PRESERVING THE PAST

An Introduction To

MUSEUM SERVICES

National Park Service
PRESERVING THE PAST

AN INTRODUCTION TO
THE DIVISION OF MUSEUM SERVICES
NATIONAL PARK SERVICE
HARPERS FERRY CENTER

Compiled by Diana Pardue

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July 1980
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INTRODUCTION

Almost every National Park area has an important museum collection. Very few parks have anyone on their staff who can cope with the technical and scientific care of the objects in their museum collection. This is where the Division of Museum Services can be of help to parks.

The Division offers a variety of services to parks - all of which are intended to prolong the life of the various cultural and natural resources that have been entrusted to the individual parks. The people of the Division work together with the parks, toward a common purpose...to preserve small portions of America's Cultural Heritage.

This descriptive booklet is intended as a resource guide to explain the different levels of work that go on in the Division, and who does it. The narrative was written as a community effort within our Division, each segment is a personal vignette of an individual's work and the pride he or she takes in his or her work. It is written by our clerks, aids, technicians, conservators, and curators.

We hope it will create a more thorough understanding of how we can help you carry out the curatorial responsibilities of the National Park Service.

Arthur C. Allen, Chief
Division of Museum Services
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ROLE - DIVISION OF MUSEUM SERVICES
The Division of Museum Services has the unique responsibility for servicewide direction in the management of park museum collections. It prepares Collection Preservation Guides, Scope of Collection Statements, and establishes curatorial standards for parks throughout the National Park Service. The Division maintains the only conservation laboratories for museum specimens in the National Park Service. These centralized facilities allow professional conservators to combine their talents and pool sophisticated equipment and resources in the most efficient manner.

Conservators at Harpers Ferry can accommodate specimens in the following fields: Paintings, Paper, Metals, Furnishings, Textiles, Ethnographic Materials, Ceramics and Glass, Excavated Materials, and Natural History. The staff reflects a high degree of professionalism as illustrated by the quality of their work, their attendance at professional meetings and seminars, and positions held in professional organizations. All staff members readily assist park personnel concerning any museum related problem.

The Division of Museum Services is the curatorial training and educational center for the National Park Service. Its popular courses, Curatorial Methods Phases I and II, always have more applications than spaces available. Even other governmental agencies and private organizations send personnel to these courses. Graduate students from museum studies programs throughout the United States have interned in several of the conservation
labs. Local high school students receive unique job skills and valuable work experience. The Division distributes Conserve 0 Grams, informal sheets of curatorial advice, and responds to numerous inquiries from both in and out of the NPS.

Museum Services directly supports parks in a variety of ways. An up-to-date list of curatorial supplies and equipment is maintained and commonly used articles are dispensed to parks. The Division assists in the planning and equipping of museum storage facilities. A portion of the operating budget is appropriated for contract conservation work. These services are performed to help increase productivity and to acquire the specialized skills and equipment needed in some projects. Lists of contract conservators in many fields of specialization are maintained. Collection Preservation Guides are written for individual parks, providing curatorial solutions to specific problems.

The Clearinghouse is another part of Museum Services. Its purpose is to locate proper homes for objects that are surplus or inappropriate for parks. Similarly, it helps parks acquire objects needed to complete their collections.

The National Catalog was created to provide a central location and safe storage for all original museum catalog cards. These records are kept in the National Catalog vault in the bomb shelter at the Harpers Ferry Center. A computerized project for the catalog cards has been set up so that in the future, the information on the catalog cards will be of more use to more people.
OFFICE OF THE REGISTRAR
OFFICE OF THE REGISTRAR

The solar system revolves around the sun, but the Division of Museum Services revolves around the Registrar, Dave Warthen. All incoming and outgoing artifacts are routed through this office and all Division work radiates from this source. During fiscal years 1978-79 over 16,000 objects passed through this office either for treatment, transfer or storage.

David E. Warthen

The office of the Registrar is responsible for maintaining accurate records on every museum object in the custody of the Division of Museum Services and Harpers Ferry Center. Records include all correspondence, documentation, and other materials relating to accessions.

The Registrar provides for the continuing security and care of objects, maintains current location indexes, and establishes proper handling, packing, and shipping procedures for artifacts. When treated objects are shipped from the Center, the Registrar monitors their movement until safe delivery.

The Registrar is assisted by one Museum Aid, James Kelly Lance. Jim is retired from the Air Force, and joined the Division on September 23, 1979.
Besides keeping track of all the museum artifacts, the Registrar acts as an instructor in the Curatorial Methods Course sponsored by the Division, assists in devising special shipping containers, and advises parks with packing and records problems. Throughout the years of 1978-79 approximately 4,000 phone calls were initiated and received by the Office of the Registrar.

Below is a sample of activities:

Training: Instructed two students, from Texas Tech and Morgan State, for two weeks concerning the duties of a Registrar.

White House: Instructed maintenance staff on proper ways of packing and shipping artifacts.

The Office of the Registrar also is involved in other mundane and routine matters. Other duties include locating artifacts and straightening out problems with record keeping. The Registrar also assists the Division in operating the Museum Clearinghouse.
NATIONAL CATALOG

The purpose of the National Catalog is to provide a central location for NPS museum records information and a safe, secure storage vault for all original museum catalog cards (Form 10-254). To have this information in one location will give us more control of the artifacts, assuring better property accountability and easier inventory capability.

Established in May 1977 by Staff Directive 77-5, the National Catalog Office, with assistance of the Regional Curators, began collecting original 10-254's from the parks. It is now assumed that all original catalog cards from the field are deposited in the National Catalog vault in the bomb shelter at Harpers Ferry Center. It has been generally accepted, based on inventories, that there are about 5 million historical artifacts and about 5 million archeological specimens in NPS possession. We now have only 550,000 catalog cards in the National Catalog after 20 years of cataloging by the parks. The catalog cards in the vault have been checked for such things as accuracy of numbering, classification, description, etc. This analysis of records was returned to the parks through the Regional Curators. The analysis will enable parks to correct past errors and do better cataloging in the future. Each year, between March 15 and April 15, parks are instructed to send to the National
Catalog all new 10-254's completed during that year. This continual updating will assure that all artifacts coming into NPS possession will be accounted for in the National Catalog.

In November 1978 Gordon Gay joined the Division of Museum Services as Curator of the National Catalog. Since that time, besides handling the records sent in, Gordon has been developing the information necessary to begin a computerization project for the National Catalog. This project involves writing a functional requirements document which tells the Division of Data Systems in WASO what kind of information we want entered into the computer. In an attempt to assure standardization of computer entries it was felt that the museum classification system had to be reassessed. A committee of curators, archeologists and natural science people was assembled to do this very important task. The committee decided to use Robert Chenhall's Nomenclature as the basis for material culture classification with some very minor modifications. Dr. Christine Schonewald of the Division of Natural History in WASO redesigned the natural history classifications. This new system has been distributed to the parks. The Division of Data Systems and the National Catalog are now working together to decide what kind of system will be most practical to enter data into the computer.

An efficient computer system will give us a good collection management tool. We will, for the first time, know how many artifacts the NPS owns. We will be able to quickly retrieve information such as the value of
artifacts or how many paintings by a particular artist are in the collections. An automated records system will also allow researchers to rapidly retrieve, assemble and prepare information in response to inquiries from park planners, interpreters, restoration architects and others who need information regarding the museum collection.

In October 1979, Libby Allen joined the National Catalog Office as Museum Records File Clerk. Working against a heavy backlog of 1978 catalog cards, Libby has now caught up and is ready to plunge into the new cards that will be coming in.
BRANCH OF CURATORIAL SERVICES
Established in 1980, this Branch provides Servicewide direction to field areas in the management of park museum collections. Professional curatorial expertise not found in parks is available to the field from this Branch. Branch employees identify, evaluate and attempt to rectify museum collection management problems Servicewide. The Branch conducts formal curatorial training courses for park employees and develops curatorial informational instruction/training packages for park distribution.

Key Branch personnel work closely with Regional officials and Park Superintendents in setting priorities and developing curatorial management programs. Personnel of this Branch prepare and publish Collection Preservation Guides, Conserve O Grams, and other guidelines for maintaining curatorial standards. The professional staff develop and locate new materials and techniques used in curatorial activities. The staff also works with suppliers in developing specialized storage equipment for Servicewide use.

The Branch maintains a stock of frequently used specialized curatorial supplies and equipment and distributes these to parks. One of the few remaining field guidelines, the Museum Handbook is produced, revised and distributed by this Branch. The NPS Clearinghouse operated by the Branch, provides assistance to parks and Harpers Ferry Center in obtaining, transferring, exchanging or disposing of artifacts. The Branch also provides support and information to parks on security and security systems.
The NPS Clearinghouse functions as a central administrative office to secure the most effective distribution of artifacts within NPS.

The Clearinghouse acquires artifacts through transfers, exchanges, purchases, or donations. The acquired artifacts are used to fulfill new exhibit requirements, upgrade existing exhibits, complete Furnishing Plans and help parks upgrade and refine collections within their respective Scope of Collections statements.

A Procedural Manual for Clearinghouse actions will be available for parks' use soon. This Manual will outline procedures for parks to follow to purge their collections of excess items, make their desires known for needed artifacts or dispose of the skeletal remains of what once was a classic example of Americana.

H. Dale Durham took over the Clearinghouse operation in November 1978. Dale comes to us from the Army Museum System. He was Curator of the Fort Sill Museum in Lawton, Oklahoma for eight years. Dale is currently preparing lists of artifacts that are available for transfer or exchange. These lists of artifacts will be circulated to parks which may need them.
Jeffrey Woodruff joined the Clearinghouse staff in April 1980 as a Museum Aid. With Jeff's assistance the operation should run much smoother.
CURATORIAL SUPPLY SPECIALIST

Don Cumberland could very well be the most popular person in the Park Service. Most parks look to him as most two-year-olds look to Santa Claus. For the past four years, Don has been involved with locating, ordering, and distributing specialized museum equipment. Running a curatorial outreach program best described as Direct Park Support, he assists parks with curatorial maintenance of their collections. This office can be considered a clearinghouse for museum supplies, equipment and information. The best part is that commonly used materials and supplies are distributed without direct cost to the park. During the past four years, nearly all the parks in the system with museum collections have taken advantage of this service.

The philosophy guiding the program is that assistance and supplies distributed to parks will result in a quantum improvement in conditions. Besides, we like to help people! Since our staff can't possibly visit every park needing help with their collection, we try our best to help park personnel do their best on site with advice and materials from Harpers Ferry Center. This outreach program has proved to be very successful over the years and has become a valuable tool in the preservation of historic
objects. Best of all, thousands of objects can be treated on site, thereby reducing shipping costs and the risk of damaging specimens.

This outreach program is effective as demonstrated by large increases in assistance to parks. In fiscal year 1976, the office received and processed 443 requests for data and materials. During fiscal year 1977, 781 requests were processed. In 1978 and 1979, requests for assistance numbered 1169 and 1221 respectively. The utilization of this program by parks still continues to increase.

We provide on loan large and expensive equipment, particularly apparatus for monitoring and maintaining environment conditions in museum storage vaults. This service is designed to evaluate critical problems and correct them until parks can allocate their resources to solve the problem.

The most valuable function this office provides is assistance with museum storage. If this office can improve park museum storage conditions, the deterioration of the artifacts will be arrested.

Assistance is provided in a number of ways. We can consult with parks on special storage situations and advise on appropriate methods to use.

We recommend acceptable storage containers and cabinetry and assist parks in obtaining what is recommended. We can, in most cases, send from our stock special containers, such as acid-free folders, envelopes, and boxes.
as well as give source information on cabinets. This particular function has insured the preservation of thousands of artifacts because of our successful efforts to get artifacts stored in the proper cabinetry. The survival is guaranteed when artifacts are placed in a safe environment.

We have worked with museum equipment manufacturers to develop cabinets with "off the shelf" roller rack assemblies so parks need not fabricate racks if they have money to purchase them. An array of special museum cabinets have been introduced for special storage situations because of contact this office has with the museum equipment manufacturing world.

A new specimen cabinet capable of holding a fumigant has been added to our list of storage equipment. It comes in our modular systems of sizes. This particular model has a closed cell sponge rubber gasket around the door which creates an airtight seal.

This office has devised several innovative techniques for storing museum artifacts. They involve modifications of standard equipment to deal with particular needs. A special rack was designed to safely store large textile specimens. The plywood roller rack was fabricated so it will fit into a standard wardrobe cabinet. It enables flags, rugs, etc., to be stored on rollers in the security of the specimen cabinet. The modifications can easily be constructed with materials purchased at a local hardware store. Several parks have already requested information and illustrations. Materials lists and drawings are available from this office.
We also created a very simple method of converting standard GSA cabinets into storage for swords and scabbards.

We have discovered a new, more stable plastic foam to be used in storage applications. This polyethylene foam has replaced the polyurethane we used as the material for drawer pads which protect artifact surfaces when used in cabinets and on shelving.

We are working with manufacturers to fabricate chipboard trays totally out of acid free materials. This tray, when completed, will be a boon for the entire museum community.

Another service this office provides is on site evaluation of the museum storage situation. This consultation with the park results in the development of a comprehensive museum storage plan for the park. This service has resulted in plans for Saugus Iron Works NHS, Hubbell Trading Post NHS, Gateway NRA, Golden Gate NRA, and Acadia NP.

Two complete conservation labs were established in 1977 with the assistance of Don Cumberland. One, located at the DeSoto National Wildlife Refuge in Iowa, is a joint venture of the NPS and the Fish and Wildlife Service. The second will be operated jointly by the National Capital Region and the White House. Assistance was given by suggesting suitable equipment and providing source and price information.
A small-parts handling system was discovered that uses a minute vacuum capable of pinpoint application. It has great potential as a tool in painting conservation where a quick-release device is needed for reattaching paint chips to canvas.

This office is responsible for improvements in museum records keeping. New accession folders and Deed of Gift forms were developed with the assistance of Carol Kohan, Michael Paskowsky, and the Branch of Paperwork Management, WASO. After grappling with the problems of designing an "easy to follow" form, we have plenty of sympathy for the IRS. It is hoped that these forms will simplify accessioning, particularly for those who have little experience with the process.

SPECIAL PROJECTS

In August 1978, Don supervised the move of the Yellowstone Museum Collection from its Visitor Center to a temporary storage location at Yellowstone. Don also organized the temporary storage facility to accommodate the large collection.

A November 1978 trip to Andover, Massachusetts was made to supervise the packing of 15,000 artifacts in the Pecos Indian Collection.
An August 1979 trip was made to San Francisco to set up a storage facility for the Fort Mason and Maritime Museum Collections.

Don worked with the American Association of Museums in putting together a Directory of Museum supplies and equipment. This directory will be published for nationwide distribution in 1980.

The Division of Museum Services also assists outside institutions with information on professional museum operation. This service is extended to approximately twenty institutions per year.

Instructing students in the Phase I and II courses involves considerable effort. Don Cumberland conducts workshops demonstrating curatorial equipment, cabinets, and museum supplies. All students are interviewed to discuss curatorial problems and to determine possible solutions. Furthermore, Don conducts approximately 50 tours a year through the building to help increase awareness in curatorial matters.
As Staff Curator, I am responsible for two curatorial management programs, provided by the Division of Museum Services, that assist the parks with maintaining their museum collections. These programs are the Conserve 0 Gram series and the Collection Preservation Guides. Through these programs, curatorial information is given to the parks to meet individual needs and problems.

Diana Pardue

COLLECTION PRESERVATION GUIDES

The National Park Service is recognized by museum professionals as one of the leading proponents of sound museum management. The Museum Handbook and Manual for Museums, both NPS publications, have been acclaimed as excellent guidelines. However, in all too many cases, the Park Service fails to "practice what it preaches." Accordingly, a startling number of NPS sites maintain their museum collections in substandard conditions.

The idea of a curatorial management guide was conceived in 1974 to meet the curatorial need of Hubbell Trading Post National Historic Site. Response was so favorable that numerous parks around the country have requested similar documents. At that time the guides were called Collection
Management Plans. Quite a few were done for individual parks. In 1979, a
decision was made to change the name of the guide to Collection
Preservation Guides.

Collection Preservation Guides are being written for each of the parks to
provide them with the best curatorial advice on how to take care of their
individual collections. These guides evaluate all phases of museum
operation. Individual problems are thoroughly examined and discussed so
that solutions can be proposed that will meet the special needs of the
park.

Some of the topics covered are the Scope of Collections Statement, museum
record keeping, proper care of collections, exhibit and storage
environments, conservation recommendations, security, staffing and
curatorial maintenance. The content does not always include all of these
topics, only the topics that are relevant to each specific park. These
guides provide the park with a means of solving their curatorial problems
and thus become the first step toward sound museum management.

The guides are scheduled through the Regional Curators who decide each year
which parks are most in need of this type of curatorial assistance. The
park must send a memorandum to the Regional Curator, requesting that a
guide be done for their area. A field trip is scheduled to the park to do
an evaluation of the present status of the museum collection. This on site
evaluation takes from two days to one week. The team performing the
evaluation usually consists of the Staff Curator and a conservator from the Division of Museum Services, the Regional Curator and the appropriate park personnel.

After the field trip the guide is written up by the Staff Curator with input from other members of the team. Copies of the finished guide are sent to the Regional Office for distribution. Numerous copies are kept at the Division of Museum Services to use as information copies.

Some of the guides are written by contractors. These contractors are museum consultants from all over the United States whose professional backgrounds qualify them for this curatorial work. By using these museum consultants, more Collection Preservation Guides can be done each year, providing more parks with curatorial assistance.

Collection Preservation Guides that have been completed or initiated within the last year are:

- Hot Springs NP
- Bandelier NM
- Antietam NB
- Ft. Vancouver NHS
- Carl Sandburg Home NHS
- Yosemite NP
- Olympic NP
- Jefferson National Expansion Memorial NHS
- Pipe Springs NM
- Zion NP
- NPS Archives
- Grand Canyon NP
- Delaware Water Gap NRA
CONSERVE 0 GRAMS

The Conserve 0 Gram series makes curatorial and conservation information available to all NPS areas and some private museums. Each COG covers one topic of curatorial management, such as light damage, relative humidity, inventorying a collection or museum records. These publications offer guidelines and solutions that can easily be applied by a museum staff.

As new information on conservation and collection management comes to light, the old COG's are revised and new ones created. They are designed to fit in a three-ring notebook and numbered uniformly for easy reference. Anyone can suggest topics and submit drafts for new COG's. New COG's and revisions are put out by the Staff Curator usually four times a year.

COG's are distributed through the Regional Curators in each of the Regional Offices. They maintain a mailing list of private museums who wish to receive complete sets and updated copies.

We encourage anyone to suggest topics and to write new Conserve 0 Grams. These ideas should be sent to the Staff Curator at the Division of Museum Services.
CURATORIAL TRAINING

We at the Division of Museum Services believe that training is essential in order to upgrade the quality of museum work in the NPS. Believing this we are actively involved in the training process.

Curatorial Methods Phase I is sponsored by the Division and conducted annually at Mather Training Center and in the labs. This is the basic museum training for park personnel. In addition three or four people from museums outside the NPS are selected. The course provides trainees with sound museum philosophy, practical experience in cataloguing artifacts, and a broad overview of the conservation labs with an emphasis on how to prevent and detect deterioration of artifacts.

Curatorial Methods Phase II is also sponsored by the Division and is offered biennially. In Phase II a trainee comes to the conservation labs and spends a week working with a key conservator and possibly one other conservator. The trainee is encouraged to bring artifacts from the park collection. Conservation techniques which can be carried on back at the park are taught to the trainee who is closely supervised by the conservator.

Although not sponsored by the Division of Museum Services Curatorial Methods Phase III is now offered to NPS employees. The Division of Reference Services and Mather Training Center sponsor Phase III and hold it
in the year that Phase II is not offered. Held at the Henry Francis Dupont Winterthur Museum and conducted by their curators and conservators, Phase III emphasizes American decorative arts from the Colonial period up to about 1840. Lectures and guided tours through the museum provide an in-depth look at different aspects of decorative arts illustrated by the tremendous resource of the Winterthur collection.

The Division also encourages employees working with collections to seek training outside the NPS. The American Association of Museums and the American Association for State and Local History are two organizations that provide various workshops and seminars on different subjects relating to museum work.

Examining an American Indian War Shield
Mr. Ralph Lewis began his National Park Service career in 1935. For more than 30 years he helped establish guidelines and policy for the slow-growing museum development in National Parks. His earlier work led toward the recent establishment of two Divisions (Museum Services & Reference Services) here at Harpers Ferry Center which are directly assisting Parks with their curatorial work.

Educated as an Entomologist, Ralph has served as: Curator, Park Historian (JNEM); Assistant Chief, Branch of Museums, (WASO); Chief, Branch of Museums (WASO); and Chief, Branch of Museum Operations (WASO and HFC) until retiring in 1971. He received the Meritorious Service Award in 1968.

Since retirement, Ralph has continued to contribute to National Park Service museology largely as a volunteer. He compiled the Manual for Museums, a basic textbook of museum principles. He has helped to organize, record, and curate the Harpers Ferry National Historical Park Museum Collection and has written Collection Management Plans/Preservation Guides for several Parks. He has also visited several Parks at our request to evaluate museum collection requirements.
Beyond all these tangible results, Ralph's presence in the Division is always a pleasure for all who deal with him. Young curators learn from him, while those of us who aren't so young gain vital information from his background and experience which Mr. Lewis so willingly shares. The National Park Service and I owe very much to this remarkable man.

Arthur C. Allen
BRANCH OF CONSERVATION LABORATORIES
Since 1971, the Division of Museum Services has grown to include many functions. Among these functions has always been conservation. In December 1978, the Division created the Branch of Conservation Laboratories with Fonda Thomsen as its first Chief.

The present Branch Chief, Tom Vaughan, began working at the Division of Museum Services in July 1980. His interest in cultural resource problems has enabled him to serve in this position well.

A number of goals are accomplished through this separation of functions. Administration of the Division can be more effective now that conservation functions are being handled through a separate office. Support staff has been added in Juanita Hahn, Branch Secretary, Kathy Fadely, in charge of travel, and Jeanette Davis, in charge of requisitions and timekeeping.

Fully detailed examination and treatment reports, accompanied by condition and post-treatment photographs are now available to the Park. Treatment reports will accompany the return of the objects to Parks. A retrieval system for all reports and photographs has been established.

The new system for Requests for Treatment is fully operational. These requests are completed by the parks or Reference Services accompanied by copies of the catalog card, photographs, and other pertinent information (significance of the object, whether for exhibit or study, required date of
completion). The conservator can then schedule work with reasonable assurance of completing it when required by the Park, and the number of artifacts on hand at HFC will be limited to a one year backlog of work. All operations should function more smoothly under the new request system, and the service of the Branch will be greatly improved.

Close cooperation with Exhibit Planning helps us to schedule the large number of artifacts required every year for exhibits. We see this job as a priority function of the Branch and contribute as much assistance as possible where questions of proper lighting, proper mounting materials and techniques, humidity and handling are asked.

We are available to the parks' staff to help resolve problems of environment and storage on an individual basis. Close cooperation is maintained with other members of the Division also concerned with these aspects of the parks' museum work. There is a constant flow of communication in these matters.

Conservators are frequently asked to participate in the Collection Preservation Guide's process. A first-hand look at conditions in the Park, followed by analysis of problems, proposals for solutions of problems and compiling the suggestions into Collection Preservation Guides are some of the ways we participate.
And, of course, the Branch of Conservation performs treatments of objects of historic and artistic significance which are the responsibility of the National Park Service. There are twelve conservators in the various specialities of furniture, glass and ceramics, ethnology, paper, natural history, paintings, textiles, metals, and excavated material. With this breadth of experience and expertise, nearly every kind of treatment problem can be solved, a capability shared by very few similar conservation centers in the world.
As Museum Records Clerk, Joyce is responsible for maintaining the treatment request and treatment reports for conservation work on all artifacts received by the Division of Museum Services. These duties include logging in all requests and assigning job numbers, consulting with conservators in assigning completion dates and obtaining subsequent treatment reports for typing and archives.

Joyce Baker

The Museum Records Clerk also maintains a retrieval system documenting the artifact and all treatment performed so that at some future date, this information is readily accessible.

This support position is necessary to maintain a treatment record file. Without these records the conservation work would be meaningless.
Most of what occupies the time of a Ceramics and Glass Conservator is "after the fall."

Then, with a few more resources and a bit more experience than all the king's horses and all the king's men, I go about putting National Park Service artifacts back together again.

The opportunity to contribute my skills toward the preservation of our mutual national heritage is what I find most rewarding as a conservator. The physical evidence of our history, be it a document or a historic furnishing can slip through the fingers of neglect and be lost forever. The story history tells us, without the graphic information artifacts supply, becomes flat and uninteresting. So it is that we conservators strive to keep the story intact by keeping the artifacts intact for all to see. Hopefully we can also protect this heritage for the future. This is the impetus behind the preventative maintenance approach toward artifacts in the National Park System. The preventative approach materializes in the Curatorial Method courses wherein park personnel are instructed in the tenets of preservation. Participation in these courses as an instructor is one of the primary functions of this laboratory.
Other functions of the lab include all the restorative aspects of conservation. The lab has been on the move. We are no longer relegated to the basement of ole' Shipley. As the lab moved up, so did the list of materials treated. Stone objects with diversely different ailments are now treated. The conditions encountered range from those found on Lincoln's marble table top which was severely stained and badly repaired, to spalling (a kind of falling apart at the seams), obliterating a fossilized fern.

Picture frames are also new on the list and pose all the problems a composite piece can present.

Other responsibilities of the lab include direct park support. Often help is just a phone call away! Advice given on the care and feeding of artifacts can often circumvent a trip to history's hospital. When the problem cannot be solved over the phone, on site conservation may be required. On site support recently resulted in trips to the George Washington Carver Museum at Tuskegee Institute National Historic Site and the new Cairo Museum at Vicksburg National Military Park.
A historically important finger bowl in the condition we received it.

Now it's ready to go back on exhibit.
Inpainting a porcelain bowl

Greg instructing

Abe after treatment
"Culture is concerned primarily with the way people act. The actions, then, of manufacture, use, and nature of the material objects constitute the data of material culture. In their relation to culture, artifacts and materials are to be classed in the same category as the substances, such as minerals, flora, and fauna, which compose the environment in which people live. Artifacts themselves are not cultural data, although, to be sure, they are the concrete manifestations of human actions and cultural processes."

Ethnologist, Clellan S. Ford 1937

The collections of objects that the ethnology lab is charged with preserving, are in fact, "fossilized evidence of human behavior". The artifact is the basic unit of anthropological study and represents the ideas, activities, and artistic inspiration of mankind. In the hands of those of us who study material culture to enhance our understanding of American life, these objects are the only remaining vestage of a past that is constantly undergoing evaluation and interpretation.

Ethnographic collections differ widely from those of the fine arts. Anthropological artifacts bear culture-related functional significance, and must not be restored to a condition which negates or disguises any cultural modifications or technological evidence. Retention of relevant ethnographic and technological associations is a primary criteria of any preservation treatment. Often during treatment, significant historical alterations and modifications are uncovered and the documented materials becomes part of the object's permanent file.
There are many questions which must be considered while choosing an appropriate treatment for such sensitive material culture. They can be answered effectively only by one who has a thorough understanding of the nature of materials and the people who used them.

We at HFC see ourselves as custodians of material culture, and have realized increasingly that we are responsible not only for safeguarding and preserving the objects in our care but also for maintaining the inherent qualities that make these objects unique at the time of their creation. This uniqueness is comprised of the materials selected by its creator, the manner in which he or she expresses his/her ideas and the techniques that he or she has employed; a uniqueness that can never be exactly duplicated.

The dilemma that confronts us all is that "the fabrications of man have a fragile nature". They are constructed of matter, and as such, deteriorate according to the laws that govern all matter. Unfortunately many of our anthropological collections have decayed and deteriorated because of human neglect; they have not received proper preservation care or storage. Ethnographic artifacts are generally composed of raw materials which are quite fragile and have long vanished in archaeological situations. Our efforts to protect these treasures are just a drop in the bucket of the work that is needed if we are to really save our past.

A wealth of cultural materials pass through my laboratory each year. I am continually impressed with the historic value and significance of many of
the single items that the Parks send here for preservation treatment. The George Washington marquee, used during his Revolutionary War campaign, was a unique and exciting challenge to preserve; as was the Treasure Guard Flag which was damaged by John Wilkes Booth the night he shot Abraham Lincoln. Just as exciting, however, is the multitude of smaller anonymous artifacts, from the cavalry equipment used at Custer's Battlefield to the hand-beaded moccasins of an unknown Plains Indian.

AS FOR ME

My own background is quite varied and yet, somehow in retrospect, it looks like I was headed here all along. I studied art and anthropology at the University of California and received a BA in both fields. My interests in Peruvian cultural materials led me first to Peru and then to the Smithsonian where I settled in for the next few years. I entered George Washington University's Graduate program in Museum Studies and specialized in Ethnographic Conservation. After completing my degree I went south again for one year of work and study at the National Center for Restoration, (Paul Coreman's) in Mexico City.

I've spent three good years here at the Division of Museum Services where I have treated not only ethnographic objects but textiles as well. Just recently I have returned from four months of conservation training at UNESCO'S Rome Center (ICCROM) where I studied conservation science.
I am looking forward to getting to know many of the Park's collections that I have not yet seen. My position here at Harpers Ferry Center is one of continued adventure and involvements with this nation's past.

From the Nez Perce Indian Collection

Cleaning an Indian Saddle
EXCAVATED MATERIALS

Dan Riss

The archeology lab is responsible for both the excavated materials its name implies and also a fine miscellany of other objects. In general, the lab is responsible for treating only that portion of the National Park Service's archeological collections which have been selected to become part of a park's museum collection. These objects include artifacts which are of exhibitable quality, are illustrated in reports, are examples of types and varieties, or have some other research or interpretive potential. Most of the objects turn out to be metal, and most of that metal is iron, with some brass and copper. The rest, usually only small fragments, are of wood, leather, ceramic, or textile.

Artifacts come into the lab in varying quantities. They come singly, in batches of twenty, a hundred, or several hundred. In one recent year more than 1700 objects were treated. Admittedly this figure counts stoves, of which there were few, and nails, of which there were hundreds. However, every artifact, whether large or small, needs to be handled and treated individually in order to receive the best professional treatment. Treatment en mass is usually not possible or desirable.
Objects recovered from the ground also come in an endless variety. They are often common objects that people habitually pay little attention to. They become lost or discarded. For the generations that come after, they become a contact point with the past. Sometimes these fragments are all we have to give witness to the reality of a former time. The abstract works of written history become more real with these tangible evidences of daily lives and historic events that survived in the ground.

The idea of the lab is to make objects last. We want to stabilize objects so they will be available in the future for study, interpretation, and inspiration.

Most things require some sort of cleaning. Archeological objects are usually caked with soil and corrosion products. Cleaning not only enhances appearance, reveals markings, and makes identification easier, it also prepares the surface so that if a protective coating is desired, it will bond well. Cleaning and corrosion removal can involve any or all of the following techniques: wire brushing, chipping with a hammer, picking and scraping, vibrating with an electric engraver, ultrasonic cleaning, rubbing with polish and cloths, electrolytic cleaning, chemical soaks, or airabrasive cleaning using glass beads.

Some objects, in addition to cleaning, will require special kinds of treatment because they have somehow become chemically or physically
unstable. A cannon recovered from under the sea, for example, must have contaminating chlorides leached out or else it will continue to corrode.

Usually for iron objects, a protective coating of microcrystalline wax is applied to the heated, clean metal surface. Brass and copper are often coated with a lacquer. These coatings act as a barrier to air and moisture. Very fragile or crumbly objects are sometimes consolidated and strengthened by being brushed with, or dipped in a synthetic resin.

The work does not end with treatment, however. We work closely with the Division of Exhibits and with Parks to ensure that artifacts are displayed and stored under conditions that will not contribute to their further deterioration. In addition, we are available for consultation over the phone, give training sessions in basic artifact storage and care to park personnel, contribute to the Division's Conserve O Gram series, and help with the Collection Preservation Guides.

Over the past few years we have had the privilege of working on artifacts from all over the National Park Service and from various periods of history. From Mound City, Ohio, have come many beautiful and rare copper artifacts fashioned by the craftsmen of the Hopewell culture of circa 150 A.D. For Mt. Rushmore we have worked on the jackhammers that carved the faces and the bosun's chairs the workers were suspended from. From Padre Island came over a hundred Spanish silver coins recovered from a 1554 shipwreck. Let us not forget the cannonball fragments, canteens, bayonets,
and minie balls from various Civil War Parks. Nor the shoe buckles, stock buckles, and pouch badges of earlier conflicts. There have been stoves, a safe, and sets of hammers. Also hardware, tools, ammunition, and shoes from the Union gunboat Cairo. And of course, the humble bag of nails, reportedly just about all that was left of George Washington's Birthplace. A constant variety and challenge.

Electrolytic cleaning

Airabrasive cleaning
Allen Cochran, Ron Sheetz, and Dale Boyce
comprise 75 years of experience in furniture,
restoration, and reproductions. Their talents
and skills represent a subtle balance between
old world craftsmanship and modern technology.
They regularly attend meetings of the
Washington Conservation Guild.

In the course of their work, they are called
upon to solve seemingly impossible task -
banged, cracked, and sometimes "basket case"
objects arrive, but these defects miraculously
disappear in their lab.

All parks (including the White House) call on
them for assistance in curatorial problems,
including insect damage, cleaning objects, and
general housekeeping. Some objects that have
received major treatment are listed below.

LINCOLN HOME NHS - Ten pieces of original
Lincoln furniture was in extremely bad
condition. It was restored and returned to
the park.
KLONDIKE GOLD RUSH NHS - A Skagway boat kit that was carried up the Chilkoot Pass during the Klondike Gold Rush of 1898, was brought in. With only 27 pieces and a canvas cover, an 18 foot boat was reconstructed which originally consisted of 77 pieces.

GETTYSBURG NMP - A table, reportedly used by General Meade as his desk, needed restoration. During the restoration, four signatures were discovered on the underside of the top. Two of these men were identified as members of General Meade's regiment. These signatures help to authenticate the table.

EDISON NHS - A wooden model of a concrete house, built by Thomas Edison, was completely restored.

LYNDON B. JOHNSON NHS - A Victorian sofa used in the boyhood home was restored.

SAGAMORE HILL NHS - A moose antler chair from Teddy Roosevelt's home was treated.

WHITE HOUSE - Many pieces come in for conservation. One unusual request was to apply a hand-rubbed finish to a large reproduction bookcase, now being used in the President's living quarters. For acknowledgement of their work, the three conservators were invited to the White House to meet
with the President and Mrs. Carter. This visit was a highlight in their careers!

Allen, Ron, and Dale participate in curatorial training of park personnel, through the Curatorial Methods courses and on site. They travel to the White House storage about once a year to talk with personnel about handling and storage of objects.

Allen and another member of the staff traveled to Lyndon B. Johnson NHS, Texas for a two day training session on care of museum objects. There were fifteen State Park personnel in attendance, as well as National Park personnel.

Allen also assisted in preparing Collection Management Plans for Appomattox Court House NHP and Mammoth Cave NP.

Both Ron Sheetz and Dale Boyce did some conservation work at different parks. Ron traveled to Cumberland Island NS and Grand Canyon NP; Dale traveled to Yellowstone NP.

The purpose of the two-week trip to Cumberland Island was to assist in the restoration of original office furniture in the Tabby House. This furniture was too bulky for shipment to the lab in Harpers Ferry.

The one-week trip to the Grand Canyon was made to perform some conservation work on the historic river-running craft at the Grand Canyon Visitor Center.
Recommendations were made for further maintenance that can be carried out by the Park staff.

The trip to Yellowstone NP was necessary to photograph the furniture collection which belonged to the Yellowstone concession. This furniture is from the old hotels that have been in Yellowstone NP most of this century. Dale also determined the amount of conservation work that needed to be done on the furniture.

Dale, Allen, and Ron participated in a variety of training courses. A training course they all attended was "Museum Marauders." This three-day course involved identification and prevention of insects. Ron and Dale attended a one-week Smithsonian course, "Connoisseurship of American Antique Furniture," that discussed detection of fakes and the care and conservation of furniture. The course was held at the Museum of History and Technology in Washington, D.C.

Ron and Allen also attended a three-day course, the 14th Annual Pennsbury Manor Americana Forum. It was held at Pennsbury Manor in Morrisville, PA and they went to the sessions on upholstery and framing.

Allen attended a four-day Historic Upholstery and Drapery Conference at the Boston Museum of Fine Arts and Old Sturbridge Village. The old methods of upholstery and hangings were demonstrated and discussed.

Dale received some specialized training in England on wood turning from Mr. Peter Child. Mr. Child is a foremost authority on wood turning.
Reassembling a Skagway boat from the Gold Rush

Making repairs to a couch from the house where Lincoln died

Staining a desk from Longfellow House
A Linen Chest for the White House

General Mead's table which was used as a field desk

Window sash for Cumberland Island
Spalling paint from a cast iron ladle
Heaps of rust on a laboratory table
Chipping hammers and \( \text{H}_2\text{O} \)
These are the things.

The restful sound of ticking clocks
Learned patience from picking locks
Bending wires and soldering
These are the things.

Spinning, turning, creating parts
Not all of these are gentle arts
Casting brass and drilling holes
These are the things.

Tightening vises and cleaning bores
Writing reports, conducting tours
L-1011's and DCA
Ah yes, these are the things.

The walls of the metals laboratory are lined with tools. Through utilizing the tools, artifacts, which reflect our National heritage, are brought into a state of suspended animation. We are attempting to stop the clock of deterioration.

Stopping the clock is an impossibility. We can only modify the clock; lowering the bob will lengthen the arc, so, in essence, we are slowing the ever-present hands of time.

Through our laboratory methodology, the objects will last through successive generations. The treatments we perform are not final, there is no "cure-all." Future dedicated conservators will have to continue the adjustment.
Perhaps, through our efforts, improved methods will contain the factors which promote deterioration. Clearly, we have no alternative. The history of our past can be saved only through concentrated effort.

From my basement laboratory, a glance through the window presents the view of a spalling cement wall. This scene coordinates well with the clattering, churning, hammering of the steam pipes and the dissonant hum of the circulating pump.

The lab is large and like the perpetual blind date, has a nice personality. The imperceptible flickering of the fluorescent fixtures does a tap dance on my optic nerve, but conservation is persistent, it shall endure.

For certain, these are the things!

This clock from Gt. Falls did not want to work
In April of 1977 Edward McManus was hired by the National Park Service to assist with the establishment of the Bertrand Conservation Laboratory at DeSoto Wildlife Refuge near Missouri Valley, Iowa. The steamboat BERTRAND sank on April 1, 1865, after hitting a snag in the Missouri River. The boat was excavated in 1969 and 1970.

In addition to procuring equipment and renovating the existing laboratory space, his duties included the formulation of treatment procedures, especially metals, and the training and directing of staff members. In October of 1979 he was transferred to the Boston area.

Ed's immediate supervisor is Edward Kallop, Regional Curator for the North Atlantic Region, National Park Service. They are presently involved in a pilot program which consists of three phases. The first phase is a general conservation survey of metal items at various parks. The second phase is the generation of specific condition reports and treatment proposals, at the request of park personnel once they have had an opportunity to review the survey report. Phase three will be the treatment of specific items. Ed has recently received a small supply of materials and equipment and has obtained the use of laboratory space in the North Atlantic Region Preservation Laboratory at the Charlestown Navy Yard in Boston.
Sites visited to date:

Charlestown Navy Yard National Historical Park
Saugus Iron Works National Historical Park
Minuteman National Historical Park
Salem National Historical Park
Longfellow National Historical Site
Cape Cod National Seashore

There are several advantages to such a procedure. It is an attempt to establish the condition for an entire collection prior to the commencement of object treatment. It also delineates the responsibilities of curators and conservators with regard to large collections.
A Natural History Lab was recently set up by Charles Shepherd in the Ethnographic Lab. It is a new lab and is growing. Natural History collections can now come directly to Museum Services for treatment. Charles Shepherd is the Natural History Conservator, working in both the Metals Lab and Natural History Lab. Charlie has been taking Natural History training courses at the Smithsonian Institution and under the direction of Dr. Rolland Hower, performed treatments on the Yellowstone taxidermy specimens and the cleaning and mounting of a crocodile skeleton. Over 50 Yellowstone taxidermy specimens have been treated during his training course.

Charlie is now working on an oxen skeleton from Tuskegee Institute NHS. It needs to be cleaned and to be mounted. Two feathered taxidermy specimens, also from Tuskegee, also need to be cleaned.

Trips taken recently:

YELLOWSTONE NP - Mammoth Springs Visitor Center. Prepared to install Yellowstone taxidermy specimens in exhibit displays.

TUSKEGEE INSTITUTE NHS - George Washington Carver Museum. Performed the transfer of fluid preserved specimens.
Charlie with his oxen skeleton
I came to the National Park Service from one of the Smithsonian Institution's museums, the National Collection of Fine Arts, where I was a Paintings Conservator for 14 years. NCFA's main concern and therefore most of my professional experience, is with American Art.

My aim is to become aware of the state of paintings conservation throughout the National Park Service and to try to help out where help is most needed in preserving the paintings in our care.

Much of my time will continue to be spent doing conservation treatment of paintings in poor condition. My first priority is stabilization, preserving what remains of the original work. This usually means securing loose paint by one means or another according to circumstances. Often lining is necessary. New fabric or some other support is attached to the reverse of the original canvas. Paintings conservators anticipate that their linings will help keep paintings in stable condition for many decades.
Most paintings have been varnished, and the varnishes available to artists until recent years discolor in time, obscuring paintings with a dark yellow or brown-tinted film. This calls for cleaning. The discolored varnish and layers of grime accumulated over the years may be removed safely in most instances and replaced with one of the new, non-yellowing varnishes that paintings conservators now use. However, cleaning is almost never a routine matter. The solubilities of varnish and paint layers are frequently similar. Each painting seems to present somewhat different problems, for there are innumerable possible combinations and interactions of pigments, oils, resins, gums, glues, fabrics, artistic techniques, and environments. Conservation treatment procedures must be constantly modified.

Distracting paint losses are usually relatively easy to conceal by inpainting, our word for retouching. Paint is applied only in the missing areas. Restorers in the past tended not to be careful about this. They covered original paint as well as losses. We call that overpainting, and it is a practice widely disapproved of now. Conservators usually use paints based on synthetic mediums which can easily be removed at any time in the future without harm to the original paint layers. This is an example of reversibility, treatment which can be undone, leaving the painting in its original state.

Technical examination, involving a variety of means, enables us to ascertain the condition of paintings and devise appropriate treatment
procedures. Technical examinations can also provide data to help answer historical questions, establish attributions, and expose fakes and forgeries. In the Paintings Laboratory at the Harpers Ferry Center we have the necessary equipment, including a good stereo microscope, a Zeiss operation microscope. In the Branch of Conservation Laboratories, we have an X-ray unit, plus a fluoroscope.

Apart from this laboratory work at Harpers Ferry is the other major aspect of my work: assisting Park Service personnel wherever there are neglected or endangered paintings so that steps can be taken to improve conditions or get the necessary conservation treatment done. Obtaining proper environmental conditions in storage as well as exhibit areas is a high priority. We also want to see that contract conservation treatments are carried out in a competent, professional manner. Possibly more paintings have been seriously damaged through misguided or uninformed treatment than by any other cause.
In terms of volume and complexity, the conservation of paper artifacts ranks as the single most serious national conservation problem. This national problem is mirrored in the National Park Service which holds nearly a million artifacts composed primarily of paper.

The variety of things on paper, the words and images, includes engravings, lithographs, watercolors, drawings, maps, books, newspapers, letters, documents, photographs, pastels, and wallpaper. More paper can be found as a composite of other objects - the lining of a gentleman's hat box or a maker's label on a clock. The industrial revolution gave us vast quantities of machine-made paper from wood pulp. It also gave us a paper which so rapidly self-destructs that we may not have much left of it in another century.

The Paper Conservation Laboratory is part of the teamwork necessary to preservation of paper artifacts. We advise Parks about acid-free storage materials, mylar encapsulation of fragile research resources, and minimizing damage on exhibit. We can help a Park establish its treatment priorities, redesign storage areas, and estimate conservation costs.
One of the most important ways we feel we contribute to awareness at the Park level is by participating as a lecturer in the Curatorial Methods courses. A basic understanding of the agents of deterioration helps Park personnel see their paper problems with new eyes.

We contribute information and ideas through the written word by adding to the Conserve O Gram notebook and by participating in Collection Preservation Guide survey teams. We hope we provide sensible solutions where the problems seem overwhelming.

The laboratory itself is equipped with the basic necessities of sinks, tables, tools and supplies for performing treatments. Additionally, there is compressed air for spray deacidification, deionized water for washing and mixing solutions, a vacuum air table for treatment of fragile design surfaces, a Plexiglas cutter and an excellent mat cutter. There are microscopes, light and pH meters and cameras for supplementing visual information. The Oriental bias of our tools and techniques is thus complemented by Western technology.

We are pleased to be able to participate in various high school executive intern and work/study programs by assigning duties like cutting mats and mylar encapsulation to these students. Rarely is actual manipulation of paper artifacts suitable for wholly untrained hands.

A "routine" paper treatment would include dry cleaning the surface of dirt, soaking out acids and discoloration, deacidifying the paper with a calcium
or magnesium compound, patching tears, reinforcing the paper with a backing of thin, strong Japanese paper, drying the paper flat, then reframing with acid-free mat board. Since every piece of paper is entirely individual, the "routine" is constantly modified in countless ways. Our primary goal is to provide longer life to the paper. Only secondarily are we concerned with "cosmetics," and ideally all our techniques are reversible and will not contribute to future deterioration.

An extension of our capabilities in the lab is contracting specialized problems to other qualified conservators. Photographic material and books are two large and important categories of work in paper which have become areas requiring special training. We look carefully for good training, experience and a professional outlook.

We recognize the changing nature of our work with the enormous impact of scientific research in the conservation field. For this reason we are concerned that examinations be thorough, records of treatment be complete, accurate and well-documented. We hope those conservators that come after us will have an advantage we don't - the hindsight of our experience.
TEXTILE CONSERVATION LABORATORY

The National Park Service estimates there are over 200,000 textiles in its collections. A textile laboratory was established within the Branch to provide leadership and professional assistance to the park staffs in providing care to insure the preservation of these textiles. Obviously this laboratory cannot individually handle each textile; therefore, the laboratory is designed to provide the following services.

Fonda Thomsen

We provide professional textile conservation treatment to those textiles in our collections that are determined by park and regional curatorial staffs to be in need of professional conservation treatment and significant enough to merit it. The Textile Laboratory has facilities to identify fibers, wet and dry clean fabrics, reinforce fabrics and prepare them for storage or exhibit. Since most treatments are time-consuming, the amount of actual objects treated is limited.

Contract conservation support is provided to parks which have the capability and finances to seek professional help locally. Close communications with professionals in the field and active participation in our professional conservation organizations aids us in locating qualified assistance near the site.
Information on the proper maintenance care of textiles in the collections is distributed to the parks through the Conserve O Gram program, Curatorial Methods course, and direct personnel requests by letters or telephone. We welcome direct phone communication when questions arise.

Efforts are made to keep abreast of new developments within the field of textile conservation and pests and pesticides. We do our own basic research on relevant problems.

The laboratory staff is composed of a professional conservator with assistance from temporary technicians and student interns. A formal intern or apprenticeship program does not exist.

We welcome your inquiries and information. Feel free to stop by for a chat when visiting Harpers Ferry.

Fonda busy at work
BRANCH PHOTOGRAPHER

Mike Wiltshire's main responsibility in the Branch of Conservation Laboratories is the taking of documentary (before, during, and after) treatment photos of the objects to be worked on by the conservator. He has also developed a working photographic system for the Branch and is continuing to improve it.

Before treatment on an object may begin, black and white documentary photos of the object must be taken for insurance and security purposes. Black and white is used because of its relative permanence and stability. Each negative has included in it, along with the object, the following necessary and important information: the four letter park abbreviation, a scale of measurement, the job number of that particular object, and a Kodak gray scale. The reason for the inclusion of this information is so the negative and any prints made from the negative contain all reference information pertaining to that object. The end results (negatives or prints) show where the object is from, give the viewer an idea of the object's size and condition, shows the job number which doubles as a photo referral number for filing, and, with the Kodak gray scale, tells the viewer if the photograph is an accurate rendering of the object included. With this information, the negatives and prints in a sense speak for themselves.
Processing of the negatives and sometimes the prints is of the utmost importance. It is imperative that the negative be processed archivally, which generally means producing the most stable and durable results possible. It demands close and careful monitoring of the negatives, and prints during processing and testing the end results for residual elements that may shorten their existence. We strive to make the negatives and prints last as long or longer than the object itself.

In some instances color, infrared, ultraviolet, or additional black and white photos may be deemed necessary by the conservator responsible for an object. In a few cases microphotographs are requested and a microscope with photographic attachments is used to achieve the desired results. The amount of time and the number of documentary or specialized photos taken of an object depends upon the importance, extent of damage, the uniqueness of a particular problem, or the interest of a conservators particular technique. Some objects may warrant many photographs, some objects only a few, but nevertheless documentary photos are almost always taken.

Photography is one of the frequently neglected areas of the cataloguing process, but it could well be one of the most valuable. In some cases a written description, no matter how detailed, just is not sufficient.

To law enforcement authorities, photographs can be invaluable in tracing down a missing, lost, or stolen museum object. For insurance purposes many
insurance companies request that photos be taken of valuables for this reason.

Over a period of years a photograph can show condition changes, deterioration, or damage to a particular object. Has the object been overused and abused or does the climate need improvement? In this case it serves as an indicator of the object's environment.

For research reasons a photograph can be important. In the future it may be the only visual record of an object that now exists. It is also possible that an entire collection could be researched by way of a photographic file. This file would save time, and eliminate the handling of countless objects that did not need to be considered.

A photograph can be used by conservators to evaluate the success of their treatments. When an object is returned to its park, the photos may give the curator and park personnel a chance to evaluate the "before" and "after" treatment also.

Unique problems arise with every object to be photographed and much of the photographer's time is spent trying to overcome these problems so that he can provide the most informative and permanent results in the shortest amount of time. When he is not photographing, he is looking for new methods or techniques that will improve the quality of his work and make it a smoother operation for others in the Branch to utilize.
Two photographs are displayed below of an area on the underside of a table used by General Meade during the Civil War. The table is presently in the Gettysburg Collection.

Photograph #1

Photograph #2

A photograph using conventional black and white film.

A photograph using high speed black and white infrared film. The infrared film reveals four signatures in pencil that were otherwise obscure. Use the knot in the wood (arrows) as a reference point.
Photograph #3

A typical photograph containing the pertinent reference information.
CONTRACT CONSERVATION

Contract conservation is the result of a number of factors. An enormous backlog of objects needing conservation work prevents the conservators in the Branch from being able to do all of it. Occasionally special problems arise that involve unique materials, specialized techniques or special equipment. Sometimes objects cannot be moved from their geographic location without further damage. A contract conservator can help us solve these problems.

Over the years, a comprehensive file of potential contract conservators has been compiled. Names were acquired through professional meetings (such as the Washington Conservation Guild and the American Institute for Conservation), conservation publications, and personal contacts.

Each potential contract conservator receives a copy of the National Park Service's "Guidelines for Conservation Work" when he/she is added to the contract file. The "Guidelines to Conservation Work" describes the professional standards set by the Division of Museum Services and the contracting procedure.
Great care is taken in selecting a contract conservator for a particular job. When an object appropriate to the conservator's field of specialization is available, the artifact is delivered to their laboratory. In some cases the conservator may have to work close to the site of the particular object. Explicit instructions are provided by the Branch conservators to the Contract Conservation Specialist. Once the object is completed with the required treatment reports, the object is examined by the appropriate people at Museum Services before being returned to its proper home.

The Contract Conservation Specialist is Tyra Walker. Her predecessors are responsible for the success of this program in the past and for the broad base that has been established for contract work.

The following list of contract conservation work provides a glimpse of the types of conservation work that has been done on contract.

Olney Cleaners - Louis Muir Wedding Dress

John Muir Historical Site

Mary K. Porter - William Henry Jackson Album - Third Phase

Scotts Bluff National Monument

Christine Young - Ambrotypes (man) - (women & child)

Vicksburg National Military Park
Christine Young - Tintype (soldier)
Vicksburg National Military Park

Ralph Sheetz - Sheraton Style Chairs (6)
Saint Gaudens

Kathy Heffner - Curtains for Photographic Lab
Shipley School House

Michael & Alicia Dixon - 600 Nitrate Base Historic Negatives to be processed to archival standards and make one each contact print.

Mary K. Porter - To perform specialized training in the conservation of photographic materials.

Lola Clendening - Interpreting Service

Nancy Walker - Interpreting Service

Lisa Mibach - Review draft of Collection Management Plan for Bertrand Collection.

Anna R. Johnson - Hand Stitch Cotton Backing to Alter Frontal
Tumacacori National Monument
ADMINISTRATIVE SUPPORT
The administrative support function of the Division has increased during the past year. While the clerical support was once centrally located in the Division Office, it has now branched out to other areas. The Branch of Conservation Laboratories now has its own clerical staff; they perform the duties of typing and other support for the Branch.

Georgeanna Bradshaw has assumed the responsibilities of the Division Secretary. In addition to assisting the Division Chief in the day-to-day administration of the Division, she supervises a staff of three permanent part-time employees and two/three temporary high school students. The Division clerical staff provides support to the four work units in the Division, which consist of the National Catalog, the NPS Clearinghouse, the Curatorial Supply Specialist and the Registrar.

The clerical staff works together to see that all the endless typing gets done in a timely manner. The Division clerical staff maintains the central filing operation for the Division that is a daily working file and is used by Division and Branch alike. In addition, a file of handouts on museum management is maintained. Conserve O Grams are typed and produced in the Division Office and distributed to Regional Curators for further distribution to their Parks. These are written by our conservators to aid parks in the care, preservation and storage of their collections.
Seven Collection Preservation Guides have been prepared this year to date. Each requires many drafts before the finished document is printed, bound and distributed. This represents, sometimes two or more man months of Division effort. The rental of a Lanier word processor this year has made the job much easier and has enabled us to produce a more professional looking document in much less time. Hooray for innovation!!!

Travel preparations represent a large portion of the work for the travel clerk. Each quarter of the year begins with the issuance of "Area Travel Authorizations" for staff members who travel frequently to Washington or attend the monthly Guild meetings. These have to be done every three months since a decision was made to issue a Travel Authorization for no longer than 90 days at a time. The travel budget has been cut drastically this year, and as a result the travel typing load has been reduced.

Before anyone can travel anywhere, a Travel Authorization must be issued. The Travel Clerk collects necessary data from the traveler and prepares a TA, checking to make sure all arrangements have been made. Flight, hotel, and rental car reservations are made by this office; and when the traveler departs, there is an itinerary, TA, GTR for obtaining ticket, and a travel advance to go with them. Travel vouchers claiming expenses are prepared by this office and submitted to Washington for approval. Knowledge of travel regulations is necessary to prepare any voucher. Each trip usually produces a trip report which must similarly be typed. The Division staff will readily attest to the fine travel arrangements made by the administrative support staff.
The Division's function as an educational center likewise creates paperwork and correspondence. In preparation for Curatorial Methods Phase I, it is necessary to set up and confirm schedules for the instructors participating in the sessions. Last year each instructor prepared lesson plans which were maintained in the office to better coordinate topics and prevent repetition and boredom on the part of the students. Handouts and other instructional aids were prepared and placed in individual notebooks for the students. This involved making 40 copies of the handouts and making up 40 notebooks complete with a label for each instructor section and the handout for that session behind the name.

The office also distributes the Manual for Museums by Ralph Lewis. Since its publication in Fall 1976, hundreds of requests for this well received work have been made. This office can distribute a few copies to NPS personnel, and some museum institutions but private individuals must purchase the work through the Government Printing Office.
Georgie

Carolyn

Betty

Carol
HIGH SCHOOL STUDENTS

Since September, faces of area high school students have been present throughout the center. Their jobs range from secretaries to museum aides and student interns, and they work in the bomb shelter of Mather Training Center, as well as Shipley School.

Five students on work/study programs started in September, and three interns began in February. The work/study participants work every day for four hours, either in the morning or afternoon, whereas one student intern comes four full days every week, and the other two are present only one day a week.

Karen Mohler, a work/study student from Brunswick High School, is a clerk trainee at Shipley School during the morning hours. Roxanne Cunningham and Joyce Simons, also work/study participants from Brunswick High, are afternoon clerk trainees in the bomb shelter and Shipley School, respectively. Jackie Myers, of Boonsboro High School, works as a clerk trainee every afternoon in Shipley School. Cay Childs, from Martinsburg High School, works every day from 10:30-2:30, except Wednesday, as a museum aid. Cay has worked in different labs doing mylar encapsulation for old newspapers, cleaning leather artifacts, repairing an altar cloth and cleaning and repairing a basket.

Elizabeth Holmes, from Boonsboro High School, is a Community Intern who works with Dale Durham in the Clearinghouse on Thursdays. Kate Keeley,
another Community Intern from South Hagerstown High School, has been working in various conservation labs, but has spent the majority of her time working with Dale Boyce in the Furnishings Lab. Ellen Moore, a Thomas Johnson High School student intern, works Monday through Thursday assisting many of the conservators in different areas of restoration. She is engaged in a long-term project cutting multi-opening window mats for pages in the William Henry Jackson Album.
Periodically the Division of Museum Services has members of the YACC working here. They are on a one year appointment and are from the C & O Canal Office.

This year we have two young people working in the Division. They are Barbara Trail and Troy Stephenson.

Barbara Trail is a 1978 graduate of Brunswick High School in nearby Maryland. She has been working with the Ceramics and Glass Conservator, assisting with the treatment reports on objects from Vicksburg NMP and Tuskegee Institute. She occasionally does some typing, filing, laboratory maintenance and supervised object treatment.

Troy Stephenson is a 1979 graduate of Jefferson High School. His duties include the packing and shipment of the Museum Objects, as well as maintaining a clean and organized stockroom. It is his responsibility to make sure there are plenty of curatorial supplies in the stockroom and where each item is located. When he has the stockroom under control he spends some time assisting the Registrar. Troy helps the Registrar accession the incoming objects and place them in a safe storage area.

The YACC program has been very successful at the Division of Museum Services. It has provided the Division with some hard-working young people
who have been a big help with day-to-day operations. This program helps test the abilities of the young people and gives them some exposure to different types of occupations.
STAFF BIOGRAPHIES
STAFF PERSONNEL

ARTHUR ALLEN - Art has 22 years with the National Park Service in a variety of positions; Park Ranger, Park Naturalist, Chief Park Naturalist, Master Planner and Interpretive Planner. Since all of these Park Service assignments have involved some kind of resource management, it wasn't such a giant step to take on responsibilities for historic resource management of Chief, Division of Museum Services.

LIBBY ALLEN - Libby started working for the National Park Service in April of 1978, with the YACC (Young Adult Conservation Corp) program in Sharpsburg, MD, working for the C&O Canal National Park. After a month, she transferred to Harpers Ferry Center, Division of Museum Services where she remained for the duration of her appointment. When her appointment expired she was reemployed by the Division of Museum Services under a 700 hr. appointment. She received a permanent/part-time employment with the National Catalog on October 1, 1979.

JOYCE BAKER - In April 1979, after twenty-three years of experience with other government agencies, Joyce joined the Division of Museum Services, Branch of Conservation Laboratories as Museum Records Clerk.

DALE BOYCE - Dale graduated from Boonsboro High School in 1977. He worked part-time for three years for a private antique dealer. His duties included restoring a house, rebuilding stone walls, and working with
antique furniture. He joined the National Park Service in January 1977, through the work study program of Boonsboro High. The appointment lasted until December of 1977. In February 1978 he was hired on a permanent part-time basis. He is a member of the Washington Conservation Guild.

GEORGEANNA BRADSHAW - Prior to March 1976, when Georgie started working for the National Park Service, she had 10 years of secretarial experience, which included government and private industry. She also worked as a secretary in the field of education for five years. She joined the Division as clerk-typist which included duties such as payroll clerk, travel clerk, and other secretarial duties. She is presently Secretary to Mr. Allen and supervises the Division clerical staff.

GREG BYRNE - Greg studied at Indiana University then served an apprenticeship at Mario’s Conservation Services in Washington, D.C. while taking conservation courses at the Smithsonian and Cooperstown. After training he stayed at Mario’s as a practicing conservator until mid 1976, when he left to work at the Smithsonian’s Conservation Analytical Lab. Greg joined Museum Services in August 1977, and has set up the new glass and ceramics lab. He is a member of the Washington Conservation Guild and the American Institute of Conservation.
TOM CARTER - Tom joined the staff as Paintings Conservator in October 1979. He received an undergraduate degree from George Washington University in 1965, but was already an apprentice in Paintings Conservation. He started working at the National Collection of Fine Arts in 1965 and became head of the Conservation Lab there in 1976. He is a fellow of the American Institute for Conservation and a member of the International Institute for Conservation and the Washington Conservation Guild.

ALLEN COCHRAN - Allen has been in the field of furniture restoration since 1946. In 1948 he started his own business and worked primarily with restoring and refinishing wooden furniture and upholstered pieces. In 1971 he performed some contract conservation work for the Park Service and was hired as a Museum Specialist the following year. He is a member of the Washington Conservation Guild and the American Institute for Conservation.

DONALD CUMBERLAND - Graduated from VMI, and was a reserve officer in the Corps of Engineers. He joined the Park Service as a Ranger at Harpers Ferry in 1975. A year later he joined the Division as Curatorial Supply Specialist. As such he is responsible for providing parks with supplies and equipment for the maintenance of their museum collections, as well as procurement for the Division. He is a member of the Washington Conservation Guild, the Harpers Ferry Historical Association, the National Trust for Historic Preservation, and the Berkeley County Historical Association.
JEANETTE DAVIS - Jeanette joined the Division of Museum Services in October 1979 as a clerk-typist for the Branch of Conservation Laboratories. Prior to joining the National Park Service, she had previous government service which includes the National Institutes of Health, the Institute of General Medical Sciences and the National Bureau of Standards, Electricity Division serving as Secretary to the Administrative Officer.

H. DALE DURHAM - A long time civil servant who for the past 10 years has been deeply involved in the museum profession. Dale attended Cameron University in Lawton, Oklahoma and graduate school at the University of Oklahoma. In November 1978, Dale joined the Division as Curator of the NPS Clearinghouse. Dale comes to us from the US Army Field Artillery and Fort Sill Museum in Oklahoma where he was a curator for eight years. Dale's professional affiliations include the American Association of Museums, American Association for State and Local History, Mountain-Plains Museums Association, Perminian Basin Museum Institute, Texas Association of Museums, Indian Territory Posse of Oklahoma Westerners, Company of Military Historians, Council on Abandoned Military Posts (CAMP), Oklahoma Archeological Society, Washington Conservation Guild, American Institute of Conservation, and is past-president of Oklahoma Museum Association.

KATHY FADELY - Kathy joined the Division of Museum Services in October, 1979 as a clerk-typist for the Branch of Conservation Laboratories. She previously worked for the Social Security Administration, Office of Policy and Procedure in Arlington, Virginia and also has several years of
secretarial experience in private industry. Her duties here include preparing outgoing Branch correspondence and coordinating travel plans for our conservators.

GORDON GAY - Gordon joined the Division as Curator of the National Catalog in November 1978. His previous assignments include four years as Regional curator of National Capital Region, 1-1/2 years as Regional Curator of Southwest Region, 2 years as Curator of the Carl Sandburg Home and stints as Historian at Booker T. Washington NM, Chickamauga-Chattanooga NMP and Moores Creek NMP. Gordon has been a member of American Association for State and Local History and American Association of Museums for several years.

JAMES K. LANCE III - Jim came to Harpers Ferry Center in July 1979, first working in maintenance, then transferred to Museum Services as a Museum Aid in September 1979. He brings with him some 20 years experience as a Document Control Technician, being a retired member of the U.S. Air Force. He attended the University of Maryland, overseas campus at Heidelberg, Germany and Chateauroux, France, majoring in history. He has been affiliated with community theaters since 1963 and is currently a member of the Old Opera House, Charles Town, W.Va.

EDWARD MCMANUS - Ed has a B.A. from William and Mary in History. While in school, he worked as an apprentice founder at the Geddy Shop for Colonial Williamsburg. He then worked as a conservator for Colonial Williamsburg and at the Conservation Analytical Laboratory at the Smithsonian
Institution. Ed joined the National Park Service in 1977 and was assigned to the Bertrand Conservation Laboratory. In October 1979, he transferred to the North Atlantic Regional Office to work under Edward Kallop, Regional Curator. Ed is a member of the American Institute for Conservation.

JUANITA MILLER - Juanita joined the Division of Museum Services in October 1979 as the Secretary for the Chief, Branch of Conservation Laboratories. She has 12 years of Federal service which includes the Public Health Service, the National Institute of Allergy and Infectious Diseases and the U.S. Nuclear Regulatory Commission (formerly the U.S. Atomic Energy Commission) where she served as Chief of the NRC's Central Word Processing Unit and as Communications Assistant for the newly established Communications Branch. She was also employed for two years with the Indian River School District in Frankford, Delaware. As the Branch Secretary, Juanita supervises the Branch clerical staff and is responsible for the overall workflow of the Branch office.

CAROLYN MOLER - Prior to December 1977, when Carolyn started working for the National Park Service, she attended Shepherd College and also had 12 years secretarial experience working for Halltown Paperboard Company. She is a permanent part-time clerk-typist and is the work leader in the Division clerical office. She is responsible for getting the work organized and done accurately and in a timely manner. She does the timekeeping for the office and the four work units which are a part of the Division office. She also does a great job on our Lanier Word Processor to produce professional-looking Collection Preservation Guides from a rough draft provided by Staff Curator, Diana Pardue, who coordinates these projects.
SUSAN NASH MUNRO - Sue has a B.F.A. from the University of Michigan in studio arts and art history. She entered the first conservation class of the Cooperstown Graduate Programs, Cooperstown, New York, in 1970. Her summers were spent working at Olana Historic Site, Hudson, New York, and the Bishop Museum, Honolulu, Hawaii. After the internship year at the University of Pennsylvania Museum, she received an MA in Conservation in 1973. She then worked for the Canadian Conservation Institute, the Pacific Regional Conservation Center at the Bishop Museum, and the Anchorage Historical and Fine Arts Museum. She spent three years in private practice in Portland, Oregon, treating paper and objects. She came to the National Park Service in October 1979, as Paper Conservator. She is a member of the International Institute for Conservation, and the Washington Conservation Guild. She is a fellow of the American Institute for Conservation.

DIANA PARDUE - Diana has worked for the National Park Service since 1973. She worked in the Division of Cultural Resources, WASO, and at Appomattox Court House NHP before transferring to the Division of Museum Services as a Staff Curator in August 1979. Her duties involve coordinating and writing Collection Preservation Guides and supervising the Conserve O Gram series. She has a degree in History from the University of Kentucky. She is a member of the Washington Conservation Guild, American Association of State and Local History, and National Trust of Historic Preservation.

TOBY RAPHAEL - Toby joined the staff in September 1977. He studied art and anthropology at the University of California and received a BA in both
fields. He then received a MA at George Washington University in Museum Studies, specializing in Ethnographic conservation. He has had training at the Smithsonian Institution and studied at the Paul Coreman's Center for Conservation in Mexico City. Recently he returned from four months of conservation training and study at UNESCO’S Rome Center (ICCROM).

DAN RISS - With a B.A. in anthropology/archeology Dan came to Museum Services in October 1974. After serving an apprenticeship, he is now responsible for the conservation of excavated material from Park Service sites. He is a member of the International Institute for Conservation, the American Institute for Conservation, the Washington Conservation Guild, the Society for Industrial Archeology, and the Society for the History of Technology.

BART ROGERS - Bart holds a B.A. in Language Arts. His vast experience includes Steeplejack, Mineshaft Mucker, Drill Runner, Explosives Handler, Carpenter, Metal Smith, Naval Aviator, Corrosion Control Officer, Ordnance Officer, Air Taxi Pilot, Teacher, Apprentice Conservator, and Metals Conservation. He joined the HFC staff in 1974. He is the pilot-in-residence at the Harpers Ferry Center and is finally a member in the Washington Conservation Guild.

RON SHEETZ - With the exception of two years military service, Ron has over twenty years continuous work in the field of restoration and reproduction of furniture in his own shop. In February 1978, he joined the Division of Museum Services, National Park Service. He is a member of the Washington Conservation Guild.
CHARLES E. SHEPHERD - After two years experience as a dental technician at Rothstein Dental Laboratories, Inc., Hagerstown, MD, Charlie joined the HFC staff in December 1976. He works 60% of the time manufacturing reproductions for artifacts with missing parts and performing conservation treatment on metal artifacts. He has been training in Natural History preservation at the Smithsonian Institution and has set up the new Natural History Lab. He works 40% of the time in the Natural History Lab. He is considering membership in Washington Conservation Guild. He graduated from West Virginia School for the Deaf and Blind in Romney, W.Va., in June 1967.

BETTY STRAND - Before moving to this area nine years ago, Betty was Executive Secretary in the Division of Procurement, AVSCOM, for five years in St. Louis, Missouri. Prior to that she held similar positions in private industry. She has been working in the Division office as a clerk-typist for several months.

FONDA GHIARDI THOMSEN - After graduating from the Pennsylvania State University with a Zoology/Chemistry degree, Fonda did medical and chemical research for three years. She returned to school to seek a Masters of Fine Arts at Corchoran School of Art and George Washington University. While there, she became interested in museum studies and began a museum career at the Conservation Analytical Laboratory at the Smithsonian Institution. She joined the National Park Service in 1971, where she has worked as Ethnographic Conservator, manager of the Bertrand Laboratory, Chief of the
Branch of Conservation, and now Textile Conservator. She has studied textile conservation with Eva Burnham, Louise Cooley, and the Abegg Stiftung Museum in Berne, Switzerland.

TOM VAUGHAN - Tom has been with the NPS for 13-1/2 years as a Park Ranger and Superintendent. He has worked at Mesa Verde, City of Refuge, Haleakala, Point Reyes, Hubbell Trading Post, and Grant Kohrs Ranch. He is currently on the NPS Cultural Resources Management Guidelines Task Force and is a member of the National Geneological Society.

TYRA WALKER - Prior to joining the HFC staff, Tyra experienced two six-month internships at the Center. The first was spent as a museum aid with the Division of Museum Services primarily learning the basic techniques of paper conservation. The second six-months was spent working with the Division of Reference Services, setting up slide and index files. She also documented some of her findings for the Lincoln Home in Springfield, Illinois and the Peterson House in Washington, D.C. Tyra received a B.A. in Art History from Morgan State University in Baltimore, MD.

DAVE WARTHEN - Dave has worked for the National Park Service since 1965, first for the Job Corps, then for Harpers Ferry Center. Since 1972, he has been Registrar for Museum Services and is responsible for the flow of artifacts in and out of the Division.
MIKE WILTSHIRE — Mike's involvement with the National Park Service began as a Youth Conservation Corps enrollee at Harpers Ferry, Manassas and Fredericksburg. While attending Shepherd College, he began working as a part-time employee and eventually became the Division Photographer. Presently he is employed as Photographer for the Branch of Conservation Laboratories and is responsible for archival quality treatment photos of the objects treated in the Branch. Other duties have included the designing of Collection Preservation Guide covers and executing scale drawings of museum storage areas and storage equipment. He is a member of the Washington Conservation Guild.
Walter J. Nitkiewicz

Fine Arts Conservator Walter J. Nitkiewicz died January 11, 1979 at the age of 68. As a member of IIC, AIC and the Washington Conservation Guild he had adhered unswervingly to the ethical and technical standards of his profession. During nearly 26 years as a public servant in the employ of the National Park Service he had earned the respect and confidence of his colleagues. For them his knowledge and skill, conscientiously applied and generously shared; his masterly execution of especially difficult assignments; and his dedication remain as a challenge.

Walter Nitkiewicz trained for his profession by five and a half years of apprenticeship under Alfred Jakstas, FIIC. He supplemented this with courses in art history, life drawing, painting, and sculpture. Throughout his professional career he expanded and updated his knowledge by attending conservation seminars, professional meetings and such training opportunities as Robert Organ's lectures in conservation chemistry.
In February 1953 Walter succeeded Elizabeth H. Jones as conservator of paintings and prints in the central museum laboratory of the Park Service.

He was selected on her recommendation when she left to direct the conservation laboratory at the Fogg Art Museum. For the remainder of his career he carried responsibility for inspection and treatment paintings, prints and other works of art in the custody of the national parks. These collections involve some 2,700 paintings, mostly 19th and 20th century American, as well as many prints and a smaller number of sculptures.

While most of his day-to-day work involved easel paintings, Walter was repeatedly called upon to tackle unusual conservation problems. The first of these required him to clean and restore the murals in the rotunda and dome of the Old St. Louis Courthouse. He recruited, trained and closely supervised a crew of artists and art students who spent about 16 months going over the century-old painted surfaces inch-by-inch while perched on high scaffolds. His restoration and reinstallation of the huge cyclorama of the Battle of Gettysburg are described in Studies in Conservation. 10:3. Later he removed a painted ceiling threatened by structural deterioration in the home of Thomas A. Edison, cleaned and restored it, then attached the painting to a fiberglass replacement ceiling he devised. When the President's staff urgently needed more office space, he with two helpers faced, detached from the wall and prepared for storage a 1067-square foot White House mural in 102 working hours.
Failing health curtailed Walter's work during the final 10 months, but he found ways to continue helping in the care of park collections even when he could not be in his laboratory.

The National Park Service will be forever grateful for the many years of Walter's steady contributions and above average dedication.