumidifier. It is probable that this solution was used at one time by entomologists for fixing the specimens in 1% HCL / 85% ETOH. The solution should be removed from the storage room and placed in the unofficial natural science "laboratory" area in Building 4.

These problems can be solved incrementally:

- *Consolidate collections and remove extraneous furniture.*

Many of the 14 enclosed cabinets are not used to capacity or, in several instances, are empty all together. The fact that they are stacked three high is a bad choice on any level from safe accessibility to earthquake proofing. The 2002 Collection Condition Survey lists all problems from excessive weight loading to inadequate housing techniques for individual objects within the cabinets and these concerns should be addressed. Thoughtful rehousing of collections within available cabinets can actually liberate space as old damaged cabinets can be emptied and removed from the storage room altogether. For example, the park has no plans for collections growth in natural science entomology and seed collections. Space can be gained by consolidating the entomology collection now in two cabinets into one cabinet and the dry forest seed collection now in two cabinets into one cabinet and removing the unused cabinets from the room. Similarly, the herbarium cabinets can be consolidated, putting herbarium sheets into the new Interior Steel cabinet after cleaning and aeration as suggested above and discarding at least one old damaged cabinet. The few random contents of a two drawer safe can be sorted, stored appropriately or discarded, and the unit removed from storage.

- *Thoroughly clean the storage room.*

Clean and disinfect the storage room and remaining furniture when the cabinets are placed on the new sanitary risers that were ordered in response to the 2002 Survey.

- *Separate out non-accessioned items and uncatalogued accessioned items in the storage cabinets and evaluate them against the Scope of Collection for possible removal from the collection.*
- *Rehouse collection appropriately within the cabinets using guidance from the 2002 Survey.*

A surprisingly large amount of metal in the collection has been treated, probably on-site by Park staff in the past, but actively corroding metal was also present in the specimen cabinets. Accessioned and cataloged unstable iron in the collection will eventually be lost to total mineralization unless stored properly. Unstable iron is ideally stored in dry conditions of 30% RH and below to arrest continued corrosion processes. Because of the impracticality of conditioning an entire room to 30% RH and the conflicting needs of organic materials also present in the room, this CMP recommends microclimate storage techniques for unstable metal objects. Guidance in creating and conditioning microclimate containers can be found in the Conserv O Gram series and Part I of the NPS Museum Handbook. At

this point, the number of unstable metal objects is small enough to fit into two rehabbed museum cabinets.

Remedial treatment is very costly and should be done by or under the supervision of a qualified conservator. An in-house treatment of metal objects, including those collected at Cinnamon Bay, is not recommended. The effort is more profitably put toward preventive conservation of this material. The 2002 Collection Condition Survey includes an assessment of treatment needs of 350 individual objects by priority. Priority categories 1 and 2 require conservation treatment by a conservator. Only five objects are assigned these priorities whereas 128 objects fall into priority 6, "The object requires storage or exhibition improvements by park curatorial staff."

Housekeeping issues

There is no consistent effort to keep the museum storage room clean. When the storage room is reconfigured, a formal Housekeeping Plan should be written for the storage room.

Old Danish Warehouse, Cinnamon Bay

Since 1998, the Old Danish Warehouse has served as an archeology laboratory for processing material from a pre-Columbian Taino site and Plantation era site on the Cinnamon Bay that had been exposed by a hurricane that year. Prior to this, the historic building served as a storage location for consolidated park collections and contained limited exhibits incorporating non climate sensitive museum objects, graphics and didactic text.

The old exhibits have been removed and visitors to the beach are invited to enter the building when an intern or volunteer is present. Text information describing the project is visible and several Cornell trays contain study collection materials to illustrate the range of finds to date. With the exception of one pot, none of the objects used for exhibit in the building are cataloged.

Environment

This historic structure is approximately 30 feet from the beach and is made of plastered cut coral and stone walls with a non-historic cement floor. Wooden window shutters are wide open and unscreened when the building is occupied. The wood frame and corrugated metal roof is a fairly new replacement of a previous termite damaged roof. As recommended by CHRI Historian Bill Cissel, a small room was framed out within the warehouse and fitted with an air-conditioner in 1998 to serve as an office and secure place to catalogue objects. At the time of the site visit, the air conditioner was no longer working and this room was filled with about 20 boxes of collections from Trunk Bay in the process of being cataloged by interns. The Trunk Bay collection will then be moved to the storage room.

Apart from the Trunk Bay material, about 90% of the material in the Archeology Lab is brought in by tourists and requires no specific preservation effort and long-range curation. The 2002 Collection Condition Survey recommends monitoring the climate conditions in this building, but there really is no point in continuous monitoring an area that has absolutely no climate control. Gathering a profile of general climate characteristics will suffice to inform curatorial decisions to keep a material range of objects in this location. Generally, continuous monitoring is done to track the performance of a mechanical system or specific climate control strategy.

Housekeeping and visitor issues

The interior of the Archeology Lab is chaotic and can be improved with clear separation of functional areas within the small structure, removal of all material unrelated to the project such as the personal belongings stored on top of the inner room, and reorganization of traffic areas. Visitors are allowed to circulate around and beyond the catalog work areas that are situated in the front of the building to see and handle randomly collected objects placed on shelves in a back corner. Although these objects have no real scientific value, it does send a message to the public handling that handling archeological collections at will is acceptable and even encouraged in a laboratory setting.

With the exception of two small open trenches, the excavation phase of this project is virtually complete, and the emphasis now should be on cataloging which requires organization, concentration, and a clean space for the lap top computer. As long as the Danish Warehouse continues serving this function, the traffic flow should be reversed with the cataloguing activity in the back and a self-guided visitor area in the front to physically and psychologically separate the visitors from the professional activities underway. Ideally, collections should be placed in a secure locked area when the building is unoccupied. However, metal museum cabinetry will soon corrode in the un-climate controlled marine atmosphere of Cinnamon Bay the same way that the enamel-painted metal fans in the building have done in just a few years. The small framed out room could easily serve the purpose of a secure storage room when the lab is closed. Removal of extraneous furniture and random supplies will permit more shelves to be erected in the room for easy access to material in progress.

A thorough cleaning of all surfaces including the floor is essential and a Housekeeping Plan must be written and implemented to maintain order and basic collections security within this building.

IPM issues

Although termites are a huge problem at Cinnamon Bay and in structures throughout the park, there is no routine inspection for termites or other structural pests. Several weeks ago, personal belongings including furniture stored on top of the inner framed room in the Old Danish Warehouse was found to be consumed to the point of major material loss by termites.

Boxed material should not be transported to the storage building at Lind Point without careful inspection for pest infestation. Although the inorganic archeological material is not in itself attractive to insects, packaging material may be. Moreover, objects may be inadequately dried encouraging mold to grow in the confines of the plastic boxes which should be eliminated before the material is transferred to permanent collection storage.

The 2002 Collection Condition Survey provides a good discussion of the IPM needs at the park and several of the recommendations have already been implemented. It is imperative that the park develop a written formal IPM Plan that embraces all areas in the park containing museum collections.

Future use

When the cataloging phase of the Cinnamon Bay project is complete, the Old Danish Warehouse should revert to its original park function as an exhibit location. Because of the preservation challenges of the climate conditions, exhibits should be primarily didactic graphic panels with possible use of inorganic, preferably, non-metallic objects. The temporary room built in 1989 should be dismantled.

Museum Exhibits

The Visitor Center in Cruz Bay contains a small exhibit area installed through a contract with HFC in 2001 which includes a small number of museum objects that had been exhibited at the former Visitor Center in Redhook. A metal cane knife and a hoe blade have been conserved at HFC in 1976 by Archeological Objects Conservator Dan Riss. Barbara Cumberland supplied the Treatment Reports in her 2002 Survey, but although there are HFC Accession and HFC Work Order numbers recorded on the sheets, there are no catalog numbers recorded for these objects.

As noted in the 2002 Survey, both metal objects have spots of active corrosion and should be retreated. We suggest contacting Dan Riss at HFC or John Maseman, a private-practice archeological objects conservator in Florida to arrange for treatment. The objects can be sent via FedEx overnight delivery to the selected conservation facility.

Environment

Because the exhibits are primarily graphic panels and with the exception of three reproduction items, are not light-sensitive, light levels in the exhibit area are not an important consideration. However, long-term display of the archeological metal objects in humid atmosphere of Cruz Bay is a concern. Ideally, these objects should be exhibited in a microclimate case conditioned with silica gel. Conservator Toby Raphael at HFC is a good source with whom to discuss microclimate exhibit case options.

Future Storage Needs

Although the museum storage building was the single most important step the park has made in collections preservation, the building is now nearly fifteen years old and the normal life-span of these prefabricated structures is considered to be about 20 years before structural failure of the composite materials and joints begins to occur. Moreover, as the archeological material is catalogued and moved from the Danish Warehouse to Lind Point and archival collections now stored in many locations throughout the park are consolidated for storage with the museum collections the present stationary system of museum cabinets will be inadequate to safely house and permit access to the stored collection. In addition, a approximately 90 boxes of archeological material is stored at SEAC and may be returned to the park at some future date.

A new museum management and storage facility is clearly necessary. In the meantime, compact storage systems such as Space Saver should be installed in the current Museum Collection Storage Building to accommodate as much of the existing collection as possible and the growing collection material. Once purchased and installed, compact storage systems are transportable to other locations.

At this point, the park urgently needs a Museum Collection Storage Plan to identify the present spatial needs and equipment necessary to store the museum collection and anticipated growth in collection areas according to the approved Scope of Collection. The following PMIS projects should be developed as soon as possible:

- Prepare a Museum Collection Storage Plan for all VIIS collections
- Installation of a compact storage system to upgrade storage of VIIS museum collections
- Prepare a Museum Housekeeping Plan for VIIS museum areas

Funds can also be requested from the MCPP program for assistance in actually rehousing the collection in the newly configured space. In the Southeast Region, teams of curatorial staff from other parks have been assembled for this purpose as required for moving large collections, and the Northeast Museum Services Center (NEMSC) regularly undertakes rehousing projects for parks. Teams are comprised of specialists in specific collection types according to the nature of the project. For example, a team skilled in archival and archeological collections would be ideal for the VIIS collections. NEMSC Director Sara Wolf can be contacted by NPS e-mail or called at (617) 224-5613 to discuss this project.

Recognizing the need for additional storage space, the park has written a PMIS Project Statement for the purchase and installation of an additional Bally building for a cost of \$300,000.00. The need for more curatorial storage space is clear at this point, and will become critical as collections are organized and readied for curation, but it may be wiser to plan for a new permanent structure to house the collection. The new building should have separate areas for curatorial, research areas, offices and include room for collections growth in all areas of the park's approved Scope of Collections Statement. Prefabricated structures cannot be considered permanent and are not hurricane-proof, which should be a major consideration in the Virgin Islands. Although new construction is much more expensive in the short-term, it is far more advisable. Given the life-cycle of prefabricated structures and their vulnerability to hurricane damage, only new construction should be considered for a permanent solution to the museum collection storage problem at VIIS.

Options for major new infra structure construction, in different locations, are now under consideration by the park. The park's museum management program needs, including collection administration, processing, research, and storage, must be on the table for inclusion during early planning efforts. Consideration should also be given to partnering with NPS units on St. Croix (Christiansted National Historic Site, Salt River Bay National Historical Park and Ecological Preserve, and Buck Island Reef National Monument), who are in the process of addressing very similar museum management program needs.

Recommendations

Immediate action:

A large wood packing box labeled "hydrochloric acid solution" is stored beneath the dehumidifier in the Museum Collection Storage Building. It should be removed from collection storage and possibly placed in the unofficial natural science "laboratory" area in Building 4, MAB Reserve Center.

Submit a Museum Collection Storage Plan PMIS project for all VIIS collections. This document will serve as the foundation for requesting a new storage facility. Remove the PMIS request for an additional Bally building.

Submit PMIS project statement covering anticipated need to install a compact storage system and other furniture based upon the plan's recommendations.

Prepare a Museum Housekeeping Plan for VIIS museum areas. If this cannot be accomplished locally submit PMIS project statement.

Request a Technical Assistance Project for rehousing collections, based upon recommendations of this CMP and the 'upcoming' Museum Collection Storage Plan.

Begin physical reorganization of the Museum Collection Storage Building by; consolidating collections within cabinets and remove extraneous furniture, separating not yet accessioned items

from accessioned items and uncataloged items from cataloged items. Evaluate all unaccessioned items against the 'updated' Scope of Collection for possible inclusion in the collection.

Thoroughly clean and aerate the new Herbarium cabinet and begin re-housing the collection appropriately within the cabinets using guidance from the 2002 Collection Condition Survey.

Begin reorganization of the Archeology Lab in the Old Danish Warehouse:

- Remove all unrelated objects and inappropriate furnishing.
- Seek another storage location for excavation equipment.
- Reverse the traffic pattern within the building by moving the catalogue activity to the back and restricting visitor circulation to the front.
- Revise didactic text used to explain the project to visitors to indicate which objects they are free to handle in the front of the room.
- Discontinue plans to treat metal objects by electrolytic reduction on site. Random metal finds need not be stabilized by remedial methods. They could be documented and photographed if necessary but treatment should be done only on objects that are significant, accessioned and catalogued and the need for conservation intervention should be evaluated on a case-by-case basis.

One to two years:

Plan for implementation of a Collections Rehousing Project with technical assistance from SERO Curators or from a collections rehousing team from the Northeast Region Museum Services Center.

Make arrangements for conservation of the two metal objects in the Cruz Bay VC exhibits.

Develop a SOP for transferring archeological material and archival material within the park to museum storage. None of this outlying material should be brought into storage without prior disinfection for presence of insects or mold. If necessary, the park will have to locate a safe temporary collection processing and storage location as collections are being prepared for permanent storage.

Three to four years:

Request funding for a new building that will implement the Collection Storage Plan and support museum collection activities in all areas of the park's approved Scope of Collections Statement.

Complete the archeological activities now in progress at the Archeology Lab in the Danish Warehouse. Consider removing the temporary room within this building and revert the building to its original function as a contact station with educational exhibits.

Install a compact storage system in the present Museum Storage Building. Make arrangements for re-housing the collections with assistance from a curatorial team.

On-going:

Continue to discuss specifically integrating park museum management program functions (museum collections administration, processing, research and storage) into considerations being given to the proposed Heritage Center and major infrastructure building construction in the Maintenance area.

Explore formally partnering with NPS units on St. Croix to address museum management program needs for all parks. Consider adopting a mutually beneficial and cost-effective approach(s) that minimize duplication of infra-structure while fulfilling fundamental resource management needs.

Chapter 10 MUSEUM COLLECTION SECURITY, FIRE PROTECTION AND EMERGENCY PREPAREDNESS

Introduction

As noted earlier in this plan, the park's museum collections are located on exhibit at Park Headquarters in the Cruz Bay Visitor Center gallery and the Cinnamon Bay Archeology field laboratory and in the Museum Collection Storage Building at MAB Reserve Center. Additionally, museum collections (archival materials such as marine biology research data, historic structure and other resource management-related documents) are located in the 4 office buildings at the MAB Reserve Center, in the second floor of the main maintenance building, in the previously occupied headquarters building at Red Hook, and in a variety of spaces/offices in the current Visitor Center. The archival materials located in the maintenance area, visitor center offices, and at Red Hook may be considered temporary locations.

A significant step was taken by the park to improve visitor services, protection of park assets, and administrative capabilities with the completion of the Cruz Bay Visitor Center three years ago. Relatively sophisticated security and fire protection systems were installed and upgrades are currently being considered. The public area of the Visitor Center contains three small wall-mounted museum exhibits containing archeological and historic objects.

Where present, the current Visitor Center security and fire protection systems are owned by the NPS. Maintenance on the security system is provided by ADT Security Systems, St. Thomas. ADT Security Systems PR, Inc. is also under contract to provide 24-hour monitoring services. The company appears to have stacked the monitoring points in that the park is charged for five separate monitoring or signaling locations throughout the park. The annual monitoring and/or maintenance charges, currently at ca. \$3326 per year, will undoubtedly increase as additional security or fire protection devices are brought on-line without adopting a more integrated park-wide approach.

Fire extinguishers in the MAB Reserve Complex structures were last serviced in November of 2000, well past the mandated NFPA annual requirement. The Museum Collection Storage Building is protected by a locked door; individuals using the contents are required to sign in/out.

Security at the Cinnamon Bay Danish Warehouse building (Archeology Lab) is provided by locked doors and barred windows. Fire protection at both sites is provided by ABC-type fire extinguishers. The existing fire detection system for MAB Reserve Center buildings is inoperable. Volunteers sign in/out as part of their normal work day routine. The physical distinction between the public exhibition or education space and the archeological work areas or laboratory is unclear.

VIIS Museum Collection Security Overview and Observations

The park has not had an independent museum collection security survey, conducted by a third party. Such a survey will undoubtedly help the park avoid potentially unnecessary monitoring charges as well as identify appropriate hardware for specific applications to ensure the park has the best available cost effective systems and hardware. This effort will also help to ensure all security measures correspond to the varying level(s) of risk.

Alarm systems recently installed in the Visitor Center utilize modern technology. While staff are aware of and alert to various protection issues, the efforts to systematically coordinate or integrate overall park system operations or protection arrangements are ongoing. The park is considering the installation of a security system for the MAB Reserve complex; an estimate for the 4 MAB Reserve complex buildings has been received with the estimated cost at \$4,267.77. This is presented as 4 separate security systems; the Museum Collection Storage Building is considered a component of an adjacent building or a partition of that building main panel. Central alarm station monitoring, on a 24/7 basis, is a typical standard for collection museum protection. It is not part of the package presented by Top Dog Security Systems of St. Thomas, nor is it presently being considered by the park.

The current system in the VC is comprised of ADT installed hardware (Focus 200 control panel), owned by the NPS, and covered by a service agreement with ADT. The Visitor Center has an ADT Focus control system, with zone expansion installed but not fully utilized at present. Surge protection is not installed. Though possible with the current panel, wireless partitions are not being used. Wireless capability is an approach commonly used to protect special museum exhibits and remote or mobile panic duress technology. The present system is addressable and includes a range of devices; entry electronic keypads, single (?) technology motion detectors, external magnetic door contacts, glass break detectors, and black and white technology video surveillance cameras, using VHS recording requiring daily changes of tape. The daily tape change may be a programming function, based on present usage. If the VHS/camera recording components had suitable technological capabilities, they could be re-programmed to only require changing tapes weekly or a few times per week. The cameras are scheduled to operate after normal working hours; they record sequentially.

There are four other active security systems now installed within the park, each covers a fee-collecting or fee-demo-related space. Each of the five systems has a separate contract with ADT for maintenance/monitoring. A long-term, integrated, park-wide, approach should be given to alarm system design and purchases.

The Danish Warehouse at Cinnamon Bay Campground continues to serve multiple functions, including museum collection management functions. A small number of cataloged objects are on exhibit and accessioned archeological artifacts or specimens are analyzed and cataloged using the space in this facility. These functions serve as a basis for educating park visitors. It is possible to upgrade certain physical security aspects at the building, mainly by securing identified artifacts and irreplaceable project documentation in locking cabinets when the facility is not open to the public. Electronic protection of the building through intrusion detection systems is probably not justifiable at the present time. If a security system is installed when the nearby fee collection booth is completed, it may be practical to expand the system to provide basic security for the Danish Warehouse building/archeology laboratory. Given the environmental conditions and the nature of the structure itself, any system will need to be well designed to ensure nuisance alarms are eliminated.

Background checks are not routinely performed on staff (permanent, temporary, or volunteer) with unsupervised access to museum collections.

At least staff two persons should be familiarized with each system, its maintenance requirements, and capabilities. Alarm service contracts are typically not necessary with these types of systems, as they should be fully warranted for the first year following installation, and if properly designed and correctly installed, require only periodic servicing. Time and material arrangements are typically adequate.

Standard and Consultant Museum Collection Electronic System Considerations and Recommendations

The Museum Collection Storage Building is not protected by an intrusion detection system. A local alarm activation security system, covering the MAB facility and including the Museum Collection Storage Building, was being considered by the park at the time of the CMP site visit. There is no humidity nor high/low temperature sensor/alarm for the collections facility. The Museum Collection Storage Building HVAC and/or protection systems should include both humidity sensors and high/low temperature sensors. Motion sensor security lights should be installed on both sides and the rear of the building.

The following guidelines are commonly recommended by security consultants specializing in cultural heritage site and facility complex protection. The following guidance and recommendations (1 through 19) are excerpts taken from reports produced by Layne Consultants, Intl.

The protection of museum collection storage rooms (natural and cultural collections), or those rooms where accessioned art work, rare books, or "on loan" museum collections are stored shall be secured in a special manner that affords a higher level of protection from both internal and external threats. Such rooms are commonly referred to as "vaults," and should be protected as such.

1. Building exteriors, and particularly entryways and areas of concealment, should be well lit by automatic lighting devices which may include:

- a. Dusk to dawn high intensity discharge lighting.
- b. Motion sensing flood lights.
- c. Automatic timer activated lighting.

Lighting should be installed so that cones of illumination are overlapping, eliminating areas of concealment, especially on walkways between Park buildings and the parking lot, and near public entries.

2. All exterior doors should be secured by double cylinder dead bolts, or electronic latching devices. The "throw" of the bolt should extend at least one inch into the door strike. Door strikes should be of hardened steel, at least six inches in length, and secured to the door frame by screws which extend through the door frame into the adjacent stud (at least 4"). Door latching detectors should be installed to verify that doors are closed and locked.

Note: Designated fire exits must provide free egress. Use of panic bar equipped doors is preferable. Where dead-bolt locks are installed, they must remain open during normal operating hours, and a sign instructing building operators needs to be posted above the lock. Delayed access electronically controlled doors are acceptable in some jurisdictions. Check with fire marshal before installing any controls on marked fire exits.

3. Where doors open outward and utilize exterior hinges, the hinge pins should be:
 - a. Secured by a manufacturer's internal locking device, or
 - b. Spot welded to negate pin removal, or
 - c. Special nails or screws installed between door frame and the edge of the door which hold the door in place when all pins are removed.
4. All opening windows should be designed to withstand known risks (i.e., hurricane force winds) and secured by one of the following:

- a. a dowel tightly placed in the track of sliding windows,
- b. a pin insert which incapacitates the normal opening function.
- c. a locking device which will withstand most efforts to pry or force the window to open,
- d. and an electronic glass break sensing device.

- 5. All exterior doors should be protected by a concealed magnetic detection device. These may include the following:
 - a. wafer type device located at the installer's discretion along the door frame and door edge.
 - b. commercial grade plunger type device located at the inner edge of the door frame.

Especially where valuable collections are being protected, magnetic detection devices should be of the "high security," "bias," or "tamperproof" quality.

- 6. Motion sensing devices should be installed according to manufacturer's specifications and include these considerations.
 - a. Devices are walk tested prior to completing the installation.
 - b. A drop of silicone is placed between the alarm wire and the opening where it enters the detector to deter the entry of insects which may render the detector ineffective.
 - c. In those areas where rodents, moths, or other insects are prevalent, only those detectors which are not sensitive to insects, or include "pet alley" masking devices should be utilized. Dual-technology, tri-technology, or quad-technology sensors should be considered.
 - d. Walk test lights should be covered after installation.
 - e. Sensors should be placed to deny access to vital storage areas, and within asset storage rooms so that the room is covered by the range of one or more detectors.
 - f. Passive infra red detectors should not be placed in areas where direct sunlight or extreme temperature change may affect the detector.
- 7. Intrusion alarm control panels should be placed in an area inaccessible to staff members not responsible for the use or maintenance of the system, and may not be easily located or accessed by the general public. The room in which the panel is located should be protected by recommended devices. The panel itself should include a tamper switch on the panel door.
- 8. Alarm activation/deactivation keypads should be located in accordance with normal entry/exit patterns of the staff. Keypads should include the following features:
 - a. A system status light for "ready", and "alarm".
 - b. Capability of at least thirty separate activation codes.
 - c. Annunciation of fault or alarm activation zones.
 - d. Tamper proof installation.
 - e. Capability of transmitting silent "panic" signal.
 - f. Capability of activating audible signaling devices.
- 9. Devices may transmit alarm signals to the control panel by direct wire, multiplex, or radio transmitted means.
- 10. Audible signaling devices should be located throughout the building interior, and at least one location on the building exterior. The exterior device should be located so that it may be heard by passing patrols, or other persons within the complex.

11. Alarm signals, when transmitted off-site, should be transmitted by a Digital Alarm Communicator Transmitter (DACT), or Digital Alarm Radio Transmitter (DART). The ONLY alarm messages transmitted on a radio communications system should be by code, when certified law enforcement officers relay alarm information necessary for proper response.
12. Devices which activate audible signaling devices should be installed to operate when telephone service is disabled or cut.
13. Redundant or alternate signaling systems should be installed to transmit a signal when the primary means of alarm transmission is disabled or does not function.
14. All alarm activation messages should be received in an approved, 24 hour, central alarm monitoring station or proprietary alarm monitoring station. The alarm monitoring station, if proprietary, must be secured at all accesses by proper locking devices. Entry to the monitoring station should be by authorized personnel only. A viewing port should be installed in entry doors. A separate "panic" device, transmitting a silent alarm to an outside agency, should be installed in each monitoring station.
15. Only those systems which are nationally distributed, have ready availability of replacement parts, and offer complete manufacturer's installation guidelines and specifications should be utilized.
16. Only certified alarm technicians, or in-house staff specifically trained in the installation, service, or maintenance of intrusion alarm equipment should be given access to control panels or authorized to work on system components. All devices within a system should be activated and tested at least once each year. A log should be maintained for each test.
17. "As built" drawings showing wire runs, device location, device specifications, and system particulars are required for new system installations, and should be maintained on-site in a secure location.
18. Law enforcement officers from responding agencies should be familiarized with each intrusion or panic/duress alarm system.
19. Backup Power Supplies are normally installed in control panels. Batteries need to be changed no less than annually, and after any significant power outage. Additionally, where emergency generators are available, alarm system control panels should be included when generators are activated. A surge protector and/or uninterrupted power supply (UPS) system is recommended to protect all intrusion alarm panels from lightning or other power surges.
20. A manual sign-in sheet should be utilized where electronic locks reporting to a computerized data base are not available.

VIIIS Museum Collection Surveillance System Discussion – General Recommendations

Visitor Center

The park should ensure that dual, or higher, technology motion detectors are installed. All interior cameras and possibly exterior cameras should be considered for replacement over a period of time with color or dual technology, low-light capability (auto-iris) cameras, monitored by a digital video recorder.

VHS tapes deteriorate through use/reuse and over time. Ultimately, the use of digital video recording is preferred, to eliminate the need for changing tapes and to enhance all around better quality. The long term cost of replacing VHS tapes, the cost of other system components, the quality of VHS recording, and the retrieval ability of VHS tape footage ultimately justify the conversion to digital video recording.

The number of cameras involved in the VIIS installation probably requires the use of a multiplexed system which allows for the recording of images from each location simultaneously. If every camera were to be recorded all the time, the data retrieved would thereby require a large storage capacity. This need may be somewhat reduced by the initiation of some cameras based on motion detection within specified areas, the opening of a door, or by manual activation of a panic/duress signal.

Museum Collection Storage Building (Bally Building)

This space should be protected by a security system designed to be capable of detecting unauthorized intrusion, documenting authorized access, and providing uninterrupted 24/7 monitoring of alarm signal transmissions.

VIIS Museum Collection Fire Protection Overview and Observations

The VC is protected by a relatively sophisticated fire suppression system, which includes an emergency backup power generator connection. The system is checked and maintained on an annual basis, by certified sprinkler system technicians. Fire detection in the Visitor Center is adequate for the present, with certain exceptions. The smoke detectors in the museum exhibition and visitor contact area are not mounted at the highest point of the space and the sprinkler flow valve is not secured in the 'open' position.

Fire detection is not present in the Museum Collection Storage Building. A portable dehumidifier operates continuously to support the cooling/dehumidification efforts of the air conditioner.

The fire extinguisher in the Danish Warehouse (Archeology Laboratory) does not have the requisite tag indicating the date it was last serviced. All fire extinguishers examined in facilities at the MAB Reserve Center, including the Museum Collection Storage Building, were last serviced in November 2000. The park is aware that fire extinguisher certification is an annual requirement. This is a potentially critical oversight, especially for the wooden buildings and the Museum Collection Storage Building at the MAB Reserve complex, since the Museum Collection Storage Building and adjacent structures have no functioning fire detection devices.

Museum Collection Fire Detection Consultant Considerations and Recommendations

As noted above, the park's Visitor Center is protected by a recently installed and relatively sophisticated water based fire suppression system. According to the plans and specifications on file at park Maintenance, the heart of the wet pipe system is a Silent Knight model No. 5129 control panel, with four zones. Devices installed in the system include a water flow detector, two duct detectors, five photo detectors, and nine manual pull stations. Nine audio alarms and nine strobe lights are also part of the system. While there are records of the system being tested annually and properly operating, there apparently are no records of the detectors being cleaned on an annual basis. Annual cleaning of such devices, at a minimum, is typically required.

The park would also undoubtedly benefit from the preparation of a comprehensive Fire Plan. Museum collection repositories within the Park should be protected by professionally designed systems and upgraded, as needed, following a detailed evaluation by a fire protection specialist.

Records on file indicated the suppression system had been tested; it was operational and a notation was made indication that the central alarm station connection was not hooked up. There were no records available regarding cleaning and testing of smoke detectors. It appears as if the contractor tests smoke detectors regularly but does not clean them. Detectors need to be cleaned at least annually.

Smoke detectors need to be installed at the highest point of the spaces they are to protect. A detector does not appear to be located on the highest point on the open "cathedral-type" ceiling in the public gallery of the Visitor Center.

Fire detection in the Museum Collection Storage Building, as an addressable location, should be included as fire/ detection systems are installed at the MAB Reserve Center. Smoke detection is preferred for early warning, except in areas where heavy accumulations of dust or dirt are present.

The following fire protection system recommendations have been developed by Layne Consultants International for application at most public facilities, particularly museums, libraries, historic sites, National Park Visitor Centers, and similar facilities.

1. Wet/Dry Pipe water suppression systems should be installed with new construction or retrofitted where appropriate to protect existing structures. Flow valves should be monitored so that activation will initiate an alarm at a monitoring station.
2. Main sprinkler valves should be secured in the open position by chain and padlock.
3. Smoke detectors or air sampling systems should be installed as early warning devices as specified by manufacturers recommendations and NFPA 72E (Standard on Automatic Fire Detectors). This consultant generally prefers photoelectric smoke detectors over ionization detectors for most installations because of their advantage in detecting smoldering fires.
4. Heat sensing fire detectors should be installed in areas that have accumulations of dust, carbon monoxide fumes from vehicles, fireplace smoke, boiler rooms, kitchens, and as recommended by manufacturer's guidelines.
5. Internal audible/visual signaling devices should be installed so that signals may be audible behind every closed door in each building, and visual signals may be observed in each location by hearing impaired persons, including passageways, as required by the Americans With Disabilities Act (ADA).
6. Manual pull stations should be installed along marked exit routes, at a height which may be easily accessed by wheelchair-bound persons (see ADA requirements).
7. An external audible/visual signaling device should be placed so that passing patrols, neighbors, or others may hear or see a signal initiation.
8. All devices should report to a UL approved fire alarm panel (commercial or residential determined by local code and building use) either by direct wire, multiplex wire, or radio transmitted signal.
9. An auxiliary (UPS system preferred) power supply should be capable of maintaining system operation for 24 hours, and operate all alarm indicating appliances for evacuation for 5 minutes.

10. Alarm signals should be transmitted to a central alarm monitoring station off site, or proprietary central alarm monitoring station on site, by Digital Alarm Communication Transmitter (DACS), or Digital Alarm Signal Transmitter (DART).

Park staff should be oriented and subsequently scheduled to perform cleaning and testing of smoke detectors or to ensure that it takes place and document the activity.

Exhibit Protection

The protection of valuable collections in a park museum, gallery, and corporate setting requires special measures, often above and beyond those of standard building protection. The current museum exhibits in the VIIS Visitor Center are protected using surveillance devices, intrusion detection technology, and security screws for individual exhibit case access. These are excellent approaches for the items currently on exhibit; it will undoubtedly be prudent to anticipate additional protection considerations if other objects are placed on exhibit in the future. In this regard, it is essential to ensure that the structure itself, where museum exhibits are contained, is properly secured both from external threats as well as the possibility of loss from internal sources.

The use of properly maintained and installed electronic protection systems are a key element in the protection plan. Budgetary and other constraints may vary considerably from one location to another. The following guidelines, typically provided by specialists in museum exhibition security, are generic in terms of scope and application.

1. Access to the exhibit area itself should include the use of solid core doors, sealed or locked building penetrations (such as roof hatches or ventilation hatches), and limited egress from other building areas.
2. Entire exhibition gallery should be protected with a sophisticated early warning fire/smoke detection system.
3. Keys to doors accessing exhibit areas should be restricted issue, with proper documentation.
4. Perimeter doors, windows, and other access portals should be protected by electronic detection devices, to include tamperproof magnetic door contacts, area window glass-break sensors, and dual technology or higher motion detection sensors.
5. The exhibit area should be protected by volumetric motion detection so that persons entering or moving within the exhibit area, after normal operating hours, would be immediately detected.
6. Entry and exit portals should be covered by proper video surveillance cameras.
7. Specific exhibits, usually those with extremely high value or significant historical or curatorial importance should be protected with special electronic devices, to include direct video surveillance, exhibit case protection, and/or specific item protection.
8. All hanging museum collection artwork should utilize security hangers which delay the easy removal of such items from the wall.
9. All exhibit cases utilizing screws to secure Plexiglas covers or frameworks should utilize special security screws, or, alternate the use of straight or Phillips head screws.

10. A daily visual inventory should be conducted at opening and closing of the public area. Uniformed or otherwise identified staff or volunteers should make a walking tour of exhibit areas as often as practically possible to deter theft attempts.

Key Control

The primary park collection storage location is the Museum Collection Storage Building at the MAB Reserve Center. The key to the single door is not on the park's main lock/key system; access to the key(s) is somewhat regulated and controlled.

The issuing, monitoring, and retrieval of keys accessing museum collection spaces is an important aspect of the site's security. Regardless of the level and sophistication of electronic protection, proper control of locked doors to storage vaults may determine the safekeeping of assets as well as the safety of personnel.

Observations and Recommendations from Layne Consultants, Intl. contracted for reports are included here for general consideration. Below is a list of the common concerns one finds when evaluating proper measures of key control:

1. Key cabinets left unsecured, mounted in areas with unrestricted access.
2. Keys in key cabinets identified by tags with location identifiers.
3. Safes left unsecured or unlocked, doors left unlocked or propped open.
4. Key rings left in locks, on desk tops, in unsecured desk drawers.
5. Common key-ways to perimeter doors, interior doors, restricted storage areas.
6. Common keyed padlocks used to secure perimeter gates, interior storage bins.
7. Failure to collect keys at termination of employment.
8. Failure to re-key after keys are lost or not turned in at termination proceedings.
9. Failure to maintain consistent key inventory.
10. Failure to control issue of keys.

Remedies for these common problems tend to be relatively simple and inexpensive when rigorously adhered to. They are necessary for installations of any size or scope.

Key Control Recommendations

1. All facility keys should be stored in a secure key cabinet. The cabinet should be located in a secure room or storage area, with access to that room limited to necessary personnel only. Placement within an alarmed area is recommended.

2. Key tags should identify keys by number or other code only. A complete list of key identifier locations should be kept separately from the key cabinet, in a secure desk or storage vault, with restricted access.
3. All safes/vaults should be locked at all times. Doors with locks, unless restricted by fire code, should be locked. Staff should be instructed to remove door props whenever they are found.
4. Keys found in locks, on desk tops, or elsewhere should be removed by the finder and turned in to a designated supervisor.
5. Persons responsible for maintaining the facility's locking systems should be instructed to utilize separate keyways for each category of secured areas, i.e. perimeter doors, interior general doors, interior restricted access doors, interior storage rooms, etc.
6. Padlocks providing access to perimeter gates and restricted storage areas should have separate keyways from padlocks securing maintenance or tool bins and other areas where key issue is necessary for daily service tasks.
7. Keys must be collected as a part of the final personnel process. Failure to turn in keys should warrant postponement of termination procedures.
8. When keys are lost or not turned in at termination of employment, all locks accessed by those keys should be re-keyed.
9. No less than annually, (semi-annually if possible) all staff should be required to bring in all issued keys for inventory. Compare keys shown with signed key issue form.
10. No keys should be issued without the signature of the receiver, signature of the proper supervisor, and authorizing issue. One source within each facility should be responsible for the issue and retrieval of all keys. Key blanks, key cores, and collected keys should be kept in a secured container, within a secured storage area.

Emergency Preparedness and Safety

Currently, the park has an approved and up-to-date Hurricane Plan in place. Hurricanes are obviously the most likely naturally occurring threat to the park staff and resources. Planning for other types of emergencies has not been formalized into written plans although an Incident Command System is in place which will be activated by the park superintendent when an emergency occurs. This would include earthquakes, which occur on St. John quite frequently. Although most temblors are quite mild, the threat of a major earthquake exists. Other types of potential emergencies include, but are not limited to, oil spills, structural fires, and wildland fires. Both types of fires are currently handled by the St. John Fire Department. Current staff agree that there is an unofficial cooperative arrangement exists between the park and the St. John Fire Department. The Fire Department has two stations, one in Cruz Bay and the other at the east end of the island at Coral Bay. A signed Memorandum of Understanding for Fire Department services in the park is not in place. However, cooperation is described as excellent, in the event of either structural or wildland fire. Wildland fire assistance is also available from the U.S. Forest Service wildland fire team on Puerto Rico and the U.S. Navy. The park has an emergency generator in place to provide emergency backup power for the HVAC systems covering Museum Collection Storage Building (Bally Building) and other facilities at the Biosphere Reserve Center in the event of power loss.

The approved Hurricane Plan involves activation of the park's Incident Command System in the event that storm force winds (35 knots) threaten the park and its environs (St. John and St. Thomas). The system is activated when these conditions are predicted within 120 hours and all available park staff become part of the Incident Command Team and come under the command of the designated Incident Commander. Although the plan narrative does not specifically mention museum collections, an appendix titled "VIIS Incident Command System Major Organizational Elements" identifies several Groups under the Operations Section. One of the groups identified in the plan, known as Group C is charged with Interior Facility Preparedness. A number of employees are listed for each facility, including the Visitor Center, First Floor (including the exhibit area) and the Biosphere Reserve Center (including museum storage in the Bally Building). In a footnote under Group C, the Park Archeologist is instructed to "Transfer to Group B after securing Cinnamon Bay/ Bally Building." No additional or specific information is in the plan regarding special protection efforts required for museum collections. No information is included concerning recovery of museum collections or exhibits in the aftermath of a hurricane. The Incident Commander is charged with providing security staff for facilities that are damaged or without power in the aftermath of a storm.

According to park staff, the following procedures are followed for protection of museum collections when the Incident Command System is invoked upon the approach of a storm. These procedures are understood by current staff, but are not written. The Park Archeologist retrieves archeological objects and archives from the Cinnamon Bay Archeology Lab/Danish Warehouse and brings them to the collection storage (Bally) building at the Biosphere Reserve Center. The collection storage building is then secured as is usual (door locked). The archeological and ethnographic objects on exhibit in the Visitor Center at Cruz Bay are left in place. The exhibit cases are believed by park staff to be water resistant and are located about three feet above floor level. Doors and hurricane shutters are closed and secured. The Visitor Center is served by an emergency power back-up system (generator) that will power the building's security and fire protection systems.

Given the nature of the park's museum collection and the high probability of hurricane-related disasters, this information is not sufficient. A Museum Collections Emergency Operations Plan should be prepared. This plan should include staff responsibilities and should be directly referenced in the park's approved Hurricane Plan. Key staff (including the Park Archeologist) must be provided instruction in this plan and it should be coordinated with Group C (Interior Facility Preparedness) and Group B (Exterior Facility Preparedness) in the park's Incident Command organizational structure. The plan will need to specifically address several areas, as noted below.

- Identify methods to mitigate against disaster-related damage, to the extent possible, for the types of collections in the park.
- Reformat (microfilm) museum records and key resource management records. Place original or reformatted copies in a mainland repository.
- Outline procedures for responding to and recovering from damages resulting from events that cannot be mitigated against.
- Identify collection support materials to stockpile for use during and after disasters. Indicate where such materials are located. The park's hurricane cache is currently located in a tractor trailer in the park maintenance yard. An inventory of materials currently in the cache is available from Walt Keys, the Park Engineer.
- Prioritize museum objects according to their value and importance. Ensure that following a disaster, the most valuable items are given highest priority for treatment.

- Address the availability of secure storage for collection protection following a disaster, if regular storage or exhibit space becomes unusable. If off-site facilities are anticipated, keep pre-disaster agreements for their use current at all times.
- Establish and keep current agreements with emergency response organizations and with nearby NPS units regarding mutual aid in time of disaster.
- Establish agreements for experts to provide assistance and potentially needed facilities (e.g., freezing capability) before a disaster occurs.

Staff Emergency Procedures

It is often advisable to have an emergency 'flipchart' quickly available to each employee, perhaps on their desk to serve as a ready reference if an emergency event materializes.

The following sections provide a summary listing of some of the emergency situations which the Virgin Islands National Park might face during business and visiting hours. The broad topics, supported by specific park details, are intended to assist the individual staff person in understanding what to expect and how to initially respond. The sections can be expanded and printed in flip chart format for ease of accessing pertinent information. The content included under each type of emergency is highly park-specific.

IN CASE OF EMERGENCY CALL EXTENSION: _____.

FIRST AID and MEDICAL EMERGENCIES: When an employee, visitor, student, or volunteer observes a visitor who appears to be ill or injured, do the following: details follow outlining anticipated park situation(s).

POWER OUTAGE: Virgin Islands National Park has an emergency generator which provides emergency lighting. If a power outage occurs certain park facilities are supported by emergency generators. If a prolonged power outage occurs, do the following: park-specific details follow.

WATER DAMAGE: Serious water damage occurs from a number of sources: burst pipes, clogged drains, broken skylights or window, or construction oversights. If a water leak occurs: park-specific details follow.

EXPLOSION: Chemical accidents, leaking gas, damaged or faulty electrical systems, or even motor vehicles could all be the cause of life-endangering explosions. Be prepared for fire or power failure to follow explosions. Park-specific details follow.

FIRE: If a fire occurs in your area: park-specific details follow.

CHEMICAL SPILL: If a chemical fire occurs: park-specific details follow.

TELEPHONE THREAT: It is possible that any staff member might someday receive a threatening telephone call or letter, or might receive a suspicious parcel or discover a suspicious object somewhere on the premises. If you receive a telephone threat: park-specific details follow. If you receive a written threat or suspicious parcel, or if you find a suspicious object anywhere on the premises: park-specific details follow.

EVACUATION: Park specific-details follow.

Recommendations

All fire extinguishers, particularly those associated with museum collection repositories must be inspected annually. Most recent inspection for MAB Reserve Center extinguishers is Nov 2000. Six months

Fully report collection use by researchers (visitor and staff research) on the Annual Collection Management Report. **On-going**

Place keys to museum cabinetry and special tools to access museum exhibit cases in locked key cabinets located in respective collection storage areas. Current key box in Collection Storage Building is unused. **On-going**

Obtain and secure fire and security system as-built drawings and plans, including wiring and device specifications, from current vendors where necessary. Ensure such plans and detailed specifications are provided by future vendors. All such documents must be adequately secured. **On-going**

Complete background checks on all museum collection or curatorial staff, including volunteers, who are granted unsupervised access to collections. **On-going**

A media insert for storage of park's collections backup data is unused in the Museum Collection Storage Building. Place insert in one of the insulated file cabinet drawers. **On-going**

Program for and request Museum Collection Fire and Security surveys. **One year**

Resolve M.O.U. issues with local fire response agency. Prepare an adequate fire plan for the complex which identifies hydrants, exits, fire system control panel locations, and the location of museum collections in storage and/or on exhibit. **One year**

Complete Job Hazard Analysis for pertinent curatorial functions such as handling or use of hazardous substances such as silica gel, used to create microenvironments, and acetone, used when numbering museum objects. **One year**

Program for (one year) and complete Museum Emergency Operations Plan, taking into account the special needs of the park's museum collections as outlined in the NPS Museum Handbook. **Two years**

Ensure the park's museum collection concerns are addressed in all pertinent phases of the park's fire management plan(s), especially areas of the plan addressing topics such as orientation of the fire department to park resources, initial attack techniques, and salvage activities. **Two years**

Upgrade intrusion and fire detection systems at the Museum Collection Storage Building; integrate new system with the overall park's 24/7 monitoring system. **Two to three years**

Install appropriate fire protection systems in museum collection spaces and certain unprotected adjacent spaces within building. **Three to five years**

Program for and complete preparation of a Museum Collections Emergency Operations Plan and an attendant Emergency Service Flip Chart (See "Staff Emergency Procedures" above) Reference this plan in the Park's Hurricane Plan. **Two to three years**

Incorporate staff responsibilities from the Museum Emergency Operations Plan into the park's Incident Command System Organizational Structure. **Two to three years**

Reformat museum records and key resource management records. Place original or reformatted copies in a mainland repository. **Three to five years**

References

The following published sources or internet sites contain useful information for disaster planning.

Written References:

Jones, Barclay G. (ed). *Protecting Historic Architecture and Museum Collections from Natural Disaster*. Butterworths, 1986.

Lord, Allyn, Caroline Reno, and Marie Demeroukas. *Steal This Handbook! A Template for Creating a Museum's Emergency Preparedness Plan*. Southeastern Registrars Association, 1994.

Museum Collections Emergency Operations Plan Workbook. National Park Service, Northeast Museum Services Center, 1998.

O'Connell, Mildred. "Disaster Planning: Writing and Implementing Plans for Collections-Holding Institutions". *Technology and Conservation*, Summer 1983.

Trinkley, Michael. *Hurricane! Making Sure Your Institution Survives the Big One*. SOLINET (Southeastern Library Network), 1993, Atlanta, GA.

Web Sites:

www.disasterlinks.net

VIRGIN ISLANDS COLLECTION MANAGEMENT PLAN APPENDICES

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Appendix A: Project Agreement

Project Agreement

Museum Collection Management Plan

Virgin Islands National Park

May 2003

Approved: signed **"John A King"** **5/6/03**

Superintendent, Virgin Islands National Park

Date

Approved: signed **"J Anthony Paredes"** **4/2/03**

Acting Chief, Cultural Resources, Southeast Regional Office

Date

Concurred: signed **"William W. Schenk"** **4/4/03**

Regional Director, Southeast Region

Date

I. Purpose and Background

Virgin Islands National Park (VIIS) has a museum collection comprised of natural science specimens and archival, historic, and archeological artifacts. The parks' collections are currently reported at approximately 157,000 objects, with about one third of the archeological materials located at the Southeast Archeological Center (SEAC). Given the current national emphasis on natural history research (i.e., vascular plant and vertebrate inventories), archival collection development, documenting park events and general historic research, the natural history, archival, and archeological components of the collection will undoubtedly increase in size and importance.

The park has a fully functioning Automated National Catalog System (ANCS+) database. An approved, though outdated, Scope of Collection Statement (SOCS) is in place. Limited museum management planning or programmatic support has been afforded the park in the past. A collection management plan was last completed for VIIS in 1993 (drafted in 1988). A Collection Condition Survey (CCS) was completed in 2001.

This project will result in the preparation of a museum Collection Management Plan (CMP). A CMP is one of the basic planning documents for parks. As such, it will serve as the first step in providing programmatic museum management support and guidance for VIIS. The CMP provides for a review of a park's museum management program and typically includes both observations of current conditions and recommendations for improving the program.

II. Scope of Work

As part of the completion of a site-specific CMP, an interdisciplinary team of museum professionals will conduct an on-site review. A rough draft of the plan will be presented and available for park use at the end of the site visit.

An interdisciplinary team has been assembled to conduct the on-site review and complete the plan. Team members were selected with expertise appropriate to the nature and anticipated needs of the park's collections, and include:

Allen Bohnert – Chief, Museum Services, Southeast Regional Office (Team/project lead)
Steve Harrison – Chief Resources Management, Cape Hatteras National Seashore (Group)
Kathleen Jenkins – Curator, Natchez National Historical Park
Paul Rogers – Staff Curator/Archivist, Southeast Regional Office
Virginia Salazar-Halfmoon – Regional Curator, Santa Fe Support Office, Intermountain Region
Brigid Sullivan Lopez – Conservator, Cultural Resource Center, Northeast Region
Richard Vernon – Curator, Southeast Archeological Center

Certain topics, identified by the park management and staff, will be given special attention by the team. Additional areas of emphasis will include a thorough evaluation of the park's SOCS, museum record keeping and accountability, fire and security, storage, archives accountability and management, collection preservation, museum planning and programming, museum checklist, collection use/access, resource management interface, and other areas as needed.

Prior to the on-site visit a "Museum, Archives and Library Collections" questionnaire is sent to the park for completion by all park staff members. Responses are also tabulated prior to the site visit and typically provide insight into patterns of use or special areas of staff concern. These help guide the museum CMP team's preparations and focus during initial on-site discussions and reviews.

III. Responsibilities

The Museum Services Program (MSP), SERO Cultural Resources Stewardship Division (SERO-CRS) is responsible for assembling the team to undertake the CMP and to coordinate the overall project. Plan completion is the responsibility of the MSP. Environmental monitoring and other technical equipment needed to document current conditions where museum collections are located will be provided by CSP. Other SERO staff, including Natural Science and Interpretation staff, will provide technical input and comments during the review process to insure that all recommendations are both sound and comply with National Park Service (NPS) policies and/or professional standards. MSP staff will provide oversight of the project schedule and budget.

CMP team members are responsible for completing sections of the final plan, as follows:

Bohnert – Project Lead, Questionnaire Summation, Fire, Security
Harrison – Resource Management (Natural) Museum Collection Management Interface
Jenkins – Museum Record Keeping, ANCS+ database
Rogers – Museum Archival Collections, Current Project Documentation
Salazar-Halfmoon – Museum Collection Planning/Programming, Scope of Collection Statement
Sullivan-Lopez – Collection Preservation (Storage and Exhibits) and Environment
Vernon – Archeological Collection Management, Current Projects, Emergency Preparedness

The VIIS Superintendent and staff will provide onsite assistance to the CMP team during the site visit. Park staff will be responsible for providing access to the park's ANCS+ database, collection storage area(s), all offices and files holding records and documents (potential museum collection archives), museum exhibits, and all planning and program plans or documents. A list of documents typically examined during the CMP process and a discussion of collection management planning is in the NPS Museum Handbook, Part I, Ch. 3 and App. F.

Park staff will prepare a relatively short description of the history and significance of the park's collection for the CMP. This brief history will generally describe the collection content, along with signature collections and historically significant collection-related events.

The VIIS Superintendent and staff will review, comment on, and approve submittals and the final report. The Superintendent and CMP team lead will also be responsible for briefing the Southeast Regional Director, as necessary, at each stage of the process. Implementation of the recommendations put forward in the plan is the responsibility of VIIS.

IV. Funding and Completion Schedule

The project budget consists of \$30,000 from the Museum Collection Preservation and Protection Program (MCP) and CRPP Base funds for FY 2003.

V. Project Schedule

Initial Plan Coordination	October, 2002 - April, 2003	Completed
Site Visit	May 5 - 16, 2003	Scheduled
Present Rough Draft	May 15, 2003	Scheduled
Park Submit Comments	July, 2002	
MSP Submit Final Draft	September 2003	
Park Submit Final Comments	November, 2003	
MSP Present Approved Plan	January, 2004	

VI. Primary Participants

VIIS

Superintendent
Administrative Officer
Chief, Interpretation
Chief, Facility Management
Chief, Resources Management
Chief Ranger
Cultural Resource Manager/Archeologist
IPM Coordinator

CMP Team Members

Allen Bohnert, Chief, Curatorial Services Program, SERO
Steve Harrison, Chief, Resources Management, CAHA
Kathleen Jenkins, Curator, NATC
Paul Rogers, Staff Curator/Archivist, SERO
Virginia Salazar-Halfmoon, Regional Curator, SFSO-IMRO
Brigid Sullivan Lopez, Conservator, NERO
Richard Vernon, Curator, SEAC

VII. Project Implementation and Results

Project participants will complete all work outlined in this Project Agreement (PA) within the established schedule and budget, as updated and amended. Participants warrant the technical adequacy of portions of the product for which they are responsible. SERO-CRS guarantees that all its work will meet established quality standards and the guidelines and objectives defined in the PA. SERO-CRS will help resolve issues related to provided services. Problems arising from SERO-CRS errors or omissions will be corrected in a timely manner, to the full satisfaction of VIIS.

VIII. Project Agreement Amendment Process

The PA, subject to concurrence by all parties, may be amended. Circumstances that may result in an amendment to the agreement include substantial changes in scope, schedule, products, budgets, milestone dates, and key positions. Amendments will be in the form of revisions to the original Project Agreement or changes documented through paper or electronic correspondence, and they will be distributed to all core team members.

Appendix B: Collection Survey Summary Tabulation

(*Museum Collections include archeology, archives, biology, geology, history, & paleontology materials)

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 or Curator to find and communicate that information to you.

1. Do you use the park library? 9 No 8 Yes
If yes, about how many times in the past year? Ave. 18 times

2. Do you use the park collections/archives? 11 No 7 Yes
If yes, about how many times in the past year? Ave. 14 times

3. Do you use non-NPS collections or archives? 14 No 3 Yes 1 ??
If yes, about how many times in the past year? Ave. 53

4. What parts of the collection/archives do you use (check as many as apply):
*= 1 'would like to' response

3	Historic Archives	3*	Administrative Records
6*	Photo Collections	2	Historic Collection
2	Archeological Collection		Ethnological Collection
4	Herbarium	1	Paleontological Collection
2	Insect Collection	1	Geological Collection
1	Mammal Collection	1	Bird Collection
6	Resource Management Records (such as building files, natural resources studies, archeological excavations reports) [including maps]		

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

3	Administrative Research	5	Project Research
	Develop Summer Programs	3	Comparative Studies
	Maintenance/Repair Information	2	Historic Structure Information
5	Publication	7	Information for visitors
4	Exhibit/Programs		
4	Environmental Impact/Remediation Research		
2	Other: examples for lecture or seminar; information for researchers and presentations; biological spec. identification		

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):

- | | | |
|---|--|--------------------------------|
| 8 | Do not know where the collections/archives are located | |
| 6 | Do not know what types of collections are available | |
| 4 | Do not know how to find the collections I need | |
| 2 | Do not know who can get me into the collections | |
| 5 | There is no place to look at/study the collections/archives [convenient space] | |
| | There are no supporting archives (reports, maps, photos) | |
| | The collections do not have the items I need | |
| 6 | The collections are not relevant to my job | |
| 3 | There is no place to work | There is no wet laboratory |
| 5 | The collections are not physically accessible | 1 There is no dry laboratory |
| 5 | The collections are not electronically accessible | 1 There is no preparation area |
| 2 | There is no supporting library | 4 There is no study area |
| | There is no computer printer | There is no copy machine |
| 2 | Collections are not organized | 2 There is no one to let me in |
| 5 | Not open on a regular schedule | The staff is not friendly |
| 2 | There is no one to help me find things | The staff is not helpful |
| 3 | Collections are too far away from where I work. Distance 1 mile | |

Other (please list): 2 said N/A;

no adequate place to put them since we have no museum; collections are locked, collections are not maintained and up to date; other staff access information that I might need to refer to; some of the archives are too lame (biological); some of the archives are in another location & often inconvenient to get to and/or are inaccessible staff from another division present; some archives are too disorganized (interp library, photo, report files)

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 and library collections are managed. Again, your open and honest response to this question would be appreciated.

7. What could the museum collections (including archives) do to be more useful to you:

- 3 Move museum collections (including archives) to a more central location
Suggestions: include cultural items
- 4 Open museum collections (including archives) for different or longer days and hours
Suggestions: need infrastructure and dedicated staff; state what is in the collection and give guided tour
- 13 Provide a listing of what is in the collections (general interest, not comprehensive; for park
- 7 Provide a finding aid to the collections
- 1 Combine museum collections with archives (certain archives are museum collections)
- 2 Combine museum collections with library
- 4 Provide a work area
2 Wet lab 2 Dry lab 1 Other: dissecting microscope
- 3 Provide a computer hook up
2 Printer 1 Copy machine Other:
- 4 Provide on-line services to support research
- 8 Provide professional staff to organize and work on collections (ideal but unfeasible)
- 7 Organize existing collections (somewhat unrealistic)
Organize existing collections in a different manner
- 4 Provide professional staff to assist with access to museum collections
- 5 Provide remote computer access to collections (including archives)
Provide the type of collections I need
- 3 Other (please list): WASO release \$ to properly curate so most parks cannot absorb more necessary costs thus the current state of affairs; provide a museum; need more space to organize, facilitate use & have all collections housed at park; have permanent curatorial staff

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			
A	U	D	Museum collections (including archives) should be used to document park resources.
17	1		
A	U	D	Park museum collections (including archives) are of no value to me in the completion of my job. [Specialists need collections to do NEPA]
1	3	13	
A	U	D	Park museum collections and libraries need professional management and care.
15	1	1	
A	U	D	Park museum collections (including archives) should be consulted prior to beginning resource management projects. [where relevant, scope?]
10	7		
A	U	D	Park museum collections (including archives) should be more available for park staff use.
17	1		
A	U	D	Park museum collections (including archives) are primary resources for the park.
16	2		
A	U	D	The best use for park collections is reference and research.
14	2	1	
A	U	D	Park museum collections (including archives) would be more useable if combined with the library. [No space or infrastructure]
7	5	6	
A	U	D	There is not enough emphasis on natural materials in park collections.
5	11	3	
A	U	D	Parks should not be expending staff, time and funding on museum collections.
	3	15	
A	U	D	Park archives should contain copies of all studies and reports done about the park.
18			
A	U	D	There is not enough emphasis on cultural material in park collections.
6	8	4	
A	U	D	There is no value in parks maintaining park museum collections or archives.
2		16	
A	U	D	Park collections (including archives) serve as the "institutional memory" of the park.
17	1		
A	U	D	Park Visitor Centers should exhibit more material from the park collections. [Gen. or VIIS?]
15	2		
A	U	D	Funds spent on museum collections (including archives) would be better spent on preservation of other park resources. [Ambiguous funding often limited factor in both, obviously]
	7	9	

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: Ave. 13.6 years

Number of years at current park: Ave. 7.4 years

Number of park units you have served in: Ave. 2 units [11 at 1 unit]

Current position (optional): Administration, interpretation, maintenance, resource management, visitor protection and law enforcement -

Number of years in current position: Ave. 6.1 years

Are you currently:

17 Permanent staff, or

1 Term/Seasonal/Temporary staff

Please estimate the time you spent responding to this survey: Ave. 12 minutes

Thank you for taking the time to complete this survey. Your responses will provide important information to the team assisting the park in its effort to plan for future museum collection management, along with non-museum archives and library collections, use and storage.

Please return the completed survey to Ken Wild by May 1, 2003 - - -

or, electronic copy to:

allen_bohnert@nps.gov by April 30th

Allen Bohnert, VIIS CMP Coordinator
Museum Services Program
National Park Service
100 Alabama St, SW
Atlanta, GA 30303

Appendix C: Checklist for Evaluating Scope of Collection Statements

Unit's Name: Virgin Island National Park

Draft _____ Approved X

Date: 9/25/85

Reviewed by: R. B. Jones Supervisory Park Interpreter
Name Title

Date: 9/25/85

	<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>Note*</u>
A. Does the SOCS have TITLE PAGE?				
1. Is Title Page format correct?	_____	<u>X</u>	_____	_____
2. Does Title Page include all required signatures and dates?	_____	<u>X</u>	_____	_____
B. Does the SOCS have INTRODUCTION section?	<u>X</u>	_____	_____	_____
1. Is purpose of SOCS stated?	_____	<u>X</u>	_____	_____
2. Are NPS legal authorities (laws) to acquire and preserve museum objects cited?	<u>X</u>	_____	_____	_____
3. a. Is unit's mission stated?	_____	<u>X</u>	_____	_____
b. Is unit's enabling legislation cited?	<u>X</u>	_____	_____	_____
c. If applicable, is subsequent legislation cited?	<u>X</u>	_____	_____	_____
4. If applicable, is there a statement indicating that a museum collection is mandated by the unit's enabling or subsequent legislation?	_____	_____	<u>X</u>	_____
5. Unit's Interpretive Themes:				
a. Are interpretive themes listed?	_____	<u>X</u>	_____	_____
b. Are interpretive periods listed?	<u>X</u>	_____	_____	_____
c. If available, are appropriate planning documents (title/date) cited?	_____	<u>X</u>	_____	_____
6. Unit's Resource Management Goals and Objectives:				
a. Are pertinent cultural and natural resource management goals and objectives listed?	_____	<u>X</u>	_____	_____
b. If available, are appropriate planning documents (title/date) cited?	_____	<u>X</u>	_____	_____
7. Mandated Collections:				
a. Is statement, citing 43 CFR 7.13 and NPS <i>Management Policies</i> (2001), made that archeological collections are managed as part of the unit's museum collection?	_____	<u>X</u>	_____	_____
b. Is there a statement citing permit conditions and curatorial requirements pertaining to 36 CFR 2.5g?	_____	<u>X</u>	_____	_____
8. Is there a discussion of the significance and history of the collection?	_____	<u>X</u>	_____	_____
9. Are other laws, regulations, conventions, and special directives relevant to acquisition of museum objects cited?	_____	<u>X</u>	_____	_____
10. If applicable, are any special unit designations (e.g., MAB Reserve, National Historic Landmark, World Heritage Site) that may be pertinent to museum collection cited?	<u>X</u>	_____	_____	_____

*See additional notes pertaining to this question on attached pages.

C.	Does the SOCS have TYPES OF COLLECTIONS section?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
1.	Is there a brief profile of the unit's museum collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
2.	Is there an introductory statement indicating that the INTRODUCTION section states the purpose of collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
3.	Is section divided into two major categories: Natural History Collection and Cultural Collection?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
4.	Natural History Collection Category:				
	a. If appropriate, is there a statement that the unit does not collect/maintain a natural history collection for its own purposes?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
	b. If unit collects/maintains a natural history collection is there an introductory paragraph that briefly outlines the purpose of this collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	c. Is major category subdivided into disciplines (Biology, Geology, Paleontology) pertinent to unit?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	d. Is each discipline subdivided into collecting categories that reflect unit's purpose for collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	e. If appropriate, under each collecting category:				
	1) Is current representation of object types described?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	2) Are priorities established to fill identified deficiencies (gaps) in existing collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	3) Are limits (quantities) defined?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	f. Is there a collecting category for "associated records," under each discipline?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
	g. Does paleontology discipline include a statement relevant to uncontrolled surface collecting?	<u> </u>	<u> </u>	<u>X</u>	<u> </u>
5.	Cultural Collection Category:				
	a. Does introductory paragraph include a statement that describes the purpose of this collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	b. Does introductory paragraph state that an object or archival and manuscript collection from site or directly associated to person(s) or event(s) commemorated by the unit is more desirable than a similar object without such primary association?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	c. Is major category subdivided into disciplines pertinent to the unit (Archeology, Ethnology, History, Archives)?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	d. Is each discipline subdivided into collecting categories that reflect the unit's purpose for collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	e. If appropriate, under each collecting category:				
	1) Is current representation of object or archival types described?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	2) Are priorities established to fill identified deficiencies (gaps) in existing collection?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	3) Are limits (quantities) defined?	<u> </u>	<u>X</u>	<u> </u>	<u> </u>
	f. Does archeology discipline include collecting categories for "artifacts and specimens" and "associated records?"	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
	g. Does archeology discipline include a statement relevant to uncontrolled surface collecting?	<u>X</u>	<u> </u>	<u> </u>	<u> </u>
D.	Does the SOCS have MUSEUM COLLECTIONS SUBJECT TO THE NATIVE AMERICAN GRAVES PROTECTION & REPATRIATION ACT OF 1990 section?	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
1.	Does section contain appropriate statement regarding the required summary of unassociated funerary objects, sacred objects, and objects of cultural patrimony?	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
2.	Does section contain appropriate statement regarding the required inventory of human remains and associated funerary objects?	<u> </u>	<u> </u>	<u> </u>	<u>X</u>

E.	Does the SOCS have ACQUISITION section?	<u>X</u>	___	___	___
1.	Is there a statement describing types of potential acquisition sources?	<u>X</u>	___	___	___
2.	Does section include statement that acquisition of objects is governed by the unit's capability to preserve its museum collection in accordance with NPS <i>Management Policies</i> (2001), DO #28, and the NPS <i>Museum Handbook</i> , Part I?	<u>X</u>	<u>X</u>	___	___
3.	Is there a statement that discourages gifts with restrictions or limiting conditions?	<u>X</u>	___	___	___
4.	Does section state that acquisition of firearms included on the Bureau of Alcohol, Tobacco, and Firearms (ATF) list of prohibited and restricted weapons requires concurrent review prior to acceptance by regional/SO curator and regional/SO law enforcement specialist?	___	<u>X</u>	___	___
5.	Does section state that museum objects must be acquired, accessioned, and cataloged in accordance with NPS <i>Museum Handbook</i> , Part II?	<u>X</u>	___	___	___
6.	Is there a statement regarding delegation of authority to the unit's superintendent to accept title to and responsibility for museum collections?	<u>X</u>	___	___	___
7.	Does this section outline any park- specific acquisition procedures that supplement NPS policies?	___	<u>X</u>	___	___
F.	Does the SOCS have USES OF COLLECTIONS section?	<u>X</u>	___	___	___
1.	Is there a description of desired and acceptable uses?	<u>X</u>	___	___	___
2.	Is there a statement regarding conservation as a primary consideration when determining uses?	<u>X</u>	___	___	___
3.	In accordance with the NPS <i>Management Policies</i> (2001), Chapter 7, does section state that unit shall not place skeletal or mummified human remains, grave goods or other objects considered sacred on display?	___	<u>X</u>	___	___
4.	Is there a statement regarding access to museum collection?	___	<u>X</u>	___	___
5.	Does section reference DO- 24, DO- 28, and DO- 6 relevant to potentially consumptive uses of museum objects?	___	<u>X</u>	___	___
6.	Does section reference DO- 24, DO- 28, and <i>Cultural Resource Management Guideline</i> relevant to research/destructive analysis of museum objects?	___	<u>X</u>	___	___
G.	Does the SOCS have RESTRICTIONS section?	<u>X</u>	___	___	___
1.	Does section include a statement regarding consultation with tribal governments, Native Hawaiian organizations, Alaskan Native Corporations, and traditional religious leaders?	___	<u>X</u>	___	___
2.	Does section state NPS policy relevant to disclosure of information on location, nature, and character of cultural resources?	___	<u>X</u>	___	___
3.	Does section state NPS policy relevant to keeping confidential identities of community consultants and information about sacred and other culturally sensitive places and practices?	___	<u>X</u>	___	___
4.	Is there a statement regarding use of objects subject to copyright?	___	<u>X</u>	___	___
5.	If appropriate, is there a statement relevant to the collecting of endangered, threatened, or rare species?	___	<u>X</u>	___	___
6.	Is there a statement concerning the disposition of type specimens?	___	<u>X</u>	___	___
7.	Does section identify any legal restrictions on disposition or uses of the unit's museum collection?	___	<u>X</u>	___	___

- H. Does the SOCS have a MANAGEMENT ACTIONS section? ☒ ☐ ☐ ☐
1. Are there statements that require the following:
- a. Periodic review of SOCS? ☒ ☐ ☐ ☐
- b. SOCS remains supportive of and consistent with unit's mission? ☒ ☐ ☐ ☐
- c. Unit superintendent's approval of any revisions to SOCS? ☒ ☐ ☐ ☐
2. Does section document existence of or need for a Collection Management Plan? ☒ ☐ ☐ ☐
3. If any collections are located outside the unit's boundaries, is a brief description of each collection and name and location of each repository identified? ☐ ☒ ☐ ☐

I. Comments/Recommendations (If needed, attach additional pages.):

- ☐ See attached copy of unit's approved or draft Scope of Collection Statement for editorial comments.
- ☐ Revise the SOCS to correct the deficiencies noted on this checklist. See NPS *Museum Handbook*, Part I, (MH- I) Chapter 2, Scope of Museum Collections (2003), Section D, for guidance on writing a Scope of Collection Statement. You can also consult the sample Scope of Collection Statement in MH- I, Appendix E, Scope of Collection Statement (2003) for additional assistance.
- ☐ See additional notes on attached pages.

Appendix D: Summary of Laws and Regulations for the Management of Natural History Collection in the National Park Service

The following is a synopsis of current regulations, policies and guidelines for the accountability and preservation of natural history collections in the national park system. This synopsis is not exhaustive. It was originally prepared to assist the network coordinator when preparing contracts and cooperative agreements to accomplish the inventories. It was also intended to assist parks in the Inventory & Monitoring program in issuing collecting permits for inventories and later documenting the collections.

NPS Management Policies (2001)

4.2.1 NPS-conducted or -sponsored Inventory, Monitoring, and Research Studies

Superintendents may authorize National Park Service staff to carry out routine inventory, monitoring, study, and related duties without requiring an NPS scientific research and collecting permit. With or without an NPS permit, Service staff will comply appropriately with professional standards and with general and park-specific research and collecting permit conditions. All research and data and specimen collection conducted by NPS employees will be appropriately documented and carried out in accordance with all laws, regulations, policies, and professional standards pertaining to survey, inventory, monitoring, and research.

4.2.3 Natural Resource Collections

Natural resource collections include non-living and living specimens. Guidance for collecting and managing specimens and associated field records can be found in the Code of Federal Regulations (36 CFR 2.5) and NPS guidance documents, including the museum handbook. Non-living specimens and their associated field records are managed as museum collections. Living collections will be managed in accordance with the provisions of a park's management plan, the Animal Welfare Act, and other appropriate requirements. Field data, objects, specimens, and features obtained for preservation during inventory, monitoring, research, and study projects, together with associated records and reports, will be managed over the long term within the museum collection. Specimens that are not authorized for consumptive analysis will be labeled and cataloged into an appropriate cataloging system in accordance with applicable regulations (36 CFR 2.5).

(See Paleontological Resources and Their Contexts 4.8.2.1; Collecting Natural Products 8.8; Consumptive Uses 8.9; Natural and Cultural Studies, Research, and Collection Activities 8.10; Social Science Studies 8.11. Also see Director's Order #24: Museum Management)

Code of Federal Regulations

Title 36--PARKS, FORESTS, AND PUBLIC PROPERTY

[Revised as of July 1, 2000]

Sec. 2.5 Research specimens.

(a) Taking plants, fish, wildlife, rocks or minerals except in accordance with other regulations of this chapter or pursuant to the terms and conditions of a specimen collection permit, is prohibited.

(b) A specimen collection permit may be issued only to an official representative of a reputable scientific or educational institution or a State or Federal agency for the purpose of research, baseline inventories, monitoring, impact analysis, group study, or museum display when the superintendent determines that the collection is necessary to the stated scientific or resource management goals of the institution or agency and that all applicable Federal and State permits have been acquired, and that the intended use of the specimens and their final disposal is in accordance with applicable law and Federal administrative policies. A permit shall not be issued if removal of the specimen would result in damage to other natural or cultural resources, affect adversely environmental or scenic values, or if the specimen is readily available outside of the park area.

(c) A permit to take an endangered or threatened species listed pursuant to the Endangered Species Act, or similarly identified by the States, shall not be issued unless the species cannot be obtained outside of the park area and the primary purpose of the collection is to enhance the protection or management of the species.

(d) In park areas where the enabling legislation authorizes the killing of wildlife, a permit which authorizes the killing of plants, fish or wildlife may be issued only when the superintendent approves a written research proposal and determines that the collection will benefit science or has the potential for improving the management and protection of park resources.

(e) In park areas where enabling legislation does not expressly prohibit the killing of wildlife, a permit authorizing the killing of plants, fish or wildlife may be issued only when the superintendent approves a written research proposal and determines that the collection will not result in the derogation of the values or purposes for which the park area was established and has the potential for conserving and perpetuating the species subject to collection.

(f) In park areas where the enabling legislation prohibits the killing of wildlife, issuance of a collecting permit for wildlife or fish or plants, is prohibited.

(g) Specimen collection permits shall contain the following conditions:

(1) Specimens placed in displays or collections will bear official National Park Service museum labels and their catalog numbers will be registered in the National Park Service National Catalog.

(2) Specimens and data derived from consumed specimens will be made available to the public and reports and publications resulting from a research specimen collection permit shall be filed with the superintendent.

(h) Violation of the terms and conditions of a permit issued in accordance with this section is prohibited and may result in the suspension or revocation of the permit.

NPS-77: Natural Resources Management Guideline

Chapter 5, Program Administration and Management (Collections, page 57)

Natural resource specimens preserved and maintained in park museum collections play an important role in the NPS mission to preserve and protect the natural resources within each park. Natural resource collections document park resources for the purposes of information, resource protection and management, and future analysis. Systematically collected specimens are the products and subjects of vital research that provide baseline data necessary for continued and effective park

management. Museum specimens collected in the past may provide information that is otherwise unobtainable.

The NPS museum program objectives include the commitment to collect, document, and preserve objects, specimens, samples, and associated records. A critical element in the preservation of permanently retained natural resource collections is ensuring that early and continuing consideration of curatorial concerns is an integral part of the park's scientific research planning process. Many park research projects produce specimens that may have inherent long-term preservation value. The responsibility for the curation of such specimens and associated data must be determined by a park's scientific and curatorial staff prior to starting a research project and be written into the conditions of each research proposal, cooperative agreement, contract, or collecting permit. Planning includes determining provisions for field documentation and preparation of specimens, identifying the recipient NPS or non-NPS repository for the specimens, and ensuring that each project funds the cataloging and initial preservation and storage costs.

The value of a natural resource museum collection is in its use or potential use. Some categories of functional unity and utility are: general reference collections, voucher collections, research collections, and exhibit collections.

Chapter 5, Program Administration and Management (Project Documentation, page 53). Data, records, reports, and other related information generated as a result of research activities conducted within a park or on museum specimens collected in a park. Natural resource archives may contain field notes, daily journals, maps, drawings, photos and negatives, slides, videotapes, raw data sheets, remote sensing data, copies of contracts, correspondence, repository agreements, specialists' reports and analyses, reports and manuscripts, collection inventories, field catalogs, analytical study data, sound recordings, computer documentation and data, tabulations and lists, specimen preparation records, conservation treatment records, and reports on all scientific samples lost through destructive analysis.

Museum Handbook, Part I: Museum Collections

Chapter 1, National Park Service Museums and Collections (Section C.2, Natural History Collections)

Extensive and precise documentation of specimens must be maintained to ensure that information gleaned from specimens is available and useful. For this reason, field records (e.g., field notebooks, photographs, negatives, drawings, maps, raw data sheets, instrument charts, remote sensing materials) should be maintained as integral parts of the collection.

Museum Handbook, Part II: Museum Records

Chapter 2: Accessioning and Chapter 3: Cataloging

Documentation is a continuous process that starts when a specimen is first collected and includes field notes, field cataloging, mapping, photographing, conservation treatment and subsequent annotations, and other information gathered about a specific specimen.

Director's Order 24, NPS Museum Collections Management

Section 4.3.16, Project-generated Collections

Require project budgets to include funding for the basic management of collections that are project-generated. Collections management includes cataloging; labeling; conservation examination and treatment (including specimen preparation); initial storage of objects and specimens; and organization and storage of project documentation, including appraisal, arrangement, description, finding aid production, and appropriate archival housing.

Before starting, permitting, or contracting a project, specify in writing in the task directive, proposal, agreement, permit, or contract, the parties responsible, the designated NPS or non-NPS repository, the collections management tasks, and a time schedule for completion.

Fund subsequent ongoing maintenance costs of collections management from the operating base of the responsible park, center, or other repository.

If project-generated collections cannot be accommodated in available storage space, and new storage space construction is necessary, program to construct new space to accommodate the expanded collection. If interim storage is needed, specify in the project task directive the location of that storage, and state that it must meet NPS standards. Identify the funding source for interim storage.

4.3.17 Systematic Collections

Add collections made through systematic research to the museum collection. House those associated with a single accession at the same repository to facilitate research and use. As appropriate, lend these collections for exhibit, research, conservation, and other approved uses. Superintendents may authorize housing of collections from the same accession at different repositories if by so doing preservation, research, and use will be improved.

Note: Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision Making, its attendant Handbook, and draft Director's Order #88, Administrative Records, direct the creation of administrative records and project files for all compliance actions. These files are permanent and so to be retained in perpetuity, as per DO-19. These files should then be linked to the collecting permit project file, the creation of which is outlined in the RPRS Guide "Administrative Guide for Park Research Coordinators" (see below).

Director's Order #19: Records Management

4. General Records Management Requirements

4.4 Records and data that are collected, created or generated by other organizations working for the NPS under contracts, interagency agreements, cooperative agreements or other agreement instruments with the NPS, are considered NPS records unless the contract or agreement specifically states otherwise. All partnership agreements, contracts or other agreement instruments should clearly state this. Copies or originals of all project documents and data generated under these agreements should be obtained and retained by the NPS office managing the project.

4.5 Contracts, interagency agreements, and cooperative agreements and similar agreement instruments should address copyright issues of any material produced under the agreement. Copyright is not necessarily vested with the NPS unless specifically obtained under the terms of the contract or other agreement.

5. Mission Critical Records

5.1 Mission critical records are those records that are most necessary for fulfillment of the NPS mission. Mission critical records are permanent records that will eventually become archival records.

They should receive the highest priority in records management activities and resources and should receive archival care as soon as practical in the life of the record.

5.2 Mission critical records include:

All records of natural and cultural resources and their management that contain information that affects the future management of the resource. General management plans and other major planning documents that record basic management philosophies and policies, or that direct park management and activities for long periods of time. All land records regarding legal title, rights, and usage of NPS lands. Any records that directly support the specific legislated mission of a park unit in addition to, or distinct from, the overall NPS mission.

Director's Order 74, Studies and Collecting

(in draft as of June 2001)

Administrative Guide for Park Research Coordinators

SCIENTIFIC RESEARCH AND COLLECTING PERMIT

This guidance is provided to assist parks in administering Scientific Research and Collecting Permits in National Parks (36 CFR 2.5). The permit process uses the following documents:

Application for a Scientific Research and Collecting Permit
Scientific Research and Collecting Permit
Application Procedures and Requirements for Scientific Research and Collecting Permits
Guidelines to Researchers for Study Proposals
General Conditions
Investigator's Annual Report
Cover Sheet

2. Once the completed application form and research proposal are received, park staff should:
e. Assess proposed research for potential impact under NEPA guidelines before a permit is issued. A determination must be made that the proposed project is categorically excluded or that, as a result of conducting an appropriate level of environmental assessment, it may proceed within the framework of any park-specific conditions that may be required.

3. If a permit is approved:

g. In a single folder for each study number, hardcopies of the final application and permit package (including all signed forms) will be filed in a secure location. All relevant information, including permit and application forms, study proposals, peer-reviews, correspondences, or related information including notes, photos, maps, and field data, are placed in the file. These records are considered resource management files and are maintained for long-term use. The park may desire to use laser jet printing on acid-free paper and folders to assist with their preservation. Final disposition within five years of inactivation should include incorporation of the files in the park's museum collection as permanent archives. All copies of field notes, data, reports, and other records associated with the study that are submitted to NPS pursuant to a permit must be accessioned and cataloged.

4. If the permit is not approved:

a. A letter of explanation must be sent to the applicant explaining the grounds for disapproval. Phone or verbal discussions may also take place, but do not replace the need for a written response. The correspondence should clearly state what elements of the proposal are unacceptable. If modifications could make the proposal acceptable, the park may state them at this time. If the permit is to be denied based upon a lack of researcher qualifications or institutional affiliations, copies of written consultation on this issue with qualified scientists or resource specialists should be obtained for the records.

b. A copy of the correspondence and application should be placed in a file identified by Principal Investigator's name and year of application. Rejected application files should be maintained with the study number files in a secure location (See Step 4.g above). If the application pertains to a project that was previously approved and received a prior study number, an additional copy of the rejected application and associated correspondence is also placed in the study number file.

Prepared by
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Cape Hatteras National Seashore
Drafted May 2001
Updated April 4, 2003

Appendix E Suggested Museum Procedures for Park Management of Natural History Collections

The park should integrate the issuance of research and collecting permits with the museum management program. Even if the issued permit does not authorize the collecting of specimens, there should still be field data and a report that will be obtained from the researcher at the conclusion of their work and be added to the park archival collection. Disposition of project documentation and collected objects/specimens should be carefully considered in the conditions of each permit. The following procedures outline the steps to follow to integrate the permitting process with the museum management program.

1. Park accessions the project when the collecting permit is issued. Accession as a “field collection”. Even if no specimens will be collected, there will be field records that should become an archival collection within the museum collection. For guidance on accessioning procedures, refer to the NPS Museum Handbook, Part II, Chapter 2.
2. The collecting permit states whether or not specimens will be collected. If collected, it states whether or not they will be consumptively used or saved. If saved, why they will be saved, how they will be preserved, and where they will be stored.
3. Determine responsibility for cataloging collections prior to issuing the permit. If the permit authorizes the collection of specimens, the permittee must contact the park before any field work or collecting begins to discuss NPS and park-specific cataloging requirements. If the investigator will be cataloging, the park must provide the collector with a copy of ANCS+ (software and instructions).
4. The collecting permit or contract should identify records to be created as part of the collecting activity and specify the disposition of the field records. Records include investigator field notes, maps, slides, photographs, charts/graphs, and data (including GIS data and associated metadata). Ideally, original records should be obtained by the park and made a permanent part of the museum collection. If original records are not available, high quality “archival” quality copies should be obtained.
5. During collection it is essential to gather complete information required for cataloging specimens. A museum catalog worksheet (Form 10-254 B) could be used during field work for documenting pertinent data on-site, thus assuring that the collector has recorded all pertinent data. This will also make later data entry in ANCS+ easier and quicker.
6. The preservation of natural resource specimens begins with field collecting techniques. Collecting biological specimens involves several steps that include techniques for killing, fixing, mounting, and preserving. The methods for preserving specimens depend on the intended use and should be spelled out in the permit conditions. It is essential for the collector to provide park curatorial staff with documentation on the techniques and materials used in the field collecting activity. Future maintenance of the specimens may depend on this information.
7. Park prepares an outgoing loan for the collection records and specimens during the processing by the collector.
8. Park assigns catalog numbers for collections (data and specimens). Catalog numbers should be recorded in the park’s catalog number log book.

9. Specimens are labeled with NPS labels. NPS labels may be generated from ANCS+ once data has been entered. [36 CFR 2.5(g)1] (For guidance on specific NPS labeling procedures for NH specimens, refer to the NPS Museum Handbook, Part II, Appendix J, Section K. Instructions for printing labels using ANCS+ are Chapter 5 of the ANCS+ User Manual.)

10. Catalog data for the records and specimens is entered into ANCS+ thereby making the information available for future accountability, inventory, and research purposes. (Museum Handbook, Part II, Chapter 3, Cataloging, Section F, Natural History Catalog Data Fields, and, Appendix H, Natural History.)

11. Collector provides the park with associated records and specimens if they are to be deposited in the park.

12. If the collector catalogs the associated records and specimens, the park appends ANCS+ data to their existing database.

13. If collections are returned to the park following initial cataloging and preservation, the outgoing loan made to the collector is canceled.

14. If the collections are stored off-site, the park determines that the records and specimens are stored according to museum standards to ensure their preservation and protection. A new outgoing loan may be necessary.

Prepared by
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Cape Hatteras National Seashore
Drafted May 2001
Updated May 12, 2003

Appendix F

Virgin Islands National Park Project File Checklist

VIIS National Park
Planning and Professional Services

PROJECT FILE INDEX

Date:

Project Name: _____

Project Number: _____

PROJECT MANAGEMENT

- ☐ CURRENT WORK
 - ☐ Correspondence
 - ☐ Meeting Notes
 - ☐ Schedules
 - ☐ Budgets & Cost Estimates
 - ☐ Task Orders & Consultant Contracts
 - ☐ Compliance & Approvals
 - ☐ Documentation & Photographs
 - ☐ Other
- ☐ EXISTING INFORMATION
 - ☐ Planning Documents
 - ☐ Historical Research
 - ☐ Infrastructure Info/Evaluations
 - ☐ Site Info/Evaluations
 - ☐ Building Info/Evaluations
 - ☐ Market Research & Financial Analysis
 - ☐ Agreements & Lease Documents
 - ☐ Other
- ☐ RESEARCH & WRITING
 - ☐ Research Materials
 - ☐ Graphics
 - ☐ Preliminary Drafts & Comments
 - ☐ Final Draft & Comments
 - ☐ Other
- ☐ PLANNING
 - ☐ C.O.R. FILES Established by COR on project-by-project basis
 - ☐ Scoping
 - ☐ Data Collection
 - ☐ Public Review & Comments
 - ☐ Draft Plan
- ☐ Final Plan/Staff Report/FONSI
- ☐ Alternatives Form/Design Review
- ☐ Other
- ☐ DESIGN
 - ☐ Schematic Design & Review Comments
 - ☐ Design Development & Review Comments
 - ☐ Materials Research (break out if needed)
 - ☐ Outline Specifications
 - ☐ Specifications (break out by CSI format)
 - ☐ Other
- ☐ BIDDING & CONSTRUCTION
 - ☐ Bids & Revised Cost Estimates
 - ☐ Submittals (break out by CSI format)
 - ☐ Inspection Records, Photos & Reports
 - ☐ Change Orders
 - ☐ Operating Manuals, Warranties
 - ☐ Construction Close-out
 - ☐ Post Occupancy Inspections
 - ☐ Other

Cultural Resource Project Documentation Submissions
Check Lists
Director's Order 28

Chapter 3: Research – Report – Standards (p. 21)

- ☐ Object collections, field notes, sketches, plans, maps, photographs, computerized databases, interview tapes, and transcripts are properly curated and maintained as part of the park's museum collection and its information base, with confidentiality ensured when appropriate.

Section 106 Compliance (p. 60)

- ☐ Documentation of no-effect findings and evidence of consultation with SHPO's must be retained in park files

Archeology (p. 86)

- ☐ Artifacts
- ☐ All associated paper records

Cultural Landscapes (p. 111)

- ☐ All associated records
- ☐ Maps
- ☐ Field notes
- ☐ Photographs
- ☐ Soil or pollen analyses
- ☐ Construction files
- ☐ Cultural Landscape Report
- ☐ Reports
- ☐ Publications
- ☐ Record of Treatment (copy; including all specifications, plans, work procedures)

Historic Structures (p. 136)

- ☐ Material (structure) samples
- ☐ Field notes
- ☐ Photographs
- ☐ Construction Files (including all plans and specification)
- ☐ Reports
- ☐ Publications

Ethnographic Resources (p. 165)

- ☐ (Summaries of) Field notes
- ☐ Oral history tapes
- ☐ Transcripts
- ☐ Videotapes
- ☐ Photographs
- ☐ Draft report
- ☐ Final report
- ☐ Publications

**National Resource Project Documentation and Research Activities Materials for Placement in
Museum Collection Check List:**

NPS-77

Natural Resources Management Guideline

- ☐ Field notes
- ☐ Daily journals
- ☐ Maps
- ☐ Drawings
- ☐ Photographs, negatives, slides
- ☐ Videotapes
- ☐ Raw data sheets
- ☐ Remote sensing data
- ☐ Copies of contracts
- ☐ Correspondence
- ☐ Repository agreements
- ☐ Specialists' reports and analyses
- ☐ Reports and manuscripts
- ☐ Collection inventories
- ☐ Field catalogs
- ☐ Analytical study data
- ☐ Sound recordings
- ☐ Computer documentation and data
- ☐ Tabulations and lists
- ☐ Specimen preparation records
- ☐ Conservation treatment records
- ☐ Reports on all scientific samples lost through destructive analysis

Appendix G: VIIS Catalog Number Log

An asterisk (*) indicates records submitted to the National Catalog.

"N" or "C" designates records found for Cultural Resource or Natural History objects in the park database.

VIIS Catalog Number			VIIS Accession Number	SEAC Accession Number	Description	Comments
I	N	*	9		Rock collection from Virgin Gorda & St. John	Draft record
2-15	N	*	9		"	4, 7, 12 lost
16	C	*	1		Axe head	
17-29	N	*	10		Shell & coral collection from St. John	Lost
30	C	*	2		Danish handcuffs	
31	C	*	3		Rum tester	
32	C	*	4		Coffee pot	
33	C	*	11		Cannonball	
34	C	*	12		Donkey yoke	
35	C	*	13		Door hinge	
36	C	*	14		Cannonball	
37	C	*	5		Cannonball	
38	C	*	15		Caulking hammer	
39	C	*	6		Lignum vitae mortar	Incoming Loan
40	C	*	7		Anchor	Deaccessioned
41	C	*	16		Lock	
42	C	*	8		Emancipation proclamation	Lost
43	C	*	17		Lignum vitae boundary post	Lost
44	C	*	18		Door hinge	
45	C	*	19		Potsherds from Turtle Bay area	Deaccessioned
46	C	*	20		Potsherds from Cinnamon Bay	Deaccessioned
47-55	N	*	21		Shell collection from St. John	
56-72			21		"	
73-74	C	*	22		Hoe blade & spigot	
75-86	N	*	23		Rock collection from St. John & St. Thomas	
87-436			24		John Randall fish collection	Florida Museum of Natural History
437	N	*	24		"	"
438			24		"	"
439	N	*	24		"	"
440-443			24		"	"
444-446	N	*	24		"	"

447-448			24		"	"
449-453	N	*	24		"	"
454			24		"	"
455-468	N	*	24		"	"
469			24		"	"
470-474	N	*	24		"	"
475			24		"	"
476-478	N	*	24		"	"
479-480			24		"	"
481-482	N	*	24		"	"
483			24		"	"
484-495	N	*	24		"	"
496			24		"	"
497	N	*	24		"	"
498			24		"	"
499-501	N	*	24		"	"
502-506			24		"	"
507-513	N	*	24		"	"
514			24		"	"
515	N	*	24		"	"
516-950			24		"	"
951-962	N	*	25		Rock collection from St. John & Great St. James	
963-969	N	*	26		Rock collection from St. John & St. Thomas	
970-988	N	*	27		Rock collection from St. John	
989-1101			28		Plant specimens from St. John	
1102-1103			29		Jasper from St. John and Great St. James	
1104-1272			30		Plant specimens from St. John	
1273-1276	C	*	31	289	Shell, stone, potsherd artifacts	Incoming loan
1277			31	289	"	
1278-1295	C	*	31	289	"	
1296						
1297-1301	C	*	31	289	"	
1302-1308	C	*	32	289	Stone, shell, potsherds from Cinnamon Bay	
1309			32	289	"	
1310-1311	C	*	32	289	"	
1312			32	289	"	
1313	C	*	32	289	"	
1314			32	289	"	
1315	C	*	32	289	"	
1316			32	289	"	
1317-1319	C	*	32	289	"	
1320			32	289	"	
1321	C	*	32	289	"	

1322-1406			32	289	"	
1407			33		Bowl & handle from Cinnamon Bay	
1408-1412			34	156	Potsherds from Cinnamon Bay	Reserved by SEAC
1413-1475			38		Gastropod & Pelecypod shells from St. John	
1476	N	*	39		Typhlops Richard snake	
1477	N	*	40		Dromicus exiguus snake	
1478	N	*	41		Amphisbaena fenestrata legless lizard	
1479			42		Amphisbaena fenestrata legless lizard	
1480-1481	N	*	43		Sphaerodactylos macrolepis lizards	
1482	N	*	44		Dromicus exiguus snake	
1483-1484			45		Epicrates inornatus granti snakes	
1485-1488	N	*	46		Ampnisbaena fenestrata, Leptodactylus albilabris	
1489	N	*	47		Lizards & frogs from St. John	
1490			47		"	
1491-1492	N	*	47		"	
1493-1494			47		"	
1495-1506	N	*	48		Chelonia myadas hatchlings from Costa Rica; lizards & frogs from St. John & St. Thomas	
1507-1510	N	*	49		Rock specimens from St. John	
1511	N	*	50		John Randall fish collection	
1512-1513	C	*	51		Potsherd, celt, stone implement	
1514					"	
1515	C	*	52		Potsherd	
1516-1518	N	*	53		Quarts	
1519-1520			54		Effigy face, pottery, stone fragments from Trunk Bay & Cinnamon Bay	
1521	C	*	55		Candle reflector	Incoming Loan
1522	C	*	56		Hoe head	
1523	C	*	57		Flat iron	
1524-1526						
1527	C	*	57		Swivel cannon	Accession book has this # assigned to VIIS-62
1528			63		Cannon	
1529-1533	C	*	64		Bottles	
1534-1588						

1589	C	*	66	Charcoal iron with wooden handle
1590	C	*	67	Stirrup irons
1591	C	*	67	"
1592				
1593	C	*	68	Curling iron
1594-1623				
1624	C	*	73	Cane knife
1625-1632			74	Hoe, knife blade, iron wedge, etc.
1633-1634	C	*	75	Wooden spikes
1635	C	*	76	Iron hoes
1636-1643			76	"
1644			77	Donkey bit
1645-1646	C	*	78	Sugar cane knives
1647-1649			79	Donkey shoes
1650			80	Axe head
1651	C	*	81	Chisel
1652				
1653	C	*	82	Hinge, latch, potsherd, etc.
1654-1660				
1661			83	Clay vessel
1662-1830				
1831	C	*	92	Widemouth clay bottle
1832-1833				
1834			95	Bowl fragment
1835-1836				
1837-1838	C	*	96	Artifacts from John Wells house
1839	C	*	106	Gin bottle
1840	C	*	99	Ceramic bottle
1841-1842	C	*	104	Artifacts from Fredericksdahls Plantation
1843			104	"
1844-1845	C	*	104	"
1846-1873			107	Ceramics, glass from Rustenberg Ruins
1874			108	Gin bottle
1875-1876			109	Ceramic pieces
1877-1879	C	*	109	"
1880-2104				
2105-2107	N	*	113	Marine invertebrates & plants
2108			113	"
2109-2111	N	*	113	"
2112			113	"
2113-2116	N	*	113	"
2117			113	"
2118-2126	N	*	113	"
2127			113	"
2128-2153	N	*	113	"

2154-2155			II3		"	
2156-2157	N	*	II3		"	
2158			II3		"	
2159-2160	N	*	II3		"	
2161			II3		"	
2162-2165	N	*	II3		"	
2166			II3		"	
2167-2168	N	*	II3		"	
2169			II3		"	
2170-2176	N	*	II3		"	
2177			II3		"	
2178-2182	N	*	II3		"	
2183			II3		"	
2184-2196	N	*	II3		"	
2197			II3		"	
2198-2204	N	*	II3		"	
2205			II3		"	
2206-2251	N	*	II3		"	
2252			II3		"	
2253-2274	N	*	II3		"	
2275-2276			II3		"	
2277	N	*	II3		"	
2278-2283			II3		"	
2284	N	*	II3		"	
2285			II3		"	
2286	N	*	II3		"	
2287-2288			II3		"	
2289	N	*	II3		"	
2290			II3		"	
2291	N	*	II3		"	
2292-2296			II3		"	
2297	N	*	II3		"	
2298-2300			II3		"	
2301	N	*	II3		"	
2302-2305			II3		"	
2306	N	*	II3		"	
2307			II3		"	
2308-2312	N	*	II3		"	
2313			II3		"	
2314-2315	N	*	II3		"	
2316			II3		"	
2317	N	*	II3		"	
2318-2319			II3		"	
2320-2322	N	*	II3		"	
2323-2325			II3		"	
2327-2339	N	*	II3		"	
2340			II3		"	
2341	N	*	II3		"	
2342			II3		"	
2343	N	*	II3		"	

2344-2349			II3		"	
2350-2446	N	*	II3		"	
2447-2448			II3		"	
2449-2458	N	*	II3		"	
2459-2469						
2470	N	*	II3		"	
2471			II3		"	
2472	N	*	II3		"	
2473-2484			II3		"	
2485	N	*	II3		"	
2486			II3		"	
2487	N	*	II3		"	
2488			II3		"	
2489-2490	N	*	II3		"	
2491-2494			II3		"	
2495	N	*	II3		"	
2496						
2497	C	*	34	156	Potsherds from Cinnamon Bay	
2498	C	*	151	193	Basidiomycetes & etc.	
2499-2500						
2501-2579	N	*	II0		John Randall fish collection	
2580-2585			II0		"	
2586-2597	N	*	II0		"	
2598			II0		"	
2599	N	*	II0		"	
2600-2602			II0		"	
2603-2604	N	*	II0		"	
2605			II0		"	
2606	N	*	II0		"	
2607			II0		"	
2608	N	*	II0		"	
2609			II0		"	
2610-2611	N	*	II0		"	
2612			II0		"	
2613-2624	N	*	II0		"	
2625			II0		"	
2626-2628	N	*	II0		"	
2629			II0		"	
2630-2632	N	*	II0		"	
2633			II0		"	
2634	N	*	II0		"	
2635			II0		"	
2636	N	*	II0		"	
2637-2641			II0		"	
2642-2643	N	*	II0		"	
2644			II0		"	
2645	N	*	II0		"	
2646-2647			II0		"	

2648-2649	N	*		110		"	
2650-2652				110		"	
2653	N	*		110		"	
2654-2655				110		"	
2656-2657	N	*		110		"	
2658				110		"	
2659-2662	N	*		110		"	
2663-2665				110		"	
2666-2669	N	*		110		"	
2670-2671				110		"	
2672	N	*		110		"	
2673				110		"	
2674-2680	N	*		110		"	
2681				110		"	
2682-2686	N	*		110		"	
2687-2689				110		"	
2690	N	*		110		"	
2691				110		"	
2692-2693	N	*		110		"	
2694						"	
2695-2999						"	
3000-4006				157	736	Lameshur Rd. archeological	Reserved by SEAC
4007-5393				159	742	North Shore Rd. archeological	Reserved by SEAC
5394-4713							
4714	C	*		162	782	Trunk Bay holding tank archeological	Artifacts @ park
4715-5390							
5391	C	*		162	782	"	Artifacts @ park Used for VIIS-159 @ SEAC
5392-5393							
5394-5471	C	*		161	781	Trunk Bay archeological	
5472-5800	C	*		162	782	Trunk Bay holding tank archeological	Artifacts @ park
5801-6080	C	*		163	783	Mary Creek midden archeological	In ANCS
(5801- 6088)	C	*		162	782	Trunk Bay holding tank archeological	SEAC needs New #s?
6081-6088	C	*	158/162*in ANCS		782	"	ANCS has only 18986 for VIIS-158
6089-6400	C	*		163	783	Mary Creek midden archeological	
6400-6517				114		Woodbury plant specimens	
6518	N	*		114		"	
6519-6572				114		"	
6573-6574	N	*		114		"	
6575				114		"	
6576	N	*		114		"	

6577-6578			II4		"	
6579	N	*	II4		"	
6580-6586			II4		"	
6587	N	*	II4		"	
6588-6592			II4		"	
6593	N	*	II4		"	
6594-6608			II4		"	
6609	N	*	II4		"	
6610-6628			II4		"	
6629	N	*	II4		*	
6630-6633						
6634	N	*	II4		"	
6635-6654			II4		"	
6655-6656	N	*	II4		"	
6657-6661			II4		"	
6662	N	*	II4		"	
6663-6669			II4		"	
6670	N	*	II4		"	
6671			II4		"	
6672	N	*	II4		"	
6673-6682			II4		"	
6683-6685	N	*	II4		"	
6686-6694			II4		"	
6695	N	*	II4		"	
6696-6697			II4		"	
6698	N	*	II4		"	
6699-6709		*	II4		"	
6710	N	*	II4		"	
6711-6714			II4		"	
6715-6716	N	*	II4		"	
6717-6718			II4		"	
6719	N	*	II4		"	
6720			II4		"	
6721	N	*	II4		"	
6722			II4		"	
6723	N	*	II4		"	
6724-6725			II4		"	
6726	N	*	II4		"	
6728-6734			II4		"	
6735	N	*	II4		"	
6736-6737			II4		"	
6738	N	*	II4		"	
6739-6740			II4		"	
6741-6742	N	*	II4		"	
6743-6751			II4		"	
6752	N	*	II4		"	
6753-6754			II4		"	
6755	N	*	II4		"	
6756-6769			II4		"	
6770	N	*	II4		"	

6771-6779			II4		"	
6780	N	*	II4		"	
6780-6801			II4		"	
6802	N	*	II4		"	
6803-6816			II4		"	
6817	N	*	II4		"	
6818-6822			II4		"	
6823-6825	N	*	II4		"	
6826-6831			II4		"	
6832	N	*	II4		"	
6833-6836			II4		"	
6837	N	*	II4		"	
6838			II4		"	
6839	N	*	II4		"	
6840-6853			II4		"	
6854	N	*	II4		"	
6855-6867			II4		"	
6868	N	*	II4		"	
6869			II4		"	
6870	N	*	II4		"	
6871-6880			II4		"	
6881	N	*	II4		"	
6882			II4		"	
6883	N	*	II4		"	
6884-6892			II4		"	
6893	N	*	II4		"	
6894-6900			II4		"	
6901	N	*	II4		"	
6902-6904			II4		"	
6905	N	*	II4		"	
6906			II4		"	
6907	N	*	II4		"	
6908-6911			II4		"	
6912-6913	N	*	II4		"	
6914-6919			II4		"	
6920-6921	N	*	II4		"	
6922-6925			II4		"	
6926	N	*	II4		"	
6927			II4		"	
6928	N	*	II4		"	
6929-6932			II4		"	
6933	N	*	II4		"	
6934-6935			II4		"	
6936-6938	N	*	II4		"	
6939-6940			II4		"	
6941	N	*	II4		"	
6942-6951			II4		"	
6952	N	*	II4		"	
6953-6954			II4		"	
6955	N	*	II4		"	

6956-6962			II4	“	
6963	N	*	II4	“	
6964			II4	“	
6965-6966	N	*	II4	“	
6967			II4	“	
6968	N	*	II4	“	
6969-6974			II4	“	
6975	N	*	II4	“	
6976-6998			II4	“	
6999	N	*	II4	“	
7000-7008			II4	“	
7009-7011	N	*	II4	“	
7012-7019			II4	“	
7020-7021	N	*	II4	“	
7022-7023			II4	“	
7024	N	*	II4	“	
7025			II4	“	
7026	N	*	II4	“	
7027-7039			II4	“	
7040	N	*	II4	“	
7041-7049			II4	“	
7050	N	*	II4	“	
7051-7054			II4	“	
7055	N	*	II4	“	
7056-7064			II4	“	
7065	N	*	II4	“	
7066-7069			II4	“	
7070	N	*	II4	“	
7071-7072			II4	“	
7073	N	*	II4	“	
7074-7078			II4	“	
7079	N	*	II4	“	
7080			II4	“	
7081-7082	N	*	II4	“	
7083-7085			II4	“	
7086	N	*	II4	“	
7087			II4	“	
7088	N	*	II4	“	
7089-7093			II4	“	
7094	N	*	II4	“	Input by S. Lenik
7095-7103			II4	“	
7104	N	*	II4	“	
7105-7112			II4	“	
7113	N	*	II4	“	Input by S. Lenik
7114-7117			II4	“	
7118	N	*	II4	“	
7119-7139			II4	“	
7140-7141	N	*	II4	“	
7142-7148			II4	“	
7149-7150	N	*	II4	“	

7151-7153			II4		"	
7154-7156	N	*	II4		"	
7157-7159			II4		"	
7160-7161	N	*	II4		"	
7162-7164			II4		"	
7165	N	*	II4		"	
7166-7171			II4		"	
7172-7173	N	*	II4		"	
7174-7179			II4		"	
7180	N	*	II4		"	
7181			II4		"	
7182	N	*	II4		"	
7183-7194			II4		"	
7195	N	*	II4		"	
7196-7197			II4		"	
7198-7202	N	*	II4		"	
7203-7204			II4		"	
7205	N	*	II4		"	
7206			II4		"	
7207	N	*	II4		"	
7208-7212			II4		"	
7213	N	*	II4		"	
7214-7237			II4		"	
7238-7239	N	*	II4		"	
7240-7242			II4		"	
7243	N	*	II4		"	
7244			II4		"	
7245	N	*	II4		"	
7246			II4		"	
7247	N	*	II4		"	
7248			II4		"	
7249	N	*	II4		"	
7250-7251			II4		"	
7252	N	*	II4		"	
7253-7255			II4		"	
7256	N	*	II4		"	
7257			II4		"	
7258-7260	N	*	II4		"	
7261-7263			II4		"	
7264	N	*	II4		"	
7265-7267			II4		"	
7268	N	*	II4		"	
7269-7279			II4		"	
7280	N	*	II4		"	
7281-7283			II4		"	
7284	N	*	II4		"	
7285-7287			II4		"	
7288	N	*	II4		"	
7289-7290			II4		"	
7291	N	*	II4		"	

7292-7350			114		"	
7351-7700			138		Acevedo-Rodriguez plant collection	
7701	N	*	118		Leptedactylus albilabris from Lameshur Bay	
7702	N	*	119		Eleutherodactylus antillensis from Sprat Hill	
7703	N	*	120		Eleutherodactylus antillensis from Europe Bay	
7704	N	*	121		Eretmocyelys imbricata turtle shells	
7705	N	*	122		Eretmychelys imbricata, hatchling with egg shell	
7706	N	*	123		Sphaerodactylos macrolepis from St. John	
7707	N	*	124		Anolis acutus from St. Croix	
7708	N	*	125		Anolis acutus from Anegada	
7709	N	*	126		Anolis acutus from Anegada	
7710	N	*	127		Anolis acutus from Anegada	
7711	N	*	128		Anolis acutus from Anegada	
7712	N	*	129		Anolis acutus from Anegada	
7713	N	*	130		Amphisbaena fenestrata from Chocolate Hole	
7714	N	*	131		Amphisbaena fenestrata from Chocolate Hole	
7715	N	*	132		Typhlops richardi from Red Hook	
7716	N	*	133		Typhlops richardi from Frank Bay	
7717	N	*	134		Unidentified bat	
7718	N	*	135		Alsophia potoricensis	
7719	N	*	136		Cyclura pinquis eggs	
7720	N	*	137		Rock collection from Whistling Key	
7721			115 or 139?		Rock collection from St. John	
7722-8484						
8485	N	*	115		Insect collection	
8486-8800						
8801-9285	N	*	115		Insect collection	
9286-9297	N	*	117		Terrestrial invertebrates	Old Accession VIIS-119
9298-9461						
9462-9487	N	*	115		Insect collection	
9488-9501					"	

9502	N	*	115		"	
9503					"	
9504-9506	N	*	115		"	
9507-9510					"	
9511-9521	N	*	115		"	
9522-9524					"	
9526-9568	N	*	115		"	
9569-9581					"	
9582-9590	N	*	115		"	
9591-9593					"	
9594-9619	N	*	115		"	
9620-9621					"	
9622-9632	N	*	115		"	
9633					"	
9634-9641	N	*	115		"	
9642						
9643	N	*				
9644-9646						
9647	N	*				
9648-9649						
9650-9660	N	*				
9661-9662						
9663-9664	N	*				
9665-9698						
9699	N	*				
9700						
9701-9702	N	*				
9703-9705						
9706	N	*				
9707-9712						
9713-9824	N	*				
9825-9911						
9912-9913	N	*	115			
9914-10051						
10052-10096	N	*	140		Terrestrial invertebrates from St. John	
10097-10100						
10101-10151	N	*	116		Marine mullusca collection from St. John	
10152-10200						
10201-11500			141		Photographic negatives & prints of US Virgin Islands	
11451-11465	C	*	96		Artifacts from John Wells House	
11466	C	*	100		Hinge pin	
11467-11472	C	*	104		Artifacts from Fredericksdahls Plantation	
11473	C	*	103		Bottles from Rusenberg	
11474	C	*	102		Hoe	

11475-11481	C	*	104		Artifacts from Fredericksdahls Plantation	
11482	C	*	101		Eye bolt	
11483-11999						
12000- 12149	C	*	163	783	Mary Creek midden archaeological	
12150-12231	C	*	164	784	Cinnamon Bay archaeological	
12232-12335	C	*	165	798	Annaberg waterwat units 1&2 archaeological	Artifacts @ park
12336	C	*	166	802	Mary Point parking lot archaeological	
12337- 12508	C	*	165	798	Annaberg waterwat units 1&2 archaeological	
12509- 12645	C	*	166	802	Mary Point parking lot archaeological	
12646- 12951	C	*	167	803	Reef Bay Great House (par force) archeological	
12952-13171	C	*	168	804	Installation of signs archeological	
13172-13173	C	*	170	828	Trunk Bay refrigeration unit archaeological	
13174-13175	C	*	171	829	Little Maho septic tank installation archeological	
13176-13242	C	*	172	830	Lameshur cistern, facilities archeological	
13243- 13534	C	*	173	841	Annabert vault toilet archaeological	
13535- 13605	C	*	174	854	Lind Point housing archeological	
13606	C	*	173	841	Annaberg vault toilet archeological	
13607- 13612	C	*	175	855	Mary Point housing archeological	
13613-13619	C	*	176	856	Waste water facility archaeological	
13620- 13624	C	*	177	857	Cinnamon Bay landscaping archaeological	
13625- 13639	C	*	178	858	Trunk Bay septic system archaeological	
13640- 13700	C	*	163	783	Mary Creek midden archaeological	
13701- 13704			151	193	Cinnamon Bay artifacts	Reserved by SEAC
13705-13713			84	207	Human Remains	
13705			86	207	Human Remains	
13706			91	207	Human Remains	
13707			87	207	Human Remains	
13708			84	207	Human Remains	
13709			87	207	Human Remains	
13710			85	207	Human Remains	

13711			88	207	Human Remains	
13712			89	207	Human Remains	
13713			90	207	Human Remains	
13714				207	Human Remains	
13715			91	207	Human Remains	
13716-13802			31 or 32?	289	Human Remains	
13803-14082	C	*	181	902	Annaberg Plantation archeological	Artifacts @ park
14083-16000						
16001-16860	C	*	179	876	North Shore Rd., Phase 2 archeological	
16861	C	*	84	207	Human remains	
16862	C	*	156	714	North Shore Rd. archeological	
16863-16955	C	*	143	1026	Potsherd, metropolitan slipware	
16956	C	*	87	207	Human Remains	
16957	C	*	90	207	Human Remains	
16958	C	*	170	828	Trunk Bay refrigeration unit archaeological	
16959-16968	C	*	182	903	Lameshur Plantation archeological	
16969	C	*	171	829	Little Maho septic tank installation archeological	
16970-17003	C	*	181	902	Annaberg Plantation archeological	Artifacts @ park
17004	C	*	161	781	Trunk Bay archeological	
17005	C	*	177	857	Cinnamon Bay landscaping archeological	
17006	C	*	161	781	Trunk Bay archeological	
17007			84	207	Human Remains	
17008	C	*	157	736	Lameshur Rd. archeological	
17009	C	*	185	1029	St. John archeological	
17010-17022	C	*	180	898	Lind Point archeological	
17023-17032	C	*	161	781	Trunk Bay archeological	
17033-17946	C	*	142	1027	Cinnamon Bay archeological	
17947	C	*	162	782	Trunk Bay holding tank archeological	Artifacts @ park
17948-18155	C	*	142	1027	Cinnamon Bay archeological	
18156	C	*	162	782	Trunk Bay holding tank archeological	
18157-18358	C	*	142	1027	Cinnamon Bay archeological	
18359	C	*	162	782	Trunk Bay holding tank archeological	Artifacts @ park

18360-18643	C	*	142	1027	Cinnamon Bay archeological	
18644-18653	C	*	153	1042	Trunk Bay, Lyne House, Lameshur archeological	
18654-18984	C	*	192	1113	Trunk Bay sewage archeological	
18985						
18986	C	*	158	741	North Shore Rd. archeological	
18987	C	*	159	742	North Shore Rd. archeological	
18988	C	*	161	781	Trunk Bay archeological	
18989	C	*	162	782	Trunk Bay holding tank archeological	
18990	C	*	163	783	Mary Creek midden archeological	
18991	C	*	164	784	Cinnamon Bay archeological	
18992	C	*	165	798	Annaberg waterway units 1&2 archeological	
18993	C	*	166	802	Mary Point parking lot archeological	
18994	C	*	167	803	Reef Bay Great House (par force) archeological	
18995	C	*	168	804	Installation of signs archeological	
18996	C	*	169	805	Cinnamon Bay archeological	
18997	C	*	172	830	Lameshur cistern, facilities archeological	
18998	C	*	173	841	Annaberg vault toilet archeological	
18999	C	*	186	1104	Mary's Point parking lot archeological	
19000						
19001-19016	C	*	163	783	Mary Creek midden archeological	
19017	C	*	142	1027	Cinnamon Bay archeological	
19018-19049	C	*	192	1113	Trunk Bay sewage archeological	Artifacts @ park
19050	C	*	156*/188	714	North Shore Rd. archeological	
19051	C	*	160	772	VIERs cistern archeological	
19052	C	*	174	854	Lind Point housing archeological	
19053	C	*	175	855	Mary Point housing archeological	
19054	C	*	176	856	Waste water facility archeological	

19055	C	*	178	868	Trunk Bay septic system archeological	
19056	C	*	179	876	North Shore Rd. Phase 2 archeological	
19057	C	*	180	898	Lind Point archeological	
19058	C	*	181	902	Annaberg Plantation archeological	
19059	C	*	182	903	Lameshur Plantation archeological	
19060			142	1027	Cinnamon Bay archeological	
19061	C	*	153	1042	Trunk Bay, Lyne House, Lameshur archeological	
19062			151	193	Basiomycetes & misc.	
19063- 21062			184		South Shore, Grootpan, Salt Pond archeological	
21063- 21085			190		Cinnamon Bay sewer line repair archeological	
21086- 21087	C	*	191		Cinnamon Bay archeological	Draft Records
21088- 30000			191		"	
30001- 31306	C	*	191		"	
31307- 34999			191		"	
35000- 36289	C	*	194		Trunk Bay bathrooms Phase 1 archeological	
36290					Available	
36291- 36307			197		Yawzi Point Surface collection	
36308- 36327			193		Water Creek Site, hurricane hole underwater survey	
36328- 36499					Available	
36500- 38238	C	*	187		Trunk Bay Phase 22 kiosk, ramp, holding tank archeological	
38239- 38241			187		"	
38242- 38836			195		Annaberg Plantation Pit Toilet #2 archeological	38239-38241 added to VIIS-187 5/14/03
38837			151	193	NAGPRA cataloging	
38838			201	520	Documents	
38839			200	1753	Documents	
38340- 38341			179	876	Artifacts	
38342			192	1113		
38343- 40342			196		Annaberg slave village	Lori Lee

Appendix H: 2003 CMP Recommendations – Summary Listing

Immediate (within 1 year)

Chapter 3

Establish a Collections Advisory Committee to advise on accessioning, deaccessioning and writing of various guidance documents (1 year).

Revise the current SOCS to meet the park needs based on the information contained in this plan. It is very important that the SOCS be written in a collaborative manner with park staff to include resources management, interpretation, maintenance and management staff in addition to the archeologist tasked with museum responsibilities. It is also highly recommended that the South Florida/Caribbean Network coordinator be included in this process, as well (1 year).

The SOCS must address the collecting of endangered, threatened or rare species.

Chapter 4

The park should integrate the issuance of research and collecting permits with the museum management program.

The park should request that all researchers, park staff included, use the current professionally accepted fluids when “fixing” and preserving wet specimens. (This should be included as a condition of the collecting permit.)

Ensure that all research projects generating museum specimens and/or records include funding to catalog, initially preserve and store the specimens and/or records.

The park should contact the Florida Museum of Natural History to acknowledge the error made when wet specimens were permanently transferred there, clarify the arrangement, and make arrangement for an out-going loan of specimens and documentation that will remain at the UF.

The park should then update the museum catalog records in ANCS+ to be certain that the correct location is in the database (many, if not all, currently have Florida Museum of Natural History). For those that remain on loan, the status must be changed to out-going loan and the status year changed to reflect the year the loan became effective.

Chapter 5

Require all cooperators, Universities, and others performing analysis or cataloging on the archeological collections to either use standard NPS usage on bag tags for accession numbers and catalog numbers or ask these groups to label the outsides of the bags and not include bag tags. The Park Archeologist must define the standards for them and provide examples. **Immediately**

Require all cooperators and other institutions providing archeological services to the park to label each artifact bag with the appropriate Field Specimen, provenience, and catalog number (if it has been assigned) to prevent loss of provenience for any of the excavated materials. **Immediately**

All artifact storage boxes should be labeled with the correctly formatted VIIS accession number. A box number for each box within an accession is also appropriate. Each box should contain an acid-free sheet with each Field Specimen number assigned to the contents (uncataloged collections) and the catalog numbers for all the contents. **Immediately**

Amend the existing Memorandum of Understanding with Syracuse University to include archeological work outside the Cinnamon Bay project. Planned GIS work for 2003 falls outside the strict definitions in the current MOU. **Immediately**

Reorganize the Cinnamon Bay laboratory so that the public may view exhibits without being able to touch objects that are being washed, analyzed, or cataloged by the interns, staff, or trusted volunteers or physically interfere with their work. **Immediately**

Volunteers who work in the laboratory should be either from an organized group or cooperator (university, Americorps, Elderhostel) or from a pool of individuals who live on St. John or St. Thomas or are on the islands for an extended stay and who can reasonably be expected to return. **Immediately**

If problems are encountered with continued use of the project Microsoft Access analysis database in terms of converting data into the current version of ANCS+, then data entry directly into ANCS+ should be considered. **On-going**

Complete a Memorandum of Understanding with Southern Maine University to formalize their relationship with the park. This document can be written with less detailed reference to specific projects than the other two current agreements. **Six months**

Chapter 6

With the assistance of an archivist, complete a park-wide archival survey. Label and identify the cabinets and shelves in the Museum Collection Storage Building with distinct numbers for easy identification. **Within one year**

The park needs to additional storage space for archive and resource management collections and control access to these materials. Send BUIS and CHRI documents and images to CHRI. Do not place contaminated or infested materials in the library or museum storage room as this will contaminate clean collections. **One year**

The decentralized nature of records in each park division needs to be re-examined. Projects need to be created and kept together, regardless of the different divisions and personnel involved. **One year**

Park records and archive collections are seriously infested with mold, silverfish, cockroaches and other insects. Left unabated this will seriously jeopardizes the life-span of these records. The IPM program needs to increase monitoring and safeguarding of the collections against infestation and mold. **As soon as possible**

The park needs a historian or cultural resource person to care for the archives, act as the point person for park and outside research requests and conduct other work such as oral histories. This can be a volunteer or a collateral duty position. **Within one year**

Chapter 7

Designated one staff member with the official responsibility to serve as the curatorial contact for the park. The park should always have someone specific designated/entrusted with the curatorial duties.

The VIIS designated curatorial staff contact must initiate a concerted investigation through all possible file cabinets or boxes that might contain files at the park in search of the park's missing accession folders (113 total).

If the park's original accession files are not located, park management should contact all possible knowledgeable parties regarding the matter: Keith Watson, Jennifer Bjork, Jonathan Bayless, Caroline Rogers, Nancy Russell.

The park's designated curatorial staff contact must initiate a consistent practice of using the VIIS Catalog Number Log attached to this CMP as Appendix F to assign museum catalog numbers. The form will be left in electronic version on a computer in Ken Wild's office.

The park's designated curatorial staff contact must initiate a practice of regular back-ups of the electronic museum data in ANCS+ both for the computer in Ken Wild's office and for the computer at the Cinnamon Bay archeology lab. The regular electronic backups of ongoing cataloging efforts should be mandated in all MOU's for the analysis and cataloging of artifacts or specimens. The park's backup disks should be stored in the media safe inside a file cabinet in the Museum Collection Storage Building. They should be rotated periodically with disks stored off site.

Purchase acid-free printer paper for printing official museum accession and outgoing loan forms.

Purchase acid-free folders to hold accession and outgoing loan records (100 acid-free folders have been donated to the park by CAHA).

Generate the outgoing loan forms requested by SEAC.

The park's designated curatorial contact should gather information about the material exhibited at the visitor center, catalog uncataloged objects fitting the park's Scope of Collections Statement, and change the status for each cataloged object to "exhibit" with the location corrected to "Visitor Center".

In consultation with the regional curator, park management should establish a museum committee of both cultural and natural resource staff to ensure that record keeping for the park's museum collection is managed in a seamless fashion. The records manager for the park should also serve on this committee.

The park curatorial contact should consult with the Museum Management Program in Washington to make sure that the park has up-to-date chapters in the *NPS Museum Handbook*. The park curatorial contact should also be familiar with how to access NPS museum materials on-line.

Park resource management should work with SEAC to resolve the issue of which archeological accessions will be curated at SEAC and which will be curated at the park so that the responsible parties can write PMIS statements to cover backlog cataloging of the material.

The park museum committee should resolve the questions of whether any VIIS museum material remains at VIERS, and return any applicable material to the Museum Collection Storage Building.

The park museum committee should develop SOP's for access to collections and any other necessary procedures to ensure they address both cultural and natural issues.

Park management should prepare an OFS statement for a full-performance museum curator that might be shared with another nearby park and a museum technician with primary responsibility for museum record keeping at VIIS.

Park management should write a PMIS statement requesting funding for cataloging and rehousing of the photographic collection, accession VIIS-141.

Park management should write a PMIS statement requesting funding for a term or detailed full-performance museum curator to oversee a 100% inventory of the Museum Collection Storage Building artifact, specimen, and archival contents.

The designated park curatorial contact must research the old incoming loans currently recorded in the park's accession book. These loans should be returned or converted to donations if possible.

The designated park curatorial contact must begin using the ANCS+ outgoing loan system and NPS policy regarding outgoing loan of museum material to catalogers.

The cabinets, shelves and drawers in the Museum Collection Storage Building should all be physically marked with numbers.*

Following this cabinet, shelf, and drawer numbering project, locations in the ANCS+ database should be corrected as necessary.

The blue 10-254's (and any other copies of museum catalog records) in and on the 4-drawer file cabinet in the Museum Collection Storage Building (including those placed into accession files by Steve Lenik) should be separated and sorted into numerical catalog order with any exact duplicates discarded.*

The park should purchase enough covers and binding stems to rehouse the blue 10-254's stored in the Museum Collection Storage Building (seek assistance from the regional curator if necessary).

The blue 10-254's to be kept should be bound and filed.*

The museum catalog records stored in two metal drawers on the table and drawer in the Museum Collection Storage Building should be evaluated against the bound 10-254's and discarded if they are exact duplicates.*

All blue 10-254's should be evaluated against the contents of museum records in the park's ANCS+ database.

Old museum catalog records that do not exist electronically should be entered into the ANCS+ database.

The park should purchase two acid-free "Hollinger" type records boxes and 300 tabbed file dividers.

All museum catalog worksheets should be gathered from the various drawers of the 4-drawer cabinet (including those placed into accession files by Steve Lenik), sorted into numerical catalog order, and housed in the "Hollinger" boxes with tabbed dividers indicating the subsequent number span inserted every 100 records.*

The contents of the museum catalog worksheets should be compared against the contents of the park's ANCS+ database to identify those worksheets whose content has not been input into the database electronically.

Park management should then consult with the regional curator to write a PMIS request covering the cost of backlog cataloging as necessary.

If the park's original accession folders are not found, the park must create acid-free accession folders for those accessions which do not yet have folders. Replace the existing dark brown accession folders that are not acid-free. Use a permanent black marking pen to write the VIIS accession number on the top of each folder. Print out the folder cover on acid-free paper.*

The materials from other parks currently housed in Ken Wild's office should either be returned to their park of origin or incoming loans should be generated for them by VIIS.

The designated park curatorial contact should draw a line through "blank" entries in the accession book as noted above to prevent their re-use. The action should be signed and dated, with an explanatory memo placed in the accession folder for those numbers.

The park should re-core the 4-drawer, fire-resistive cabinet in the Museum Collection Storage Building that holds museum records to insert a new lock so that all drawers can be closed and the cabinet locked.

Chapter 8

Ensure that the Collection Management Report and the Checklist for the Preservation and Protection of Museum Collections accurately reflect the current status of the needs of the park. These documents determine the distribution of the national funds to the regions and the distribution is recalculated every four years. (6 months) [NOTE: Checklist updated by 2003 CMP Team.]

Coordinate PMIS project statements with needs identified throughout THIS CMP, the 2002, Conservation Condition Survey, the Collection Management Report (CMR), and the Museum Checklist (ACP). (6 months)

Revise the park organization chart to reflect a professional level curator, GS-1015-II. Submit a new position description for a biological (or other discipline-appropriate) curator at the II level for classification. (6 months)

Prepare an OFS statement for a base increase to cover museum management. This should include salary and support cost for a full performance museum curator (GS-II), at a minimum. It could also include costs for various reoccurring staffing assistance such as museum and/or archival technician(s). Consider approaching this need with CHRI management. (6 months)

Chapter 9

A large wood packing box labeled "hydrochloric acid solution" is stored beneath the dehumidifier in the Museum Collection Storage Building. It should be removed from collection storage and possibly placed in the unofficial natural science "laboratory" area in Building 4, MAB Reserve Center.

Submit a **Museum Collection Storage Plan** PMIS project for all VIIS collections. This document will serve as the foundation for requesting a new storage facility. Remove the PMIS request for an additional Museum Collection Storage Building.

Submit PMIS project statement covering anticipated need to install a **compact storage system** and other furniture based upon the plan's recommendations.

Prepare a **Museum Housekeeping Plan** for VIIS museum areas. If this cannot be accomplished locally submit PMIS project statement.

Request a **Technical Assistance Project** for rehousing collections, based upon recommendations of this CMP and the 'upcoming' Museum Collection Storage Plan.

Program for an request a follow up collection condition survey, specifically targeting archival materials.

Begin physical reorganization of the Museum Collection Storage Building by; consolidating collections within cabinets and remove extraneous furniture, separating not yet accessioned items from accessioned items and uncataloged items from cataloged items. Evaluate all unaccessioned items against the 'updated' Scope of Collection for possible inclusion in the collection.

Thoroughly clean and aerate the new Herbarium cabinet and begin re-housing the collection appropriately within the cabinets using guidance from the 2002 Collection Condition Survey.

Begin reorganization of the Archeology Lab in the Old Danish Warehouse:

- Remove all unrelated objects and inappropriate furnishing.
- Seek another storage location for excavation equipment.
- Reverse the traffic pattern within the building by moving the catalogue activity to the back and restricting visitor circulation to the front.
- Revise didactic text used to explain the project to visitors to indicate which objects they are free to handle in the front of the room.
- Discontinue plans to treat metal objects by electrolytic reduction on site. Random metal finds need not be stabilized by remedial methods. They could be documented and photographed if necessary but treatment should be done only on objects that are significant, accessioned and catalogued and the need for conservation intervention should be evaluated on a case-by-case basis.

Chapter 10

All fire extinguishers, particularly those associated with museum collection repositories must be inspected annually. Most recent inspection for MAB Reserve Center extinguishers is Nov 2000. 6 months

Short-Term (1-3 years)

Chapter 3

Locate and determine the condition of the three accessions; accession number 24, collected in 1961, accession number 110, collected between 1976-1983 and accession number 113, collected in 1984 of fish,

marine invertebrates and plant specimen collections. Determine the extent of preservation, clarify status, and place on loan to the University of Florida (1-2 years).

Survey other institutions and known researchers for prior scientific and archeological investigations that have occurred on the park. Currently, the known facilities holding VIIS collections include, Southeast Archeological Center, the University of Florida, the Smithsonian Institution, Virgin Islands Environmental Resource Station and the Florida Museum of Natural History. Acquire copies of reports, field records and data. Inventory all artifacts, specimens and associated records located at other institutions. If materials were collected after the park was established (1956), they remain the property of the government and current laws, regulations and policies are in effect. (1-2year).

Review SOCS on the two-year schedule as proscribed by the Museum Handbook, Part I. (on-going).

Chapter 4

Accession and catalog the seed collections and associated documents in the two cabinets, including the bag marked "*Zanthoxylum Thomasianum*", an endangered plant.

Redistribute coral and shell specimens from overloaded drawers in museum cabinet #3 to empty drawers in museum cabinet #2. Also check the weight of the drawers in museum cabinet #1 that contain geology specimens. The weight in each drawer should not exceed 50 pounds. Change specimen location on museum catalog records in ANCS+.

Chapter 5

Develop a park field collection policy for archeological objects, terrestrial and underwater. **One year**

Retain an appropriate sample of the shell excavated from the Cinnamon Bay site and discard the rest. All shell has been identified, counted and weighed and this information has been logged. **One year**

Program for completion of the cataloging of archeological objects collected from the prehistoric component of the Cinnamon Bay project. Funds to hire a museum technician for this work will enable the park to make better use of student interns and volunteers to help with this process and would augment funding contributed by the Friends of Virgin Islands National Park. **One year**

Program for assistance with cataloging archeology project documentation from projects completed through MOUs without park funding. **One year**

Program for funding for conservation treatment of artifacts collected on projects completed through MOUs without park funding. NPS funding could augment any conservation treatment funding provided by the Friends. **One year**

The low-cost, high public involvement approach used on the Cinnamon Bay project can be improved upon by adding slightly more balance to the staffing of the projects. A term field supervisor and archeology/museum technician to oversee laboratory work could be hired on large, NPS funded projects. These individuals could be hired on a project basis as NPS term employees. **One to two years**

Purchase archival artifact tray inserts for the collection storage boxes as funding becomes available. **One to two years**

Research the Bullen and Sleight archeological survey collection, determine ownership, and begin attempts to retrieve the collection from the Florida Museum of Natural History if appropriate. Two to three years

Chapter 6

The park secretary needs records management training. There are several courses offered each year, at a variety of locations, through NARA. Check www.nara.gov website for current training dates. One to two years

Submit a PMIS request for backlog-cataloging of park archives. Hire a term archivist to complete the work. One to two years

To avoid catastrophic data loss, store back-up of electronic resource management data off-site. Two years

Establish and implement SOP's for park archives. Two to three years

Send aerial prints to TIC in Denver for microfilming. Two to three years

Rehouse the oversized maps, plans and aerial photographs in archival unbuffered paper enclosures. Flatten all rolled or folded maps/drawings. Ensure diazotypes are physically segregated from all other processes in separate drawers, and if possible in a separate map case. Those items not already on file at DSC-TIC should be sent and bond paper copies returned to the park. Two years

Migrate the five reel-to-reel magnetic audio reels to CD or audiocassette. The originals have mold and environmental damage and are currently not accessible. Two years

Chapter 7

All VIIS staff with museum record keeping responsibilities need to receive training in basic curatorial record keeping to further benefit the park. This can be obtained formally or through details at regional parks, SEAC, or SERO.

In consultation with the regional curator, the park's Scope of Collection statement should be revised.

If the original park accession folders are not found, park staff should work to recreate as much of the missing documentation as possible.

A 100% inventory of all contents of the Museum Collection Storage Building should be carried out. All unaccessioned artifacts, specimens, and archival materials should be evaluated against the park's Scope of Collection Statement and either accessioned or discarded. All museum records should be evaluated for retention.

Following the inventory, the location for all cataloged materials should be corrected in ANCS+ database, or – if the electronic record has not been created – on the blue 10-254.

Following the inventory, all accessioned but uncataloged material should be consolidated as much as possible to provide better accountability. It should not be scattered throughout cataloged material.

After the 100% inventory is complete, Park management should write a PMIS statement to request backlog cataloging for all accessioned but uncataloged materials not already covered by such requests.

After the 100% inventory is complete, the park curatorial contact should consolidate all museum record keeping files out of Ken Wild's office and the Museum Collection Storage Building lateral file, 4-drawer file, and desk drawers. The contents of each folder should be evaluated, like contents systematically consolidated between files, and files renamed as necessary. These should all be gathered into one locking file cabinet.

The park should develop a project for the systematic gathering of oral histories and other information regarding oversight of the museum collection from previous park resource managers. When complete, accession the material archivally into the museum collection.

Chapter 8

Determine which of the activities above require professional attention and which are technical in nature. Determine which jobs should be performed by NPS positions (full-time permanent versus term or temporary) and which could be contracted, etc.

Revise the park organization chart to reflect a professional level curator, GS-1015-II, and technician based upon the assessment noted above.

Submit a new position description for a biological (or other discipline-appropriate) curator at the II level for classification (or use the benchmark position description if appropriate).

Continue to update PMIS and OFS statements to meet the needs of the program as well as add new ones based on this plan. (One year and on-going)

Chapter 9

Plan for implementation of a Collections Rehousing Project with technical assistance from SERO Curators or from a collections rehousing team from the Northeast Region Museum Services Center.

Make arrangements for conservation of the two metal objects in the Cruz Bay VC exhibits.

Chapter 10

Program for and request Museum Collection Fire and Security surveys. One year

Resolve M.O.U. issues with local fire response agency. Prepare an adequate fire plan for the complex which identifies hydrants, exits, fire system control panel locations, and the location of museum collections in storage and/or on exhibit. One year

Complete Job Hazard Analysis for pertinent curatorial functions such as handling or use of hazardous substances such as silica gel, used to create microenvironments, and acetone, used when numbering museum objects. One year

Program for (one year) and complete Museum Emergency Operations Plan, taking into account the special needs of the park's museum collections as outlined in the NPS Museum Handbook. Two years

Ensure the park's museum collection concerns are addressed in all pertinent phases of the park's fire management plan(s), especially areas of the plan addressing topics such as orientation of the fire department to park resources, initial attack techniques, and salvage activities. **Two years**

Upgrade intrusion and fire detection systems at the Museum Collection Storage Building; integrate new system with the overall park's 24/7 monitoring system. **Two to three years**

Mid-Term (3-5 years)

Chapter 3

Under Management Actions, a listing of all collections located elsewhere should be included. The information can be formatted as a table and information should include accession number, brief description of the materials, number of items or specimens, and location. This is particularly important since research is on-going and much knowledge and understanding can occur from work already performed on park resources (2-5 years).

Numerous maritime resources exist in park waters as well as other underwater cultural resources. They include five known shipwreck sites, five historic anchor sites and historic documents indicate the park should have at least 27 shipwreck sites. They should be documented in the Archeology section and the relevant legal citations be included in the Introduction section, i.e., Abandoned Shipwreck Act (2-5 years).

After revising the SOCS, deaccession or remove from collection areas all items not to be placed in the museum collections (2-5 years).

Chapter 4

Have a botanist, or someone familiar with botanical classification, arrange the cataloged specimens according to family, genus, and species.

Add NPS labels, printed from ANCS+, to the herbarium sheets.

The park should contact documented institutions to determine if specimens from VIIS are in their collections. If specimens are present, the park should obtain information about the collection including at a minimum when the collecting was done and by whom and a listing of specimens.

Chapter 6

Catalog the library holdings into Pro-Cite, and submit all Pro-Cite catalog records to the NPS Combined Library Catalog. Staff should pursue obtaining an internship for a graduate student in a library and information science program to have a trained graduate student catalog the park Library collection into Pro-Cite following the Library of Congress system. **Three to five years**

Migrate the park resource management records and archives onto microfilm or microfiche for long-term preservation. **Four to five years**

Chapter 7

After all efforts to track down uncataloged material within accessions have been exhausted, the designated park curatorial contact may begin to assign blank (i.e. unassigned) catalog numbers on the VIIS catalog number log to new cataloging projects.

Chapter 8

Ensure that appropriate staff receives current preservation training in essential duty areas, i.e., emergency/disaster preparedness, handling of archival and object collections, IPM. (1 – 3 years)

When a full professional museum curator is hired and available to supervise work, contact the Southeast Region Curatorial staff, the WASO Museum Management Program, and/or the HFC Division of Conservation, to establish an internship program and contact graduate programs for candidates. (3 – 5 years)

Working with the Southeast Region Curatorial staff, the WASO Museum Management Program, and/or the HFC Division of Conservation, establish an internship program and contact graduate Museum Studies and other programs for candidates. (3 – 5 years)

Chapter 9

Request funding for a new building that will implement the Collections Storage Plan and support collections activities in all areas of the park's approved Scope of Collection.

Complete the archeological activities now in progress at the Archeology Lab in the Danish Warehouse. Consider removing the temporary room within this building and revert the building to its original function as a contact station with educational exhibits.

Install a compact storage system in the present Museum Storage Building. Make arrangements for rehousing the collections with assistance from a curatorial team

Chapter 10

Program for (one year) and complete Museum Emergency Operations Plan, taking into account the special needs of the park's museum collections as outlined in the NPS Museum Handbook. Two years

Ensure the park's museum collection concerns are addressed in all pertinent phases of the park's fire management plan(s), especially areas of the plan addressing topics such as orientation of the fire department to park resources, initial attack techniques, and salvage activities. Two years

Upgrade intrusion and fire detection systems at the Museum Collection Storage Building; integrate new system with the overall park's 24/7 monitoring system. Two to three years

Install appropriate fire protection systems are installed in museum collection spaces and certain unprotected adjacent spaces within building. Three to five years

Program for and complete preparation of a Museum Collections Emergency Operations Plan and an attendant Emergency Service Flip Chart (See "Staff Emergency Procedures" above) Reference this plan in the Park's Hurricane Plan. Two to three years

Incorporate staff responsibilities from the Museum Emergency Operations Plan into the park's Incident Command System Organizational Structure. **Two to three years**

Reformat museum records and key resource management records. Place original or reformatted copies in a mainland repository. **Three to five years**

Long Term (5+ years)

Chapter 4

The park should work with institutions holding undocumented park collections to accession the collection (one accession for each project), catalog the specimens and record them into the park collection, and obtain copies of all the associated records from the project. If the decision is made to leave the specimens and records at the institution, the park should prepare an outgoing loan agreement for the collection and indicate on the catalog record that the specimens and archives are on loan.